

Electroconvulsive Treatment in Oak Ridge: Considering Clinical Ethics

[Jesus said,] “Therefore all things whatsoever ye would that men should do to you, do ye even so to them: for this is the law and the prophets.”

“Do unto others as you would have them do unto you.” (Matthew 7:12; Luke 6:31)

There are plans to promote electroconvulsive treatment (ECT) in this hospital’s secure psychiatric facility. In this commentary, potential ethical issues are considered.

There is a commonly accepted ethical requirement to offer well-established, evidence-based, and less intrusive therapies first because this maximizes benefit while minimizing harm. Yet, at this institution, less intrusive and more empirically supported therapies are not offered fully.

Promoting ECT while delaying established behavioral and psychosocial therapies entails potential ethical problems by:

- diverting resources from and otherwise delaying the task of implementing those established, less intrusive behavioral and psychosocial therapies, thereby failing vulnerable persons;
- failing to honestly live up to the hospital’s mission, vision, and faith-based values;
- failing a duty of public protection; and
- failing to obtain the legally and ethically required free and fully informed consent.

Empirical evidence related to these concerns is addressed in Appendix A.

Preliminary

There is scientifically acceptable evidence that patients suffering from severe mood disturbance who then experience grand mal seizures induced by applying electrical current to the brain derive a benefit (Appendix A, section 4). The benefit appears to be of limited duration (leading to the practice of maintenance ECT which itself is relatively untested). The mechanism whereby ECT exerts beneficial effects has not been fully elucidated, but appears to involve some fundamental changes in brain function. The risks of ECT mostly involve cognition and memory problems which are common, but in many cases, modest and/or temporary (Appendix A, section 4). Because ECT requires anaesthesia, there are additional health risks associated with that. Under some circumstances, it is reasonable to offer ECT to patients experiencing severe mood disorder when other treatments (behavioral, psychosocial and pharmacological) have not been effective.

There is no scientifically acceptable evidence to support a preference for ECT over behavioral and psychosocial therapies for any psychiatric disorders or problematic behaviors (Appendix A, section 4). Some authorities nevertheless recommend it as a last resort in cases where nothing else has worked.

It is ethically troubling to offer ECT without first offering less intrusive evidence-based behavioral and psychosocial therapies because, to maximize benefit and minimize harm, the least intrusive and the most empirically well-established therapies must generally be attempted first.

There is scientifically accepted evidence (Appendix A, sections 1 & 2) that behavioral, cognitive-behavioral, and psychosocial therapies are effective for the clinical problems experienced by these patients (including those with mood disorder; Appendix A, section 3). A full array of professionally delivered treatments of these types is not available for many of this institution's forensic patients. From an ethical perspective, these well-established therapies ought to be professionally attempted before the last resort of ECT is prescribed.

This requirement to offer well-established behavioral and psychosocial therapies first is also linked to the ethical requirement that treatments be offered in relation to their intrusiveness. That is, for example, if surgery and physiotherapy were known to have equivalent efficacy for a particular condition, clinicians would be ethically obligated to offer physiotherapy first because physiotherapy is less intrusive than is surgery. Part of the reason for the least-intrusive-first doctrine is that relatively intrusive treatments carry greater risk. Although ECT is probably safer than some surgeries, it clearly carries greater health risks than behavioral therapy or psychotherapy—on ethical grounds, less risky therapy must be attempted first. Once other therapies had been exhausted, higher risk treatment might be warranted and the risk deemed acceptable.

The Canadian Psychological Association's Code of Ethics articulates four fundamental principles each of which is invoked by these circumstances:

1. *Respect for the Dignity of Persons*—The requirement to obtain fully free and fully informed consent, to protect vulnerable persons, and to encourage others to do the same.
2. *Responsible Caring*—The requirement to maximize benefit and minimize harm, and to encourage others to do the same.
3. *Integrity in Relationships*—The requirement to be honest and avoid misrepresentation, and to encourage others to do the same.
4. *Responsibility to Society*—The requirement to contribute to and communicate knowledge; to contribute to an environment that supports the respectful expression and resolution of ethical concern or dissent; to speak out when in possession of expert knowledge that bears on important issues being studied or discussed; to speak out and/or act if the policies, practices, laws, or regulations of the workplace seriously ignore or contradict any of the principles of this *Code*; and to encourage others to do the same.

From the perspective of clinical ethics, ECT could be offered to this institution's forensic patients for some conditions under some circumstances when other, less dangerous and evidence-based treatments had failed. But there is a clear ethical violation in promoting ECT to patients when professionally delivered behavioral and psychosocial therapies have not been fully attempted. This ethical failure presents risks related to these four principles above; specifically:

A focus on ECT threatens further, ethically unacceptable, delay to implementing behavioral and psychosocial therapies thereby unnecessarily failing vulnerable persons.

As discussed, there are empirically supported therapies for forensic populations (Appendix A, sections 2, 5-8) that are not offered to all of this facility's forensic patients. On ethical grounds, an institution or clinician may not use the absence of clinical expertise to indefinitely excuse a failure to ensure delivery of the most efficacious treatment. Ontario's leading forensic hospital ought to provide comprehensive behavioral and psychosocial therapies to its patients. The implementation of ECT ahead of these better-established therapies carries the risk that the full implementation of behavioral and psychosocial treatment will be further delayed because of the intellectual and material resources directed to delivering ECT instead. Giving inappropriate primacy to ECT might well also foster the false but common misconception that behavioral and psychosocial treatments will be ineffective for people suffering psychotic symptoms. Implicitly or explicitly reinforcing this false belief among clinical staff might make getting appropriate psychosocial and behavioral treatment even harder to get going.

While some psychiatrists endorse ECT, it remains controversial and is regarded as inappropriate and unnecessary by others in mental health fields (Appendix A, section 4). Delivering ECT in the context of insufficient psychosocial and behavioral treatment unnecessarily risks the reputation of the institution and its staff members. This too risks delay in the implementation of psychosocial and behavioral therapies because professionals expert in such services might be more difficult to retain and recruit to a hospital with a reputation for delivering ECT in the absence of adequate behavioral and psychosocial therapies.

This institution asserts that it provides comprehensive services which, on ethical grounds, must include those interventions known to reduce the recidivism risk of its forensic patients, yet ECT offers no benefit to the safety of the public at large.

There is no evidence of an effect of ECT on criminal recidivism. In addition to improving patient mental health, a forensic mental health facility has an ethical obligation to provide services aimed at decreasing the risk of future victimization of members of the public. This hospital has explicitly and publicly accepted this responsibility, but has delayed implementation of the most solidly supported services for this purpose (Appendix A, sections 5-8) while implementing an intervention (ECT) not expected to affect the risks to which the public will be exposed. For a teaching hospital of the country's top university that aspires to being an academic health care setting, one must be concerned about the possibility of conveying a false impression as to the comprehensiveness of the hospital's forensic clinical services.

Free and informed consent is an absolute ethical requirement to deliver ECT, but it is liable to be jeopardized when known beneficial services are not also offered.

By law, ECT may only be delivered with consent. For individuals in secure custody, offering ECT without offering less intrusive and more empirically supported therapies places patients (or their substitute decision makers) in a situation where they are not truly free to choose

among those services most likely to be beneficial. The implicit message might well be: consent to ECT or face the prospect of indeterminate detention even though other services that we elect not to offer might be as, or even more, beneficial. Many authorities would not regard consent under such circumstances to be freely obtained. As well, consent is free only when it is fully informed. It could be reasonably argued, therefore, that full information in this context would require clinicians to tell prospective subjects for ECT that there are well-established specialized behavioral or psychosocial techniques that could be beneficial without inducing seizures, but this hospital will not provide such treatments. One wonders whether this full information will be provided to patients and their substitute decision makers. Relying on ECT in a maximum security facility while not fully providing behavioral and psychosocial therapies (and/or information about them) could expose the hospital to accusations that any consent obtained was not truly free and fully informed.

Evidence and supporting documentation reinforce these ethical concerns (Appendices).

Appendix A of this commentary is an annotated bibliography about the efficacy of ECT, and of psychosocial and behavioral treatments for clinical problems likely to be experienced by maximum security forensic patients. Going back several decades, there is an abundance of solid evidence supporting psychosocial and behavioral treatments for such clients. Except for severe depression, there is little or no evidence supporting ECT for any clinical problems. And even for severe depression, there is good evidence supporting the efficacy of cognitive-behavioral and other interpersonal therapies. No evidence supports a preference for ECT over behavioral and psychosocial therapies.

Appendix B lists some fundamental ethical principles associated with health care. Essential here are the requirements that least intrusive interventions should be attempted first, consent includes information about alternative treatments, offenders who are mental patients are entitled to the same quality of services as other patients, and patients have a right to effective interventions that cannot be diminished by a clinician or hospital electing not to possess the requisite clinical skills, services, or resources.

Of particular relevance, as a Catholic hospital adhering to the health ethics guide of the Catholic Health Association of Canada, the provision of ECT in the absence of interventions that are more established as efficacious and less intrusive appears to contravene the spirit of Double Effect. Providing these alternate therapies that do not cause the same harm as ECT, and have demonstrable benefits over and above ECT, allows clinicians and patients to avoid the Double Effect dilemma. Such is also consistent with the Christian moral values set out in the guide of the dignity of every person, the common good, and charity or solidarity.

In Conclusion

Clearly, standards of clinical ethics and this institution's mission, vision, and values statements would permit no ethical refuge in saying, as examples, that there is anecdotal support for ECT, getting comprehensive psychosocial and behavioral therapies going would be hard

work, other institutions and forensic hospitals don't provide all the evidence-based psychosocial therapies either, it would be too difficult to recruit knowledgeable professionals, psychology is an under-valued discipline, there's little public sympathy for or political interest in forensic patients, the hospital can escape successful legal challenge by calling upon authorities sympathetic to ECT, or we'll get appropriate therapy going but after the new building is completed.

The most compelling moral imperative in this context lies at the heart of the institution's faith-based values: *What is hateful to you, do not do to your fellowman. This is the entire Law; all the rest is commentary (Talmud). The Golden Rule is no use whatever unless you realize it's your move (Crane, 1919)*. There can be little doubt that this hospital's clinical leaders would, if they were patients, crave the option to receive the most effective psychosocial therapies for themselves. Therefore, they may not ethically delay access to those same services for others while promoting an intervention each would insist having true choice about for themselves as a last resort.

On ethical grounds and to be true to its commitment to caring and respect then, the hospital should implement the less intrusive and more well established psychosocial and behavioral therapies demonstrated (Appendix A, sections 1, 2, 3, 5-9) to be effective for this institution's forensic population before seeking to deliver electroconvulsive treatment to its patients.

Appendix A

A BRIEF ANNOTATED BIBLIOGRAPHY ON THE TREATMENT OF FORENSIC PATIENTS RELATED TO THE PROMOTION OF ECT OVER PSYCHOSOCIAL AND BEHAVIORAL THERAPIES

Notes: The term “forensic patient” here refers to a person with involvement in the criminal justice system and who also has, or appears to have, a mental disorder. Thus, the term includes various mentally disordered offenders: insanity acquittees, accused persons found unfit to stand trial, prisoners transferred to psychiatric facilities, persons undergoing pre-trial psychiatric assessment, and so on.

The scientific and professional literature on clinical intervention for forensic populations is very large. Not addressed here, as examples, are the literatures on such special populations as sex offenders, fire setters, young offenders, psychopaths, and female offenders, all of whom might sometimes be forensic patients. Readers interested in more information are encouraged to consult the three books listed here, and the reference lists of the publications that follow.

1. Behavioral and psychosocial therapies are the programs of choice for psychiatric patients because of their established efficacy.

Lipsey, M. W., & Wilson, D. B. (1993). The efficacy of psychological, educational, and behavioral treatment. *American Psychologist, 48*, 1181-1209.

Behavioral and cognitive-behavioral treatments are at least as efficacious as treatments for medical conditions.

VanHouten, R., Axelrod, S., Bailey, J. S., Favell, J. E., Foxx, R. M., Iwata, B. A., Lovaas, O. I. (1988). The right to effective behavioral treatment. *Journal of Applied Behavior Analysis, 21*, 381-384.

Psychiatric patients and other persons in institutions have the right to all forms of effective treatment.

Bellus, S. B., Vergo, J. G., Kost, P. P., Stewart, D., & Barkstrom, S. R. (1999). Behavioral rehabilitation and the reduction of aggressive and self-injurious behaviors with cognitively impaired, chronic psychiatric inpatients. *Psychiatric Quarterly, 70*, 27.

Brosnan, J., & Healy, O. (2011). A review of behavioral interventions for the treatment of aggression in individuals with developmental disabilities. *Research in Developmental Disabilities, 32*, 437-446.

Donat, D. C. (1998). Impact of a mandatory behavioral consultation on seclusion/restraint utilization in a psychiatric hospital. *Journal of Behavior Therapy and Experimental Psychiatry, 29*, 13-19.

Donat, D. C. (2002). Employing behavioral methods to improve the context of care in a public psychiatric hospital: Reducing hospital reliance on seclusion/restraint and psychotropic PRN medication. *Cognitive and Behavioral Practice, 9*, 28-37.

Favell, J. E., Azrin, N. H., Baumeister, A. A., Carr, E. G., Dorsey, M. F., Forehand, R. ... Solnick, J. V. (1982). The treatment of self-injurious behavior. *Behavior Therapy, 13*, 529-554.

Foxx, R. M. (1996). Twenty years of applied behavior analysis in treating the most severe problem behavior: Lessons learned. *The Behavior Analyst, 19*, 225-235.

Foxx, R. M. (2003). The treatment of dangerous behavior. *Behavioral Interventions, 18*, 1-21.

Hunter, R. H., Wilkniss, S., Gardner, W. I., & Silverstein, S. M. (2008). The multimodal functional model – advancing case formulation beyond the “diagnose and treat” paradigm: Improving outcomes and reducing aggression and the use of control procedures in psychiatric care. *Psychological Services, 5*, 11-25.

LePage, J. P., DelBen, K., Pollard, S., McGhee, M., VanHorn, L., Murphy, J., ... Mogge, N. (2003). Reducing assaults on an acute psychiatric unit using a token economy: A 2-year follow-up. *Behavioral Interventions, 18*, 179-190.

Longo, D. A., & Bisconer, S. W. (2003). Treatment of aggression for an adult diagnosed with schizophrenia at a public psychiatric hospital. *Professional Psychology, Research and Practice, 34*, 177-179.

Matson, J. L., & Minshawi, N. F. (2007). Functional assessment of challenging behavior: Toward a strategy for applied settings. *Research in Developmental Disabilities, 28*, 353-361.

Paul, G. L., & Menditto, A. A. (1992). Effectiveness of inpatient treatment programs for mentally ill adults in public psychiatric facilities. *Applied & Preventive Psychology, 1*, 41-63.

Wykes, T., Steel, C., Everitt, B., & Tarrier, N. (2008). Cognitive behavior therapy for schizophrenia: effect sizes, clinical models, and methodological rigor. *Schizophrenia Bulletin, 34*, 523-537.

Behavioral and psychosocial therapies have established efficacy for the most serious clinical problems experienced by this institution's forensic patients, including aggression and those associated with psychosis. On clinical ethical grounds, these established interventions should be available to all.

2. Behavioral and psychosocial therapies have established efficacy for forensic patients specifically.

Beck, N. C., Menditto, A. A., Baldwin, L., Angelone, E., & Maddox, M. (1991). Reduced frequency of aggressive behavior in forensic patients in a social learning program. *Hospital and Community Psychiatry, 42*, 750-

Becker, M., Love, C. C., & Hunter, M. E. (1997). Intractability is relative: Behaviour therapy in the elimination of violence in psychotic forensic patients. *Legal and Criminological Psychology, 2*, 89-101.

Hilton, N.Z. & Simmons, J.L. (1999). Adverse effects of poor behavior management on an inpatient's difficult behaviors. *Psychiatric Services, 50*, 964-966.

Jones, N. T., Menditto, A. A., Geeson, L. R., Larson, E., & Sadewhite, L. (2001). Teaching social-learning procedures to paraprofessionals working with individuals with severe mental illness in a maximum-security forensic hospital. *Behavioral Interventions, 16*, 167-179.

Menditto, A. A. (2002). A social-learning approach to the rehabilitation of individuals with severe mental disorders who reside in forensic facilities. *Psychiatric Rehabilitation Skills, 6*, 73-93.

Menditto, A. A., Baldwin, L. J., O'Neal, L. G., & Beck, N. C. (1991). Social-learning procedures for increasing attention and improving basic skills in severely regressed institutionalized patients. *Journal of Behavioral Therapy and Experimental Psychiatry, 22*, 265-269.

Milan, M. A., & McKee, J. M. (1976). The cellblock token economy: Token reinforcement procedures in a maximum security correctional institution for adult male felons. *Journal of Applied Behavior Analysis, 9*, 253-275.

Morgan, R.D., Flora, D.B., Kroner, D.G., Mills, J.F., Varghese, F., & Steffan, J.S. (2012). Treating offenders with mental illness: A research synthesis. *Law and Human Behavior, 36*, 37-50.

Newbill, W. A., Paul, G. L., Menditto, A. A., Springer, J. R., & Mehta, P. (2011). Social-learning programs facilitate an increase in adaptive behavior in a forensic mental hospital. *Behavioral Interventions, 26*, 214-230.

Appropriately implemented behavioral and psychosocial therapies are the programs of choice for forensic patients, while inappropriate management strategies exacerbate clinical problems.

3. The efficacy of cognitive, cognitive-behavioral, and other interpersonal psychotherapies for depression has been well supported by evidence.

Butler, A. C., Chapman, J. E., Forman, E. M., & Beck, A. T. (2006). The empirical status of cognitive-behavioral therapy: a review of meta-analyses. *Clinical Psychology Review, 26*, 17-31.

Dimidjian, S., Hollon, S. D., Dobson, K. S., Schmaling, K. B., Kohlenberg, R. J., Addis, M. E. ... Jacobson, N. S. (2006). Randomized trial of behavioral activation, cognitive therapy, and antidepressant medication in the acute treatment of adults with major depression. *Journal of Consulting Clinical Psychology, 74*, 658-670.

Høifødt, R. S., Strøm, C., Kolstrup, N., Eisemann, M., & Waterloo, K. (2011). Effectiveness of cognitive behavioural therapy in primary health care: A review. *Family Practice, 28*, 489-504.

4. There is evidence for the efficacy of ECT in depression. No scientifically valid claims can be made for the idea that it is more effective than, or clinically preferable to, psychosocial or behavioral therapy for any diagnoses or clinically significant problems.

Damm, J., Eser, D., Schüle, C., Obermeier, M., Möller, H. J., Rupprecht, R., & Baghai, T. C. (2010). Influence of age on effectiveness and tolerability of electroconvulsive therapy. *Journal of ECT, 26*, 282.

Fink, M. (2011). Electroconvulsive therapy resurrected: Its successes and promises after 75 years. *The Canadian Journal of Psychiatry, 56*, 3-4.

Pagnin, D., Queiroz, V. D., Pini, S., & Cassano, G. C. (2004). Efficacy of ECT in depression: A meta-analytic review. *Journal of ECT, 20*, 13-20.

The UK ECT Review Group (2003). Efficacy and safety of electroconvulsive therapy in depressive disorders: a systematic review and meta-analysis. *Lancet, 361*, 799-808.

Salford Community Health Council (1998). *Electro-convulsive Therapy, its Use and Effects*. <http://www.ect.org/resources/UKreport.html#conclusions>.

Sienaert, P. (2011). What we have learned about electroconvulsive therapy and its relevance for the practicing psychiatrist. *Canadian Journal of Psychiatry, 56*, 5-12.

Under some circumstances, ECT is a defensible therapeutic option for severe mood disorder after other pharmacological and psychosocial therapies have been properly attempted but have failed.

Greenhalgh, J., Knight, C., Hind, D., Beverley, C., & Walters, S. (2005). Clinical and cost-effectiveness of electroconvulsive therapy for depressive illness, schizophrenia, catatonia and mania: systematic reviews and economic modelling studies. *Health Technology Assessment, 9*, 1-156.

Poublon, N. A., Haagh, M. (2011). The efficacy of ECT in the treatment of schizophrenia: A systematic review. *Erasmus Journal of Medicine, 2*, 16-19.

Recommendations about ECT for other diagnoses and clinical problems are based mostly on anecdotal observations and open trials,

scientifically weak forms of evidence. Much of the apparent effect appears to be placebo. Heavy reliance on just pharmacotherapy and ECT in the provision of clinical services to forensic psychiatric patients could not be regarded as “best practice.”

Barker, P. (2011). ECT and informed consent. In P. Barker (Ed.) *Mental Health Ethics: The Human Context* (pp. 169-179.) New York: Routledge.

Mosher, L.R., & Cohen, D. (2003). The Ethics of Electroconvulsive Therapy (ECT). *American Medical Association. Virtual Mentor, 10*. <http://virtualmentor.ama-assn.org/2003/10/oped1-0310.html>

Weiner, R.D. (2003). Ethical Considerations with Electroconvulsive Therapy. *American Medical Association. Virtual Mentor, 10*. <http://virtualmentor.ama-assn.org/2003/10/oped2-0310.html>.

ECT remains controversial. Some authorities regard ECT as generally unnecessary, unsafe, and seldom provided with truly informed and freely obtained consent. Most proponents advocate its use only in severe depression under circumstances that would not pertain to many forensic inpatients.

5. There is a well-established and internationally accepted model for the organization of behavioral and psychosocial treatment for forensic populations, the Risk-Need-Responsivity (RNR) Model.

Andrews, D.A. & Bonta, J. (2010). *The psychology of criminal conduct* (Fifth Edition). New Providence, NJ: M. Bender & Co.

Andrews, D. A. (2010). The impact of nonprogrammatic factors on criminal-justice interventions. *Law and Criminological Psychology, 16*, 1-23.

Andrews, D. A., Bonta, J., & Wormith, J. S. (2011). The risk-need responsivity (RNR) model. Does adding the good lives model contribute to effective crime prevention? *Criminal Justice and Behavior, 38*, 735-755.

Dowden, C., & Andrews, D. A. (2004). The importance of staff practice in delivering effective correctional treatment: A meta-analytic review of core correctional practice. *International Journal of Offender Therapy and Comparative Criminology, 48*, 203-214.

Gendreau, P. (1996). Offender rehabilitation: What we know and what needs to be done. *Criminal Justice and Behavior, 23*, 144-161.

Gendreau, P., Goggin, C., & Smith, P. (1999). The forgotten issue in effective correctional treatment: Program implementation. *International Journal of Offender Therapy and Comparative Criminology, 43*, 180-187.

These publications describe RNR in great detail including the definitions of Risk (actuarially measured), Need (associated with criminality and

recidivism), and Responsivity (efficacious styles of intervention). Especially valuable here too are several attempts to elucidate the components of effective implementation of RNR, including desirable qualities of administrators, clinical directors, treatment providers, clinical supervision, and training and personnel practices. The book listed first describes the LSI family of assessments which is the best available means to assess service-induced changes in relevant need.

Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28, 369-404.

Andrews, D. A., & Bonta, J. (2010). Rehabilitating criminal justice policy and practice. *Psychology, Public Policy, and Law*, 16, 39-55.

Interventions are effective for forensic populations to the extent that they encompass RNR principles.

6. The Risk Principle has been thoroughly articulated: Actuarial assessment is the best method to assess risk.

Quinsey, V.L., Harris, G.T., Rice, M.E., & Cormier, C.A. (2006). *Violent offenders: Appraising and managing risk* (Second Edition). Washington, DC: American Psychological Association.

Describes the development, validation, scoring, and application of the Violence Risk Appraisal Guide (VRAG) and Sex Offender Risk Appraisal Guide (SORAG), the most well established and validated actuarial tools for the risk of violent recidivism in the community. The book also summarizes research conducted here on the assessment and treatment of forensic patients.

Harris, G.T., Rice, M.E., & Quinsey, V.L. (2010). Allegiance or fidelity? A clarifying reply. *Clinical Psychology: Science and Practice*, 17, 82-89.

The most complete available meta-analysis of the predictive accuracy of the VRAG/SORAG. Results indicated that the VRAG also predicted institutional violence.

Hilton, N.Z. & Simmons, J.L. (2001). Actuarial and clinical risk assessment in decisions to release mentally disordered offenders from maximum security. *Law and Human Behavior*, 25, 393-408.

McKee, S.A., Harris, G.T., & Rice, M.E. (2007). Improving forensic tribunal decisions: The role of the clinician. *Behavioral Sciences and the Law*, 25, 485-506.

These publications presented data indicating that the risk principle was applied non-optimally at this institution – clinical advice to the ORB was very weakly related to actuarially assessed risk, with the

result that ORB decisions were unrelated. The second study presented concrete methods to improve submissions to the ORB.

7. The Need Principle has been thoroughly articulated: Those that are criminogenic must be addressed if violence risk is to be reduced.

Bonta, J., Law, M., & Hanson, K. (1998). The prediction of criminal and violent recidivism among mentally disordered offenders: A meta-analysis. *Psychological Bulletin*, *123*, 123-142.

McKee, S.A., Harris, G.T., & Rice, M.E. (2007). Improving forensic tribunal decisions: The role of the clinician. *Behavioral Sciences and the Law*, *25*, 485-506.

Quinsey, V. L., Coleman, G., Jones, B., & Altrous, I. F. (1997). Proximal antecedents of eloping and reoffending among supervised mentally disordered offenders. *Journal of Interpersonal Violence*, *12*, 794-813.

Quinsey, V. L., Jones, G. B., Book, A. S., & Barr, K. N. (2006). The dynamic prediction of antisocial behavior among forensic psychiatric patients. *Journal of Interpersonal Violence*, *21*, 1539-1565.

The clearest evidence on changeable (or potentially changeable) criminogenic needs for forensic patients indicates that the high priority targets should be: substance abuse, anger, illegal or rule-breaking behavior, antisocial or unconventional attitudes and values, irresponsibility, denying all problems, lying and manipulateness, lack of consideration or concern for others, impulsivity, unrealistic or grandiose plans, noncompliance with remediation and supervision, poor employment and relationship skills.

8. The Responsivity Principle has been thoroughly articulated: Behavioral and psychosocial therapies are indicated for forensic patients generally.

Harris, G.T. & Rice, M.E. (1994). The violent patient. In R.T. Ammerman & M. Hersen (Eds.), *Handbook of prescriptive treatments for adults* (pp. 463-486). New York: Plenum.

Harris, G.T. & Rice, M.E. (1997). Mentally disordered offenders: What research says about effective service. In C.D. Webster & M.A. Jackson (Eds.), *Impulsivity: Theory, assessment and treatment* (pp. 361-393). New York: Guilford Press.

These publications specifically address the application of RNR to forensic patients and include an example of application to the design of services for an individual client.

Rice, M.E. & Harris, G.T. (1988). An empirical approach to the classification and treatment of maximum security psychiatric patients. *Behavioral Sciences and the Law*, *6*, 497-514.

Rice, M.E., Harris, G.T., Cormier, C.A., Lang, C., Coleman, G., & Smith Krans, T. (2004). An evidence-based approach to planning services for forensic psychiatric patients. *Issues in Forensic Psychology*, 5, 13-49.

These publications illustrate how comprehensive needs assessment and other data combined with statistical methods can be used to identify clinically relevant commonalities in needs and among clients so as to facilitate the planning and organization of clinical services in forensic psychiatric facilities and agencies.

Rice, M.E. & Harris, G.T. (1997). The treatment of mentally disordered offenders. *Psychology, Public Policy & Law*, 3, 1-58.

Rice, M.E., Harris, G.T., & Quinsey, V.L. (1996). Treatment for forensic patients. In B. Sales & S. Shah (Eds.), *Mental health and law: Research, policy and services* (pp.141-189). New York: Carolina Academic Press.

Rice, M.E., Harris, G.T., Quinsey, V.L., & Cyr, M. (1990). Planning treatment programs in secure psychiatric facilities. In D. Weisstub (Ed.) *Law and mental health: International perspectives*, (pp. 162-230). New York: Pergamon.

These publications comprehensively review the evidence pertaining to the assessment and treatment of criminogenic and noncriminogenic needs among forensic patients. Recommendations as to the best available assessment tools and treatment techniques are made for each set of needs. Recommendations about assuring program integrity are also provided.

9. There is considerable additional knowledge about how to arrange the forensic institutional environment.

Rice, M.E., Harris, G.T., Varney, G.W., & Quinsey, V.L. (1989). *Violence in institutions: Understanding, prevention, and control*. Toronto: Hans Huber.

Effective training for clinical staff in the management of disturbed behavior improves knowledge, skill, morale, and self-reported effectiveness, and reduces violence, staff injuries, and lost work time claims.

Harris, G.T. (1989). The relationship between neuroleptic drug dose and the performance of psychiatric patients in a maximum security token economy program. *Journal of Behavior Therapy and Experimental Psychiatry*, 20, 57-67.

For many institutionalized forensic patients, drug treatment cannot yield adequate improvements in adjustment. Despite their greater requirements for effective administrative and clinical leadership, nondrug programs (such as RNR) are ethically, clinically, and professionally obligatory.

Harris, G.T. & Rice, M.E. (1992). Reducing violence in institutions: Maintaining behaviour change. In R. DeV. Peters, R.J. McMahon & V.L. Quinsey (Eds.) *Aggression and violence throughout the life span* (pp. 261-282). Newbury Park, CA: Sage.

Sturidsson, K., Turtell, I., Tengström, M., & Levander, M. (2007). Time use in forensic psychiatry: An exploratory study of patients' time use at a Swedish forensic psychiatric clinic. *International Journal of Forensic Mental Health, 6*, 79-86.

These publications illustrated that very little of forensic patients' time is spent in productive therapeutic activities and that there is often a trend towards reliance on ever increasing punitiveness in managing their behaviors. The recommended remedy for both problems is the full implementation of the RNR model, specifically including the comprehensive and independent measurement of clinical fidelity and follow-up outcomes.

Holmberg, R., Fridell, M., Arnesson, P., & Bäckvall, M. (2008). Leadership and implementation of evidence-based practices. *Leadership in Health Services, 21*, 168-184.

Implementation of evidence-based interventions require the active efforts of an organization's executives and clinical leadership.

Appendix B

Relevant Declarations and Standards

A. Office of the United Nations High Commissioner for Human Rights

Principles for the protection of persons with mental illness and the improvement of mental health care

Adopted by General Assembly resolution 46/119 of 17 December 1991

<http://www2.ohchr.org/english/law/principles.htm>

Principles Relevant to the Clinical Ethics of ECT

Principle 8 - Standards of care

1. Every patient shall have the right to receive such health and social care as is appropriate to his or her health needs, and is entitled to care and treatment in accordance with the same standards as other ill persons.
2. Every patient shall be protected from harm, including unjustified medication, abuse by other patients, staff or others or other acts causing mental distress or physical discomfort.

Principle 9 - Treatment

1. **Every patient shall have the right to be treated in the least restrictive environment and with the least restrictive or intrusive treatment appropriate to the patient's health needs and the need to protect the physical safety of others.**
2. The treatment and care of every patient shall be based on an individually prescribed plan, discussed with the patient, reviewed regularly, revised as necessary and provided by qualified professional staff.
3. Mental health care shall always be provided in accordance with applicable standards of ethics for mental health practitioners, including internationally accepted standards such as the Principles of Medical Ethics adopted by the United Nations General Assembly. Mental health knowledge and skills shall never be abused.
4. The treatment of every patient shall be directed towards preserving and enhancing personal autonomy.

Principle 11 -Consent to treatment

1. No treatment shall be given to a patient without his or her informed consent, except as provided for in paragraphs 6, 7, 8, 13 and 15 below.
2. Informed consent is consent obtained freely, without threats or improper inducements, after appropriate disclosure to the patient of adequate and understandable information in a form and language understood by the patient on:
 - (a) The diagnostic assessment;
 - (b) The purpose, method, likely duration and expected benefit of the proposed treatment;
 - (c) Alternative modes of treatment, including those less intrusive; and**
 - (d) Possible pain or discomfort, risks and side-effects of the proposed treatment.

Principle 14 - Resources for mental health facilities

1. A mental health facility shall have access to the same level of resources as any other health establishment, and in particular:
 - (a) Qualified medical and other appropriate professional staff in sufficient numbers and with adequate space to provide each patient with privacy and a programme of appropriate and active therapy;**
 - (b) Diagnostic and therapeutic equipment for the patient;
 - (c) Appropriate professional care; and
 - (d) Adequate, regular and comprehensive treatment,** including supplies of medication.

Principle 20 - Criminal offenders

1. This Principle applies to persons serving sentences of imprisonment for criminal offences, or who are otherwise detained in the course of criminal proceedings or investigations against them, and who are determined to have a mental illness or who it is believed may have such an illness.
2. **All such persons should receive the best available mental health care as provided in Principle 1. These Principles shall apply to them to the fullest extent possible, with only such limited modifications and exceptions as are necessary in the circumstances.** No such modifications and exceptions shall prejudice the persons' rights under the instruments noted in paragraph 5 of Principle 1.
3. Domestic law may authorize a court or other competent authority, acting on the basis of competent and independent medical advice, to order that such persons be admitted to a mental health facility.
4. Treatment of persons determined to have a mental illness shall in all circumstances be consistent with Principle 11.

B. World Medical Association Code of Ethics

<http://www.wma.net/en/30publications/10policies/c8/index.html>

(cited on the College of Family Physicians of Canada website: <http://www.cfpc.ca/Ethics/>)

Principles Relevant to the Clinical Ethics of ECT

“A PHYSICIAN SHALL strive to use health care resources in the best way to benefit patients and their community.”

“A PHYSICIAN SHALL owe his/her patients complete loyalty and all the scientific resources available to him/her. Whenever an examination or treatment is beyond the physician's capacity, he/she should consult with or refer to another physician who has the necessary ability.”

C. CMA Code of Ethics

<http://www.cfpc.ca/uploadedFiles/Education/CMA%20Code%20of%20Ethics.pdf>

Principles Relevant to the Clinical Ethics of ECT

“15. Recognize your limitations and, when indicated, recommend or seek additional opinions and services.”

D. Canadian Psychiatric Association

http://ww1.cpa-apc.org:8080/publications/position_papers/treatment.asp

Principles Relevant to the Clinical Ethics of ECT

Mandates least intrusive and most effective treatment.

E. Catholic Health Association of Canada – Health Ethics Guide

http://www.chac.ca/resources/ethics/ethicsguide_e.php

Principles Relevant to the Clinical Ethics of ECT

Double Effect: When an action may have both beneficial and harmful consequences, the action may be pursued if the following conditions are fulfilled: the directly intended object of the act must not be intrinsically evil, i.e. contrary to one's fundamental commitment to God, neighbor or oneself; the intention of the agent must be to achieve the beneficial effects and **to avoid the harmful effects as far as possible** (i.e. the harmful effects should not be wanted, but only

allowed); the foreseen beneficial effects are not achieved by means of the foreseen harmful effects; rather, the beneficial effects are inextricably and unavoidably linked to the harmful effects; the foreseen beneficial effects must be equal to or greater than the foreseen harmful effects.

F. Canadian Psychological Association Code of Ethics

<http://www.cpa.ca/cpsite/userfiles/Documents/Canadian%20Code%20of%20Ethics%20for%20Psycho.pdf>

G. Ethics in Public Health

<http://plato.stanford.edu/entries/publichealth-ethics/>