

AN INVESTIGATIVE STUDY ON THE PERCEPTION AND ACCEPTABILITY OF A COVID-19 VACCINE OF THE PUBLIC IN TRINIDAD AND TOBAGO

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INTRODUCTION

- The COVID-19 pandemic has had a devastating impact on global morbidity and mortality rates and adversely affected society and economies.
- To control this pandemic, mass vaccination is required.
- Many countries have reported varying levels of COVID-19 vaccine acceptance.¹⁻⁴
- The public perception of the COVID-19 vaccine and acceptance of the vaccine are unknown in Trinidad and Tobago.

OBJECTIVES

- To assess the public perception of the COVID-19 vaccine.
- To determine whether members of the public would accept the COVID-19 vaccine.
- To identify reasons for their acceptance or hesitation to receive the vaccine.
- To recommend measures that can be implemented to make members of the public more inclined to accept the COVID-19 vaccine.

METHODOLOGY

- Study Design - Cross sectional online survey.
- Study Population - Adults (>18 years) residing in Trinidad and Tobago.
- Study Sample - Convenience and snowball sampling.
- Study Size - Estimated sample size of 1033 persons.⁵
- Data Collection - Online questionnaire disseminated on different social media platforms (Facebook, Instagram, WhatsApp).
- Data Analysis - Descriptive statistics (Frequency/percentage charts)
 - Logistic regressions.
- Ethical Approval - Granted by:
 - o Campus Research Ethics Committee (UWI)
 - o Ministry of Health, Government of the Republic of Trinidad and Tobago.

RESULTS

Figure 1. Agreement to Accept a COVID-19 Vaccine

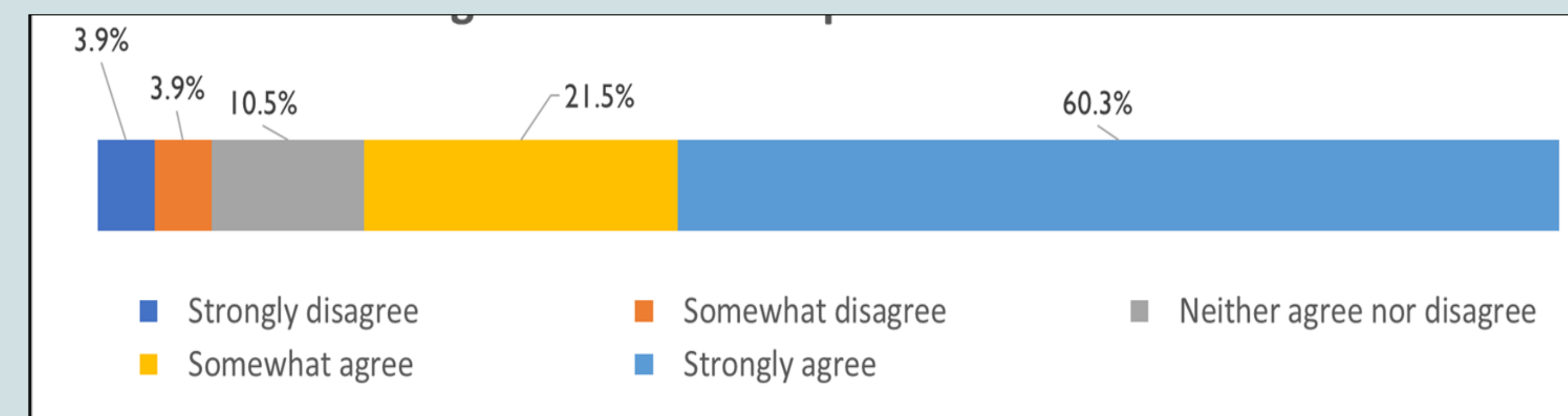


Figure 2. Reasons for Agreement to Accept a COVID-19 Vaccine

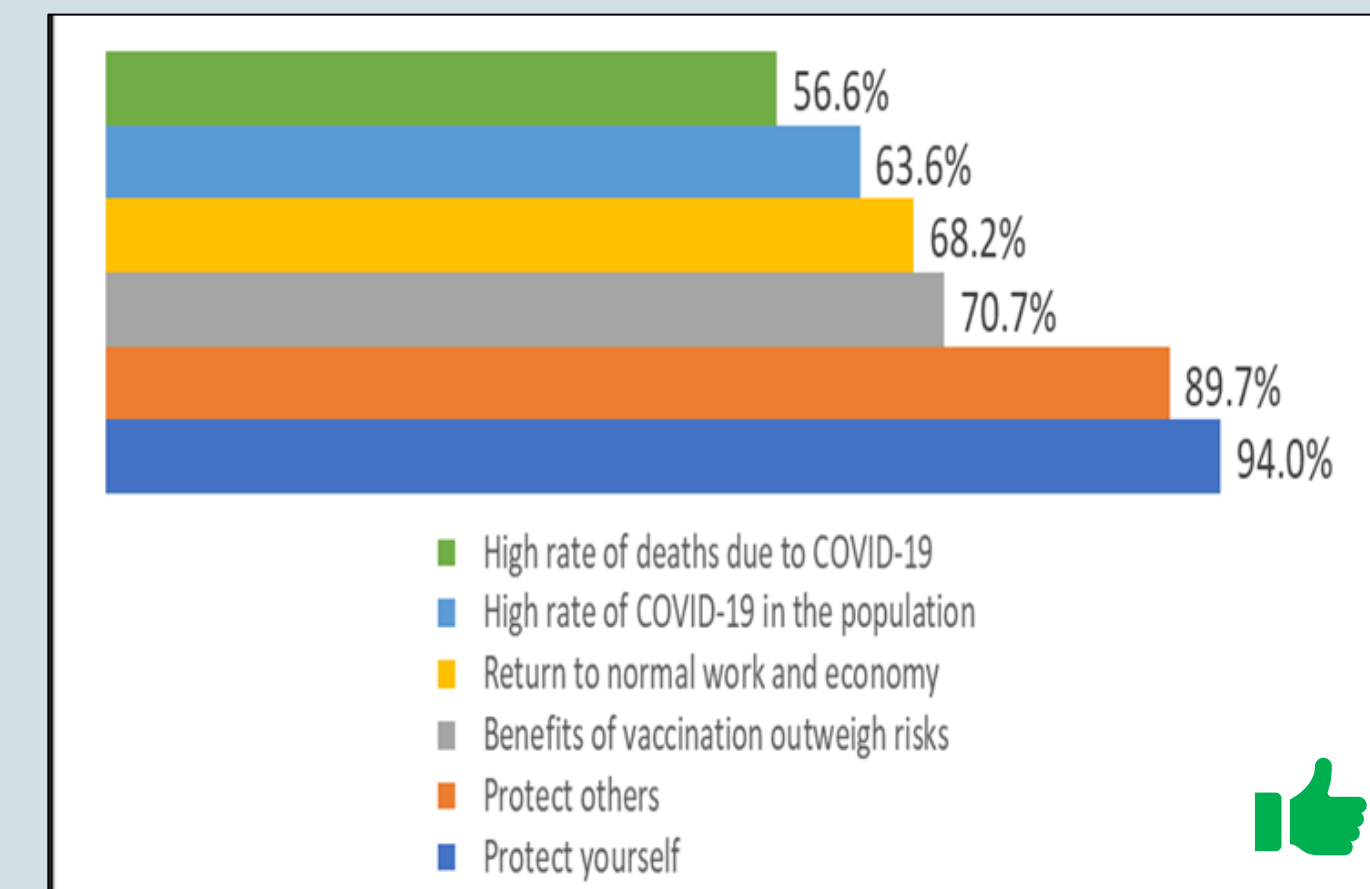


Table 1. Examination of the relationship between agreement to accept a COVID-19 vaccine and independent variables

Significant Variable	Odds Ratio [95% CI]	p-value
Male	1.77 [1.24-2.54]	0.002
Postgraduate degree	1.78 [1.03-3.08]	0.038
Monthly Salary: \$20,000-\$30,000	3.61 [1.17-11.10]	0.025
Monthly Salary: >\$30,000	13.91 [1.82-106.56]	0.011
East Indian descent	1.76 [1.16-2.69]	0.008
≥ 2 comorbidities	2.15 [1.05-4.39]	0.036
Knew where to be vaccinated	2.73 [1.89-3.94]	<0.001
Believed contraction of disease if vaccinated	0.6 [0.40-0.92]	0.018
Believed that vaccine are effective	1.97 [1.11-3.50]	0.02
	7.34 [4.57-11.80]	<0.001
Been vaccinated before	2.46 [1.03-5.90]	0.044
Influenza	1.98 [1.42-2.78]	<0.001

Figure 3. Reasons for Disagreement to Accept a COVID-19 Vaccine

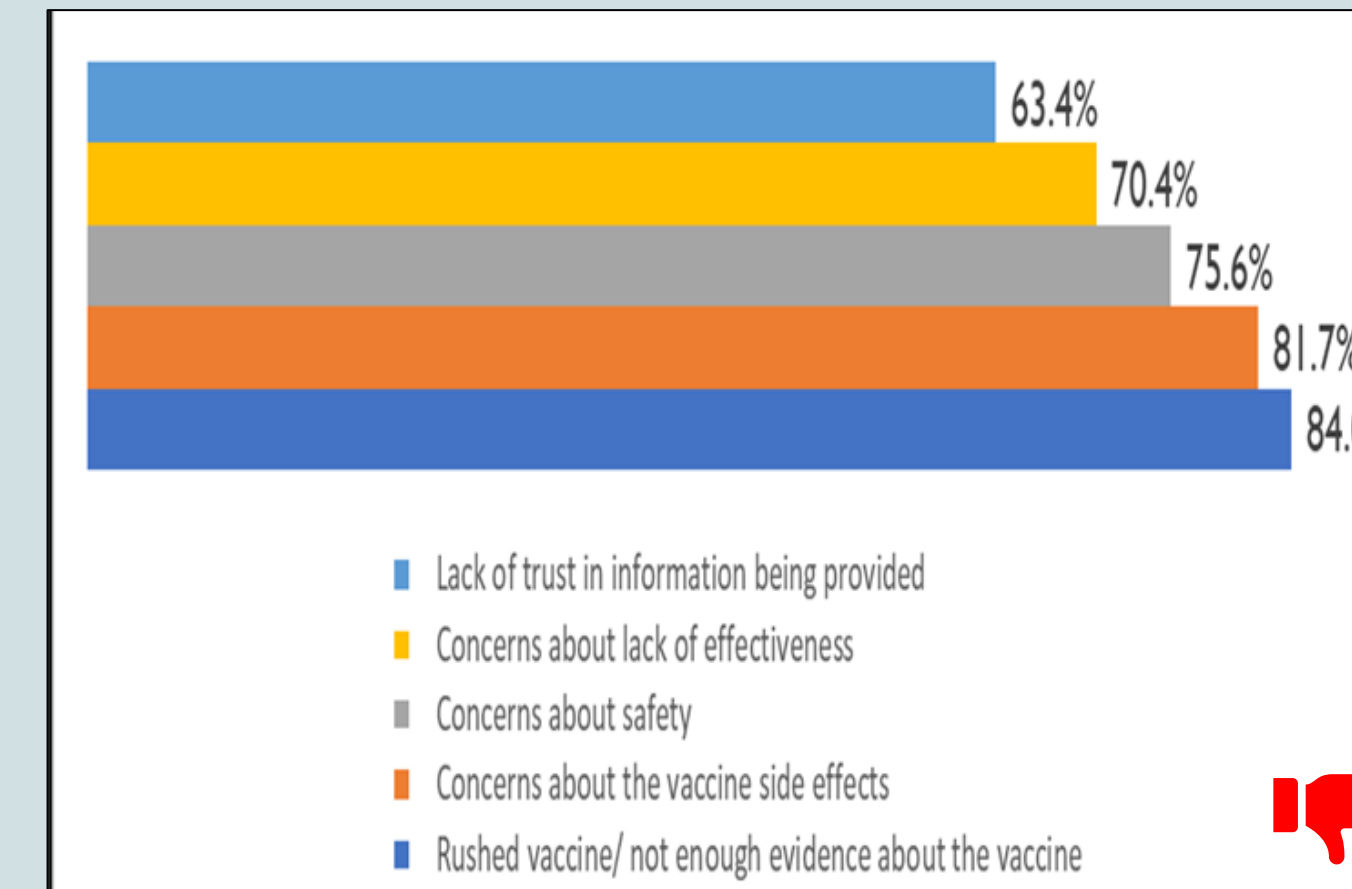


Figure 4. Trusted Sources of Information on a COVID-19 Vaccine

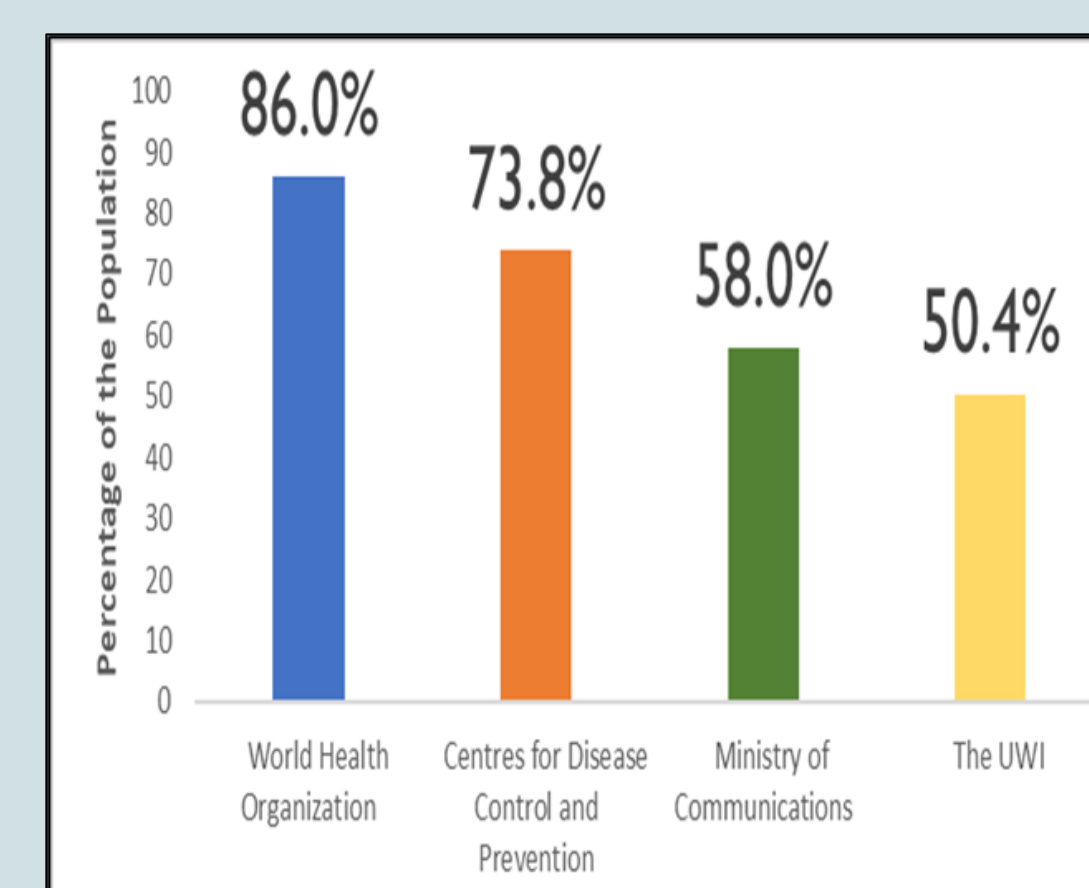
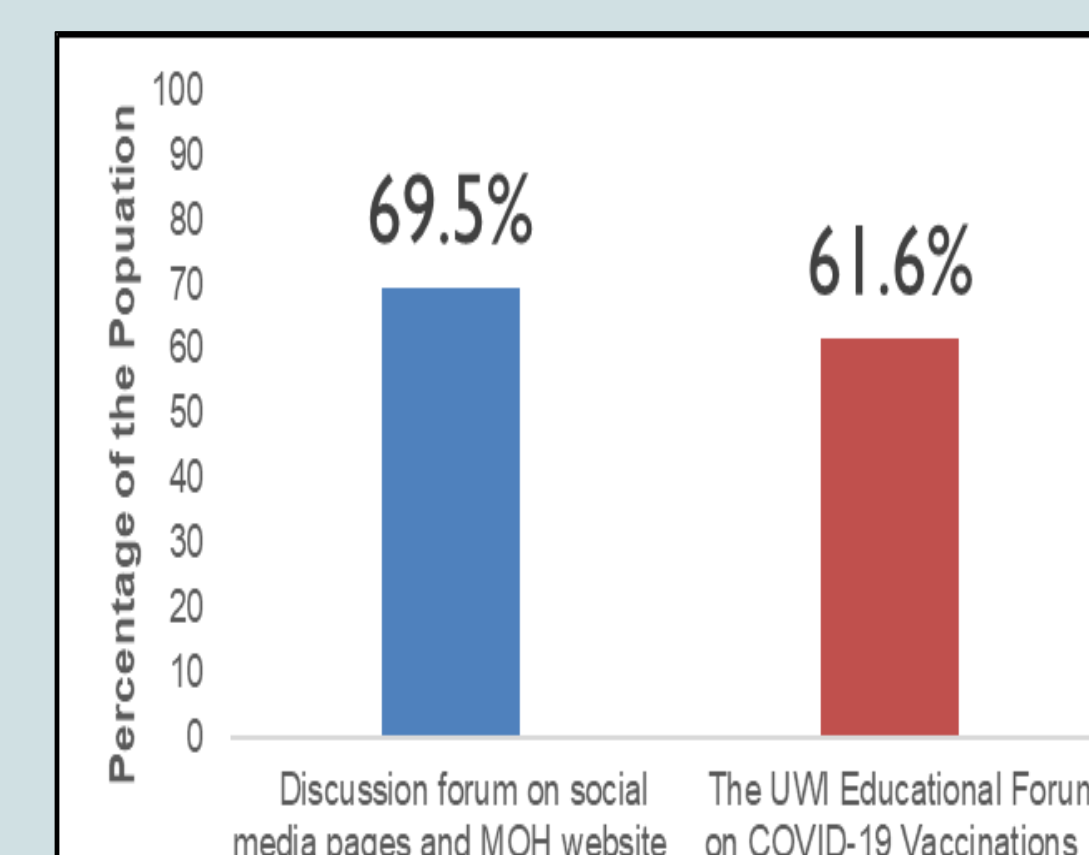


Figure 5. Preferred Modes of Receipt of Information on a COVID-19 Vaccine



DISCUSSION

- The COVID-19 acceptance level was similar to those in global surveys²⁻⁴ and national surveys done in China⁶, United States⁷ and the Mediterranean⁸.
- Reasons for agreement and disagreement to accept a vaccine were similar to the constructs in the Health Belief Model⁹ and in Bono *et al*, (2021),⁴ respectively.
- Our findings of sociodemographic predictors for acceptance were similar to those in other studies: being male,^{4,7,10} of East Indian descent,¹¹ having a high educational level⁴ and high income.⁴
- The comorbidities predictor for acceptance was similar to findings in a Bangladesh study¹² but contrasted findings in a Kuwait study.¹³
- Vaccination indicators for acceptance: knowledge on where to be vaccinated, belief in vaccine effectiveness and prior vaccination history were similar to findings in studies in China⁶ and Saudi Arabia.⁸

CONCLUSION

- Agreement to accept a COVID-19 vaccine was high among adults in Trinidad and Tobago.
- The major driving factors for agreement were to protect oneself, and others, and to return to normalcy. Nevertheless, concerns remained about the vaccine.
- Communication with the public by the Ministry of Health and utilizing the most trusted sources of information on the vaccine would help to alleviate concerns and further promote COVID-19 vaccine uptake.

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