

2008 Alliance William Campbell Felch/Wyeth Award for Research in CME

In Recognition of the Best Completed Research Project in the Arena of Continuing Medical Education

Sean M. Hayes, PsyD; Jeffrey D. Melin, MEd; Martin Dupuis, MA; Suzanne Murray, BComm; David M. Labiner, MD

Assessing the True Learning Needs of Health Care Professionals in Epilepsy Care

Introduction

Health care professionals who care for people with epilepsy need to inform and educate themselves about ongoing changes in epilepsy treatment and management in order to advance the standard of epilepsy care. With the emergence of outcomes-based educational initiatives, needs assessments involving practicing health care professionals (who are often not experts) have become a primary means for identifying gaps and barriers to change in daily clinical practice. The rationale for a comprehensive needs assessment is to help providers of educational programs understand the what, how and why of clinical decision making behaviors of practicing health care professionals. Analysis of a behavioral needs assessment reveals differences between actual activities in daily clinical practice as compared with optimal clinical practices (ie, what should be) as indicated by experts, such as key opinion leaders, evidence-based medicine, clinical practice guidelines and clinical research.

Method

The American Epilepsy Society (AES) partnered with AXDEV Group to conduct a comprehensive mixed-methods behavioral needs assessment from September 2005 to April 2006. The purpose of this assessment was to determine the educational and clinical practice needs of health care professionals who treat and manage individuals with epilepsy, and to identify significant barriers to caring for people with epilepsy.

The needs assessment used a mixed-methods research design and involved multiple stakeholders, including epileptologists, neurologists, professionals in epilepsy care, and persons with epilepsy. Mixed-methods research is defined as a *type of research in which a researcher combines elements of qualitative and quantitative research approaches for the broad purposes of breadth and depth of understanding and corroboration*.¹ Mixed-methods research is becoming increasingly recognized as the third major research approach, along with qualitative and quantitative research.¹ A triangulated approach was used to connect and integrate the qualitative and quantitative data in a meaningful way, to provide a fuller understanding of the unmet needs of health care professionals in epilepsy care.

The research was conducted in three phases. Phase I began in September 2005 with a literature review and key informant interviews with AES educational leaders (n=5), who provided direction for subsequent research initiatives and research objectives to investigate. In Phase II, 26 stakeholders were asked to share their experiences in epilepsy care at four half-day focus groups during the AES annual meeting in December 2005. These four homogeneous focus groups were comprised of: epileptologists, general neurologists, professionals in epilepsy care, and individuals with epilepsy. Phase II employed purposive sampling for the qualitative data collection. This technique is frequently used to study the lived experience of specific populations.² Thus, researchers selected subjects to participate in the study on the basis of identified variables under consideration. In Phase III, the AES invited health care professionals and other stakeholders in epilepsy care (both AES members and nonmembers) to participate in a quantitative online survey designed by AXDEV. This phase was conducted to validate the qualitative findings of Phases I and II and to enable group comparisons in the areas of learning needs, competencies, challenges to optimal epilepsy care, and barriers to learning. This random sampling attracted 228 respondents over a three week period from February 27 to March 9, 2006.

Results and Discussion

The needs assessment identified five major themes with respect to barriers in achieving optimal health outcomes in the treatment and management of persons with epilepsy. Those themes included: attitudes towards persons with epilepsy; issues surrounding treatment; challenges in management and referrals; barriers within the health care system; priority areas of need for continuing professional development. We provide highlights of this research below and the full details the research can be found in the November 2007 issue of *Epilepsy & Behavior*.³

With respect to attitudes towards persons with epilepsy, health care professionals firmly believe that public perceptions of epilepsy continue to present a significant barrier for treating individuals with epilepsy, and that these perceptions impact health care providers' attitudes. Patient communication workshops are needed to enhance physician skills, and to broaden the scope of epilepsy care, in order to address the psychosocial needs of individuals with epilepsy in a time-sensitive manner. The purpose of these workshops would be to enable health care providers to address the social stigma of epilepsy with confidence, in alignment with Maintenance of Certification competencies of patient care and interprofessional and communication skills.⁴

With respect to treatment barriers, all participating health care professionals in the study emphasized the need for practical clinical guidelines that could be used reliably in daily practice. The development of case-study workshops, peer-to-peer interactive programs and educational tools to support the interpretation and application of guidelines to real people would be helpful in eliminating this barrier to optimal care.

With respect to management and referral issues, health care professionals expressed varying degrees of discomfort with the task of epilepsy management, ranging from the outright avoidance of treating patients to frustration at being unable to achieve optimal patient outcomes. In addition, results indicated that the respective roles of patients and health care professionals in epilepsy care are not well defined. Some health care professionals (eg, neurologists) are unsure of their role on the interdisciplinary team, while others have conflicting visions of the roles their team members should play. An interdisciplinary guideline for clinical practice (ie, a continuum of care map) developed in cooperation with major stakeholders could provide a clear differentiation of the roles and responsibilities of various health care professionals, thereby increasing the efficiency of epilepsy care. Furthermore, the identification of mentors by local, regional, or national associations such as the AES would address this barrier to optimal care by helping physicians develop a sense of professional fulfillment in this therapeutic domain, and by diminishing the perception that treating and managing patients with epilepsy is demanding and unrewarding.

The participants reported a need for further education and guidance in managing the trade-off between drug benefits and risks. With regard to the latter, concerns about the applicability and shortcomings of clinical practice guidelines were expressed on more than one occasion, across health care groups. Simple tools such as a pharmacological risk assessment flow chart could address these concerns by offering a practical solution. The purpose of such educational materials is to optimize clinical skills in order to balance the goal of seizure elimination with appropriate risk assessment of pharmacological interactions and adverse effects. Targeted educational interventions could close the knowledge gap that exists in this area by offering health care providers best practices in the diagnosis, treatment and management of comorbidities in individuals with epilepsy.

Conclusion

This needs assessments unearthed valuable information about the attitudes and practices of major stakeholders in epilepsy care, and provided clear and concrete direction upon which the AES has already acted in its educational programming.

Award Winner Affiliations

Sean M. Hayes, PsyD, AXDEV Group; Jeffrey D. Melin, MEd, American Epilepsy Society; Martin Dupuis, MA, AXDEV Group; Suzanne Murray, BComm, AXDEV Group; David M. Labiner, MD, Department of Neurology, University of Arizona

References

1. Johnson RB, Onwuegbuzie AJ, Turner LA. Toward a definition of mixed methods research. *J Mixed Methods Research*. 2007;1(2):112-133.
2. Patton MQ. *Qualitative Evaluation and Research Methods*. Newbury Park, CA: Sage Publications; 1990.
3. Hayes SM, Melin JD, Dupuis M, Murray S, Labiner DM. Assessing the true learning needs of healthcare professionals in epilepsy care. *Epilepsy & Behavior*. 2007;11:434-441.
4. American Board of Medical Specialties. *MOC Competencies and Criteria*. Available at: www.abms.org/Maintenance_of_Certification/MOC_competencies.aspx. Accessed February 5, 2008.