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A COMPARATIVE ANALYSIS OF PRE- AND POST-ELECTROCONVULSIVE THERAPY DRAWINGS

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In the general hospital, many look at Electroconvulsive Therapy (ECT) as a medical procedure that does not require the integrated efforts of the multidisciplinary team. If ECT treatment is administered without attention to dynamics and other therapeutic issues in the patient's life and treatment, it may lead to less than successful long-term results (Silbert, 1986). Developing practical outcome measures and collaboration among members of the treatment team are only briefly mentioned in the literature (Scovern & Kilmann, 1980). Measures to determine the adequate course or "success" of ECT are also lacking. The authors of this study designed this research to test the utility of drawings in assessing mood improvement and cognitive impairment as demonstrated in art samples from pre- and post-ECT.

Alloy, Acocella, and Bootzin (1996) cite studies that indicate approximately 17% of Americans will experience depression at some point in their lives. Hospitalization for depression ranks second only to schizophrenia in frequency. Further, physicians report that 12 to 48% of their patients are suffering from depression at a rate that frequently is more debilitating than chronic medical problems such as arthritis and diabetes. Statistics also point to a progressive pattern in the incidents of depression. Barlow and Durand (1995) refer to an increasing percentage of depression in the general population but especially noted the increased risk in younger Americans. For example, they quote Klermen and Weissman's that "among Americans born before 1905, only one percent had developed depression by age 75, of those since 1955, six percent had become depressed by age 24" (1995, p. 246).

Of course, all depressed people do not end up committing suicide nor do all require last resort measures such as ECT. However, according to Alloy et al. (1996), a conservative estimate is that at least 30,000 people per year commit suicide in America. Although ECT remains controversial, partly because of negative stereotypical views, it continues to present a viable alternative for severely depressed people whose depression has been resistant to standard therapy and psychopharmacological treatments. For some, the benefits of ECT are undeniable when it replaces a life threatening depression with restored hope.

This study examined the effect of ECT as reflected by altering both content and quality of drawings.

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Were there statistically significant changes in the drawings from 25 in-patients who participated in the pre- and post-ECT study? Seven parameters in the art products were measured in pre- and post-ECT drawings. Significant changes appeared between the drawings on two of the parameters.

The study demonstrated the value of collaborated efforts from separate departments. Also, the results may be of interest, not only for art therapists and psychiatrists, but to other clinicians, depressed people, family members, artists and the general public may see concrete benefits from the results of this study. The scope of this study was limited in the size and may warrant replication with refinements. Although research in art therapy inevitably poses new questions, its importance cannot be ignored given the incipient stage and needs of the art therapy field. Assessment tools such as this may prove to be a valuable contribution to the field.

History of Electroconvulsive Therapy (ECT)

Electricity or electric shock has long been viewed as a remedial agent. Ancient Greeks applied electric torpedo fish to the head. In the 18th Century, notables such as John Wesley, the founder of Methodism; John Birch, a noted London surgeon; and Ben Franklin made great claims for electronic cures for numerous types of maladies.

ECT was a natural outgrowth of early efforts by Meduna in 1935, who used injections of oil of camphor to create seizures. His use of the procedure was based on erroneous but widely held antagonistic belief. By 1937, Bini and Cerletti used electrical stimulation to achieve seizures in a manner more tolerable for the patient. The success of the treatment was heralded worldwide. Since it occurred in a therapeutic vacuum, it rapidly became a predominant form of somatic therapy for schizophrenia and affective disorders (Weiner, 1984).

In the 1950s, development of effective medications largely replaced the use of ECT. Since then, refinements of technique and a more carefully monitored use for patients who do not respond to other alternate treatments have eliminated many problems. ECT is now used primarily for severe Affective Disorders (especially depression) and is used rarely in schizophrenia. For current ECT use, techniques have been developed for use with anesthetic agents for sleep, fear or discomfort relief, neuromuscular relaxation to prevent fractures or musculoskeletal trauma and pre- and post-treatment monitoring, as well as medicines to prevent cardiovascular risk. Finally, newly developed equipment incorporates computers allowing changes in the electrical waveforms to reduce memory impairment.

Objective assessments differ from the patients' subjective reports about post-ECT memory loss. Immediate recall is unaffected by ECT; however, delayed recall is reduced for 48 to 72 hours unrelated to the total dose of electrical energy (Zervas & Jandorf, 1993). Most younger patients experience less deficit in verbal and visuospatial anterograde memory immediately following a course of ECT. Evaluations 1 month following ECT indicates the difference between younger and older patients is marginal; no difference is found after 6 months.

At present, ECT is used sparingly in only 3 to 5% of psychiatric inpatients. However, anecdotally, utilization is increasing (Mecta Corporation, 1985), although reports conflict, apparently due to limited data collection. For example, the National Institute of Mental Health (NIMH) reported 33,000 individuals treated with ECT, but the most recent data report that approximately 4.3 out of 100,000 in the population receive ECT. Common reaction to ECT is often based on fictional accounts, such as movie portrayals (Fitzgerald, 1988), or written accounts from ECT patients prior to the standard use of anesthesia and other current medication regimes.

Clinicians and the public become wary of certain medications for a variety of reasons. Side effects and lack of efficacy with specific populations, such as the elderly, are among the frequently identified problems. To the contrary, many psychotic and agitated depressions respond dramatically only to ECT, and unexpected improvements following ECT have occurred in other illnesses such as deliriums and Parkinson's disease.

In 1990, the NIMH contracted with the American Psychiatric Association to create a task force to examine ECT's efficacy, soliciting information from psychiatry, neurology, psychology, medicine, cardiology, anesthesiology, obstetrics, device manufacturing, medical ethics, Joint Commission on Accreditation of Healthcare Organizations, Food and Drug Administration and lay mental health organizations. In sections 12.1 and 12.2 of the task force report, criteria for a therapeutic response in treatment are provided, as well as assessment of cognitive changes. This is approximately one-half page out of a 35-page report, and no specific suggestions are offered. The