Stakeholder Affect Toward Psychiatric Electroceutical Interventions for Treatment-Resistant Depression

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BACKGROUND
Psychiatric electroceutical interventions (PEIs) use electrical or magnetic stimulation to alter brain circuitry/function to treat neuropsychiatric conditions.

OBJECTIVE
To examine attitudes about 4 PEIs by analyzing the affects among members of the general public, caregivers, patients with depression, and psychiatrists.

METHODS
1026 members of general public
1050 patients living with depression
505 psychiatrists

Sample
• Participants randomly assigned to one PEI condition via full factorial design
• Informed by developmental phase interviews
• 8-item General Affect Likert Scale (negative affect [1] to positive affect [7])

Survey
• One-way ANOVA with post-hoc Tukey HSD & OLS Regression Models

Analysis

ACKNOWLEDGEMENTS
We thank other team members: Emily Castillo, Marissa Cortright, Eleni Varelas & Megan Penkert. We also thank the National Institutes of Health BRAIN Initiative for funding this project (#1R15MH117802-01).

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ONE-WAY ANOVA RESULTS
Mean scores on General Affect Scale

<table>
<thead>
<tr>
<th>PEI</th>
<th>General Public</th>
<th>Caregivers</th>
<th>Patients</th>
<th>Psychiatrists</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECT</td>
<td>5.32</td>
<td>4.00</td>
<td>3.53</td>
<td>3.46</td>
</tr>
<tr>
<td>rTMS</td>
<td>3.85</td>
<td>4.26</td>
<td>3.83</td>
<td>3.61</td>
</tr>
<tr>
<td>rTMS</td>
<td>3.54</td>
<td>4.16</td>
<td>3.63</td>
<td>3.66</td>
</tr>
<tr>
<td>DBS</td>
<td>5.34</td>
<td>5.52</td>
<td>4.29</td>
<td>4.15</td>
</tr>
<tr>
<td>ABI</td>
<td>5.52</td>
<td>4.15</td>
<td>4.00</td>
<td>3.93</td>
</tr>
</tbody>
</table>

OLS REGRESSION RESULTS
Statistically significant (p<.05) standardized coefficients from models explaining General Affect Scale

<table>
<thead>
<tr>
<th>PEI</th>
<th>Education</th>
<th>Liberal ideology</th>
<th>Religiosity</th>
<th>Trust in MSE</th>
<th>Awareness of PEI</th>
<th>R^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECT</td>
<td>-1.5</td>
<td>-0.15</td>
<td>0.17</td>
<td>-0.19</td>
<td>0.27</td>
<td>0.09</td>
</tr>
<tr>
<td>rTMS</td>
<td>0.22</td>
<td>0.71</td>
<td>0.16</td>
<td>0.22</td>
<td>0.13</td>
<td>0.12</td>
</tr>
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<td>0.16</td>
<td>0.22</td>
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<td>0.17</td>
<td>0.22</td>
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FUTURE DIRECTION
Future targeted educational initiatives may better align attitudes with current evidence around PEIs, helping to demystify the negative and often unfounded views around some of these procedures.

DISCUSSION
• All stakeholder groups reported most positive affect towards rTMS
• Overall, psychiatrists reported most positive affect toward all PEIs
• Trust in medical-scientific establishment is related positively to general affect toward PEIs amongst non-psychiatrists
• Religiosity, education, & political conservatism are related positively to general affect
• Non-clinicians’ awareness of & psychiatrists’ experience with PEIs were positively related to affect

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