

**2024 Multidisciplinary Research Program in Medicine Project:** *Access to the medication abortion pill mifepristone: A Survey of Pharmacies in British Columbia and Ontario*

**Hypothesis or Research Question(s):** What proportion of pharmacies in BC and Ontario stock and dispense mifepristone? What proportion of BC and Ontario 6-digit postal codes include a mifepristone dispensing pharmacy? What is the average travel distance to access mifepristone for BC and Ontario residents? Are there differences in availability of mifepristone across health regions or by community population size?

**PROJECT BACKGROUND & SUMMARY**

**Background:** Access to abortion in Canada is inadequate and inequitable, with geographic disparities in access. Until 2017, >96% of abortions were performed in <100 clinics located mostly in Canada's largest, southernmost cities. Rural and remote populations generally had no local access to abortion services, requiring travel to reach this essential and time-sensitive reproductive health service. The medication abortion Mifegymiso (a combined regimen of oral mifepristone and misoprostol) came to market in Canada in 2017, potentially expanding abortion services into more geographically remote areas. While uptake among prescribers (physicians and nurse practitioners) appears rapid (including those in primary care), patients have reported difficulty finding a pharmacy that stocks and dispenses this medication. However, the number and characteristics of pharmacies with Mifegymiso available remains unknown. **Aim:** In this study, we will quantify the proportion of pharmacies in British Columbia (BC) and Ontario (ON) that stock and dispense mifepristone and examine the geographic distribution of dispensing and non-dispensing pharmacies; we will identify the proportion of regions without local access to this medication.

**Methods:** We will conduct a cross-sectional telephone survey of all pharmacies in BC and ON. The students will access a publicly available database of all accredited community pharmacies from the respective Colleges, which includes pharmacy physical location and contact information. Following a script developed with pharmacist partners and approved by the institutional ethics review board, the students (TS) will call each pharmacy to ask if they currently have stock for and dispense Mifegymiso and to verify street addresses. Responses to the telephone survey will be entered into the pharmacy database. TS will geocode pharmacy locations using geographical software (ArcGIS, DMTI Spatial). TS will collaborate with team statisticians to merge these data with road network data (DMTI Spatial) and census data (Statistics Canada 2016). We will use Statistics Canada population estimates to determine the number of reproductive aged females per geographic area ("dissemination block", the smallest geographic areas for which population figures are available).

TS will engage in the analytic process to calculate 1) proportion of reproductive aged female Ontario residents living in dissemination blocks within walking and driving services areas of mifepristone-dispensing pharmacies and 2) proportion of dissemination blocks and larger geographical regions with no mifepristone-dispensing pharmacy. TS will have opportunities to contribute to the development of presentations and a manuscript summarizing the results of this study, with role dependent on timeline of data acquisition during the summer.

**Impact:** The results of this study will provide new information about the availability of medication abortion in BC and Ontario, the role of pharmacists in this health service, and inform opportunities to directly impact pharmaceutical services and reproductive health care policy to address those gaps. This will complement and build on our team's existing work in both provinces on the use and outcomes of this novel reproductive service.

## **BENEFIT TO THE STUDENTS**

The Students (TS) will have the opportunity to be involved in all aspects of the research study. Their main role will be in conducting primary data collection via a telephone survey and compiling a database of mifepristone-dispensing pharmacies in Ontario, and geocoding their physical locations. With guidance from their Supervisors, they will be supported to conduct statistical analyses. TS's work will support the Supervisors' programs of research, which aim to improve reproductive population health outcomes, improve access to medicines, and impact health policy.

TS will work as part of our interprofessional research teams and will have the opportunity to learn from team members from various disciplines, including epidemiology, public health, pharmacy, family medicine, obstetrics, midwifery, health policy, and health systems. TS will be guided and supervised by two highly accomplished researchers and supported by their research team staff. Feedback and support will be provided by the team through consistent communication and regular meetings. TS will also be invited to attend monthly research team meetings to share progress and experience, learn from others, and receive feedback and advice.

Through this work, TS will enhance their knowledge and get hands-on experience conducting health research and survey data collection. They will gain knowledge pertaining to epidemiology, public health, health policy research, pharmaceutical services, and reproductive health research. This work will support development of effective time management skills, primary data collection, data entry, academic writing, computer skills, professional communication, and collaboration. TS will have opportunities to expand their academic and professional networks with a multidisciplinary team, to support future learning or working opportunities.

The student will be joining a team that is committed to equity, diversity, and inclusion. Our team includes researchers and students from diverse backgrounds in terms of sex, gender, ethnic and cultural identities, and age. We strive to create and maintain a supportive work environment, reduce barriers to participation in research activities (e.g., attend conferences), and enable opportunities for professional development. The team fosters a safe, respectful, and inclusive environment aimed to support collaboration and participation by all students, staff, and faculty. The Supervisors and team will ensure student needs are met, including in regards to physical workspace, working hour and location flexibility, and support to complete tasks and for professional development.