

**Research Insights of Regional Mental Health Care London and St. Thomas** is a peer-reviewed journal designed to publish reviews, case studies and articles as they pique the interests of our clinicians and emerge from reflections on daily clinical work. The purpose is to encourage local scholarly endeavours and provide an initial forum of presentation. The papers may later be submitted to other journals for publication.

Research conducted at Regional Mental Health Care London and St. Thomas, St. Joseph's Health Care, London is part of Lawson Health Research Institute.

# Research INSIGHTS

REGIONAL MENTAL HEALTH CARE LONDON AND ST. THOMAS



**Managing Editor:**  
J.D. Mendonca PhD, CPsych

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14<sup>th</sup> ANNUAL RESEARCH HALF DAY  
SEPTEMBER 19, 2013 ABSTRACTS  
&  
RESEARCH REPORT 2012

RMHC Research Committee

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J.D. Mendonca PhD, CPsych

**Instructions for Authors:**

Manuscripts submitted for publication should not exceed 4000 words and follow the style of the Canadian Journal of Psychiatry. The manuscript should be arranged in the following order: 1) Title page 2) Structured Abstract, Clinical Implications and Limitations, and Key Words 3) Body Text 4) Funding Support and Acknowledgements 5) References 6) Tables and Figures. The Managing Editor may be approached for any unique stylistic variations required by the subject matter.

Research and Education Unit,  
Regional Mental Health Care London,  
850 Highbury Avenue,  
London, ON N6A 4H1  
Telephone: 519/455-5110 ext. 47240  
Facsimile: 519/455-5090

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**Regional Mental Health Care London and St. Thomas**

**14<sup>th</sup> ANNUAL RESEARCH HALF DAY**

**SEPTEMBER 19, 2013**

**ABSTRACTS**

**&**

**RESEARCH REPORT 2012**

**by**

**RMHC RESEARCH COMMITTEE**

## Message from the Director

I am pleased to welcome everyone to the 14<sup>th</sup> Annual Research Half Day. This event is only one of several initiatives of the Research Committee, which supports and promotes research undertaken at Regional Mental Health Care. I would encourage you to regularly check our webpage, which can be found under the 'Clinical & Professional Practice' tab on the intranet homepage of St. Joseph's Health Care London. This site provides important information about research projects that are ongoing and or have been recently completed by Regional Mental Health Care staff. Several researchers are looking for suitable subjects for their projects and descriptions including subject criteria are included on the site.

A number of our researchers have published aspects of their work in the hospital's own peer-reviewed journal, Research Insights. This journal can be accessed from the site or in hard copy from the hospital library.

As usual, this year's Research Half Day will feature presentations on a variety of topics reflecting the work undertaken by RMHC staff in assisting the patients we serve. Notable are the oral presentation by Dr. Chiu and poster by Dr. Subramanian, which seek to identify effective interventions for treatment-resistant negative and positive symptoms of schizophrenia. Other oral presentations span the spectrum from the study of interpersonal behaviours when interacting with our patients - Dr. Corring's "Vital Behaviours" project – through to the use of technology to empower the individuals we serve – Dr. Forchuk's MHEN project. Dr. Srivastava's presentation will examine the reasons why individuals have repeated hospitalizations and Ms. Pallaveshi's, the link between immigration and psychosis.

You will likely have noticed that the Research Committee decided to hold this year's Research Half Day in the fall rather than our tradition spring date. This decision was taken in consultation with our keynote speaker, Dr. Allen Frances, who will speak on the DSM-5. The American Psychiatric Association released its updated manual of psychiatric diagnosis in May. This has been a controversial undertaking and Dr. Frances accurately predicted that there would be a lot of media attention and public debate about DSM-5 over the summer months. The Research Committee is pleased that this publicity has provided a stimulating segue to Dr. Frances' keynote address for the 9<sup>th</sup> Annual Tony Cerenzia Research Lecture.

I trust that you will enjoy the Research Half Day.

*R.L. O'Reilly*  
Director of Research

**\*Regional Mental Health Care Research Committee Members**  
 (Clinical Research Suitability and Impact Committee CRsIC)

**Richard O'Reilly MB FRCPC (Chair\*)**

Director of Research, Regional Mental Health Care  
 Consultant Psychiatrist, Strathroy ACTT, Regional Mental Health Care  
 Professor, Department of Psychiatry, Schulich School of Medicine & Dentistry, Western University  
 Scientist, Lawson Health Research Institute

**Joanne Andrews BSc (OT) OT Reg (Ont)\***

Professional Practice Leader, Occupational Therapy, St. Joseph's Health Care London

**Ed Black PhD CPsych \* (Chair)**

Psychologist, Geriatric Psychiatry Program, Regional Mental Health Care  
 Adjunct Professor, Department of Psychiatry, Division of Geriatric Psychiatry  
 Schulich School of Medicine & Dentistry, Western University  
 Associate Scientist, Lawson Health Research Institute

**Deb Corring PhD \***

Project Lead, Mental Health Transformation, Regional Mental Health Care  
 Adjunct Assistant Professor, Department of Psychiatry, Schulich School of Medicine & Dentistry,  
 Western University  
 Associate Scientist, Lawson Health Research Institute

**Anna-Marie Duffy BA Spec TR TRS R/TRO \***

Professional Practice Leader, Therapeutic Recreation & Music Therapy, St. Joseph's Health Care London

**Cheryl Forchuk RN PhD \***

Assistant Director, Lawson Health Research Institute  
 Professor & Acting Associate Director Nursing Research, Faculty of Health Sciences, Western University

**Michelle Fredette Caragher RN, BScN \***

Nursing Professional Practice Consultant, St. Joseph's Health Care London

**Sonya Gilpin BA \***

Communications Assistant, Lawson Health Research Institute

**Mustaq Khan PhD C Psych \***

Staff Psychologist, Mood and Anxiety Program, Regional Mental Health Care  
 Assistant Professor, Department of Psychiatry, Schulich School of Medicine & Dentistry and  
 Adjunct Clinical Professor, Department of Psychology, Faculty of Social Science, Western University  
 Scientist, Lawson Health Research Institute

**Jim Mendonca PhD C Psych \***

Editor, Research INSIGHTS  
 Consultant, London InterCommunity Health Centre  
 Professor, Department of Psychiatry, Schulich School of Medicine & Dentistry, Western University

**Sandy Morton BA (Hon) BSW MA RSW \***

Professional Practice Leader, Social Worker, St. Joseph's Health Care London

**Verinder Sharma MBBS FRCPC \***

Consultant Psychiatrist, Mood & Anxiety Program, Regional Mental Health Care  
 Professor, Department of Psychiatry & Department of Obstetrics & Gynaecology  
 Schulich School of Medicine & Dentistry, Western University  
 Scientist, Lawson Health Research Institute

**Liz Taylor \***

Family Advisory Council Representative

# **Regional Mental Health Care London and St. Thomas**

## **14<sup>th</sup> ANNUAL RESEARCH HALF DAY**

**SEPTEMBER 19, 2013**

### **ABSTRACTS**

## Oral Presentations

### AB-O1 Vital Behaviours (VBs) and Recovery Oriented Care.

*Deborah Corring PhD*

**Purpose:** Evaluation of a quality initiative at RMHC, specifically the introduction of an expectation for all staff to demonstrate the use of vital behaviours (VBs) believed to be necessary to create a “recovery-oriented” milieu on an inpatient (IP) unit.

**Methods:** This study employed a mixed method approach. Observations of behaviours, focus groups and interviews were employed to collect data as well as a pre and post administration of a Recovery Knowledge Inventory. The study was rolled out in three phases: Phase I consisted of pre-intervention observations of behaviours on 11 units for one month, Phase II a three-month intervention phase with 5 units (incorporating observation of behaviours, education, focus groups and interviews with staff) and Phase III a one month post intervention observation of behaviours with the initial 11 units. The Recovery Knowledge Inventory was administered in Phases I and III.

**Results:** Results will be analysed in June 2013. It is anticipated that they will identify the frequency of use of the VBs before the intervention and after the intervention on the 11 units as well as the effect of the interventions employed on the 5 units that were part of Phase II. In addition, the Recovery Knowledge Inventory will provide pre and post intervention results.

**Conclusions:** Too early to provide conclusions.

**Expected Outcomes:** It is expected that the results will demonstrate a positive impact on the milieu of the intervention units and thus move us further toward creating recovery oriented milieus on all of our IP units.

### AB-O2 Open Label Study of Curcumin C-3 Complex Targeting Epigenetics in Modifying Negative Symptoms and Cognition in Schizophrenia.

*Simon Chiu MD PhD FRCPC ABPN, Michel Woodbury MD PhD; Zack Cernvosky PhD; Yves Bureau PhD; Vladimir Badmeav MD PhD, Robbie Campbell MD FRCPC, Amresh Srivastava MD DMP MRC Psych FRCPC; John Copen MD FRCPC Mariwan Husni MD FRCPC*

**Purpose:** Our objective was to examine whether curcumin, the putative histone deacetylase (HDAC) inhibitor, extracted from *Curcuma Longata* (curry plant), can improve the persistent negative symptoms and cognitive deficits in subjects diagnosed with schizophrenia.

**Methods:** The design was a parallel-group randomized trial. We recruited community-dwelling patients diagnosed with schizophrenia who had a SANS (Scale for the Assessment of Negative Symptoms) score > 30 and who were maintained on antipsychotic medications for at least 3 months. We chose the patented formulation of curcumin [Supercurcumin Sabinsa Inc. USA (Curcumin C-3 complex™ combined with Bioperine™)] to enhance bioavailability of curcumin. Subjects were randomized to two groups. Group I received 1 gm Curcumin C-3 complex daily; and Group II received 4 gm Curcumin C-3 Complex daily, for 16 weeks. At baseline and at regular intervals, PANSS (Positive and Negative Syndrome Scale), CNS Vital Signs and a neurocognitive test battery were administered. Safety was monitored with an adverse events scale.

**Results:** We recruited 17 subjects and 15 subjects completed the study: average age 39.9 years, male/female: 11/4. Both 4-gm and 1-gm treatment groups showed significantly improved negative symptoms in total and general psychopathology PANSS subscale scores over 16-weeks (  $P < 0.05$ ). Curcumin at 4 gm dosage increased neurocognitive scores at the end of 16-weeks. Curcumin C-3 was highly tolerated with no serious adverse events.

**Conclusions:** The promising results of Curcumin C-3 complex in augmenting antipsychotics in negative symptoms underscore the emerging role of targeting epigenetic signature: HDAC as adjunct therapy in schizophrenia.

**Expected Outcomes:** Epigenetics offers novel insights and open therapeutic avenues in schizophrenia.

**AB-O3 Immigration and Psychosis**

**Luljeta Pallaveshi RN LLB BA, Abraham Rudnick MD PhD FRCPC, Ahmed Jwely MD FRCPC, Priya Subramanian MD**

**Purpose:** This is a qualitative (phenomenological) study aimed to learn about challenges and related matters of first-generation adult immigrants with psychotic disorders.

**Methods:** Semi-structured interviews were conducted with Canadian mental health care clinicians – physicians, psychologists, social workers, nurses, occupational therapists, and therapeutic recreationists – who have provided care to first-generation adult immigrants with psychosis. Each interview consisted of open ended questions to explore the participants' views about these patients' immigration experience, needs, difficulties, and coping strategies. Interviews were audio-recorded, then transcribed verbatim and validated. Line-by-line coding of the transcripts and then comparative thematic analysis of the coding was conducted.

**Results:** Clinicians reported that there is insufficient coordination of relevant social and health services, and that there is a lack of easy access to culturally suitable services such as language interpreters who can also serve as cultural brokers, particularly in relation to immigrants whose countries of origin are not well represented in Canada. Clinicians reported assessment difficulties, such as challenges in clarifying psychosis onset timelines and in differentiating psychosis from health beliefs.

**Conclusions:** Immigration of adults with psychotic disorders poses generic and specific system and clinical challenges. More research and development of suitable services for this clinical population is required.

**AB-O4 Re-hospitalization of Psychiatric Patients: The patients, or the illness and treatment?**

**Amresh Shrivastava MD DMP MRCPsych.FRCPC, Robbie Campbell MD FRCPC, Ruth Mooser RN, Cheryl Forchuk PhD, Megan Johnston PhD, Vicki Bridgen MSW Student, Paula Watts MSW Student, Coralee Berlemont MA, Jill Mustin-Powell RN & Larry Stitt, MSc**

**Purpose:** The goal of this project was to find out why psychiatric patients get hospitalized repeatedly. Studies have found that repeated hospitalization leads to economic drain, disability, poor outcome, stigma and discrimination. Hospitalization consumes more than 90% of mental health budgets. Identifying the potential risk factors for repeated hospitalization, interrelationships between risk factors, and vulnerability will help us take the appropriate measures to prevent hospitalization and promote care in the community. Logistically, there are three possible factors which may lead to repeated hospitalization: (1) Characteristics of the patient, (2) Nature of the illness, and (3) Management of the illness including health care system. This prospective, cross-sectional cohort study done at RMHC St Thomas had the objective to delineate some of these risk factors, their psychosocial correlates and their clinical profiles.

**Methods:** This was a prospective, cross-sectional cohort study. We recruited consenting patients with repeated hospitalizations from an acute inpatient facility. These patients were assessed on the following parameters: clinical factors, psychopathology, life events, current psychosocial stressors, resilience, nature of treatment and community care. We used structured psychometric tools, namely: Brief Psychiatric Rating Scale (BPRS), Hamilton Depression Rating Scale (HDRS), Life Events Questionnaire (LEQ), The Holmes and Rahe Stress Scale (HRSS), Connor-Davidson Resilience Scale (CD-RISC) and level of suicidality was measured using the Scale for Impact of Suicidality – Management, Assessment and Planning of Care (SIS-MAP).

**Results:** Findings from the pilot study show that there are significant patient-related factors e.g. experience of trauma, chronic suicidality and unremitted symptoms, which were the primary causes of re-hospitalization. The nature of illness, nature of treatment and systemic issues were not significantly involved in re-hospitalization.

**Conclusions:** A preventive strategy needs to address specific areas of vulnerabilities in a given patient. Completion of the study is expected to provide broad range of information to prevent repeated hospitalization.

**Expected Outcomes:** Understanding of the factors which can be treated to prevent repeated hospitalization.

**AB-O5 Mental Health Engagement Network (MHEN): An update.**

*Cheryl Forchuk PhD*

**Purpose:** The MHEN project leverages a secure technology platform through the use of smart handheld devices. This empowers consumers with their own health information for the purpose of making healthy choices, and sharing health information as they choose.

**Methods:** The MHEN project is a mixed method research study which has recruited 400 (245 men and 155 women) research participants diagnosed with a mood or a psychotic disorder who are currently working with mental health care professionals (54 mental health care providers). Each participant has been randomly assigned into Group 1 (early intervention) or Group 2 (later intervention). Participants in Group 2 will initially act as a control group, but will receive the intervention 6 months later.

**Results:** Web analytic reporting for the initial 6 months indicated that more clients access the Lawson SMART record using their iPhone than a desktop computer (9567 and 3237 hits to the homepage respectively). Clients are frequently accessing the health journal (5654 hits) and health journal notes (995 hits), messaging with their care providers (1728 hits client portal and 1244 hits provider portal), scheduling appointments (971 hits), and employing reminders (462 hits).

**Conclusions:** Through deployment of this new service delivery model, it is expected that smart health information technology will improve quality of life and reduce health care costs for participants.

**Expected Outcomes:** The evaluation framework includes outcomes for economic, policy, ethical and effectiveness analyses. This research will allow us to develop evidenced based recommendations about the use of smart technology in mental health care.

**AB-O6 The Relationship Between Ego-Strength and Functioning in Outpatients with Schizophrenia: A combined feasibility and exploratory study.**

*Priya Subramanian MD, Abraham Rudnick MD PhD FRCPC & Luljeta Pallaveshi RN LLB BA*

**Purpose:** Ego-strength may be one of the most relevant personality factors for adaptive (or maladaptive) coping and hence for functional outcome. Studying ego-strength of people with schizophrenia may be particularly important as standard constructs of coping have been found to correlate relatively weakly with outcome in schizophrenia. The purpose of this study was two-fold: (1) To describe the inter-individual variance in ego-strength in a sample of adult outpatients with schizophrenia, and (2) To examine the association between ego-strength and functioning in this sample, and factors may moderate this association if it is significant.

**Methods:** This quantitative cross-sectional exploratory study evaluated the relationship between ego-strength and functioning in outpatients with a confirmed diagnosis of schizophrenia at Regional Mental Health Care (RMHC). The primary evaluation tools used were the SCID-I to confirm the diagnosis and assess psychiatric morbidity, the Baron's Ego-strength scale (part of the Minnesota Multiphasic Personality Inventory 2) to measure ego-strength and the UCSD Performance-Based Skills Assessment scale to measure independent functioning. The secondary evaluation tools included the PANSS to measure severity of symptoms, the 3MS and MoCA to screen for cognitive impairment and the General Self-efficacy scale as an additional proxy measure of ego-strength. Descriptive statistics mean and standard deviation will be used for demographic data and to examine the inter-individual variance in ego-strength. Pearson correlation (or Spearman test, if the data are found to be distributed non-normally) will be used to analyze the association between ego-strength and functioning and multivariate regression will be used to assess the weight of factors that may moderate this association if it is significant.

**Results:** Data from 34 individuals has been obtained with the aim to recruit a total of 60 participants. Preliminary results suggests: (1) No significant correlation between psychiatric symptoms severity and functioning, and (2) Medium to strong correlation between cognition and functioning.

**Conclusions:** Recruitment is ongoing, and we hope to have a full analysis completed by July 2013.

**Expected Outcomes:** It is expected that the results will demonstrate possible moderation and mediation effects related to symptom severity, cognition and self-efficacy. This study may generate causal hypotheses worth further exploration, specifically in relation to the interventions to improve ego-strength and possibly functioning/quality of life.

## Poster Presentations

### **AB-P1 Outcome of Forensic Assessment and Interventions for Fitness to Stand Trial and NCR-MD (Not Criminally Responsible on account of Mental Disorder): A retrospective chart review.**

**Simon Chiu MD PhD ABPN FRCPC, Liz Goble BA, Maureen Kononiuk RN, Blayne Heddle BA Hons Student, Yves Bureau PhD, G. Sidhu, MBBS MRC(UK) FRCPC, Sam Swaminath MBBS MRC(UK) FRCPC & Arun Prakash MBBS MRC(UK) FRCPC**

**Purpose:** The study was to delineate the psychiatric profile of forensic patients admitted for assessment of Fitness to Stand Trial (FST) and remand for Not Criminally Responsible on account of Mental Disorder (NCR-MD) and to correlate the judicial decision with treatment outcome based on CGI (Clinical Global Impression scale) scores.

**Methods:** Retrospective review of admissions to the Forensic Program of RMHC St Thomas Ontario over the 4-year period (2003-2006) including: clinical records, criminal court proceedings, forensic review board adjudication orders, disposition and community discharge records.

**Results:** We reviewed a total of 37 cases and found that 10.8% (4/37) were unfit to stand trial. Mental retardation and Korsakoff's dementia accounted for 50% of unfit with poor response. For NCR-MD (mean age: 38.5 years; male/female ratio: 19/4) aggravated assault was the commonest offense. Schizophrenia was the most frequent psychiatric disorder (14/23), followed by bipolar disorder (4/23). Substance use was closely associated with index offense of NCR-MD (16/23) of the cohort of remands. Forensic psychiatric evaluation for NCR-MD agreed essentially with the adjudication of NCR-MD ruling by the Ontario provincial criminal court judges. Poor treatment responses were reflected in higher CGI scores and were associated with duration of detention. Good responders were in most cases granted community release. Review board weighed risk of violence equally with treatment responses and adherence to order.

**Conclusions:** Clinical outcomes for NCR-MD influenced the forensic review board in adjudicating detention and community release options. Unfit to stand trial remands call for enhanced program.

**Expected Outcomes:** Forensic intervention outcomes depend equally on forensic psychiatric assessments and violence risks.

### **AB-P2 Ecological Validity of the Independent Living Scales in Geriatric Psychiatry.**

**Stephanie Farrell MSc(OT), OT Reg ON & Erin Finley MSc(OT), OT Reg ON**

**Purpose:** With growing numbers of seniors in hospital care, there is an increasing need to identify best practices to assist in discharging seniors to the appropriate level of care. The Independent Living Scales (ILS) is a standardized tool to assess competency in instrumental activities of daily living and is intended to provide guidelines for determining appropriate living arrangements and supports for individuals. Geriatric Psychiatry inpatient programs must consider whether the ILS is a suitable tool to assist with discharge planning. The purpose of the study is to assess the validity of the ILS among elderly with severe and persistent mental illness.

**Methods:** The ILS was administered to 169 individuals during their admission to a tertiary care mental health facility. ILS results were correlated to following: participants' pre and post living arrangement, demographic variables, Cambridge Cognitive Exam, Mini Mental Status Exam, and the Residential Assessment Instrument ADL scales.

**Results:** High ILS scores were predictive of clients returning to their previous living situation, however low to moderate scores were not predictive. For individuals with low ILS scores, gender and marital status impacted whether they returned to independent living.

**Conclusions:** Results suggest the ILS alone cannot be used to measure safe and independent functioning of clients in their environment.

**Expected Outcomes:** Based on results, it is recommended clinicians in Geriatric Psychiatry employ the ILS in conjunction with an analysis of support systems, consideration of psychiatric diagnosis, and functional assessments in a natural environment.

**AB-P3 Assessment of Shopping Planning.**

**Clark Heard** BA Hons, BEd BHSc OT Reg (Ont) MA Doctoral Candidate in Occupational Therapy,  
**Jared Scott** BA (Hons) BEd, MSc & Laura Hartman Occupational Therapy Student BSc, MSc Doctoral Candidate in Occupational Therapy

**Purpose:** The *Assessment of Shopping Planning* is a tool designed to assess those skills required for any individual's shopping planning and budgeting in light of the unique local conditions that inform this occupational performance.

**Methods:** This assessment requires a duration of approximately 60 minutes. It is standardized. It is divided into two sections involving analysis of (a) consumer awareness of local food availability/costing; and (b) grocery shopping planning/budgeting.

**Results:** Clinicians obtain information regarding consumer insight into (a) their personal nutritional preferences; (b) practical shopping list construction; (c) grocery costs/budgetary impacts in light of local conditions; and (d) application in consideration of their authentic financial situation.

**Conclusions:** The *Assessment of Shopping Planning* supports analysis of the sort of practical skills required on an ongoing basis in community living for any individual. It enables the assessor to partner with the participant in undertaking real world task management with meaningful practical implications.

**Expected Outcomes:** Publication 2014.

**AB-P4 Clozapine Funding and its Predictors.**

Michael Mak MD PGY-3 Psychiatry Resident, **Abraham Rudnick** MD PhD FRCPC &  
**Luljeta Pallaveshi** RN LLB BA

**Purpose:** This retrospective document review study reviewed clozapine funding requests submitted to and reviewed by RMHC from 1992 till 2010, in order to describe the diagnostic distribution of clozapine funding requests and approvals and to test for possible predictors of clozapine funding request and approval.

**Methods:** Physicians of patients from Southwestern Ontario seeking first-ever clozapine treatment per patient has to complete and submit a request form (per requested patient) for funding approval by a regional coordinator (the PI in the last 7 years). These forms (which have changed in format but not in content over the years) represent patients spanning almost 2 decades (19 years) and are stored at RMHC. We retrospectively reviewed these forms and the funding decisions pertaining to them (noted on them and/or filed with them) to: (1) Statistically describe the distribution of requested and approved indications for clozapine treatment in addition to refractory schizophrenia; and (2) Determine variables (if any) that predict funding request and approval (using multivariate logistic regression analysis).

**Results:** The preliminary results from the clozapine funding forms indicate that an overwhelming majority of funding applications were approved. Roughly 2-3% of all applications were met with rejection. Since very few funding applications were rejected, it is difficult to clearly differentiate predictive variables.

**Conclusions:** We hope to have a full analysis completed by July 2013.

**Expected Outcomes:** The findings will serve as a pilot proxy for indications for clozapine beyond refractory schizophrenia and will support further research on indications for clozapine.

**AB-P5 Psychiatric Rehabilitation Pertaining to Health Care Environments: Facilitating skills and supports of people with mental illness in relation to their mental and physical health care – systematic review.**

**Luljeta Pallaveshi** RN LLB BA, **Abraham Rudnick** MD PhD FRCPC, Yaara Zisman-Illani PhD &  
David Roe PhD

**Purpose:** Psychiatric/psychosocial rehabilitation (PSR) aims to facilitate the recovery of people with serious mental illness (SMI), and consists of enhancing and maintaining adaptive skills and supports of people with SMI so that they can be satisfied and successful in their environments of choice. The objective of our paper is to review PSR in relation to various health care environments, specifically in relation to mental, substance use-related, physical

(medical and dental), and complementary and alternative medicine (CAM) health care environments. The primary questions we posed for this review are: (1) What are PSR and related practices regarding these health care environments? (2) What are PSR outcomes regarding these health care environments? and (3) What are predictors of these outcomes?

**Methods:** Data collection consisted of a systematic review of PSR in relation to these health care environments. Data analysis consisted of a narrative review (a meta-analysis was not conducted due to the wide diversity of PSR practices and outcome measures found).

**Results:** PSR is effective in relation to mental health care environments and is promising in relation to substance use related and physical (medical and dental) health care environments. There is no rigorous study of PSR in relation to CAM health care environments.

**Conclusions:** PSR in relation to health care environments is helpful for people with SMI. Further research on PSR in general, and in relation to CAM health care environments in particular, is needed.

**AB-P6 Indo-Canadian Collaboration for Suicide Prevention: Training needs assessment for healthcare professionals in India.**

**Ravi Shah MD, Paul Links MD FRCPC, Rahel Eynan PhD, Shubhangi Parkar MD PhD, TSS Rao MD DPD, Kranti Kadam MD DPM, Chetali Dhuri MD DPM, K Kishor MD & Amresh Srivastava MD DMP MRCPsych FRCPC**

**Purpose:** The goal of this project was to conduct a comprehensive needs assessment for the development of a training program to enhance knowledge and competencies in clinical management of suicidal behaviour among primary care health professionals in India.

**Methods:** Healthcare professionals for this project were recruited from primary care and community clinics at two sites affiliated with medical schools in Mumbai and Mysore, India. A suicide prevention training program which included workshops and interactive sessions was offered. Consenting participants were recruited before the start of the training program. Data was collected using a combination of qualitative and quantitative strategies such as environmental scans, focus groups and gap analysis. All of the participants were requested to complete a self-report needs assessment questionnaire as a part of this study.

**Results:** A total of 144 primary care health professionals (physicians=26%; primary care workers=74%) completed the needs assessment questionnaire. Forty participants took part in the focus groups and all of the training participants were invited to join the open discussion on training needs. The majorities of healthcare professionals (64%) neither received formal training in suicide prevention during their degree program nor did they acquire it later. Sixty-three percent of the participants do not ask about suicidal ideation while assessing a case of depression and/or anxiety. Most of the primary care health professionals rated their level of comfort and competence in asking patients if they are suicidal, assessing suicide risk, treating or referring suicidal patients as medium to high. Participants also indicated a strong need for suicide prevention training programs for early identification and intervention of suicidal patients.

**Conclusions:** The findings from this extensive collaborative needs assessment provide the foundation for the development of innovative and effective evidence-based suicide prevention training program designed to enhance competencies in identification, risk assessment, and management of at-risk individuals. These programs must be designed to be germane to local context and risk factors and include cultural-specific training modules.

**Expected Outcomes:** Understanding the nature of the gap in training and education for effective suicide prevention work.

**AB-P7 Cannabis and Transition to Psychosis: Model of a neurobiological pathway.**

**Amresh Shrivastava MD DMP MRCPsych FRCPC, Megan Johnston PhD, Kristen Terpstra BS Hons McMaster University Research Student & Yves Bureau PhD**

**Purpose:** Cannabis is a risk factor for the development of schizophrenia, although the exact biological mechanisms remain unclear. Purpose of this study was to explore the trajectory for psychosis due to cannabis based upon a neurobiological model.

**Methods:** A selective PubMed search was carried out to construct a neurobiological model of the pathway based upon our hypothesis.

**Results:** The hypothesis for this conceptual paradigm is that neurobiological changes exist and cannabis metabolites modulate these changes in a sequential manner from genetic expression, environmental and biological interaction and neurochemical dysfunctions leading to cognitive dysmetria. Dopamine remains a final common pathway which leads to core symptom manifestation of affective dysphoria. This symptomatic state unfolds into a psychotic state of affective symptoms due to acute consumption of cannabis in adolescence and post adolescence period.

**Conclusions:** We conclude that a model of pathways based upon neurobiological changes can be conceptualized to explain complex process of cannabis leading to psychotic state.

**Expected Outcomes:** Construction of biological model for psychosis in relation to cannabis.

**AB-P8 ‘Quantification of Stigma for Clinical Assessment in Psychiatric Practice’ - A paradigm shift in anti-stigma intervention: Using newly developed scale (Stigma Quantification Scale ‘SQS’).**

**Amresh Shrivastava MD DMP MRCPsych FRCPC, Nilesh Shah MD DPM DNB, Arman Panday MD, Nitika Rewari MSc PMP, Megan Johnston MA, Cheryl Forchuk PhD, Dilkhush Panjwani MD MRCPsych FRCPC & Robbie Campbell MD FRCPC**

**Purpose:** Objective of the project was to develop a quantification tool for measurement of stigma in clinical practice for the purpose of identifying patients who have suffered severe stigma with the hopes of identifying and treating stigma related issues.

**Methods:** Our tool which includes 49 items, quantifies four domains of stigma: (1) Personal, (2) Family, (3) Social, and (4) Illness. In addition, the items are distributed into three subscales: (a) self-experience, (b) illness related consequences, and (c) coping strategies.

**Results:** In this pilot study conducted in India, we present the scale details and results. We found that as age increased fewer stigmas were experienced ( $r = -.541, p < .01$ ). Both duration of illness ( $r = -.339, p = .067$  (ns)) and duration of treatment ( $r = -.360, p = .051$  (ns)) showed a tendency toward a negative correlation with stigma scores, indicating that longer durations of illness and treatment were associated with fewer stigmas. Also, there was a correlational trend towards a greater number of relapses with higher scores of stigma. Finally, we found that there were no differences between violence groups,  $F(2,27) = 1.240, p = \text{ns}$ , and knowledge of other patients,  $F(1,28) = 1.453, p = \text{ns}$ . Differences were found for suicide risk showing that those in the high level of suicide risk had greater stigma and discrimination,  $F(2,27) = 8.676, p < .01$ . Non-compliance was also related to stigma,  $F(1,28) = 5.701, p < .05$ ; individuals who did not comply with treatment reported higher stigma scores.

**Conclusions:** We conclude that quantification of stigma is clinically important. Further work is required to show that this scale can change stigmatization levels.

**Expected Outcomes:** Measurement of stigma amongst patients attending psychiatric clinics can develop evidence that can be an outcome measure.

**AB-P9 Peer-Led and Professional-Led Group Interventions for People with Co-Occurring Disorders: A qualitative study.**

**Priya Subramanian MD, Luljeta Pallaveshi RN LLB BA, Abraham Rudnick MD PhD FRCPC & Krishna Balachandra MD FRCPC**

**Purpose:** This pilot study evaluated the experience of people with co-occurring disorders (mental illness and addiction) in relation to peer-led and professional-led group interventions.

**Methods:** The study used a qualitative (phenomenological) approach to evaluate the experience of a convenience sample of 6 individuals with co-occurring disorders who participated in up to 8 sessions each of both peer-led and professional-led group interventions (with a similar rate of attendance in both groups). The semi-structured interview data were coded and thematically analyzed

**Results:** We found 5 themes within and across the 2 interventions. In both groups, participants experienced a positive environment and personal growth, and learned, albeit different things. They were more comfortable in the

peer-led group and acquired more knowledge and skills in the professional-led group.

**Conclusions:** Offering both peer-led and professional-led group interventions to people with co-occurring disorders may be better than offering either alone.

**AB-P10 The Experience of Patients with Schizophrenia Treated with repetitive Transcranial Magnetic Stimulation (rTMS) for Auditory Hallucinations.**

**Priya Subramanian MD, Amer Burhan MBChB, FRCPC, Luljeta Pallaveshi RN LLB BA, Abraham Rudnick MD PhD FRCPC**

**Purpose:** Auditory hallucinations are a common symptom of individuals with psychotic disorders such as schizophrenia and schizoaffective disorder. Many of these individuals experience auditory hallucinations as persistent, distressing and disruptive. This case series examined the lived experiences of four individuals treated (successfully or unsuccessfully) with low frequency (1Hz) rTMS for auditory hallucinations.

**Methods:** A phenomenological approach was used and modified to involve some predetermined data structuring. This was done to accommodate for expected cognitive impairments of participants, and the impact of rTMS on auditory hallucinations. Data on thoughts and feelings in relation to the helpful, unhelpful and other effects of rTMS on auditory hallucinations, well-being, functioning and the immediate environment; and thoughts about causation of these effects, were collected by means of individual semi-structured interview.

**Results:** Overall, none of the participants reported a worsening of their well-being or symptoms. All four participants noted some improvements in their well-being following treatment: However, only two participants noted an improvement in the auditory hallucinations and only one of them reported an improvement that was sustained after treatment completion.

**Conclusions:** We suggest that there are useful findings in the study worth further exploration, specifically in relation to the role of an individual's acceptance and ownership of the illness process in relation to this biomedical intervention as well as in relation to the effects of rTMS on co-occurring – syndromes such as obsessive compulsive disorder, which is commonly comorbid with schizophrenia.

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# **Regional Mental Health Care London and St. Thomas**

## **ANNUAL RESEARCH REPORT**

**January – December 2012**

### Publications in Journals Peer Reviewed

**Black E, VanBussel L, Ross T & Speziale J.** Advancing clinical practice in patient safety: Linking incident reporting to proactive practices in a geriatric psychiatry program. *Research Insights of Regional Mental Health Care London and St. Thomas* 2012;9(2).

**Chiu S, Sadek G, Cernovsky Z.** Screening for cardio-metabolic risk factors in methadone-maintained treatment for opiate dependence. *Journal of Internet Psychiatry* 2012; epub.

**Corring D, Campbell R & Rudnick A.** A smart apartment for psychiatric inpatients [Frontline Report]. *Psychiatric Services* May 2012; 63(5):508.

**Links PS & Eynan R.** The relationship between personality disorders and Axis I psychopathology: Deconstructing comorbidity. *Annual Review of Clinical Psychology*. 2012 Nov. 13 published online as a review in advance; DOI: 10.1146/annurev-clinpsy-050212-185624

**Links P, Nisenbaum R, Ambreen M, Balderson K, Bergmans Y, Eynan R, Harder H & Cutcliffe J.** Prospective study of risk factors for increased suicide ideation and behavior following recent discharge. *General Hospital Psychiatry* 2012;34(1):88-97.

Schiavone FL, **Links PS.** Common elements for the psychotherapeutic management of patients with self injurious behavior. *Child Abuse & Neglect*. 2013 Feb-Mar;37(2-3):133-8. doi: 10.1016/j.chiabu.2012.09.012. Epub 2012 Dec 20.

Cutcliffe JR, **Links PS, Harder HG, Balderson K, Bergmans Y, Eynan R, Ambreen M & Nisenbaum R.** Understanding the risks of recent discharge. *Crisis: The Journal of Crisis Intervention and Suicide Prevention* 2012; 33(1):21-29.

**O'Reilly R, Dawson J & Burns T.** Best practices in the use of involuntary outpatient treatment. *Psychiatric Services* 2012; 63(5):421-423.

**O'Reilly R, Solomon R & Gray J.** Reforms to Ontario's Mental Health Act: Lessons from the story of the man who killed Brian Smith. *Research Insights of Regional Mental Health Care London and St. Thomas* 2012; (9)3.

Gowda K, **Rao J, O'Reilly R & Singh S.** Molecular analysis of candidate genes at the 22q region in schizophrenia subjects. *Research in Biotechnology* 2012; 3(6):24-32. <http://www.researchinbiotechnology.com/view/article/3/6/3>

**Rudnick A.** A philosophical analysis of the general methodology of qualitative research: A critical rationalist perspective. *Health Care Analysis* 2012 May 17. [Epub ahead of print]

Schrank B, Bird V, **Rudnick A & Slade M.** Determinants, self-management strategies and interventions for hope in people with mental disorders: systematic search and narrative review. *Social Sciences & Medicine* 2012 Feb;74(4):554-64. doi: 10.1016/j.socscimed.2011.11.008. Epub 2011 Dec 13.

**Shah R, Shah A, & Links P.** Post-traumatic stress disorder and depression comorbidity: Severity across different populations. *Neuropsychiatry* 2012;2(6):521-529.

**Sharma V & Sharma P.** Postpartum depression: Diagnostic and treatment issues. *Journal of Obstetrics and Gynaecology Canada* 2012 May;34(5):436-42.

**Sharma V & Pope C.** Pregnancy and bipolar disorder: A systematic review. *Journal of Clinical Psychiatry* 2012 Nov;73(11):1447-55. doi: 10.4088/JCP.11r07499. Epub 2012 Aug 21.

Frey BN & **Sharma V.** A primary care-based treatment programme improves postpartum depression at 12 months. *Evidence-Based Mental Health*. 2013 Feb;16(1):6. doi: 10.1136/eb-2012-100976. Epub 2012 Oct 4.

Yatham LN, Kennedy SH, Parikh SV, Schaffer A, Beaulieu S, Alda M, O'Donovan C, Macqueen G, McIntyre RS, **Sharma V**, Ravindran A, Young LT, Milev R, Bond DJ, Frey BN, Goldstein BI, Lafer B, Birmaher B, Ha K, Nolen WA & Berk M. Canadian Network for Mood and Anxiety Treatments (CANMAT) and International Society for Bipolar Disorders (ISBD) collaborative update of CANMAT guidelines for the management of patients with bipolar disorder: update 2013. *Bipolar Disorders* 2013 Feb;15(1):1-44. doi: 10.1111/bdi.12025. Epub 2012 Dec 12.

**Shrivastava A**. Early intervention: Need for innovative experiments. *Archives of Indian Psychiatry* 2012; 14(1): 8-15.

**Shrivastava A**, Johnston M, Terpstra K, Stitt L, Shah N. Atypical antipsychotics usage in long-term follow-up of first episode schizophrenia. *Indian Journal of Psychiatry* 2012 Jul-Sep;54(3):248-52.

**Shrivastava AK**, Johnston ME, Stitt L, Thakar M, Sakel G, Iyer S, Shah N & Bureau Y. Reducing treatment delay for early intervention: Evaluation of a community-based crisis helpline. *Annals of General Psychiatry* 2012 Jun 24; 11(1):20.

**Shrivastava A**, Johnston M, Bureau Y & Shah N. Baseline serum prolactin in drug-naive, first-episode schizophrenia and outcome at five years: Is it a predictive factor? *Innovations in Clinical Neuroscience* 2012 Apr;9(4):17-21.

**Shrivastava A**, Johnston M & Bureau Y. Stigma of Mental Illness-1: Clinical reflections. *Mens Sana Monograph* 2012 Jan;10(1):70-84.

**Shrivastava A**, Johnston M & Bureau Y. Stigma of Mental Illness-2: Non-compliance and intervention. *Mens Sana Monograph* 2012 Jan;10(1):85-97.

**Shrivastava A**, McGorry PD, Tsuang M, Corcoran C, Carpenter W. The risk syndrome of psychosis as a diagnosis in DSM V- The debate. *Indian Journal Psychiatry* 2012;(53)1:57-65.

## Books

Davison KM, Ng E, Chandrasekera U, **Seely C**, Cairns J, Mailhot-Hall L, Sengmueller E, Jaques M, Palmer J & Grant-Moore J. *Promoting Mental Health through Healthy Eating and Nutritional Care*. Toronto: Dietitians of Canada. 2012.

**Shrivastava A**, Kimbrell M & Lester D. (eds) *Handbook: Suicide from a Global Perspective* (5 volumes hardcover and e-book). (1) *Suicide from a Global Perspective: Psychiatric Approaches*; (2) *Suicide from a Global Perspective: Psychosocial Approaches*; (3) *Suicide from a Global Perspective: Public Health Approaches*; (4) *Suicide from a Global Perspective: Risk Assessment and Management*; and (5) *Suicide from a Global Perspective: Vulnerable Populations and Controversies*. Nova Science/NY, USA 2012.

## Chapters in Books

**Links P**, Ansari J, Fazalullasha F & **Shah, R**. The Relationship of Personality Disorders and Axis I Clinical Disorders. In: Widiger T. (editor). *Oxford Handbook of Personality Disorders*. Oxford University Press/ New York, NY, 2012; 237-259.

## Publications in Journals Non-Peer Reviewed

**Burhan A**. Depression in dementia. *Dementia Newsletter for Physicians* (a publication of the Ontario Dementia Network) 2012 Summer;2(2):1-2.

Gray JE, Shone MA & **O'Reilly RL**. Alberta's community treatment orders: Canadian and international comparisons. *Health Law Review*: 2012; 20(2):13-21.

### Abstracts / Presentations

**Beach C.** Violence risk assessment and management. Grand Rounds, Royal Victoria Hospital, Barrie, ON, January 2012.

**Beach C.** Violence risk assessment and management. Ontario Telemedicine Network, February 2012.

**Beach C, Kambam P, DelSignore L, Wolf C.** Psychiatric malpractice. International Association of Forensic Mental Health Services, Miami, FL, April 2012.

**Beach C.** Psychiatric malpractice. Ontario Telemedicine Network, May 2012.

**Beach C.** Psychiatric seclusion and restraint reduction. Ontario Telemedicine Network, May 2012.

**Beach C.** Psychopharmacology review. Ontario Telemedicine Network, May 2012.

**Beach C.** Challenging clients: Maximizing assertiveness and enhancing conflict resolution techniques. Ontario Telemedicine Network, June 2012.

**Beach C.** Suicide risk assessment and management. Ontario Telemedicine Network, June 2012.

**Beach C.** Depression in the elderly. Wendat Midland, ON, June 2012.

**Beach C.** Dementia. Wendat Midland, ON, June 2012.

**Beach C, DelSignore L.** Psychiatric malpractice. Sea Course Cruise, Montreal-Boston, September 2012.

**Beach C.** Violence risk assessment and management. Sea Course Cruise, Montreal-Boston, September 2012.

**Beach C.** Suicide risk assessment and management. Sea Course Cruise, Montreal-Boston, September 2012.

**Beach C.** Suicide risk assessment and management. Trellis Mental Health and Developmental Services, Guelph, ON, November 2012.

**Burhan A.** Neuroplasticity: An overview for front-line healers. Keynote speaker to the Mental Health and Addiction Fall Symposium, Sault Area Hospital Mental Health Program, Sault Ste Marie, ON, November 2, 2012.

**Chiu S, Cernovsky Z, Copen J, Mariwan H, Houicin J & Bureau Y.** Ginsana-115 effect on Framingham Risk Score in schizophrenia patients maintained on atypical antipsychotics: A post-hoc analysis of RCT study. [Poster] American Psychiatric Association 165<sup>th</sup> Meeting, New Research Poster Proceedings, Philadelphia, PA, May 5-9, 2012.

Raheb H, **Chiu S**, Cernovsky Z, Bureau Y, **Campbell R & Dua V.** Outcome study of dietary neurosteroid Ginsana-115 in reducing cardiovascular risk as measured with Framingham Risk Score (FRS) in schizophrenia: Post-hoc secondary analysis of randomized controlled trial. Regional Mental Health Care Annual Research Day, St. Thomas, ON, May 16, 2012.

Terpstra K, **Chiu S**, Bureau Y, Jiniuin H, Mulk MD, Rabeba H & Helson L. Neuroprotective effects of liposomal-formulated curcumin lipocurc, putative HDAC (histone deacetylase) modulator in modifying the phenotype of Park7 -knockout (Park 7- KO) rat paradigm of Parkinson's disease. Journal of Movement Disorder Society. MDS Abstract of the 16<sup>th</sup> International Congress of Parkinson's Disease and Movement Disorders, Volume 27, Abstract Supplement, Dublin, Ireland, June 17-21 2012.

Raheb H, Terpstra K, **Chiu S**, Bureau Y, Cernovsky Z, Sadek G & Lalone L. Differential non-mandated treatment outcomes of co-existing addictions and psychiatric disorders: Mediating role of criminality. [Poster] Western University, Department of Psychiatry Academic Research Day, London, ON, June 21, 2012.

Manocha R, Cernovsky Z, **Chiu S**, Sadek G, Bureau Y, Copen J & Husni M. Prospective study of BMI (Body Mass index) and psychopathology changes during methadone maintenance treatment: Results of 1-year follow up. [Poster] Western University, Department of Psychiatry Academic Research Day, London, ON, June 21, 2012.

Sadek G, Cernovsky Z & **Chiu S**. Legal history and urine toxicology in methadone versus suboxone patients. [Poster] Western University, Department of Psychiatry Academic Research Day, London, ON, June 21, 2012.

Terpstra K, Raheb H, **Chiu S**, Bureau Y, Copen J, Mariwan H, **Campbell R**, Houicin J, Ang L, Cernovsky Z, & Helson L. Neuroprotective effects of liposomal-formulated curcumin lipocurc in the Park 7-knockout (Park 7- KO) rat paradigm of Parkinson's disease. Western University, Department of Psychiatry Academic Research Day, London, ON, June 21, 2012.

**Chiu S**, Cernovsky Z, Bureau Y, Copen J, Mariwan H, **Campbell R**, Houicin J, Terpstra K & Raheb H. Targeting Epigenetics-Transcription regulation in transforming Ginseng from herbal supplement to CNS drug lead: RCT findings of Ginsana-115 in schizophrenia. Chair Symposium S2-5 Cultivating Natural Bioactives International Conference Proceedings, London, ON, July 9-11, 2012.

Woodbury-Farina M, Cernovsky Z, **Chiu S**, Bureau Y, Copen J, Mariwan H, **Campbell R**, Houicin J, Terpstra K & Raheb H. Proof of concept of randomized controlled study of Curcumin C-3 Complex as adjunct treatment in schizophrenia: Effects on negative and depressive symptoms. Symposium S2-3. Cultivating Natural Bioactives International Conference Proceedings, London, ON, July 9-11, 2012.

Terpstra K, Woodbury-Farina M, Cernovsky Z, **Chiu S**, Bureau Y, Copen J, Mariwan H, **Campbell R**, Houicin J & Raheb H. Neuroprotective effects of liposomal-formulated curcumin lipocurc exhibiting multiple CNS actions in modifying the phenotype of Park 7-knockout (Park 7- KO) rat paradigm of Parkinson's disease. Symposium S2-4. Cultivating Natural Bioactives International Conference Proceedings, London, ON, July 9-11, 2012.

Raheb H, Bureau Y, Woodbury-Farina M, Badmeav V, Gericke N, Terpstra K, **Chiu S** & Houicin J. Translational study of standardized Zembrin extract and mesembrenone targeting PDE-4 (phosphodiesterase subtype 4) for regulation of mood and cognition. Symposium S2-2 . Cultivating Natural Bioactives International Conference Proceedings, London, ON, July 9-11, 2012.

**Corring D**, Kalia K, & **Rudnick A**. Evaluation of the establishment of a recovery-orientated milieu in a psychiatric hospital – tertiary care inpatient unit. Ontario Shores Recovery Research Day, Whitby, ON, March 23, 2012.

**Corring D**, **Tetzlaff A** & Chen S-P. Implementing recovery milieus on traditional IP units. Ontario Psychiatric Association Annual Conference, Toronto, ON, March 30, 2012.

**Corring D**. Implementing a recovery-oriented milieu in a traditional psychiatric hospital tertiary care inpatient unit. Ontario Hospital Association Conference, Patient Experience: Working together to improve patient satisfaction. Toronto, ON, April 23, 2012.

**Corring D**, **Plyley C** & **Skufca J**. Exploring Consent and Capacity Board (CCB) members' experiences in Ontario, Canada with community treatment orders. Regional Mental Health Care Annual Research Day, St. Thomas, ON, May 16, 2012.

**Corring D**, **Rudnick A**, Kalia K & **Subramanian P**. Establishing a recovery-oriented milieu in a tertiary mental health inpatient unit. [Poster] Regional Mental Health Care Annual Research Day, St. Thomas, ON, May 16, 2012.

**Corring D** & **Rudnick A**. Implementing a recovery-oriented milieu in a traditional psychiatric hospital tertiary care inpatient unit. [Poster] Western University, Department of Psychiatry Academic Research Day, London, ON, June 21, 2012.

**Eynan R**. Reducing the suicide risk associated with recent discharge: Moving from models toward an integration of strategies. 14<sup>th</sup> European Symposium of Suicide & Suicidal Behavior, Tel-Aviv, Israel, September 6, 2012.

**Eynan R, Heisel M & Links PS.** Suicide prevention in Canada: The long and winding road towards a Canadian national suicide prevention strategy. 14<sup>th</sup> European Symposium of Suicide & Suicidal Behavior, Tel-Aviv, Israel, September 4, 2012.

Forchuk C. Mental Health Engagement Network: Connecting clients with their health team. Regional Mental Health Care Annual Research Day, St. Thomas, ON, May 16, 2012.

**Links P.** Executive function performance and high risk for suicidal behaviour in women diagnosed with borderline personality disorder. Canadian Association for Suicide Prevention (CASP) “Stepping Out of the Darkness”, Niagara Falls, ON, October 2012.

**Links P.** Hospitals and suicide prevention. Canadian Association for Suicide Prevention (CASP) “Stepping Out of the Darkness”, Niagara Falls, ON, October 2012.

**O’Reilly R, Gray J & Solomon R.** Brian’s Law: Legislative lessons from the killing of Brian Smith. Ontario Psychiatric Association 92<sup>nd</sup> Annual Meeting, Toronto, ON, March 30-31, 2012; p8.

**O’Reilly R, Singh S & Castellani C.** Complete genome sequences of identical twins discordant for schizophrenia uncover possible causative heterogeneous de novo mutations. Ontario Psychiatric Association 92<sup>nd</sup> Annual Meeting, Toronto, ON, March 30-31, 2012; p9.

Castellani C, Maiti S, **O’Reilly R & Singh S.** Complete genome sequence based genetic analysis of monozygotic twins discordant for schizophrenia. 3<sup>rd</sup> Biennial Schizophrenia International Research Society Conference, Florence, Italy. April 17, 2012.

**O’Reilly R, Singh S & Castellani C.** Complete genome sequences of identical twins discordant for schizophrenia. Regional Mental Health Care Annual Research Day, St. Thomas, ON, May 16, 2012.

**O’Reilly R.** Expert Panel Reviews Clinical Situations. Capacity Assessment: Ethical, Legal and Practical Challenges Conference, London, ON, June 15, 2012.

**O’Reilly R.** Advocating with Clinicians for Appropriate Psychiatric Services. Community presentation to patients, families and advocates, St. Michaels Hospital, Toronto, ON, July 12, 2012.

Castellani C, **O’Reilly R & Singh SM.** Complete genome sequence based genetic analysis of monozygotic twins discordant for schizophrenia. World Congress Psychiatric Genetics (WCPG), Hamburg, Germany, October 14-18, 2012.

Castellani C, **O’Reilly R & Singh SM.** Challenges with complete genome sequence comparison of monozygotic twins discordant for schizophrenia. American Society of Human Genetics meeting, San Francisco, CA, November 6-10, 2012.

**O’Reilly R.** Coercion in Psychiatric Treatment: What can we learn from the Canadian experience? Workshop for psychiatrists, nurses and allied health professionals of Metro South Mental Health Services; and staff from the Schools of Medicine and Social Work from the University of Queensland, Brisbane Australia, November 20, 2012.

**O’Reilly RL, Gray JE, McSherry B & Dawson J.** A comparison of Australasian and Canadian involuntary treatment refusal laws. 32<sup>nd</sup> Annual Congress, Australian and New Zealand Association of Psychiatry, Psychology and Law. Melbourne, Australia, November 23, 2012; p39.

**O’Reilly RL, Solomon R & Gray JE.** Outcomes when courts in Ontario, Canada support a right to refuse treatment. 32<sup>nd</sup> Annual Congress, Australian and New Zealand Association of Psychiatry, Psychology and Law, Melbourne, Australia, November 24, 2012; p32.

Roberts K, **Ross T & Black E.** Geriatric inpatients have personality! [Poster] Regional Mental Health Care Annual Research Day, St. Thomas, ON, May 16, 2012.

Edwards K, **Rudnick A**, Martin R, Caird S, Wedlake M, Kohn P. Feasibility and effects of humour-related interventions for people with mental illness: A randomized controlled pilot study. Regional Mental Health Care Annual Research Day, St. Thomas, ON, May 16, 2012.

**Shah R**, Nisenbaum R, Classen C & **Links P**. Impact of comorbid major depressive disorder (MDD) on PTSD Severity in Toronto Transit Commission (TTC) employees. Canadian Association for Suicide Prevention (CASP) “Stepping Out of the Darkness” Conference, Niagara Falls, ON, October 15-17, 2012.

**Sharma V**. The Mood Spectrum: Diagnostic approaches & relevance to treatment. Timmins & District Hospital, Timmins, ON, January 6, 2012.

**Sharma V**. Use of atypicals in the management of bipolar disorder. Woodstock General Hospital, Woodstock, ON, February 28, 2012.

**Sharma V**. Childbirth and bipolar disorder: Challenges and opportunities. International Society for Bipolar Disorders, Istanbul, Turkey, March 14, 2012.

**Sharma V**. Assessment and treatment of bipolar disorder in the postpartum period. International Society for Bipolar Disorders. Istanbul, Turkey, March 15, 2012.

**Sharma V**. What is bipolar disorder? Mood Disorder Association of Ontario, Springbank Civic Gardens, London, ON, April 10, 2012.

**Sharma V**. Detection and treatment of bipolar diathesis in treatment resistant depression. Oakville, ON, April 19, 2012.

**Sharma V**. Evidence based management of bipolar I disorder. Cambridge, ON, April 25, 2012.

**Sharma V**. Childbirth & bipolar. Learning After Five, Lamplighter Inn, London, ON, May 15, 2012.

**Sharma V**, **Sommerdyk C**, Xie B & Campbell K. Drug treatment of bipolar II depression during and after pregnancy. Regional Mental Health Care Annual Research Day, St. Thomas, ON, May 16, 2012.

**Sharma V**, Xie B, Campbell K, Penava D, Hampson E, Mazmanian D & Pope C. Diagnostic conversion of major depressive disorder to bipolar disorder in pregnancy and postpartum. [Poster] Regional Mental Health Care Annual Research Day, St. Thomas, ON, May 16, 2012.

**Sharma V**. Management of depression during pregnancy. Ivey Tox Symposium, London, ON, October 16, 2012.

**Sharma V**. Detection and treatment of unipolar and bipolar depression. Whitehills Medical Center, London, ON, November 9, 2012.

**Sharma V**. Detection and treatment of unipolar and bipolar depression. Whitehills Medical Center, London, ON, November 19, 2012.

Bambole V, Shah N, Sonavane S, Johnston M, Bureau Y & **Shrivastava A**. Study of negative symptoms in first episode schizophrenia [Poster]. International Congress of Schizophrenia and Bipolar Disorder, Istanbul, Turkey, March, 14-17, 2012. *Bipolar Disorders*, 14: 139–145. doi: 10.1111/j.1399-5618.2012.

Nagarkar A, Shah N, Sonavane S, Johnston M, Bureau Y & **Shrivastava A**. Phenomenology of first episode bipolar affective disorder [Poster]. International Society of Schizophrenia and Bipolar Disorder, Istanbul Turkey, March 14-17 2012.

**Shrivastava A**. Global mental challenges: Response to local needs, London, Ontario. Transcending Borders Towards Global Health: Discovering Sustainable Pathways Local to Global, London, ON, April 27-29, 2012.

**Shrivastava A.** Challenges in global mental health. Transcending Borders Towards Global Health: Discovering Sustainable Pathways Local to Global, London, ON, April 27-29, 2012.

**Shrivastava A.** Neuroendocrine in first episode schizophrenia. American Psychiatric Association, 165<sup>th</sup> Annual Conference, Philadelphia PA, May 5-9, 2012.

**Shrivastava A.** Quantification of stigma for clinical assessment: A paradigm shift in anti-stigma intervention. American Psychiatric Association, 165<sup>th</sup> Annual Conference, Philadelphia PA, May 5-9, 2012.

**Shrivastava A.** Coping with challenges of risk assessment: Towards a new scale, SISMAP. American Psychiatric Association, 165<sup>th</sup> Annual Conference, Philadelphia PA, May 5-9, 2012.

Karira A, Shah N & **Shrivastava A.** Epidemiology of anxiety disorder amongst High school students (Grade 5 to 10) of an Urban, Metro community in Mumbai [Poster]. American Psychiatric Association, 165<sup>th</sup> Annual Conference, Philadelphia PA, May 5-9, 2012.

Balakrishnan M, Vincent D, Parkar SR & **Shrivastava A.** Study of interface between alcohol dependence and depression: Diagnosis and phenomenology [Poster]. American Psychiatric Association, 165<sup>th</sup> Annual Conference, Philadelphia PA, May 5-9, 2012.

**Shrivastava A,** Shah N, Johnston M & Stitt L. Extrapyramidal symptoms in recovered first episode schizophrenia patients at ten years [Poster]. American Psychiatric Association, 165<sup>th</sup> Annual Conference, Philadelphia PA, May 5-9, 2012.

**Shrivastava A,** Johnston M, Stitt L & Shah N. Atypical antipsychotics usage in long-term, ten year's follow up of first episode schizophrenia [Poster]. American Psychiatric Association, 165<sup>th</sup> Annual Conference, Philadelphia PA, May 5-9, 2012.

**Shrivastava A,** Mitta S & Shah N. No Axis I diagnosis in patients hospitalized due to a suicide [Poster]. American Psychiatric Association, 165<sup>th</sup> Annual Conference, Philadelphia PA, May 5-9, 2012.

**Shrivastava A,** Johnston M, Shah N & Parkar S. Psychiatric treatment as an 'anti-stigma intervention': Objective assessment of stigma by families [Abstracted, Not presented]. 5th International Stigma Conference, Ottawa, ON, June 4-6, 2012.

**Shrivastava A.** Innovative experiments in community mental health in Mumbai. Annual Conference of Lawson Mental Health Network, London, ON, June 8, 2012.

**Smith J, Reed S, Black E & Ross T.** What's the hold up? Discharging geriatric psychiatry patients [Poster]. Regional Mental Health Care Annual Research Day, St. Thomas, ON, May 16, 2012.

Lindsay E, Allen M, Armson H, Hendry P & **Takhar J.** Competencies and solutions for evidence-based CME/CPD planning committee processes. CCME, Banff, AB, April 2012.

Macnab J, Dixon D, **Takhar J** & Eadie J. CME bias training workshop for the CFPC of Ontario. 4th Accredited Providers Conference 2012, Toronto, ON, September 20-22, 2012.

**VanBussel L,** Gutmanis I, **Jarvie A,** Speechley M & DeForge R. Using theatre to explore long-term care home healthcare provider needs [Poster]. Regional Mental Health Care Annual Research Day, St. Thomas, ON, May 16, 2012.

### **Internal Approved Projects**

**Black E (PI), Ross T, VanBussel L** & Roberts K. Assessment of cognition, mood, and personality function in a geriatric psychiatry inpatient tertiary care program. REB18730E; R-12-067.

**Corring D** (PI). Regional Mental Health Care London and St. Thomas (RMHC-L & RMHC-S) vital behaviours (VB) project. REB103045; R-12-521.

Gutmanis I (PI), Simpson K, Hillier L. Behavioural support system for older persons with behavioural challenges: Geriatric cooperatives in southwestern Ontario. REB18993E; R-12-354.

**Ruddell ME** (PI), **Balsom R**, **Walker H**, **Lewis K**, **Beach C**, **Duncan J** & **Lai JC**. Does participation in an inpatient psychiatric Adventure Based Counselling (ABC) program improve client outcome? REB102724E; R-12-417.

**Sharma V** (PI), **Varapravan S** & **Sommerdyk C**. A prospective, randomized, double-blind, placebo-controlled, Phase 2 safety and efficacy study of oral ELND005 as an adjunctive maintenance treatment in patients with Bipolar I Disorder. REB103206; R-13-711.

## Grants

**Burhan A** & **Jog M**. Assessment of the feasibility of virtual interactive case system in teaching of movement disorders in geriatric psychiatry patients. Instructional Innovation Development Fund (IIDF), Western University, Schulich School of Medicine & Dentistry, CPD Office. 2012-2013: \$9,912.

**Chiu S** (Project PI). Multi-functional outcome study of ziprasidone switch in bipolar disorder: Differential mediating effects of e-SMART program versus usual care. Pfizer Canada 2009-2012: \$181,000. Closed in September 2012.

**Chiu S** (PI). Study of curcumin, a putative neuronal nitric oxide synthetase inhibitor (nNOS) with neuroprotective, antioxidant, anti-inflammatory properties, isolated from turmeric curcuma longa as added-on strategy to antipsychotics in treating negative symptoms and neurocognitive impairment in schizophrenia. Pilot open-label study. Stanley Medical Research Institute, MD USA 2007-2012: \$96,020 US. Study completed December 2012.

**Chiu S** (Academic PI). Exploring curcumin and curcumin derivatives as putative epigenetic target of histone deacetylase (HDAC) inhibition in Parkinson disease. Funded by Michael J. Fox Foundation Parkinson Disease and SignPath Pharma USA Milestone II i: Study of Lipocurc in DJ-1 knockout rat model of Parkinson disease. 2009-2012: \$90,000. US. Completed in December 2012.

**Chiu S** (Academic PI). Translational research program on botanical ingredient of the extract *sceletium tortuosum* (Zembrin®) targeting PDE-4 (phosphodiesterase-4) in cognition. Independent investigator-initiated study. Jointly funded by HGH Inc. South Africa (led by Dr. Nigel Gericke) and PJ Thomas Inc. NJ, USA (led by Dr. Badmeav Vladimir). 2011-2012: Total Amount: \$50,500. US. Completed in December 2012.

**Chiu S** (Co-PI) & **Bureau Y** (Lead PI). Targeting G-protein coupled dopamine receptor (GPCR-DA) with L-Proxyl-leucyl-glycinamide (PLG) peptidomimetic: PAOPA in a LRRK-2 knockout rat model of Parkinson disease. Lawson Health Research Institute London ON. Internal Grant Competition \$14,000. In progress.

**Corring D** & **Rudnick A**. Vital behaviours. St. Joseph's Health Care London, 2012: \$9,750.

**Corring D** (PI), **Rudnick A** & **Forchuk C**. Smart Technology at Steele Street. Veenboer Foundation. 2012: \$3,300.

**Forchuk C** (PI) & **Rudnick A** (Co-I). Mental Health Engagement Network (MHEN): Connecting clients with their health team. Canada Health Infoway 2011-2016: \$1,686,526.

**Forchuk C** (PI) & **Rudnick A** (Co-I). Poverty and social exclusion (CURA award). SSHRC 2011-2016: \$1,000,000.

**Forchuk C** (PI), (Co-I from SJHC and LHSC): **Corring D**, **Mustin-Powell J**, **Reiss J**, **Mitchell B** & **McIntosh L** (& others from other facilities). Transitional Discharge Model. Council for Academic Hospitals of Ontario 2012: \$1,403,014.

Forchuk C (PI) & **Rudnick A** (Co-I). Poverty and mental health: issues, challenges and solutions. Ontario Mental Health Foundation 2010-2012: \$150,000.

**Rudnick A** (PI), Forchuk C & Hardingham L. Dialogue in clinical neuroethics: an exploratory study of the impact of cognitive and other mental impairments on patient participation in ethics consultations. Canadian Institutes of Health Research 2008-2012: \$98,898.

**Sharma V** (Co-I), CANMAT Group. Mood stabilizer plus antidepressant versus mood stabilizer plus placebo in the maintenance treatment of bipolar disorder. Canadian Institute for Health Research 2009-2013: Total Amount: \$395,030.

**Sharma V** (PI), Penava D & Xie B. Bipolar disorder: screening, prevalence, and neonatal outcomes. Ontario Mental Health Foundation 2010-2012: Annual Amount \$72,450; Total Amount \$289,800.

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