minority rights group international

Diversity: Impact on Vaccine Equality (DIVE)

Preliminary findings from Algeria, Kenya, Pakistan and Sri Lanka

Summary

This bulletin reports the impact of diversity in terms of ethnicity, language and religion on Covid-19 vaccine confidence and access in four settings. The project used data scraping methods to review comments about the vaccination on social media platforms, and these were disaggregated using language, language markers, names, and locations to determine which comments were made by different groups. The study is a preliminary report of an ongoing research study but has already revealed:

- Different amounts of information available in majority and minority languages in some settings;
- Differences in vaccine confidence between majority and minority social media users in some settings;
- Differences in reported trust between health authorities/providers and users posting in different languages in some settings; and
- No evidence, as yet, for different levels of access to vaccines or discrimination being a barrier to accessing the Covid-19 vaccine in our research settings.

The picture is still emerging and not totally clear but does suggest that attention to diversity in terms of ethnicity, language and religion is essential when planning any vaccine rollout or vaccine information programme.

Research overview and context

Minority Rights Group International worked in partnership with Grand Synergy Development Initiative (GSDI), Bytes for All (B4A), and Verité Research to monitor social media to track and understand content shared about Covid-19 vaccine confidence, uptake and access across diverse ethnic, religious and linguistic groups in Algeria, Kenya, Pakistan and Sri Lanka. Among these groups are the indigenous Amazigh community in Algeria, Muslim Somalis and other local minority and indigenous communities in Kenya, religious minorities in Pakistan, and Tamil and Muslim ethno-religious groups in Sri Lanka.

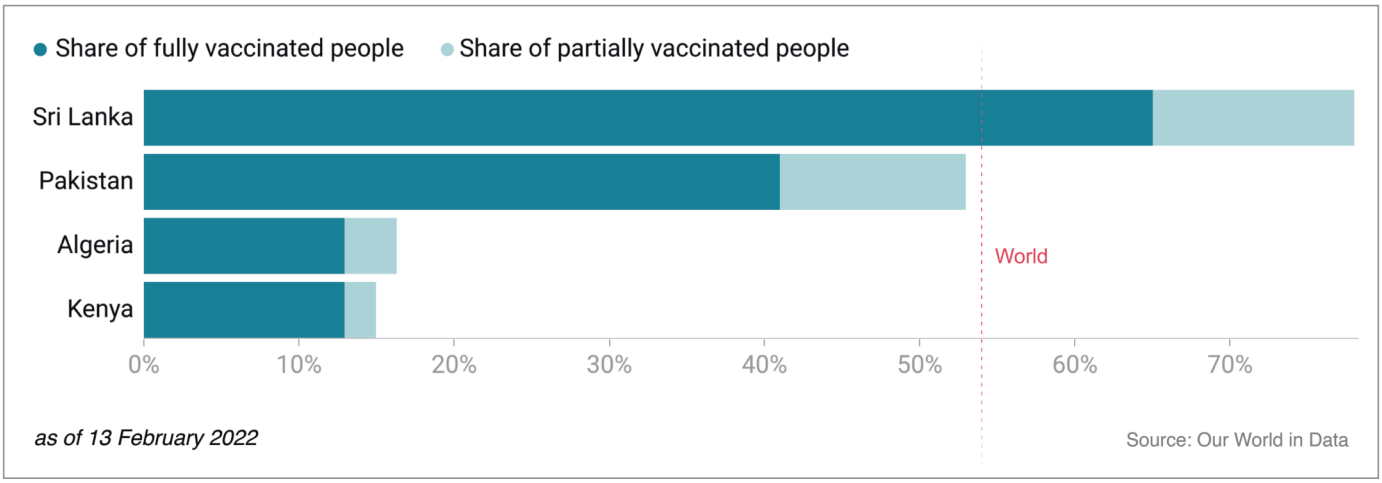
Estimates of the numbers of the Amazigh community in Algeria vary widely, from 17 per cent to 55 per cent (depending on the source).[1] The Amazigh community has been subjected to discrimination and disadvantage in Algeria, and some of these issues have been reflected in how the pandemic has been handled in the country. For example, pandemic-related information has been issued in French and Arabic but not in Tamazight (Amazigh language), although Tamazight is an official language alongside Arabic (whereas French is not).

The ethnic Somali population has been resident in Kenya for centuries. Augmented by more recent refugee arrivals from Somalia, the community experiences discrimination in access to documentation. Their traditional home province, Mandera, has social, educational, economic and health indicators significantly below the national average. According to the 2019 census, approximately 2.8 million Somalis live in Kenya.[2]

In Pakistan all religious minority communities experience threats and hate speech, sometimes violence. Many community members are extremely poor and due to threats also try to avoid regular contact and exposure to majority community members. This particularly affects Hindu and Sikh women. As of the most recent census in 2017, the Christian and Hindu populations constitute 1.59 per cent and 1.60 per cent respectively of the population. Sects within Islam (e.g., Shi'a, Ismaili and Ahmadi) make up a larger proportion, at least 20 per cent, but terminological debates cloud the numbers, especially for the Ahmadi community.[3]

Whilst Sri Lanka has two official national languages, Sinhala and Tamil, few individuals speak both languages fluently. Those who are educated speak English plus one of these two languages. The impact of the decades long-internal conflict is still felt today, with Muslims being scapegoated for allegedly introducing or spreading the virus. The

Figure 1: Share of vaccinated people across the four countries



Tamil and Muslim ethno-religious minorities together comprise 25 per cent of the population.[4] Tamil is considered to be the first language of the Tamil community as well as a majority of the Muslim community of Sri Lanka.

Minority and indigenous communities often report that they do not benefit equally from vaccination programmes in general. Existing data suggests that marginalization significantly increases the risks of missing vaccinations as well as other similar preventative health care services. Religious and other beliefs can also impact on vaccine confidence. Where states primarily issue information in one or two languages, minorities' understanding of the issues and access to information to counter rumors or misinformation may be at risk. However, it is also the case, in at least some documented cases, that health services to remote and minority areas are weaker and access to routine services may not be available to all.[5]

As of today, three of the four countries—Algeria, Kenya and Pakistan—are still lagging behind the global Covid-19 vaccination rate, with Kenya and Algeria being far behind.[6] All four countries, however, have already introduced booster shots to their general population (*Figure 1*).[7]

Methodology

The findings of this study are the result of social media monitoring conducted on Facebook and Twitter over a period of 12 months starting from countries' vaccination rollout or kick-off vaccination campaigns and to date (around January 2021— January 2022).[8]

The social media listening **software tool** and social media monitoring platform CrowdTangle were used to extract data, based on a tried and tested set of keywords relevant to each context.

For this report, a sample of n= 2,252 Facebook comments (Algeria = 395, Kenya = 322, Pakistan = 259, Sri Lanka = 1,276[9]) were analyzed with respect to their sentiment on:

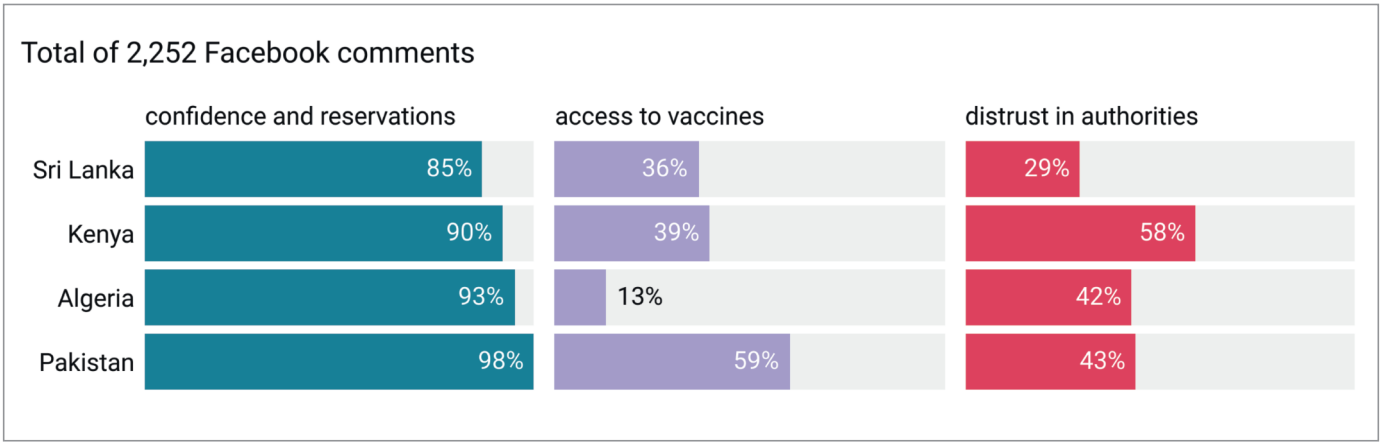
1) Covid-19 vaccine confidence,
2) reservations towards the vaccine,
3) access to vaccines, and
4) distrust in health and other government authorities regarding the administration and dissemination of information related to the vaccine.

Facebook comments were selected for evaluation on the basis of the criteria mentioned above and were later disaggregated based on either language and/or ethnicity.[10] Due to its sample size and ability to identify an ethnicity based on names, the methodology was more successful in Sri Lanka.[11] In Algeria, Kenya and Pakistan the approach had certain limitations, and thus current findings focus either on linguistic differences of the general public (Algeria[12] and Pakistan[13]) or represent overall general tendencies (Kenya[14]).

Therefore, due to partial penetration of social media use among some poor/remote communities the social media findings are also being triangulated by the introduction of one additional method in each country. In Algeria the data is complemented by four focus group discussions (FGDs) with participants inside the country or with diaspora representatives. Due to widespread access to radio among the adult population (urban and rural) in Kenya, radio talk shows have been selected as the data triangulation method in Kenya. In Pakistan, citizen journalism pieces supplement the current research, while in Sri Lanka data triangulation is conducted with the help of a largescale in-person survey.

Finally, this report limits its insights to specific ethno-religious groups and languages in social media and is not representative of the communities as a whole.

Figure 2: Breakdown of comments analyzed in each country



Key findings

Concerns relating to Covid-19 vaccine confidence/hesitancy and reservations dominated online conversations across all four countries (92 per cent on average), while issues of access to vaccines and distrust in the authorities received much less traction.[15] For example, only 13 per cent of comments were related to access to vaccines in Algeria, whereas the number was higher in other contexts, with the greatest traction in Pakistan (59 per cent).

The comments related to distrust in authorities were the lowest in Sri Lanka (28 per cent), while Kenya had the highest in the group (58 per cent) (*Figure 2*).

Confidence levels varied across the countries, ethnic minorities and languages, with 'low' and 'no confidence'[16] in the vaccines being the most frequent mentions among social media users, with a few deviations in Pakistan where differences in languages indicated opposite trends — 'high confidence' in English (63 per cent) and 'no confidence' in Urdu (56 per cent)—and Sri Lanka, with a high level of vaccine confidence being prevalent among social media users belonging to the majority Sinhalese community (42 per cent) (*Figure 3*).

Among the 'low' and 'no confidence' mentions analyzed, three reservations were dominant across all four countries, those that referred to: 1) 'doubt over vaccine safety', 2) 'doubt over vaccine efficacy', and 3) those that referred to 'conspiracy related fears', with the latter

Figure 3: Breakdown of vaccine confidence based on language, ethnicity, or religion

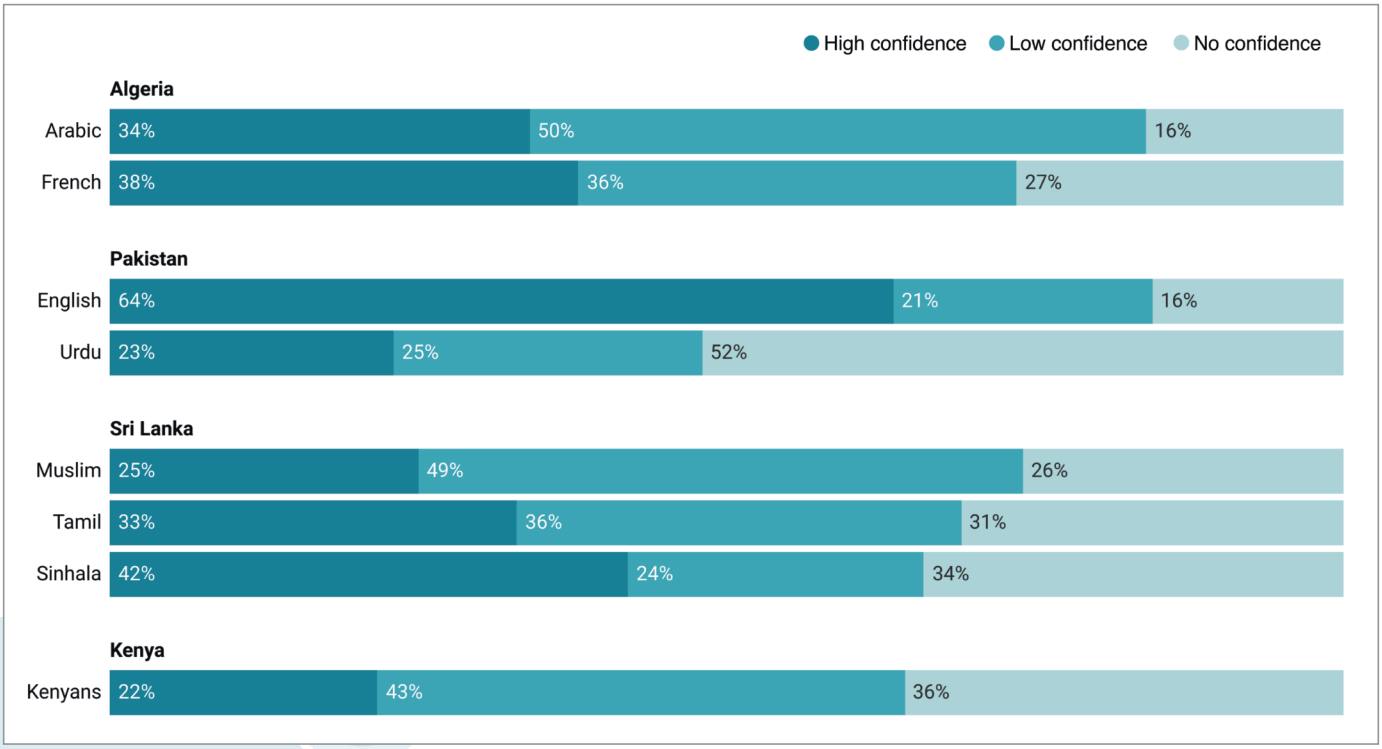
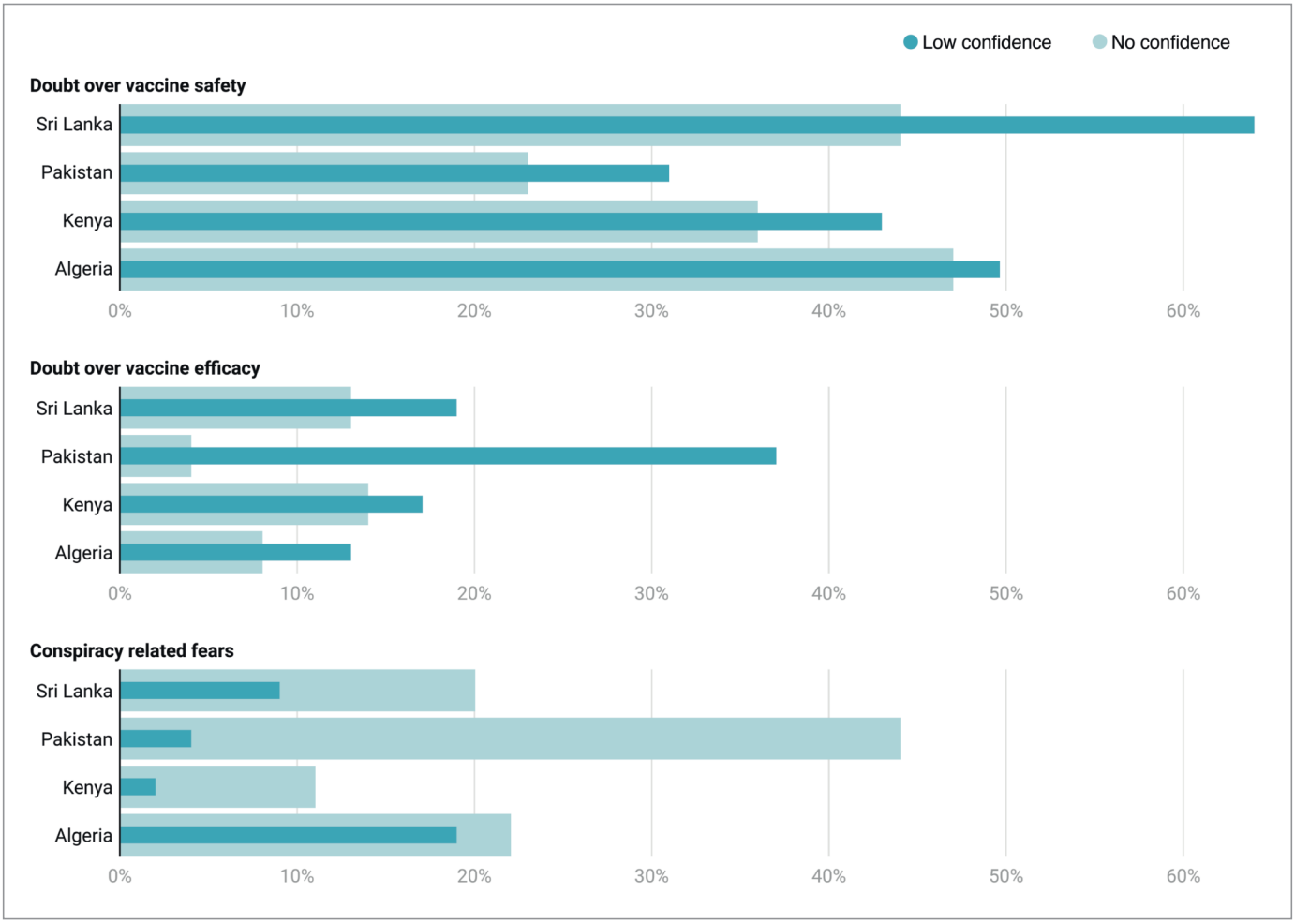


Figure 4: Most common reservations towards Covid-19 vaccines in 'low' and 'no' confidence levels by countries



being most frequent among those social media users who indicated no confidence in vaccines (*Figure 4*).

Offline conversations with members of ethno-religious minorities in Pakistan, specifically with the Hindu community, supported the findings about fears about safety and efficacy of the vaccine, with misinformation spread online and by word of mouth being the main obstacle in getting vaccinated.

Though the above themes were found in content posted in the four countries, some were more common in a specific country.

For example, reservations based on 'religious reasons' received more traction in Kenya and in Pakistan (majority commented in Urdu), and quite insignificant traction in Sri Lanka and Algeria (*Figure 5*).

'Prefer traditional medicine' was also more common in Sri Lanka among those social media users (the majority commented in Sinhala) who expressed 'low' to 'no' confidence in Covid-19 vaccines (12 per cent).

Some, on the other hand, were unique to a specific country; for example, 'freedom of choice' to vaccinate and the belief that the 'vaccine is not real' were unique to Kenya, though traction was usually low for each (*Figure 6*).

Reservations based on ethnicity and language had similar tendencies. However, 'doubt over vaccine safety' dominated mostly in Sri Lanka, and especially among Muslim social media users. In Algeria, close to 30 per cent of comments in both languages expressed the same reservation (*Figure 7*).

Comments in Urdu in Pakistan, on the other hand, indicated the highest proportion of reservations based on 'conspiracy fear.' Although there was a much lower number of comments in Arabic in Algeria (17 per cent), there was still some traction based on 'conspiracy fears.'

It is important to note that some comments indicated 'no reservations,' usually those that demonstrated 'high confidence' in vaccines. Thus, comments in English (Pakistan) had close to 64 per cent of comments without any reservations, followed by French in Algeria (38 per cent).

Figure 5: 'Religious reasons' as a reservation towards Covid-19 vaccines by 'low' and 'no' confidence levels in Kenya and Pakistan

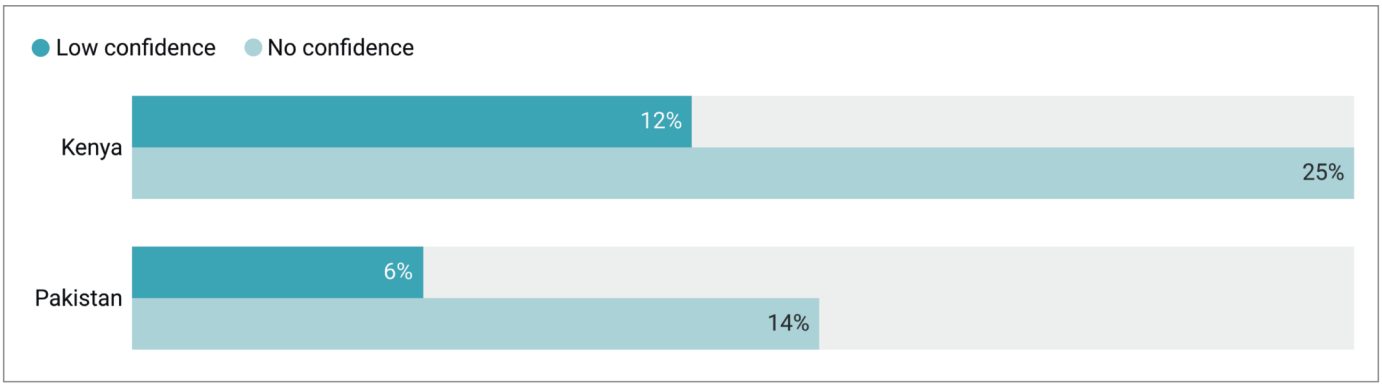


Figure 6: Unique reservations to Kenya in 'low' and 'no' confidence levels

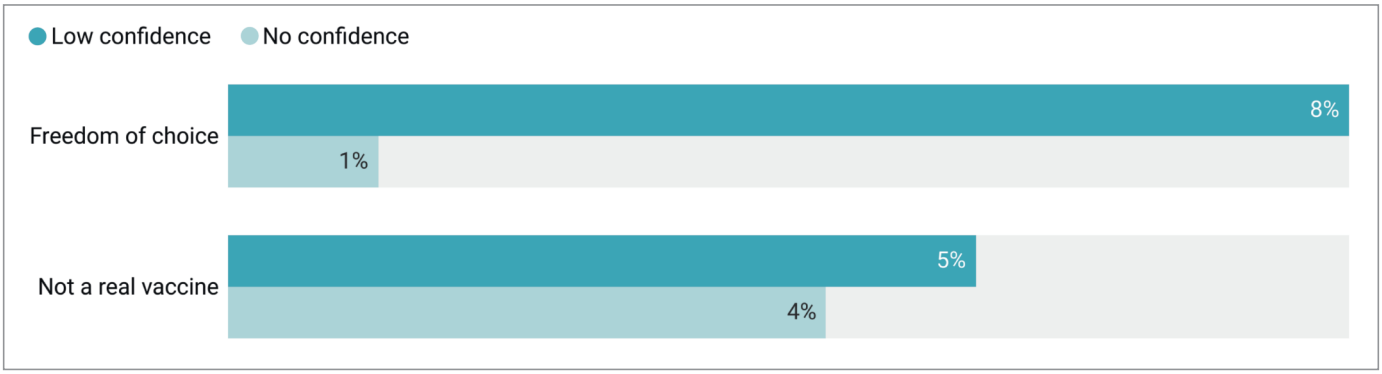


Figure 7: Most common reservations towards Covid-19 vaccines by ethnicity, language, or religions

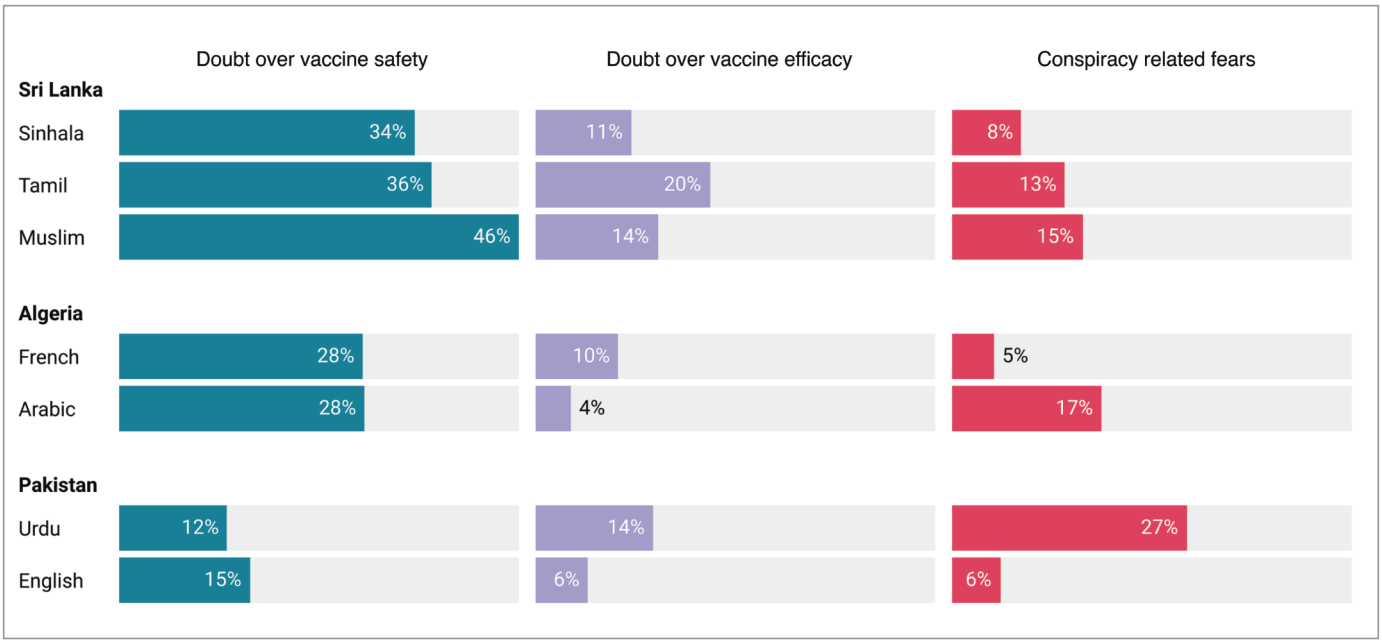
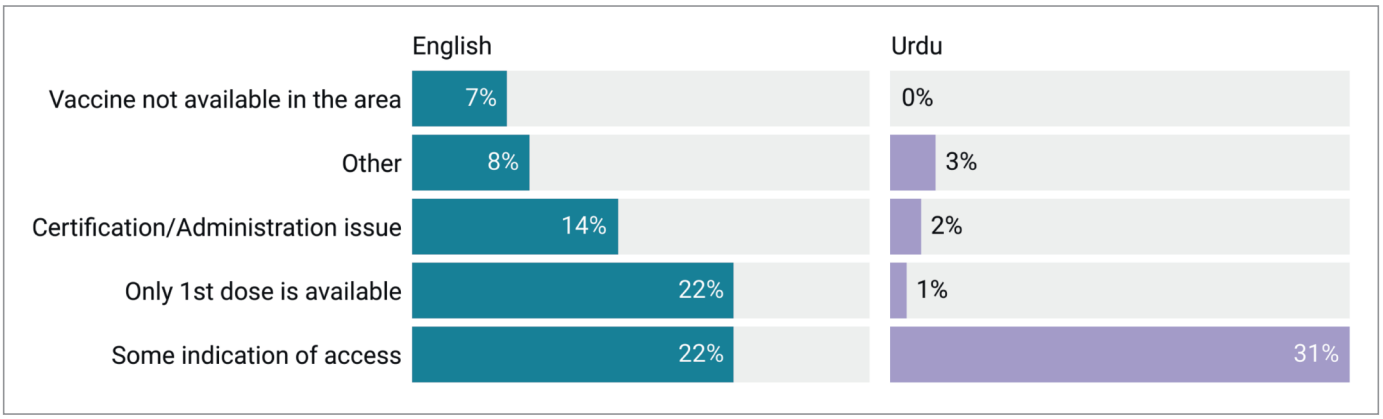


Figure 8: Breakdown of vaccine access based on language in Pakistan



There were also other reservations, such as 'unsafe for pregnant mothers', 'affect fertility/sexual functioning', and 'trust in natural immunity', all of them gaining very low traction in the comments, less than 5 per cent.

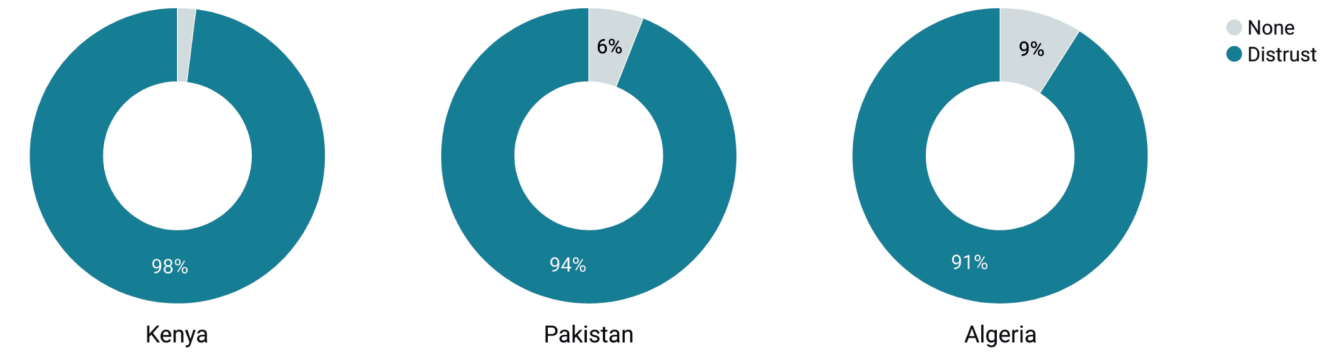
Among the 2,252 posts and comments analyzed, access to vaccination was overall a major issue only in Pakistan (59 per cent), mainly due to issues in receiving the second dose of vaccine and concerning administration and mismanagement in the vaccination registration system. However, most of these conversations were in English, 22 per cent and 14 per cent accordingly. A significant number of comments were also demonstrating 'some indication of access to vaccine' with the majority being comments in Urdu (31 per cent). (*Figure 8*)

Unlike social media comments, offline conversations with ethnic minorities in Pakistan, such as Hindu, did not indicate any issues with access to the vaccine and/or discrimination towards minorities in vaccine distribution.

Although access to vaccination in Algeria was not reflected as an issue in the social media comments (only 13 per cent of comments addressed the topic), access to information in Tamazight has been historically limited. Thus, we analyzed the official information on vaccination and Covid-19 available through the Algerian official news site Algérie Presse Service (APS). The website is accessible in French, Arabic, English and Tamazight, the last being available in the three different alphabets: Arabic, Latin and Tifinagh (Tamazight writing system). Examination of social media posts from all APS official Facebook pages about vaccines in the three languages, using CrowdTangle, for the period from 1 December 2020 to 23 December 2021, showed that information about Covid-19 vaccines is not equally available: 111 posts with 21,184 interactions, consisting of 55 posts in Arabic, 56 posts in French and zero posts in Tamazight.

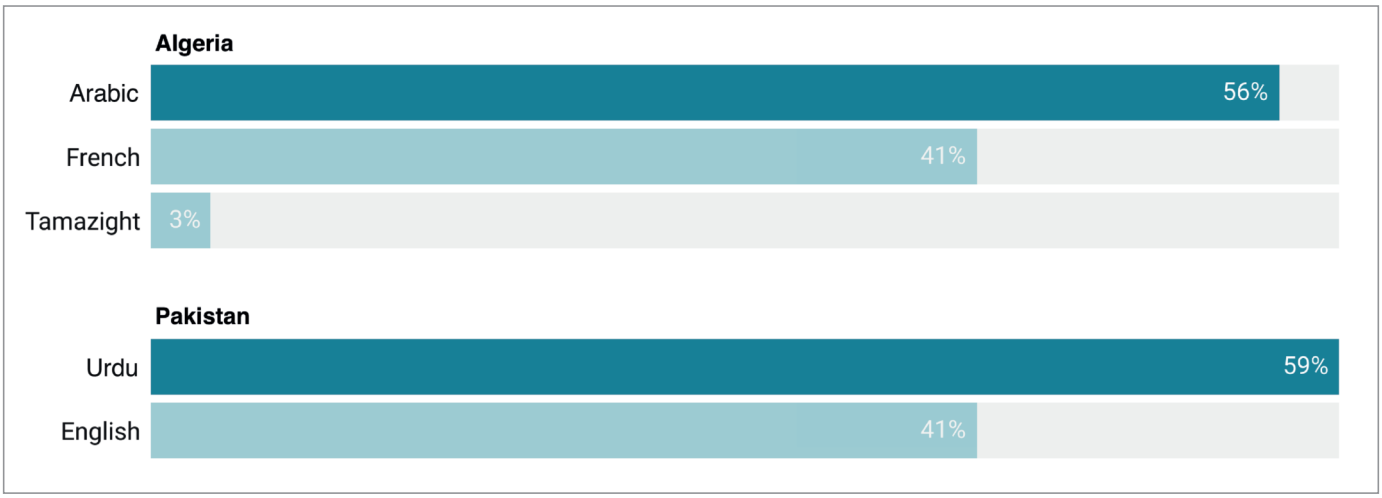
Based on the focus group discussions with Amazigh communities in Kabylia and Ghardaia, radio and TV information in Tamazight generally is not always accessible. Radio is mostly used by the older population; radio general news is spread mostly in French but not in Tamazight, with national radio stations broadcasting mostly in Arabic and TV stations providing insufficient awareness

Figure 9: Breakdown of distrust in authorities based on country



Note: The lowest indicators were in Sri Lanka (28 per cent of the comments that could be assessed), and thus were not included the chart.

Figure 10: Breakdown of distrust in authorities based on language



raising about Covid-19 in Tamazight. Yet local alternative solutions fill the gap, e.g., locally managed radio stations in Ghardaia with programs in Tamazight and channels of the council of Aayane[17] in Mozabite, sharing information in the local variety of the Tamazight language.

Distrust in authorities on average was reflected in less than half of the conversations. Of those that could be assessed, Kenya had the highest proportion of comments indicating distrust in authorities (98 per cent_. Many conversations indicated mistrust in the government in general and specifically in relation to how the vaccination process has been handled (*Figure 9*).

When disaggregated by language, a majority of the comments expressing dissatisfaction of the government or mistrust in the actions of the government were in Arabic (Algeria) and Urdu (Pakistan); although comments in French and English did also include distrust in authorities, these were at a lower rate. It is important to note that the Tamazight comments include a combination of Tamazight and French and consist of only 10 comments of the entire sample (*Figure 10*).

Conclusion

The current Bulletin is an interim report, and findings indicated here may change as we continue our analysis, social media monitoring and data triangulation.

However, our preliminary findings suggest that the amount of information available in majority and minority languages in some settings varies and is not always accessible for the latter. Vaccine confidence between majority and minority social media users in some settings also differs, as well as trust between health authorities/providers and users posting in different languages in some target countries may be an obstacle in vaccination uptake.

Finally, despite some indication of difficulties with access in some countries, the research at this stage did not identify evidence for different levels of access to vaccines and/or discrimination being a barrier to accessing the Covid-19 vaccine. Therefore, it is too early to draw a conclusion on the level of confidence in the Covid-19 vaccine among minority communities across Algeria, Kenya, Pakistan, and Sri Lanka.

Notes

1 Quattrini, S. (2021) 'Algeria: The ongoing struggle of indigenous Tamazight speakers in the wake of the pandemic', in Minority Rights Group, *Minority and Indigenous Trends 2021*
2 Kenya National Bureau of Statistics, '2019 Kenya population and housing census', available at https://www.knbs.or.ke/?wpdmpro=2019-kenya-population-and-housing-census-volume-iv-distribution-of-population-by-socio-economic-characteristics&wpdmdl=5730
3 Bureau of Statistics (2017) *2017 Census of Pakistan,* available at https://www.pbs.gov.pk/content/population-religion
4 Ashani Abayasekara, *'Building a More English-Literate Sri Lanka: The Need to Combat Inequities',* 23 April, 2018, available at https://www ips.lk/talkingeconomics/ 2018/04/ 23/building-a-more-englishliterate-sri-lanka-the-need-to-combat-inequities/ [Accessed 8 December 2021]
5 Tadros, M. and Thomas, C., 2021. *Evidence Review: Religious Marginality and COVID-19 Vaccination - Access & Hesitancy - Social Science in Humanitarian Action Platform, Social Science in Humanitarian Action Platform,* available at: https://www.socialscienceinaction.org/resources/evidence-review-religious-marginality-and-covid-19-vaccination-access-hesitancy
6 Ritchie, H., Mathieu, E., Rodés-Guirao, L., Appel, C., Giattino, C., Ortiz-Ospina, E., Hasell, J., Macdonald, B., Beltekian, D. and Roser, M., 2020. *Coronavirus Pandemic (COVID-19),* Our World in Data, available at: https://ourworldindata.org/covid-vaccinations?country=OWID_WRL
7 Each country had its own timeframe of analysis: Sri Lanka January: January – October 2021, Algeria and Kenya: January 2021 – January 2022, Pakistan: February – December 2021. For more details, please see: https://minorityrights.org/what-we-do/dive/
8 In Sri Lanka, the sample includes Facebook comments and tweets, as well as replies to tweets.
9 In Sri Lanka, the initial selection was also based on the ability to identify ethnicity.
10 The methodology was initially developed and tested by MRG partners Verité Research in Sri Lanka, and later adapted to other contexts.
11 The methodology was initially developed and tested by MRG partners Verité Research in Sri Lanka, and later adapted to other contexts.
12 At the time of writing, an extremely low proportion of online comments in Tamazight compared to Arabic and French (since both Arab and Amazigh communities are often familiar with both languages), and difficulty in identifying the ethnicity of the user, as most Algerians do not have different names based on their ethnic identity, with only a few exceptions, imposed certain limitations to the research.
13 The comments in Urdu and English languages were selected, as the majority of the population that has access to the internet uses Urdu or English language as the mode of communication on social media.
14 This research limits its insights to the distribution of Facebook comments among Muslim, Somali, and Christian social media users. However, the sample of Muslim and Somali comments was proportionally lower from Christian social media users and is not sufficient to generate statistically significant findings, thus at this stage social media findings reported in this bulletin are solely focused on the general narratives without minority /majority disaggregation.
15 A single comment and/or tweet could be assessed for more than one of the targeted areas of the study—i.e., for vaccine confidence, access to vaccines or distrust in authorities. Therefore, the total comments/tweets calculated within each category may exceed the total sample of comments and tweets.
16 Low confidence is defined as those who express some distrust or skepticism towards any of the Covid-19 vaccines available. No confidence is defined as those who express complete distrust towards the vaccine and refuses to take/receive any of the Covid-19 vaccines available.
17 Consisting of religious leaders, doctors and businessmen, the council of Aayane is respected by the community and unofficially accepted by the state.

Acknowledgement

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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.