Psychiatrists’ perspectives on clinical guidelines for use of electroceutical interventions in major depressive disorder

Eleni Varelas¹ Robyn Bluhm, PhD² Eric D. Achtyes, MD, MS³⁴ Aaron M. McCright, PhD⁵ Laura Y. Cabrera, PhD⁶

¹Human Biology Major, MSU; ²Department of Philosophy, College of Arts & Letters, Lyman Briggs College, MSU; ³Division of Psychiatry & Behavioral Medicine, College of Human Medicine, MSU; ⁴Pine Rest Christian Mental Health Services; ⁵Department of Sociology, College of Social Science; ⁶Center for Neural Engineering, Department of Engineering Science and Mechanics, PSU

Introduction

There is growing interest around psychiatric electroceutical interventions (PEIs) for patients with major depressive disorder for whom first-line treatments have failed. Already FDA approved PEIs include electroconvulsive therapy (ECT) and transcranial magnetic stimulation (TMS), while others, like deep brain stimulation (DBS), are still in development. The literature discusses ways to improve clinical employment of these interventions, but there is little research examining which concerns psychiatrists would like to see reflected in the available guidelines.

Research Aims

Our study aims to better understand what topics are covered in the guidelines for these PEIs and compare this information with the topics clinicians want guidelines to cover. We wish to address gaps in the PEI clinical literature to better align clinical practices with current available guidelines.

Results

Main findings from the interviews

"I think there also needs to be guidelines about a proper evaluation and standards of management, like how many failed trials should a person have, [or] who is a suitable candidate."

"Well, the problem is is that depression is a heterogeneous population of patients. And we need some clear markers that help to sway: 'This depression is likely to respond versus this one does not.'"

More information on risk and benefits

"I think [more is needed in terms of] appropriate public education and awareness of availability."

Most significant areas covered in PEI guidelines literature

Timing of employment in treatment

Clinical qualifications

Moderate to severe illness severity

Clinical qualifications

DBS

ECT

TMS

Safety considerations

Complications due to invasiveness of procedure

PEIs whose literature addresses an associated stigma

ECT

DBS

Future Steps

Our next steps include integrating results presented here with those of our national survey. This will provide a more complete understanding on which areas need to be revised or incorporated in future clinical guidelines.

Acknowledgements

We thank our other team members: Maryssa M.C. Gilbert, Marissa Cortright and Emily Castillo. We would like to thank the National Institutes of Health-BRAIN Initiative for funding this project (#1R13MH117802-01).