

Evidence-Based Practice in Child Welfare: Challenges and Opportunities

AUGUST, 2001

[This paper is undergoing revisions and will be reposted when they are complete.]

Emmanuelle C. Gira, MSW Candidate
Michelle L. Kessler, MSW
John Poertner, DSW

Children and Family Research Center
School of Social Work
University of Illinois at Urbana-Champaign
1207 W. Oregon
Urbana, IL 61801

This project was funded by the Children and Family Research Center, School of Social Work, University of Illinois at Urbana-Champaign which is funded in part by the Illinois Department of Children and Family Services.

EVIDENCE BASED PRACTICE IN CHILD WELFARE: CHALLENGES AND OPPORTUNITIES

Abstract

Increased demand for accountability for outcomes in child welfare is influencing many child welfare agencies to use evidence based practice. That is, practitioners using efficacious interventions as determined by the strongest possible empirical evidence. There are many difficulties with implementation of an evidence based practice system. These range from insufficient evidence to influencing practitioners to change their practice behavior. There is substantial research within the medical field that evaluates interventions aimed at influencing physicians and other health care professionals to use evidence based practice. Child welfare can learn from these efforts. These interventions include dissemination of educational materials, audit and feedback, educational outreach visits, use of local opinion leaders, mass media campaigns, continuous quality improvement, and computer systems. Educational outreach visits, the use of local opinion leaders, and computer systems all showed some effectiveness in changing behavior with audit and feedback demonstrating modest success. The research indicates that interventions tend to be successful with some behavior but not others. For example, changing prescribing behavior or diagnosing. Interventions using multiple strategies tend to be more successful. Finally, challenges to the use of evidence based practice in child welfare are discussed.

EVIDENCE BASED PRACTICE IN CHILD WELFARE: CHALLENGES AND OPPORTUNITIES

Since the early to mid 1980's the field of child welfare has increasingly been held accountable for services and interventions provided to children and families. Weary of relying on faith in well-intentioned but often unavailing programs, society began asking social workers to prove their work is worth supporting (Magura and Moses, 1986). During the 1990's a consensus developed on outcomes for child welfare intervention. The Adoption Safe Families Act of 1997 (Public Law 105-89) codified into law requirements for the federal government to develop national indicators for child welfare services. The law states:

“The Secretary, in consultation with Governors, State legislatures, State and local public officials responsible for administering child welfare programs, and child welfare advocates, shall – develop a set of outcome measures (including length of stay in foster care, number of foster care placements, and number of adoptions) that can be used to assess the performance of States in operating child protection and child welfare programs pursuant parts B and E to ensure the safety of children (Public Law 105-89, Sec. 479A Annual Report, 42 USC 679b.)”

The Department of Health and Human Services established that the national goals for children in the child welfare system are safety, permanency and well-being. Federal and state laws emphasize child safety and permanency, and these two outcomes are often used in global evaluation of agency or system performance (Courtney, 2000).

Although concerns for accountability are at the center of the outcomes movement, the emphasis on defining and measuring outcomes has drawn attention away from practice. State and federal legislation attempting to improve the child welfare system are focusing on outcomes (Poertner, McDonald, Murray, 2000). Those concerned with the escalating costs of public child welfare are turning to outcome monitoring and performance standards as potential fiscal control

mechanisms. Focusing on numbers and quotas for system maintenance draws attention away from the practice that produces the outcome. For example, if a State meets the adoption requirements for a given year they receive fiscal rewards. The quality of the relationships and commitments built through the adoption process are not assessed.

In the 21st century, a move in the field of child welfare toward utilizing “best evidence” is seen as a way to assure both best practice and positive outcomes for children and families. There is little consistency thus far in defining best practice, but there is relative consensus in the underlying principles. Macdonald (1998) explains the principle of evidence-based practice by stating “when we intervene in the lives of others we should do so on the basis of the best evidence available regarding the likely consequences of that intervention.” As social workers strive to meet the outcome goals required by the public, they must also strive to provide effective practice interventions to children and families.

One challenge posed by the evidence based practice movement is assuring that those who intervene know the current state of the knowledge in a field. How does a child welfare worker faced with a caseload that includes a substance abusing mother, a victim of domestic violence, an emotionally disturbed child and a developmentally disabled child keep up to date on best practices? The medical field has confronted this problem for several years with a line of research dedicated to strategies for keeping physicians and other health care providers up to date on the latest medical outcomes research.

This paper is a summary and critical appraisal of what can be learned from the techniques used within the medical field to influence physicians and other health care professionals to adopt evidence based practices. Reviews of techniques such as continuing education, audit and feedback, and computer-generated reminders are scrutinized to determine the effectiveness of

these interventions in changing physician behavior. Challenges to the use of evidenced based practice in child welfare are identified.

DEFINING EVIDENCE-BASED PRACTICE

Interest in providing effective interventions and services to children and families is essential to evidence-based practice and ethical social work practice. Sackett, Straus & Richardson (1997) defines evidence-based practice as the conscientious, explicit, and judicious use of current best evidence in making decisions about individuals. Defined by worker behaviors, EBP requires 1) an individualized assessment; 2) a search for the best available external evidence related to the client's concerns and an estimate of the extent to which this applies to a particular client; and 3) a consideration of the values and expectations of clients.

An individualized assessment requires that the worker engage with the client to determine what specific issues are causing difficulties in family functioning. The worker and the client collectively determine the stressors and work to define a treatment path. Critical to this stage is an understanding on the part of the worker that an underlying condition/risk factor present within one family system may act out differently than the same factor in another family system. For example, two families may have the presenting problem of mental illness. However, the effect of the mentally ill family member on the family system impacts each system and member within the system differently. Differences such as severity of the illness, who is diagnosed with the illness (i.e. parent or child), and which areas of functioning (i.e. school, work, home) are compromised impact the clinical service pathway selected by the worker and family.

Proponents of evidence-based practice advocate a rethinking of the relationship between practice, professional judgement, and research findings. They suggest that the practitioner should not rely only on preferred theories, individual professional experience or instinct, but also

on objective evidence found in the best research studies to date. MacDonald (1998) explains that evidence-based practice relies on available randomized controlled trials and systematic reviews or meta-analysis as a basis for discussing choices with the client. These types of studies are the best evidence for practice. However, lacking this type of evidence the importance of secondary data analysis, qualitative studies, subjectivity, understanding processes, or practice wisdom all play an important role.

Client involvement in making decisions regarding services they will receive and programs in which they will participate is a key element of evidence-based practice (Gambrill, 1999). Social workers need to seek out practice related research findings regarding the important practice decisions and share the results of their search with clients. A social worker should make sure that the intervention, service, or theory directing his or her work with a client is grounded in up-dated knowledge about what has been proven to be the most effective for the specific client situation. The social worker works with the client to assure that she/he understands the benefits and deficits of the proposed interventions and the extent to which the research applies to his or her individual situation. The client needs to understand that what is presented as best practice is more likely to be effective than other interventions, but is not guaranteed to work, especially since it depends on individual factors that may not have been controlled for in the research trials. The client's input is essential to insure the best use of current evidence because it will help the social worker and the client to combine research results and these individual factors to reach an intervention that is more likely to be successful.

The Nature of Evidence

According to Gambrill (1999, 2001) social work has been and continues to be an authority-based rather than an evidence-based profession. Social workers tend to have strong

biases that the interventions they use with families are effective whether or not there is evidence to support their claim. The belief that doing something is automatically better than doing nothing is rampant, yet not necessarily true. Most research that tests the effectiveness of social work interventions does not use a methodology that can establish cause and effect. As a result, practitioners are able to find evidence (no matter how weak) that their programs and interventions are helping families. The current research base is not challenging professional social workers to confront the potential lack of effectiveness in services that are daily provided to uninformed clients.

In social work, there is a range of evidence available to practitioners regarding theories, programs and interventions. The most powerful tools for evaluating effectiveness are meta-analysis and systematic reviews. Systematic reviews are the synthesis of research studied in which the researchers outline their methodology and sources of biases. Meta-analyses use statistical analysis to determine the effectiveness of an intervention used in multiple randomized trials. Randomized controlled trials are the only way that researchers can control for the factors, known and unknown that may account for the outcome of an intervention.

Unfortunately, there are a limited number of randomized controlled trials in the social work literature. However, there are important opportunities to conduct this type of research. For example, under section 1130 of the Social Security Act as amended by Public Law 105-89, Child Welfare Demonstration Projects are allowed for and waive certain requirements of titles IV-B and IV-E (United States Department of Health and Human Services, 2001). These Demonstration Projects provide an opportunity for child welfare to greatly increase the number of randomized controlled trials in the knowledge base. Preference is given to approving projects that include an evaluation based on randomized controlled trials. These waivers provide an

opportunity to develop creative approaches to dismantling the many barriers that exist between children waiting in foster care and permanency, enhancing the number and quality of randomized controlled trials and the scope of knowledge about the effectiveness of interventions thereby defining best practice.

In the absence of meta-analyses and randomized controlled trials, social workers need to know what evidence is available to them and the strengths and limitations of the methodologies that are employed. Studies using secondary data-analysis and sophisticated statistical analyses are not as powerful for providing evidence on effectiveness, but these methodologies answer important questions that may not be testable by randomized controlled trials. Also, qualitative studies provide a wealth of information concerning the client's perspective. These are critical to understanding clients' thoughts, emotions, and experiences with their situations as well as planned interventions.

Making Research Available to Caseworkers

Given the multi-faceted situations facing social workers it is difficult to imagine how anyone can keep up with best evidence that includes many different fields from substance abuse to mental illness to domestic violence. Practitioners find it nearly impossible to even begin to keep up with new developments in the research literature. The proliferation of scholarly journals that is seen as one way to disseminate research findings exacerbates the problem. Unfortunately the consequence is that there are now even more places that the practitioner must look in order to find the best available evidence.

In addition, as Stephen Webb (2001) observes, when workers are provided with evidence it is unlikely that they will use it in the way that the proponents of EBP claim or hope. He suggests that research is needed into the very idea that by alerting social workers to evidence and

systematic reviews of research findings that they will actually do things differently. This challenge is consistent with research that has shown that available knowledge is underused (Gambrill, 1999).

However, there are efforts underway to bring research together in a useful manner (Gallagher, 1999). The Cochrane Collaboration that focuses on medical research is one such resource. The Cochrane Collaboration is an international organization that coordinates the efforts of health care professionals and researchers around the world to prepare, maintain and disseminate systematic reviews of health care research (Robinson, 1995). The collaboration is divided into groups that are coordinated by an editorial team that compiles modules from the reviews produced for dissemination electronically. Each group is assigned topics based on the research interests and expertise of the collaborators. Each review specifies the methodology used and synthesizes all identified randomized controlled trials on the given topic.

In addition to the problem of bringing related research together the health care field has developed and tested techniques to influence physicians and other health care professionals to use best practices. These techniques include dissemination of educational materials, educational outreach visits, use of local opinion leaders, audit and feedback techniques, use of computers, mass media campaigns, and continuous quality improvement [CQI] programs. In an effort to learn from the health care field the following section reviews each of these interventions and discusses the effectiveness of each technique based on existing systematic reviews.

INTERVENTIONS USED TO INFLUENCE THE BEHAVIOR OF HEALTH CARE PROFESSIONALS

“Best Practice” guidelines for social work interventions can contribute to improved practice and outcomes only if they succeed in moving practice closer to the behaviors that the

guidelines recommend. This section reviews the research on the effectiveness of interventions intended to influence health care professionals to use evidence based practices.

Dissemination of Educational Materials

It is often assumed that merely providing information in an accessible form will influence practice. Although such a strategy is still widely used in an attempt to change behavior, there is growing awareness that simply providing information may not lead to changes in the practice of health care professionals. Freemantle et al. (2001) reviewed the effectiveness of printed educational materials on changing professional physician behavior. This is a review of 11 studied trials that included more than 1848 physicians. This review selected only randomized controlled trials, interrupted time series analyses and non-equivalent group designs with pre-post measures. The studies included interventions comparing 1) printed educational materials versus a non-intervention control, and 2) printed educational materials plus additional implementation strategies versus printed educational materials alone (Freemantle et al., 2001). The subjects of the studies were any health care professionals provided with printed educational materials aimed at improving their practice and/or patient outcomes. The methods of dissemination ranged from the distribution of guidelines or publications by hand or through mass mailings.

The studies included in this review evaluated a variety of attempts to modify provider behavior including: attempts to modify prescribing practice; reduce the rate of inappropriate cesarean sections; introducing smoking cessation programs; encouraging appropriate radiological test ordering; and the appropriate management of hypertension; irritable bowel syndrome and congestive heart failure (Freemantle et al., 2001). Most of the changes to practice in these studies were minimal, and the practical importance of the small changes is uncertain. In

addition, none of the 19 estimates of provider behavior or nine estimates of patient outcome was statistically significant (Freemantle et al., 2001).

In many public and private child welfare agencies, updates on policies, procedures and practices are given to workers through the dissemination of paper guidelines. Problems with this way of informing staff of guideline changes are not limited to ensuring their conformity to the policy changes, it is common that paper documents get easily lost, misplaced, and are quickly obsolete. The body of research from the medical field suggests that social work should question its widespread, singular use of the dissemination of paper education materials. Lomas et al. (1989) concluded that printed “guidelines for practice may predispose physicians to consider changing their behavior, but that unless there are other incentives or the removal of disincentives, guidelines may be unlikely to effect rapid change in actual practice.” Freemantle et al. (2001) indicated that the combination of dissemination of paper guidelines with other techniques might increase the likelihood of influencing physician behavior to use best practice guidelines.

Educational Outreach Visits

Thomson O’Brien et al. (2001c) systematically reviewed the literature on outreach visits and included only randomized trials. They define this intervention as the use of a trained person who meets with the providers in their practice settings to provide information with the intent of changing the provider’s performance. For example, in many studies, outreach interventions were used to give information about appropriate indications and alternative prescribing strategies, while other studies dealt with appropriate screening or counseling practices. This type of intervention includes written material and educational meetings, and may include feedback about the provider’s performance. The messenger varies and so does the frequency of the visits. In some cases the intervention consisted of one visit, in other cases visits were scheduled weekly

for seven months. In some programs, visits were personal and then followed by a group session, while other programs exclusively consisted of group sessions.

Three studies identified by Thomson O'Brien et al. (2001c) compared the effect of outreach visits alone to no intervention. All of them suggested that outreach visits resulted in more changes in physicians' behaviors. However, the results of 12 studies out of 13 suggested that they were more effective when combined with other interventions (See section on multi-faceted interventions). Outreach visits were especially effective with prescribing behaviors. In their review, Thomson O'Brien et al. (2001c) also found studies that suggested that physicians' performances deteriorate over time. This suggests the need for further research regarding the long-term effects of this intervention. This review also indicates the need for more research linking the intervention to patient outcomes. Finally, research needs to be done to determine the optimal components of a successful outreach visits program. This includes visit frequency and number, who should do the visits and the optimal structure (individual sessions alone, individual and group sessions combined, group sessions alone).

Use of Local Opinion Leaders

Peer judgements and beliefs may play an important role in an individual's evaluation of new information and consequent behavior (Mittman, Tonesk, & Jacobsen, 1992). Training departments in social work organizations deal with this quite often. New workers enter the office after training and veteran workers can, and often do, dispel new "best practices" as myths and discourage new workers from adhering to new guidelines encouraging retention of the status quo. This example shows the influence of negative peer judgement. However, the use of local opinion leaders is a clinical technique that has proven effective in some situations and can be a

resource for positively influencing worker behavior to move toward implementing best practice guidelines.

In the trials included in Thomson O'Brien's systematic review (2001d) local opinion leaders were defined as "health care professionals nominated by their colleagues as 'educationally influential'." Greer (1988) suggests that these local opinion leaders provide "sanction" for the diffusion of new guidelines and technologies. Credibility and status are among the reasons these leaders are effective in influencing behaviors of others. However, because these individuals are likely to take part in or organize many different activities, it may be difficult to disentangle the activities that are likely to be the most important change agents (Thomson O'Brien et al., 2001d).

The review of research in this area evaluated 8 studies that included more than 296 health care professionals. Six of seven trials that measured health professional practice demonstrated some improvement for at least one outcome variable, and in two trials, the results were statistically significant and clinically important. In three trials that measured patient outcomes, only one achieved an impact upon practice that was of practical importance. In this study local opinion leaders were effective in improving the rate of vaginal birth after caesarian section.

Audit and Feedback

Audit and feedback can sometimes be an effective technique in improving the practice of health care professionals. One meta-analysis (Balas, Boren et al., 1996) and two systematic reviews (Thomson O'Brien et al., 2001a; Buntinx, Winkens, Grol, & Knottnerus, 1993) have been conducted to determine the effectiveness of the techniques. The meta-analysis by Balas, Austin et al. (1996) included 12 studies involving 553 physicians. The inclusion criterion for the

study was randomized controlled clinical trials that tested peer-comparison feedback intervention and measured utilization of clinical procedures.

The systematic review of audit and feedback was originally conducted in 1997 and subsequently updated physicians (Thomson O'Brien et al., 2001b). It includes 37 studies involving more than 4977 physicians. This study selected only randomized controlled trials of audit and feedback defined as any summary of clinical performance of health care over a specified time. The information may have been given in a written, verbal, or electronic format. The systematic review by Buntinx et al. (1993) evaluated feedback and reminders. Feedback is defined as the providing of data on the effect of physician performance both after and/or during the routine. Reminders are defined as the provision of this data prior to the physician behavior. This review looked only at reports of studies in which control groups, including historical control groups, were used. It is important to know that several of these studies did not have exact results, and in a few cases results were estimated from histograms provided in the article. There were 26 studies included in the review.

Balas, Boren et al. (1996) concluded that profiling has a statistically significant, but minimal effect on the utilization of clinical procedures. The systematic review by Thompson O'Brien (2001) found that audit and feedback could be effective, particularly in the area of prescribing and diagnostic test ordering. When the technique is effective, the effects appear to be small to moderate but potentially worthwhile. Buntinx et al. (1993) found that feedback reduces use of diagnostic test ordering and increases the adherence to guidelines. All studies emphasize that when attempting to change physician behavior one should not rely solely on this approach.

Use of computers

Three systematic reviews were conducted on computer-based interventions. Hunt, Haynes, Hanna and Smith (1998) studied 68 controlled clinical trials. Balas, Austin et al. (1996) reviewed 98 randomized clinical trials. Sullivan and Mitchell (1995) reviewed 30 studies selected by rating their methodological adequacy (the global rating combines ratings of sample formation, baseline differences, unit of allocation, outcome measures, follow-up).

Computers are used in a number of ways to influence behavior. The most common one is as an aid to access clinical data during consultations (Sullivan and Mitchell, 1995). Balas, Austin et al. (1996) described how computers could be used for an interactive patient education/therapy technique or as a patient reminder. For example the computer can identify patients who should be followed up for an abnormal test result and send a reminder to the patient.

All three reviews describe the use of computers as clinical decision-support. Hunt et al. (1998) explain how some software is designed to match characteristics of individual patients that are entered in the computer to a computerized knowledge base and generate patient-specific assessments or recommendations that are then presented to clinicians for consideration in a timely fashion. This can be a reminder to recommend preventive care such as cancer screening tests for some patients evaluated to be at risk, or it can be a recommendation for a specific drug dosage. Sullivan and Mitchell (1995) further explain that this kind of software can assist the physician by accessing scientific publications, by providing guidelines and protocols, and by prompting the physician for missing information.

Hunt et al. (1998) suggest that computer-based decision support systems (CDSS) were effective with drug dosing (9 out of 15 studies had positive results) and preventive care (14 out of 19 studies had positive results) but not effective with diagnosing patients (only 1 out of 5

studies had positive results). All five studies that examined computers effectiveness with making recommendations for general medical problems showed positive results. Hunt et al. (1998) noted that requiring physicians to acknowledge reminders improved their adherence to recommendations.

Sullivan and Mitchell (1995) found that 21 out of 21 studies showed improvement in clinician performance when a computer was used and showed especially positive results for single preventive measures. It is interesting to note that the authors also found that computers promoted better results in clinician performance when dealing with more deprived patient populations. One study suggested that computers might encourage more complete data capture of the aspects of consultation which doctor considered important. However, Sullivan and Mitchell (1995) suggest that computers are an information management tool rather than a clinician management tool.

Hunt et al. (1998), Balas, Austin et al. (1996) and Sullivan and Mitchell (1995) suggested that there is a need for further research regarding linking changed physical behavior to patient outcomes. Further, the organizational context of CDSS should be the subject of study since organizational factors might be related to their effectiveness.

Mass Media Campaigns

Media campaigns are targeted to consumers in an effort to change their behavior but also to influence the behavior of physicians. This includes having consumers requesting health screens for anything from cholesterol to cancer or requesting particular medication. Grilli, Freemantle, Minozzi, Domenighetti and Finer (2001) reviewed the use of mass media campaigns. They examined campaigns promoting immunization or cancer screening and campaigns aiming at reducing hysterectomy rates or the delay in admission to hospital for

patients with suspected myocardial infarction. These campaigns used radio, television, newspapers, magazines, leaflets, posters and pamphlets. Targeted at consumers they did not rely on scientific media. The length of the campaigns varied widely. Some campaigns lasted one week while others were 4 years in duration. This review included 17 studies that all used interrupted time series designs but inconsistently analyzed the results. Grilli et al. (2001) reanalyzed all the raw results reported by the studies.

The review found that mass media interventions appeared to be effective with the promotion of immunization (2 out of studies had positive results), with reducing hysterectomy rates (1 study), and with increasing HIV testing and use of counseling (2 out of 3 studies had positive results). Mass media interventions aimed at reducing delay in admission to hospital for patients with suspected myocardial infarction, and promoting cancer screening, had mixed results (respectively 1 out of 2 studies, and 2 out of 5 studies had positive results). One campaign aimed at raising awareness about the relationship between Reye's syndrome and aspirin did not prove to be effective. Grilli et al. (2001) suggest that more research is needed to identify the components that make a successful media campaign (optimal length, medium, setting, topic etc). Further research is also needed to determine who is most influenced by the campaigns: the patients (who will then in turn affect the practitioner) or the practitioners, or both. More follow-up studies are needed to evaluate long-term effects and to examine cost-effectiveness.

Continuous Quality Improvement (CQI) Programs

Shortell, Bennett, Byck (1998) reviewed the use of CQI programs in health care and found that these interventions were used to address three main types of problems: overuse of services (prescription of sedatives and tranquilizers, carotid endarterectomies, hysterectomies, upper GI endoscopy), under use of services (immunization, anti-coagulation therapy, assessment

for depression, prenatal care, mammography) and misuse of services (medication errors, complication or injuries). Generally, multidisciplinary teams conducted CQI programs. Physician involvement varied greatly. Physicians initiated some programs while others were initiated and directed by nursing personal. CQI programs are generally tailored to the problem the organization is facing. The first step is to find the causes of the problem. Then, a number of interventions may be implemented to address these causes, such as provider training and education, information dissemination, feedback to staff, guideline/protocol development, physician retraining, feedback from utilization manager or case manager, or CDSS. Shortell et al. (1998) report that in 1993, 69% of health care providers used CQI programs to improve their administration. However, at that time, CQI programs were seldom used to improve clinical practice. Only recently has CQI been used to change service utilization and physician behavior.

Shortell et al. (1998) found positive changes in almost all of the 55 studies that were included in their review. They report that CQI program success correlates with the participation of a nucleus of physicians, feedback to practitioners and a supportive organizational culture for maintaining gains. They suggest that these interventions are culturally compatible with the health care field since they focus on determining and meeting the needs patients, they use a holistic approach to quality improvement based on the identification of underlying causes of poor performance and they are fact-base management and scientific methodologies.

However only 3 studies out of 55 included in Shortell et al. review were randomized clinical trials (the others primarily used pre-post designs). None of these 3 studies showed positive results. The authors acknowledge the need for more randomized clinical trials. They also suggest that more studies should focus on the under use and misuse of services.

Effectiveness of Multi-faceted Interventions

Generally, these reviews suggest that combinations of interventions are more effective than the use of a single intervention or some other combinations. For example, Thomson O'Brien et al. (2001b) reported the use of outreach visits augmented with reminders to be more effective than the use of audit and feedback augmented with reminders. They also found that outreach visits appear to be effective when they are combined with another intervention and especially effective and promising when used with a social marketing. This strategy aims at determining the barriers to change that exist in the targeted organization and the readiness of workers to change. The intervention is then tailored to the specific barriers and workers attitude. This strategy is based on social cognition models and the stages of change approach developed by Prochaska and DiClemente (Getting evidence into practice, 1999). This approach proposes that the change process consists of 5 main stages: pre-contemplation, contemplation, preparation, action and maintenance. Originally used with addiction problems, Prochaska and DiClemente (1982) suggest that treatment techniques will be more successful when they match the stage the individual is in.

CHALLENGES TO THE USE OF BEST PRACTICES

The lesson from the health care literature is clear. It is a nontrivial exercise to make best practices available to workers and to influence them to change their practice to incorporate new ideas. There are a variety of constraints from lack of evidence to support best practices to the management of information to the organizational culture in which the worker operates.

Lack of evidence for best practice guidelines

Slawson and Shaughnessy (2000) found that recent studies showed that only about half of medical best practice guidelines are based on good evidence. They state that for example, "the

latest anticoagulation guidelines were developed using the highest quality evidence only 44% of the time.” (p. 64). This is clearly a problem for social work and child welfare in particular. For example, there is a lack of evidence for most prevention programs. The family preservation program that sought to prevent placement of children is a good example. There have been a number of controlled studies of these programs that have demonstrated no difference between intensive services and usual child welfare services.

The diversity of the child welfare population raises another question about the nature of the evidence. Women and African-American families are over-represented in the child welfare system (Morton, 1999, United States Department of Health and Human Services, 1999). The degree to which interventions are tested on African-American children and families is not always clear. There is always the danger that an intervention tested on one group may not fit the cultural framework of others.

Another difficulty is interventions or practices that are based on theories that refuse to recognize empirical evaluations. For example, feminist social workers consider that empirically evaluating clients progress is counter therapeutic and based on theories supporting our culture’s male-dominated values (Turner, 1996). This point of view prevents social workers from having empirical data on which to rely. In addition, as Webb (2001) suggests it, “only those interventions which are amenable to scientific-technological inputs and solutions are deemed rationally decidable by the evidence-based approach” (p. 73). This means that a number of theories and therapies would not be considered in an evidence best practice environment.

This also raises another question for the evidence-based practice movement. In fact, the major part of the evidence found in the literature is based on effectiveness as defined by the researchers. The outcomes they define and decide to measure are what determine the success of

the intervention. It may be that these outcome variables are chosen to address funding requirements or to fit what our society wants. It may also be that client interests and society's interests are different. This suggests the importance of the assessment process blending clients' and societies' interests and where necessary engaging in advocacy for clients.

Organizational and Professional Culture

Social workers know about the importance of culture in influencing behavior. This also applies to organizations and the range of worker behaviors that will be encouraged or discouraged. Organizations that have "established ways of doing business" are less likely to embrace new practices. On the other hand workers in organizations where the culture indicates a value for innovation and demonstrating outcomes for clients are more likely to be open to new approaches.

In addition, some social work organizations use only one theoretical framework such as psychodynamic theories. These organizational cultures interpret their clients' problems and provide treatment from a single perspective. They are unlikely to consider evidence-based practice since different therapies and thus different theoretical frameworks might be indicated.

Within the professional social work culture conflict exists between practitioners and researchers. They have not always valued each other. Practitioners sometimes feel that researchers are not faced with the same reality and researchers sometimes feel that practitioners are not open to a more scientific approach to their work. For evidence-based practice to succeed practitioners and researchers need to value each other.

Webb (2001) also suggests that culturally "it is the social workers' conception of how things are, rather than the evidential facts per se which determine actions" (p. 67). Evidence-based practice tends to only look at the evidence regarding the outcomes of interventions that are

chosen once the client's problem has been assessed and evaluated. It is much harder to prove the validity of one theoretical interpretation of a problem. Webb points out that "social workers make decisions not only because of the ways things are but because of the way they would like things to be. [...] Social problems, to a very considerable extent depend on what social workers think they are, that is upon their ideas." (p. 67). For example, research may point out to a cognitive-behavioral intervention to help a client facing emotional problems coming from a history of discrimination in his or her work place, thus assuming that the origin of the client's problem is in his cognition and his coping mechanisms. However, according to his or her own values, a social worker may want to focus on the social issue constituted by the discrimination and try to solve this problem as framed as an environmental stress that can be and should be removed from the client's life. This advocacy aspect of social work is important in the field's culture and may sometimes challenge evidence-based practice.

Decision-making process

Research on decision-making in social psychology demonstrates that people tend to use certain reasoning strategies regardless of the evidence (Tibrewal & Poertner, 2000). For example, people frequently make quick decisions based upon little evidence and then have great confidence in their decisions. This tendency can be dangerous when used for decisions that may have a low failure rate but high negative consequences. For example, the decision to reunify a child with a parent may only fail 20% of the time but the consequence for the child that is re-abused may be devastating. Child welfare has largely ignored the decision-making research and seldom trains workers in this area. People trying to influence social workers to use best practice guidelines need to be aware of the strength of these natural decision making tendencies and of how universal they are.

In addition, the complex environment of decision-making in child welfare needs to be recognized. Social workers are often pressured in their decisions by environmental constraints ranging from limited resources to politics of agencies and professional values. Legal and organizational requirements are also important in social work and practitioners are not always free to choose whatever intervention would be best for their client regardless of financial costs or legal issues. For instance, a child protection investigator may make the decision that reunification with the biological family is in the child's best interests and the State's Attorney may support termination of parental rights. In an instance such as this, the final authority for decision-making rests with the judge and not the child protection worker.

Information Management

Getting the evidence based practice information to workers when and where they need it is a challenge. Child welfare workers deal with a great variety of situations ranging from individual problems to issues involving a whole community or even the society. No single worker can know all of what needs to be included in best practice. The advantages of the information technology revolution need to be blended with the working reality of child welfare workers to determine the best way to get information to workers as needed. In addition, in order for a social worker to be able to implement best practice guidelines, social workers would need to have a better access to various therapy training.

Client Expectations

The proliferation of television advertisements about prescription drugs puts a great deal of pressure on physicians to respond to the patient and the advertisement in spite of other available evidence. Child welfare clients' expectations are also an important challenge for practitioners. For example, some parents may think that they can "solve" their children's

behaviors problems by getting them diagnosed ADHD and prescribed medication. They may not know what ADHD really is or if their child has this disorder. On the other hand parents misapprehensions about having their children take medications may make it difficult for them to accept medication for ADHD when it is accurately diagnosed.

Similar to the techniques we have discussed in this study, the Cochrane Collaboration has reviewed the effectiveness of mass media campaigns to change patterns of health care procedures and to change public lifestyles. We did not include the synthesis of this technique in our study because it does not directly target physician behavior. The mass media technique may change physician behavior, however, though it is done through informing client expectations. For example, Grilli, Freemantle, Minozzi, Domenighetti and Finer (2001) found that mass media campaigns appeared to be effective in the promotion of immunization, with reducing hysterectomy rates, and with increasing HIV testing and use of counseling.

Grilli et al. (2001) suggest that mass media interventions can be helpful and are a useful tool to communicate health information to the general population. They may be especially useful in the areas of prevention, risk reduction and drug information. They also argue that it is a way to make sure that the media becomes an advocacy tool to advance healthy public policies. In addition, they point out that these interventions allow the health care community to have some control over the accuracy of the message that the media deliver to the general population, which influences client expectations.

DISCUSSION/CONCLUSION

There are many lessons to be learned about the application of evidence based practice from the health care field. As Oxman, Thomson, Davis, & Haynes (1995) put it, there are no “magic bullets” that are effective across all practice issues in health care. The health care

research shows that interventions aimed at changing workers are differentially effective depending on the decision. Some interventions are effective with some decision points but not with others. For example CDSS are reported to be effective for drug dosing and for preventive care (through the use of computerized prompts) but not for diagnosis (Hunt et al., 1998). However, even within one decision category such as preventive care, one intervention can be effective for one preventive measure but not another. For example CDSS were effective for intravenous drug dosage but not for the dosage of Warfarin (Hunt et al., 1998). Finally, this review suggests that interventions that are a combination of several approaches are more likely to be effective.

Changing practice behavior is difficult because it challenges a lifetime of education, practice and experience. It also challenges whole sets of beliefs and values. Therefore, child welfare workers are likely to be more sensitive to a change model that integrates their resistance and their fears. Perhaps what has been learned from social marketing and Motivational Enhancement Therapy applies to helping workers adapt best practices. These strategies embedded in an organizational culture that values the use of best evidence may enhance the use of evidence based practices.

Decision making is affected by emotional involvement both positively and negatively (Munro, 1999). One way to use this emotional involvement to change behaviors may be using case studies to illustrate the statistical data supporting a best practice guideline. Thomson O'Brien et al. (2001d) found one trial that compared the use of case studies to the use of statistical information when training doctors to modify their prescribing practice regarding anti-ulcer agents. This study showed positive results in favor of the group trained with case scenarios. Webb (2001) quotes Nisbett and Ross (1980), who suggest that "people are unmoved by the sorts

of dry statistical data that are dear to the hearts of scientists and policy planners...information that scientists regards as highly pertinent and logically compelling are habitually ignored by people” (p. 65).

Webb (2001) suggests that EBP may end up undermining the profession by letting our “performance culture” (p. 59) take over social work as it may already have in managed health care systems. He worries that there may no longer be room for caring and therapeutic relationships. Webb states that “increasingly the phrase ‘using research evidence’ to facilitate practice is being dropped and replaced by the more monolithic assertion that practice should be ‘grounded in’ evidence or show a ‘commitment to’ evidence-based practice” (p. 59). Balancing the need to produce outcomes with the use of evidence based practices within the context of a helping relationship is a major challenge. Acknowledging this difficulty and asking child welfare workers to think about how to work on this issue is a first step to open resistant practitioners to this new way of working.

The balance between use of evidence and the input of the client is also critical. It is not always easy to see how Gambrill’s (1999) suggestion of presenting clients the evidence and involving them to make the treatment decision might work in child welfare. The continued struggle of working with involuntary clients and the balance between individual choice and social control continues.

SUMMARY

Since the 1980’s child welfare has increasingly been held accountable for services and interventions provided to children and families. It has focused on defining and measuring outcomes, while forgetting best practice concerns. The evidence-based practice movement calls back attention to this essential aspect of accountability. However, as illustrated by the health care

field experience, changing practitioner behavior presents many challenges. Their extended literature on the subject suggests that disseminating information alone is insufficient. Many interventions have been designed to improve practitioners' adherence to best practice guidelines, and are differentially effective depending on the desired change. Furthermore, combining interventions and integrating workers' resistance appears to be more effective.

References

- Adoption and Safe Families Act of 1997, Pub.L. No. 105-89, 42 USC 1305, 111 Stat 2115 (1997).
- Balas, E. A., Austin, S. M., Mitchell, J. A., Ewigman, B. G., Bopp, K. D., Brown, G. D. (1996). The clinical value of computerized information services. A review of 98 randomized clinical trials. Archives of Family Medicine, 5(5), 271-8.
- Balas, E. A., Boren, S. A., Brown, G. D., Ewigman, B. G., Mitchell, J. A., Perkoff, G. T. (1996). Effect of physician profiling on utilization. Journal of General Internal Medicine, 11(10), 584-90.
- Buntinx, F., Winkens, R., Grol, R., Knottnerus, J. A. (1993). Influencing diagnostic and preventive performance in ambulatory care by feedback and reminders. A review. Family Practice, 10(2), 219-28.
- Courtney, M. (1999). What outcomes are relevant for intervention? In H. Dubowitz & D. DePanfilis, Editors. Handbook for Child Protection Practice. Thousand Oaks: Sage Publications
- NHS Center for Reviews and Dissemination, University of York. (1999). Getting evidence into practice. Effective Health Care, 5 (1) 1-16 [on-line] Available at: <http://www.york.ac.uk/inst/crd>.
- Freemantle, N., Harvey, E. L., Wolf, F., Grimshaw, J. M., Grilli, R., Bero, L. A. (2001). Printed educational materials: effects on professional practice and health care outcomes. Cochrane Effective Practice and Organisation of Care Group Cochrane Database of Systematic Reviews. Issue 1.
- Gallagher, P. E. (1999). Getting started in evidence-based health care: A guide to resources. Medical Reference Services Quarterly, 18(4), 1-10.
- Gambrill, E. (1999). Evidence-based practice: an alternative to authority-based practice. Families in Society: The Journal of Contemporary Human Services, 80(4), 341-350.
- Gambrill, E. (2001). Social work: An authority-based profession. Research on Social Work Practice, 11(2), 166-175.
- Greer, A.L. (1988). The state of the art versus the state of the science: The diffusion of new medical technologies into practice. International Journal of Tech Assess Health Care. 4:5-26.
- Grilli, R., Freemantle, N., Minozzi, S., Domenighetti, G., Finer, D. (2001). Mass media interventions: effects on health services utilisation. Cochrane Effective Practice and Organisation of Care Group Cochrane Database of Systematic Reviews. Issue 1.

Hunt, D. L., Haynes, R. B., Hanna, S. E., Smith, K. (1998). Effects of computer-based clinical decision support systems on physician performance and patient outcomes: A systematic review. The Journal of the American Medical Association, 280(15), 1339-1346.

Lomas, J., Anderson, G.M., Domnick-Pierre, K., Vayda, E., Enkin, M.W., & Hannah, W.J. (1989). Do practice guidelines guide practice? : The effect of a consensus statement on the practice of physicians. The New England Journal of Medicine. 321(19) 1306-11.

Macdonald, G. (1998). Promoting evidence-based practice in child protection. Clinical Child Psychology and Psychiatry, 3(1), 71-85.

Magura, S. & Moses B.S, (1986). Outcome measures for child welfare services: Theory and application. Washington, DC: Child Welfare League of America

Mittman, B.S., Tonesk, X., & Jacobsen, P.D. (1992). Implementing clinical practice guidelines: Social influence strategies and practitioner behavior change. QRB, 18(12): 413-22

Morton, T. (1999). Letter to the editor. Child Abuse and Neglect, 23(12), 1209.

Munro, E. (1999). Common errors of reasoning in child protection work. Child Abuse and Neglect, 23(8), 745-758.

Nisbett, R.E., & Ross, L. (1980). Human inference: Strategies and shortcomings of social judgment. New Jersey, Englewood Cliffs: Prentice Hall.

Oxman, A. D., Thomson, M. A., Davis, D. A., Haynes, R. B. (1995). No magic bullets: A systematic review of 102 trials of interventions to improve professional practice. Canadian Medical Association Journal, 153(10), 1423-1431.

Poertner, J., McDonald, T.P., & Murray, C. (2000). Child welfare outcomes revisited. Children and Youth Services Review, 22(9-10), 789-810.

Prochaska, J. O., DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. Psychotherapy: Theory, Research & Practice, 19(3), 276-288.

Robinson, A. (1995). Research, practice and the Cochrane collaboration. Canadian Medical Association Journal, 152(6), 883-889.

Sackett, D. L., Straus, S. E., Richardson, W.S. (1997). Evidence-based medicine: How to practice and teach EBM. New York: Churchill Livingstone.

Shortell, S. M., Bennett, C. L., Byck, G. R. (1998). Assessing the impact of continuous quality improvement on clinical practice: What it will take to accelerate progress. The Milbank Quarterly, 76(4), 593-624.

Slawson, D. C., Shaughnessy, A. F. (2000). Becoming an information master: Using POEMs to change practice with confidence. Journal of Family Practice, 49(1), 63-67.

Sullivan, F., Mitchell, E. (1995). Has general practitioner computing made a difference to patient care? A systematic review of published reports. British Medical Journal, 311(7009), 848-852.

Thomson O'Brien, M. A., Oxman, A. D., Davis, D. A., Haynes, R. B., Freemantle, N., Harvey, E. L. (2001a). Audit and feedback: effects on professional practice and health care outcomes. Cochrane Effective Practice and Organisation of Care Group Cochrane Database of Systematic Reviews. Issue 1.

Thomson O'Brien, M. A., Oxman, A. D., Davis, D. A., Haynes, R. B., Freemantle, N., Harvey, E. L. (2001b). Audit and feedback versus alternative strategies: effects on professional practice and health care outcomes. Cochrane Effective Practice and Organisation of Care Group Cochrane Database of Systematic Reviews. Issue 1.

Thomson O'Brien, M. A., Oxman, A. D., Davis, D. A., Haynes, R. B., Freemantle, N., Harvey, E. L. (2001c). Educational outreach visits: effects on professional practice and health care outcomes. Cochrane Effective Practice and Organisation of Care Group Cochrane Database of Systematic Reviews. Issue 1.

Thomson O'Brien, M. A., Oxman, A. D., Haynes, R. B., Davis, D. A., Freemantle, N., Harvey, E. L. (2001d). Local opinion leaders: effects on professional practice and health care outcomes. Cochrane Effective Practice and Organisation of Care Group Cochrane Database of Systematic Reviews. Issue 1.

Tibrewal and Poertner (2000). Confidence and uncertainty in casework decisions: The supervisor's role. Urbana, IL: Children and Family Research Center, School of Social Work, University of Illinois at Urbana-Champaign.

Turner, J. F. (1996). Feminist theory and social work practice. In J. F. Turner (Ed.), Social Work Treatment Interlocking theoretical approaches (4th ed.) (pp. 282-318). New York: The Free Press.

United States Department of Health and Human Services. (2001). Child welfare demonstration projects. [on-line] Available at:
<http://www.acf.dhhs.gov/programs/cb/initiatives/cwwaiver.htm>

United States Department of Health and Human Services. (1999, Jun. 18). *How many children entered foster care during the period 10/1/97 through 3/31/98?* U.S. DHHS. Available: <http://www.acf.dhhs.gov/programs/cb/stats/ar0199.htm> [2000, Dec 10].

Waldfohal, J. (2000). Reforming child protective services. Child Welfare, 79(1), 43-57.

Webb, S. A. (2001). Some considerations on the validity of evidence-based practice in social work. British Journal of Social Work, 31, 57-79.