 Minority Rights Group International worked in partnership with Grand Synergy Development Initiative (GSDI), Bytes for All (B4A), and Verité Research to analyze and understand Covid-19 vaccine confidence, uptake and access across diverse ethnic, religious and linguistic groups in Algeria, Kenya, Pakistan and Sri Lanka. These include indigenous Amazigh in Algeria, Muslim Somalis and other local minority and indigenous communities in Kenya, religious minorities in Pakistan, and Tamil and Muslim communities in Sri Lanka.

The current study evaluates information gathered in each context with two methods. The first method involved the use of social media listening and monitoring tools, CrowdTangle and Brandwatch. The second method served to triangulate the findings from monitoring social media and was different for each setting: a large-scale face-to-face survey in Sri Lanka, 30 radio talk shows in various locations in Kenya, thirteen citizen journalism pieces from different parts of Pakistan, and four focus group discussions (FGDs) with participants inside Algeria or involving diaspora representatives.

Our preliminary findings were published on Diversity: Impact on Vaccine Equality (DIVE) at the end of February 2022.

### KEY FINDINGS

**Across all groups and contexts**

- Vaccine confidence may be a more important barrier to vaccine uptake than access restrictions in all four settings among minority and indigenous communities, although in Pakistan data suggests significantly higher confidence in Covid-19 vaccines among minority communities: 64 per cent of minority interviewees reported this versus 38 per cent in the social media data by majority social media users.

- Preferences toward a certain Covid-19 vaccine (i.e., unwillingness to receive a certain brand of vaccine) is not as common, but those who have preferences are less likely to get vaccinated with Chinese-produced vaccines (Sinopharm and Sinovac).

- Doubt over vaccine safety is the most common concern among all groups in all four settings, followed by conspiracy theories, concern over vaccine efficacy and religious reasons.

- Misinformation was widespread among both majority and minority communities in all four settings through social media and word of mouth, and sometimes led to fears that are specific to a location or a group of people, such as Muslim communities in Kenya not believing that the vaccine is real.

- Access is the least of issues mentioned in all four contexts; however, data suggests existing concerns with language accessibility in Algeria, and issues with access to vaccination centers and lack of availability of second doses of vaccines in Pakistan.

- Distrust in authorities is high and is an existing issue specifically in Kenya, where it also leads to low trust in vaccines.

- Despite high levels of generalized distrust, community and religious leaders and healthcare workers serve as a bridge to create trusted relations, increase confidence in vaccines and tackle misinformation, especially among minority communities in Pakistan, Sri Lanka and Algeria.

### Differences between minorities and majorities in each setting

When data is disaggregated by ethnicity, language and religion, potentially significant differences emerge which may help to explain residual pockets of non-vaccination in Sri Lanka, or the fivefold difference in vaccination rates in different areas of Kenya. Treating diverse populations as homogenous in a misguided attempt to save time or money or to promote efficiency entails a high risk of back-firing and can mean efforts do not reach their intended targets.

- Muslims in Sri Lanka are also more likely to have misconceptions about the reproductive and sexual side effects of getting the vaccine. And generally, respondents belonging to minority ethnic groups (Sri Lankan Tamils, Hill Country Tamils and Muslims) were more likely to believe in politicized messages.
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Differences between minorities and majorities in each setting (cont.)

relating to Covid-19 and the vaccination process in Sri Lanka. For example, Tamil and Muslim social media users were more likely to display low to no confidence and based on the survey three times more likely to remain unvaccinated in comparison to members of the majority Sinhala community.

- Amazigh social media users in Algeria were more likely to express no confidence in Covid-19 vaccines than the general population (28 per cent compared to 18 per cent).

- Muslims in Kenya were significantly more likely to express that the vaccine was not a real vaccine (17 per cent versus 4 per cent among Christians and Somali), a reservation unique to Kenya and not mentioned in the other three countries.

- Among the Amazigh community in Algeria, conspiracy theories were the most frequently mentioned reservation: 25.3 per cent versus only 13 per cent of social media users from the general population.

- Access to information in all languages in Algeria demonstrated some limitations, as official online sources did not provide information on Covid-19 vaccines in Tamazight, an official language in Algeria, but made it equally available in Arabic and French, the latter not being an official language. The impact of this on the Amazigh community members who did not speak French or Arabic well was exacerbated by the fact that the authorities prevented information circulating about the vaccine in almost all unofficial sites to avoid fake news.

- In Sri Lanka, Tamil and Muslim respondents had lower confidence in politicians and regional government officials when distributing and administering Covid-19 vaccines.

METHODOLOGY

The findings of this study are the result of social media monitoring conducted on Facebook and Twitter covering a period of 12 months starting from each countries’ vaccination rollout or kick-off vaccination campaigns and to date (around January 2021 — March 2022).¹

For this report, a sample of n= 2,727 Facebook comments (Algeria = 510, Kenya = 517, Pakistan = 424, Sri Lanka = 1,276)² were analyzed with respect to four sentiments: Covid-19 vaccine confidence; reservations towards the vaccine; access to vaccines; and distrust in health and other government authorities regarding the administration and dissemination of information related to the vaccine. Facebook comments were selected for evaluation based on the criteria mentioned above and were later disaggregated based on religion, language and/or ethnicity.

Citizen journalism pieces in Pakistan and radio talk shows in Kenya were later analyzed based on the four sentiments mentioned above and disaggregated in the same manner. As a result, we selected a total of 213 comments from the on-ground data in Pakistan and 199 comments from radio talk shows from panel members/guests and listeners in Kenya.

In Sri Lanka, survey data 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 from 16 December 2021 to 1 January 2022.

In Algeria, the data from FGDs was gathered from four specific sub-groups, Kabyle (the largest Amazigh group living mostly in northern Algeria), Chaouis (mostly eastern Algeria), Mozabite (mostly central and southern Algeria, who maintain separate religious traditions and follow Ibadism) and a focus group with Amazigh women, to highlight potential differences or discrimination in access and confidence in Covid-19 vaccination by language, ethnicity, region, gender and socio-economic conditions.

We also conducted targeted analysis of the social media networks of Aayane Council in the southern Wilaya (governorate) of Ghardaia, Algeria, to ensure balanced data.

Limitations in data collection

The findings of the study are specific to the period of January 2021 – February 2022 and thus do not assess subsequent changes in public perceptions toward the Covid-19 vaccine.

In addition, part of the report limits its insights to the distribution of Facebook comments and tweets among specific social media users and is not representative of the communities.

The sampling method also does not guarantee an unbiased representation of social media users. It is likely that those with higher levels of confidence were less likely to comment on posts and would therefore be under-represented in the sample.

Due to lack of access to internet among minority communities, which often reside in remote locations in Pakistan, the Facebook data analyzed mainly represents the views of the Sunni Muslim population (96 per cent), later referred to as the majority community and used as a basis for comparison with findings from minority communities through citizen journalism pieces.

It is important to note that while Sunni Muslims represent the majority community in Pakistan, there are other Muslim communities, such as Shi’a and...
Ahmadiyya which are Muslim minorities. Thus, social media users identified as Muslim are not necessarily Sunni Muslims, as there is a possibility that they belong to a minority Muslim community.

Data collected from citizen journalism pieces represents information from diverse minority communities but in various proportions, and therefore cannot be considered representative of all ethno-religious minorities in Pakistan. Rather, the data indicates common trends among the communities surveyed.

Identification of the Amazigh community both by names and language also had its limitations. As many Amazigh (particularly younger people and men) in Algeria often use Arabic and French, especially on social media, and information on the health crisis was shared less frequently in Tamazight, this limited the chances of collecting comments from the Amazigh community based on language. And although identifying Amazigh by names was more successful, as some Amazigh people have Arabic names, there is a possibility some members of the Amazigh community were either not included or not identified in the data.

**FINDINGS**

**Confidence level**

Vaccine confidence dominated all conversations across various data sources, which leads to a conclusion that this may be a more important barrier in all four settings to vaccine uptake among minority communities than access restrictions.

For example, Tamil and Muslim social media users in Sri Lanka were more likely to display low to no confidence and based on the survey, three times more likely to remain unvaccinated in comparison to members of the majority Sinhala community.

Amazigh social media users were more likely to express no confidence in Covid-19 vaccines than the general population, 28 per cent compared to 18 per cent (Figure 1).

The overall pattern in Kenya suggests that Muslim social media users have a higher level of doubt but are less likely to be determined not to get vaccinated. On the other hand, Somali social media users were more likely to express high confidence (Figure 2).
In Pakistan, however, collected data suggests significantly high confidence in Covid-19 vaccines among minority communities: 64 per cent of minority interviewees reported this versus 38 per cent in the social media data by majority social media users. A significant finding of the interviews that was not reflected in the social media data, was that most people from minority communities in Pakistan opted to vaccinate due to economic hardships (linked to work requirements for vaccinations) and government pressures. Preferences toward certain Covid-19 vaccines, or unwillingness to receive a certain brand of vaccine, was less likely to be mentioned. However, when mentioned, those who indicated preferences were more likely to be negatively selective about the China-manufactured vaccines.
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(Sinopharm in Sri Lanka and Sinovac in Algeria). This is especially true in Sri Lanka and Algeria, where of those who expressed selective preference, this number varied between 40 to 55 per cent.

This means that a proportion of people in Algeria and Sri Lanka were least willing to obtain one of the most widely administered vaccines in their countries.

**Reservation**
Doubt over vaccine safety is the most common concern among all groups in four settings and in some instances reached over 40 per cent of all reservations, for example in Sri Lanka among Muslim communities.

Muslims in Sri Lanka are also more likely to have misconceptions about the reproductive and sexual side effects of getting the vaccine. And generally, respondents belonging to minority groups (Sri Lankan Tamils, Hill Country Tamils and Muslims) were more likely to believe in politicized messages relating to Covid-19 and the vaccination process in Sri Lanka (Figure 3).

**Figure 4**: Reservations towards Covid-19 vaccines by ethnicity/religion in Pakistan

<table>
<thead>
<tr>
<th>Reservation</th>
<th>Minority community</th>
<th>Majority community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doubt over vaccine safety</td>
<td>25%</td>
<td>14%</td>
</tr>
<tr>
<td>Trust in natural immunity</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>Virus is not real, no need for vaccine</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>14%</td>
</tr>
<tr>
<td>Conspiracy related fears</td>
<td>1%</td>
<td>12%</td>
</tr>
<tr>
<td>Doubt over vaccine efficacy</td>
<td>0%</td>
<td>11%</td>
</tr>
<tr>
<td>Religious reasons</td>
<td>0%</td>
<td>8%</td>
</tr>
</tbody>
</table>

In some cases, doubt over vaccine safety was the only serious reservation mentioned, such as among religious minority communities in Pakistan (25 per cent), and as they also have quite high confidence, they tend to have lower reservations. Although many have had reservations due to widespread misinformation, this has been tackled quickly with the help of community and religious leaders (Figure 4).

In fact, misinformation was widespread among both majority and minority communities in all four settings through social media and word of mouth, and sometimes led to fears that are specific to a location or a group of people. For example, Muslims in Kenya were significantly more likely to express that the vaccine is not real (17 per cent versus 4 per cent among Christians and Somalis each), a reservation unique to Kenya and not mentioned in other three countries.

Conspiracy theories, concern over vaccine efficacy and religious reasons are second most common reservations. And among Amazigh community members, conspiracy theories were the most frequently mentioned reservation: 25.3 per cent versus only 13 per cent of social media users from general population.

The survey in Sri Lanka confirmed that respondents who did not get the vaccine had come across health-based misinformation (such as rumours around the reproductive and sexual side effects) and politicized messages regarding Covid-19 vaccines (such as national or international conspiracy theories in relation to governments).

**Access to vaccines**
While access to vaccines was the least common theme across various data sources in all four contexts, our findings indicate some existing issues.

For example, in Algeria the issue was related to access to information, where official online sources would not provide information on Covid-19 vaccines in Tamazight, an official language in Algeria, but would have it equally available in Arabic and French, the latter not being an official language in Algeria.

Our FGD findings confirmed lack of information in Tamazight in other official sources such as TV and radio, and/or indicated that information was not designed for a general audience. On the other hand, local radio stations made a significant effort to share information about Covid-19 vaccination in Tamazight.
Such lack of accessibility or linguistic disparities in health care and in particular fact-based information on vaccines contributes to the risk of minorities having a less well-informed understanding of the issue and as a result lacking facts to counter misinformation.

In Pakistan, minority communities had their own unique issues with access to vaccination. For example, transgender people had to hide their identity at vaccination centers to avoid ridicule and to fit limited queue options designed for men and women only. Difficulty accessing vaccination centers due to distance impacted particularly female and elderly minority community members, although in many interviews it was noted that such issues were resolved by local community leaders.

Distrust in authorities

Distrust in authorities is high across all communities and in all four contexts, especially among minority communities. It is particularly an existing issue in Kenya, where it leads to low trust in vaccines too, equally across Christian majority and Somali and Muslim minorities.

In Sri Lanka, Tamil and Muslim respondents had lower confidence in politicians and regional government officials involved in distributing and administering Covid-19 vaccines. Yet, based on the Sri Lanka survey, respondents had a higher degree of confidence in state sector healthcare workers than in political figures to best serve the public interest when distributing and administering Covid-19 vaccines. This trend was visible in Algeria and Pakistan as well, where community and religious leaders served as a bridge to create trusted relations, increase confidence in vaccine and tackle misinformation especially among minority communities.

CONCLUSION

Evidence about access and confidence levels in Covid-19 vaccines among ethnic, religious and linguistic minorities was limited in Algeria, Kenya, Pakistan and Sri Lanka before launching the research. As a result of this research, we collected data from Facebook, Twitter, face-to-face survey data, radio talk shows, citizen journalism pieces, and FGDs to identify factors that affect vaccine confidence and uptake in the four contexts among minority communities.

In all the locations that we analyzed, misinformation was widespread among both majority and minority communities through social media and word of mouth, which affected confidence levels.

Although reported problems in access were low, they were higher among minority communities and in some cases unique to experiences of minority communities, such as in Pakistan and Algeria. This research shows that a one-size-fits-all approach disregards religion, language and ethnicity, and is therefore at high risk of being partially ineffective and leaving groups behind. In the era of the Sustainable Development Goals, such an approach is outdated and not in line with international commitments made by all UN member states.

On the other hand, evidence shows that community and religious figures play a vital role in building confidence in vaccines and tackling misinformation, which indicates their significance in health-related efforts and in building inclusivity and accessibility among minorities.

Our research suggests that a nationwide effort may reap low results and that a more effective approach would be to invest in local-level efforts, with the visible involvement of trusted health professionals, religious leaders and others not associated with national politics, so reducing the risk of information being discounted or ignored as a result of high levels of distrust.
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Notes


2. In Sri Lanka, the sample includes Facebook comments and tweets, as well as replies to tweets.

3. The Shi’a community is recognized Muslim but can be subjected to sectarian discrimination. The Ahmadi community identify themselves as Muslim, but the Constitution does not recognize them as such.

4. Common reasons reported for the low use of Tamazight are lack of agreement about the alphabet (Latin, Arabic or Tifinagh); limited technical tools to be able to use it on social media (such as keyboard and automatic corrector); exclusively oral knowledge of Tamazight and limited reading/writing skills of a large proportion of the population; poor language trainings in school; and social media communication involving Arab Algerians who do not speak Tamazight.

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Minority Rights Group International

Minority Rights Group International (MRG) is a non-governmental organization (NGO) working to secure the rights of ethnic, religious, and linguistic minorities and indigenous peoples worldwide, and to promote cooperation and understanding between communities. Our activities are focused on international advocacy, training, publishing, and outreach. We are guided by the needs expressed by our worldwide partner network of organizations, which represent minority and indigenous peoples. MRG works with over 150 organizations in nearly 50 countries. Our governing Council, which meets twice a year, has members from 10 different countries. MRG has consultative status with the United Nations Economic and Social Council (ECOSOC), and observer status with the African Commission on Human and Peoples’ Rights (ACHPR). MRG is registered as a charity and a company limited by guarantee under English law: registered charity no. 282305, limited company no. 1544957.

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