

**SASKATCHEWAN  
PSYCHIATRIC  
ASSOCIATION**

**RESIDENT RESEARCH SESSION  
09:55 – 11:05 a.m.**

**VIRTUAL CONFERENCE & ANNUAL GENERAL MEETING  
May 7, 2022**

Questions to [research.psychiatry@usask.ca](mailto:research.psychiatry@usask.ca)

Department of Psychiatry, CoM, University of Saskatchewan

**Adjudicators:**

Dr. Andriyka Papish, MD, MSc, FRCPC; Dr. Senthil Damodharan, FRCPC, MB-BS; Dr. Dan Huynh, MD, PGY4

**Introduction:**

09:55am – 10:00am

Dr. Mariam Alaverdashvili, PhD

#	Time	Presenters	Campus	Adjudicators
1	10:00am – 10:12am	Dr. Luba, Mark (PGY5)	Saskatoon	AP& SD & DH
2	10:13am – 10:25am	Dr. Gilecki, Lee-Anne (PGY5)	Saskatoon	AP& SD & DH
3	10:26am – 10:38am	Dr. Cheveldae, Isaac (PGY4)	Saskatoon	AP& SD & DH
4	10:39am – 10:51am	Dr. Ahmed, Fatima (PGY4)	Saskatoon	AP& SD & DH

- Residents will be presenting their research through the Zoom virtual platform.
- Similar to an in-person poster presentation, this session will proceed in the order identified and maintain the schedule.
- Each talk will be comprised of a Presentation (5 min) and subsequent Q&A (4-5 min).
- Judges will ask you up to four (4) questions, so up to one minute will be allocated to each question.
- No questions/comments from the audiences unless time permits. Nevertheless, we encourage you to submit your questions in the chat.
- There will be prizes of \$600 (1<sup>st</sup> prize), \$300 (2<sup>nd</sup> prize), \$100 (3<sup>rd</sup> prize).

## **Presentation #1**

**Project Title:** Antipsychotic prescribing practices at three Saskatchewan inpatient facilities

**Authors:** M. Luba\* (MD), O. Adelugba (MB-BS, DCP), M. Mela (MBBS, FWACP, MSc. Psych, FRCPC)

\* Department of Psychiatry, (Saskatoon Campus), University of Saskatchewan

### **Background**

Antipsychotic medications are a cornerstone treatment for psychotic disorders. They also pose a risk of significant side effects, especially in high doses. In clinical practice, it is common when doses exceed to the daily-recommended maximum that increases the risk of adverse effects without additional benefit. This study evaluated prescribing practices at three different inpatient treatment facilities in Saskatchewan, Canada.

### **Methods**

Cross-sectional data of schizophrenia patients (n=163) gathered in 2011 from three psychiatric treatment facilities in Saskatchewan, Canada: Regional Psychiatric Centre (RPC), the Irene and Leslie Dube Centre for Mental Health (DC), and Saskatchewan Hospital North Battleford (SHNB) were used in this study. Differences in the prevalence of high-dose antipsychotic (HDA) use: (i) across three treatment facilities, (ii) between patients receiving vs. not receiving a long-acting injectable (LAI) antipsychotic, (iii) between patients receiving vs. not receiving clozapine, and (iv) between patients receiving vs. not receiving an anti-parkinsonian medication were examined using Chi square tests. Correction for multiple comparisons will be used where appropriate to assess significance. HDA use is defined as a cumulative daily dose exceeding 100% of the daily recommended maximum. This study was approved by the University of Saskatchewan Biomedical Research Ethics Board (ID: 08-94).

### **Results**

Significant difference in HDA use was found across treatment facilities. Prevalence of HDA use almost doubled in SHNB (44.6%) compared to RPC (22.6%) ( $p=0.02$ ). Prevalence of HDA use was significantly higher in patients taking anti-parkinsonian agents (48.4%) than those who did not (26.7%) ( $p=0.01$ ). Similarly, prevalence of HDA use was significantly higher in patients taking LAI antipsychotics (44.9%) than those who did not (25.9%) ( $p=0.02$ ). No significant difference in HDA use between patients receiving clozapine and those who did not was observed.

### **Conclusions**

Despite lack of scientific evidence, HDA prescribing is common practice in treatment facilities around Saskatchewan. Frequency of HDA use is correlated with institutional setting, LAI use and concurrent use of an antiparkinsonian agent. Physicians treating inpatients with schizophrenia should be cognisant of this. If HDAs are prescribed, physicians should reflect on the reasons for doing so, and carefully weigh the risks and benefits of such an approach.

### **Acknowledgements**

I would like to thank Drs. Thuy Le and Mariam Alaverdashvili for assisting with data analysis and guidance throughout each stage of this process. They were an instrumental part of the team and I am grateful for their hard work. I would also like to extend my gratitude to Deqiang Gu, who was consulted at various times throughout the project whenever there were questions about the data.

## **Presentation #2**

**Project Title:** Factors associated with length of stay and re-admission rates in adult inpatients with eating disorders

**Authors:** L. Gilecki\* (MD), K. Quennell (MD), S. Gomis (MD), A. Wanson (MD, FRCPC)

\*Department of Psychiatry (Saskatoon Campus), University of Saskatchewan

### **Background**

Eating disorders are serious and often deadly diseases that can be challenging to treat. Treatment can require repeated prolonged stays in hospital which can be taxing for patients and costly for the healthcare system. This study aims to identify modifiable risk factors associated with length of stay in hospital and readmission rates in adult inpatients with eating disorders.

### **Methods**

The proposed study will consist of a retrospective chart review of adult patients with diagnoses of Anorexia Nervosa, Bulimia Nervosa, or Unspecified Feeding or Eating Disorder admitted to the Dube Centre for Mental Health during 2012-2018 (estimated n=125). Key variables to be examined will include demographics, diagnosis, co-morbidities, weight, Body Mass Index, Bone Mineral Density, Echocardiograms, placement of NG tubes, diet and calorie progression, medications, labs, activity levels, referrals, length of stay in the hospital, and readmission rates. The study will involve descriptive analysis to characterize the study population and multiple linear regression analysis to identify modifiable risk factors associated with length of stay in the hospital and readmission rates due to eating disorders. This research has been approved by The University of Saskatchewan Biomedical Research Ethics Board. ID: 1191

### **Results**

Results are not available at the time of presentation but will be ready once data collection and analysis are completed.

### **Conclusions**

We hope to discover ways in which we can make inpatient eating disorder treatment more effective and efficient and explore the feasibility of a step-down program for eating disorder patients.

### **Acknowledgements**

None

### **Presentation #3**

**Project Title:** Intranasal racemic ketamine for patients hospitalized with treatment-resistant depression: a retrospective analysis

**Authors:** I. Cheveldae\* (MD), E. Peters (MD, FRCPC), K. Halpape (BSP, ACPR, PharmD BCPP), A. Wanson (MD, FRCPC)

\*Department of Psychiatry (Saskatoon Campus), University of Saskatchewan

#### **Background**

Most research describing ketamine as a treatment for depression has relied on intravenous dosing. There remains a need for more research to support this treatment with other routes of administration. This study was a retrospective analysis of safety and efficacy data from inpatients treated with intranasal racemic ketamine.

#### **Methods**

A retrospective chart review was completed for 30 patients hospitalized at Royal University Hospital with unipolar or bipolar treatment-resistant depression who were treated with up to four doses of compounded intranasal racemic ketamine (50mg or 75mg). Treatment courses lasted up to seven days. Symptom improvement was measured with either the Hamilton Depression Rating Scale (HAMD) or the Montgomery-Asberg Depression Rating Scale (MADRS). This project was approved by the Biomedical Research Ethics Board at the University of Saskatchewan, ID 3192.

#### **Results**

Ketamine was well tolerated with no serious adverse events or treatment discontinuations due to adverse effects. Blood pressure increased by 4-6 mmHg on average. Twenty patients (66.7%) were classified as treatment responders based on HAMD or MADRS depression scores decreasing by more than 50% at any point in treatment compared to baseline scores. Among the 27 patients with moderate to severe suicidal ideation scores at baseline, these decreased by 68.5% on average. There was a trend towards greater efficacy when 75mg doses were used.

#### **Conclusions**

Compounded intranasal racemic ketamine was safe and effective in the treatment of depressive symptoms and suicidal ideation in a real-world sample of patients hospitalized with treatment-resistant depression. Additional research comparing intranasal ketamine to esketamine and intravenous racemic ketamine is warranted.

#### **Acknowledgements**

None

## **Presentation #4**

**Project Title:** Exploration of mediating and moderating effects of sexual orientation and childhood sexual abuse on mental health outcomes in adulthood

**Authors:** F. Ahmed\* (MD), E. Peters (MD, FRCPC)

\* Department of Psychiatry (Saskatoon Campus), University of Saskatchewan

### **Background**

Being a sexual minority is associated with higher rates of childhood sexual abuse (CSA), mental illness, and suicide. It is unclear how sexual minority status (SMS) and CSA interact to predict mental health in adulthood. This study examined the mediating and moderating effects between CSA and SMS as risk factors for mental illness and suicide.

### **Methods**

Using cross-sectional data from 7,332 adults who completed the 2007 UK Adult Psychiatric Morbidity Survey, logistic regressions with effect decompositions were conducted for hypothesis testing. Survey respondents self-reported SMS (i.e., being non-heterosexual) and CSA (i.e., non-consensual sexual touching or intercourse before age 16). Active non-psychotic psychiatric disorders (in the last month) and recent suicide attempts (in the last year) were assessed with a structured diagnostic interview. This study of a public, anonymized dataset did not require ethics approval.

### **Results**

SMS was associated with statistically significant higher odds of CSA ( $OR = 2.12$ ), psychiatric disorder ( $OR = 1.70$ ), and recent suicide attempt ( $OR = 4.77$ ). Controlling for CSA explained only a small portion of the effect of SMS on having a psychiatric disorder (15.2%) and recent suicide attempt (7.42%). The effect of CSA on having a psychiatric disorder was constant regardless of SMS; the effect on suicide attempts more than doubled in sexual minorities, but the interaction did not reach statistical significance.

### **Conclusions**

CSA is more common in sexual minorities, but it does not appear to mediate the relationship between SMS and mental illness/suicide. A possible moderating effect of sexual orientation on suicide risk in CSA survivors warrants more research.

**Acknowledgements:** We would like to thank the UK Data Service for providing access to the study data. We would also like to acknowledge the National Centre for Social Research and the University of Leicester as the principal investigators of the 2007 Adult Psychiatric Morbidity Surveys.