

Mental Health and Life Satisfaction Among Canadian Paramedics during the COVID-19 Pandemic

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Introduction

- Paramedics are exposed to various psychosocial hazards in uncontrolled and unpredictable work environments.
- COVID-19 may further compound the uncertainty, accompanying stress, and mental health risk to which paramedics are exposed.
- We aim to characterize the impact of the COVID-19 pandemic on the mental health of Canadian paramedics.

Methods

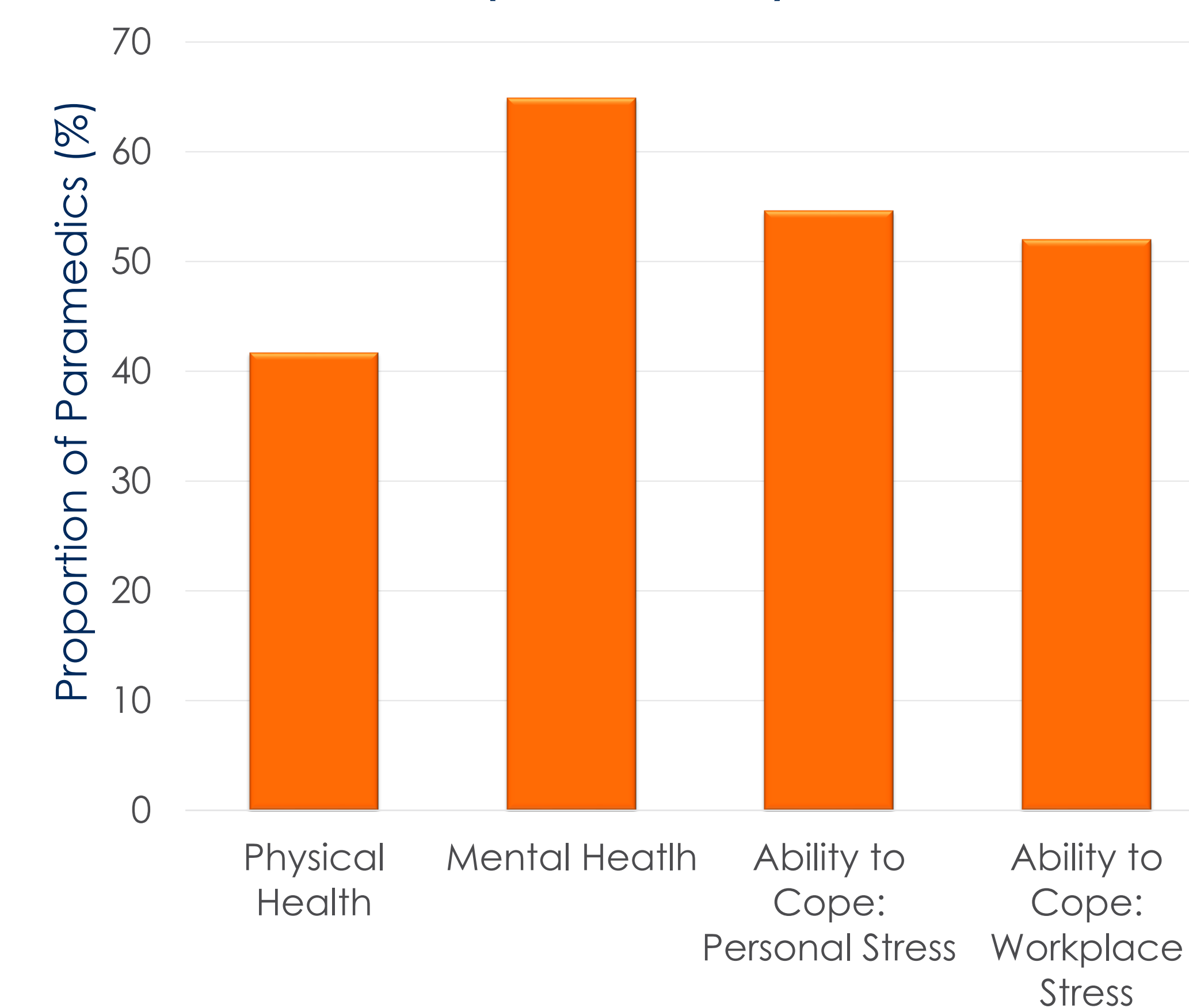
- Paramedics from five Canadian provinces were recruited online through social media, emails from employers/unions/associations, and posters.
- Online questionnaires were obtained upon recruitment between Jan 2021 – Oct 2021, using validated stress questionnaires:
 - Major depressive disorder (**MDD**, PHQ-9 questionnaire)
 - Post-traumatic stress disorder (**PTSD**, PC-PTSD-5 questionnaire)
 - Satisfaction with life (**SWL**, Canadian Census)
- Descriptive statistics, Wilcoxon signed-ranked, and differences in proportions tests were used as appropriate. Reliability analysis and probability of superiority were conducted on SWL responses.

Demographics of Paramedic Participants (n = 2577)

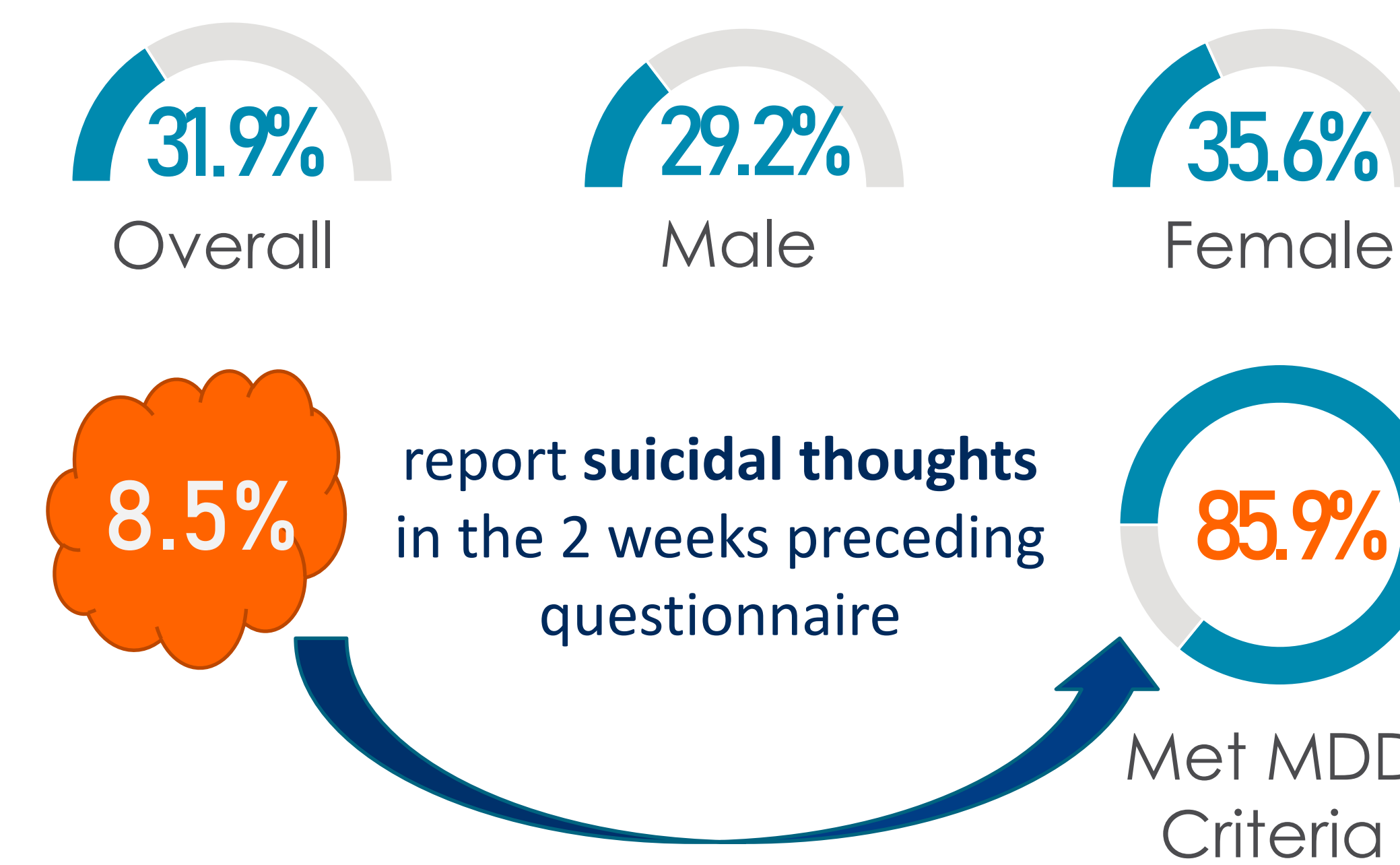
| | n (%) |
|-----------------------------------|-------------|
| Mean Years Experience (SD) | 12.1 (9.0) |
| Average Age in Years (SD) | 38.0 (10.2) |
| Gender (n = 2489) | |
| Male | 1397 (56.1) |
| Female | 1092 (43.9) |
| Job Title (n = 2424) | |
| Basic Life Support | 1683 (69.4) |
| ALS/Special Operations | 535 (22.1) |
| Critical Care | 60 (2.5) |
| Management | 103 (4.2) |
| Work Schedule (n = 2425) | |
| Fulltime | 1841 (75.9) |
| Parttime | 405 (16.7) |

* Proportions may not total 100%. ALS = Advanced Life Support

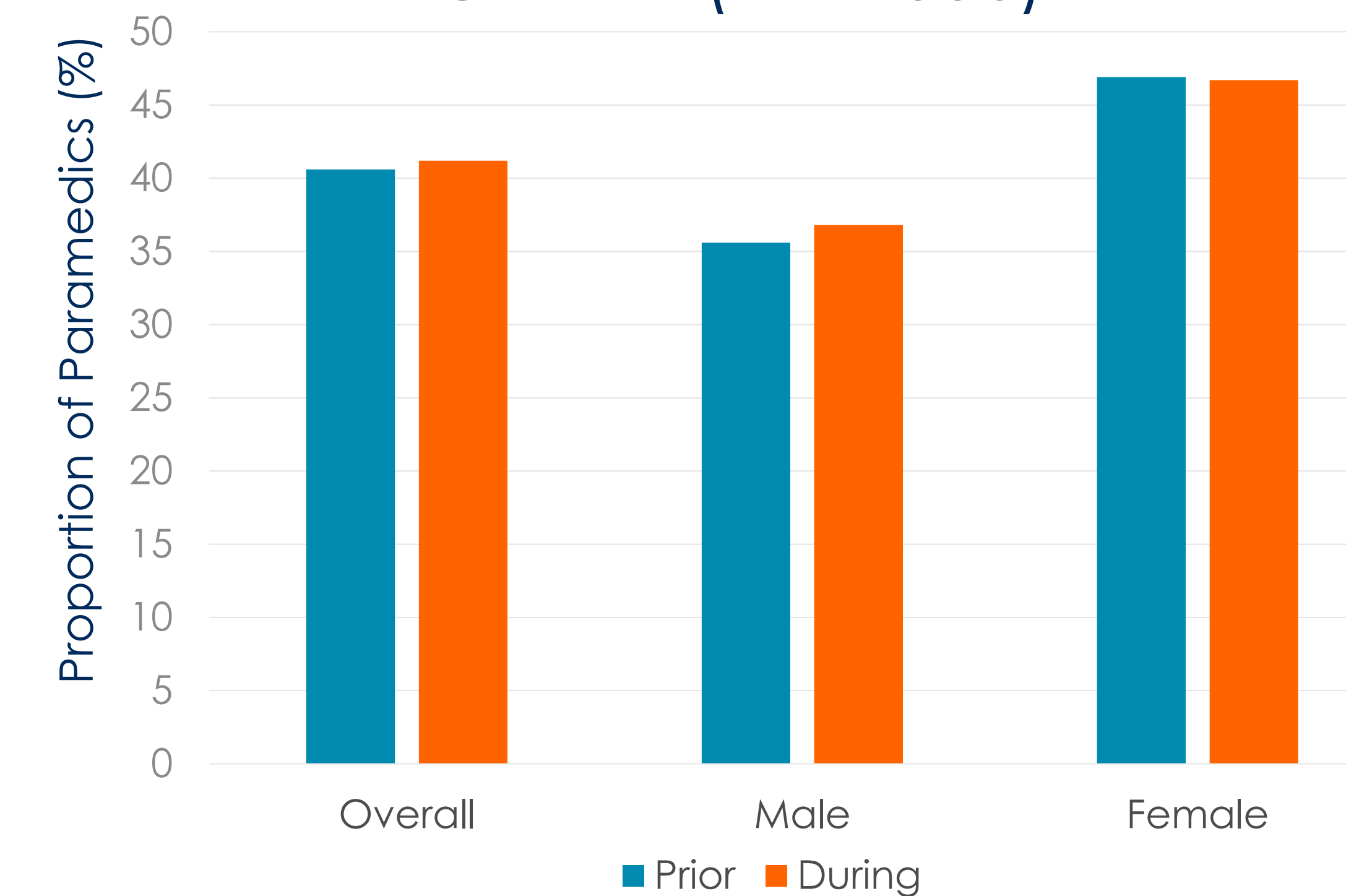
Reduction in Health and Coping during COVID-19 (n = 2267)



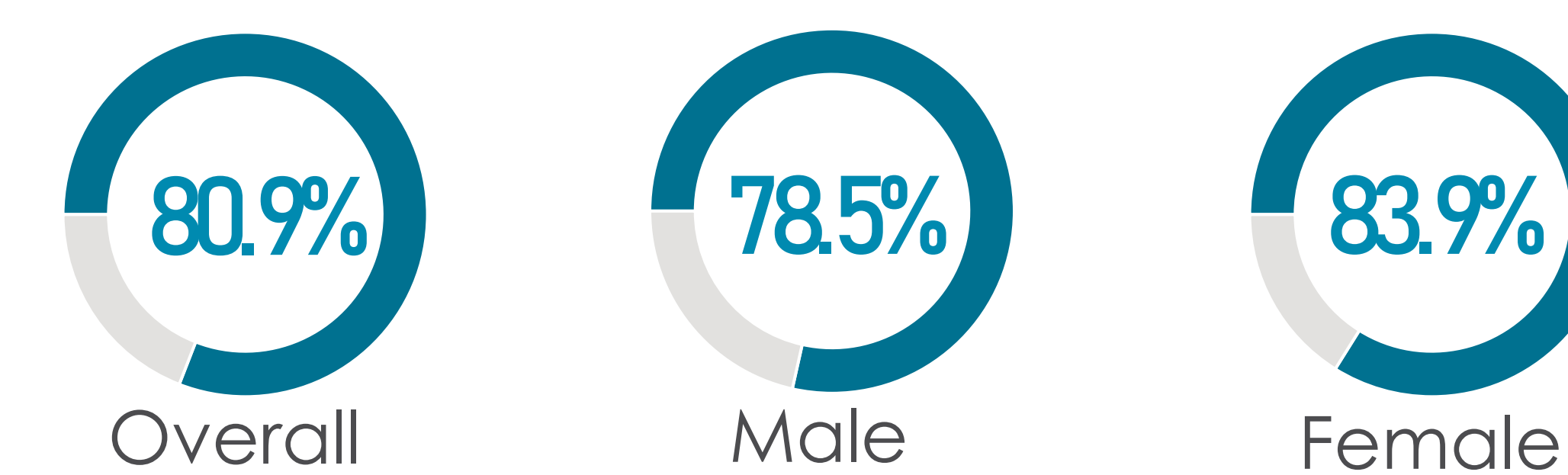
Major Depressive Disorder (MDD) Criteria (n = 2001)



Probable Post Traumatic Stress Disorder Criteria (n = 1356)



% with Reduced Satisfaction of Life (n = 2015)



Results/Discussion

- While the pandemic may not influence probable PTSD risk, it was associated with a reduction in SWL, mental and physical health, and ability to cope with stress. There were no differences in MDD, PTSD, or SWL scores by province.
- Paramedics that met MDD (5 v. 3, p < 0.001) and probable PTSD (5 v. 3, p < 0.001) criteria had greater median reductions in SWL.
- Female paramedics were more likely than males to experience risk of adverse mental health sequelae corresponding with the pandemic.
- ~ 20% of paramedics suspected that they had COVID-19, but only ~ 9% tested positive. Using serology results, we will investigate suspected infections.

Key Findings

- The COVID-19 pandemic has adversely impacted health and coping, particularly among paramedics that are female and/or with risk of underlying mental disorders.
- Estimated prevalence for meeting MDD and probable PTSD criteria, and suicidal thoughts are higher than previously reported for Canadian paramedics.
- These preliminary analyses warrant further investigation to determine why females are impacted more than males.

Acknowledgement:

This project was funded by the Public Health Agency of Canada (PHAC) through the COVID-19 Immunity Task Force. We would like to thank the paramedic unions, associations, and employers for their assistance with recruitment. A special thanks to the paramedic participants for the precarious job tasks they undertake in the line of duty. There were no conflicts of interest to declare for any co-authors. Contact cb.macdonald@mail.utoronto.ca for questions.