visits. Family work is generally necessary, including at times the employment of contracts to manage boundary issues in over-involved families. Regular input from outside agencies for staff and patients, through the course of admission, is encouraged. Training and staff support are important. Strong links with the supported accommodation officer and the community rehabilitation team have proved helpful in finding appropriate placement and ongoing support after residential rehabilitation.

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# Electroconvulsive therapy in Wales

Richard Duffett, Drew Ridley Siegert and Paul Lelliott

Aims and method The use of electroconvulsive therapy (ECT) was surveyed over the first six months of 1996 in Wales. Data on the indications for ECT and clinical outcome were collected in the first three months.

Results The computed annual rate was 22 patients treated with ECT per 100 000 population. Women constituted 71% of those receiving ECT (236/321). Eighty-three per cent had an affective disorder, and 80% had failed to respond to previous treatments. Only 33% of patients had been prescribed more than one class of antidepressant, and only 25% had received augmentation with lithium or an alternative drug before being given ECT.

**Clinical implications** ECT is mostly used after a failure of patients to respond adequately to a course of antidepressants.

Between 1990 and 1993 (data were last collected in Wales in 1993), the number of patients reported to be receiving electroconvulsive therapy (ECT) in Wales fell from by 26% from 39 to 29 per 100 000 population (Welsh Office, 1994). A number of factors may account for this:

- (a) Improvements in pharmacotherapy with the introduction of effective antidepressants with fewer side-effects and the increased use of lithium as an adjunct. The treatment of resistant depression has probably also become more systematic with the introduction of treatment protocols.
- (b) Stigma and adverse publicity may have made patients more reluctant to accept

ECT and psychiatrists less ready to prescribe it.

(c) Incomplete recording of the number of patients receiving ECT.

Practice between individual services and health authorities practice has varied widely. In 1991 there was a nearly five-fold variation in the use of ECT between Welsh health authorities, with the annual number of treatment applications ranging from 113 to 541 per 100 000 population and the number of patients treated from 16 to 71 per 100 000 population.

The practice of ECT in Wales reflects that elsewhere in the UK. In England in 1990 the rate of administration of ECT per head of population varied over 10-fold between individual services (Pippard, 1992) and three-fold between regions (Government Statistical Office, 1992). Between 1985 and 1991 (the last time national figures were collected in England) the number of treatment applications in England fell by 24% (from 291 treatments per 100 000 population in 1985 to 220 per 100 000 population in 1991; Government Statistical Office, 1992).

These findings must be treated cautiously because of concern about the accuracy of centrally collected data. In England a previous audit by the Royal College of Psychiatrists Research Unit (CRU) found that some clinics had reported only 39% of the applications administered (Pippard, 1992).

The study reported here aimed to gain a complete and accurate picture of the pattern of use of ECT in Wales during the first six months of 1996. More detailed information was collected from consultant psychiatrists responsible for patients who started ECT during the first three months of 1996.

#### The study

All 17 NHS ECT clinics in the five health authorities of Wales (population 2 910 000) were identified by phoning mental health trusts. All were visited by the first author as part of the CRU's third audit of ECT (Duffett & Lelliott, 1998). Data were collected prospectively on all patients commencing ECT during the first six months of 1996. To ensure patient confidentiality, information was first collected locally (usually by the nurse responsible for running the clinic) about age and gender of patients and about the number of treatment applications they received before anonymous returns were made to CRU.

In addition, a questionnaire was sent by local data coordinators to the consultant psychiatrist of every patient commencing treatment in the first three months of 1996. This enquired about the patient's diagnosis, the indication for ECT,

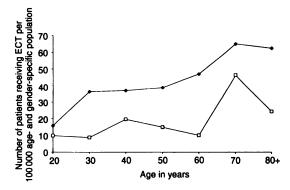
other treatment given during the index episode of illness, status under the Mental Health Act 1983 and previous admissions to hospital. Clinicians also rated their impression of the change in the patient's condition following ECT using the Clinical Global Impression Scale of Change (CGI; Guy, 1976). Mid-1996 population estimates were obtained from the Welsh Office (Government Statistical Office, personal communication, 1996). Results were analysed using the computer statistical package SPSS for Windows 95.

#### Results

Use of ECT during the first six months of 1996

We identified 321 patients, 92 men (29%) and 239 women (71%) as having commenced a course of ECT during this period: this represents an annual rate of 22 patients per 100 000 population. The mean age of men and women was 55.5 and 56.9 years respectively. The number of courses of ECT is shown as a computed annual rate per age and gender specific population in Figure 1. When adjusting for representation in the general population of Wales those over age 65 years were 2.25 times more likely to be prescribed ECT than those between the ages 20 and 64 (24 v. 58 per 100 000). The number of patients treated in each clinic with ECT ranged from 1–61.

Table 1 shows the rate of ECT use in the five Welsh health authorities during the study period. The highest prescribing health authority (Dyfed Powys) treated 1.6 times as many people per 100 000 population as the lowest (North Wales) – this difference was significant ( $\chi^2$ , P<0.01). Variation was greater in the rate of treatment for people aged between 20–64 years (range 13.3–26.8 per 100 000 population) than



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Table 1. Electroconvulsive therapy (ECT) treatment in first six months of 1996 in the five Welsh health authorities

Health authority	North Wales	Dyfed Powys	Morgannwg	Bro Taf	Gwent	Total in Wales
Number of male patients starting treatment	13	24	12	27	16	92
Number of female patients starting treatment	42	41	47	63	36	229
Total patients treated	55	65	59	90	52	321
Population	656 900	476 700	499 900	752 500	556 200	2 921 100
Patients prescribed ECT per 100 000/year <sup>1</sup>	0.168	0.273	0.236	0.246	0.18	37 0.220
Estimated ECT applications per 100 000 year <sup>1</sup>	10.3	20.2	15.5	18.8	11.4	15.2

<sup>1.</sup> Adjusted for missing data.

for those aged 65 or over (range 45.3-63.2 per 100 000 population).

The duration of the course of ECT was known for 291 patients (91%). The mean number of treatments per completed course was 6.75 (median 6, range 1–8). Patients were most likely to receive an even number of treatments (61%,  $\chi^2$ , P<0.001). The mean number of treatments per course ranged from 6–7.6 between health authorities; this difference was significant (t-test, P<0.01). There were however no differences in the mean number of treatments between the genders or in those older or younger than 65 years old.

Data on treatment duration were more complete for patients commencing ECT in the first quarter of 1996 than the second (99% v. 92% complete) due to a failure to record the total number of treatments for some patients still receiving ECT in July 1996. This resulted in the mean number of treatments per course in the second quarter being shorter than the first (6.4 v. 7.3, P<0.02). When the total number of treatments applications administered in Wales in 1996 were extrapolated from the mean number of treatments given in the first quarter of 1996, it was calculated that about 4668 treatment applications would have been administered to 642 patients annually.

## Indications for ECT during the first three months of 1996

Complete returns were received for 132 of the 161 patients who commenced ECT in the first quarter of 1996 (82%). The majority of non-returns (20 of the 29) were from two sites. Patients for whom there were missing data did not differ significantly in terms of their age or gender from the rest of the sample.

Table 2 summarises the diagnosis, Mental Health Act status, previous history, other treatment during the index illness and indications for ECT of these patients. A failure to respond to drug therapy was the most common reason for

Table 2. Characteristics of patients commenced on electroconvulsive therapy (ECT) in Wales during the first three months of 1996

	Males (n=37)		Total <sup>1</sup> (%) (n=132)
Diagnosis			
Depression	29	69	102 (82)
Mania	1	0	1 (1)
Mixed affective state	2	2	6 (5)
Schizoaffectice disorder	1	8	9(7)
Schizophrenia	2 0	4	6 (5)
Puerperal psychosis	0	1	1 (1)
Indication			
Life-saving procedure	6	8	17 (13)
Failure to respond	29	75	106 (80)
Patients choice	2	4	7 (5)
Past history			• • •
Previously hospitalised	24	66	95 (72)
Previously ECT	15	52	72 (55)
During current episode			•
Detained under Mental Health Act	6	17	26 (20)
Treated under Mental Health Act	1	8	12 (9)
Received ECT	5	15	24 (18)
Tricyclic antidepressant	24	53	82 (62)
Selective serotonin	19	52	75 (57)
reuptake inhibitor			• •
Monoamine oxidase	3	12	15 (11)
inhibitor or reversible inhibitor of monoamine	•		
oxidase A (RIMA)			
Any antidepressant	33	81	119 (90)
More than one	11	30	41 (33)
antidepressant			` ,
Augmentation strategies			
Lithium	9	20	31 (23)
Anticonvulsant	1	8	9(7)
T3 or T4	0	2	2 (2)
L-Tryptophan	1	8 2 5	7 (5)
Any augmentation	9	22	33 (25)
strategy			
Other psychotropic medica	ation		
Antipsychotic	16	43	63 (48)
Benzodiazepine	6	22	29 (22)

<sup>1.</sup> Data were missing on the gender of six patients.

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starting ECT (80% of the sample, n=106). Consistent with this only four patients with depressive illness had not received an antidepressant prior to commencing ECT. The majority of patients were commenced on ECT as in-patients, with only 21 (16%) commencing treatment as out-patients. Although about onefifth of patients were detained under the Mental Health Act only 9% (n=12) were given ECT against their consent (under Sections 58 or 62 of the Mental Health Act 1983). The indications (more than one might apply) for treatment in those starting ECT under compulsion were as a life saving procedure (eight); failure to respond to alternative treatments (seven); and failure to tolerate antidepressants (one).

Fifty-nine per cent (n=78) of patients were rated as much or very much improved, a further 31% (n=41) as improved and only two as worse following their course of ECT. All 12 patients who were commenced on ECT against their consent were rated as improved.

#### **Discussion**

The study gives an almost complete picture of the use of ECT in Wales during the first half of 1996. As personnel involved in the administration of ECT collected data on the use and all clinics were visited by R.D. during data collection period and accuracy is likely to be high. The survey design was appropriate to examine rates of ECT use and variation in rates between health authorities and the age, gender and Mental Health Act status of patients. The design was not ideal to describe patients' clinical details because data were collected by a large number of psychiatrists and not using rigorous research methods. Even with these reservations, data on diagnosis, previous treatment, indications for use and outcomes are presented because they complement the picture by adding a clinical element.

The age and gender distribution of patients was very similar to those found in an audit of ECT practice in Great Britain conducted in 1980 (Pippard & Ellam, 1981) and other studies (O'Leary & Lee, 1996; Trezise & Conlon, 1997). Likewise the mean number of treatments per course (6.75) was very similar to those of the 1980 survey (6.55).

The data on rates of use are likely to be more accurate than those derived from central returns, and for this reason comparisons need to be made cautiously. With this caveat, the findings of this study suggest that, since 1990, the annual number of applications of ECT in Wales has fallen by 30% and of patients treated by 44%. Also variation between health authorities in rates of use has reduced (from

5-1.6-fold) although much larger variations occur between individual services.

If this fall in the rate of ECT is real it might be in part due to more extensive use of pharmacotherapy before ECT is prescribed. A survey of prescribing practice conducted in the 1980 audit (Pippard & Ellam, 1981) reported that before ECT was given, 71% of patients with depression had had a trial of antidepressants (this compares with 96% in this study), and only 8% had commenced a lithium or another augmentation strategy (25% in this study). Failure to respond adequately to an oral antidepressant was the reported indication for ECT in 50% of patients in 1980 compared with 80% in this study.

Despite this change, the 1996 survey does suggest that pharmacological treatments are not used exhaustively before ECT is given as only 33% of patients had been prescribed more than one class of antidepressant during the index illness. ECT in Wales is used principally as a treatment for affective disorders, consistent with guidelines produced by The Royal College of Psychiatrists (1995).

The survey does not indicate what other factors might have influenced the decision to use ECT, such as a wish to bring about a rapid improvement in mood either to relieve suffering or to enable earlier discharge.

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# Treatment of the mentally ill in the Federal Republic of Germany

### Sectioning practice, legal framework, medical practice and key differences between Germany and the UK

Hanns Rüdiger Röttgers and Peter Lepping

Aims and method The legal provisions concerning the admission to hospital, holding powers and compulsory treatment of the mentally III in Germany are illustrated. The essential legal concepts are compared to the situation in Great Britain.

**Results** Whereas British law gives key powers to multiprofessional decision-making and relatives, German law requests formal court decisions even in routine cases. This reflects a different understanding of individual rights and their protection. German mental health law is motivated by the experiences of the totalitarian national socialist regime. It tries to protect patients' rights by restricting physicians', hospitals' and family members' influence. British law, on the other hand, assumes that experts as well as family members act benevolently in the patient's interest, prefers less formal mechanisms and expresses more trust in professional ethics.

**Conclusion** Further research is desirable to analyse the situations in other countries and to determine which of these approaches is the most adequate from the point of view of the mentally ill. This is even more important in view of further European integration which will undoubtedly touch these questions and accelerate a convergence in medico-legal issues.

European integration will not only lead to an integration of economic markets, but also to more similar standards of the service sector, professions and jurisdiction. Whereas the medical and scientific standards in Great Britain and Germany are comparable, fundamental differ-

ences exist in medico-legal concepts and the psychiatric practice as far as sectioning, forced treatment and guardianship issues are concerned. This has recently been highlighted by several High Court decisions.

## Sectioning law and Guardianship law in Germany

In the Federal Republic of Germany there is a separation between public and civil law regarding Sectioning and Guardianship.

Public law is the domain of the 16 Federal States, each of which has a different sectioning law (*Unterbringungsgesetz*). Its function is to avert dangers to public order and security relating to mentally ill persons. Public law does not care about individual welfare or health. Guardianship law (*Betreuungsgesetz*) as part of the civil law on the other hand is identical in all 16 Federal States.

Its function is to grant the proper personal, medical and economic care for those people not able to do so themselves due to handicap or illness. A guardian appointed by the local court then takes care of such persons. The guardian's rights have to be specified according to the circumstances of the individual case. Those rights can for example comprise "financial issues with the exception of everyday transactions up to DM100 per week" or "psychiatric treatment