COVID-19 vaccination intention and willingness to pay: understanding the major factors from a cross-sectional study in Bangladesh

Rajon Banik¹, Md. Saiful Islam¹, Mamun Ur Rashid Pranta¹, Quazi Maksudur Rahman¹, Mahmudur Rahman¹, Sahadat Hossain¹, Md. Tajuddin Sikder¹
¹Department of Public Health and Informatics, Jahangirnagar University, Savar, Dhaka-1342, Bangladesh.

Background

- Although a variety of COVID-19 vaccines have been authorized and delivered in a number of countries, including Bangladesh. Widespread vaccination remains a challenge, which largely depends on public perception and belief regarding the COVID-19 vaccine.
- The Health Belief Model (HBM) is one of the most widely used models for determining contributing factors to vaccination intent.
- The decision to vaccinate also depends on the Willingness to pay (WTP) of an individual in order to obtain increased health benefits.
- In Bangladesh, there is a scarcity of data on people's intentions to receive the COVID-19 vaccine and their WTP, as well as the motivation and barriers to vaccination coverage.

Objectives

- To investigate people's intention to be vaccinated against COVID-19 and willingness to pay (WTP).
- To determine the factors related to public intention and WTP for COVID-19 vaccination.

Methods

Study Duration
The survey was carried out from 10 December 2020 to 10 January 2021.

Study Design
It was a cross-sectional study.

Sample size
A total 894 participants were included in this study.

Study Instruments
Self-administered questionnaire, comprising of socio-demographics, COVID-19 experience and vaccination-related information, as well as the HBM.

Study Population
Any Bangladeshi citizen (18 to 60 years), who accesses the internet was study population.

Sampling Techniques
Convenience sampling technique was used for data collection.

Data collection procedure
Data was collected through different online platforms (e.g., E-mail, Facebook, and WhatsApp).

Results

- Among the participants 38.5% reported a definite intention to get vaccinated against COVID-19, whereas 27% had a probable intention.
- Older age, feeling optimistic about the effectiveness of COVID-19 vaccination, believing that vaccination decreases the worries and risk of COVID-19 infection, and being less concerned about side effects and safety of COVID-19 vaccination under the HBM construct were found to be significant factors in COVID-19 vaccination intention.
- Most of the participants (72.9%) had WTP for a COVID-19 vaccine, with a median amount of BDT 400/US $4.72 per dose.
- Factors associated with higher WTP were younger age, being male, and those having higher education, residing in an urban area, having good self-rated health status, positivity towards COVID-19 vaccination's effectiveness, and being worried about the likelihood of getting infected with COVID-19.

Conclusions

The findings show that a large proportion of Bangladeshis wanted to be vaccinated and had WTP for the COVID-19 vaccine. However, to maximize vaccination against COVID-19, urgent education and awareness campaigns are warranted, including the media, focusing on younger age groups and those who have doubts about the COVID-19 vaccine’s safety and efficacy.