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Educational Approaches to Address Barriers to Implementation of Evidence-Based Practices

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Abstract

The author describes barriers to evidence based practices (EBP); use of education to address gaps among research, education, and practice for EBP; the need for cultural competence; and educational approaches for community-based implementation. EBP is central to development of quality health and social services, but challenges remain in translation of research findings into EBP

Keywords: Evidence-based practice; Challenges; Research; Education; Practice

Barriers to Implementation of Evidence-Based Practice

Evidence-based practice has existed for several decades in health care for older adults [1]. These include services addressing disease prevention, health promotion, nutrition, and other services funded by the Older Americans Act of 1965 and Amendments [2]. Other funding has supported programs to train community members to address mental health needs of older adults. However, there are challenges to translation of research findings into evidence-based practices, and education is a necessary component of the three-legged stool of research, education, and practice essential for successful implementation of evidence-based practice. Gaps between these components for implementation of EBP are well documented [1,3-6], and they must be addressed through collaboration by educators, researchers, and practitioners.

There is lack of consensus about what EBP is as an approach to practice, and multiple definitions exist. Scheinholtz's [7] commonly cited definition of EBP as "interventions that have strong scientific proof that they produce positive outcomes for certain types of disorders" differs from Sackett's [8] definition of EBP as "conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients." Several authors [5,9] have broadened conceptualization of EBP to reflect the need to supplement research efforts so that complexities of needed multimodal interventions and local implementation and translation are addressed. Gupta [10] describes evidence-based medicine (EBM) as integration of clinical expertise, patient values, and the best research evidence.

Rahman and Applebaum [5] describe the challenge of a "paradox of practice" in which researchers advocate for practice based on scientific evidence, but the broad range of services and their contexts prevents practitioners from basing all practice on research evidence. Since researchers and practitioners have different goals, tensions result pertaining to implementation of EBP because these groups have different goals. Practitioners are required to provide services to consumers in an imperfect system while researchers may focus on problems for which funding and publication potential are available although the focus may not be of interest to practitioners [5].

Education for cultural competence in EBP may be lacking. Cultural affiliation impacts beliefs about services, their access and utilization, decisions about developing health and social services, and policies affecting service delivery [11,12]. EBPs that fail to address cultural specificity risk evidence that is circumscribed and practices that are ineffective with persons belonging to racial and ethnic minority groups.

Education to Address Challenges to Implementation of EBP

Education is essential for translation of research findings into practice for EBP. Translation for EBP has been defined as "the science of the acceleration of research to its useful application [4]. The amount of change required in practitioner behavior and agency operations must be considered in embedding EBPs for service provision [13]. Adapting the intervention, preparing the agency, and developing and modifying the host system are essential change processes for EBP, and there may be staff resistance [13]. Changes may be needed in organizational culture, capacity building, and development in external systems and linkages, and community gatekeepers and potential participants need to value the program. Staff must receive coaching and supervision to assure intervention fidelity, as well as training in the logic, core principles, and protocols of the intervention [13].

Interest in EBP has led to how-to courses, textbooks, and articles across disciplines. Nevertheless, there are recent developments generating concerns about EBP, including increased adoption of continuous quality improvement (QI) practices by social service, health care, and community service providers that lack the required level of scientific rigor for publication in scientific literature [5]. Additional attention must be devoted to developing an evidence base documenting contextual, organizational, community, and political factors influencing implementation and sustainability of EBP [1]. Information should be available for understanding the needs of service providers as they consider adopting, implementing, and maintaining programs for older adults [4]. Ongoing education is needed for development of researchers' understanding of clinical issues and

practitioners' understanding of research methodology. Reinhardt [6] believes that research findings must be translated into accessible treatment guidelines for service providers. According to Reinhardt [6], confusion about who is responsible for translation and how to do it may be an impediment to translation for EBP.

For success in changing systems and building organizational capacity in services for older adults, the characteristics of scalability, sustainability, and organizational and environmental factors are important. It is important to consider applicability of findings to diverse settings and populations in real world conditions; making the program attractive and compatible with the organization's mission; availability of training, manuals, and other materials for community-based staff; presence of volunteers that reflect the community's context; engaging older adults as facilitators and peer supports and emphasizing self-determination; protecting the interests of the participants, funders, and adopting organizations; and updating EBP when new evidence becomes available [1].

Reinhardt [6] recommends continuous interaction between researchers and practitioners, and she suggests that commitment to the importance of this work, willingness to become educated about the process, and development of skills that will make EBP happen are critical factors for implementation. According to Reinhardt [6], if researchers learn about issues that are important to practitioners, they can ask clinically informed questions that can access information that is truly useful in practice [6]. Decisions on outcomes require participation of practitioners, researchers, potential participants, policy makers, and funders [9], as well as educators with their key role in translation from research to practice.

Bass and Judge [3] have developed a framework of characteristics that impact successful EBP implementation. Their framework has important implications for roles of education in developing EBP. They suggest that hybrid organizations with service and research divisions, such as the Benjamin Rose Institute on Aging, are in an especially strong position to study the implementation process. Bass and Judge have identified six groups of characteristics that impact successful implementation of EBP: (a) community characteristics that are contextual factors outside of the organization, including environmental features and social norms and values, (b) intra-organizational characteristics, (c) evidence-based program characteristics, (d) fidelity, (e) marketing, cost, and payment source, and (f) staffing and training.

Bass and Judge [3] offer advice about educating staff members about EBP, including staff members who are not directly involved in implementation. Staff education can facilitate understanding about how an EBP complements pre-existing programs, as well as increasing understanding about the EBP. Education can explain the rationales and reasons for change and can generate enthusiasm throughout the organization for the change. Internal referrals to the program can result from staff education. Education can address concerns that may impede implementation of the EBP, such as perceptions about the EBP as competition or replacement of existing staff or programs or concerns that staff may have that the EBP is considered superior to existing programs. Educating staff about the EBP before implementation, involving existing staff in planning for the program, and asking staff for recommendations for strategies for implementation can also predispose staff to react positively to implementation of the EBP. Program-specific training may be more important than academic and employment background.

Less experienced practitioners may find it easier to adhere to program-specific protocols compared to more experienced practitioners who may resume familiar ways of providing assistance. In addition to a well-written manual or curriculum, program-specific training should include structured review and feedback for needed role playing, pilot cases, and practice sessions. Some information can be learned only after implementation begins, and weekly to monthly sessions in which cases and approaches for program improvement are discussed can be useful. Supervision is essential in training and fidelity, and a formal certification process may also be useful to ensure adequacy of training received by practitioners and acquisition of required skills and expertise [3].

Conclusion

This article provides information and analysis pertaining to education as an essential component in the "three-legged stool" of research, education, and practice for EBP. Analyses of roles of education in EBP provide essential knowledge to inform efforts to address barriers to EBP and develop approaches for facilitating translation of research into practice for EBP.

Barriers to implementation of EBP include (1) multiple definitions for EBP; (2) the "paradox of practice" in which in which researchers advocate for practice based on scientific evidence, but the broad range of services and their contexts prevents practitioners from basing all practice on research evidence; (3) lack of education for cultural competence in EBP; and (4) failure to address the needs of researchers, educators, and service providers for education for EBP that adequately explains rationales, roles, tasks, contexts, and tools for reduction of barriers and successful implementation of EBP..

Important concepts and approaches for education to address barriers to implementation of EBP have been identified by Birkel, et al. [13], Rahman and Applebaum [5], Whitelaw [1], Reinhardt [6], McCallion and Ferretti [9], Bass and Judge [3] and others.

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