

## Oral Session:

### A Cross-Sectional Survey of COVID-19 Vaccine Acceptance among Adults in Taiwan, 2021

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#### Background:

An efficient immunization program is key to contain the COVID-19 pandemic. To increase vaccine coverage, it is important to understand the factors influencing willingness to vaccinate in general population and target groups.

#### Methods:

We performed a population-based, random telephone survey to assess the knowledge, attitude and behavior of adults aged  $\geq 18$  years toward COVID-19 vaccine during January–February 2021. We collected participants' demographic information, including age, gender, and occupation. To understand the acceptance in priority group, we aim to include at least 500 healthcare workers and 250 first-line public health practitioners. We measured the willingness by asking if they would accept a COVID-19 vaccine when the emergency use authorization is issued and factors that can increase their willingness to vaccinate. We assessed the associations between sociodemographic characteristics, perceived effectiveness and safety with acceptance of COVID-19 vaccine by chi-square test.

#### Results:

Of the 1,522 participants surveyed, 1005 (66%) reported willingness and 424 (28%) reported unwillingness to vaccinate; 93 (6%) were unsure or unknown. The acceptance of a COVID-19 vaccine among health care worker and first-line public health practitioners were 65% and 75 %, respectively. Compared to other age groups, participants aged 36–45 years were less likely to receive a COVID-19 vaccine (78% vs 65%,  $p < 0.01$ ). 32% participant intended to vaccinate as soon as possible, but 59 % participants will delay the vaccination least one month. Participants who believed vaccine is effectiveness were more likely to receive COVID-19 vaccine (83% vs 59%,  $P < 0.01$ ). In addition, the willingness to vaccinate was increased in 30% participants when the effectiveness and safety of COVID-19 vaccine has been confirmed.

#### Conclusions:

The acceptance of a COVID-19 vaccine varied by different age, occupation, perceived effectiveness and safety of the vaccine. Continuous promotion and education about vaccine in different target groups are needed to increase the acceptance of COVID-19 vaccine.