

# LIFE CHAOS, SOCIAL SUPPORT, AND SUBSEQUENT EMERGENCY DEPARTMENT USE AMONG PEOPLE WHO INJECT DRUGS IN QUÉBEC, CANADA

## Authors:

Høj SB<sup>1</sup>, Minoyan N<sup>1,2</sup>, Larney S<sup>1,3</sup>, Bruneau J<sup>1,3</sup>.

<sup>1</sup> Université de Montréal Hospital Research Centre (CRCHUM), <sup>2</sup> Department of Social and Preventive Medicine, School of Public Health, Université de Montréal, <sup>3</sup> Department of Family and Emergency Medicine, Faculty of Medicine, Université de Montréal.

**Background:** Chaotic life circumstances and inadequate social support may impede navigation of health services and foster reliance on permeable settings such as emergency departments (ED). We examined i) life chaos (LC) and ii) social support (SS) as potential predictors of subsequent ED use among people who inject drugs (PWID) in Québec, Canada.

**Methods:** Data were from the Virtual Cascade of Care Cohort (VCCC). Eligible participants (aged  $\geq 18$ , lifetime injection drug use, past six-month illicit drug/heavy alcohol use) were recruited via community-based harm reduction organisations in three cities (04.2018–01.2019). Interviewer-administered questionnaires captured psychometrically validated measures of LC and SS alongside sociodemographic, social stability, and substance use indicators. Data on ED use in the six months following questionnaire completion, including major diagnostic codes, were obtained via administrative data linkage.

Multivariable Poisson regression models estimated associations between i) LC and ii) SS (both median-dichotomized) and ED visit count, adjusting for age, gender, and factors univariably associated with the outcome ( $p < 0.10$ ). We additionally compared proportions of participants with ED visits for different diagnostic categories using chi-square analyses. LC (Cronbach alpha=0.64) and SS (Cronbach alpha=0.85) were moderately correlated and analysed separately.

**Results:** 183/196 (93%) interviewed participants were successfully linked (74% men, median age 44 (IQR:34–53), 56% past-month injection). High LC was not associated with ED visit count, but did predict higher prevalence of visitation for mental health problems (21% vs. 8%,  $p=0.01$ ). High SS predicted fewer ED visits overall (aIRR=0.44, 95%CI: 0.34-0.57) and lower visitation for mental health (7% cf. 20%,  $p=0.02$ ) and musculoskeletal problems (0% vs. 9%,  $p < 0.01$ ).

**Conclusion:** LC and SS were differentially associated with ED visit count, but both predicted visitation for mental health problems. Findings suggest interventions to enhance community support and address social challenges may reduce ED reliance, and highlight a need for accessible primary mental health care.

**Disclosure of interest statement** Høj receives salary from a Canadian Institutes of Health (CIHR) grant and previously received a postdoctoral fellowship from the Canadian Network on Hepatitis C (CanHepC) during development of this work. Minoyan receives doctoral awards from the Fonds de recherche du Québec (FRQ-S) and CanHepC. Larney holds an FRQ-S salary award, funding from the CIHR, and has received advisory board fees from Gilead Sciences, outside the scope of the present work. Bruneau holds the Canada Research Chair in Addiction Medicine and receives funding from Fonds de recherche du Québec, the Canadian Institutes of Health Research, the National Institute on Drug Abuse (NIH), and Gilead Sciences. Bruneau has also received advisory board fees from Gilead Sciences, AbbVie and

Cepheid Sciences, outside the scope of the present work. No pharmaceutical grants were received in the development of this study.