

Integrating the Patient Voice into Primary Care Continuing Education Results in Improved Performance in Developing Seizure Action Plans for Patients with Epilepsy

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ABSTRACT

1

Introduction

Research has shown gaps among clinicians in best practices for identifying and treating seizures. CME Outfitters identified gaps in shared-decision making and developing Seizure Action Plans (SAPs) for adult patients with epilepsy. This study aimed to determine whether integrating the patient voice into an educational intervention could assist clinicians in achieving best practices related to identifying and treating various seizure types as well as working with patients with epilepsy to make shared treatment decisions and put SAPs in place.

2

Methods

The educational activity consisted of Live and On Demand webcast, which incorporated content obtained through patient interviews. Using mixed qualitative and quantitative methods to evaluate the CE/CME activity in aligning practice with optimal care, this educational initiative measured up to Moore's Level 5¹ (performance) outcomes. Assessments were administered before, immediately after, and 3 months following the activity's premier date; 3-month control data were gathered from nonparticipants matching the target audience.

3

Results

Over 4,500 clinicians participated in the activity, representing over 45,000 patients with epilepsy. A subset of participants responded to the follow-up survey (n = 30), with a similar response rate for controls (n = 30). After 3 months, participants outperformed controls on questions assessing knowledge and performance related to seizure risk factors, treatment, and developing SAPs.

4

Conclusions

Incorporating the patient voice into medical education was an engaging and effective method for improving HCP knowledge and clinical practice behaviors.

True Success: Participant Quotes...

"I participated in your activity and had to call you to share a story of how your education impacted the life of one of my patients. I met with a patient a week after your program...he did not have a seizure action plan. We developed one and that next week he had a seizure and his co-workers knew exactly what to do. My patient felt this action plan saved his life."

"I realized that a SAP can and should be part of adult epilepsy management plans. I have found them much easier to do than I had anticipated. Your event really gave me guidance on how to start doing them. I believe my patients have enjoyed them and two patients have commented that it really has eased the stress they feel at work and at home knowing there is a plan."

INTRODUCTION

Background

Of the more than three million people in the United States who have epilepsy, lack of recognition of the signs and symptoms of epilepsy by healthcare providers (HCPs) limits patients' ability to receive an accurate diagnosis and appropriate treatment, leading to decreased quality of life.² In addition, HCPs often do not involve the patient when developing treatment or management plans. Seizure clusters, also known as acute repetitive seizures, have a particularly negative impact on quality of life and result in, often unnecessarily, high rates of emergency department utilization and increased costs.³

Implementation of a Seizure Action Plan (SAP), developed with active participation by patients through shared decision-making, is an important step in addressing these gaps and can prepare individuals and families in the event of a seizure. A variety of tools can be used to maximize the collaborative nature of the development of an SAP. Emerging treatments have the potential to enhance available options, thereby altering the treatment landscape reflected in SAPs. Continuing medical education has an opportunity to play a valuable and nimble role as a key stakeholder assisting HCPs to integrate shared decision-making into the development of much needed SAPs for patients with different seizure types.

Study Objectives

The continuing education program aimed to integrate the patient voice into the activity to develop, maintain, and improve the competence, skills, and professional performance of clinicians by providing quality, relevant, accessible, and effective educational experiences that address gaps regarding identifying seizure risk factors, treatment options, and developing SAPs with active patient participation.

METHODS

Education consisted of a Live and On Demand webcast with a live, 60-minute webcast featuring a panel discussion of expert faculty followed by a 30-minute Q&A. An enduring video webcast was also made available one month following the live component.

In order to address the needs of both patients and learners, as well as adhere to the goals of the National Quality Strategy Priorities and the "Triple Aim" of improving care, CME Outfitters (CMEO) worked with WEGO Health to incorporate a patient voice component into the activity. Interviews were conducted with 18 Patient Leaders from social communities spanning 70+ websites that reach 162,900+ patients with epilepsy, caregivers, and health professionals. Surveys were administered electronically and audio clips of interviews and feedback were shared with faculty when developing content as well as integrated into the webcast. These interviews provided faculty and learners an opportunity to hear patient stories and experiences aligned with the latest evidence.

Assessment of improvements in knowledge and performance consisted of survey instruments developed by faculty members and an internal staff of outcomes and content experts, and were aligned to the educational objectives. Surveys were sent to participants 3 months following the activity, as well as to a group of matched nonparticipant controls. Responses to survey questions were coded as dichotomous (e.g., correct/incorrect) and compared between participants and controls using chi-square tests. Statistical significance was determined at alpha = .05. Effect size was calculated using Cohen's *d*, with data points reflecting the percentage of correct responses per participant.

Patient Influencer Quotes...

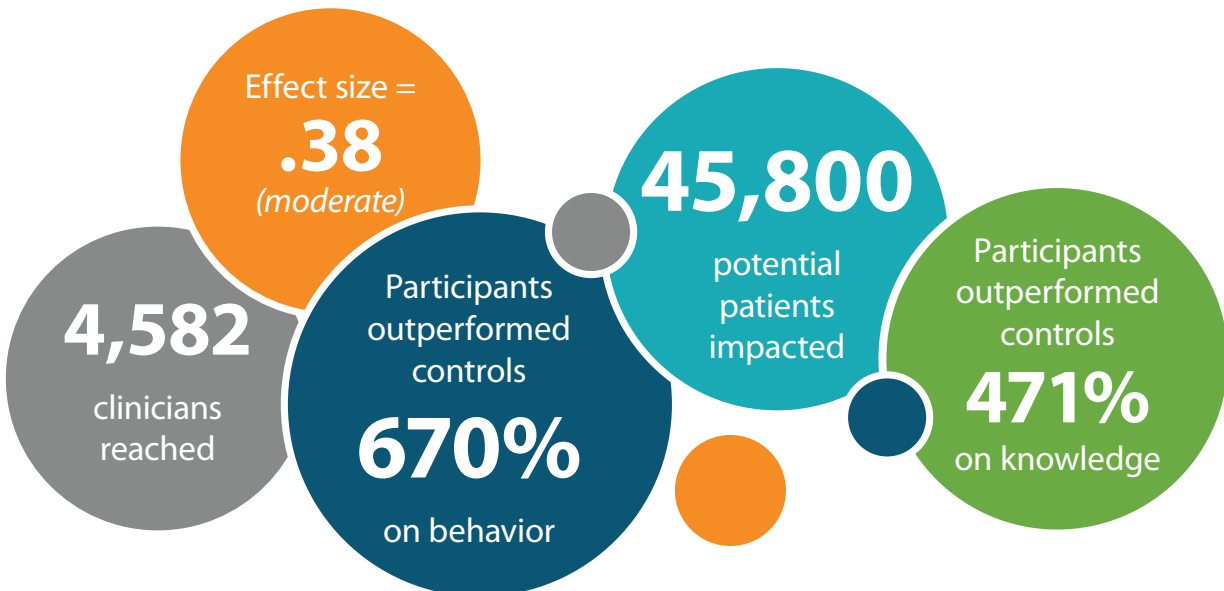
Question: Please estimate what percentage of people in your community have a formal seizure action plan that was developed in collaboration with their healthcare provider.

"With regard to preparedness, I think that 50% of the people in my community have an action plan. I hear of people heading to the ER with seizures that may have been able to be handled at home if they had a preparedness plan. I also feel people in my community do not understand what actions they could take for cluster seizures."

"I don't think that the members of the online community that I've spoken with have a very formal plan. I would say probably roughly about 30% of those. I don't think that doctors are very proactive in educating their patients and talking with them about coming up with an action plan long-term for their epilepsy."

"I'd put that at less than 20% of people having this seizure action plan. It's put on the list of things you're going to get around to, like if you're seeking seizure control first and then you're changing medications or you're trying to get answers. Having a seizure action plan is kind of on the back burner."

RESULTS



Demographics

A total of 4,582 clinicians participated in the activity, 67% higher than set goal, representing over 45,000 patients with epilepsy. Matched data for pre- and post-survey responses were available for 200 participants. A subset of participants responded to the follow-up survey (n = 30), with a similar response rate for controls (n = 30).

Knowledge

Immediately following the activity participants demonstrated a strong understanding of the educational content presented and correctly answered knowledge-based questions 81% of the time. After 3 months, participants outperformed controls on 4 of 5 knowledge questions. Figures 1 and 2 present results from 2 of the knowledge questions. Figure 1 shows a **111% relative increase in knowledge regarding risk factors for seizure clusters following the activity** ($p < .001$). Knowledge was retained at follow-up, and participants outperformed controls by 471% ($p = .002$). Figure 2 shows an **83% relative improvement in knowledge, from pre-activity to immediate post-activity, regarding FDA-approved treatments for seizure clusters** ($p < .001$).

RESULTS *cont.*

Figure 1. Percentages of Participants and Controls Responding to a Question on Risk Factors for Seizure Clusters.

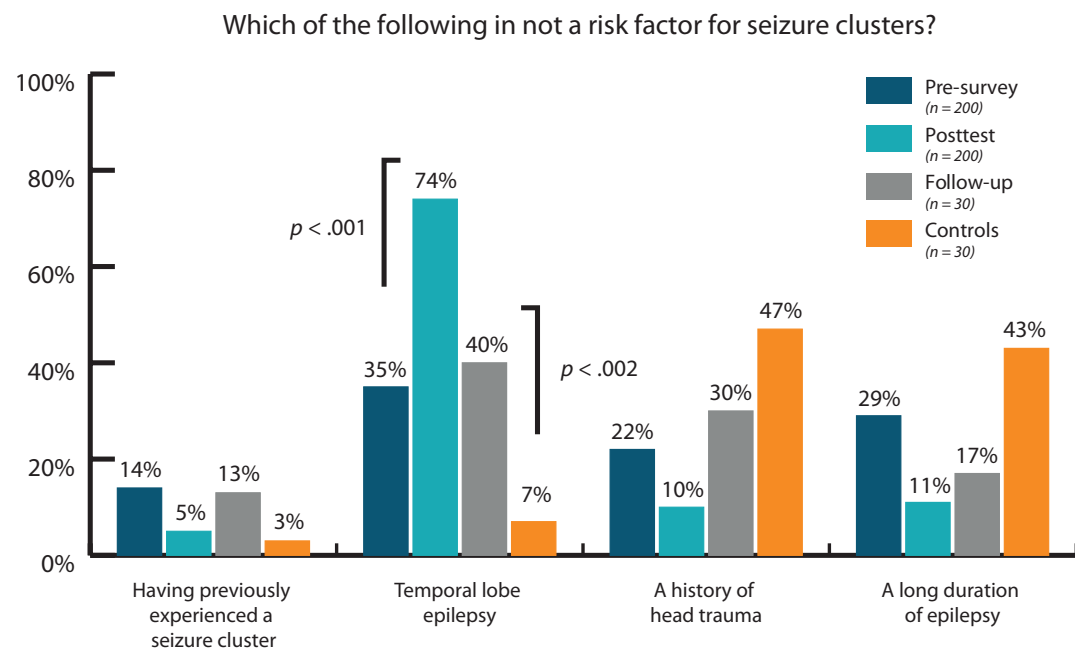
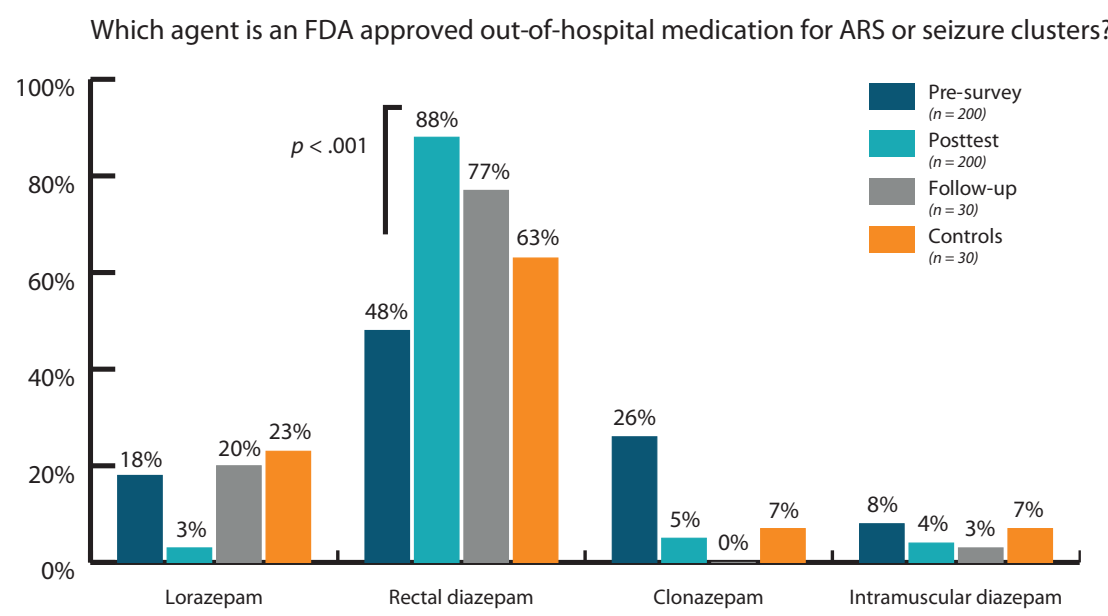


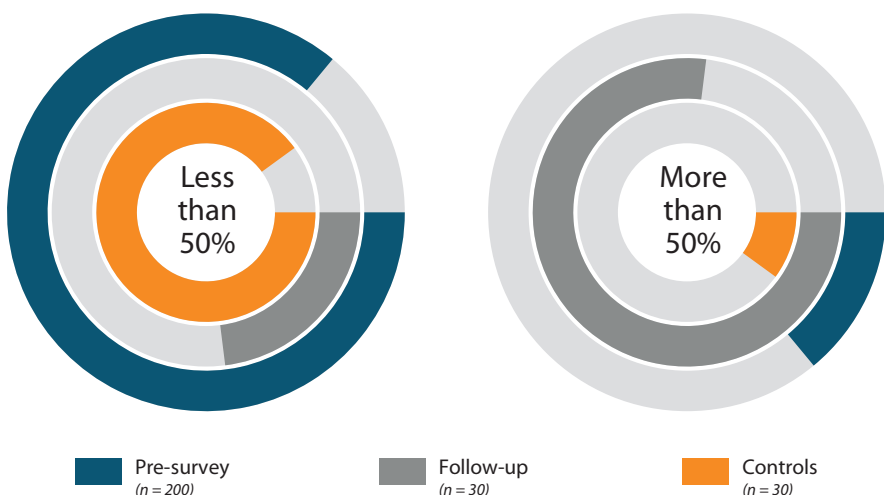
Figure 2. Percentages of Participants and Controls Responding to a Question on FDA-Approved Treatment for Seizure Clusters.



Performance

With regard to performance, after 3 months, 4500 more participants developed an SAP with their patients compared to before the activity, and participants outperformed controls by 670% ($p < .001$) (Figure 3).

Figure 3: Percentages of Participants and Controls Implementing a Seizure Action Plan for Less than or More than 50% of Patients.



CONCLUSIONS

- Healthcare providers participating in this activity significantly improved their knowledge and performance regarding risk factors and treatments for seizure clusters, as well as developing Seizure Action Plans with their patients.
- The addition of the patient voice in the content development and use of audio clips during the activity created a successful and engaging format, and aligns with the National Quality Strategy Priorities and the "Triple Aim" of improving care.
- Participants improved their knowledge of best practices for identifying and treating seizures resulting in better identification and appropriate treatment compared to matched controls.
- Participants now understand the importance of all patients with epilepsy having a Seizure Action Plan in place and have the ability to impact more than 45,000 patients.

REFERENCES

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