Fibromyalgia in Primary Care: Can an Online CME Program Change Clinical Practice?

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Introduction

In 2010, the University of North Texas Health Science Center conducted two educational interventions related to fibromyalgia diagnosis and treatment. AXDEV Group assessed the effectives of those activities to determine any change in knowledge, competence and attitude experienced by participants.

Activity Description

- Interactive online program targeting Primary Care Physicians
- Two one-hour webinars
  - Two faculty(PCP and specialist) reviewing scenarios and sharing best practices
  - Clinical scenarios
  - Interactive clinical cases
  - Clinical aid to support clinical decision making, and other reference materials provided

The evaluation assessed:

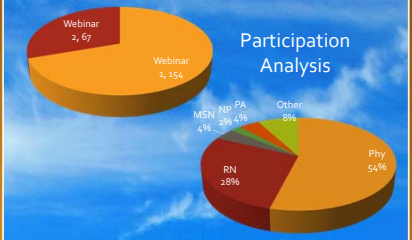
- Improvement in participants' awareness, knowledge and understanding of fibromyalgia
- Evolution of participants' attitudes towards fibromyalgia as primary condition
- Enhanced commitment to change clinical practice related to fibromyalgia
- Barriers or obstacles that remain to be overcome for target audience to application of learnings from the program

Methods

- Pre- and immediate Post- activity quantitative questionnaire
- Control to establish causality
  - Questions related to fibromyalgia but not to related to actual program content
- Control to correct for response bias
  - Correct for participants' tendency to respond in a specific way, e.g. innate tendency to agree more than disagree
  - Reverse scoring employed, e.g. on agreement scales, correct response on some items was Strongly Disagree, Strongly Agree on others.

Domains of Exploration

Results



Significant Knowledge and Competence Increases in Assessment & Diagnosis

Screening, Assessment, & Diagnosis	Item Type / Correct Response	Pre-event n=154	Post-event n=47	Wilcoxon Z P
	4-point rating scale	Mean (SD)		
Diagnostic features (recurrent pain)	Sometimes / Always (3/4)	X=2.88 SD=0.74	3.26 0.61	-3.02 0.003
Diagnostic features (pain alone)	Sometimes (3)	X=2.74 SD=0.71	2.30 0.83	-2.94 0.003
Clinical Scenario: Diagnosis (sleep disturbance)	Agree / Strongly Agree (3/4)	X=2.88 SD=0.66	3.35 0.71	-3.27 0.001
	True/False	n (%) Correct		
Diagnostic criteria (tender points)	False (2)	28 (19%)	36 (77%)	-4.15 0.000
Epidemiology (prevalence)	True (1)	95 (65%)	46 (98%)	-3.05 0.002
Pathophysiology (central processing)	True (1)	115 (78%)	43 (98%)	-2.53 0.011

Improvements in Competence in Need for Follow-Up Visit, Pharmacologic Treatment and Treatment/Management Strategies

Treatment & Management	Item Type / Correct Response	Pre-event n=67	Post-event n=67	Wilcoxon Z P
CLINICAL SCENARIO	4-point rating scale (1-Strongly Disagree, 4-Strongly Agree)	Mean (SD)		
Management (follow up visits)	Agree / Strongly Agree (3/4)	X=3.48 SD=0.64	3.69 0.46	-2.27 0.02
Treatment (opiates)	Strongly Disagree / Disagree (1/2)	X=1.58 SD=0.58	1.40 0.52	-2.11 0.03
Treatment (SNRI, anticonvulsant)	Agree / Strongly Agree (3/4)	X=3.00 SD=0.59	3.29 0.57	-3.67 0.00
Treatment (cognitive behavioral therapy, CBT)	Strongly Disagree / Disagree (1/2)	X=2.22 SD=0.79	2.28 0.79	-0.57 0.57
	True/False	n (%) Correct		
Treatment (opiates)	False (2)	43 (84%)	60 (90%)	-3.71 0.00
Treatment (anticonvulsants)	True (1)	44 (67%)	55 (83%)	-2.52 0.01
Treatment (non-pharmacological)	False (2)	37 (56%)	57 (85%)	-3.78 0.00

Summary

CME Objective	Achievement
Develop awareness of physiological evidence for fibromyalgia	• **Significant increase in knowledge** of central processing
Recognize diagnostic features of fibromyalgia in patients with chronic pain and fatigue	• **Increases in knowledge of symptoms** in addition to pain, characteristics of pain • **Increased competence in arriving at diagnosis** based on symptom other than pain (sleep disturbance)
Comprehend recognized evidence for multi-modal treatment approaches for fibromyalgia	• **Increased knowledge and competence in determining pharmacological approaches** • Need for improvement in knowledge, competence in non-pharmacologic treatment strategies
Develop confidence in managing fibromyalgia in the primary care setting as a chronic condition	• **Increased competence in leveraging primary care relationship in chronic illness management**
Plan to engage in collaborative therapeutic relationships with patients and with specialists	• **Increased intent and confidence in engaging patients** in collaborative discussion • Need for support of interdisciplinary collaboration

Discussion

- This online CME activity was effective in improving PCP knowledge and competence.
- Significant changes observed vs. control
- A significant performance barrier evident in participant comments was coordinated care and health care team collaboration
- Such an event, while having limited impact in isolation, can form an effective component of a performance improvement initiative to change the proactive treatment of fibromyalgia patients
- Potential topics for future activities based on these results include:
  - An interdisciplinary team approach to fibromyalgia care
  - Diagnosis beyond pressure points
  - Value of Cognitive Behavioral Therapy (CBT)

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