Coronavirus: vaccine misinformation and the role of social media

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Introduction

This report includes findings from a survey of 2,244 UK residents aged 16-75 by King’s College London and Ipsos MORI, conducted on 20-24 November 2020. It finds that:

- 1 in 3 people in (34%) and nearly half (46%) of all 16-34-year-olds say they’ve seen or heard messages discouraging the public from getting a coronavirus vaccine.

- Facebook is by far the top source of such messages, with 1 in 5 Britons (20%) saying they’ve seen this kind of content on the social network.

- A quarter of the population (26%) say they’ve seen or heard Covid anti-vax messages on social media, with people’s friends or family members most likely to have shared them.

- A notable minority of the public also believe conspiracy theories about a Covid-19 vaccine – with belief especially high among younger people and those who get a lot of information on the pandemic from social media platforms. For example:

  - 1 in 7 (14%) believe the real purpose of a mass vaccination programme against coronavirus is simply to track and control the population. This rises to a quarter (27%) of 16-24-year-olds.

  - People who get a great deal or fair amount of information on Covid-19 from WhatsApp (42%) and YouTube (39%) are around three times as likely to believe this.

  - Those who use Twitter (29%) and Facebook (28%) in this way are also more likely to think it is true.

  - 15% – or 1 in 7 – think it’s true that the only reason a coronavirus vaccine is being developed is to make money for pharmaceutical companies. This rises to 39% among those who get a lot of information from WhatsApp and 37% among those who do the same with YouTube.

  - 1 in 8 (13%) do not believe the UK government will make sure the coronavirus vaccine is safe before it is released. This includes 1 in 5 (21%) 16-34-year-olds and around a quarter (26%) of YouTube and WhatsApp users.

And while those who believe particularly damaging conspiracy theories about the health impacts of a Covid vaccine make up a smaller minority, there is still a high degree of uncertainty about these extreme claims. For example, 4 in 10 (42%) say they don’t know whether a Covid vaccine may cause autism in children.

In order to combat the spreading of such misinformation, a majority of the public support at least some form of regulation of social media:

- Two-thirds (67%) are in favour of platforms making it easier to find reliable scientific evidence about vaccines, and the same proportion support financial penalties for companies who do not remove false information.
Covid-19 anti-vax messages are relatively widespread in the UK, and social media appears to be amplifying them.
1 in 3 people (34%) in the UK say they’ve seen or heard messages discouraging the public from getting a coronavirus vaccine.

This rises to nearly half (46%) of all 16-34-year-olds.

Those in social grade AB – who work in higher managerial, administrative and professional occupations – are much more likely (45%) than those in junior or manual occupations (29%) to say they’ve seen such messages.

Note some figures differ from charts due to rounding.
Of the third of the country who say they’ve seen such messages, 58% report seeing them on Facebook – by far the top source cited.

Overall, this amounts to 1 in 5 people (20%) in the UK saying they’ve seen such messages on Facebook.

This high proportion will in part reflect the fact that the platform has a larger user base than other social media companies.

There are far fewer people who report seeing Covid anti-vax messages on other platforms. For example, 19% of those who say they’ve seen them say Twitter was a source, and 17% say Instagram – equal to around 6% of the UK population as a whole.

A similar proportion of the UK public say a friend or family member was a source of such messages.

Note some figures differ from charts due to rounding.
Around 1 in 4 Britons (26%) say they’ve seen or heard Covid anti-vax messages on social media.

Of this group, 42% say a friend or family member shared such messages – equal to around 11% of the population overall.

Among the quarter of the UK who report seeing these messages on social media, 28% say they were shared by a news or lifestyle account and 23% say they were shared by a celebrity or public figure.

**26% of Britons say they have seen messages encouraging the public not to get a coronavirus vaccine on social media. This is who they say shared those messages**

- A friend or family member: 42%
- Other: 31%
- A news or lifestyle account: 28%
- A celebrity or public figure: 23%
- Don’t know: 9%

Base: 614 UK residents aged 16-75 who say they have seen messages encouraging the public to not get a coronavirus vaccine on social media, interviewed 20-24 November 2020
There is a high level of support for at least some form of regulation of social media platforms to combat the sharing of anti-vax content.

Two-thirds (67%) of the public are in favour of such platforms making it easier to find reliable scientific evidence about vaccines, and the same proportion support financial penalties for companies who do not remove false information.

Smaller majorities support platforms removing anti-vax posts (55%) or adding warnings to them (54%).

<table>
<thead>
<tr>
<th>Support</th>
<th>Oppose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social media platforms making it easier to find and read scientific evidence on vaccines, such as articles by experts and scientists</td>
<td>67%</td>
</tr>
<tr>
<td>Financial penalties for social media companies who fail to remove false information about vaccines</td>
<td>67%</td>
</tr>
<tr>
<td>Social media platforms removing posts on vaccines that contradict scientific evidence</td>
<td>55%</td>
</tr>
<tr>
<td>Social media platforms adding warnings to posts that contradict scientific evidence</td>
<td>54%</td>
</tr>
</tbody>
</table>
Most people do not believe conspiracy theories about a Covid-19 vaccine – but a notable minority do, with belief especially high among social media users and younger people.
The UK public are much more likely to say various conspiracy theories about a coronavirus vaccine are false than true – but a notable minority do say they believe them.

1 in 8 (13%) say they don’t trust the UK government to ensure the vaccine is safe, while around 1 in 7 believe the vaccine is only being developed in order to make money for the pharmaceutical industry (15%). A similar proportion (14%) believe that tracking and controlling the population is the real aim of the vaccination effort.

And while those who believe the more extreme conspiracy theories make up an even smaller minority, there is still a high degree of uncertainty about some of these claims. For example, nearly half the population (48%) say they don’t know whether a Covid vaccine may cause infertility, and 4 in 10 (42%) are unsure whether the vaccine might cause autism in children.
Levels of uncertainty decline when some of these statements are worded to suggest that a coronavirus vaccine definitely will (rather than may) have some negative effects.

But even with this change, significant proportions of the public still say they are unsure about various impacts:

- 38% don’t know if it will cause infertility, down from 48% when the question is phrased with “may cause”
- 32% don’t know if it will cause autism in children, down from 42%
- 25% don’t know if it will alter people’s DNA, down from 30%

<table>
<thead>
<tr>
<th>Statement</th>
<th>True</th>
<th>Don't know</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>A coronavirus vaccine may alter people’s DNA</td>
<td>9%</td>
<td>30%</td>
<td>61%</td>
</tr>
<tr>
<td>A coronavirus vaccine will alter people’s DNA</td>
<td>7%</td>
<td>25%</td>
<td>68%</td>
</tr>
<tr>
<td>A coronavirus vaccine may cause infertility</td>
<td>7%</td>
<td>48%</td>
<td>44%</td>
</tr>
<tr>
<td>A coronavirus vaccine will cause infertility</td>
<td>5%</td>
<td>38%</td>
<td>58%</td>
</tr>
<tr>
<td>A coronavirus vaccine may cause autism in children</td>
<td>5%</td>
<td>42%</td>
<td>53%</td>
</tr>
<tr>
<td>A coronavirus vaccine will cause autism in children</td>
<td>6%</td>
<td>32%</td>
<td>62%</td>
</tr>
</tbody>
</table>
1 in 8 (13%) say they don’t believe the UK government will make sure a Covid-19 vaccine is safe before it is released.

Belief in this claim is significantly higher among those who get a great deal or fair amount of their information on the pandemic from certain social media platforms: around 1 in 4 of those who use WhatsApp (27%) and YouTube (25%) in this way do not believe the government will guarantee the safety of the vaccine.

Those aged 16-34 (21%) are more likely than those aged 35-75 (9%) to say they do not believe this claim.

Are the following statements true or false?
The UK government will make sure the coronavirus vaccine is safe before it is released

- True: 67%
- Don’t know: 21%
- False: 13%

% who say they think this statement is false

- WhatsApp: 27% (16-24: 21%, 25-34: 21%, 35-44: 9%, 45-54: 12%, 55-75: 5%)
- YouTube: 25% (16-24: 21%, 25-34: 21%, 35-44: 9%, 45-54: 12%, 55-75: 5%)
- Twitter: 20% (16-24: 21%, 25-34: 21%, 35-44: 9%, 45-54: 12%, 55-75: 5%)
- Facebook: 19% (16-24: 21%, 25-34: 21%, 35-44: 9%, 45-54: 12%, 55-75: 5%)

Base: 1,122 UK residents aged 16-75, interviewed 20-24 November 2020
There is an even bigger difference in opinion between social media users and the population overall when it comes to the claim that a Covid-19 vaccine is being developed purely to make money for pharmaceutical companies.

39% of WhatsApp users, 37% of YouTube users, 28% of Twitter users and 26% of Facebook users say this claim is true – much higher than the 15% of the UK as a whole who say the same.

Are the following statements true or false?
The only reason a coronavirus vaccine is being developed is to make money for pharmaceutical companies

- True
- Don’t know
- False

<table>
<thead>
<tr>
<th></th>
<th>True</th>
<th>Don’t know</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>16%</td>
<td>69%</td>
<td></td>
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</table>

% who say they think this statement is true

Get a great deal or fair amount of information on coronavirus from:

- WhatsApp: 39%
- YouTube: 37%
- Twitter: 28%
- Facebook: 26%

Base: 1,122 UK residents aged 16-75, interviewed 20-24 November 2020
14% of the public say it’s true that the purpose of the coronavirus vaccination effort is simply to track and control the population.

This nearly doubles, to 27%, among those aged 16-24, and triples, to 42%, among those who get a great deal or fair amount of information on the virus from WhatsApp.

Belief in this conspiracy is also much higher among those who use YouTube (39%), Twitter (29%) and Facebook (28%) as key sources of information.

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### Are the following statements true or false?

**The real purpose of a mass vaccination programme against coronavirus is simply to track and control the population**

<table>
<thead>
<tr>
<th></th>
<th>True</th>
<th>Don’t know</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>14%</td>
<td>17%</td>
<td>68%</td>
<td></td>
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</tbody>
</table>

### % who say they think this statement is true

<table>
<thead>
<tr>
<th>Source</th>
<th>Age 16-24 (%)</th>
<th>Age 25-34 (%)</th>
<th>Age 35-44 (%)</th>
<th>Age 45-54 (%)</th>
<th>Age 55-75 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WhatsApp</td>
<td>42%</td>
<td>21%</td>
<td>10%</td>
<td>12%</td>
<td>8%</td>
</tr>
<tr>
<td>YouTube</td>
<td>39%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twitter</td>
<td>29%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facebook</td>
<td>28%</td>
<td></td>
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</table>

Base: 1,122 UK residents aged 16-75, interviewed 20-24 November 2020
1 in 11 people (9%) say it’s true that a coronavirus vaccine may alter people’s DNA.

The proportion who believe this claim is four times as high among WhatsApp users (36%), around three times as high among YouTube users (28%), and around twice as high among Twitter (22%) and Facebook (19%) users.
1 in 5 16-34-year-olds (19%) say it’s true that Bill Gates wants to vaccinate people against coronavirus in order to implant microchips into them – five times as many as the proportion of 35-75-year-olds who say the same (4%).

Overall, 1 in 11 (9%) say they believe this conspiracy, with belief much higher among people who get a lot of information on the pandemic from social media.

Are the following statements true or false?

**Bill Gates wants a mass vaccination programme against coronavirus so that he can implant microchips into people**

- True: 9%
- Don’t know: 21%
- False: 70%

**% who say they think this statement is true**

<table>
<thead>
<tr>
<th>Platform</th>
<th>16-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-75</th>
</tr>
</thead>
<tbody>
<tr>
<td>WhatsApp</td>
<td>35%</td>
<td>19%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YouTube</td>
<td>30%</td>
<td>18%</td>
<td>7%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Twitter</td>
<td>21%</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Facebook</td>
<td>21%</td>
<td></td>
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Base: 1,122 UK residents aged 16-75, interviewed 20-24 November 2020
1 in 14 people (7%) say they think it’s true that a Covid-19 vaccine may cause infertility. This rises to much higher levels among social media users – for example, around a quarter of Twitter (25%) and YouTube (28%) users say they believe this claim.

1 in 5 (19%) 16-24-year-olds also say they believe it, while nobody aged 55-75 says the same.

Almost half the population (48%) say they don’t know whether this claim is true.

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Are the following statements true or false?

A coronavirus vaccine may cause infertility

<table>
<thead>
<tr>
<th>True</th>
<th>Don’t know</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>7%</td>
<td>48%</td>
<td>44%</td>
</tr>
</tbody>
</table>

% who say they think this statement is true

- WhatsApp: 33% (19% of 16-24)
- YouTube: 28% (15% of 25-34)
- Twitter: 25% (5% of 35-44)
- Facebook: 20% (4% of 45-54)

Base: 1,122 UK residents aged 16-75, interviewed 20-24 November 2020
Those who get a lot of information on Covid-19 from Facebook (15%) are three times as likely as the population overall (5%) to say it’s true that a coronavirus vaccine may cause autism in children. Users of other social media platforms are even more likely to believe this claim.

And belief is higher among those with at least one child under 17 at home (9%) than it is among those with no children (4%) present.

Meanwhile, 4 in 10 (42%) say they don’t know whether a Covid vaccine might cause autism in children.
Ipsos MORI interviewed a sample of 2,244 adults aged 16-75 in the United Kingdom using its online i:omnibus between 20 and 24 November 2020. Data has been weighted to the known offline population proportions for age within gender, government office region, working status, social grade and education. All polls are subject to a wide range of potential sources of error.
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