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Background

Global COVID-19 pandemic containment necessitates understanding the risk of hesitancy or resistance to vaccine uptake in different populations.

In Qatar, the government announced in December 2020 that it would provide free COVID-19 vaccination to the entire population and that vaccination would occur in stages, starting with the highest priority group.

The Middle East and North Africa currently lack vital representative vaccine hesitancy data.

We conducted the first representative national phone survey among the adult population of Qatar.

Aims

To estimate the prevalence and identify potential determinants of vaccine willingness:

- acceptance (strongly agree)
- resistance (strongly disagree)
- hesitancy (somewhat agree, neutral, some-what disagree).

Methods

Data collection

- Probability based sampling
- Phone survey
- Data collection period: December 15, 2020 – January 25, 2021
- Arabic and English language
- Verbal informed consent

Target population

- 18 years old and above
- Arabic or English speaking
- Residents of Qatar

Instruments

- Sociodemographic characteristics: age, gender, marital status, employment status, population groups
- Vaccine willingness and vaccine-related questions: 5-point Likert scale for 3 statements: “I am willing to get coronavirus vaccine if it became available for me”, “Getting the coronavirus vaccine should be made mandatory” and “When a coronavirus vaccine becomes available, I will be concerned about its side-effects”.
- Pandemic-related questions: personal history of COVID-19, concern about themselves or family members contracting COVID-19, death of someone close due to COVID-19, experience of quarantine since the pandemic started.
- Physical health: chronic physical disease diagnostic
- Mental health: PHQ-9, GAD-7

Results

Figure 1. Correlates of vaccine willingness groups: Hesitant and Resistant

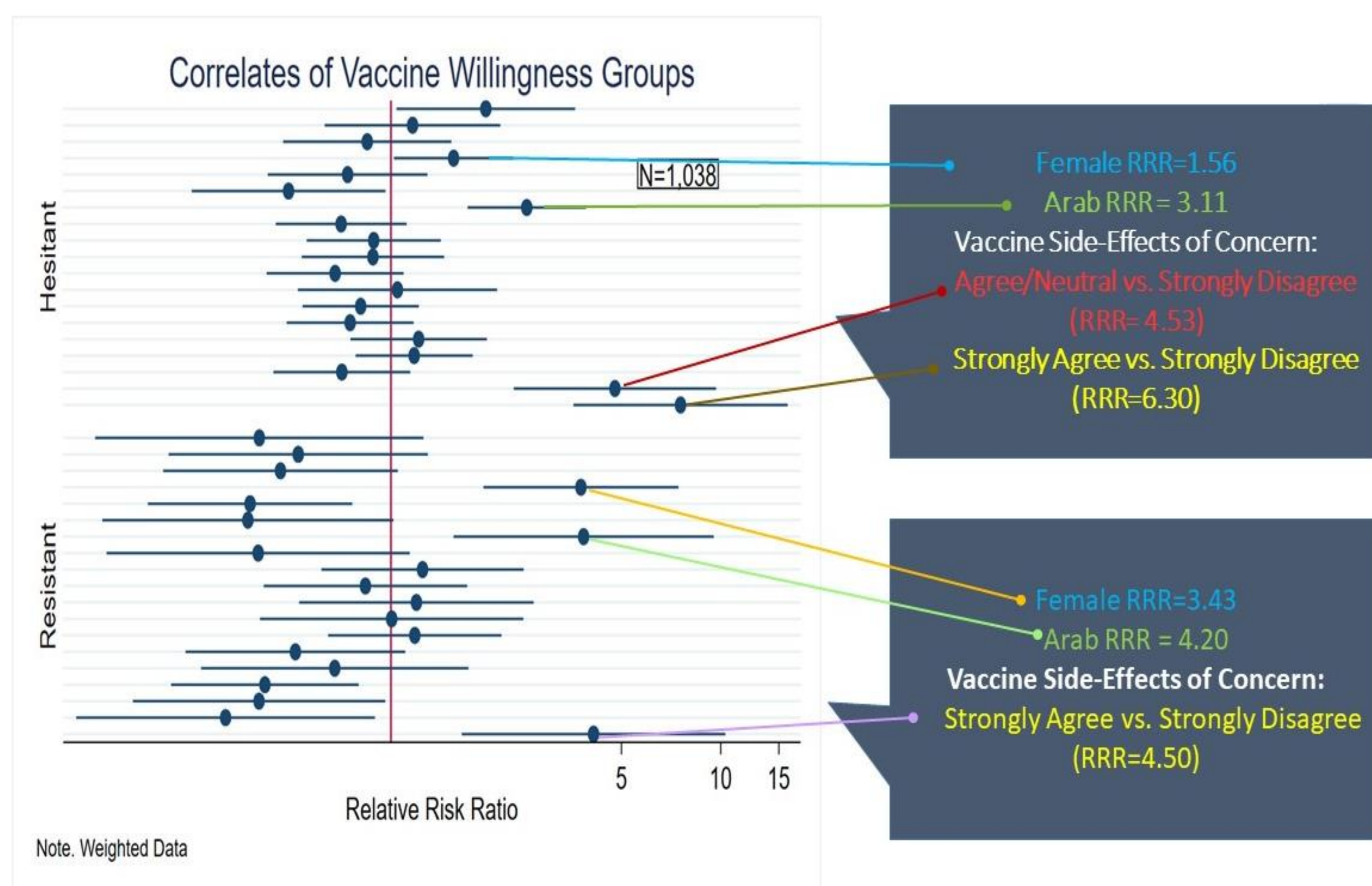
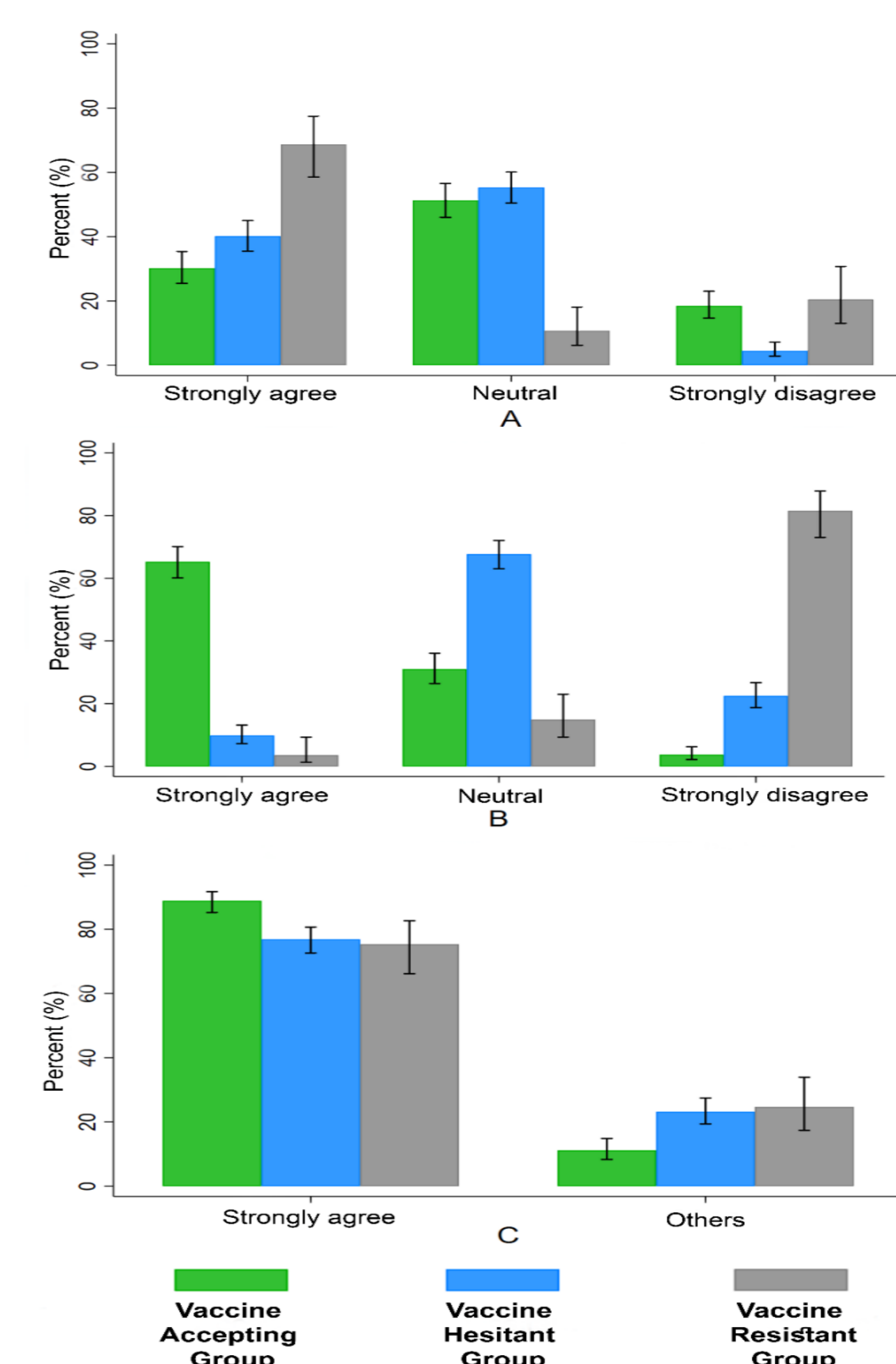


Figure 2. Attitudinal questions related to COVID-19 vaccine



(A) Attitudes towards side-effects of COVID-19 vaccination;
 (B) Attitudes toward making COVID-19 vaccination mandatory;
 (C) Attitudes towards effectiveness of measures taken against COVID-19 in controlling the spread of the virus in Qatar.

Conclusions

- Our results indicate a low level of vaccine acceptance (42.7%) and conversely high levels of vaccine hesitancy (45.2%) and vaccine resistance (12.1%) in Qatar.
- Concerns about side-effects of the vaccine were independently associated with vaccine hesitancy and vaccine resistance.
- Socio-demographics such as female gender, Arab ethnicity and non-migrant status were associated with hesitancy and resistance towards COVID-19 vaccine.

Acknowledgements

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