

# Diversity Impact on Vaccine Equity (DIVE) in Sri Lanka

March 2022

### Introduction

- This report is the final study of a two-part series for the Diversity Impact on Vaccine Equity (DIVE) programme 2021 – 2022 in Sri Lanka. Verité Media conducted the study on behalf of Minority Rights Group International.
- This study analysed conversations around and attitudes toward Covid-19 vaccine confidence, uptake and access among the Sinhala, Tamil (Sri Lankan Tamils and Hill Country Tamils),<sup>1</sup> and Muslim communities, which are also the main ethnic groups in Sri Lanka. The findings of the study were aimed at informing an online campaign in Sinhala and Tamil to counter rumours, misinformation and mistrust, and promote vaccine confidence and uptake in Sri Lanka.
- Sri Lanka commenced administering Covid-19 vaccines on January 29, 2021.<sup>i</sup> As of January 1, 2022, Sri Lanka has vaccinated 85.25% of the population aged over 16 years (64.41% of the total population).<sup>ii</sup> Sri Lanka also began administering booster doses of the Covid-19 vaccine from November 2021. Despite Sri Lanka's high vaccination rates, health authorities have regularly expressed concerns over 'misinformation-fuelled hesitancy' toward Covid-19 vaccines.<sup>iii</sup>
- Against this backdrop, the study evaluated information gathered via two methods. The first method involved the use of social media listening

and monitoring tools to track and understand online conversations on Covid-19 vaccine confidence, uptake and access among Sri Lanka's main ethnic groups. The first study conducted by Verité Media evaluated online conversations from January 1 to October 31, 2021 on Facebook and Twitter. The findings of this study were published in *Diversity: Impact on Vaccine Equity (DIVE) in Sri Lanka: November 2021.* 

The second method related to conducting a faceto-face survey to triangulate the findings from monitoring social media, due to limitations in social media access and usage. According to the 2020 Annual Report published by the Central Bank of Sri Lanka, the country's internet penetration was 79.9 per 100 persons by the end of 2020.<sup>iv</sup> The 2020 Computer Literacy Statistics by the Department of Census and Statistics reported on the distribution of internet use based on the household population (aged 5 – 69) by sector.<sup>v</sup> Accordingly, 54.5% of the household population in the urban sector used the internet, while internet usage in the rural and estate sector was 33.3% and 13.9% respectively.<sup>vi</sup> Notably, members of the Hill Country Tamil community fall largely within the estate sector with evidently low internet usage. Thus, the survey enabled Verité Media to reach population groups that may not use and/or have access to social media and/or may not have been captured in the social media monitoring.

Sri Lankan Tamils are described to distinguish them from Hill Country Tamils, who consist mainly of descendants of immigrants from India who were brought to work on Sri Lanka's coffee, tea and rubber plantations between 1837 and 1939. The community is identified in various ways: as 'Indian Tamils', 'Indian-origin Tamils' or 'plantation Tamils'. Members of the community typically identify themselves as *malaiyaha* Tamils (Hill Country Tamils). This community is also largely situated in tea estates in the Central Province.

- The current study summarises the main observations from the survey that was conducted from December 16, 2021 to January 1, 2022 among 2,476 respondents. The current study also draws on social media monitoring findings from the preceding report for similarities or dissimilarities between the findings gathered by the two methods, wherever the data allows for it.
- Lastly, this study details the online campaign that was conducted to counter misinformation and mistrust and promote vaccine confidence and uptake in Sri Lanka. The campaign strategy was informed by the data gathered via social media monitoring and the survey.

### **Research Methodology**

### Survey design and sampling framework

- The survey was designed to evaluate perceptions and attitudes toward Covid-19 vaccines among the Sinhala, Tamil and Muslim communities. For this purpose, the questions in the survey tested the effect of misinformation, trust in authorities and the potential impact of the virus on the lives of the respondents, among other factors, on Covid-19 vaccine confidence, uptake and accessibility. The survey also gathered relevant socio-demographic data (e.g., age, occupation and education level, among others) to evaluate perceptions and attitudes across different socio-demographic characteristics.
- Data for the survey was collected from 2,479 respondents who were 18 years or older. The survey was administered face-to-face in Sinhala and Tamil, covering the period December 16, 2021 to January 1, 2022.
- A purposive sampling method was used to construct a representative sample from 22 districts in Sri

Lanka. The districts were selected if they had low vaccination rates, or a high concentration of any one ethnic group considered for the study.

- There was an oversample of Tamil and Muslim respondents in selected districts to ensure comparability with the majority Sinhala community. The oversampling was aimed at achieving an equal proportion of each ethnic group assessed in the study. Accordingly, among the sample of n=2,479, 32% of the respondents were Sinhala, 29% were Sri Lankan Tamils, 3% were Hill Country Tamils and 36% were Muslims.
- The Primary Sampling Unit (PSU) was set at the district level. Within the PSU, different sub-sampling units were created in collaboration with public health inspectors to identify Grama Niladhari (GN) divisions with low Covid-19 vaccination rates. A combination of random and snowball sampling methods was used to then identify the respondents. One respondent from each household was selected using the last birthday method i.e., the household member with the most recent birthday was selected to participate in the survey.

### Limitations in the data collection

The findings of the study are specific to the survey data collected from December 16, 2021 to January 1, 2022. Thus, the study does not assess subsequent changes in public perceptions toward the Covid-19 vaccine. Moreover, the survey was conducted in the aftermath of the spread of the Delta variant, which was responsible for a spike in Covid-19 patients and deaths in the country.<sup>vii</sup> The spike in the country's Covid-19 patients and death rates resulted in an accelerated vaccine rollout administered by the triforces and health sector officials.<sup>viii</sup> This context could have influenced responses to some of the questions.

### **Statistical analysis**

The survey data was cleaned by removing respondents who had missing responses or 'I prefer not to answer' responses in required fields, bringing the analysed sample to 2,476 respondents. Open ended responses, such as 'reasons for not getting the vaccine', were grouped together and re-coded. Chi-squared tests were used to assess the association between variables and the outcomes of interest, such as vaccine hesitancy or misinformation relating to Covid-19 vaccines. A p value of less than 0.05 was taken to represent a statistically significant result. Odds ratios were calculated after an association between the variables had been established. Logistic regression models were used to identify the highest contributing information sources towards misinformation. Information sources that had a high degree of association (using a Chi-squared test) with misinformation were first selected for a particular model. The best-fit models were evaluated using McFadden's R-Squared. Sources of information that were statistically significant (coefficients that had a p value less than 0.05) were selected as the primary contributors to a given type of misinformation. The highest contributors were selected by taking the variables with the largest coefficients from the model.

### **Summary of Key Findings**

### Covid-19 vaccine confidence and uptake

- Overall, a vast majority of the respondents—95.6% of the respondents (n=2,476)—had received at least one dose of the Covid-19 vaccine. However, of those who had received at least one dose of the vaccine, 38% had had reservations prior to getting the vaccine.
- Tamil and Muslim respondents were three times more likely to remain unvaccinated. They were also five times more likely to express hesitation prior to receiving at least one dose of the vaccine in

comparison to Sinhala respondents. This finding corresponds with social media monitoring data gathered between January and October 2021 from Facebook and Twitter. Muslim and Tamil social media users were more likely to display low to no confidence (hesitancy) levels compared to Sinhala users.

- Younger people were more likely to be unvaccinated and hesitant prior to receiving at least one dose of the vaccine.
- Respondents who were willing to be vaccinated yet remained unvaccinated were likely to have faced an external barrier that prevented them from obtaining the vaccine (e.g., not having time to go to the vaccine centre).
- These same respondents—those who were willing to be vaccinated yet remained unvaccinated—showed preferences toward certain Covid-19 vaccines (i.e., unwillingness to receive a certain brand of vaccine).
  On social media, selective preference toward vaccines was more evident among Sinhala and Tamil social media users in comparison to Muslim users (irrespective of their vaccination status).

### Misinformation

- The data suggests that respondents who did not get the vaccine had come across health-based misinformation (such as reproductive and sexual side effects) and politicised messages regarding Covid-19 vaccines (such as national or international conspiracy theories in relation to governments). This misinformation had primarily spread through 'conversations with friends and family'.
- Misconceptions about the reproductive and sexual side effects of getting the vaccine were more likely to be believed by respondents belonging to the Muslim community in comparison to Sinhala and

Tamil respondents. Similarly, Facebook and Twitter data for January to October 2021 indicated that Muslim social media users expressed most doubt over vaccine safety compared to Tamil and Sinhala users.

 Overall, respondents belonging to minority ethnic groups (Sri Lankan Tamils, Hill Country Tamils, and Muslims) were more likely to believe in politicised messages relating to Covid-19 and the vaccination process. Similarly, social media monitoring findings revealed that conspiracy related fears were the third most common reservation towards vaccines, and it was higher among Tamil and Muslim social media users.

### **Confidence in authorities**

- Respondents had a higher degree of confidence in state sector healthcare workers than in political figures to best serve the public interest ('to have the public's best interests at heart') when distributing and administering Covid-19 vaccines.
- Tamil and Muslim respondents had lower confidence in the tri-forces and regional government officials (in terms of looking out for their best interests when distributing and administering Covid-19 vaccines.

### **Survey Findings**

A vast majority of the respondents-95.6% of the respondents (n = 2,476)-had received at least one dose of the Covid-19 vaccine. Vaccinated respondents were divided into two groups: (1) those who had received the vaccine with no reservations (57.6%) and (2) those who had received the vaccine but had reservations prior to receiving the vaccine (38%)(Exhibit 1).

### **Exhibit 1:** Distribution of respondents based on their Covid-19 vaccination status



Responses to survey questions:

Q.1.2 Of your family members who live in this household (including yourself), how many have obtained at least one dose of the vaccine?[asked from all respondents, total sample respondents n=2,476]

0.1.4. Prior to taking at least one dose of the Covid-19 vaccine, did you have any reservations to take the vaccine? [asked from respondents who had obtained at least one dose of the vaccine]

0.1.7. If the vaccine were made available to you, would you be willing to take it? [asked from respondents who had not obtained at least one dose of the vaccine]

Note: The study was conducted between 16 December 2021 and 1 January 2022.

- The 4% of unvaccinated respondents were further divided into three groups.<sup>2</sup> Accordingly, group 1 comprised 38% those who were unvaccinated but were willing to get the vaccine; group 2 comprised 35% those who were unvaccinated and were unwilling to get the vaccine; group 3 comprised 27% those who were unvaccinated and were unsure about whether they would obtain the vaccine.
- The study relied on the groupings within vaccinated and unvaccinated respondents to make certain data assumptions regarding vaccine confidence. Accordingly, if the analysis assumes that obtaining the vaccine with no prior reservations is an indicator of high confidence, then more than half of the respondents seemed to express high confidence in the Covid-19 vaccines available in Sri Lanka.
- By contrast, if the analysis assumes that (a) willingness to get the vaccine despite being

<sup>2</sup> It is important to note that the sample size of unvaccinated respondents limits further analysis of this group in terms of ethnicity and other possible contributory factors for not getting vaccinated.

unvaccinated is an indicator of low confidence and (b) unwillingness to get the vaccine is an indicator of no confidence, then there is a large proportion of individuals who appear to be hesitant to receive the vaccine. Further analysis is provided to understand the characteristics of those who show hesitancy.

## Covid-19 vaccine uptake: Who remains unvaccinated?

 Covid-19 vaccine uptake was generally high across all the ethnic groups surveyed. However, respondents from minority ethnic groups were more likely to not have received the vaccine. They were also more likely to have reservations prior to getting vaccinated (Exhibit 2).

**Exhibit 2:** Ethnic grouping and Covid-19 vaccination status of respondents



Note: The study was conducted between 16 December 2021 and 1 January 2022.

- An odds ratio calculation shows that Tamil and Muslim respondents were three times more likely to remain unvaccinated and five times more likely to be hesitant prior to receiving the vaccine in comparison to Sinhala respondents.
- This finding was consistent with the findings from the social media monitoring conducted between January and October 2021 in the preceding study. Accordingly, social media monitoring findings

showed that low confidence (hesitancy) levels were higher among social media users belonging to minority ethnic communities, while a high level of vaccine confidence was more prevalent among social media users belonging to the majority Sinhala community.

- The survey data points to an inverse relationship between the respondent's age and vaccine hesitancy. The degree of vaccine hesitancy appeared to be higher for respondents who were younger. Therefore, on average, unvaccinated respondents tended to be younger in age (median age of below 31 years). By contrast, respondents who had gotten at least one dose of the vaccine without any reservations were likely to be somewhat older.
- An analysis of the survey data revealed that there was some evidence to suggest that respondents who were unvaccinated but were willing to get vaccinated were more likely to have encountered external barriers when trying to access the vaccine (Exhibit 3).

## **Exhibit 3:** Distribution of unvaccinated respondents who faced external barriers and details of these external barriers



Responses to 0.1.6. Did you not get the vaccine due to any of the following practical reasons? [asked from respondents who did not get at least one dose of the vaccine].

Note:

A single respondent could state more than one reason. Therefore, the summation of reasons selected may exceed the total number of respondents.

The study was conducted between 16 December 2021 and 1 January 2022

- By cross-tabulating the survey data, the study looked at potential external barriers that limited respondents' access to vaccines across all ethnic groups (Exhibit 3). The main barriers included: not having time to go to the vaccine centre (13%), feeling [external] pressure to not get the vaccine (7%), unable to receive a vaccine at the centre (6%) and having to stand in long queues (6%).
- An analysis of the survey data revealed that 65% of the respondents (across all ethnic groups) who were unvaccinated but were willing to be vaccinated were more likely to be selective about the Covid-19 vaccine they wanted to receive. In contrast, only 38% and 45% of those who were vaccinated and those who were not and unwilling respectively were selective about the vaccine (Exhibit 4). Respondent preferences regarding certain vaccine brands seemed to have contributed to respondents remaining unvaccinated.
- Notably, social media findings on selective preference of vaccine brands revealed that although the distribution of comments and tweets was relatively similar across all ethnic groups, Sinhala and Tamil social media users appeared to feel more strongly in comparison to Muslim social media users about their preferred brand of Covid-19 vaccine.



## **Exhibit 4:** Percentage of respondents who were selective about the vaccine (by vaccination status or group)

Note: The study was conducted between 16 December 2021 and 1 January 2022.

- Survey respondents across all vaccine groups were more likely to be negatively-selective about the Sinopharm vaccine (Exhibit 5). In other words, respondents were least willing to obtain the Sinopharm vaccine, which was the most widely administered vaccine in the country. This finding coincides with social media monitoring data which indicated that selective preference levels (across all ethnic groups) were highest among users who had preferred Pfizer and/or Moderna vaccines produced by US companies over the China-manufactured Sinopharm vaccine.
- Notably, among the respondents who were unvaccinated but willing to be vaccinated, 53% selected Sinopharm as the vaccine they were least willing to get. Thus, the findings in Exhibit 5 suggest that the unwillingness to get the Sinopharm vaccine may have contributed to vaccine hesitancy among these respondents.

## **Exhibit 5:** Types of vaccines respondents were unwilling to get according to their vaccination status or group



Responses to survey question Q.1.9. Can you name any vaccines you would be/were unwilling to take?

#### Note:

A single respondent could name more than one type of vaccine. Therefore, the total amount calculated within each type of vaccine may exceed the total number of respondents.

The study was conducted between 16 December 2021 and 1 January 2022

### (Mis)Information: Messages and messengers

- Exhibits 6 to 11 set out the findings with regard to the connection between the level of agreement with six popular messages that contained certain types of information/misinformation and (a) behavioural responses in terms of uptake of the vaccine, and (b) ethnicity. The messages were selected based on their prevalence in social media.
- There was strong evidence to suggest that respondents who 'strongly agreed' or 'somewhat agreed' with these six messages were more likely to be unvaccinated or hesitant prior to receiving at least one dose of the vaccine.
- The six messages for which level of agreement tended to correlate with the level of vaccine hesitancy can be categorised in to two types. The first type of message was on health-based beliefs relating to reproductive and sexual concerns. The second type of message was on politicised beliefs regarding Covid-19 and the vaccination process. Notably, the primary disseminators of both types of messages were friends and family members from whom respondents had sought information/advice on Covid-19 vaccines.
- Health-based messages that correlate with the level of vaccine hesitancy among the respondents included the fear of sterility, pregnant mothers experiencing side effects and side effects relating to sexual performance (Exhibits 6 to 8).
- Politicised messages that correlate with the level of Covid-19 vaccine confidence and uptake included messages that the virus is a conspiracy created by powerful countries, vaccines produced by the

West (the US and UK) have higher efficacy levels in comparison to Chinese-manufactured vaccines and that the government's vaccination programme discriminated against certain social segments (Exhibits 9 to 11).

- An analysis of the six messages also revealed the degree to which these messages were accepted by Sinhala, Tamil and Muslim respondents. Accordingly, Muslim respondents were more likely to believe in misconceptions relating to reproductive and sexual side effects of getting the vaccine compared to Sinhala and Tamil respondents. Similar sentiments were expressed by Muslim social media users during the social media monitoring conducted in 2021. Accordingly, while distribution of comments and tweets expressing reservations toward the Covid-19 vaccine were relatively similar across the ethnic groups, Muslim social media users expressed the most doubt over vaccine safety in proportion to Tamil and Sinhala social media users.
- Overall, respondents from minority ethnic communities (Sri Lankan Tamils, Hill Country Tamils, and Muslims) were more likely to believe in politicised messages on Covid-19 and the vaccination process. Of these communities, the Hill Country Tamils and Muslims were more likely to believe that Covid-19 was a conspiracy created by powerful countries and not a dangerous virus. As such, they were less likely to believe in the need for vaccination. This survey finding corresponds with the social media monitoring findings on reservations towards vaccines expressed among social media users. Social media data revealed that 'conspiracy related fears' was the third most common reservation, and it was higher among the ethnic minority social media users.

**Exhibit 6:** Effect of agreeing with the message that 'the Covid-19 vaccine can lead to sterility' on the vaccination status and breakdown by ethnicity



Responses to survey question Q7.2. On a scale of 1 to 5, from 1 being you strongly disagree to 5 being you strongly agree, please state how you rate the following attitudes and beliefs about Covid-19 vaccines. [asked from respondents who had previously heard of the message]

Note: The study was conducted between 16 December 2021 and 1 January 2022

Icon credit: Cuputo; The Noun Project

**Exhibit 7:** Effect of agreeing with the message that 'the Covid-19 vaccine is unsafe for pregnant and lactating mothers' on the vaccination status and breakdown by ethnicity



Responses to survey question Q7.2. On a scale of 1 to 5, from 1 being you strongly disagree to 5 being you strongly agree, please state how you rate the following attitudes and beliefs about Covid-19 vaccines. [asked from respondents who had previously heard of the message]

Note: The study was conducted between 16 December 2021 and 1 January 2022

Icon credit: Cuputo; The Noun Project **Exhibit 8:** Effect of agreeing with the message that 'the Covid-19 vaccine can lead to sexual dysfunction' on the vaccination status and breakdown by ethnicity



Responses to survey question Q7.2. On a scale of 1 to 5, from 1 being you strongly disagree to 5 being you strongly agree, please state how you rate the following attitudes and beliefs about Covid-19 vaccines. [asked from respondents who had previously heard of the message]

Note: The study was conducted between 16 December 2021 and 1 January 2022

Icon credit: Cuputo; The Noun Project

**Exhibit 9:** Effect of agreeing with the message that 'Covid-19 is a conspiracy created by powerful countries and not a dangerous virus' on the vaccination status and breakdown by ethnicity



Responses to survey question Q7.2. On a scale of 1 to 5, from 1 being you strongly disagree to 5 being you strongly agree, please state how you rate the following attitudes and beliefs about Covid-19 vaccines. [asked from respondents who had previously heard of the message]

Note: The study was conducted between 16 December 2021 and 1 January 2022

Icon credit: Cuputo; The Noun Project **Exhibit 10:** Effect of agreeing with the message that 'the Covid-19 vaccines produced by the West (the US and UK) have higher efficacy levels in comparison to Chinese-manufactured vaccines' on the vaccination status and breakdown by ethnicity



Responses to survey question Q7.2. On a scale of 1 to 5, from 1 being you strongly disagree to 5 being you strongly agree, please state how you rate the following attitudes and beliefs about Covid-19 vaccines. [asked from respondents who had previously heard of the message]

Note: The study was conducted between 16 December 2021 and 1 January 2022

Icon credit: Cuputo; The Noun Project

**Exhibit 11:** Effect of agreeing with the message that 'the government's vaccination programme discriminates against segments of the society' on the vaccination status and breakdown by ethnicity



Responses to survey question Q7.2. On a scale of 1 to 5, from 1 being you strongly disagree to 5 being you strongly agree, please state how you rate the following attitudes and beliefs about Covid-19 vaccines. [asked from respondents who had previously heard of the message]

Note: The study was conducted between 16 December 2021 and 1 January 2022

Icon credit: Cuputo; The Noun Project

### Confidence in authorities: Which actors have the public's 'best interests at heart' when distributing and administering the Covid-19 vaccine?

 As illustrated in Exhibit 12 respondents had the least confidence in political figures to best serve the public interest when distributing and administering the Covid-19 vaccine. These figures included President Gotabaya Rajapaksa, Minister of Health Keheliya Rambukwella and other local politicians/ parliamentarians.

 Respondents were more confident in state sector healthcare workers to best serve the public interest when distributing and administering the vaccine. The state authorities in the healthcare sector comprise of public health inspectors, medical officers of health in the area, government doctors and nurses.



### Exhibit 12: Distribution of confidence in authorities

Response to survey question Q.9. On a scale of 1 to 5, from 1 being not at all confident to 5 being very confident, please state how confident you are that the following authorities have your best interests at heart when distributing and administering the Covid-19 vaccine?[asked from all respondents].

Note: The study was conducted between 16 December 2021 and 1 January 2022

- The study used the degree of confidence respondents had in authorities as an indicator of public trust in these authorities in their involvement in the vaccination drive. Thus, the analysis assumed that high confidence in authorities translates to trust in authorities and low confidence translates to mistrust. Accordingly, the findings suggest that respondents were more likely to trust Covid-19 vaccine related engagement led by state authorities in the healthcare sector.
- A closer evaluation of the data revealed varying degrees of confidence among Sinhala, Tamil and Muslim respondents with regard to certain state authority figures. In comparison to Sinhala respondents, Tamil and Muslim respondents had much lower confidence in the tri-forces and regional government officials (i.e., divisional secretaries) to look out for their best interests when distributing and administering the vaccine (Exhibit 13).<sup>ix</sup>



**Exhibit 13:** Distribution of confidence in tri-forces and regional government officials by ethnicity

Note: The study was conducted between 16 December 2021 and 1 January 2022

### Online Campaign Promoting Covid-19 Vaccine Confidence and Uptake

On February 22, 2022, Verité Media launched an online campaign in Sinhala and Tamil to promote vaccine confidence and uptake among Sri Lankan citizens. The campaign was published on the Facebook, Twitter and Instagram handles of two platforms managed by Verité Media, Ethics Eye and FactCheck.lk, and on Verité Research's social media handles.<sup>×</sup>

The findings derived from (a) monitoring social media, (b) the survey and (c) official government data informed the campaign strategy. These findings revealed that misinformation on Covid-19 vaccines was a key contributing factor to low vaccine confidence among certain segments of the population. Thus, the campaign focused on countering rumours and misinformation on and mistrust in Covid-19 vaccines. Notably, there has been a spill-over effect from the low degree of confidence in Covid-19 vaccines; authorities have blamed 'organised' misinformation campaigns for the low turnout of individuals to receive the booster dose.<sup>xi</sup>

The campaign mainly focused on addressing two key health-based misconceptions relating to the vaccine: (1) fear of reproductive and sexual problems that may arise from getting the vaccine (specific to sterility and sexual dysfunction) and (2) fear of adverse side effects from getting the vaccine.

To address these two misconceptions, Verité Media made use of effective and appropriate video clips of Sri Lankan doctors publicly debunking health-based misinformation in the Sinhala and Tamil languages. These video clips were selected as the survey findings showed that the public had a higher degree of confidence in government doctors and nurses than other officials who are part of the vaccination programme.

The campaign targeted Sri Lankan online users who are under 31 years of age. The age threshold chosen was in line with the survey findings, which revealed that the median age of unvaccinated respondents was generally below 31 years. It was also aimed at online users in districts and towns with vaccination rates lower than 60% for the second dose, and districts highlighted in mainstream media for displaying signs of vaccine hesitancy.<sup>xii 3</sup> For this purpose, the districts of Colombo, Kilinochchi, Mullaitivu, Vavuniya, Jaffna, Batticaloa and Kalutara and the town of Kalmunai were selected. To reach the target audience and locations, Verité Media used targeted boosting on Facebook and Instagram.<sup>4</sup>

The reach of the videos on each platform as at 21.03.2022 is summarised below:

| Video  | Launch date | Facebook reach     |                   |               | Twitter impressions                   |                   |               |          |
|--|-------------|--------------------|-------------------|---------------|---------------------------------------|-------------------|---------------|----------|
|  |             | Verité<br>Research | Fact-<br>Check.lk | Ethics<br>Eye | Verité<br>Research                    | Fact-<br>Check.lk | Ethics<br>Eye | IG reach |
| Fears related to<br>sexual problems<br>(Tamil)   | 22.02.2022  | 79,405             | 30,937            | 131           | 473                                   | 187               | 42            | 20,403   |
| Fears related to<br>sexual problems<br>(Sinhala) | 22.02.2022  | 108,215            | 1,196             | 175           | 380                                   | 262               | 46            | 27,296   |
| Fears of adverse<br>side effects (Tamil)         | 10.03.2022  | 1,191              | 4,694             | 193           | (Retweeted<br>from Fact-<br>Check.lk) | 181               | 57            | 11,248   |
| Fears of adverse<br>side effects<br>(Sinhala)    | 10.03.2022  | 4,734              | 2,313             | 1,342         | (Retweeted<br>from Fact-<br>Check.lk) | 946               | 83            | 13,282   |

### Conclusion

This study set out to examine conversations and attitudes toward Covid-19 vaccine confidence, uptake and access in Sri Lanka across Sinhala, Tamil and Muslim groups. The findings of the study revealed that even after two years had passed since Covid-19 was discovered in Sri Lanka, misconceptions preventing high Covid-19 vaccine confidence and uptake persisted. However, these misconceptions are limited to small pockets across the country and are more present among ethnic minorities.

The findings of this study may contribute towards understanding the attitudes and beliefs held by Sri Lanka's main ethnic groups on Covid-19 vaccines. More importantly, the study outlines the effects of these misinformed beliefs, among other factors, on the degree of confidence and uptake of Covid-19 vaccines. It demonstrates that failing to recognise issues around ethnicity and religion in measures to address vaccination hesitancy risks omitting important differences linked to the specific experiences and attitudes of minority communities. Although the findings of the study are specific to the Sri Lankan context, the misconceptions identified in the study may be held by populations across the world. Thus, the findings of this study can better inform countries with similar contextual factors or encountering similar misconceptions on how to design effective communication campaigns and intervention strategies to improve the global uptake of Covid-19 vaccines.

<sup>3</sup> The districts and town targeted were identified as areas with low vaccination rates and/or had displayed signs of hesitancy at the time the campaign was launched. Vaccination rates may have increased since the launch of the campaign in these areas.

<sup>4</sup> Verité Media is not a news publisher and is not exempted from Twitter's political content advertisement policy, and therefore unable to boost Covid-19 related content on Twitter.

### **Endnotes**

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