

Perspectives of Pharmacy Staff in Ontario Regarding their Role in COVID- 19 Vaccination Efforts – Opportunities and Challenges

**By: Anushiya Kuhanathan
MSc Candidate, Occupational &
Public Health**



Why is This Important?



Evolution of pharmacy staff's roles



Literature highlighted challenges of vaccine hesitancy, operational and logistical challenges and negative mental health impacts



Significant gap in literature addressing the experiences of Ontario pharmacy staff

Experiences of pharmacy staff in Brampton ¹

Experiences of Ontario pharmacy technicians ²

Experiences of Ontario pharmacists ³



Need for a study that incorporates all pharmacy staff

Research Question

What are the experiences and challenges of pharmacy staff in Ontario involved in the COVID-19 vaccination efforts?



Study 1: Cross-sectional Study on the Experiences and Perspectives of Ontario Pharmacy Staff Involved in COVID-19 Vaccination Efforts



Research Aim 1: Examine perceptions and experiences of Ontario pharmacy staff in their involvement in COVID-19 vaccinations



Research Aim 2: Assess psychological strain associated with psychosocial workload factors

- Assess mental well-being

Study 1: Methods



Ontario College
of Pharmacists

Putting patients first since 1871

- A 46-item online questionnaire
 - Demographic details
 - Experiences and perspectives
 - Short-Warwick Edinburgh Mental Well-being Scale ⁴
 - Psychosocial Workload Factors Survey ⁵
- Recruitment through Ontario College of Pharmacists (OCP)
- Inclusion criteria:
 - Ontario pharmacy staff who administered COVID-19 vaccines between December 2020 and March 2022
- Proportion calculations using R Studio ⁶

Study 1: Results

- 532 participants fully completed the questionnaire

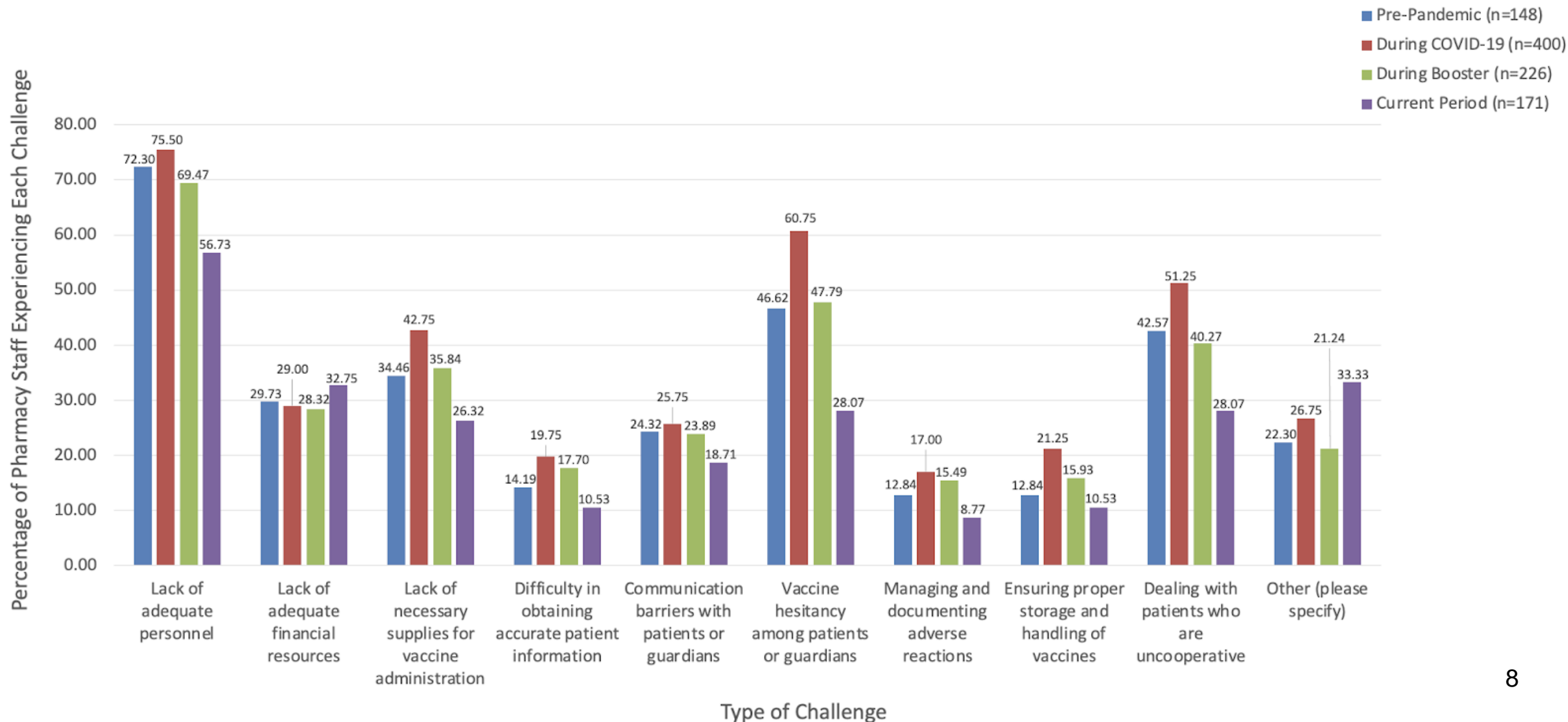
Demographic Findings	Percentage (n)
Females	60.83% (323)
Pharmacists	81.73% (434)
White, European descent	41.97% (222)
Age group: 35-44	25.94% (138)
Occupation Length: 15 years	42.67% (227)
Pharmacy Owners	20.00% (108)
Type of Pharmacy: Franchise pharmacy	28.76% (153)
Large Urban Centre	59.59% (317)

Study 1: Results

- 45.30% (n=241) felt excluded from decision-making
- 57.52% (n=306) dissatisfied with availability of mental health support
- ~ 38.00% faced unsafe or threatening situations
 - 86.50% experienced verbal abuse
 - ~ 48.00% had threats to inflict harm
- 47.22% (n=51/108) of pharmacy owners reported inadequate financial resources
 - 45.83% (n=23/72) unwilling to administer vaccines in future

Study 1: Results

Percentage of Vaccination Challenges Faced Across Key COVID-19 Phases:
Pre-Pandemic, Pandemic, Booster, and Current Period



Study 1: Results

- Overall, around 20.00% (n=106/532) of participants had low mental well-being
- Around 67.00% of participants (n=356/532) experienced psychological strain at least fairly often from harmful psychosocial workload factors



Study 1: Discussion

- Staffing challenges resulted in increased workload and strain ⁷
- Need more resources to tackle vaccine hesitancy
- Involvement in decision-making processes can prevent future challenges ^{8,9}
- 43% of Canadian pharmacy staff had “not good” or “poor” mental health during the pandemic ¹⁰



Study 1: Limitations



Reliance on
self-reported
data

Recall bias

Self-selection
bias

Study 1: Future Research and Recommendations

- Need strategies and support to enhance occupational health and safety
- Extra security personnel and frameworks to educate pharmacy staff on best practices during unsafe situations
- Future research assessing association between psychosocial workload factors and impact on mental well-being
- Resources to address vaccine hesitancy and support for vaccine-related education and knowledge dissemination

Study 2: Challenges and Opportunities of Ontario Pharmacy Staff Involved in COVID-19 Vaccination Efforts: Qualitative Analysis



Research aim: To examine common challenges, concerns, areas for improvement, and opportunities further to incorporate pharmacy staff in future public health crises.

Study 2: Methods



Online focus groups on Zoom



Questions were developed as a follow-up to the online questionnaire in Study 1



Three focus group sessions with the goal of eight participants in each group

1. Pharmacists
2. Pharmacy Owner
3. Pharmacy Technicians



Participants were recruited through Study 1



Demographic details collected through preamble questionnaire prior to their participation



Thematic analysis conducted following Braun and Clarke's (2006) framework

Study 2: Results



1. Communication Challenges: Government & Public



2. Challenges with the Vaccine Tracking Platform (COVaxON)



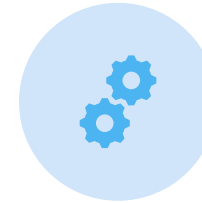
3. Lack of Personnel



4. Compensation



5. Mental Health Impacts



6. Lack of Involvement in Decision-Making Processes



7. Potential Expansion in their Scope of Practice

Study 2: Discussion

- Streamlined and consistent communication is needed to prevent confusion, medical errors, and increased stress ^{2, 11}
- Increased workload during pandemic heightened need for adequate personnel
- Expressed frustrations over lack of technical support which led to increased workload ¹²
- Need for pandemic pay
- Expansion in scope of practice will allow easier access to care¹³

Study 2: Limitations

- Limited representation of pharmacy owners
- Ontario specific



Future Research and Recommendations

- Development of a readiness selection toolkit
- Emphasis on mental health resources
- Further scope expansion can aid in better accessibility and delivery of services



OMA warns about the risks of pharmacists's scope expansion

Dr. Dominik Nowak, president of the Ontario Medical Association and a family doctor, said that the biggest concern are the impacts a misdiagnosis can have, not only on the patients' health, but also in increasing the backlog in hospitals and emergency rooms.



Conclusion

- Another pandemic inevitable
- Provides knowledge on what worked well and what could be improved
- Aids in understanding what resources are needed to support occupational and mental well-being
- Will aid in ensuring efficient and effective vaccine delivery



References

1. Manmohit Gill et al., “COVID-19 Vaccination in High-Risk Communities: Case Study of Brampton, Ontario,” *Canadian Pharmacists Journal : CPJ* 155, no. 6 (September 20, 2022): 345, <https://doi.org/10.1177/17151635221123042>.
2. Ayesha Khan et al., “Unmasking the Unrecognized: Exploring Registered Pharmacy Technicians’ Stressors During COVID-19 Through a Demands-Resources Inquiry and Looking Ahead,” *Inquiry: A Journal of Medical Care Organization, Provision and Financing* 61 (March 24, 2024): 00469580241241391, <https://doi.org/10.1177/00469580241241391>.
3. Zoha Zahoor et al., “Behind the Counter: Exploring Pharmacists’ Stressors and Lessons Learned During the Pandemic in Ontario, Canada,” *Health Services Insights* 16 (May 2, 2023): 11786329231169937, <https://doi.org/10.1177/11786329231169937>.
4. NHS Health Scotland, University of Warwick and University of Edinburgh, “Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS),” 2008, <https://www.corc.uk.net/outcome-experience-measures/short-warwick-edinburgh-mental-wellbeing-scale-swemwbs/>.
5. Occupational Safety and Health Administration in Finland, “Psychosocial Workload Factors Survey - Työsuoja.fi - Occupational Safety and Health Administration - Työsuoja.fi,” Työsuoja.fi - Occupational Safety and Health Administration, September 6, 2022, <https://tyosuoja.fi/en/safety-and-health-in-workplace/indicators/psychosocial-workload-factors-survey>.
6. R Core Team (2024). *_R: A Language and Environment for Statistical Computing_*. R Foundation for Statistical Computing, Vienna, Austria. <<https://www.R-project.org/>>.
7. Maria Allinson, Lucinda Obeid, and Kaitlin Cornes, “Community Pharmacists’ Experiences of Working during Lockdown,” *Exploratory Research in Clinical and Social Pharmacy* 5 (March 1, 2022): 100121, <https://doi.org/10.1016/j.rcsop.2022.100121>.

References

8. Rachelle Ashcroft et al., “A Qualitative Examination of the Experiences and Perspectives of Interprofessional Primary Health Care Teams in the Distribution of the COVID-19 Vaccination in Ontario, Canada,” *PLOS ONE* 19, no. 6 (June 10, 2024): e0304616, <https://doi.org/10.1371/journal.pone.0304616>.
9. Dillon H. Lee, Kaitlyn E. Watson, and Yazid N. Al Hamarneh, “Impact of COVID-19 on Frontline Pharmacists’ Roles and Services in Canada: The INSPIRE Survey,” *Canadian Pharmacists Journal / Revue Des Pharmaciens Du Canada* 154, no. 6 (November 2021): 368–73, <https://doi.org/10.1177/17151635211028253>.
10. Canadian Pharmacists Association, “Pandemic Stress, Increase in Harassment and Staffing Challenges Exact Heavy Toll on Pharmacy Professionals - English,” 2022, <https://www.pharmacists.ca/news-events/news/pandemic-stress-increase-in-harassment-and-staffing-challenges-exact-heavy-toll-on-pharmacy-professionals/>.
11. Dawn Holford et al., “Healthcare Professionals’ Perceptions of Challenges in Vaccine Communication and Training Needs: A Qualitative Study,” *BMC Primary Care* 25, no. 1 (July 20, 2024): 264, <https://doi.org/10.1186/s12875-024-02509-y>.
12. Sandra Gerges et al., “Experiences of Community Pharmacists Administering COVID-19 Vaccinations: A Qualitative Study,” *Canadian Pharmacists Journal / Revue Des Pharmaciens Du Canada* 156, no. 1_suppl (January 2023): 7S-17S, <https://doi.org/10.1177/17151635221136552>.
13. Government of Ontario Newsroom, “Ontario Exploring More Ways to Expand Role of Pharmacists,” [news.ontario.ca](https://news.ontario.ca/en/release/1004860/ontario-exploring-more-ways-to-expand-role-of-pharmacists), July 24, 2024, <https://news.ontario.ca/en/release/1004860/ontario-exploring-more-ways-to-expand-role-of-pharmacists>.

Thank you!
Questions?