

Symposium on Improving the Teaching of Evidence-based Practice

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Teaching evidence-based practice

Edward J. Mullen, Jennifer L. Bellamy, Sarah E. Bledsoe, Julia Jean Francoisⁱ

Prolog

When we teach evidence-based practice (EBP) to students they typically say it is an approach they like and value. However, they also report that they can not implement EBP in their field work practice because of agency barriers (Mullen and Streiner, 2004). Studies of the attitudes of agency practitioners have found that they too are open to EBP, and they would like to provide quality services of proven effectiveness to their clients, but that they encounter barriers to implementation because of training and organizational constraints (Bellamy, Bledsoe, & Traube, 2006; Edmond, Megivern, Williams, Rochman, & Howard, 2006; Mullen & Bacon, 2006; Mullen, Bellamy, & Bledsoe, 2005). Indeed, Edmond et al. (2006) report that, in their survey of field instructors associated with the George Warren Brown School of Social Work, 87% viewed EBP as a useful practice idea. Similarly, Rubin and Parrish (in press) found strong support among social work faculty for EBP. Accordingly, it seems fair to say that there is some limited data available indicating that students, faculty and agency field instructors generally have a positive regard for EBP. However, EBP has not yet become a reality in social work education or agency practice (Mullen, Shlonsky, Bellamy, & Bledsoe, 2005) and surprisingly little is actually known about the nature of these barriers, aside from surveyed opinion, or how to feasibly address these barriers as they play out in agency practice. As noted by Proctor,

“discerning analysis of issues in agency, research, and professional cultures” is required so we can better understand what barriers are being encountered and what facilitators will be required (Proctor, 2004, p. 227).

In the spirit of Proctor’s proposal that an analysis of critical issues be conducted and in an attempt to gain further understanding of how EBP training could be improved in agency-based practice, we have implemented a pilot project (*Bringing Evidence to Social Work Training*, aka BEST) which engaged a dynamic partnership between the Columbia University School of Social Work and three New York City agencies (Mullen, Bellamy, & Bledsoe, 2005).ⁱⁱ In this project we explored the possibility of teaching agency teams the fundamentals of evidence-based practice. We will refer to this project throughout this paper as an illustration of some of the issues discussed. (Training resources developed for the BEST project together with other EBP resources are available at the Columbia University Musher Program web site at:

<http://www.columbia.edu/cu/musher/EBP%20Resources.htm> .)

We were struck by how difficult it is to provide such training in the real world of social agency practice due to barriers such as limited time, agency culture and infrastructure, including access to internet and research databases, high staff turnover, and limited resources to support the implementation empirically supported practices once they are identified (Bellamy, Bledsoe, & Traube, 2006; Edmond et al., 2006; Mullen, Bellamy, & Bledsoe, 2005). This experience has caused us to ask how practitioner training might be altered so that future generations of practitioners will be better prepared for evidence-based social agency practice, and what types of support, such as continuing education, could be provided to sustain graduates once they are in agency practice.

We agree with Proctor's caution that adoption of EBP by the profession will not occur as a result of simplistic and isolated solutions (Proctor, 2004). Rather actions are necessary at multiple levels that focus on producing more agency based practice relevant research, improved organizational infrastructures, and relevant class and field education (Proctor, 2004). Our comments address only those possible actions that relate to how class and field education might be strengthened and coordinated to foster improved teaching of EBP, and the role that schools of social work may play in the process. Hopefully, other discussions at this symposium can address how research and organizational infrastructures might be altered and aligned so that a concerted effort can be made by the profession to make EBP in social agency practice a reality.

Introduction

Based on our experiences teaching EBP, both in the classroom and in agencies, as well as our consideration of what others have reported in the literature, we think that teaching evidence-based practice to social work graduate students and practitioners requires:

- Teaching students how to be life-long learners
- Teaching students what is currently known and not known about the efficacy and effectiveness of social work practices and programs
- Teaching students to be knowledgeable and skillful with the practices in their area of practice specialty that are empirically supported
- Teaching graduates and other practitioners new knowledge and skills through evidence-based continuing education programs

Teaching students how to be life-long learners

It is widely acknowledged that due to the pace of change all around us it is not possible to assume that what we learn today will be valid or relevant tomorrow. Gone are the times when social work could assume that it had a manageable and relatively stable knowledge base that could be taught within the limits of a two year graduate program. Most of us would have no trouble recalling the social work theories or methods we once assumed were of obvious validity and relevance that we have since discarded. Most of us who are a bit older will recall the awkwardness we experienced as the information and computer revolution took hold. Unless we took pains to keep up with this new technology we saw our students and children more at ease with new learning and information access than we were with our old reliance on pre-digital information sources which had afforded us some degree of stability.

One of the challenges faced by participants in the BEST project was that agency culture and infrastructure are still grounded in the assumption that knowledge is generally stable. Therefore, there is no significant and consistent commitment of resources to the activities of searching for, evaluating, and incorporating new evidence into practice. The BEST project itself provided an opportunity for agency practitioners and administrators to focus on these activities and commit a certain amount of time and energy to this new context of learning. Explicitly scheduling valuable agency time on a regular basis, time that would normally be overtaken by other competing demands, was an essential part of the project's success. The BEST project, in essence, brought the activity of learning and knowledge development to the forefront of agency practice when it might normally remain as a secondary or ancillary project, at least for the teams receiving the training.

This new context for learning and practice is characterized not only by the transmission of and access to information in new digital forms, but also by an explosion of readily available information of varying quality and relevance. It is for this reason that most of us are looking for new ways to manage the information deluge. Indeed, it is because the profession's knowledge base has become extremely dynamic that practitioners now need to start from the assumption that knowledge is always rapidly evolving and that skills are needed for keeping abreast of new knowledge as it evolves and changes quickly over time.

Because of this information explosion we find ourselves needing to make choices among an ever changing array of possibilities cast upon us. This information explosion and the resulting complexity of decision making has changed our task as educators from serving as purveyors of a limited amount of "valid" and "relevant" information (for today) to one of teaching our students not only how to access valid and practice relevant information, but also to know how to critically use this information to inform practice and, ultimately, to benefit the client. Of course this means teaching students how to ask practice-relevant, client-oriented questions that, if answered, will provide information useful for making important practice decisions of relevance to client welfare. As noted by Straus et al. (2005, p. 31), "One solution for the problem of obsolescence of professional education is 'problem-based learning' or 'learning by inquiry'. That is, when confronted by a clinical question for which we are unsure of the current best answer, we need to develop the habit of looking for the current best answer as efficiently as possible." We believe that our students should equate the 'current best answer' with one that is derived using EBP.

We need to teach our students the skills to frame questions that direct them to inquire and access empirical evidence, assess the quality of that evidence, and critically apply information so as to make wise practice choices. Because clients and client advocates, as citizens of this new information age, are coming to social workers with more information (or misinformation), social workers need to be educated in new communication skills designed to engage clients and their significant others in a critical discussion of this information and relevant options based on this information. Finally, because of the growth of information and technology systems and the consequent increased complexity of choices, social workers need to be trained to develop a high level of interpersonal skills that will permit them to partner with clients in the sharing of information, decision-making, and assessment of possible risks, benefits and costs.

Students should be taught to be realistic about how they go about information retrieval and assessment, including the inevitable limitations of this process. Though knowledge and information are continuously expanding, we found that participants in our pilot project were frustrated by the limited amount of high-quality evidence that was directly applicable to their practice questions. Oftentimes it seemed that the questions that were most perplexing to practitioners were likewise absent from the research literature; or if questions were present, findings were not easily or readily accessible. When practitioners were able to identify relevant literature using free web-based resources, as often many search engines used commonly in the academy are fee based and therefore inaccessible to agency based social work practitioner, difficulty in securing full text articles or relevant texts created additional barriers to agency level use of EBP. Some of these types of barriers were addressed through the agency-university partnership. The

BEST research team could secure research articles, syntheses, and other materials that agencies could not. In other cases agencies asked a field practicum student, who frequently had broader access to information and technology through schools and libraries, to retrieve materials for the EBP team. This was a unique and valuable role that student team members could play in the project that benefited both their learning through the connection they made between the university and agency worlds, as well as the agencies in which they worked.

Students should be taught methods of information management that will fit their future organizational context. That context, which is typically the context of social work practice, is characterized by competing demands for time and other resources as well as immediacy in decision-making. Two suggestions follow.

- First, students should be taught to work in teams where responsibility is shared for information management among people with varying expertise and levels of motivation. EBP can be an intimidating process that initially requires a great deal of energy and commitment. Individual practitioners are indeed capable of engaging in EBP, but participants in the BEST pilot project found the support of their team members to be a key facilitator of the EBP process. Furthermore, working in teams fosters selection of important practice problems that are encountered frequently in agencies (and, therefore worth the investment in finding answers) rather than focusing on unique or obscure practice problems that, while they may be fascinating for a particular practitioner or arise from atypical cases, would

not occur frequently in agency based practice contexts (and, therefore not worth as much investment in finding answers).

- Second, as noted by Haynes (2001) students should be taught to seek out information that is designed for practitioner decision making such as would be found in decision-support systems (it is only a matter of time that these will be online, integrating client information systems with evidence-based information systems) rather than searching for and assessing evidence from articles reporting individual research studies.

Haynes (2001) describes four levels of organization of evidence from research ranging from the most user-friendly (computerized decision support systems) to the least user friendly (searching for and reviewing individual studies). The acronym “4S” describes the search options as shown in the following figure from Haynes (2001, p. 36).

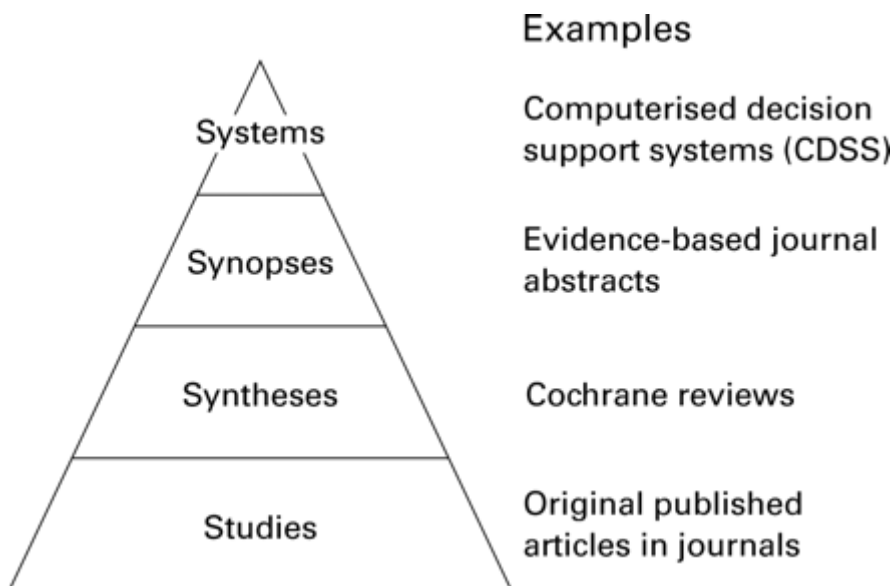


Figure "4S" levels of organization of evidence from research.

Our current research (BEST) suggests that busy practitioners do not have the time or typically the expertise to search for and evaluate individual studies or even syntheses of individual studies. Social work will need to develop internet or online text systems that can provide busy practitioners with relevant synopses as is now done in health and mental health. The online text *Clinical Evidence*ⁱⁱⁱ is an excellent model for how this can be done. *Clinical Evidence* organizes evidence by clinical question. Accordingly a practitioner need only identify a clinical question of relevance to his or her client and search *Clinical Evidence* for a summary of the evidence related to that question. Depending on interest the practitioner can “drill down” to systematic reviews and even individual studies. *UpToDate*^{iv} is another such system designed for medicine. These systems have been called the friendly interface to Cochrane Collaboration and other review sources. There is no reason social work can not over time develop such systems organized by question and/or outcomes.

Education programs need to give priority to teaching the skills needed to locate and use such systems and synopses. Secondly, students should be taught skills for locating and critically assessing systematic reviews and individual studies so that they can “drill down” to critically examine the evidence, but only as necessary. We do not think that it is efficient or appropriate to expect practitioners to search for and assess technical reports of systematic reviews or individual studies. Preliminary findings from the BEST project reveal that social workers in agency based practice settings feel that easily accessible synopses of research evidence related to practice relevant questions would be more useful than individual studies or systematic reviews that must be first accessed and then evaluated. As described by Haynes (2001) practitioner friendly

synopses and systems will need to be the clinician's entry point. Such systems would represent a significant and major shift impacting how textbooks are written as well as how research methodology is taught.

When considering how best we might restructure our educational programs it is tempting to say that we should use our valuable and limited curriculum time to teach only or primarily efficacious assessment and intervention practices as well as those that have promise of demonstrating effectiveness. However, this would be a great disservice to our students and their clients since it would only be a matter of time before new evidence would be forthcoming and the list of efficacious practices would change. The first priority for educating students to become evidence-based social work practitioners needs to be to use our valuable curriculum space to provide students with the skills needed to stay up-to-date.

- Recommendation 1: In addition to teaching the basic generic practice skills needed for the effective and judicious implementation of any EBP, an objective of the first year foundation courses in graduate level social work educational programs should be to provide students with the knowledge and skills necessary to be life-long adult learners. Specifically students should be provided with the knowledge and skills to formulate appropriate practice relevant questions; seek information of relevance to those questions; assess the quality, strength and relevance of that information; communicate the information appropriately to clients and their significant others; facilitate team and client decision making; and, assess and use information about what happens in practice with clients

after interventions are made, leading, when appropriate to the formulation of new questions and searches. Students should be prepared to ask questions regarding incidence and prevalence, aetiology and risk assessment, assessment methods, and prevention, treatment and rehabilitative options.

Teaching students what is currently known and not known about the efficacy and effectiveness of social work practices

Graduate schools of social work elect different ways to organize their practice curriculum (including micro, mezzo and macro practice). Some elect fields of practice, others practice method, some social problem or some other such framework. At both the foundation level as well as at the advanced practice level students need to learn about evidence-based assessment and intervention practices and programs relevant to their practice context. This should include explicit information about what is known regarding the empirical foundations of each of the practices and programs and categorization of practices and programs based on their empirical support. For example, in the field of psychotherapy and mental health practices, Roth and Fonagy (2005) classify interventions into those for which there is *clear evidence of efficacy*, those for which there is *some but limited support for efficacy*, and those for which there is *less than limited support*. The American Psychological Association's classification system is probably the most widely used (Chambless et al., 1998). The APA classifies interventions as *empirically supported* or *not empirically supported*. *Empirically supported* are further classified into *well established treatments* and *probably efficacious treatments*. A more informative classification is used in the on-line book *Clinical Evidence* where

interventions are categorized based on a balance of benefits and harms into: those that are *known to be beneficial*; *likely to be beneficial*; those where there is a *trade off of benefits and harms* depending on client circumstances and priorities; those of *unknown effectiveness*; those *unlikely to be beneficial*; and those *likely to be ineffective or harmful*.

Now that information regarding empirical evidence is readily available for a growing number of social work practices it is imperative that students be informed of the empirical evidence underpinning any and all interventions taught. It is especially imperative that schools inform students about those interventions which are relevant and known to be beneficial, efficacious, or effective. Additionally, students should be informed regarding the context in which the identified evidence-based practice or program has been effective or efficacious and when client context indicates prescription of the practice as supported by empirical evidence. It is not enough to be trained in the techniques of a specific evidence-based practice without knowing when the use of that practice is indicated. Using mental health as an example, evidence may support the use of a particular practice, such as interpersonal psychotherapy, for the treatment of major depression, but there may be limited or contradictory evidence when major depression is complicated by a comorbid substance abuse disorder. Providing only training in the skills necessary to use practices and programs that are empirically supported is not sufficient to prepare students to be evidence-based social work practitioners. Students must have knowledge to search for information about evidence regarding when empirically supported practices are indicated or counter indicated.

This teaching should also be tempered with the acknowledgement that some agencies where students will work will not employ, or may not be aware of, current

evidence-based interventions. Instructors should make students aware of the barriers that may exist in implementing evidence-based interventions in a real-world context. If these issues are not explicitly discussed and actively addressed, the frustration resulting from students' experience of disconnects between classroom and field work is likely to compound any contextual barriers. The same is true of working with agencies. EBP presents an exciting opportunity for agencies to improve practice, and the idea of being on the "cutting edge" of practice innovation was certainly appealing to participants in the BEST project, particularly at the administrative level. When working with agencies, transparency about the limitations of EBP they are likely to face is just as important to communicate as the potential it holds. Just as students will be frustrated by skills they learn and cannot apply, so too will practitioners and other agency stakeholders. Participants in the BEST team noted how much they appreciated our viewing them as partners in the process, acknowledging their frustrations and viewpoints, and recognizing the limitations of what was and was not possible in terms of implementing EBP in the current context of their practice.

- Recommendation 2: An objective of the first year foundation courses and the second year specialization courses should be to inform students about classification systems being used to categorize empirical evidence regarding intervention efficacy and effectiveness as well as to classify assessment tools. An additional objective should be to inform students about the empirical support for every assessment and intervention practice taught in the standard curriculum, and to inform students about those relevant assessment and intervention practices that are supported by

empirical evidence. This information should focus on the practice and client context and should include empirical evidence indicating and counter-indicating use of practices and programs. In keeping with recommendation 1, from a pedagogical stance it is recommended that students be given assignments to search out the evidence-base for every assessment and intervention practice presented to them in the classroom. This would enhance their skills as self-directed learners and place less reliance on what the teacher-authority says is the evidence-base.

Teaching students to be knowledgeable and skillful with the practices in their specialty that are known to be efficacious

It is not sufficient to teach students to be life-long learners or to provide information in the classroom about what are known to be efficacious interventions and empirically supported assessment tools. In addition to these valuable skills and knowledge, social work students need to be trained before graduating to provide evidence-based assessments and interventions. Of course it would not be feasible, nor even desirable, to attempt to teach all of the assessment tools and interventions known to be empirically supported. However, those that are directly relevant to the student's specialized area of study should be taught in both class and field so that a beginning level of competence is developed through classroom learning and supervision.

Many interventions of relevance to social work are now known to be efficacious and in some cases there is emerging evidence of effectiveness. Many assessment instruments of relevance to social work are likewise now known to have sound psychometric properties. In the mental health field of practice, for example, there are now

approximately 20 interventions for which there is clear evidence of efficacy for specific problems or populations (Roth & Fonagy, 2005). Others have identified a range of community mental health programs which have empirical support for the severely mentally ill (Drake et al., 2005). Yet recent evidence indicates that interventions of unknown efficacy dominate the social work curriculum space (Bledsoe, Weissman, Mullen, et al., submitted; Weissman et al., 2006). This evidence indicates that few schools require the teaching of empirically supported interventions in class and field work, which is considered to be the *gold standard* for learning since the gold standard assumes that both didactic training and practicum learning is required for development of practice competence. Citing findings from Davis et al. (1999), Weissman et al. (2006, p. 926) have noted that: “--- lectures and readings alone have not been shown to change clinical practice. --- The combination of a didactic program and supervised clinical work is considered the gold standard for learning a new treatment.”

Generally, we now know that few social work educational programs meet this gold standard in their curriculum for teaching evidence based practices. In the August 2006 issue of *Archives of General Psychiatry* Weissman et al. (2006) report findings from the first national survey of a systematic sample of graduate training programs in social work, psychiatry and psychology that sought to document the extent to which evidence-based psychotherapies are taught.^v While the teaching of psychotherapies (EBT or evidence-based treatments) is only a small component of those interventions taught in schools of social work, these findings are indicative of the extent to which evidence-based practices are being taught. Weissman et al. (2006, p. 930) concludes that:

The major findings of this national survey are that training programs offered as electives a range of psychotherapies (mostly non-EBT) and often did not require the gold standard of didactic and clinical supervision for EBT or non-EBT. However, a higher percentage of non-EBTs meet the training gold standard as compared with EBTs. The 2 disciplines with the largest number of students and the emphasis on training for clinical practice (PsyD and MSW) required the lowest percentage of gold standard training in EBT. --- This training situation poses problems for patient care and research. The bulk of clinicians are being trained in psychotherapy that has no basis in evidence from controlled clinical trials. --- Although there may be justification for teaching treatments for which there is rather little empirical evidence, there is little justification for the exclusion of teaching psychotherapies when the evidence is robust.

Weissman et al. (2006) report that most social work programs (61%, n=38) currently do not require students to learn in class and field any evidence-based psychotherapies. Only 14.5% (n=9) reported requiring more than one EBT be taught in both class and field.

- Recommendation 3: An objective of every school of social work should be to require students to develop a beginning level of competence in the practice of those empirically supported assessment tools and interventions of direct relevance to their area of specialization. This will require both didactic training in the classroom and coordinated practicum training in field work. Accordingly, where training capacity does not already exist schools and practicum agencies will need to invest in training programs

designed to prepare field instructors for the teaching of evidence-based practices.

Teaching graduates and other practitioners new knowledge and skills through continuing education programs and field practicum training

In keeping with the spirit of teaching students to be life-long adult learners graduate schools of social work will need to provide evidence-based continuing education opportunities for their graduates as well as other practitioners in their communities so that life-long learning can be supported. We know from recent research that practitioners generally are not functioning as adult learners nor are they using empirically supported practices (Bellamy et al., 2006; Mullen & Bacon, 2006; Weissman & Sanderson, 2002; Mullen, Bellamy, & Bledsoe, 2005). We have learned from our BEST project something about the complexity of this issue. In these three very progressive and well established agencies we have found that practitioners can be highly motivated learners and want to use empirically supported practices. We have found also that when the school of social work provided support for practitioners in these agencies to learn the process of EBP that it was well received. However, we have learned also that once these supports were removed the challenges of the agency context combined with the absence of graduate school preparation in the skills of life long learning and specific evidence based practices of relevance to agency work made full implementation and continued learning problematic.

The social work practitioners, including their supervisors and administrators who participated in the project, described being preoccupied by the day to day tasks and crises that typically arise in the course of agency practice. Finding the time to meet in EBP

teams, even an hour or two once a week, was a challenging task. Once scheduled these EBP meetings were often interrupted by unforeseen and uncontrollable issues (e.g., client emergencies, staff turnover, monitoring visits). Practitioners in the project reported that EBP is simply not at the top of the list of their more pressing agency driven priorities. Engaging in the BEST project offered an opportunity for a temporary shift toward this activity, but more consistent support and infrastructure is needed to continuously tend to the work of EBP. It is likely that students learning to be evidence-based practitioners will be similarly distracted. It is likely as well that they will experience a disconnect between the knowledge, skills and values they are taught in school and the typical agency environments in which field education is provided. Accordingly, in order for EBP training to meet the gold standard of field and agency learning, new forms of coordination between schools and agencies will be required.

We do not intend to blame agencies or practitioners or suggest that their failure to use EBP is a simple matter of choice. This sort of accusation is not constructive nor is it accurate. Many agencies are simply overwhelmed and under-supported. Agency-based practitioners have been given a road map for practice that is directing them along a route full of detours, road blocks, and unreasonable tolls demanding dedication and promising frustration with little immediate payoff. The practitioners and administrators with whom we worked in New York City were part of three remarkable examples of high-quality social service agencies, yet they experienced many barriers to implementing EBP. This is not to say that the situation is without hope. As we learn more about the experiences of social workers attempting to use EBP, we will learn more about what is needed to make EBP in social agencies feasible. In our pilot study, skills and experience were

successfully transferred and each agency team expressed a desire and plan to continue working toward EBP, but they also wanted additional and ongoing help and support. While we have limited evidence based on our pilot study, we can offer some suggestions on how, in partnership with the agency teams, we attempted to address some of the barriers to using EBP in agency based practice.

Some teams determined that using social work interns to perform some of the tasks would be useful for student learning, promoting EBP in agency practice, bridging the gap between what is learned in the classroom and what is practiced in the field, and protecting the time of frontline workers who may be able to contribute to the team through problem formulation or implementation. As mentioned earlier using students also addresses the problem of access to internet and research databases as most students have access through their training program's library. The teams also came up with other creative solutions to address access issues. One team found that they were able to access some of the fee for service databases and retrieve books and articles using the local public library system. Individual agencies are likely to offer further creative solutions born out of their unique expertise and contexts.

Limited time was one of the primary barriers to using EBP in social agency settings. We implemented several strategies to address this barrier. First and foremost, using a team approach to EBP allows for the division of labor among team members. By focusing on a common problem prevalent to the individual agencies practice, each member can contribute to the EBP approach based on his or her interests and expertise. For example, some team members may be better at identifying practice problems to target using empirical evidence while others may be more comfortable with or have more time

to search the literature or evaluate and summarize empirical findings. One agency reported that they planned to have interns search for targeted research evidence to bring to their supervisory group who would in turn evaluate, synthesize, and incorporate the research.

We also attempted to incorporate EBP into existing agency trainings or meetings so that the process did not create an additional burden on practitioners. For instance, one agency had existing trainings that incorporated either theory or practice techniques. This agency has chosen to incorporate an EBP model into existing trainings. Another agency had begun a journal reading group prior to participating in the BEST project and planned to continue their EBP efforts in the context of this existing activity. By incorporating the EBP process into existing career development opportunities, we were also able to address agency culture and infrastructure barriers.

We also attempted to address these barriers by including supervisors and upper level administrators in the process. We stressed the importance of protecting time for team members to engage in EBP.

Time was expressly protected by the scheduled activities of the BEST project. It became clear that most practitioners could not individually find time to commit to EBP related tasks, so project work was performed for the most part within in the boundaries of scheduled meetings and training time. Before EBP becomes institutionalized within agencies, specified dedicated time will likely have to be set aside and protected for EBP related work.

While we were able to address some of the barriers to using EBP in agency practice, some barriers remained unchallenged. An implication is that schools and

agencies working in partnership need to provide continued and ongoing training and support to practitioners for evidence-based practice to become a reality. Part of this ongoing training and support should be focused on addressing the real world barriers that frustrate the efforts of agency teams focused on using EBP models.

Recommendation 4:

- An objective of graduate schools of social work should be to partner with social agencies to provide collaborative continuing education supportive of EBP. This could be in the form of class work at the university or in the form of in-service training at local agencies or groupings of agencies. This training should not focus on training individuals but rather the focus should be on training EBP teams. EBP can best be learned through team work and interdisciplinary collaboration. Programs should be provided that would offer training in the skills needed to access and evaluate information to support life long learning . In addition training should be provided so that practitioner teams develop expertise in those empirically supported practices of direct relevance to their area of specialization and population need.
- To make possible student training in EBP that meets the gold standard, field practicum instructors will need to be provided with EBP training and other supports so as to facilitate their capacity to provide EBP training in actual agency environments. Continuing education programs and field practicum educators should consider joining resources to foster EBP in agencies.

- Because staff turnover is a significant issue in many agencies careful consideration needs to be given to which agency staff are selected to participate in EBP training.

CODA

In the recently published survey of social work graduate programs Weissman et al. (2006) included questions about perceived barriers to the teaching of evidence-based psychotherapy in social work programs. The findings are surprising. Only two barriers were cited by more than 10% of the programs: lack of trainee interest (27.4%); and, lack of funding (21%). Few programs cited: need more evidence (0%); too time consuming (3.2%); does not work in clinical practice (3.2%); not relevant (4.8%); do not have qualified faculty (8.1%); and, too difficult to teach (9.7%). These findings indicate that there may be fewer obstacles to the teaching of EBP in schools of social work than some have feared. The time may be right to make the needed changes in social work education programs. However, unless changes are made in our service systems and agency programs there may be too many barriers for EBP to be implemented.

Social agencies, the organizational arenas where evidence-based practices and programs are delivered, will need to become learning organizations providing incentives and facilitators for such practice (Johnson & Austin, in press). This is a major challenge and one that social work educators and schools of social work cannot directly address. Nevertheless, for EBP to be taught within the context of field education, special efforts will need to be made by field work programs within schools of social work to facilitate the development of units within agencies having the capacity to support this type of education. The continuing education programs described above could be extended to field

work instructor teams as the field makes this transition. Whether field work instructors and agencies should be required to meet necessary EBP standards is a question for discussion.

If schools of social work were to succeed in training a new generation of evidence-based practitioners then it could be expected that this new generation would bring some change to the quality of agency-based practice. However, beyond this, changes will need to be made in how services are organized and financed so that service programs can move beyond existing barriers and provide necessary supports for this new generation of practitioners. Otherwise the notorious gap between what schools do and what agency based practice allows will only widen. Appropriate groups within social work need to join with other professional groups, government officials and funding representatives to develop strategies for creating service systems conducive to evidence-based practice. Such a multi-level strategy backed by concrete incentives linked to funding, licensing and accreditation would require a cultural shift within the social work profession and the development of new alliances between funding bodies, agencies and educators as key stakeholders.

It will take a formidable and coordinated effort to outline and implement such an ambitious strategy for change, and schools of social work should play a critical role. Many creative possibilities exist for what administrators, faculty, and other stakeholders in schools of social work might do to facilitate a practice atmosphere where EBP will be feasible in agency-based social work practice. However, changes in our educational programs must be accompanied by changes in other sectors of the profession for EBP to become fully implemented in agency practice. A complete and mindfully developed

blueprint for implementing EBP in social work should include a full compliment of coordinated goals and strategies for all stakeholders, including key professional organizations.

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ⁱ Edward J Mullen is the Willma & Albert Musher Chair Professor, Columbia University School of Social Work; Jennifer L. Bellamy is a postdoctoral fellow at the George Warren Brown School of Social Work, Washington University ; Sarah E. Bledsoe is an assistant professor at the School of Social Work, University of North Carolina Chapel Hill ; Julia Jean Francois is Associate Executive Director, Center for Family Life, New York City.

ⁱⁱ The BEST project was conducted as a partnership between the Columbia University School of Social Work Musher Program and three New York City social agencies. The Columbia University research team included Edward Mullen, Jennifer Bellamy, Sarah Bledsoe, Lin Fang and Jennifer Manuel. Due to confidentiality requirements we are not free to identify the participating agencies or staff. We wish to acknowledge the important contributions of each member of the research team as well as of the agency staff.

ⁱⁱⁱ <http://www.clinicalevidence.org/ceweb/conditions/index.jsp> provides access to the electronic text *Clinical Evidence*. It is also available through Ovid at www.ovid.com .

^{iv} <http://www.uptodate.com/> provides access to UpToDate.

^v The design was a cross-sectional survey of a probability sample of all accredited training programs in psychiatry, psychology, and social work in the United States. Responders included training directors (or their designates) from 221 programs (73 in psychiatry, 63 in PhD clinical psychology, 21 in PsyD psychology, and 64 in master's-level social work). The overall response rate was 73.7%.