

ECT: An investigation of lay attitudes and experiences in an Irish sample

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Ir J Psych Med 2011; 28(1): 32-34

Abstract

Objectives: Electroconvulsive therapy (ECT) is one of the most controversial psychiatric treatments of the modern era. Few studies have used validated scales to examine attitudes and knowledge regarding ECT in lay people. We examined attitudes, knowledge and experience of ECT using standardised questionnaires in Irish lay people, and compared the present results with the findings from a similar study reported over 25 years previously.

Methods: A total of 103 lay people were recruited from a variety of settings and completed a questionnaire. Data were analysed using independent samples t-tests, χ^2 tests and Pearson correlations.

Results: Attitudes to ECT among Irish lay people are negative and knowledge of the treatment is poor. A significant correlation ($r = 0.32$) was found between knowledge and attitudes, with higher levels of knowledge associated with more positive attitudes. People with relatives who experienced ECT had a significantly higher ECT knowledge than the people without such relatives ($p < 0.05$).

Conclusion: Results confirmed previous findings and revealed novel statistically significant factors that contributed to attitudes towards ECT. Further replications are required to examine the findings' robustness and the relationship between attitudes, knowledge and experience. Such research can help increase the understanding of ECT and remove the stigmatisation associated with ECT. Mental health education programmes should consider the relation between knowledge and attitudes to better inform programme focus and content.

Key words: Electroconvulsive Therapy; Attitudes; Mental health.

Introduction

Electroconvulsive therapy (ECT) is one of the most controversial psychiatric treatments of the modern era, capable of

eliciting strong disputes among both the international scientific community and the general population.¹ In the past 50 years research has examined attitudes towards ECT, typically among healthcare professionals or ECT patients.²⁻⁴ Despite substantial evidence supporting the efficacy and safety of ECT,⁵ negative public opinion and misconceptions persist. Studies tend to report extremely negative attitudes, limited knowledge and limited exposure to the treatment among lay populations.⁶⁻⁸

One of the initial studies on lay people's knowledge and attitudes towards ECT was conducted in Ireland by O'Shea and McGennis over 25 years ago.⁹ They reported negative attitudes towards ECT and an extremely low level of knowledge. However, all the participants were recruited from a Dublin industrial facility and the authors indicated the need to examine the attitudes of a larger and more representative sample.

The current study replicates and extends O'Shea and McGennis' research by investigating current attitudes towards ECT, knowledge about it and perceived effectiveness of ECT.

Method

Participants

We recruited participants from different sites in county Dublin (eg. mature students in a Dublin university, lay people working in a hospital, people working in a major retail shop, and people working in a court in county Dublin). Of the 130 people contacted, 103 participants returned questionnaires (response rate of 79%); the sample age ranged from 18 years to 69 years. The only exclusion criterion was the inability to read and complete the questionnaire.

Measure

The questionnaire comprised demographic details, an ECT knowledge scale, an attitudes towards ECT scale, and questions about personal experience of ECT, and perceived effects of ECT. The knowledge scale, with response options of 'True', 'False' and 'Don't know', consisted of 14 items, based on previous studies and from current NICE guidelines.^{5,9-11} The attitudes scale towards ECT consisted of 15 items, derived from previous studies.^{9,12,13}

Analysis

Means (M) and standard deviations (SD) are presented to describe continuous variables, frequencies and percentages are used for categorical data. We used independent samples t-tests to examine group differences in continuous variables, and χ^2 tests examined the associations among categorical variables. Relationships among continuous variables are reported using Pearson correlations.

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SUBMITTED: OCTOBER 15, 2008. ACCEPTED: APRIL 7, 2010.

Table 1: Levels of knowledge regarding ECT

Statement	% Correct
ECT involves a small amount of electric current sent to the brain to alter chemical messages in the brain and influences centres in the brain that control thinking, mood, appetite and sleep	70
Depression caused by social conditions, such as bereavement or unemployment, should be treated with ECT	55
Obsessive-compulsive disorder should be treated with ECT	45
There are guidelines for the administration of ECT in Ireland	39
ECT is currently used in Ireland	38
Since patients will receive an anaesthetic before undergoing ECT treatment, they must be fasting (no eating or drinking) from about midnight the night before each treatment	31
The ECT treatment takes only a few minute.	30
Patients should wear loose clothes or nightclothes during ECT	26
ECT is given with an anaesthetic	22
Depression resistant to drugs should be treated with ECT	21
Depression resistant to drugs and where the patients have already attempted suicide should be treated with ECT	19
Melancholic (severe) depression should be treated with ECT	15
Acute mania with severe behavioural disturbance should be treated with ECT	14
Depression caused by biological causes should be treated with ECT	12

Results

The sample was predominantly female (57%), educated as far as leaving certificate (55%), single (46%), and the mean age was 36.4 years (SD = 14.3). In comparison with O'Shea and McGennis's sample, the current sample had a higher mean age ($p < 0.005$) and comprises significantly more females ($p < 0.001$) and more single participants ($p < 0.001$). However there were no gender differences in attitudes.

Knowledge

Table 1 outlines the levels of knowledge regarding ECT. Approximately two-thirds (64%) of the sample had low (< 40% correct)/extremely low (< 20% correct) levels of knowledge, consistent with O'Shea and McGennis' findings. Just over one-third (38%) of the sample believed that ECT is currently used in Ireland, with 55% being unsure. Only 22% were aware of the use of general anaesthesia during ECT; a similar value of 23% was reported by O'Shea and McGennis.

Of the respondents 64% reported knowing what ECT is and 39% of those reported that their source of information about ECT was the media (film, television, books and newspapers), whereas 12% reported knowing someone who received ECT. Only 9% reported that such information was in favour of ECT. O'Shea and McGennis reported that the majority of their sample (61%) saw the film *One flew over the cuckoo's nest* and 84% were negatively influenced by it. In this study 52% of participants saw that movie and similarly

Table 2: Comparison of current sample's response to advice to undergo ECT with O'Shea and McGennis's sample

If advised by doctors to undergo ECT	Current study %	O'Shea & McGennis %
Refuse outright	26	24
Consider it before making decision	36	30
Talk with personal friends/relatives	1	34*
Accept without hesitation	1	0
Expect a full explanation, including side-effects	62	53*
Expect a modified, non technical explanation	5	15

* $p < 0.05$

the majority of respondents (71%) were negatively influenced by it. Of the 17% who read about ECT, only 20% reported that what they read was in favour of ECT.

Attitudes

Nearly two-thirds (62%) of respondents reported that ECT is frightening, 39% that it helps people, 36% that it is safe, 26% that it is helpful but has severe side-effects, and 22% that it can improve quality of life. Table 2 presents the responses to receiving advice from a doctor to undergo ECT for the current sample and for O'Shea & McGennis's sample.

In comparison to O'Shea and McGennis, significantly less of the current sample would talk to friends and relatives ($p < 0.001$), whereas significantly more would expect a full explanation of ECT, including side-effects ($p < 0.01$).

A total of 18% reported that they would consider ECT for a member of their family, 28% reported they would not, and the majority were unsure (54%). Of note, only 15% would sign a form that allowed a doctor to administer ECT to a sick relative who refuses it but is too sick to make this decision; this is significantly lower ($p < 0.001$) than the value of 37% reported by O'Shea and McGennis. Approximately one-third (37%) of respondents indicated that they would be disappointed if someone signed such a form on their own behalf, 10% would feel grateful, whereas 54% were unsure. Only 14% of the sample reported that ECT is not stigmatising.

Experience

Similar to the 13% reported by O'Shea and McGennis, 12% of the current sample had a relative who received ECT. Of those with such a relative, 50% reported that the relative in question had benefited from it; this is a significantly ($p < 0.005$) lower value than the 69% who reported such a benefit in the O'Shea and McGennis study. Furthermore, 42% of the present sample reported that their relatives did not benefit from ECT, whereas only 23% of O'Shea and McGennis's sample noted a lack of benefit.

Relationship between knowledge, attitudes and experience

A significant correlation (Pearson $r = 0.32$) was found

between knowledge and attitudes, with higher levels of knowledge associated with more positive attitudes. People with relatives who experienced ECT had a significantly higher ECT knowledge than the people without such relatives ($p < 0.05$); however, there was no difference in attitudes.

Discussion

Over 25 years after O'Shea and McGennis's study, attitudes to ECT are still negative and knowledge of the treatment is poor. Even though the current participants were not randomly sampled, the results of the current study are based on a more representative sample in terms of gender and age than the participants in O'Shea and McGennis's study. Of note, the substantial conclusions remain the same.

The majority, approximately two-thirds of the sample, reported knowing what ECT is, although just over one-third believed that it was currently used in Ireland. Similar to previous studies, knowledge about ECT came predominantly from the media and not from medical sources and this information tended to be negative.¹⁴

In the movies ECT is typically presented as a punishment or torture rather than a psychiatric treatment to help people.¹⁵ Such a presentation of the treatment will influence attitudes towards ECT and adversely influence acceptance of it as a legitimate treatment for psychological distress. In contrast, a sample of Irish ECT patients recently reported high level of satisfaction with ECT and did not consider it stressful.¹⁶

Attitudes towards ECT were predominantly negative both for oneself and for family members. Such negative attitudes are consistent with previous research nationally and internationally.^{6-9,14} It should be noted that attitudes towards ECT tend to be more positive among patients who have received it than in the general public;⁷ patients' attitudes may be influenced by perceived beneficial effects of ECT in relation to symptom relief and improved functioning.

In comparison to O'Shea and McGennis's participants, significantly more of the current sample would expect a full explanation of ECT, including side-effects. This change may reflect the shift in patient expectations towards more informed involvement in healthcare decision making, an ethos exemplified in recent healthcare strategies.¹⁷

Higher levels of knowledge were associated with more positive attitudes. Similarly, Kerr and colleagues reported that familiarity with ECT was associated with more positive attitudes.⁶ In line with previous research no relationship was found between exposure to ECT and attitudes towards it.¹⁴ However this may be attributable to the low number of people with such exposure (12% of the sample) and replication using a larger sample would be beneficial.

Of interest, the percentage of lay people who have a relative who received ECT in this study (12%) and in O'Shea and McGennis (13%) appears high. It would be worth

investigating the number of people receiving ECT in Ireland and comparing it to rates of use in other countries.

Furthermore, it would be of interest to compare the present findings with those collected from a truly representative lay sample. Other methods to elicit attitudes could be used to further examine the relationship between attitudes and knowledge. In addition a larger sample size would facilitate more detailed analyses of the relationship between demographic factors (eg. age, socio-economic status) and knowledge and attitudes to ECT.

Comparison of the present study with the research carried out by O'Shea and McGennis reveals that lay people's attitudes towards ECT has not changed over the past 25 years. Investigating attitudes towards the treatment provides better understanding of social acceptability of the treatment, whereas documentation of lay knowledge of ECT is important as adequate knowledge of ECT facilitates informed decision making.

Mental health education programmes should consider the levels of knowledge and attitudes of lay people to better inform programme focus and content. Individuals are less likely to seek mental health services when they are poorly informed or hold negative attitudes towards treatment. Appropriate understanding of treatment is essential for informed decision making by patients, a key aspect of the current Mental Health strategy.¹⁸

Declaration of interest: None.

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