INDIAN PSYCHIATRISTS' ATTITUDES TOWARDS ELECTROCONVULSIVE THERAPY

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ABSTRACT

A questionnaire on ECT, tapping attitudes, usage and experience, was mailed to all medical members of the Indian Psychiatric Society whose addresses were known: 263 (28.8%) of 913 psychiatrists responded. This paper describes Indian psychiatrists attitudes towards ECT. A global attitude favouring the treatment was expressed by 81.4% of respondents. The psychiatrists considered that for many patients ECT may be the safest, cheapest and most effective treatment (79.8%), disagreed that ECT should be used as a last resort (68.4%) and disagreed that drugs have made ECT obsolete (81%). While many (44.1%) opined that use of ECT should be curtailed, few (5.3%) considered that ECT should be abandoned - in fact, most respondents (86.3%) stated that comprehensive psychiatric care should include ECT services. A need was expressed for explicit guidelines for proper use of ECT (77.2%). Conflicting opinions were expressed about the use of ECT in children. Many psychiatrists (38%) thought that ECT may produce subtle brain damage: nevertheless, of those actively using ECT, 82.9% expressed willingness to receive ECT themselves, if indicated.

Key Words: Attitudes, ECT, India, psychiatrists

Electroconvulsive therapy (ECT) remains a controversial form of treatment, and criticism has come from various sources. Diverse populations have therefore been studied in their attitudes towards the treatment: such populations include psychiatric and nonpsychiatric patients (Freeman and Kendell, 1980; Benbow, 1988; Andrade et al., 1993a, Batteebsby et al., 1993), nonpsychiatric medical professionals (Andrade et al., 1995a), nurses (Kalayam and Steinhart, 1981; Janicak et al., 1985), hospital administrators (Andrade et al., 1992), medical students and psychiatry residents (Szuba et al., 1992; Andrade et al., 1995b), and psychologists and social workers (Kalayam and Steinhart, 1981; Janicak et al., 1985).

Psychiatrists attitudes towards ECT have also been examined. Kalayam and Steinhart (1981) reported that psychiatrists in New York had an overall positive response to every aspect of the treatment: as a group, they were unanimous in not expressing a single negative reaction to ECT. They also appeared less fearful of receiving ECT themselves, were it to be necessary.

Janicak et al. (1985) operationalized attitude towards ECT as a willingness to receive the treatment oneself, if very depressed. Psychiatrists with greater clinical experience and greater knowledge about ECT showed more positive attitudes towards the treatment.

The American Psychiatric Association Task Force on ECT (American Psychiatric Association, 1978) reported that 72% of respondents to their survey considered that there are patients for whom ECT is the safest, least expensive and most effective form of treatments: only 7% viewed ECT as obsolete. Pippard and Ellam (1981) reported that only 1% of British psychiatrists were wholly opposed to the use of ECT: 87% regarded it as at least occasionally useful.

Lauter and Sauer (1987) studied attitudes towards ECT in a sample comprising medical directors of acute psychiatric inpatient services in the Federal Republic of Germany. The majority of respondents indicated that they did not consider that drug therapy had made ECT obsolete, that comprehensive psychiatric services should include ECT services, that there are still clear-cut indications for ECT, that use
of ECT need not be confined to application as a last resort in selected instances, that use of ECT is not associated with severe and lasting memory impairment, and that ECT is used less frequently than necessary. As compared with psychiatrists in state mental hospitals and in psychiatry departments of general hospitals, psychiatrists in university hospitals showed the most favourable attitudes.

Of interest, the personal experience of a psychiatrist who received ECT has also been recorded (Practising Psychiatrist, 1965).

There are geographical variations in the practice of ECT. In certain countries, such as Japan, ECT is virtually unavailable. In other countries, such as USA, social opposition, legal restrictions and fear of malpractice suits limit the use of ECT (Fink, 1991). In still other countries, such as India, ECT is freely administered. Such variations in practice may be due to variations in psychiatrists' attitudes and/or variations in societal attitudes. Furthermore, newer generations of psychiatrists tend to be influenced in their attitudes and practice by the attitudes and practice of the previous generations.

The study of psychiatrist's attitudes towards ECT is therefore an important issue, and was addressed in a survey of the practice of ECT in India. Several attitudinal issues were investigated: How do psychiatrists view the present role of ECT? How do psychiatrists view ECT in relation to drugs? What do psychiatrists believe to be the beneficial and adverse effects of ECT? Would a psychiatrist who prescribes ECT also be willing to receive the treatment, should it be indicated? In this report, responses to these and other issues are discussed.

MATERIAL & METHOD

At the National Symposium on ECT held at the National Institute of Mental Health and Neurosciences (Bangalore) in October, 1990, it became apparent that Indian psychiatrists held differing views on ECT. Therefore, a survey of the medical membership of the Indian Psychiatric Society was undertaken to generate an extensive database on ECT, covering attitudes, usage and experience.

An 8-page questionnaire, modified from that used by the American Psychiatric Association Task Force on ECT (American Psychiatric Association, 1978) was mailed to all medical members of the Society whose addresses were up-to-date. A stamped, self addressed envelope was enclosed to facilitate return of the completed forms.

This report presents the responses to questions related to attitudes towards ECT, these questions are listed in the Appendix.

RESULTS

Of the 938 psychiatrists to whom the questionnaire had been mailed, 263 responded. 25 questionnaires were returned by the postal department marked 'Addressee unknown'. The response rate was therefore 263/913 or 28.8%.

Although the sample size in this study was 263, some difference in actual sample size across variables was observed. This was because of omissions in the completion of the questionnaire by the respondents, and because of illegible or unclassifiable entries.

The sample comprised 228 males (86.7%) and 32 females (12.2%). Three respondents (1.1%) did not indicate their gender. The Mean ± SD age of the sample was 41.5 ± 11.4 years.

The 25th, 50th and 75th percentiles for demi-decade of postgraduation in psychiatry were 1970-1974, 1980-1984 and 1985-1989 respectively. Thus, 50% of the respondents had obtained their postgraduate degree in psychiatry during the past 10 years. All geopolitical zones in India were represented in the sample; however, just 9 psychiatrists were based in rural areas.

Sixty-two (23.6%) psychiatrists worked in a private clinic, 19 (7.2%) in a general nursing home, 34 (12.9%) in a psychiatric nursing home, 21 (8.0%) in a private general hospital, 72 (27.4%) in a government general hospital, 37 (14.1%) in a government mental hospital and 3 (1.1%) in a special services facility. Thirty-four percent of psychiatrists had been or were presently involved with ECT research.

The psychiatrist had widely varying practices, having seen from less than 100 (n=21; 8.0%) to more than 3000 (n=16; 6.1%) patients during the previous 6 months. The median number of patients seen during the previous half-years fell in the class interval of 500-699.
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TABLE 1

Respondents' attitudes towards specific issues concerning ECT (n=263).*

| Issue                                                                 | Agree | Ambivalent | Disagree | Invalid |
|-----------------------------------------------------------------------|-------|------------|----------|---------|
| For many, ECT (with or without other treatments) is still the safest, cheapest and most effective treatment | 210 (79.8) | 6 (2.3) | 37 (14.1) | 10 (3.8) |
| ECT should be used only when all else fails                           | 63 (24.0) | 6 (2.3) | 180 (68.4) | 14 (5.3) |
| Drugs have made ECT obsolete                                          | 34 (12.9) | 6 (2.3) | 213 (81.0) | 10 (3.8) |
| Use of ECT should be completely discontinued                         | 14 (5.3) | 6 (2.3) | 233 (88.6) | 10 (3.8) |
| Use of ECT should at least be curtailed                               | 116 (44.1) | 21 (8.0) | 114 (43.3) | 12 (4.6) |
| Comprehensive psychiatric facilities should include ECT services       | 227 (86.3) | 5 (1.9) | 21 (8.0) | 10 (3.8) |
| ECT may produce subtle brain damage                                   | 100 (38.0) | 71 (27.0) | 80 (30.4) | 12 (4.6) |
| More explicit guidelines are needed for proper use of ECT             | 203 (77.2) | 18 (6.8) | 30 (11.4) | 12 (4.6) |
| Guidelines may interfere with patient care                            | 60 (22.8) | 38 (14.4) | 152 (57.8) | 13 (4.9) |
| ECT should not be used on children below 16 years                     | 98 (37.3) | 66 (25.1) | 88 (33.5) | 11 (4.2) |

* Figures indicate the actual number of respondents. Percentages are indicated in parentheses.

Four (1.5%) psychiatrists were in administrative positions while 8 (3%) were not engaged in any form of work. These 12 (4.6%) psychiatrists, who saw no patients at all, were hence classified as non-practising. Thirty-six psychiatrists (13.7%) indicated that they administered ECT neither themselves nor through their junior staff. In effect, a total of 48 (18.3%) respondents did not use ECT.

A further description of the respondents, their clinical background and their ECT practice has been presented elsewhere (Agarwal et al., 1992; Andrade et al., 1993b).

The respondents' main orientation towards psychopathology was sought. 104 (39.5%) were biologically oriented, 32 (12.2%) were psychosocially oriented and 108 (41.1%) were eclectic in their approach. Responses of 19 (7.2%) subjects were either missing or could not be classified.

Table 1 presents various attitudes of the respondents towards ECT, towards its position in current therapeutics and towards its position vis a vis drugs. Most psychiatrists opined that for many patients ECT may be the safest, cheapest and most effective treatment (n=210; 79.8%), disagreed that ECT should be used as a last resort (n=180; 68.4%), and disagreed that drugs have made ECT obsolete (n=213; 81%). While many (n=116; 44.1%) stated that use of ECT should be curtailed, few (n=14; 5.3%) considered that ECT should be abandoned—in fact, most respondents (n=227; 86.3%) believed that comprehensive psychiatric services should include ECT facilities. There was an expressed need for explicit guidelines for the proper use of ECT (n=203; 77.2%). A substantial number of psychiatrists (n=100; 38%) believed that ECT may produce subtle brain damage. There was divided opinion on the use of ECT in children below 16 years.

Table 2 presents the respondents' global attitude towards ECT. Most psychiatrists (n=214; 18.4%) expressed favourable attitudes.
Respondents who used ECT (n=215: 81.7%) were asked whether they themselves would be willing to receive the treatment if indicated. There were 180 valid responses; of these, 150 (82.9%) indicated willingness and 31 (17.1%) indicated unwillingness.

Ninety-three (43.3%) of these 215 respondents who used ECT expressed a need for further training in its application. There were 32 (14.9%) invalid responses. The large number of invalid responses to this and to the previous question is perhaps because these questions formed the concluding section of the questionnaire. The questionnaire was a very long one, requiring about an hour for conscientious completion; some respondents omitted to complete several questions towards the end of the form, possibly as a result of fatigue.

DISCUSSION

Espousal of a treatment by a profession does not necessarily imply that the profession will have favourable attitudes towards it. It is therefore reassuring that most respondents expressed positive feelings towards ECT (Table 2). Other surveys have also found psychiatrists to express positive attitudes (Kalayam and Steinhart, 1981; Lauter and Sauer, 1987). The high percentage (18.4%) of respondents who expressed a globally favourable attitude in this study may be linked to a wider practice of ECT in India (Agarwal et al., 1992); compare these figures with data from U.S.A. where ECT is less widely practised: only 67% of psychiatrists were favourably inclined towards the treatment (American Psychiatric Association, 1978). Again, in this study just 3.8% of psychiatrists thought that drugs made ECT obsolete; in the American survey, the figure was nearly double (7%).

If positive attitudes towards a treatment espoused by a profession are expressed by the profession, cynics may dismiss the attitudes as a defence. It is therefore reassuring that most respondents expressed willingness to receive the treatment should it have been indicated for them. One of the authors of this paper (CA) is even aware of a senior psychiatrist who, in the total absence of a psychiatric indication, deliberately underwent ECT to understand what his patients experienced with the treatment (the psychiatrist reported no untoward effects after several treatments). Although such Hunterian drama is uncalled for, this willingness to receive ECT amongst those who prescribe the treatment should indicate to critics of ECT (within and outside the profession) that these psychiatrists believe in what they do.

Janicak et al. (1985) also found most psychiatrists to be willing to receive ECT if indicated (for severe depression). The 'willing' psychiatrists were more experienced and more knowledgeable about the treatment than the 'unwilling' psychiatrists.

We do not know why 17.1% of psychiatrists who used ECT were unwilling to receive the treatment should it have been indicated. One reason could be difference between intellectual insight and emotional insight—knowing that a treatment is relatively safe and being willing to receive it are two totally different issues. Another reason was volunteered by one of the respondents, a psychiatrist with extensive research commitments, to an author of this paper (CA): "ECT produces memory impairment; occasionally, the impairment is pronounced. My professional memories are far too important to risk." This respondent also indicated that he pursues the same philosophy when prescribing ECT, being reluctant...
to use the treatment in persons in whom memory impairment could have devastating personal or professional effects.

Various indices in Table 1 pertaining to attitudes towards ECT application make it apparent that ECT enjoys an important position in the average Indian psychiatrist's therapeutic armamentarium. It is likely that much of the variance in these attitudes can be explained by environmental factors in India, such as the unquestioning acceptance of doctors' decisions by patients and their families, and an absence of negative public attitudes towards the treatment. Furthermore, in India many psychiatrists still use ECT as the first line of treatment in severe depression and in psychotic disorders, obviously, unlike in situations where use of ECT is confined to treatment-resistant cases, response to ECT is good in a sizeable proportion of these patients. This result reinforces the positive attitude of psychiatrists towards the treatment.

Most psychiatrists disagreed that ECT should be used as a last resort, and stated that ECT, with or without drugs, may be the safest, cheapest and most effective treatment for many patients. In contrast, many psychiatrists also considered that use of ECT should be curtailed. We believe that this (latter) conflicting view may be a result of awareness of overenthusiastic use of ECT by a few professionals.

Although formal guidelines for the use of ECT have been issued (Freeman et al., 1989; American Psychiatric Association, 1990), their availability and circulation in India is poor; no alternatives are available. This would explain the widely expressed need for more explicit guidelines and for further training in the use of ECT.

It is a matter of regret that, despite strong evidence to the contrary (Devanand et al., 1994), many psychiatrists believe that ECT may produce subtle brain damage. It is possible that these psychiatrists are equating brain damage with brain dysfunction (or other brain changes) induced by ECT in cognitive, neurochemical, neurohormonal, electrophysiological and other domains.

Divided opinions were expressed on the use of ECT in children. Possible explanations are concerns about lack of efficacy, harmful biological effects (e.g. is the developing brain vulnerable to potential harmful effects of ECT ?) and harmful psychological effects (e.g. might the treatment produce emotional scarring ?). These concerns represent insecurity due to inadequate experience with the treatment in children. Child psychiatrists in India are also concerned about possible ECT induced cognitive dysfunction and its effect on academic functioning in a school-age population. Although evidence is scanty, what little exists certainly does not discourage the use of ECT in children and adolescents; however, much more experience is required before a definitive statement can be made (Fink, 1993; Schneekloth et al., 1993; Andrade, 1996).

Finally, in certain ECT surveys the response rate to postal questionnaires has exceeded 90% (e.g. Stromgren, 1991). In comparison, the response rate of 28.8% in this study is disappointingly low. Appraisal of this response rate must be tempered by the realization that circumstances in India differ widely from those in developed countries; there are unfortunately no satisfactory yardsticks with which the response rate can be evaluated in the Indian context.

The low response rate raises the spectre that the sample may have been biased. Indeed, this may have been the case-34.2% of the respondents indicated involvement in ECT research in the present or past (Agarwal et al., 1992). It is therefore acknowledged that the favourable attitudes described in this study may not be truly representative of the attitudes held by Indian psychiatrists. However, psychiatrists of all generations, from all types of institutions and in all geopolitical zones were represented in the sample; furthermore, the Indian psychiatric community is small, and the views of its members are well known. We therefore believe that the findings of this study are unlikely to be distant from reality.

In conclusion, while some psychiatrists had apprehensions that ECT may produce brain damage and that ECT may be overused in India, across a variety of response situations Indian psychiatrists expressed favourable attitudes towards the treatment.

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APPENDIX

The questions upon which this paper is based are listed below.

1. What is your main orientation to psychopathology? Please tick only one:
   - Organic, biochemical
   - Organic, neurological
   - Psychological, psychoanalytic
   - Psychological, other than psychoanalytic
   - Social/community
   - Behavioural
   - Eclectic
   - Other (please specify)

2. Using the following rating scale, please indicate your degree of agreement or disagreement with each of the statements below:
   - 1. Strongly agree
   - 2. Agree
   - 3. No opinion: ambivalent: undecided
   - 4. Disagree
   - 5. Undecided

   a) There are many patients for whom ECT, either alone or in combination with other measures, is still the safest, least expensive, and most effective form of treatment.
   b) ECT should be used only when all else fails.
   c) The introduction of antidepressants and antipsychotics has made ECT obsolete.
   d) The use of ECT should be completely discontinued.
   e) The use of ECT should at least be curtailed.
   f) Any psychiatric institution claiming to offer comprehensive psychiatric care should be equipped to provide ECT.
   g) It is likely that ECT produces slight or subtle brain damage.
   h) There is a need for more explicit guidelines for the proper use of ECT.
   i) The issuance of guidelines (from any source) for the use of ECT is likely to interfere with good patient care.
   j) ECT should not be administered to children aged 16 or under.

3. Granted that the question below is a gross oversimplification, which of the following best characterizes your attitude towards the use of ECT?
   - a) Totally opposed to its use.
   - b) Generally opposed, but O.K. as a last resort in a few selected instances.
   - c) No really strong feeling, but tend to be more opposed than favourable.
   - d) Ambivalent, undecided.
   - e) No really strong feeling, but tend to be more favourable than opposed.
   - f) Generally favourable for appropriate patients.
   - g) Decidedly favourable for appropriate patients.

4. If indicated, would you be willing to receive ECT? Yes/No

5. Do you feel that you require further training in the use of ECT? Yes/No

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