

UJ-HSRC COVID-19 DEMOCRACY SURVEY

Research briefing Vaccine inequality and hesitancy

Carin Runciman, Kate Alexander, Benjamin Roberts, Mark Orkin, Munyaradzi Nyamukokoko & Narnia Bohler-Muller













Summary of key findings

- Round 5 of the UJ/HSRC Covid-19 Democracy Survey, conducted between 22 October and 17 November 2021 found that 36% of adults aged 18 years and older were fully vaccinated or partially vaccinated at the time of the survey. A further 38% indicated that they were favourable towards taking the vaccine, while 25% were hesitant.
- The level of vaccine hesitancy has declined slightly from 28% recorded in Round 4 of the survey (undertaken between 25 June and 20 July 2021) to 25% in Round 5. This illustrates that the proportion of the adult population that is vaccine hesitant is largely stable.
- While overall the level of vaccine hesitancy is stable there have been some important positive shifts in vaccine hesitancy. The level of vaccine hesitancy among those aged 18-24 years has declined by 16 percentage points and by 9 percentage points among 25-34 year olds. It has, however, remained stable in older age groups.
- Vaccine hesitancy among White adults, who in previous rounds of the survey were the most vaccine hesitant group, has declined by 18 percentage points although the levels of hesitancy within this group remain higher than among Black African or Indian and Asian adults.
- Generational differences, knowledge about vaccines and political trust play an important role in informing vaccine hesitancy.
- Television and radio remain the most dominant sources of information about Covid-19 vaccines among both the vaccinated and unvaccinated. However, the unvaccinated are more likely to draw their knowledge more frequently from online news sources, social media and friends, family and colleagues. This represents a double-edged sword given the higher likelihood of inaccurate information circulating through these sources.
- The report demonstrates important inequalities in vaccination coverage that cannot be explained by corresponding levels of vaccine hesitancy. Indeed, variations in vaccination appear to mirror wider socio-economic inequalities.
- Those earning between R20,001 and R40,000 per month or more have nearly double the rate of vaccination compared to those earning under R1,000 per month; 65% were vaccinated compared to 33%
- Vaccination coverage is highest among those living in the suburbs and lowest in informal settlements and rural areas.
- White adults have the highest levels of reported vaccine coverage and Black African adults have the lowest. Despite the fact that Black African adults are more favourable towards vaccination than White adults.
- Attention needs to be directed towards addressing the barriers to vaccination that access that have prevented the 38% of adults that are unvaccinated but vaccine favourable from getting the Covid-19 vaccine. The nature of these barriers is addressed in an accompanying briefing report. This focus needs to occur alongside ongoing targeted messaging to those that are weakly or strongly hesitant to try and address the concerns they harbour about vaccination.

Introduction

This briefing report presents findings from Round 5 of the University of Johannesburg (UJ)/Human Sciences Research Council (HSRC) Covid-19 Democracy Survey. It focuses on whether people had been vaccinated and whether or not they were likely to take the vaccine in the future. The survey was conducted between 22 October 2021 and 17 November 2021. Only adults living in South Africa were surveyed.

Survey methodology

The online survey was conducted using the #datafree Moya Messenger App. This app, which is operated by Datafree, has six million subscribers 800,000 of whom use the app every day. The survey was available in six languages: English, Afrikaans, isiZulu, isiXhosa, Setswana and Sesotho. English was the most common language used. The survey was fully completed by 6,358 participants via the Moya Messenger app. Most people undertaking the survey did so using a smartphone, access to which has increased rapidly in recent years, with 64.1% of households now able to access the internet via a cellphone (up from 58.7% in 2019).¹ However, there is a skew in terms of who has access to smartphones, particularly between older and younger people. In order to address this, we fielded a supplemental telephonic survey, which was undertaken by Ask Afrika.

The telephone survey supplement was conducted between 28 October 2021 and 17 November 2021, and provided an additional 252 responses from those aged 55 and above. Ask Afrika was provided with key sampling criteria regarding this supplemental sample's demographic, social, and geographic characteristics. In addition, to address an under-representation of White adults in the survey, Ask Afrika also fielded our survey to 23 White adults drawn from their online panel. These cases were integrated with the Moya sample to produce an overall sample size of 6,633 respondents for this round. All of the data was weighted to match Statistics South Africa data on race, education and age, and can be regarded as broadly indicative of the views of the adult population at large. In addition, in Round 5 we incorporated an additional adjustment for vaccination rate by gender to match data provided by the Department of Health for the midpoint of the survey period.²

Level of self-reported vaccination and views about vaccination

In Round 5, participants were asked 'If a COVID-19 vaccine became available to you, would you take it?' They could then select one of the following response options, 'I've already had the vaccine' 'yes, I would definitely get the vaccine', 'I would probably get the vaccine', 'I would probably not get the vaccine', 'No, I definitely would not get the vaccine' and 'Don't know'. The wording of this question is consistent with what was used in Round 3 and Round 4 of the survey.³ For analytical purposes, we collapsed these responses into three categories, namely: vaccinated, favourable or accepting (definitely or probably would take the vaccine), and hesitant (definitely or probably would *not* take the vaccine, plus don't know responses).

¹ Because of the pandemic, StatsSA had to change its data collection method, so the figures are not strictly comparable. <u>http://www.statssa.gov.za/publications/P0318/P03182020.pdf</u>

² <u>https://sacoronavirus.co.za/latest-vaccine-statistics/</u>

³ See Alexander, K., Runciman, C., Roberts, B., Bekker, M. and Bohler-Muller, N. 2021. <u>Vaccine Acceptance and Hesitancy: Findings from the UJ/HSRC COVID-19 Democracy Survey</u>. Johannesburg: Centre For Social Change; Runciman, C., Roberts, B., Alexander, K., Bohler-Muller, N. and Bekker, M. 2021. <u>Willingness To Take A COVID-19 Vaccine: A Research Briefing</u>. Johannesburg: Centre for Social Change.

Figure 1 compares the findings for Round 5 with the two previous rounds of the survey. It must be noted that although the figures between the three rounds are broadly comparable that they cannot be taken as directly comparable. This because of the differing because of the differing approach to the weighting applied in Round 5, detailed above, which was not applied to the Round 4 data. During Round 3 vaccination was not open to the general public so no vaccination adjustment could be made in this instance. During Round 4 vaccination was only available to those aged 50 and above. If the same retro-weighting procedure had been undertaken for Round 4, the proportion of vaccinated adults would probably have been slightly lower, and the figures for favourable and hesitant would, thus, have been higher.

During Round 3, prior to vaccinations being made available to the public, we found that 67% were favourable and 33% hesitant. In Round 4, as vaccination became available for the over-50s, we found that hesitancy had declined slightly to 28%. By Round 5, when vaccination was open to all adult age groups, we found that 36% had vaccinated, the same as the data available from the Department of Health for 5 November 2021, the mid-point in our survey. This is unsurprising due to the weighting adjustment we applied. As a result of people turning out and getting vaccinated, the percentage that were unvaccinated but favourable towards the vaccine declined appreciably (from 61% to 38%). However, the percentage that indicated that they were hesitant remained relatively stable (25%) relative to Round 4. This opens up an important question: who remains hesitant?



Figure 1: Vaccination status and views about vaccination, comparing Rounds 3, 4 and 5 (%)⁴

Factors shaping vaccination, acceptance and hesitancy

The following sections of the report provide a selective analysis of some of the key demographic, class, attitudinal and other factors related to Covid-19 that appear to influence vaccination uptake, vaccine acceptance and hesitancy.

Demographic factors

Age

Older people are more likely to be vaccinated than younger people (Table 1), as we already know from the data supplied by the Department of Health, and, also, the 60+ group are less hesitant than younger people. Compared with Round 4, there is little change in hesitancy among those aged 35 and older, but

⁴ All figures in this report may not add up to 100% due to rounding.

quite a significant decline among the two younger groups. For those aged 18-24 years, hesitancy declined by 16 percentage points and 9 percentage points for the 25-34 age group.

	Vaccinated	Favourable	Hesitant	Total
18-34 years	29	44	27	100
18-24 years	25	47	28	100
25-34 years	32	43	25	100
35-49 years	37	36	28	100
50-59 years	41	37	22	100
60+ years	62	22	16	100

Table 1. Vaccination status and views about vaccination, by age group, Round 5 (row %)

Gender

Table 2. Vaccination status and views about vaccination, by gender, Round 5 (row %)

	Vaccinated	Favourable	Hesitant	Total
Male	33	41	26	100
Female	40	36	24	100
Other	37	26	37	100

Table 2 provides a breakdown of vaccination, acceptance and hesitancy by gender. A higher proportion of women than men have been vaccinated, which reflects what we know from the data provided by the Department of Health, and is similar to what we found in Round 4. However, whereas there was a greater level of hesitancy among women than men in Round 4 (respectively, 30% and 27%), the reverse is the case with the Round 5 survey, as can be seen above, though the differences are small. It follows that a higher proportion of men remain unvaccinated but vaccine favourable, and there is thus a high chance of them becoming vaccinated in the right circumstances.

Race

Table 3. Vaccination status and views about vaccination, by race, Round 5 (row %)

	Vaccinated	Favourable	Hesitant	Total
Black African	35	41	24	100
Coloured	41	28	31	100
Indian or Asian	44	37	19	100
White	44	26	30	100

There is a distinctly higher level of vaccination among White, Indian or Asian and Coloured adults than among Black African adults. In the case of White adults, this difference cannot be accounted for by a lower level of hesitancy. On the contrary, there is greater hesitancy among White adults. In Round 4, we documented that White adults were the most vaccine hesitant population group, with 48% vaccine hesitant at that time. In Round 5, we see that the level of vaccine hesitancy among White adults declined substantially to 30% but it is still higher than that of Black African or Indian or Asian adults. Indeed, Black African adults are the most favourable towards vaccination. Among Coloured adults, the higher vaccination rates relative to Black African adults is similarly unlikely to be related to lower hesitancy rates. Among Indian adults, a large decline in hesitancy (31% in Round 4; 19% in Round 5) was due mainly to lower uncertainty about vaccination, and for many this translated into a greater likelihood of getting the Covid vaccine.

Socio-economic factors

Income

The rate of vaccination increases as income increases with the two wealthiest income groups demonstrating the highest levels of vaccination coverage (Table 4). However, this high level of vaccination cannot be accounted for by lower levels of vaccine hesitancy. Indeed, as Table 4 demonstrates, those earning between R10,001 and R40,000 have higher levels of vaccine hesitancy than those earning under R10,000 per month. Compared to Round 4, vaccine hesitancy amongst those earning between R10,001 and R20,000 and between R20,000 and R40,000 per month seems to have increased. In Round 4, 34% of those earning between R10,001 and R20,000 and R40,000 per month were hesitant in Round 4 and this has now increased to 31%.

	Vaccinated	Favourable	Hesitant	Total
Less than R1,000 per month	33	41	26	100
Between R1,001 and R2,500 per month	39	40	21	100
Between R2,501 and R5,000 per month	40	33	27	100
Between R5,001 and R10,000 per month	42	29	28	100
Between R10,001 and R20,000 per month	43	9	48	100
Between R20,001 and R40,000 per month	65	5	31	100
More than R40,000 per month	74	12	14	100

Table 4. Vaccination status and views about vaccination, by income, Round 5 (row %)

Those earning less than R10,000 a month have lower vaccination levels than higher-income earners, underscoring the importance in identifying and addressing the barriers to vaccination, which is discussed in an accompanying research brief. As the table demonstrates, this comparatively lower level of vaccination cannot be explained by higher levels of hesitancy among low-income earners. Indeed, not only do lower income earners demonstrate lower levels of vaccine hesitancy but levels of vaccine hesitancy has declined slightly (2 to 3 percentage points) since Round 4.

Settlement type

Table 5. Vaccination status and views about vaccination	n, by settlement type, Round 5 (row %)
---	--

	Vaccinated	Favourable	Hesitant	Total
Township or RDP house	38	36	26	100
Backyard room/shack in township	32	43	24	100
Informal settlement	30	46	24	100
Suburban house	46	29	25	100
Flat, apartment or townhouse	42	27	30	100
Rural area	37	44	19	100

Table 5 further illustrates some of the emerging inequalities in vaccination rates by race and class that were outlined above. Levels of vaccination are highest in suburban areas and lowest in informal settlements. Vaccine hesitancy is notably lower amongst people living in rural areas and higher amongst those living in flats, apartments and townhouses. These findings underscore the importance of placing greater emphasis on vaccinating people in townships, rural areas, and, especially, informal settlements.

Employment status

Those employed full-time have the highest rate of vaccination (47%), and students and learners have the lowest rates of vaccination (23%). While the level of vaccination for 'employed full time' is relatively high, the proportion of those who are hesitant in this category increased by 5 percentage points relative to Round 4. There is a lower level of vaccination among the self-employed and a high proportion that are hesitant (38%), which has increased by 6 percentage points since Round 4. Perhaps the most significant finding concerns students and learners. At the time of the Round 4 survey, only 1% had been vaccinated and 42% were hesitant. Now the respective figures are 23% vaccinated and 25% report being hesitant.

	Vaccinated	Favourable	Hesitant	Total
Employed full time	47	25	28	100
Employed part time	36	43	21	100
Self-employed	32	31	38	100
Employed in casual work or piece job	37	33	30	100
Unemployed, looking for work	33	44	24	100
Unemployed, not looking for work	33	39	28	100
Student or learner	23	52	25	100
Other labour inactive	49	31	21	100

Table 6. Vaccination status and views about vaccination, by employment status, Rounds 5 (row %)

Medical aid membership

Table 7. Vaccination status and views about vaccination, by medical aid status, Round 5 (row %)

	Vaccinated	Favourable	Hesitant	Total
Covered	44	32	24	100
Not covered	36	39	25	100

Table 7 is useful because it allows us to check our data with that made available by the Department of Health for insured/uninsured. In the context of medical insurance, the meaning of 'covered by medical aid' and 'insured' are similar and sometimes used as synonyms. Medical aid coverage has declined considerably in recent years and by 2020 only 15.2% of households had medical aid.⁵ We can use medical aid as a proxy for class as it is associated with having a household member in better-paid stable employment. Our Round 4 data showed that 20% of adults with medical aid were vaccinated, twice as many as the unvaccinated. In Round 5 we see that this inequality has narrowed, although there is still a gap of 8 percentage points between those covered by medical aid and vaccinated and those not covered who have been vaccinated (44% versus 36%).

Evaluations of Presidential and Government performance

In Round 4 we found that vaccine acceptance was considerably higher amongst those who rated President Ramaphosa as doing a 'good job' in responding to the pandemic. In Round 5 we see this trend continued. In Round 4, 66% rated the President as doing a 'good job', and in Round 5, 68%

⁵ http://www.statssa.gov.za/publications/P0318/P03182020.pdf

provided the same evaluation. Therefore, the evaluation of the President's performance has remained broadly the same between Rounds 4 and 5.

As Table 8 illustrates, vaccination is higher among those who rate the President as doing a 'good job'. Indeed, the vaccination rate amongst those who believe the President to be doing a good job is more than double than those who believe he is doing a bad job (43% versus 18%). Similarly, vaccine hesitancy is considerably higher than those who rate the President as doing a bad job, and this level of hesitancy has increased from 55% in Round 4 to 63% in Round 5. Among those who rated him as doing a good job or are neutral, hesitancy decreased by 3 percentage points and 5 percentage points, respectively. A similar pattern is evident with regard to evaluations of national government's handling of the pandemic (results not shown). These findings point to the influencing role of confidence in leadership on vaccination rates and vaccine hesitancy.

	Vaccinated	Favourable	Hesitant	Total
Good job	43	42	15	100
Neutral	26	38	36	100
Bad job	18	20	63	100
Don't know	25	26	49	100

 Table 8. Vaccination status and views about vaccination, by evaluation of the presidential COVID-19

 performance, Round 5 (row %)

Self-reported vaccine knowledge

In Round 4 we found that self-reported vaccine knowledge had a bearing on the willingness to vaccinate. In Round 5 we see this finding repeated. Those who report knowing 'a lot' or 'a fair amount' about Covid-19 vaccination have higher vaccination levels than those who say they know 'a little' or 'nothing at all'. Similarly, levels of vaccine hesitancy are almost double amongst those who say they know 'nothing at all' compared to those who say they know 'a lot' (40% versus 21%). This indicates that self-reported levels of knowledge are important in influencing the decision to vaccinate. If self-perceived knowledge can be improved, they are less likely to be hesitant.

	Vaccinated	Favourable	Hesitant	Total
A lot	46	34	21	100
A fair amount	44	34	21	100
A little	30	46	25	100
Nothing at all	24	37	40	100

Table 9. Vaccination status and views about vaccination, by knowledge, Round 5 (row %)

Table 10 analyses where people report getting their information about Covid-19 vaccines from and compares this to our findings in Round 4. Television (71%) and radio (54%) remain the most common mediums people report drawing their information on Covid-19 vaccinations from. This is followed by news sites on the internet or newspapers (43%) and social media (44%). While there is an increase in the use of all mediums of information sources, with the exception of television, it is notable that the largest reported increases were in the use of social media as well as friends, family and colleagues as sources of information.

Table 11 unpacks where people report receiving information about Covid-19 vaccines from based on their vaccination status and views on vaccination. It shows that television and radio were the most common source of information on Covid-19 vaccines among the vaccinated and unvaccinated, whether favourable or hesitant. Furthermore, the unvaccinated (both favourable and hesitant) drew information more frequently from online sources, whether news sites on the internet, newspapers, or social media. The hesitant also drew information more frequently from friends, family and colleagues than the vaccinated. This is likely to be a double-edged sword due to the inaccuracies of the information that may be found on social media or passed around between friends, family and colleagues. It also underscores the importance of the work of the Social Listening Committee in helping to identify and combat vaccine misinformation.

	Round 4 (%)	Round 5(%)	Percentage point increase
Television	71	71	0
Radio	49	54	5
Medical professionals	21	27	6
Government health official	23	27	4
Local government	12	14	2
News sites on internet or newspapers	34	43	9
WhatsApp	23	31	8
Social media such as Facebook and Twitter	34	44	10
Friends, family and colleagues	24	35	11
Flyers, pamphlets, and information sheets	13	21	8
Medical aid	5	7	2
Other	7	10	3

Table 10. Sources of information about vaccination, Rounds 4 and 5 compared (multiple response table, % mentioning each information source)

Table 11. Sources of information about vaccination in Round 5, by status and views about vaccination (multiple response table, % mentioning each information source)

	Vaccinated	Favourable	Hesitant
Television	70	76	67
Radio	52	56	54
Medical professionals	31	26	24
Government health official	29	28	23
Local government	14	16	11
News sites on internet or newspapers	40	44	47
WhatsApp	29	32	32
Social media such as Facebook, Twitter	40	47	46
Friends, family and colleagues	32	34	40
Flyers, pamphlets, and information sheets	20	22	20
Medical aid	7	8	6
Other	8	13	9

Conclusion

This report has shown that vaccine hesitancy declined slightly from 28% recorded in Round 4 of the survey (undertaken between 25 June and 20 July 2021) to 25% in Round 5. This suggests that the overall level of vaccine hesitancy in the country has remained largely stable despite efforts to address public concerns with Covid vaccination. More encouraging is that a significant share of those that reported favourable attitudes towards vaccination in Round 4 had by Round 5 turned out and received their Covid vaccine. Despite this, a large share of the adult population (38%) remain favourable towards vaccination but have not yet taken the vaccine. A separate briefing report analyses some of the barriers to vaccination that this group faces. Understanding and addressing this unfulfilled intention to vaccinate is a crucial priority for decision-makers in coming months.

While the overall level of vaccine hesitancy has remained more or less stable there have been some important shifts in vaccine hesitancy. While just over a quarter (27%) of young people aged 18-34 years report being vaccine hesitant, the level of hesitancy within this group have declined 16 percentage points for those aged 18-24 years and 9 percentage points for the 25-34 age group. However, vaccine hesitancy among older people, those aged 35 years and older, has remained largely the same. Furthermore, vaccine hesitancy among White adults, who in previous rounds of the survey were the most vaccine hesitant group, has declined by 18 percentage points although it is still higher than that of Black African or Indian or Asian adults.

While these shifts are encouraging, with a quarter of the adult population still hesitant about taking a Covid-19 vaccine, it is essential to consider some of the factors contributing to hesitancy. Generational differences as well as vaccine knowledge and political trust appear to be critical. Those who consider themselves well-informed about vaccination are more likely to vaccinate. Television and radio remain the most used sources of information on vaccines. However, those that are hesitant are more likely to draw their information from online sources and family, friends and colleagues. This is likely to be a double-edged sword due to the increased likelihood of misinformation circulating in these spheres. It also underscores the value of the Social Listening Committee in helping to provide accurate and real-time analysis of common misconceptions about vaccination. Furthermore, evaluations of the President's and National Government's response to the pandemic play a critical role in shaping views about vaccination. Those with positive evaluations of the President and National Government's handling of the pandemic are more likely to vaccinate or be favourable towards vaccination.

Critically, this report has drawn attention to some important inequalities in vaccination coverage that cannot be explained by vaccine hesitancy. Indeed the analysis highlights apparent inequalities in vaccination coverage that mirror the contours of socio-economic inequality. Those earning R40,000 per month or more have more than double the rate of vaccination than those earning less than R1,000 per month. Furthermore, there are also variations in vaccine coverage by gender, vaccine knowledge and political trust. This underscores the importance of identifying and removing barriers to vaccination that are discussed in a separate briefing report.

Funding sources

This report is based on research supported by the National Institute for the Humanities and Social Sciences (NIHSS) and by the National Research Foundation (NRF). We are grateful to both funders for providing the resources that made this research possible. The findings expressed in this report represent that of the authors only.