

## COVID-19 vaccine brand hesitancy and other challenges to vaccination in the Philippines

### Abstract (600 word limit)

**Background:** Effective and safe COVID-19 vaccines have been developed at a rapid and unprecedented pace to control the spread of the virus, and prevent hospitalisations and deaths. However, COVID-19 vaccine uptake is challenged by vaccine hesitancy and anti-vaccination sentiments, a global shortage of vaccine supply, and inequitable vaccine distribution especially among low- and middle-income countries including the Philippines. In this paper, we explored vaccination narratives and challenges experienced and observed by Filipinos during the early vaccination period. We interviewed 35 individuals from a subsample of 1,599 survey respondents 18 years and older in the Philippines. The interviews were conducted in Filipino, Cebuano, and/or English via online platforms such as Zoom or via phone call. All interviews were recorded, transcribed verbatim, translated, and analysed using inductive content analysis. To highlight the complex reasons for delaying and/or refusing COVID-19 vaccines, we embedded our findings within the social ecological model. Our analysis showed that individual perceptions play a major role in the decision to vaccinate. Such perceptions are shaped by exposure to (mis)information amplified by the media, the community, and the health system. Social networks may either positively or negatively impact vaccination uptake, depending on their views on vaccines. Political issues contribute to vaccine brand hesitancy, resulting in vaccination delays and refusals. Perceptions about the inefficiency and inflexibility of the system also create additional barriers to the vaccine rollout in the country, especially among vulnerable and marginalised groups. Recognising and addressing concerns at all levels are needed to improve COVID-19 vaccination uptake and reach. Strengthening health literacy is a critical tool to combat misinformation that undermines vaccine confidence. Vaccination systems must also consider the needs of marginalised and vulnerable groups to ensure their access to vaccines. In all these efforts to improve vaccine uptake, governments will need to engage with communities to ‘co-create’ solutions. COVID-19 vaccines have been developed at a rapid and unprecedented pace to control the spread of the virus, and prevent hospitalisations and deaths. However, there are a series of events and factors that create barriers to vaccination. In this paper, we explore vaccination narratives and challenges experienced and observed by Filipinos during the early vaccination period in the Philippines.

**Material and methods** We conducted 35 interviews from a subsample of 1,599 survey respondents ages 18 and older in the Philippines. The interviews were conducted in Filipino, Cebuano, and/or English via online platforms such as Zoom or via phone call. All interviews were recorded, transcribed verbatim, translated, and analysed using inductive content analysis. To highlight the complex reasons for delaying and/or refusing COVID-19 vaccines, we embedded our findings within the social ecological model.

### Importance of Research(200 words)

By The coronavirus disease 2019 (COVID-19) pandemic continues to burden health systems and communities globally, with millions of cases and deaths . Because of the significant and continued impact of COVID-19, vaccines have been developed at a rapid and unprecedented pace to control the spread of the virus, and prevent hospitalisations and deaths . Many vaccines have been shown to be safe and effective with high-income countries having vaccinated more than half of their population . Despite the availability of these vaccines, countries are faced with various challenges including vaccine hesitancy and anti-vaccination sentiments, limited global supply, and inefficient vaccine deployment . These issues in vaccine uptake, together with declining community acceptance of other public health interventions, will mean a delayed recovery and prolonged pandemic .

The World Health Organization (WHO) in 2019 identified vaccine hesitancy or the reluctance to vaccinate as one of the top ten threats to global health despite evidence of the important role of vaccines in improving population health outcomes . Together with weak primary health care and other health challenges, countries especially low- and middle-income countries (LMICs) will struggle to meet the demands of the communities within their health system capacity. With the pandemic, countries are further burdened with many health systems overwhelmed throughout its course. The Philippines presently faces these challenges: vaccine hesitancy and increasing anti-vaccination sentiments, a weak primary health care system with efforts to strengthen it through the recently implemented Universal Health Care Law, and an overwhelmed health system because of the demands of COVID-19 and other public health problems . These challenges are further compounded by a global shortage of vaccine supply with inequitable vaccine distributions .



#### Biography (200 words)

Dr. Arianna Maever L. Amitis Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Visualization, Writing – original draft, Writing – review & editing. After obtaining his MD degree and specialist diploma School of Medicine and Public Health, Ateneo de Manila University, Manila, Philippines. Arianna is a researcher working in the fields of epidemiology, health systems research, nutrition, communicable and noncommunicable diseases, and evidence synthesis. She is currently involved in various projects on COVID-19 in the Philippines and in the Southeast Asia region. She obtained her Master of Applied Science in Spatial Analysis for Public Health degree from the Johns Hopkins Bloomberg School of Public Health. She is also a masters candidate in

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#### Info of Institute & Lab (200 words)

University The University of the Philippines Manila (UPM) is a state-funded medical and research university located in Ermita, Manila, Philippines. It is known for being the country's center of excellence in the health sciences, including health professional education, training, and research. It is the oldest of eight constituent universities of the University of the Philippines System, even predating the founding of UP by three years. Originally established on December 1, 1905, as the Philippine Medical School and later called as the UP College of Medicine and Surgery on June 10, 1907. It was renamed as University of the Philippines Manila in 1983.

UP Manila administers and operates the Philippine General Hospital, the largest medical center and the national referral center for health in the Philippines.[4] The university is also the home of the National Institutes of Health. Its 14 hectare campus occupies two large city blocks[3] and it contains pre-war heritage buildings and structures built during the American Period designed by American Architect William E. Parsons, which were declared by the National Historical Commission of the Philippines as historical landmarks.

Since 2001, the College of Medicine and the College of Nursing has been recognized as Centers of Excellence by the Commission on Higher Education.

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