

APRIL 2023

Online health misinformation in the UK

Why it spreads, the impact it has, and how to reduce harm through the Online Safety Bill

**FULL
FACT**

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A Full Fact report on online health misinformation in the UK, from Covid-19 to other health conditions, including cancer, heart disease and mental and sexual health, why it spreads, its offline impact on UK citizens, and solutions that should be urgently included in the Online Safety Bill.

April 2023

Summary

This report by Full Fact looks at online health misinformation in the UK.

Health misinformation is false or misleading content that relates to physical or mental health conditions or symptoms, or medical treatments or interventions. This can take the form of medical misinformation or, in some contexts, involve misinformation linked to health statistics.

We know that health misinformation is not a new phenomenon, but we do know that the internet has fundamentally changed the way we communicate and share information, and that has increased the rate at which harmful health misinformation spreads.

In this report we gather research and expertise from academics and health professionals to look at why and how health misinformation spreads, including the design choices of online platforms, the media literacy deficit in the UK, a lack of trust in public institutions and science, and the compelling nature of misinformation.

The Covid-19 pandemic highlighted the very real harms that can result from health misinformation online, and how in times of crisis, information vacuums can fuel the spread of harmful misinformation.

This report goes beyond looking solely at Covid-19 misinformation, to look at other forms of health misinformation: where they came from, how they spread, and their impact on individuals. This includes cancer treatments, vaccinations, fertility and pregnancy, heart disease medication, mental health conditions and sexually transmitted diseases.

Finally, we present solutions that would help to tackle the spread and impact of health misinformation. Full Fact is urging the Government to strengthen regulation of online platforms in the Online Safety Bill as a matter of urgency. This includes requiring platforms to undertake adult risk assessments, to have clear policies on how they will tackle health misinformation, and to undertake media literacy. Ensuring that internet companies have a clear and responsible policy on harmful health misinformation in their terms of service, that they transparently assess risk to all users and that they play their full part in helping users make informed decisions on matters like health are vital, not just to protect us all from harm, but also to protect our freedom of expression.

Additionally, we consider where research could be taken forward by academics, and where action could be taken by Government to improve public messaging and the media to ensure balanced reporting.

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Introduction

Since early 2020 Full Fact has worked to combat the harmful misinformation surrounding the Covid-19 virus, including false information about how to cure or protect oneself. Over the past three years we have built up a clear picture of the impact that Covid-19 misinformation has caused society and individuals¹, and how it continues to do so. In the UK, as the country has moved out of pandemic crisis response, there is a temptation to adopt a mindset that the need to address harmful health misinformation has receded. For the Government and other actors this would be a grave mistake to make.

This report, *Online health misinformation in the UK*, looks at the wider reality. We go beyond focusing solely on Covid-19 misinformation to look at misinformation surrounding other health conditions, including cancer treatments, vaccines, fertility and pregnancy, heart disease medication, mental health conditions and sexually transmitted diseases.

With insight, research and expertise from academics and health professionals, we look at why health misinformation spreads, and consider the offline impacts it has on UK citizens. We present solutions that should be implemented in the Online Safety Bill as a matter of urgency to protect us from harmful health misinformation, provisions that would in turn protect our freedom of expression online. In addition we look at what further action could be taken by academics, government and the media.

This is not a niche policy issue that can simply be ignored. Full Fact polling has highlighted that 74 percent of people are worried about the spread of misinformation and the majority of people want the Government to take action.²

What do we mean when we talk about health misinformation?

Misinformation refers to the inadvertent spread of false or misleading information, whereas disinformation refers to the deliberate use of false or misleading information to

¹ Full Fact, facts checks on Covid-19, <https://fullfact.org/health/coronavirus/>

² Full Fact, 14 October 2021, 'UK public as concerned by the spread of misinformation as immigration and Brexit and the EU', <https://fullfact.org/blog/2021/oct/uk-public-concerned-spread-misinformation/>

deceive audiences.³ In this paper we focus specifically on misinformation and disinformation relating to health.

Health misinformation is false or misleading content that relates to physical or mental health conditions or symptoms, or medical treatments or interventions. This can take the form of medical misinformation or, in some contexts, involve misinformation linked to health statistics.

Health misinformation has the potential to be harmful and can negatively impact people's physical and mental health and delay the provision of care.⁴ Examples range from a TikTok video being shared that has misleading information about MPox⁵, a Facebook post promoting unevidenced alternative methods to cure cancer⁶, or a viral YouTube video making false claims about vaccine side effects.⁷

Is health misinformation a new phenomenon?

Today, many people associate misinformation as something that exists on social media. However, health misinformation far predates popular use of the internet.⁸⁹

The most famous example of this comes from the 1998 study published in The Lancet which linked the MMR vaccine to autism in children.¹⁰ Though this was later retracted by

³ Full Fact, 2018, 'Tackling Misinformation in an Open Society'

https://fullfact.org/media/uploads/full_fact_tackling_misinformation_in_an_open_society.pdf

⁴ The World Health Organisation, 1 September 2022, 'Infodemics and misinformation negatively affect people's health behaviours, new WHO review finds'

<https://www.who.int/europe/news/item/01-09-2022-infodemics-and-misinformation-negatively-affect-people-s-health-behaviours--new-who-review-finds>

⁵ Full Fact, 9 August 2022, 'Monkeypox isn't just spread by sexual contact'

<https://fullfact.org/health/monkeypox-child-cases/>

⁶ Full Fact, 23 January 2023, 'Insufficient evidence fenbendazole cures cancer says Cancer Research UK' <https://fullfact.org/health/fenbendazole-no-evidence-cancer-cure/>

⁷ Full Fact 12 August 2022, 'YouTuber misinterprets Covid-19 vaccine evidence on children from Singapore' <https://fullfact.org/health/john-campbell-youtube-singapore-children/>

⁸ Cancer Research UK, 6 July 2011, 'There's no conspiracy – sometimes it just doesn't work',

<https://news.cancerresearchuk.org/2011/07/06/theres-no-conspiracy-sometimes-it-just-doesnt-work/>

⁹ Briony Swire-Thompson and David Lazer, April 2020, Annual Review of Public Health, Vol. 41:433-451, 'Public Health and Online Misinformation: Challenges and Recommendations'

<https://doi.org/10.1146/annurev-publhealth-040119-094127>

¹⁰ The Lancet, 28 February 1998, Vol 351, 'RETRACTED Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children'

[https://doi.org/10.1016/S0140-6736\(97\)11096-0](https://doi.org/10.1016/S0140-6736(97)11096-0)

The Lancet and refuted by the scientific community and by the media¹¹, the widespread reporting of the study in print and broadcast media led to a continued public belief in the link between the vaccine and autism and a reduction in parents vaccinating their children against MMR.¹² This is a legacy that can be seen in vaccine hesitancy in the 21st century, and is explored further on page 20.

Throughout the early 2000s we saw this theme continue, with health misinformation around designer babies or the BSE disease which were widely reported and informed public debate, leading to a crisis in confidence in scientific institutions and reporting.¹³ Organisations like the Science Media Centre were set up to renew public trust in science because of the impact bad information can have on people.¹⁴

Misinformation in the internet age

The rise of the internet and social media has fundamentally changed the way we communicate and share and receive information. Because of this misinformation spreads more quickly and has far greater reach than it would have done in the past.

Getting news and information online is in itself not a problem. Having the most up-to-date information on the platforms we most use can be a good thing. We can see this in the way the World Health Organisation (WHO) worked with social media platforms to get the most up to date information on Covid-19 regulations from authoritative sources like the NHS or Government websites on to people's social media feeds.¹⁵

The problem comes from trusted and accurate information being shared on social media platforms alongside false, misleading or harmful content - often indistinguishable from correct and up to date content.

As it stands internet companies are left unchecked with how they tackle harmful health misinformation on their platforms. Discussed in more detail on page 35, the lack of

¹¹ B Taylor, et al., 12 June 1999, The Lancet, Vol 353, 'Autism and measles, mumps, and rubella vaccine: no epidemiological evidence for a causal association'

[https://doi.org/10.1016/S0140-6736\(99\)01239-8](https://doi.org/10.1016/S0140-6736(99)01239-8)

¹² Lewandowsky, S., et al. 2012. Psychological Science in the Public Interest, 13(3), 106–131, 'Misinformation and Its Correction: Continued Influence and Successful Debiasing'

<https://doi.org/10.1177/1529100612451018>

¹³ House of Lords Select Committee on Science and Technology, 23 February 2000, 'Science and Society', <https://publications.parliament.uk/pa/ld199900/ldselect/ldsctech/38/3802.htm>

¹⁴ The Science Media Centre, <https://www.sciencemediacentre.org/about-us/>

¹⁵ The World Health Organisation, 'Combatting misinformation online', <https://www.who.int/teams/digital-health-and-innovation/digital-channels/combatting-misinformation-online>

regulatory oversight in how they approach misinformation can also be a threat to our freedom of expression online.

The sources of health misinformation online

Full Fact's 2020 report, *Health misinformation In Africa, Latin America and the UK: impacts and possible solutions*¹⁶, sets out different sources of health misinformation. One source is bad science actors who hold some medical credentials, and make statements that are unwarranted by evidence, and unverified by the scientific community.

Another source are interest groups that profit from the spread of health misinformation online, including selling books, services, and other products questioning medical evidence, or proposing alternative therapies. And then there are also the 'super-spreaders', individuals who, knowingly or not, propagate misinformation through social media, where they come to reach thousands more viewers.

Health misinformation can impact individuals making decisions about their health, including whether to get vaccinated¹⁷, something Full Fact and others have reported extensively on. This is why it is vital we take health misinformation as a serious threat to public health and find solutions that protect us all from its harmful effects.

¹⁶ Full Fact, July 2020, 'Health misinformation In Africa, Latin America and the UK: impacts and possible solutions' <https://fullfact.org/media/uploads/en-tackling-health-misinfo.pdf>

¹⁷ Loomba, S., et al., 2021, Nat Hum Behav 5, 337–348, 'Measuring the impact of COVID-19 vaccine misinformation on vaccination intent in the UK and USA' <https://doi.org/10.1038/s41562-021-01056-1>

How misinformation spreads online

The internet allows misinformation to spread at speed and this can have an insidious effect on the information environment. Alongside this, there are multiple other factors which allow misinformation to spread far and wide online.

People spend more time online

Social media has fundamentally changed the way we communicate and share information. People spend much more time online, and in June 2022 Ofcom found that UK adult internet users spent 4 hours a day online.¹⁸

In 2022 Ofcom also found that those consuming news via social media are more likely to get news from posts on the platforms rather than directly from news organisations websites or apps.¹⁹ In 2019 Google found that around seven percent of daily searches were health related, equivalent to 70,000 every minute.²⁰

The changes in the way we spend time online highlights the role the internet companies have in providing health information to UK citizens and why it is so important for platforms to better tackle harmful health misinformation online.

Health misinformation is emotive and engaging

A feature of health misinformation is that it is often emotive, engaging, and/or extreme, often eliciting fear, disgust, and surprise in those reading or viewing it.²¹ Research finds that the narratives of misinformation content focuses on personal and negative

¹⁸ Ofcom, 2022, Online Nation,

https://www.ofcom.org.uk/_data/assets/pdf_file/0023/238361/online-nation-2022-report.pdf

¹⁹ Ofcom, 21 July 2022, 'News Consumption in the UK: 2022'

https://www.ofcom.org.uk/_data/assets/pdf_file/0027/241947/News-Consumption-in-the-UK-2022-report.pdf

²⁰ The Telegraph, 10 March 2019, 'Dr Google will see you now: Search giant wants to cash in on your medical queries'

<https://www.telegraph.co.uk/technology/2019/03/10/google-sifting-one-billion-health-questions-day/>

²¹ Soroush Vosoighu, et al, 9 Mar 2018, Science, Vol 359, Issue 6380, pp.1146-1151, 'The spread of true and false news online', <https://www.science.org/doi/10.1126/science.aap9559>

experiences and often uses opinionated language.²² As Covid-19 shows, health crises are particularly charged moments, when emotive stories can be amplified by the public's general state of alertness.

Studies which investigated the type of content that gets the most shares, found that stories which produced strong emotional reactions, such as fear or joy, were more likely to be spread than information-only content.^{23,24} This is something that considered and nuanced messaging from government and public bodies can find difficult to contend with. And though individuals may share or engage with this kind of content with good intentions, once misinformation is accepted as truth, it is difficult to correct.²⁵

Public lack of trust in science

Adherence to health information is not just a matter of empirical truth, but also of trust. A lack of trust in the Government, the pharmaceutical industry or scientists can make people susceptible to misinformation. Studies which review interventions during health crises, such as during the Ebola virus, or on long-established medical consensus around vaccination, make this clear.^{26,27}

The Covid-19 pandemic highlights what can happen when this lack of trust is put to the test. We saw how mistrust can reduce people's compliance with public health guidance, and their willingness to get vaccinated or recommend the vaccine to family and friends²⁸. This mistrust can also lead to people taking seriously extreme claims, including theories

²² Yuxi Wang, et al, November 2019, Social Science & Medicine, Volume 240, 112552, 'Systematic Literature Review on the Spread of Health-related Misinformation on Social Media' <https://doi.org/10.1016/j.socscimed.2019.112552>

²³ William J. Brady et al., 2017, Proceedings of the National Academy of Sciences 114, no. 28:7313–7318 'Emotion Shapes the Diffusion of Moralized Content in Social Networks', <https://doi.org/10.1073/pnas.1618923114>

²⁴ Jonah Berger, 2011, Psychological Science 22, no. 7: 891–893, "Arousal Increases Social Transmission of Information", DOI: 10.1177/0956797611413294

²⁵ Yuxi Wang, et al, November 2019, Social Science & Medicine, Volume 240, 112552, 'Systematic Literature Review on the Spread of Health-related Misinformation on Social Media' <https://doi.org/10.1016/j.socscimed.2019.112552>

²⁶ Annie Wilkinson and Melissa Leach, 2015, African Affairs, 114, no. 454: 136–148 'Briefing: Ebola–Myths, Realities, and Structural Violence' <https://doi.org/10.1093/afraf/afu080>

²⁷ Edward Mills et al., 2005, Journal of Clinical Epidemiology 58, no. 11: 1081–1088, 'Systematic Review of Qualitative Studies Exploring Parental Beliefs and Attitudes toward Childhood Vaccination Identifies Common Barriers to Vaccination', DOI: 10.1016/j.jclinepi.2005.09.002

²⁸ Jon Roozenbeek, et al, 14 October 2020, The Royal Society, 'Susceptibility to misinformation about COVID-19 around the world', <https://doi.org/10.1098/rsos.201199>

that the Covid-19 vaccine is a cover for a plan to implant trackable microchips into people or that the virus was genetically engineered.²⁹

Preventing the harm from health misinformation is not just a matter of getting facts right in the moment. It is also a matter of earning the public's trust in the long term.

Information vacuums

Information vacuums happen when there is a lack of quality information available. This can be acutely during a terror attack, or over a long period as we saw during the Covid-19 pandemic - the impact of which is explored later on in this report on page 15.

People try to make sense of what is happening on social media, and discussion can be quickly dominated by speculation, fear and confusion. It means low quality or partial information, misinformation or disinformation from malicious actors quickly spreads. In 2020 Reuters found that 49 percent of those who said they saw news about Covid-19 on social media say they mostly saw conflicting facts about it.³⁰

This lack of faith in public institutions and increased time spent online can be especially problematic when we are in a period of heightened risk. The WHO finds that health misinformation during periods like this can often negatively impact mental health, increase vaccine hesitancy, delay access to health care, and lead to people feeling social, political, or economic distress.³¹

At present there is nothing in the Online Safety Bill to ensure companies' policies respond effectively during a health crisis, leaving the public vulnerable and exposed to harm. This will be explored further on page 33.

²⁹ Ofcom, 17 December 2021, 'Covid-19 news and information: consumption and attitudes', key findings from week 76,
<https://www.ofcom.org.uk/research-and-data/tv-radio-and-on-demand/news-media/coronavirus-news-consumption-attitudes-behaviour>

³⁰ Reuters Institute, 30 June 2020, 'Social media very widely used, use for news and information about COVID-19 declining'
<https://reutersinstitute.politics.ox.ac.uk/social-media-very-widely-used-use-news-and-information-about-covid-19-declining>

³¹ The World Health Organisation, 1 September 2022, 'Infodemics and misinformation negatively affect people's health behaviours, new WHO review finds'
<https://www.who.int/europe/news/item/01-09-2022-infodemics-and-misinformation-negatively-affect-people-s-health-behaviours--new-who-review-finds>

Media literacy deficit in the UK

The UK has a vast media literacy skills and knowledge gap, which leaves the population at risk of harm. In 2022, Ofcom found that a third of adult internet users were unaware of the potential for inaccurate or biased information online and that 61 percent of social media users who say they are confident in judging whether online content is true or false actually lacked the skills to do so.³²

We are prone to believing information we hear repeated. Full Fact's briefing, *Who Believes and Shares Misinformation*, illustrated how belief formation is influenced particularly by repetition, something psychologists refer to as the "illusory truth effect".³³

One study found that closed groups with strong views can make rumours appear like common sense.³⁴ When a small number of opinion leaders are connected to a large number of followers, but followers themselves lack sufficient other connections to offer clarity by contrast, the views held by a few highly popular individuals can become accepted through a "majority illusion".

There is little understanding about why some individuals or communities are more susceptible to misinformation.³⁵ The Turing Institute has found that most sociodemographic, socioeconomic and political factors make little or no difference at all to a person's vulnerability to believing health misinformation.³⁶ The European Commission's Joint Research Centre sets out that the people that were more likely to be disproportionately affected by Covid-19 misinformation were those who are more conservative about change from the status quo or those who have a higher tendency to make intuitive and spontaneous decisions.³⁷

³² Ofcom, 2022, 'Adults' Media Use and Attitudes report', https://www.ofcom.org.uk/_data/assets/pdf_file/0020/234362/adults-media-use-and-attitudes-report-2022.pdf

³³ Full Fact, February 2020, 'Who is most likely to believe and to share misinformation?', <https://fullfact.org/media/uploads/who-believes-shares-misinformation.pdf>

³⁴ Lerman K, et al, 2016, PLoS ONE 11(2): e0147617, 'The "Majority Illusion" in Social Networks', <https://doi.org/10.1371/journal.pone.0147617>

³⁵ Yuxi Wang, et al, November 2019, Social Science & Medicine, Volume 240, 112552, 'Systematic Literature Review on the Spread of Health-related Misinformation on Social Media' <https://doi.org/10.1016/j.socscimed.2019.112552>

³⁶ The Alan Turing Institute, March 2021, 'Understanding vulnerability to online Misinformation', https://www.turing.ac.uk/sites/default/files/2021-02/misinformation_report_final1_0.pdf

³⁷ The European Commission, Joint Research Centre, 21 February 2023, 'Misinformation on COVID-19: what did we learn?' https://joint-research-centre.ec.europa.eu/jrc-news/misinformation-covid-19-what-did-we-learn-2023-02-21_en

Addressing the UK's media literacy skills gap is vital in protecting us all from harmful health misinformation. Good media literacy is the first line of defence for us all and can make the difference between decisions based on sound evidence, and decisions based on poorly informed opinions. There are currently no provisions in the Online Safety Bill to improve users' media literacy, this must be urgently addressed.

Internet company design choices

The current approaches of different internet companies towards tackling health misinformation on their platforms are very different. Facebook³⁸, LinkedIn³⁹, and YouTube⁴⁰ have freestanding health misinformation policies with varying degrees of detail and examples of prohibited claims. Others, such as Reddit⁴¹, TikTok⁴² and Snapchat⁴³ do not treat health misinformation differently from other types of misinformation under their community guidelines.

It was welcome that during the pandemic many of the largest platforms took action to tackle health misinformation and committed "to the principle that no company should be profiting from Covid-19 vaccine mis/ disinformation".⁴⁴ Many took steps to improve the supply of high quality information from local official sources, as well as announcing specific action to reduce the amount of Covid-19 misinformation. Initiatives like Covid-19 factboxes embedded within platforms, redirecting users to authoritative sources within

³⁸ Facebook Health Centre: <https://www.facebook.com/help/230764881494641>, Facebook Transparency Centre:

<https://transparency.fb.com/en-gb/policies/community-standards/misinformation/>

³⁹ LinkedIn Help: <https://www.linkedin.com/help/linkedin/answer/a1340752>

⁴⁰ YouTube misinformation policies:

https://support.google.com/youtube/answer/10834785?hl=en&ref_topic=10833358,

https://support.google.com/youtube/answer/9891785?hl=en&ref_topic=10833358,

https://support.google.com/youtube/answer/11161123?hl=en&ref_topic=10833358

⁴¹ Reddit security:

https://www.reddit.com/r/redditsecurity/comments/pfyqqn/covid_denialism_and_policy_clarification/.

Reddit help: <https://www.reddithelp.com/hc/en-us/articles/360043513151>. Reddit content

policy: <https://www.redditinc.com/policies/content-policy>

⁴² TikTok newsroom, 28 September 2022, 'An update on our work to counter misinformation'

<https://newsroom.tiktok.com/en-us/an-update-on-our-work-to-counter-misinformation>. TikTok

community guidelines: <https://www.tiktok.com/community-guidelines?lang=en#37>

⁴³ Snapchat, 8 September 2022, 'How We Prevent the Spread of False Information on Snapchat',

<https://values.snap.com/en-GB/news/how-we-prevent-the-spread-of-false-information-on-snapchat>.

Snapchat Community Guidelines:

<https://values.snap.com/en-GB/privacy/transparency/community-guidelines>

⁴⁴ The Department for Digital Culture, Media, and Sport, and The Department for Health and

Social Care, 8 November 2020, 'Social media giants agree package of measures with UK

Government to tackle vaccine disinformation',

<https://www.gov.uk/government/news/social-media-giants-agree-package-of-measures-with-uk-government-to-tackle-vaccine-disinformation>

search results, and giving advertising credits to government and public bodies were used to help improve the supply of authoritative information to users.

As laudable as some of the efforts from the companies are, policies can sometimes be hard to find, and it is either difficult or not possible to see how well or how often these policies are enforced. Based on Full Fact's own experience fact checking online claims, many items of prohibited content escape the net. Companies are also under no obligation to improve or even retain their policies to tackle harmful health misinformation.

This can be seen in the recent decisions by Twitter to abandon the enforcement of its Covid-19 misleading information policy.⁴⁵ This change sets a worrying precedent, with researchers expressing concern that the changes in the platform's approach has led to the volume of toxic material, including anti vaccine disinformation, surging.⁴⁶⁴⁷

False, misleading or harmful content being amplified without seeing different viewpoints could have a real impact on an individual's health. In 2020 the Centre for Countering Digital Hate found anti-vaccination social media accounts had increased 25 percent since 2019, and 5.4 million followers of anti-vaccine accounts are based in the UK.⁴⁸

A lack of oversight in how and why company decisions are made on harmful health misinformation also raises concerns about how our freedom of speech can be protected on the biggest platforms. This will be explored further on page 35.

This is why it is vital that the Online Safety Bill effectively regulates internet company policies on health misinformation and their approaches to protecting their users from harmful content. For too long internet companies' design choices have allowed harmful misinformation posted on their platforms to spread far and wide. Without proper regulation, companies will continue to be able to make their decisions on the bases of commercial interests, over the safety of their users.⁴⁹

⁴⁵ Twitter, 28 July 2022, 'COVID-19 Misinformation',

<https://transparency.twitter.com/en/reports/covid19.html#2021-jul-dec>

⁴⁶ Wired, 'Twitter Is a Megaphone for 'Sudden Death' Vaccine Conspiracies', 16 January 2023,

<https://www.wired.co.uk/article/twitter-sudden-death-vaccine-conspiracies>

⁴⁷ The New York Times, 28 December 2022, 'As Covid-19 Continues to Spread, So Does Misinformation About It',

<https://www.nytimes.com/2022/12/28/technology/covid-misinformation-online.html>

⁴⁸ The Centre for Countering Digital Hate, 2022, 'The Anti Vaxx Playbook',

<https://counterhate.com/wp-content/uploads/2022/05/210106-The-Anti-Vaxx-Playbook.pdf>

⁴⁹ Centre for Countering Digital Hate, 2022, 'Failure to Act - How Tech Giants Continue to Defy Calls to Rein in Vaccine Misinformation', <https://counterhate.com/research/failure-to-act/>

The impact of health misinformation

Health misinformation is abundant online and there is mounting evidence on the impact health misinformation can have on individuals. This includes illness and death from unsafe health interventions and communicable and vaccine-preventable diseases, as well as increased susceptibility to different types of misinformation, or inaction in public policy, as we saw during the Covid-19 pandemic.⁵⁰

However, the recording of health misinformation as a direct causation on health outcomes is limited. This is likely due to individuals not linking the information they are seeing online as the cause, or not considering it inaccurate or harmful in the first place. Academics predict the proportion of harm caused by health misinformation is likely to be higher than what is currently recorded due to the reported rates of people adhering to unofficial medical advice.⁵¹

Covid-19 misinformation is the obvious and recent example of how harmful health misinformation can be to individuals, communities and society. It shows us most clearly why internet companies and social media platforms must be regulated and be required to have effective and proportionate provisions in place to tackle harmful health misinformation.

The following section goes beyond Covid-19 misinformation and considers other forms of health misinformation, how they spread online, and the impact and harm that they can cause. This includes mental health, sexual health, cancer treatments, heart conditions and fertility and pregnancy.

It is important to note that health misinformation is a vast set of areas of research. This briefing is not intended as an exhaustive review of all possible impacts and interventions. Research on health misinformation is constantly being refined and methods for intervention being tested. As our 2020 paper *Health misinformation In Africa, Latin*

⁵⁰ The Council of Canadian Academies, 2023, 'Fault Lines', <https://www.cca-reports.ca/wp-content/uploads/2023/02/Report-Fault-Lines-digital.pdf>

⁵¹ Briony Swire-Thompson and David Lazer, April 2020, Annual Review of Public Health, Vol. 41:433-451, 'Public Health and Online Misinformation: Challenges and Recommendations' <https://doi.org/10.1146/annurev-publhealth-040119-094127>

*America and the UK: impacts and possible solutions*⁵² sets out, there is a lot of variance in the designs and disciplinary traditions adopted across different studies on health misinformation, and in the resources authors have placed in testing the reliability of their metrics. Further research is needed to test the robustness of these findings, and above all, to supplement findings from artificial experiments with field research.

Additionally, some forms of health misinformation take on everyday forms of unsubstantiated public health advice. This report does not have the scope to cover issues like this, including on obesity, diet and nutrition⁵³, alcohol and drugs⁵⁴, or smoking.⁵⁵ That does not mean they are harmless or should not be considered further. Full Fact believes future research on the impact of online health misinformation on public health should be taken forward to improve understanding of its effects and how best we can respond to this kind of misinformation.

Covid-19

Information vacuums

In the very early days of the Covid-19 pandemic there was a lack of clear information about the virus. It took the Government time to set up the right processes to publish accurate and regular information about symptoms and transmission.

Scientific understanding about the virus changed at a rapid pace and so did the information communicated to the public, which added to a sense of general confusion.⁵⁶ This can be seen in public messaging on whether it was harmful to take ibuprofen to

⁵² Full Fact, July 2020, 'Health misinformation In Africa, Latin America and the UK: impacts and possible solutions' <https://fullfact.org/media/uploads/en-tackling-health-misinfo.pdf>

⁵³ Talha Burki, 3 November 2022, The Lancet, Volume 10, Issue 12, P845, 'Social media and misinformation in diabetes and obesity', [https://doi.org/10.1016/S2213-8587\(22\)00318-7](https://doi.org/10.1016/S2213-8587(22)00318-7)

⁵⁴ The World Health Organisation, 20 October 2022, 'Collaboration is key to countering online misinformation about noncommunicable diseases –new WHO/Europe toolkit shows how', <https://www.who.int/europe/news/item/20-10-2022-collaboration-is-key-to-countering-online-misinformation-about-noncommunicable-diseases--new-who-europe-toolkit-shows-how>

⁵⁵ Michael F., et al, 9 September 2022, Society for the Study of Addiction, 'United States public health officials need to correct e-cigarette health misinformation', <https://doi.org/10.1111/add.16097>

⁵⁶ Full Fact, 2020, 'Addressing Health Misinformation: Lessons from 2020', https://fullfact.org/media/uploads/addressing_health_misinformation_lessons_from_2020_report_12_03_21.pdf

alleviate the symptoms of Covid-19, on social distancing⁵⁷, lockdown rules⁵⁸, wearing face masks⁵⁹, or on handwashing.⁶⁰

Government guidance changed multiple times in response to updated scientific evidence⁶¹, and Full Fact found it was often difficult to keep up with the new information as it came out. Separating the science from the politics, and being clear on where there were areas of debate or conflicting evidence was critical. Especially in early 2020, it was often the case that no single metric could give a definitive answer, which left some evidence open to interpretation.

The WHO described this as an infodemic, where too much true, false or misleading information is available for people to consume online during a disease outbreak, causing confusion and risk-taking behaviours that can harm health, and leading to mistrust in health authorities, undermining the public health response.⁶²

Full Fact found that the lack of public understanding about the science behind viruses and vaccines meant harmful misinformation was able to spread with ease. Research papers were published with an unusual amount of media attention, and translating complicated scientific concepts into language that the public could understand was a challenge which often led to inaccurate reporting in mainstream UK newspapers.⁶³

The clearest example of this can be seen in the way the Medicines and Healthcare products Regulatory Agency (MHRA) presented its data. In May 2021 Full Fact highlighted the way the Yellow Card scheme data was becoming a vector for misinformation about vaccine safety. People were using reports of suspected reactions to Covid-19 vaccines in the Yellow Card scheme as official government statistics. This led to speculation and questions from online users about the safety of the vaccines, and

⁵⁷ Full Fact, 25 January 2022, 'Photos of swimming pool with social distancing screens is genuine', <https://fullfact.org/online/swimming-pool-france-social-distancing/>

⁵⁸ Full Fact, 23 July 2020, 'It's incorrect to say there was no resistance to safety measures around the Blitz', <https://fullfact.org/online/blitz-spirit-tweet/>

⁵⁹ Full Fact, 12 July 2021, 'Video shares falsehoods about face masks and asymptomatic spread of Covid-19', <https://fullfact.org/online/orange-county-board-meeting/>

⁶⁰ Full Fact, 2 May 2020, 'Official advice says handwashing is better at protecting against coronavirus than gloves', <https://fullfact.org/online/Coronavirus-Gloves/>

⁶¹ Full Fact, 16 March 2020, 'There's mixed evidence on whether people with Covid-19 should avoid ibuprofen', <https://fullfact.org/health/covid-19-ibuprofen/>

⁶² The World Health Organisation, 'The COVID-19 infodemic', <https://www.who.int/health-topics/infodemic>

⁶³ Full Fact, 2020, 'Addressing Health Misinformation: Lessons from 2020', https://fullfact.org/media/uploads/addressing_health_misinformation_lessons_from_2020_report_12_03_21.pdf

exacerbated the existing information vacuum surrounding vaccines. It took several months before any significant action was taken, and in the meantime, Full Fact saw numerous other examples of continued confusion from concerned internet users.⁶⁴

This lack of clear information and reporting opens a vacuum for harmful misinformation to spread online. In 2021 Ofcom found that 14 percent of respondents to a survey had come across claims that the Covid-19 vaccine will alter human DNA.⁶⁵ Full Fact has fact checked numerous viral posts on social media platforms on this⁶⁶, on whether the trials for the vaccines were thorough⁶⁷, and on whether the vaccine was a medical experiment.⁶⁸

The delay in accessible information answering these questions allowed conspiracy theories to multiply, causing harm to individuals. Government's public messaging to encourage vaccine uptake struggled to reach everyone that needed it. This included minority ethnic groups⁶⁹ when some health misinformation surrounding the Covid-19 vaccine was religiously targeted⁷⁰, or those with learning disabilities, who may have increased barriers when identifying trusted sources of information online.

Harm as a result of Covid-19 misinformation

In 2020 the American Journal of Tropical Medicine and Hygiene estimated that globally around 5,800 people were admitted to hospital because of false information online that

⁶⁴ Full Fact, 4 August 2021, 'Yellow Card data isn't proof of Covid-19 vaccine deaths', <https://fullfact.org/health/yellow-card-deaths/>

⁶⁵ Ofcom, 17 December 2021, 'Covid-19 news and information: consumption and attitudes', key findings from week 59, <https://www.ofcom.org.uk/research-and-data/tv-radio-and-on-demand/news-media/coronavirus-news-consumption-attitudes-behaviour>

⁶⁶ Full Fact, 3 March 2021, 'Moderna's Covid-19 vaccine will not change your DNA', <https://fullfact.org/online/moderna-vaccine-not-change-dna/>

⁶⁷ Full Fact, 30 April 2021, 'Influencer video full of untrue vaccine claims', <https://fullfact.org/online/viral-video-covid-vaccine/>

⁶⁸ Full Fact, 18 February 2021, 'The Covid-19 vaccine programme isn't a medical experiment', <https://fullfact.org/online/covid-vaccines-not-medical-experiment/>

⁶⁹ Race Disparity Unit, Cabinet Office, May 2021, 'Third quarterly report on progress to address COVID-19 health inequalities', <https://www.gov.uk/government/publications/third-quarterly-report-on-progress-to-address-covid-19-health-inequalities/third-quarterly-report-on-progress-to-address-covid-19-health-inequalities>

⁷⁰ The House of Commons, 26 April 2021, Rapid Response, 'COVID-19 vaccine misinformation', <https://post.parliament.uk/covid-19-vaccine-misinformation>

drinking methanol or alcohol-based cleaning products would cure the virus, with at least 800 people believed to have died and 60 people developing complete blindness.⁷¹

The Council of Canadian Academies estimates that between March and November 2021, misinformation contributed to vaccine hesitancy for around 2.35 million people in Canada. If those affected by Covid-19 misinformation had not delayed or refused vaccination, then there could have been 198,000 fewer cases and 2,800 fewer deaths.⁷²

GPs in the UK have seen patients taking tips from posts they see online, including holding their breath in an attempt to diagnose themselves, thinking that drinking hot drinks will fight off the virus, and some cited President Trump's statements about drinking disinfectant.⁷³ The BBC also tracked Covid-19 misinformation and found links to assaults, arsons and deaths.⁷⁴

5G and Covid-19

5G conspiracy theories, which purport that there are adverse health impacts from exposure to 5G radio frequency, had been circulating in a niche corner of the internet for some time.

The supposed link between 5G and Covid-19 is something Full Fact reported on early on in the pandemic, and despite warnings from Full Fact and others, the information gap around the safety of 5G was not acted upon by the Government or public health authorities in time. This allowed the information vacuum to be filled by harmful conspiracy theories which spread rapidly. These theories drew on selective attention to official statements or academic studies⁷⁵, were endorsed by celebrities⁷⁶, and included

⁷¹ Md Saiful Islam, et al, The American Journal of Hygiene and Tropical Medicine, Volume 103: Issue 4, Page(s): 1621–1629, 'COVID-19–Related Infodemic and Its Impact on Public Health: A Global Social Media Analysis', <https://doi.org/10.4269/ajtmh.20-0812>

⁷² The Council of Canadian Academies, 2023, 'Fault Lines', <https://www.cca-reports.ca/wp-content/uploads/2023/02/Report-Fault-Lines-digital.pdf>

⁷³ The BBC, 27 May 2020, 'Coronavirus: The human cost of virus misinformation', <https://www.bbc.co.uk/news/stories-52731624>

⁷⁴ The BBC, 12 August 2020, 'Hundreds dead' because of Covid-19 misinformation', <https://www.bbc.co.uk/news/world-53755067>

⁷⁵ Full Fact, 9 April 2020, 'Here's where those 5G and coronavirus conspiracy theories came from', <https://fullfact.org/online/5g-and-coronavirus-conspiracy-theories-came/>

⁷⁶ The New Statesman, 21 September 2021, 'How celebrities became the biggest peddlers of 5G coronavirus conspiracy theories', <https://www.newstatesman.com/ideas/2020/04/how-celebrities-became-biggest-peddlers-5g-conspiracy-theory-coronavirus-covid-19>

claims that Covid-19 symptoms were a “mass injury” from 5G, or that Covid-19 was a hoax to enable the Government to install 5G under the cover of lockdown.⁷⁷

This led to telecoms engineers being filmed or berated at work on new infrastructure which was seen as evidence that the Government was hiding something.⁷⁸

The Government recognised this information gap and worked with health bodies and mobile infrastructure companies to create materials on the safety of 5G, and internet companies to promote the information on their sites. However, the prior response was insufficient to stem the tide of increasingly severe and harmful misinformation. 5G rumours have been remarkably successful at infiltrating a variety of online communities as well as offline spaces.

Pregnancy and Covid-19

One of the most widespread causes of concern was the safety of the Covid-19 vaccine for pregnant women, and on the possible impact on fertility. Full Fact found that online discussion quickly became dominated by speculation, low quality or partial information, and misinformation⁷⁹. Both women and vaccination centres received mixed messages and pregnant women were not given second doses or thought they needed to start their course again⁸⁰, causing confusion, fear and inaction among pregnant women.

To counter the spread of this harmful misinformation Full Fact partnered with Pregnant Then Screwed⁸¹, and since then has answered over 1000 unique queries via our service, showing the extent of the gaps in good information.

The Royal College of Obstetricians and Gynaecologists (RCOG) and the Royal College of Midwives produced evidence-based, high-quality information on vaccine safety and effectiveness for both pregnant women and healthcare workers throughout the

⁷⁷ Full Fact, 2022, 'Full Fact Report 2022 - Tackling online misinformation in an open society—what law and regulation should do',

<https://fullfact.org/media/uploads/full-fact-report-2022.pdf>

⁷⁸ The Telegraph, 2 May 2020, '5G conspiracy theories drive abuse towards broadband workers'

<https://www.telegraph.co.uk/news/2020/05/02/5g-conspiracy-theories-drive-abuse-towards-broadband-workers/>

⁷⁹ Full Fact, 'Covid-19 vaccines during pregnancy', <https://fullfact.org/pregnant-then-screwed/all/>

⁸⁰ The Guardian, 17 October 2021, 'Pregnant women at risk from NHS workers' mixed messages over safety of jab',

<https://www.theguardian.com/society/2021/oct/17/pregnant-women-at-risk-from-health-professionals-mixed-messages-over-safety-of-jab>

⁸¹ Full Fact, 'Covid-19 vaccines during pregnancy', <https://fullfact.org/pregnant-then-screwed/all/>

pandemic to try to counter misinformation. The RCOG developed a public facing information campaign that reached over 3 million people up to June 2021, and supported Q&A events with the National Childbirth Trust, MumsNet, BabyCentre and Pregnant then screwed to ensure thousands of women could speak directly to healthcare professionals with the right information and advice.

The impact of Covid-19 vaccine misinformation on pregnant women is evident. In the first half of 2021, the Royal College of Obstetricians and Gynaecologists found that only 42 percent of women offered the vaccine had accepted it. Of those not yet offered, 40 percent planned not to take it, and 18 percent were undecided.⁸² The main reason for not getting the vaccine was waiting for more evidence to reassure them that it is safe for their baby.

Pregnant women are at risk of getting severely ill with Covid-19. In October 2021, 1 in 5 of the most critically ill Covid patients were unvaccinated pregnant women.⁸³ If effective regulation was in place to ensure information vacuums on the safety of vaccines during pregnancy were addressed early on, vaccine centres could have been provided with better information, women could have made informed choices on their health, and those with Covid-19 symptoms admitted to intensive care could have been reduced.

Vaccinations

Although vaccinations save 2 to 3 million lives each year, prior to the Covid-19 pandemic the WHO listed vaccine hesitancy as one of the top 10 threats to global public health.⁸⁴

A study of attitudes to immunisation across 144 countries found that in 2018, only 79 percent of people believed that vaccines are safe, this was particularly true in high income countries.⁸⁵ While the causes of lower levels of trust in vaccines are complex, involving health systems, social determinants and societal challenges, vaccine hesitancy also plays a part.

⁸² The Royal College of Midwives, 10 June 2021, 'Vaccination provides the best protection against COVID-19 in pregnancy, say experts', <https://www.rcm.org.uk/media-releases/2021/march/vaccination-provides-the-best-protection-against-covid-19-in-pregnancy-say-experts/>

⁸³ NHS England, 11 October 2021, 'NHS encourages pregnant women to get COVID-19 vaccine', <https://www.england.nhs.uk/2021/10/nhs-encourages-pregnant-women-to-get-covid-19-vaccine>

⁸⁴ The World Health Organisation, 2019, 'Ten threats to global health in 2019', <https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019>

⁸⁵ Wellcome Trust, 2018, Wellcome Global Monitor 2018, 'Chapter 5: Attitudes to Vaccines', <https://wellcome.org/reports/wellcome-global-monitor/2018/chapter-5-attitudes-vaccines>

The amount of misinformation circulating online about vaccines has contributed to some parents choosing not to vaccinate their children. This has fueled the recent Measles outbreaks in countries like the UK, and others in Europe, which had previously had eradication status for the virus.⁸⁶

Strep A

Public health messaging for communicable diseases like Strep A has been subject to harmful health misinformation in the UK. In late 2022, Full Fact began fact checking claims on social media which falsely linked the child flu vaccine to Strep A.⁸⁷⁸⁸

Despite calls from GPs to counter this harmful misinformation⁸⁹, a survey of parents in late 2022 found that 49 percent of parents believed there could be a link between the nasal flu vaccines and Strep A, with 32 percent agreeing that Covid-19 and flu vaccines are partly responsible for an increase in Strep A infections.⁹⁰ In November 2022 the uptake of the flu vaccine among 2 and 3 year olds dropped considerably when compared with the last 2 years, by around 11 percent.⁹¹

Instances like this highlight why it is so important regulation via the Online Safety Bill has effective provisions to tackle harmful health misinformation online.

⁸⁶ Public Health Scotland, 2019, 'European Region loses ground in effort to eliminate measles', <https://www.hps.scot.nhs.uk/publications/hps-weekly-report/volume-53/issue-35/european-region-loses-ground-in-effort-to-eliminate-measles/>

⁸⁷ Full Fact, 4 January 2023, 'Strep A deaths are not dangerous new strain caused by flu vaccines', <https://fullfact.org/health/strep-A-historic-deaths/>

⁸⁸ Full Fact, 21 December 2022, 'Study didn't link children's flu vaccine to strep A infections', <https://fullfact.org/health/strep-a-nasal-flu-vaccine-study/>

⁸⁹ Manchester Evening News, 7 December 2022, 'GP warns over Dangerous Strep A myth going viral on Tik Tok and says it's 'pure misinformation'', <https://www.manchestereveningnews.co.uk/news/greater-manchester-news/greater-manchester-gp-slams-dangerous-25698075>

⁹⁰ Lynn Global, 28 February 2023, 'Infectious Vaccines': Strep-A misinformation on the rise', <https://lynn.global/strep-a-misinformation/>

⁹¹ UK Health Security Agency, 30 November 2022, 'Concern over low rate of 2 to 3 year olds getting the flu vaccine', <https://www.gov.uk/government/news/concern-over-low-rate-of-2-to-3-year-olds-getting-the-flu-vaccine>

Pregnancy and fertility

Natural births

Along with misinformation around Covid-19, pregnant women may also see online content that promotes a 'free birth' ideology. This is a trend where social media influencers who have had successful free births advocate for the practice of giving birth at home without the help of a doctor or a midwife.

Social media content on birth and pregnancy can be persuasive. Studies have shown these informal sources of information can shift the dynamic between healthcare providers and pregnant women and influence their decisions around giving birth.⁹²

This can have a huge impact on women and on maternal mortality. While data on this is extremely limited, experts believe the number of women choosing to give birth without medical help is rising^{93,94}, and there are case studies showing the harm that can come from misguided and false medical advice circulating online.^{95,96}

Abortion care

Misinformation around abortion care also affects pregnant individuals, with anti-choice campaigners deliberately sharing misinformation about abortions. This has a global aspect, with a lot of misinformation spreading to the UK from the USA.

⁹² Sanders RA, & Crozier K. 2018. BMC Pregnancy Childbirth. Jan 10;18(1):21, 'How do informal information sources influence women's decision-making for birth? A meta-synthesis of qualitative studies' doi: 10.1186/s12884-017-1648-2

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5761120/>

⁹³ iNews, 5 April 2022, 'The role of the natural birth movement in the NHS maternity scandal is being ignored',

<https://inews.co.uk/opinion/the-role-of-the-natural-birth-movement-in-the-nhs-maternity-scandal-is-being-ignored>

⁹⁴ iNews, 27 December 2022, "Free birth": why women are choosing to have their babies at home, unassisted',

<https://inews.co.uk/inews-lifestyle/maternity-wards-understaffed-women-give-birth-unassisted-home-2046312>

⁹⁵ NBC News, 21 February 2020, "I brainwashed myself with the internet",

<https://www.nbcnews.com/news/us-news/she-wanted-freebirth-no-doctors-online-groups-convicted-her-it-n1140096>

⁹⁶ The Daily Beast, 3 November 2018, 'She Wanted a 'Freebirth' at Home. When the Baby Died, the Attacks Began',

<https://www.thedailybeast.com/she-wanted-a-freebirth-at-home-when-the-baby-died-the-attacks-began>

In June 2022, after the reversal of Roe vs. Wade in the USA, YouTube stated that videos including false claims about abortion safety will be included in its misinformation policies. This includes content that promotes harmful substances or treatments that present an inherent risk of severe bodily harm or death.⁹⁷ However, the Institute for Strategic Dialogue (ISD) found that YouTube had not delivered on this promise and identified several videos spreading false claims about abortions that had been uploaded before the decision was made.

ISD also found that Facebook, Instagram, and TikTok are also severely lacking in policies or community guidelines on abortion misinformation⁹⁸, with 1,138 posts on Meta-owned platforms, posted by 559 unique accounts, with a combined following of 58 million.⁹⁹

These platforms allow content that compares abortions to murder or genocide to run unchecked, they also allow posts which promote harmful treatments for pregnant individuals, including content on Meta which promotes abortion pill “reversal”¹⁰⁰. This is something the Royal College of Obstetricians and Gynaecologists and other medical groups condemn, stating there is no reputable evidence that this works and that there are no clinical guidelines that recommend its use.¹⁰¹

Cancer treatments

Full Fact regularly sees misinformation about cancer risks, treatments and cures online. This could be posts falsely claiming lemons treat cancer better than chemotherapy¹⁰²,

⁹⁷ YouTube, Misinformation policies, Contradicting expert consensus on safe medical practices, https://support.google.com/youtube/answer/10834785?hl=en&ref_topic=10833358#zippy=%2Ccontradicting-expert-consensus-on-safe-medical-practices

⁹⁸ The Institute for Strategic Dialogue, 11 October 2022, ‘How platforms profited from abortion misinformation in the lead up to the overturning of Roe v. Wade’, https://www.isdglobal.org/digital_dispatches/how-platforms-profited-from-abortion-misinformation-in-the-lead-up-to-the-overturning-of-roe-v-wade/

⁹⁹ The Institute for Strategic Dialogue, 18 October 2022, ‘Reversal of Roe v. Wade sparks influx of abortion misinformation on social media’, <https://www.isdglobal.org/isd-in-the-news/reversal-of-roe-v-wade-sparks-influx-of-abortion-misinformation-on-social-media/>

¹⁰⁰ The Institute for Strategic Dialogue, 11 October 2022, ‘How platforms profited from abortion misinformation in the lead up to the overturning of Roe v. Wade’, https://www.isdglobal.org/digital_dispatches/how-platforms-profited-from-abortion-misinformation-in-the-lead-up-to-the-overturning-of-roe-v-wade/

¹⁰¹ The Royal College of Obstetricians and Gynaecologists, 7 July 2022, ‘No reputable evidence’ for progesterone use in ‘abortion reversal’, say medical organisations’, www.rcog.org.uk/news/no-reputable-evidence-for-progesterone-use-in-abortion-reversal-say-medical-organisations/

¹⁰² Full Fact, 15 December 2022, ‘Facebook post claiming lemons treat cancer better than chemotherapy is false’, <https://fullfact.org/health/lemons-and-cancer/>

that tumours are 'there to save your life'¹⁰³, unproven claims that cannabis oil cures cancer¹⁰⁴, or that rubbing hydrogen peroxide on your skin would treat cancer.¹⁰⁵

Posts shared online that contain harmful health misinformation can convince people they could seek alternative treatments to cure their cancer. Full Fact's fact checks show that many rely on disproven theories or personal testimonies that can't be verified. And as the cancer charity Macmillan sets out - no alternative therapies have ever been proven to cure cancer or slow its growth.¹⁰⁶

Cancer Research UK has also stated that one of the biggest risks to an individual in seeking alternative therapies is that they could postpone or decline evidence-based conventional treatments, which might otherwise prolong or even save a patient's life.¹⁰⁷

A 2018 study in the USA found that 39 percent of the population believe alternative medicine such as dieting, herbs, and vitamins can cure cancer without the use of conventional cancer treatments.¹⁰⁸ This is concerning when considered with the 2017 study of cancer patients in the USA which showed that those who opt for alternative therapies and decline conventional cancer treatments are 2.5 times more likely to die within 5 years of being diagnosed.¹⁰⁹ Another study from the USA has found that those

¹⁰³ Full Fact, 28 July 2022, 'Tumours are not 'there to save your life'',

<https://fullfact.org/health/cancer-tumour-causes/>

¹⁰⁴ Full Fact, 9 August 2022, 'No solid proof cannabis oil can 'cure' cancer',

<https://fullfact.org/health/cannabis-oil-cure-cancer/>

¹⁰⁵ Full Fact, 27 January 2022, 'Rubbing hydrogen peroxide over your body every day does not treat cancer', <https://fullfact.org/health/hydrogen-peroxide-cancer-treatment/>

¹⁰⁶ Macmillan Cancer Support, 'Alternative therapies',

<https://www.macmillan.org.uk/cancer-information-and-support/treatment/types-of-treatment/alternative-therapies>

¹⁰⁷ Cancer Research UK, 27 April 2015, 'Alternative therapies: what's the harm?',

<https://news.cancerresearchuk.org/2015/04/27/alternative-therapies-whats-the-harm/>

¹⁰⁸ American Society of Clinical Society, 2018, National Cancer Opinion Survey, 'Email Share on Twitter Share on Facebook Share on LinkedIn

National Survey Reveals Surprising Number of Americans Believe Alternative Therapies Can Cure Cancer',

<https://old-prod.asco.org/about-asco/press-center/news-releases/national-survey-reveals-surprising-number-americans-believe>

¹⁰⁹ Cancer Research UK, 1 November 2017, 'Alternative cancer therapies: the potential impact on survival',

<https://news.cancerresearchuk.org/2017/11/01/alternative-cancer-therapies-the-potential-impact-on-survival/>

seeking alternative medicines to treat cancer are more likely to be younger, female, more educated, and have a higher income.¹¹⁰

Heart diseases

Covid-19 and heart disease

During the Covid-19 pandemic there were concerns around how Covid-19 would affect heart patients and the possible side effects that the Covid-19 vaccine could cause.

In 2021 Full Fact fact checked claims made in a Facebook video of an interview by an American cardiologist which claimed that heart disease myocarditis is more dangerous after a Covid-19 vaccine. Evidence on this is limited, with research suggesting the actual risks from this inflammatory heart condition are actually greater after a Covid-19 infection compared to post-vaccine.¹¹¹

Claims like this made on television also go viral online. In 2021 a claim on GB News that the risk of having a heart attack within five years increased from 11 percent to 25 percent after a Covid-19 vaccine. This was then viewed at least one million times on Twitter.¹¹²

To counter the impact claims like this could have on patients during the pandemic, organisations like the British Heart Foundation have increased the information and support it provides patients, including myth busting false claims.¹¹³

Statins

Statins are medicines that help to lower levels of cholesterol, which if left untreated can lead to cardiovascular disease.¹¹⁴ Misinformation around the use of statins is prevalent online, and there is widespread concern and intense public debate on the impact of

¹¹⁰ Skyler B Johnson, et al., 2018. Journal of the National Cancer Institute. Volume 110, Issue 1, January 2018. 'Use of Alternative Medicine for Cancer and Its Impact on Survival', <https://doi.org/10.1093/jnci/djx145>

¹¹¹ Full Fact, 21 December 2021, 'Evidence suggests myocarditis risk after Covid-19 vaccination is lower compared to Covid infection', <https://fullfact.org/health/covid-vaccine-myocarditis-false>

¹¹² Full Fact, 30 November 2021, 'Concerns raised about legitimacy of research linking vaccines and heart attacks', <https://fullfact.org/health/covid-vaccines-heart-disease>

¹¹³ British Heart Foundation, Information & support, <https://www.bhf.org.uk/information-support>

¹¹⁴ NHS, Statins, <https://www.nhs.uk/conditions/statins>

statins reported in the media.¹¹⁵ Despite this, severe side effects with statins are very rare.¹¹⁶

A study by the London School of Hygiene and Tropical Medicine shows the impact that media coverage had on the rates of patients taking statins in the UK.¹¹⁷ They found that there was a rise in the numbers of people who stopped taking statins, in particular older people and those with a longer continuous prescription were more likely to stop taking statins after the media coverage.

This study shows the way widely reported stories on health care can have on patient outcomes. When taken in the context of 2023 and the way people are increasingly consuming news on social media, this should be cause for concern.

Sexual health

HIV and AIDS

The devastating impact health misinformation can have on individuals and society can be seen in the HIV and AIDS epidemic that mostly affected the LGBTQI+ community in the 1980s and 90s. False and misleading information about the disease spread rapidly, leading to negative health outcomes for thousands, as well as fierce hate and discrimination aimed at those affected. The slow rate at which the Government responded to the crisis created an information vacuum, and meant there was a lack of credible support or health information available for those affected.

Though this happened long before the age of the internet, many myths about HIV and AIDS virus remain, and fuel online misinformation around sexual health today.

Public health guidance is updated as research into the disease and treatments progresses. Because of this, what we understand about it changes relatively frequently over time, and a prevalence of out of date information remains in the public domain. This can lead to inaccurate information being reported, or guidance being misconstrued or taken out of context.

¹¹⁵ The Guardian, 21 March 2014, 'Doctors' fears over statins may cost lives, says top medical researcher', <https://www.theguardian.com/society/2014/mar/21/-sp-doctors-fears-over-statins-may-cost-lives-says-top-medical-researcher>

¹¹⁶ Dr Jane Armitage, FRCP, 7 June 2007, The Lancet, Volume 370, Issue 9601, P1781-1790, 'The safety of statins in clinical practice', [https://doi.org/10.1016/S0140-6736\(07\)60716-8](https://doi.org/10.1016/S0140-6736(07)60716-8)

¹¹⁷ Matthews A, et al. 2016. BMJ. 2016; 353 :i3283. 'Impact of statin related media coverage on use of statins: interrupted time series analysis with UK primary care data', doi:10.1136/bmj.i3283

In 2021 there were widespread reports of needle drug spiking in the UK, which led to posts on Facebook and Twitter falsely claiming someone contracted HIV after being spiked. Official Twitter accounts, such as the West Yorkshire Police, then posted warnings that being injected with an unsterilised needle could expose someone to HIV.¹¹⁸

Whilst this is possible, as the National AIDS Trust set out, this would be an extremely rare situation, with no confirmed cases of HIV infections from needle stick injuries in the UK since 1999, and that these cases were demonstrably false, owing to the fact that it takes four to six weeks for HIV to reliably be detected on testing.¹¹⁹

These claims perpetuate harmful narratives about people living with HIV and AIDS that persist in the UK. Research shows in 2021 only 2 in 10 people were able to identify the main, or potential routes of HIV transmission, without also identifying an incorrect routes, and only a third of people fully agree that they have sympathy for all people living with HIV, regardless of how they acquired it.¹²⁰

These harmful narratives can have a real impact on people living with HIV and AIDS. It can lead to malevolent disclosures of people's HIV or AIDS status online¹²¹ and increase the stigma people feel about living with the disease¹²². While stigma can be difficult to quantify and is experienced differently by everyone, there is evidence that this stigma has a serious impact on mental health outcomes for people living with HIV and AIDS.¹²³

MPox

MPox (formerly known as Monkeypox) is a rare infection that can be passed from person to person, with cases predominantly affecting men who are gay, bisexual or have sex

¹¹⁸ Full Fact, 1 November 2021, 'Spiking: Very rare to contract HIV through used needle', <https://fullfact.org/online/HIV-needle-spiking/>

¹¹⁹ National Aids Trust, 22 October 2021, 'Statement: National AIDS Trust response to needle stick injuries and misinformation on HIV', <https://www.nat.org.uk/press-release/statement-national-aids-trust-response-needle-stick-injuries-and-misinformation-hiv>

¹²⁰ National Aids Trust, 29 July 2021, 'New polling shows HIV stigma still widespread', <https://www.nat.org.uk/press-release/new-polling-shows-hiv-stigma-still-widespread>

¹²¹ Galop, 2020, 'Online Hate crime - Report Challenging online homophobia, biphobia and transphobia', https://www.report-it.org.uk/files/online-crime-2020_0.pdf

¹²² Terrence Higgins Trust, Stigma, <https://www.tht.org.uk/hiv-and-sexual-health/living-well-hiv/sex-and-relationships/stigma>

¹²³ Tiffany E Gooden, MPH, et al., 3 February 2022, The Lancet, Volume 9, Issue 3, E172-E181, 'The risk of mental illness in people living with HIV in the UK: a propensity score-matched cohort study', [https://doi.org/10.1016/S2352-3018\(21\)00319-2](https://doi.org/10.1016/S2352-3018(21)00319-2)

with other men¹²⁴. At the outbreak of the disease in the UK in 2022 there was a lack of consistent and clear public messaging. Full Fact countered misinformation about the symptoms and transmission of MPox, as well as its link to other diseases, particularly Covid-19.¹²⁵

A study of the UK's understanding, awareness, and response to MPox found that there were shortcomings in the public health response in the early phase of the outbreak, particularly for those facing barriers to care, and that public health information and advice were neither universally accepted nor correctly understood.¹²⁶

UNAIDS also expressed concern that public messaging on Monkeypox has used language and imagery, particularly portrayals of LGBTQI+ and African people, that reinforce homophobic and racist stereotypes, exacerbate stigma, and do not address the problem of structural LGBTQI+ discrimination and health inequality.¹²⁷

The false claims Full Fact saw on MPox highlight how information vacuums and misleading reporting can fuel the spread of harmful misinformation online¹²⁸. This is one reason why it is so important health misinformation is properly addressed in regulation under the Online Safety Bill.

Mental health

Mental health is a vast cross-cutting subject area, the complexity of which can make it difficult to determine whether content is misinformation or a matter of opinion. However there are clear examples where mental health organisations find misinformation spread online can have a real impact on health outcomes.

¹²⁴ NHS, Mpox, <https://www.nhs.uk/conditions/monkeypox/>

¹²⁵ Full Fact, 'Monkeypox', <https://fullfact.org/health/monkeypox/>

¹²⁶ Sara Papparini, et al, 2022, HIV Medicine, 'Public understanding, awareness, and response to monkeypox virus outbreak: A cross-sectional survey of the most affected communities in the United Kingdom during the 2022 public health emergency', doi: 10.1111/hiv.13430

¹²⁷ UNAIDS, 22 May 2022, 'UNAIDS warns that stigmatizing language on Monkeypox jeopardises public health'.

https://www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2022/may/20220522_PR_Monkeypox

¹²⁸ The Evening Standard, 28 July 2022, 'Monkeypox — 'people who hate the queer community are going to blame us if it spreads'',

<https://www.standard.co.uk/insider/monkeypox-gay-community-vaccine-cases-rising-b1015074.html>

Antidepressants

Incorrect reporting on the effectiveness of different treatments of mental health conditions can fuel the spread of harmful misinformation. There are numerous articles in the media that are widely shared online purporting the ineffectiveness of, and potential harm of taking, antidepressants¹²⁹, something Full Fact works to counter.¹³⁰

A 2022 study by University College London reported that there was no evidence that depression is caused by low serotonin levels.¹³¹ This led to numerous reports around the effectiveness of antidepressants to treat mental health conditions.¹³²

This kind of reporting in the media leads to discussion on social media and the spread of harmful misinformation. The Royal College of Psychiatrists feared this could lead to people stopping taking the medication that had been prescribed to them by doctors, stating that they would not recommend for anyone to stop taking their antidepressants based on this review, and encouraged anyone with concerns about their medication to contact their GP.¹³³ Misinformation like this can undermine mental health outcomes and could increase the stigma people feel about taking antidepressants and have an impact on people taking medication or getting help.

Eating disorders and body image disorders

Mental health also encapsulates eating disorders or body image disorders. A 2019 survey from the Mental Health Foundation found that 40 percent of British teenagers said images on social media had caused them to worry about body image, and 35

¹²⁹ The Daily Mail, 21 January 2023, 'Why are one in four of Britain's nearly one million dementia patients taking antidepressants – when scientists say they do more harm than good?', <https://www.dailymail.co.uk/health/article-11661349/One-four-British-dementia-patients-taking-antidepressants-scientists-say-harmful.html>

¹³⁰ Full Fact, 5 March 2021, 'It's not clear if antidepressants cause hair loss', <https://fullfact.org/health/express-hair-loss-antidepressants/>

¹³¹ UCL, 20 July 2022, 'No evidence that depression is caused by low serotonin levels, finds comprehensive review', <https://www.ucl.ac.uk/news/2022/jul/no-evidence-depression-caused-low-serotonin-levels-finds-comprehensive-review>

¹³² 20 July 2022, 'Little evidence that chemical imbalance causes depression, UCL scientists find', <https://www.theguardian.com/society/2022/jul/20/scientists-question-widespread-use-of-antidepressants-after-survey-on-serotonin>

¹³³ Sky News, 20 July 2022, 'No convincing evidence' depression caused by low serotonin levels', <https://news.sky.com/story/antidepressants-called-into-question-as-researchers-find-no-convincing-evidence-depression-is-caused-by-chemical-imbalance-12655342>

percent of British teenagers had stopped eating at some point or restricted their diets due to worrying about their body image.¹³⁴

The Centre for Appearance Research finds that engagement with social media is associated with poor body image, and that pro-eating disorder content, including tips on weight loss, is found on all social media platforms. This can cause people to develop or exacerbate negative body image and disordered eating¹³⁵, and perpetuate the illnesses for people who are already suffering.¹³⁶

There are also harms for body image for pregnant women from content promoting ‘belly only pregnancy’, a social media trend promoting an ideal body type for expecting mothers. For women with increased vulnerability for an eating disorder this might have a negative effect on their wellbeing.¹³⁷

The Women and Equalities Select Committee inquiry on Body Image outlines that despite good intentions from social media platforms to counter eating disorder and body image disorder content, their safeguarding policies simply aren’t protecting people from body image harms and they need to do better.¹³⁸ Showing the clear need for regulation that ensures internet companies properly address health misinformation on their platforms.

Self-harm and suicide-ideation

Mental health misinformation online can also be linked to self-harm and suicide-ideation content. Whilst this might not be seen as ‘traditional’ misinformation, where content includes methods to harm oneself or harmful advice about medical conditions it is rational to include it in a consideration of health misinformation.

¹³⁴ The Mental Health Foundation,, 15 May 2019, ‘Millions of teenagers worry about body image and identify social media as a key cause – new survey by the Mental Health Foundation’, <https://www.mentalhealth.org.uk/about-us/news/millions-teenagers-worry-about-body-image-and-identify-social-media-key-cause-new-survey-mental>

¹³⁵ House of Commons, April 2021, Women and Equalities Select Committee, Inquiry on Body Image, Written evidence submitted by the Centre for Appearance Research (MISS0045), <https://committees.parliament.uk/writtenevidence/7943/pdf/>

¹³⁶ Beat, ‘Harmful eating disorder content should be removed from social media’, <https://www.beateatingdisorders.org.uk/news/beat-news/eating-disorder-content-removed-social>

¹³⁷ Steube, F., et al. Eat Weight Disord 27, 2435–2445 (2022). “‘Belly Only Pregnancy’ content on social media and in internet blogs: a qualitative analysis on its definition and potential risks and benefits.’ <https://doi.org/10.1007/s40519-022-01381-y>

¹³⁸ House of Commons, 9 April 2021, Women and Equalities Select Committee, Inquiry on Body Image, <https://publications.parliament.uk/pa/cm5801/cmselect/cmwomeq/274/27410.htm>

Self-harm and suicide-ideation content is found on major social media platforms, online forums, instant messaging apps, online retailers, factual sites and gaming sites.¹³⁹

Online discussions of self-harm or suicide ideation can be positive and help those in need find information and support or connect with those who have similar experiences. However, it can often actively promote it, share methods and harmful advice about medical conditions, sometimes disguised as being from health professionals, or provide incorrect information encouraging self-diagnosis.¹⁴⁰ This can have a distressing impact on an individual's mental health, and a real impact on their physical health.

A 2019 study has found that exposure to this content elicited emotional disturbance in some users, which was related to possible harmful self-harm and suicidality-related outcomes¹⁴¹. Similarly, a survey by the Samaritans found that 77 percent of respondents said they had self-harmed in the same or similar ways “sometimes” or “often” after viewing self-harm imagery, while 76 percent had self-harmed more severely, “sometimes” or “often” because of viewing self-harm content online.¹⁴²

Mental health misinformation also stems from the reporting of data and cases of suicide or self-harm. Full Fact regularly counters the misreporting of data¹⁴³ or false claims¹⁴⁴ on suicide or self-harm rates during the pandemic, or on the rates of children self-harming due to the cost of living crisis.¹⁴⁵ The Samaritans media guidelines say “speculation about the ‘trigger’ or cause of a suicide can oversimplify the issue and should be avoided.”¹⁴⁶

¹³⁹ The Samaritans, ‘Talking to your child about self-harm and suicide content online’, <https://www.samaritans.org/about-samaritans/research-policy/internet-suicide/talking-to-your-child-about-self-harm-and-suicide-content-online/>

¹⁴⁰ NSPCC, ‘Content promoting self-harm, suicide and eating disorders’, <https://www.nspcc.org.uk/keeping-children-safe/online-safety/inappropriate-explicit-content/promotion-self-harm/>

¹⁴¹ Arendt, F., et al. 2019. *New Media & Society*, 21(11–12), 2422–2442, ‘Effects of exposure to self-harm on social media: Evidence from a two-wave panel study among young adults’, <https://doi.org/10.1177/1461444819850106>

¹⁴² The Samaritans, ‘How social media users experience self-harm and suicide Content’, https://media.samaritans.org/documents/Samaritans_How_social_media_users_experience_self-harm_and_suicide_content_WEB_v3.pdf

¹⁴³ Full Fact, 14 October 2022, ‘Sunday Express misinterprets suicide data’, <https://fullfact.org/health/sunday-express-teenage-suicide-2021/>

¹⁴⁴ Full Fact, 10 May 2021, ‘Sun wrong to claim lockdown doubled suicide rates’, <https://fullfact.org/health/suicide-rates-lockdown/>

¹⁴⁵ Full Fact, 20 June 2021, ‘Child self-harm numbers in the Guardian, Mirror and Independent don’t reflect survey’s actual findings’, <https://fullfact.org/economy/guardian-mirror-independent-children-self-harm/>

¹⁴⁶ Samaritans, ‘Media Guidelines for Reporting Suicide’, https://media.samaritans.org/documents/Media_Guidelines_FINAL_v2_TABa8C6.pdf#page=6

Whilst these were published in national newspapers, they are shared online on social media platforms by users. When stories like this are published and then shared online, there is a risk of the normalisation of suicide, and this is especially concerning if content is viewed by a suicidal individual and the post does not also point towards help and advice from organisations like the Samaritans.¹⁴⁷

¹⁴⁷ The Samaritans' helpline is available at all hours and can be contacted free on 116 123, or you can email jo@samaritans.org

How to address health misinformation

Strong regulation of online platforms is one of the clearest ways of protecting us all from harmful health misinformation. Ensuring that internet companies take responsible steps to tackle harmful content and protect users on their platforms under a strong regulatory regime is vital. However, the Online Safety Bill fails to do this and does not tackle harmful health misinformation and disinformation effectively.

Strong regulation of the online world is something that has wide support. In 2021 Full Fact found that 61 percent of people believed social media and video sharing platforms were the most to blame for the spread of misinformation, and 50 percent believe politicians and government have a responsibility for slowing the spread of misinformation.¹⁴⁸

As set out in this report, this risks continued harm to individuals, the undermining of public health, and long-term damage to public debate. Full Fact believes this can be achieved by a number of changes to the Online Safety Bill, these are set out below and in more detail in Full Fact's 2023 report, *Informed citizens: Addressing bad information in a healthy democracy*.¹⁴⁹

Internet platform's adult risk assessments

In earlier versions of the Online Safety Bill, the Government had included a requirement for platforms to undertake adult risk assessments or transparently explain the findings of those risk assessments to their users, as they do for children in Clauses 10 and 11.

However, this has been dropped from the latest version of the Bill and the regulator will now be unaware of the extent of harmful content online, including misinformation, and the impact it has on adult users. It will be very unclear how platforms are responding to harmful health misinformation, or protecting or empowering their users. Transparent access to this information will enable Ofcom, and civil society, to better advocate for changes to reduce the impact of harmful content.

¹⁴⁸ Full Fact, 14 October 2021, 'UK public as concerned by the spread of misinformation as immigration and Brexit and the EU',

<https://fullfact.org/blog/2021/oct/uk-public-concerned-spread-misinformation/>

¹⁴⁹ Full Fact, 2023, Full Fact Report 2023, *Informed citizens: Addressing bad information in a healthy democracy*, <https://fullfact.org/about/policy/reports/full-fact-report-2023/>

The Government must reinstate the requirement for companies to do adult risk assessments to identify potential harm on their platform. They must explain those risks, and then set out transparently what their policy on those risks are in their terms of service. It is essential that these risk assessments include harmful false and misleading health information.

Internet platform policies on harmful health misinformation

It is vital that the Online Safety Bill requires platforms to have a clear policy on dealing with harmful false and misleading health information in their terms of service.

At present, the Bill maintains the status-quo of platforms deciding how they will tackle harmful health misinformation, without appropriate regulatory oversight. Rather than having a strong regulatory response that would ensure platforms have clear policies for dealing with health misinformation in their terms of service, platforms will continue to be left to their own devices.

In previous iterations of the Bill, the Government had committed to including protection from health misinformation in the Government's indicative list of priority harmful content that companies would have been required to address in their terms of service under the now removed adult safety duties.¹⁵⁰ However, the Government has since reneged on this promise, leaving us all vulnerable.

Access to data

Currently, access to data about the operation of social media platforms and how they track and respond to harmful content is very limited. Access to this kind of data builds our understanding of harmful misinformation, but companies are able to remove or restrict access to this data at their discretion. Too often it has taken a whistleblower or a tragedy to expose safety critical issues in the operation of these platforms.

The Online Safety Bill will do nothing to change this situation. The Bill should require internet companies to allow independently verified researchers and civil society organisations better access to data on the operation of their platforms. This could be supported by Ofcom guidance.

¹⁵⁰ Nadine Dorries, 7 July 2022, House of Commons, Written questions, answers and statements, <https://questions-statements.parliament.uk/written-statements/detail/2022-07-07/hcws194>

The Advisory Committee on Disinformation and Misinformation

The only direct reference to misinformation in the Online Safety Bill is to set up a committee to advise Ofcom. However, this Advisory Committee has no identifiable powers or active role in tackling harmful misinformation and disinformation.

The Advisory Committee should be established within six months of Royal Assent. Its remit should be enhanced so that it oversees Ofcom's research on the harms caused by harmful information. It should also produce its own reports on emerging patterns of behaviour, effects, and proportionate responses. We want Ofcom to be required to consult the Committee when drafting Codes of Practice.

Media literacy

Media literacy is crucial to tackling the harmful effects of health misinformation. However, the Online Safety Bill does very little to improve the UK's media literacy.

The Government must amend the Bill to introduce a new, stronger media literacy duty on Ofcom with specific objectives. It should also require the regulator to produce a strategy on media literacy, and then report on progress made towards increasing media literacy under the strategy. The largest platforms, Category 1 services, must be required to promote media literacy and the safe use of the service to their users.

Protecting freedom of speech whilst tackling health misinformation

There are understandable and justified concerns that tackling online misinformation will come at the expense of freedom of speech online. Full Fact believes a balance can be found in the Online Safety Bill that will both tackle harmful misinformation whilst protecting freedom of speech.

Content neutral methods for reducing harm from misinformation mean that restricting or removing content should rarely be necessary. This includes promoting good information, such as the Covid-19 information centres Facebook, having friction-introducing initiatives, such as read-before-you-share prompts introduced by Twitter, or highlighting independent fact checking.

This principle should be integrated into the regulatory regime through a legal requirement in the Bill, supported by an Ofcom Code of Practice.

Non-regulatory steps to tackling online health misinformation

Alongside strong online regulation, there are a number of other steps that can be taken.

Research

As this report highlights, there is plenty of research on the prevalence of health misinformation. However, it is vital to build the evidence base on the links between health misinformation and negative health outcomes, and on how to correct individuals' beliefs in health myths and on how to alter their behaviour and susceptibility to harmful misinformation.

As our 2020 paper, *Health misinformation In Africa, Latin America and the UK: impacts and possible solutions*,¹⁵¹ sets out, this is profoundly complex. We need a greater understanding of the diversity of audiences, medical, and media environments.

This needs leadership from Government, as well as multi-year research and evaluation to build the evidence base so that we can measure changes over time on the impact of health misinformation on individuals and society, and what proportionate responses to dealing with it look like.

Public messaging

By improving our understanding of health misinformation, the Government will be better prepared for the next health crisis and the next 'infodemic' that will come with it.

The problems we saw with the UK's long-standing failures in public data and communications systems must be addressed to give the public better availability, accessibility and communication of good information.

Prevention is better than cure, and better understanding of health misinformation and how individuals believe and act on health myths will reduce the spread of harmful health misinformation in the long-term. Government should undertake public campaigns on health, with simple and clear messaging. These should target conspiracy theories about health in real time, and tailor interventions to different audiences.

¹⁵¹ Full Fact, July 2020, 'Health misinformation In Africa, Latin America and the UK: impacts and possible solutions' <https://fullfact.org/media/uploads/en-tackling-health-misinfo.pdf>

Traditional media

Some misinformation spreads online via traditional broadcast and print media, with outputs being exploited on social media platforms by bad actors or shared online by concerned members of the public.

Traditional media can help to reduce these risks by ensuring they don't rely solely on one extreme viewpoint, and that authoritative sources of information are clearly made available. They can also avoid using fear inducing or extreme language when discussing health topics.

Traditional media sources generally hold themselves to higher standards than many online information sources. They can help to counteract and challenge harmful misinformation that occurs in far less regulated online spaces.

Conclusion

This report is a call to action for Government, Ofcom, academics and civil society to properly address health misinformation and tackle its harmful effects with strong regulation of online platforms.

The Online Safety Bill is a chance to change the status quo, where health misinformation spreads, often unchecked, far and wide online. But the Government's decision to scrap the provisions for internet companies to tackle health misinformation on their platforms demonstrates that they are not taking the problem seriously.

Covid-19 has shown us clearly why it is vital that a new regulatory regime has the ability to protect us from harmful health misinformation online. At present, it is unclear if the proposals under the current Online Safety Bill would prevent any future health crises from having the same devastating impact that we saw throughout the pandemic.

Beyond health crises, this paper highlights how insidious health misinformation can be in the long term. With research and insight from academics and health experts, we see clearly the negative impacts health misinformation can have on individuals and more broadly on society. From mental health to disease and illness to vaccinations, we will only escape its worse effects through effective regulation of the online environment.

With the right amendments, the Online Safety Bill has the potential to protect us all from harmful online health misinformation now, and, to a significant extent, as the online world develops and new technologies emerge. It is only right that the internet companies are made accountable through a regulator for the way their platforms approach tackling harmful health misinformation online so we can ensure it is effective, transparent and consistently applied rather than facilitating harm.

This paper is by no means a definitive look at health misinformation in the UK. We highlight the urgent need for Government to invest in research on health misinformation, what it looks like, how it spreads, the impacts it has and the pathways to address it. This knowledge would help improve Government responses to health misinformation, and empower all of us to better protect ourselves online.

With our warmest thanks to the following organisations for meeting with Full Fact and advising on the issues that affect the people they work for:

British Fertility Society, British Heart Foundation, Demos, Great Ormond Street Hospital Charity, Macmillan, Mencap, Meningitis Research Foundation, Mental Health Foundation, National AIDS Trust, Royal College of Midwives, Royal College of Obstetricians and Gynaecologists, Royal College of Psychiatrists, The Royal Society, The Royal Society of Public Health, Science Media Centre, the World Health Organisation.

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Published by Full Fact, April 2023.

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