Prevalence and Motivators of Getting a COVID-19 Booster Vaccine in Canada: Results from the iCARE Study

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Introduction

- The protection offered by COVID-19 vaccines against hospitalization and death from COVID-19 decreases slowly over time due to the emergence of new variants and waning immunity.
- Booster doses remain critical to minimize the population health impact of the pandemic.

Objectives

- This study examined the prevalence, sociodemographic correlates, and motivators of getting a COVID-19 booster vaccine in a large Canadian population sample.

Methods

- A population-base sample (weighted for age, sex and province) of 3,001 Canadians ages 18+ years completed the iCARE survey between January 20th to February 2nd, 2022 using an online polling firm.
- Participants self-reported their booster status, intentions, and motivators, and were dichotomized into two groups: those who did vs. did not receive at least one booster dose.

Results

- 67 % of participants received a booster dose.
- Chi-square analyses revealed that older age ($p < 0.001$) and having a chronic disease diagnosis ($p < 0.001$) were associated with being more likely to get a booster.

Participants' characteristics as a function of booster vaccination status [b]

	Not Boosted (N = 859)	Boosted (N = 1744)	
Descriptive characteristics variables	**% (n)**	**% (n)**	***p*[a]**
Sex			
Man	48.9 (419)	46.9 (813)	0.323
Woman	51.1 (437)	53.1 (921)	
Missing values	410		
Age			
Less than or equal to 25 years	18.7 (159)	9.5 (164)	
26–50 years	53.4 (455)	30.0 (522)	**<0.001**
51 years or more	27.9 (238)	60.5 (1051)	
Missing values	412		
Education level			
High school diploma or less	74.0 (633)	71.1 (1231)	0.132
College or more	26.0 (223)	28.9 (500)	
Missing values	415		
Income			
Less than 60K/year	47.6 (365)	43.7 (682)	0.075
60K/year or more	52.4 (401)	56.3 (877)	
Missing values	676		
Chronic disease			
No chronic disease	63.5 (529)	49.0 (836)	**<0.001**
At least one chronic disease	36.5 (304)	51.0 (870)	
Missing values	462		
Presence of any depressive disorder			
Yes	21.1 (175)	15.9 (273)	**0.001**
No	78.9 (651)	84.1 (1448)	
Missing values	454		
Presence of any anxiety disorder			
Yes	26.8 (223)	20.3 (347)	**0.001**
No	73.2 (610)	79.7 (1363)	
Missing values	458		
Parent			
Not a parent	71.7 (601)	84.1 (1444)	**<0.001**
Parent	28.3 (238)	15.9 (272)	
Missing values	447		
Known or thought to have been infected with COVID-19			
Yes	70.9 (227)	84.8 (248)	**<0.001**
No	29.1 (552)	15.2 (1383)	
Missing values	591		

[a] *p*-value from chi-square analyses; [b] Period: 20 January and 2 February 2022.

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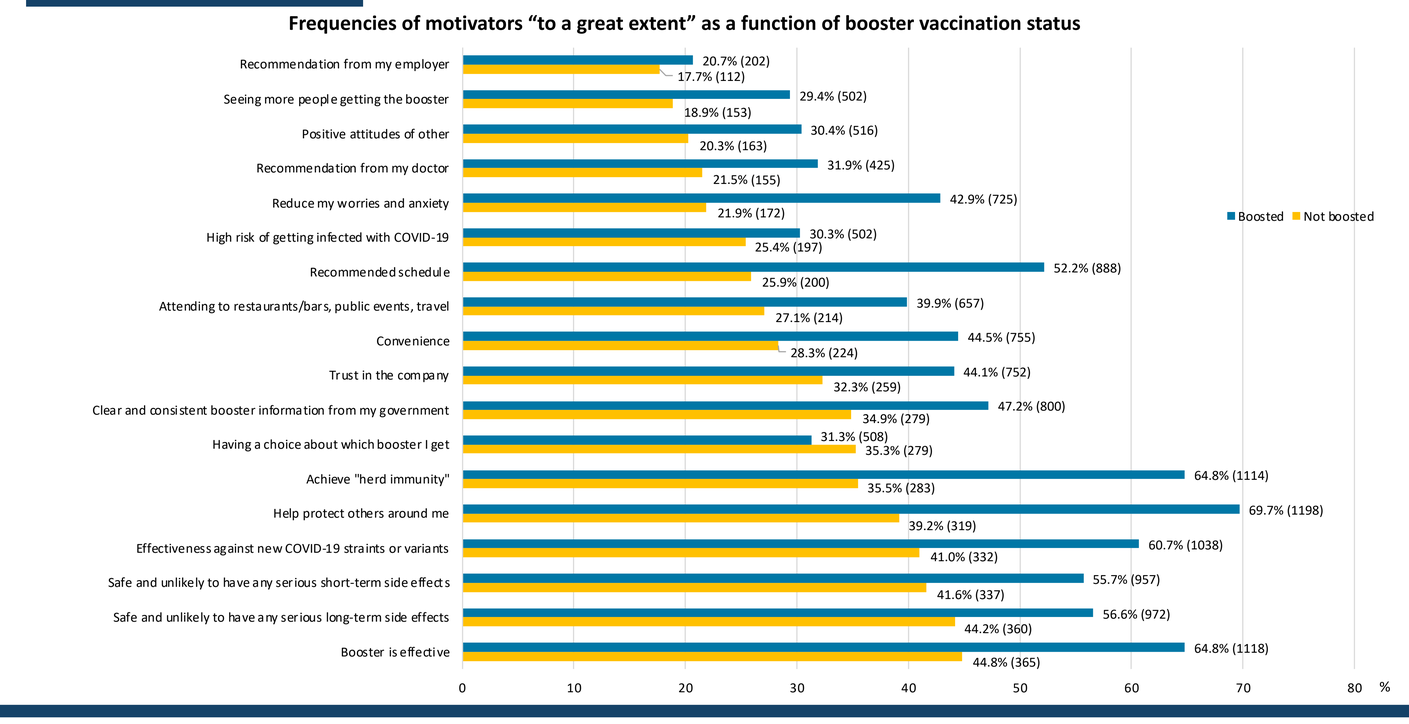
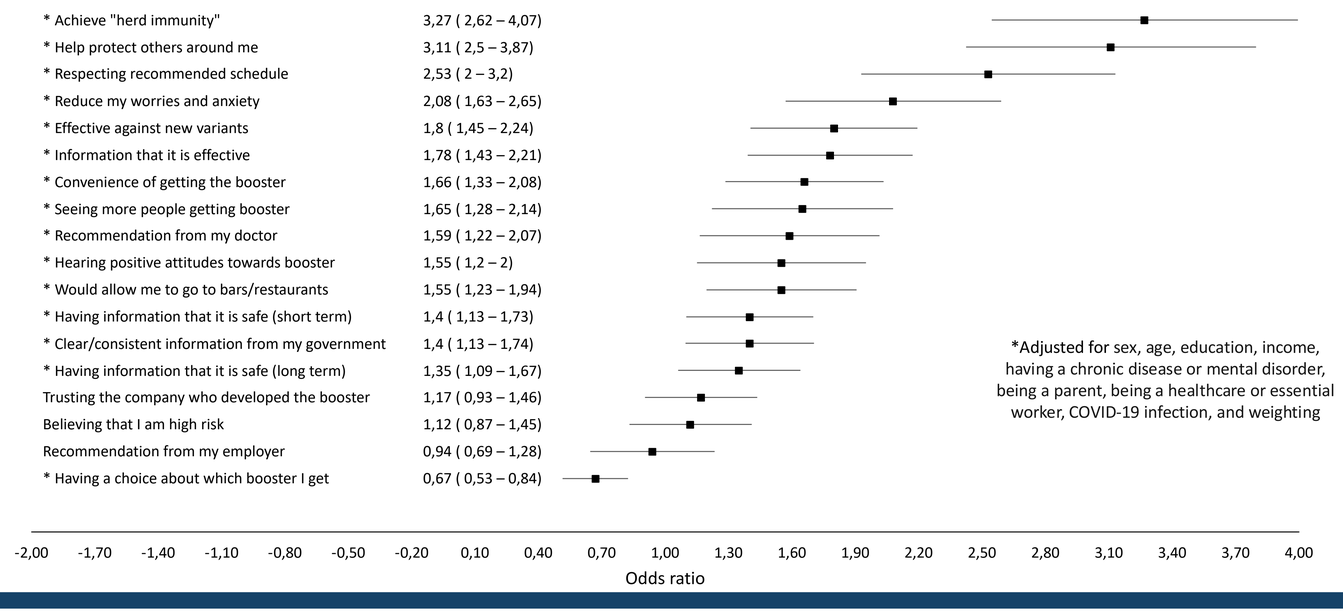
Results



Primary motivators

- Boosted: having information that the booster is effective (65%); wanting to do their part to achieve 'herd immunity' (65%); and knowing that getting the booster would help protect others around them (70%).
- Non-boosted: having information the booster is effective (45%); and having information the booster is unlikely to have any long-term (44%) or short-term (42%) side effects.

Motivators (in boosted vs non-boosted [reference])



*Adjusted for sex, age, education, income, having a chronic disease or mental disorder, being a parent, being a healthcare or essential worker, COVID-19 infection, and weighting

- Multivariate logistic regression revealed that boosted individuals were 3 times more likely to be motivated by "helping to achieve herd immunity" (OR=3.27; 95% CI 2.62-4.07) and "helping protect others around them" (OR=3.11; 95% CI 2.50-3.87) than non boosted individuals.

Conclusion

- People who are younger and healthier are less likely to get COVID-19 booster doses.
- Boosted individuals reported motivators tied to efficacy and altruism, whereas non-boosted individuals reported motivators tied to efficacy and safety.
- Messaging will require careful tailoring to address the identified behavioral motivators among non-boosted individuals who emphasize safety and efficacy of additional vaccine doses.

ACKNOWLEDGEMENTS