

MDD AND GAD: EFFECT OF CONTINUING MEDICAL EDUCATION ON PSYCHIATRISTS' KNOWLEDGE OF LATEST CLINICAL DATA

Jovana Lubarda, PhD, Piyali Chatterjee, Medscape Education, New York, NY; Michael E. Thase, MD, Professor of Psychiatry, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

STUDY OBJECTIVES

Each year, new data on major depressive disorder (MDD) and generalized anxiety disorder (GAD) are presented at major psychiatry conferences. This study assessed whether online continuing medical education (CME) composed of short video summaries of the latest evidence updates from major psychiatry conferences in 2015 could improve clinically relevant knowledge of psychiatrists who manage patients with MDD and GAD.^[1]

INSTRUCTIONAL METHOD

- The instructional program consisted of an online CME activity which included 4 video-based expert perspectives on the latest clinical data from 2015 conferences focusing on MDD and GAD (Figure 1).
- The CME program was launched online on August 10, 2015, and data were collected through October 15, 2015.

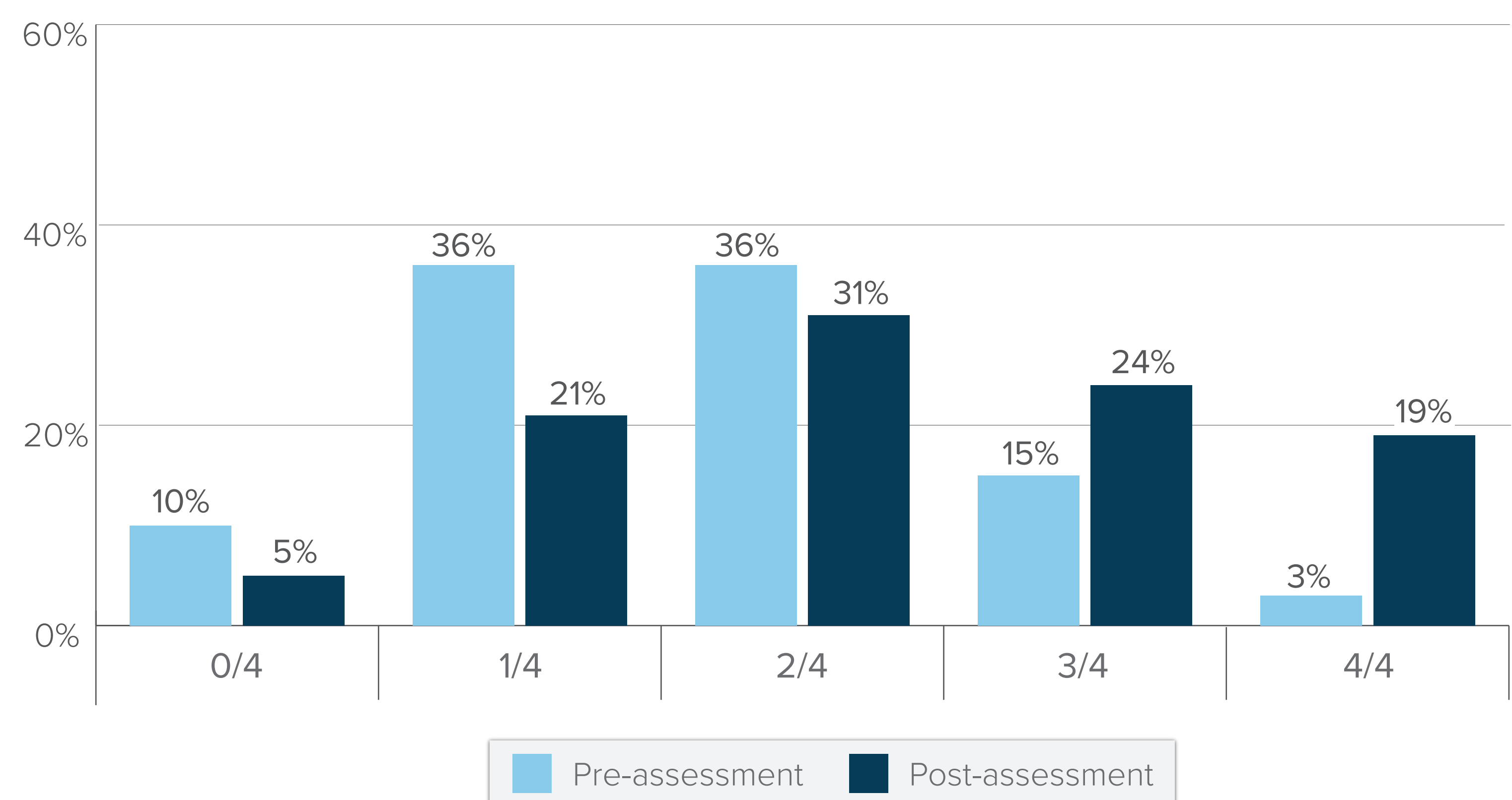
ASSESSMENT METHOD

- Linked participants (ie, the learners), who served as their own controls, were assessed with a set of 4 identical pre- and post-CME assessment questions to determine the effectiveness of knowledge transfer/exchange resulting from participation in the online CME program.
- A paired 2-tailed t-test was used to assess whether the mean post-assessment score was different from the mean pre-assessment score.
- McNemar's chi-square statistic was used to determine statistical significance.
- The effect of education was calculated using Cramer's V by determining the change in proportion of participants who answered questions correctly from pre- to post-assessment.

RESULTS

- Data were collected for the 577 psychiatrists who participated in the CME activity and answered all pre- and post-assessment questions.
 - Psychiatrists demonstrated statistically significant improvements in knowledge of the latest data on MDD and GAD (n=577; $P < .05$; $V = 0.167$; medium educational effect).
 - While only 18% answered at least 3 out of 4 questions correctly on pre-assessment, this percentage improved to 43% on post-CME assessment (Figure 2).
 - Specific improvements were demonstrated post-CME with regard to understanding the use of levomilnacipran extended-release in patients with first episode, recurrent, and chronic MDD; mechanisms of action of atypical antipsychotics such as cariprazine; use of vilazodone to improve all domains of function in GAD; and knowledge of clinical data on the use of quetiapine as an adjunctive treatment for patients with MDD (Figure 3).

FIGURE 2. Percentage of Psychiatrists Answering Questions Correctly on the Latest Data on MDD and GAD Pre- and Post-CME (n=577)



CONCLUSION

Online CME on the latest clinical data on MDD and GAD was effective in knowledge translation of clinically relevant therapeutic developments for psychiatrists. Similar video-based CME programs can be used to provide future updates on the evidence base to clinicians treating psychiatric disorders.

Acknowledgements

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For more information, contact Jovana Lubarda, PhD, Associate Director, Educational Strategy, Medscape, LLC, jlubarda@medscape.net.

FIGURE 1. Online Educational Activity: “From the 2015 Conferences to the Clinic: Latest Evidence Updates in MDD and Anxiety Disorders”



David V. Sheehan, MD

SECTION 1. New research on generalized anxiety disorder: vilazodone

Dr. David Sheehan discusses the recently presented data on vilazodone treatment of GAD.

Michael E. Thase, MD; David V. Sheehan, MD, MBA



Mudhukar Trivedi, MD

SECTION 2. New Data on Recently Approved Antidepressants: Vilazodone, Levomilnacipran, and Vortioxetine

Dr Madhukar Trivedi discusses 3 new studies exploring the safety and efficacy of antidepressants.

Michael E. Thase, MD; Madhukar H. Trivedi, MD



Bradley N. Gaynes, MD

SECTION 3. Atypical Antipsychotics in Depression: Lurasidone, Quetiapine, and Cariprazine

Dr Bradley Gaynes discusses new data on the use of atypical antipsychotics in MDD: lurasidone in MDD with mixed features and quetiapine and cariprazine as adjunctive therapy in treatment-resistant depression.

Michael E. Thase, MD; Bradley N. Gaynes, MD, MPH



George Papakostas, MD

SECTION 4. New Research on Brexpiprazole in MDD

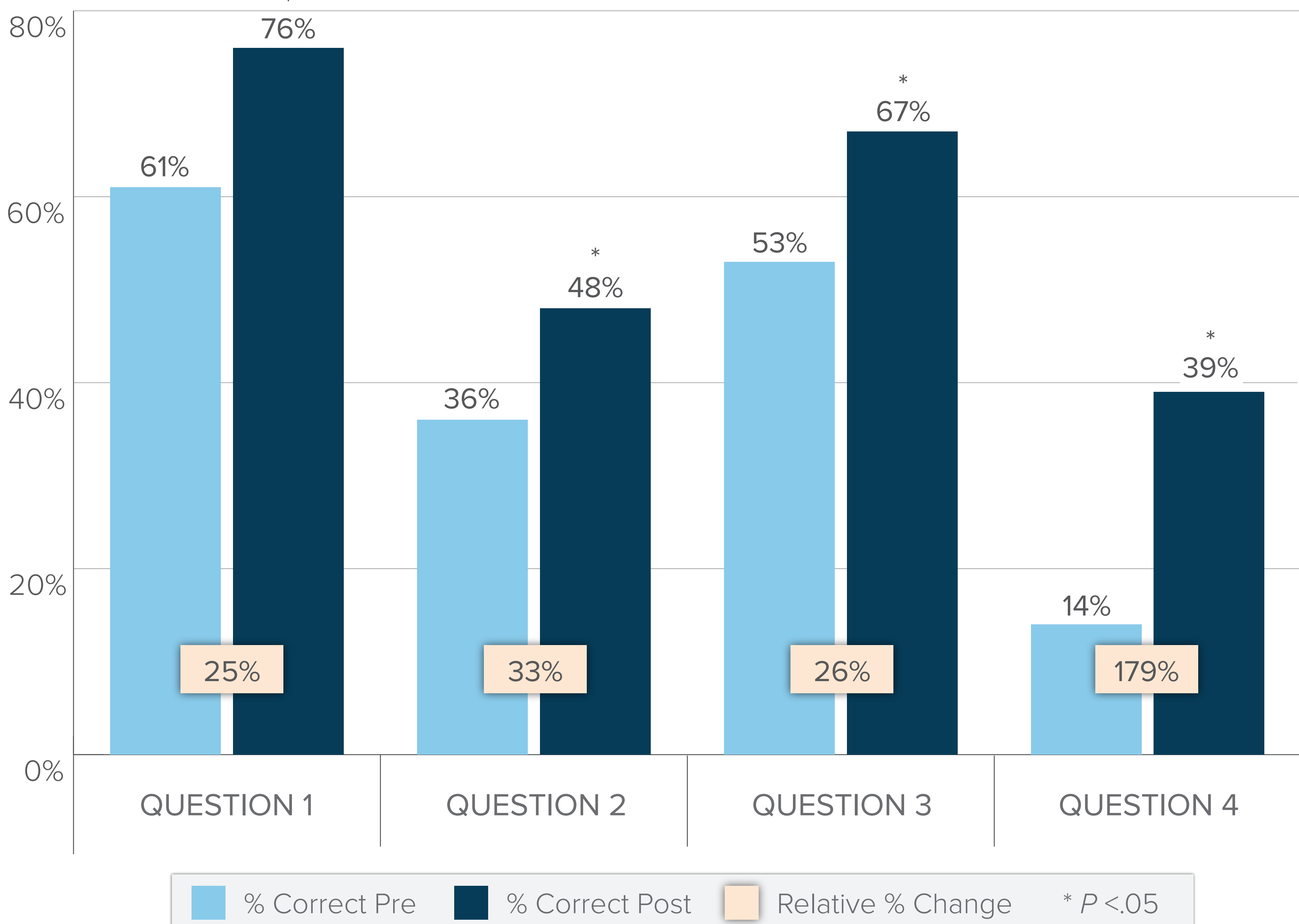
Dr George Papakostas discusses recently presented data on the efficacy and safety of the new atypical antipsychotic brexpiprazole in MDD.

Michael E. Thase, MD; George I. Papakostas, MD

FIGURE 3. Question-by-Question Responses of Psychiatrists (n=577) Pre- and Post-CME

QUESTION 1. A recent study by Kornstein et al analyzed the efficacy of levomilnacipran extended release (ER) in subsets of patients with MDD. What did they find?	
A	Treatment with levomilnacipran ER resulted in significant improvement in MDD symptoms in patients with first-episode, recurrent, and chronic MDD
B	Treatment with levomilnacipran ER resulted in significant improvement in MDD symptoms in patients with first-episode and recurrent MDD but not in patients with chronic MDD
C	Treatment with levomilnacipran ER resulted in significant improvement in MDD symptoms in patients with first-episode MDD but not in patients with recurrent or chronic MDD
D	Treatment with levomilnacipran ER resulted in significant improvement in MDD symptoms in patients with chronic MDD but not in patients with first-episode or recurrent MDD

QUESTION 2. What distinguishes cariprazine from other atypical antipsychotics?	
A	Norepinephrine transporter inhibition
B	Preferential binding to the dopamine D ₃ receptor
C	5-HT _{1A} partial agonism
D	High affinity for the 5-HT ₇ receptor



QUESTION 3. A recent study by Sheehan et al of generalized anxiety disorder suggested that clinicians consider vilazodone treatment because:

A	Improvement was observed in the Hamilton Anxiety Rating Scale (HAM-A) for psychic and somatic anxiety but not for anxious mood or tension
B	Improvement was observed in all domains of function
C	Improvement in function was statistically significant, although it is uncertain whether it is clinically relevant
D	For an improvement in overall HAM-A score, the number needed to treat was 20

QUESTION 4. In a recent study by Mullen et al on adjunctive quetiapine treatment of patients with MDD, what were the main findings?

A	Compared with placebo, quetiapine adjunctive treatment resulted in significant improvement in Montgomery-Åsberg Depression Rating Scale (MADRS) scores when paired with selective serotonin reuptake inhibitors but not when paired with serotonin and norepine
B	Compared with placebo, quetiapine adjunctive treatment resulted in significant improvement in MADRS scores when paired with all antidepressants except bupropion
C	Compared with placebo, quetiapine adjunctive treatment resulted in significant improvement in MADRS scores when paired with all antidepressants except amitriptyline
D	Compared with placebo, quetiapine adjunctive treatment resulted in significant improvement in MADRS scores when paired with all types of antidepressants

References

1. Thase ME, Sheehan DV, Trivedi M, Gaynes BN, Papakostas G. From the 2015 Conferences to the Clinic: Latest Evidence Updates in MDD and Anxiety Disorders. Medscape Education Psychiatry, August 10, 2015. <http://www.medscape.org/viewarticle/848127> Accessed April 1, 2016.

