

## ELECTROCONVULSIVE THERAPY ON HUNGARIAN WEBSITES

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### SUMMARY

**Background:** Although there are several similarities in terms of their equipment and the way they are performed, the social perception and public attitudes towards electroconvulsive therapy (ECT) and electric cardioversion (ECV) is entirely different. The aim of this study was to assess and compare the information on Hungarian Internet sites on ECT and ECV with respect to their depiction and acceptance by the public.

**Subjects and methods:** An Internet search was undertaken with the Google search engine using the terms „ECT”, „electroconvulsive therapy”, „electroshock”, „defibrillator” and „electric cardioversion”. The search was restricted to information published in the Hungarian language from 1 January 2000 to 31 December 2010. All communications were classified into negative, neutral and positive groups depending on their attitude towards the aforementioned treatment methods. Professional or non-professional categories were also distinguished.

**Results:** The total number of communications, which appeared between 2000 and 2010 and contained one of the search words for ECT was 66. The majority of them portrayed ECT in a negative (24; 36.4%) or neutral (25; 37.9%) fashion. Most of the websites (139; 95.2%) related to ECV were reflected positive (120; 82.2%) and neutral opinions (19; 13.0%).

**Conclusions:** Hungarian-language Internet sites mainly view ECT as negative or neutral in contrast to ECV cardioversion, which has almost entirely a positive reputation. Although the effectiveness of both therapies is equally well established, their public image as manifested on the Internet differs significantly. This may have a major impact on the frequency of their use.

**Key words:** electroconvulsive therapy – ECT - electric cardioversion – ECV - Internet

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### INTRODUCTION

Electroconvulsive therapy (ECT) and electric cardioversion (ECV) are similar therapeutic interventions in terms of the equipment and the way they are performed, but their social perception and the public attitudes towards them is entirely different. Despite the increasing sophistication in its application, the compelling scientific evidence about its effectiveness and the ethically safeguarded clinical practice, the public image of ECT remains mainly negative (McFarquhar & Thompson 2008). Its application is often regarded as abusive, a tool of social repression and political revenge (Euba & Crugel 2009). Groundless and false beliefs related to ECT appear frequently even among psychiatrists (Gazdag et al. 2004) and medical students (Gazdag et al. 2005). Only a small proportion of the population has scientifically valid information about ECT coupled with mostly negative opinion and feelings (Golenkov et al. 2011). This negative attitude is continually reinforced by the mass media and anti-psychiatry websites (Payne & Prudic 2009).

In contrast, the overall view and wide acceptance of electric cardioversion (ECV) is almost entirely positive (Lubin et al. 2004). Both professional circles and the public argue for its more frequent use (Arntz & Trappe 2005).

The aim of this study was to assess the information on Hungarian websites and to compare their opinions about ECT and ECV.

### SUBJECTS AND METHODS

The terms „ECT”, „electroconvulsive therapy”, „electroshock”, „defibrillator”, „cardioversion” and “electric cardioversion” were entered in the Google search engine. The search was restricted to the information published in the Hungarian language from 01/01/2000 to 31/12/2010.

Communications that used ‘electroshock’ referring to weapons, or to a form of punishment or a kind of aversive therapy, or using the term metaphorically were excluded. For the term ‘defibrillator’, sites that were limited purely to its technical description were omitted. As the aim of this survey was to explore the general attitude towards ECT and ECV as it appeared on the Internet, scientific papers written for professionals were also disregarded.

Of the authors, RT screened the search results, GG and RT categorized independently the contents of the information on the websites and also the respective sites. In case of disagreement, GSU acted as final arbiter. The sites were classified in the following ways:

- A site was considered professional if it contained professionally relevant medical information; non-professional sites touched upon the subject without demonstrating proficiency and reflecting only subjective opinions.
- The selected sites themselves were classified and 5 categories were established: health education sites,

news sites or online versions of daily newspapers, internet versions of magazines, educational sites, and ‘Other’ that did not fit into any of the above categories.

- Based on their tone, communications, i.e. the information provided, websites were classified into negative, neutral and positive groups. A communication was categorized as positive if it contained statements about the effectiveness or favorable implications of the therapy, even if side effects were also mentioned.

## RESULTS

The ECT-related search yielded 1044 sites of which 66 fulfilled the search criteria. The majority of them portrayed ECT in a negative (24; 36.4%) or a neutral (25; 37.9%) way. Twenty-nine (43.9%) of the negative and neutral communications were found on sites classified as “Other” and 25 (86.2%) of the 29 were non-professional opinions. Most positive communications (11; 16.7%) were published on professional health education sites (Table 1).

Search with keywords connected to ‘electric cardioversion’ yielded 716 sites, of which 146 met the selection criteria. The overwhelming majority (95.2%) reflected positive (120; 82.2%) and neutral opinions (19; 13.0%) mainly appearing on health education and ‘Other’ sites (86; 58.9%); 91 (62.3%) of the positive and neutral communications were from the non-professional category. A small number (7; 4.8%) of negative opinions were voiced but only in the non-professional category (Table 2).

## DISCUSSION

Studies surveying the public’s attitude and its changes over time towards ECT have scrutinized mainly newspapers (Euba & Crugel 2009). Over the past decade the Internet has become the most easily accessible and important source of information. An increasing number of patients turn to the Internet to learn about medical treatments or alternative treatment options. Therefore, it was important to examine the information available on-line on ECT.

The results of this survey confirmed that the image of ECT on Hungarian-language websites is mainly negative or neutral. In contrast, ECV has an almost entirely positive reputation. As always since its introduction, ECT even today is one of the most controversial psychiatric treatment methods (Gazdag et al. 2007). A wide range of factors could have contributed to the development of ECT’s negative image. In Hungary, Milos Forman’s film, “One Flew Over the Cuckoo’s Nest”, in which ECT is shown as a method of punishment has misinformed and negatively influenced the public (McDonald & Walter 2009). Similarly, publications that linked Ernest Hemingway’s suicide to his ECT also contributed to ECT’s negative image (Trent 1986).

The general view of ECT is that it is a primitive, unscientific, old-fashioned method, which has no place in modern psychiatry. On 12 websites, ECT is portrayed as an instrument of abuse bordering on criminality, and ECT practitioners receive similar appreciation arguing that the use of ECT is morally objectionable and tarnishes the reputation of psychiatry. In this context, the validity or even the very existence of the consenting

**Table 1.** Classification of Hungarian electroconvulsive therapy-related websites and their content

		Health education portal	News	Educational magazine	Magazine	Other	Total
Positive	Professional	11		2		2	15
	Non-professional		1			1	2
Neutral	Professional	10		1		3	14
	Non-professional	1	2	1		7	11
Negative	Professional	1				1	2
	Non-professional	1	2		1	18	22
Total		24	5	4	1	32	66

**Table 2.** Classification of Hungarian electric cardioversion-related websites and their content

		Health educational site	News	Educational site	Magazine	Other	Total
Positive	Professional	18		1		10	29
	Non-professional	21	31		2	37	91
Neutral	Professional	2					2
	Non-professional	1	6		1	9	17
Negative	Professional				1	2	7
	Non-professional	2	2				
Total		44	39	1	4	58	146

process is questioned although this requirement is clearly stated in Hungarian and international professional recommendations (Hungarian College of Psychiatrists 2005, American Psychiatric Association 2001, Royal College of Psychiatrists 2004).

Communications related to ‘electric cardioversion’ and ‘defibrillator’ reflect its strong acceptance by the public. ECV is commonly described as an essential and life-saving intervention, which should be proficiently used by professionals and laypersons alike. Many communications were public announcements about the placement of the defibrillator machine in a variety of settings, e.g. railway stations, etc. In Hungary, a national campaign has begun to promote the application of ECV. ECV clearly enjoys a high reputation and has been depicted as a highly effective and acceptable method.

Although the effectiveness of both therapies is well established, (Sienaert 2011, Weisfeldt et al. 2010) their public image is entirely different which considerably influences the frequency of their use. The use of defibrillators enjoys an almost universal public support, thus it can fulfill its life-saving role. ECT is known as the most effective treatment for major depression (UK ECT review group 2003) and is also effective in reducing suicide risk (Kobeissi et al. 2011). Yet, although scientific data support its effectiveness and legitimacy (Oral et al. 2008), the application of ECT declined significantly in the last 15 years in Hungary, partly due to its negative image. In 2002 only 315 psychiatric inpatients received ECT in Hungary (Gazdag et al. 2004) while the corresponding figure was 1605 in 1992 (Lipcsey 2002). Consequently, the chance of patients suffering from disorders responsive to ECT to receive such an effective therapy has been rapidly decreased, which infringes upon the patients’ right to the most efficacious treatment (Klerman 1990). This is a particularly poignant issue in Hungary, which has a significantly higher prevalence of depression than Western Europe (Szádóczky et al. 1998) and one of the highest suicide rate in the world (Schmidke 1997).

### Suggestions for improving the image of ECT

Several possible ways exist to improve the negative image of ECT. Probably the most important means would be to increase the number of communications written by professionals for the lay public. Currently the number of such sources is very limited (Table 1). Starting an Internet forum with the participation of experts who can answer questions from the public would probably also be useful. At the same time, the psychiatric profession should be more effective in vigorously rejecting aspersions that arise in connection with ECT.

The results of this study should be viewed with caution in light of its methodological limitations. These include the fact that there were no objective criteria in the selection and classification of the communications; they were grouped based only on the authors’ judgments.

## CONCLUSIONS

Hungarian-language Internet sites mainly view ECT as negative or neutral in contrast to ECV cardioversion, which has almost entirely a positive reputation. Although the effectiveness of both therapies is equally well established, their public image as manifested on the Internet differs significantly. This may have a major impact on the frequency of their use.

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