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Commentary

Public trust, misinformation and COVID-19 vaccination willingness in Latin America and the Caribbean: today's key challenges

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The Coronavirus Disease 2019 (COVID-19) pandemic has taken an enormous toll on lives, quality of life, and, in general, our way of living. Bringing an end to the pandemic is an urgent need shared by all, from policymakers to healthcare personnel and society in general. To this end, the world needs mass COVID-19 vaccination programs based on multiple vaccine platforms accessible to all and supported in public trust in those vaccines. Consequently, even before the availability of most of the currently used COVID-19 vaccines, multiple studies assessing the vaccination willingness or intention in different countries and regions, including Latin America and the Caribbean, have shown heterogeneous attitudes that threaten the application of the available vaccines and a prompt solution to the crisis.[1]

In *The Lancet Regional Health – Americas*, De Freitas et al [2] explored the public trust in information sources, confidence in institutions, and COVID-19 vaccination willingness in Trinidad and Tobago. Trinidad and Tobago is a country in the Caribbean that currently (September 2, 2021) has a rolling 7-day average daily new confirmed COVID-19 cases per million people higher (144.45) than Brazil (105.93) or Mexico (108.15).[3] In this study, the authors found that only 62.8% of participants would take the COVID-19 vaccine if available. A level below that observed in other Latin

American and Caribbean countries, including Mexico (88.4%) and Costa Rica (84.1%), but similar to Dominican Republic (65.8%) and Paraguay (64.6%), and above Haiti's (43.2%).[1] Beyond the Latin American and Caribbean regions, a study focused on ten low- and middle-income countries reported an overall willingness of 80.3%,[4] but with Burkina Faso (66.5%) and Pakistan (66.5%) reporting low levels similar to Trinidad and Tobago. Furthermore, in a recent review,[5] reported levels in Congo and China below 30% acceptance rates.[6,7] Overall, all these reports demonstrate that acceptance and willingness to vaccinate are highly country-specific and heterogeneous, underlining the need for its evaluation and the development of country-specific strategies to improve vaccine reach.

Improving vaccine acceptance requires a deeper understanding of the issues behind the reluctance to vaccination, which most of the studies reported failed to evaluate in detail. De Freitas et al. attempted to evaluate these issues by exploring the trust in information sources and belief in misinformation and conspiracies. This rampant issue has accompanied the pandemic through its existence and does not seem to diminish despite accumulating evidence of vaccine safety and effectiveness.[8] Misinformation and mistrust are not limited to vaccines but also expand to the authorities and the healthcare professionals. For example, in Trinidad and Tobago, the trust in health workers and the Ministry of Health of only one-third of those interviewed expressed some level of trust. Health literacy is an additional challenge that could favor misin-

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formation. As expected, the authors found that those with lower levels of health literacy were more likely to believe in conspiracies and misinformation, which could lead to hesitance and rejection of vaccinations.[2] These findings, from Trinidad and Tobago and other countries, are crucial for clinicians, policymakers, and in general for establishing effective vaccination programs that incorporate locally tailored strategies that aim to improve health literacy about the relevance, efficacy, safety, and effectiveness of vaccines. These aspects are essential to generate trust and willingness to vaccinate.

Furthermore, as the attitudes towards a vaccine and the degree of trust and misinformation are likely to change through time according to findings and opinions, they need to be evaluated constantly, considering their dynamic nature. Challenges and attitudes towards vaccines will evolve and need close monitoring to improve compliance and distribution.[9]

Another critical aspect to consider in the Latin America and Caribbean regions is the high degrees of internal and external migration. For example, as De Freitas et al commented,[2] but not explicitly assessed in their study, in Trinidad and Tobago, the growing Venezuelan migrant population represents a challenge in imported cases of COVID-19 and limited access to information and vaccines. In some countries, these populations are not explicitly considered by the national COVID-19 vaccination plans. However, their vaccination willingness remains an unanswered question with multiple implications in public health in the region. At the same time, other national vulnerable populations, as can be now the situation in Haiti, intensified after the last 7.2-magnitude earthquake (August 14, 2021) and the Grace hurricane (August 17, 2021), may be severely affected, posing additional risks to the implementation of national COVID-19 vaccination plans.

Finally, globally, nations specifically need to prioritise the urgent implementation of strategies to tackle misinformation and vaccination reluctance. Providing evidence-based information in means and terms understandable to all is essential, and in this regard, public health professionals and the utilisation of social media are underused resources. Therefore, national and regional authorities, including the Pan-American Health Organization (PAHO), should enhance their efforts in providing massively intense educational interventions, including higher presence in social and news media, that are also key in providing trustworthy information to the population that needs to be vaccinated promptly and reduce the risk of COVID-19, and all its associated outcomes, even more in the context of current significant spreading of the Delta variant of concern. As recently shown, higher vaccination coverage is asso-

ciated with a reduced mutation frequency of the SARS-CoV-2 Delta variant.[10] Only with transparent and trustworthy information accessible to all accompanied with guaranteed access to vaccines in a global sphere we can start envisioning an end to this human catastrophe.

Contributors

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References

- [1] Urrunaga-Pastor D, Bendezu-Quispe G, Herrera-Añazco P, et al. Cross-sectional analysis of COVID-19 vaccine intention, perceptions and hesitancy across Latin America and the Caribbean. *Travel Med Infect Dis* 2021;41:102059.
- [2] De Freitas L, Basdeo B, Wang H-i. Public trust, information sources and vaccine willingness related to the COVID-19 pandemic in Trinidad and Tobago: an online cross-sectional survey. *Lancet Reg Health Am* 2021:100051. doi:10.1016/j.lana.2021.100051.
- [3] Our World in Data. Coronavirus Pandemic (COVID-19). <https://ourworldindata.org/coronavirus>. 2021.
- [4] Solís Arce JS, Warren SS, Meriggi NF, et al. COVID-19 vaccine acceptance and hesitancy in low- and middle-income countries. *Nature Medicine* 2021;27(8):1385–94.
- [5] Wake AD. The willingness to receive COVID-19 vaccine and its associated factors: “vaccination refusal could prolong the war of this pandemic” - a systematic review. *Risk management and healthcare policy* 2021;14:2609–23.
- [6] Kabamba Nzaji M, Kabamba Ngombe L, Ngoie Mwamba G, et al. Acceptability of vaccination against COVID-19 among healthcare workers in the Democratic Republic of the Congo. *Pragmatic and observational research* 2020;11:103–9.
- [7] Lin Y, Hu Z, Zhao Q, Alias H, Danaee M, Wong LP. Understanding COVID-19 vaccine demand and hesitancy: A nationwide online survey in China. *PLoS Negl Trop Dis* 2020;14(12):e0008961.
- [8] Alvarado-Socarras JL, Vesga-Varela AL, Quintero-Lesmes DC, et al. Perception of COVID-19 vaccination amongst physicians in Colombia. *Vaccines (Basel)* 2021;9(3):287. doi:10.3390/vaccines9030287.
- [9] Mesa-Vieira C, Botero-Rodríguez F, Padilla-Muñoz A, Franco OH, Gómez-Restrepo C. The dark side of the moon: global challenges in the distribution of vaccines and implementation of vaccination plans against COVID-19. *Maturitas* 2021;149:37–9.
- [10] Yeh T-Y, Contreras GP. Full vaccination is imperative to suppress SARS-CoV-2 delta variant mutation frequency. *medRxiv* 2021: 2021.08.08.21261768.