

**SEÇÃO ABERTA**

**Uses and Abuses of Ritalin?**

**Interview with cynthia forlini, canadian researcher**

Due to an international collaboration between the *Institut de recherches cliniques de Montréal (IRCM)* and Instituto de Medicina Social da UERJ, we had the opportunity to learn some of the Canadian researches's work. Cynthia Forlini has been in Brazil during the months of May and June of the current year. Along with Dr. Eric Racine, director of the IRCM Neuroethics, Cynthia has been developing for almost two years a research about the use and the misuse of Ritalin, known as "Abuse, enhancement or lifestyle choice?: Stakeholder perspectives on ethics and the misuse of methylphenidate." This same research is being developed in Brazil, Rio de Janeiro, by researches and students from IMS, together with Luciana Caliman, pos doctored, collaborator teacher of the UFRJ Pos-Graduation Programme in Psychology.

During her stay in Rio de Janeiro, Núcleo de Pesquisa Cognição e Coletivos (NUCC) and the Programa de Pós-Graduação em Psicologia da UFRJ (PPGP/IP/UFRJ) invited Cynthia to minister a conference about her research. After the conference the following interview<sup>4</sup> was conceived to Virgínia Kastrup and Luciana Caliman.

**1 - Your research is being developed at the Neuroethics Unit of the *Institut de recherches cliniques de Montreal (IRCM)*. It is known that the neuroethics area is still very recent. We can even say that, in Brazil, it is practically nonexistent. Could you tell us something about neuroethics? What are its challenges and its purposes?**

Neuroethics is a part of bioethics pertaining to the ethical issues present in basic and clinical neuroscience. In addition to being interdisciplinary, neuroethics strives to bridge the gaps between the various neuro-specialties. At the research level, neuroethics aims to proactively deal with challenges in the development and application of advanced technologies such as functional neuroimaging and deep brain stimulation. On the clinical level, neuroethics addresses ethical problems related to the healthcare of neurological and psychiatric patients. For example, neuroethics is concerned with stigma and discrimination associated with depression. Another aim of neuroethics is promoting public awareness and understanding of issues in neuroscience by establishing a dialogue between neuroscientists and the public. In every facet of the field, neuroethics reflects upon the evolution of neuroscience and how it relates to "human nature".

**2 - IRCM is a research institute that already exists for 41 years. How does the Neuroethics Unit, where you develop your research, dialogs with the Institut? Other than your research, what are the projects in progress at the Unit?**

The Neuroethics Research Unit, created in 2006, is one of the research groups dedicated to neuroethics and is led by Dr. Eric Racine. The majority of the research done at the Institut de Recherches Cliniques de Montreal concentrates on elucidating the mechanisms of diseases in the interest of treatment, prevention and development of diagnostic tools.

The projects in progress at the Unit are directed toward current challenges in all facets of neuroscience, an area in which the Institut is active. The issues addressed stem from neuroscience research, clinical practice and theoretical debates. Three projects address research neuroethics. The first is a study identifying ethical issues in the review of neuroimaging protocols to research ethics committees. The second project examines the ethical use of functional neuroimaging in depression. The third project deals with trial initiation of deep brain stimulation in psychiatry.

Clinical neuroethics are represented by projects centered on patient care and their experience with having a neurological illness or caring for someone who does. The first project is a qualitative study of ethical issues in functional neurosurgery. The second project explores end-of-life decision making, more specifically organ donation, in chronic disorders of consciousness. The third clinical related project studies the narratives of adolescent patients with cerebral palsy.

The Neuroethics Research Unit has a strong interest in public understanding and public involvement. It is the home base of the Montreal Neuroethics Network whose main goal is to organize neuroethics related activities in Montreal for various audiences. The talks, seminars and workshops organized by the MNN promote neuroethics training, education and dialogue as well as foster collaborations, both within academia and with the community. Events have included talks given by the director and trainees of the NRU as well as invited speakers the American neurologist Dr. James Bernat and Dr. Luciana Caliman.

The activities of the Neuroethics Research Unit are supported by number of peer-reviewed Canadian and international agencies, including the Canadian Institutes of Health Research, the Social Sciences and Humanities Research Council, the Fonds de la recherche en santé du Québec, and the Brocher Foundation.

**3 - About your research, "Abuse, enhancement or lifestyle choice?: Stakeholder perspectives on ethics and the misuse of methylphenidate", what would you say are its goals and methodology?**

The project I am working on, in its broadest sense, is a study of the misuse of neuropharmaceuticals. By "misuse" we refer to any use of a medication that is not medically sanctioned. There is growing evidence that methylphenidate (Ritalin) is being used by university students to improve concentration and academic performance and recently a poll published in *Nature* showed that stimulant misuse is also pervasive in other parts of academia.

The research I presented at UFRJ aims to examine stakeholder perspectives and public understanding of the ethical and social issues of cognitive enhancement using methylphenidate. We started by assessing print media coverage as well as existing neuroethics and public health literatures on cognitive enhancement. We then held focus groups with stakeholders varying in personal and professional backgrounds. Included in this sample were university students. Participants were questioned on the issues identified in the discourse analysis. Qualitative analysis of the transcripts of the discussions will shed some light on how the public perceives this practice as a function of the media coverage. The results will allow us to recommend avenues for neuroethics scholarship, research dissemination and public communication regarding cognitive enhancement technologies based on research results.

**4 - In Portuguese, it is not possible to translate exactly the word *enhancement*. Some people talk about optimizing or improvement. This is one of the most important themes that neuroethics works with, and so as your project. Your research, in particular, has a special interest on the practice of techniques that improve attention through the use of methylphenidate or Ritalin. Why did you choose attention and not memory, for example? And why Ritalin specifically?**

Enhancement is a difficult term to translate. It's also a term whose connotation can vary in function of context. Cognitive enhancement can be a medical term like in the cases Attention Deficit/Hyperactivity Disorder or Alzheimer's disease where attention and memory are enhanced, respectively. However, this study examines the use of medication for this same purpose in the absence of pathology. Our main interest is the fact that a medication is being misused by healthy people to perform better. Emerging discussions of methylphenidate misuse and abuse in the medical literature and print media served as a springboard for this project. Attention is but one component of cognition that can be enhanced pharmacologically. Existing literature in both the academic and public spheres not only helped frame our discussions but also indicated that we are addressing a current practice.

**5 - There is a contemporary discussion about the high requirement of success and performance that are expected nowadays support and stimulate the practice of *cognitive enhancement*, specially concerning to attention and Ritalin. How does that shows presence in your work?**

*The theme of performance is very present in our research. Some sources regard it as a pressure put on students as well as professionals to maximize focus and productivity and thus a cause of methylphenidate misuse. However, on the other side of the medal, the effects of methylphenidate are*

considered as being a tool for optimizing human performance thus obliging workers to "be all they can be".

**6- Despite the fact that your research is still in progress, what are the first results that, in your opinion, deserve to be featured? Is it already possible to draw, even preliminarily, a line between Canadians and Brazilians data?**

*The preliminary results show a major difference in perception of this kind of methylphenidate misuse. There is no prevalence data on methylphenidate misuse in Brazil. In addition, there are very few reports of methylphenidate misuse in the Brazilian media compared to the English media we used in our study. Lack of exposure shows that either the practice is not as developed in Brazil as in North America or that for some reason it is not being spoken about. Furthermore, the tone of the print media articles is such that methylphenidate misuse is regarded largely as a North American phenomenon and not suited to the Brazilian context. The extent of methylphenidate misuse in Brazil is beyond the scope of this study but the stakeholder perspectives on it depend upon the rest of the data.*

<sup>1</sup>Versão do português para o inglês (introdução e perguntas): Deborah Tenenbaum (Curso de Graduação em Psicologia/UFRJ, Bolsa IC-UFRJ/PIBIC); Revisão: Gabriella Dupim (Mestranda no Programa de Pós-Graduação em Psicologia-IP/UFRJ-Bolsa Mestrado CNPq).