

World Health Organisation

The question of combating increased vaccine skepticism



Forum	World Health Organisation
Issue:	The question of combating increased vaccine skepticism
Student Officer:	Rudraksha Garg
Position:	President

Introduction

Vaccine Skepticism is classified as the hesitancy or refusal to vaccinate when they are readily available. This creates a great challenge to global healthcare due to the growing skepticism. This has been greatly accelerated post-COVID-19, where vaccine hesitancy caused dangerous effects and endangered widespread immunity to the pandemic. Various causes contribute to this problem. These may include misinformation, distrust in pharmaceutical companies and government institutions, concerns over vaccine safety and side effects, and a broader mistrust of the medical establishment.

These issues have a cumulative effect on the broader healthcare initiatives. The impact extends far beyond personal health choices; a decline in vaccine percentage allows for a decrease in herd immunity. This means that the protection offered to a community with vaccinations is negated by certain individuals' misconceptions and skepticism. These lead to pandemic outbreaks being more frequent and more prominent. Diseases that were considered extinct or preventable have seen resurgences due to low vaccination rates.

The issues have further effects on the economy as well. An already strained healthcare system is forced to come up with measures to treat diseases that may be treatable or very well avoidable. This forces hospitals to increase healthcare costs for everyone meaning that those living in poverty can no longer afford to be treated at these hospitals. As well as skepticism and misinformation creating a loop in which they refused to get vaccinated and could no longer afford to be treated at a hospital.

Addressing these concerns requires multiple measures to tackle the problem. These may range from engaging with community leaders to enhancing transparency about vaccine efficacy and safety.



Actively combating misinformation and assisting in reestablishing the trust in the healthcare system is essential in combating increased vaccine skepticism.

Definition of Key Terms

Vaccine Hesitancy

Delay or refusal to get vaccinated despite vaccine availability, often due to safety concerns or distrust.

Herd Immunity

When enough people are immune to a disease, making its spread unlikely, thus protecting the entire community.

Misinformation

False or incorrect information, often spread unintentionally, may mislead people about vaccines.

Vaccine Skepticism

Doubt or disbelief in the effectiveness or safety of vaccines leads to reluctance or refusal to vaccinate.

Immunization

The process of making a person immune to a disease, typically through vaccination.

Outbreak

A sudden increase in the number of cases of a disease in a specific area.

Side Effects

Unintended effects that can occur after vaccination which are usually mild and temporary, like soreness or fever.

Efficacy

The ability of a vaccine to produce the desired immune response and protect against disease in controlled conditions.

Public Health

The science and practice of protecting and improving the health of a community through preventive measures, education, and policymaking.



General Overview

To effectively combat rising vaccine skepticism we must understand the causes of it. These are extremely varied and require various measures to tackle. We must understand every problem to effectively eradicate this issue. As it not only reduces trust in vaccinations but in the healthcare industry as a whole. This allows people to be taken advantage of by leaders of a community for personal benefit. Directly linked to misinformation, misinformation directly destroys trust in public healthcare and pharmaceutical companies.

Misinformation

Misinformation about vaccines is widely spread through social media and other online platforms. Although it could also be spread via multiple other sources, the main issue here is social media. Common myths include false claims about vaccines causing autism, infertility, or severe side effects. People who do not have the means to discern the truth from these fake facts fall into the trap of misinformation. This causes skepticism to skyrocket because misinformation that vaccines can directly impact you or your children motivates individuals to no longer take them. Why should people take a risk that the information may be true? So instead of checking the facts they choose to avoid vaccinations altogether.

An example of this was during the COVID-19 pandemic when vaccine hesitancy skyrocketed. This was a major issue because misinformation about vaccines was being circulated through social media platforms, causing public distrust in the healthcare systems that they should be relying on. This made it very difficult to create herd immunity for the community as people did not want to get vaccinated. This created an environment for more people to fall sick and added immense amounts of strain on a number of healthcare systems which were already overburdened.

Vaccine safety and pharmaceutical greed

The public's distrust of vaccinations is mostly caused by false information about their safety. On social media and other online platforms, misleading information regarding the main adverse effects of vaccines like autism or infertility is a serious problem. These misconceptions frequently catch on because they play on people's fears and spread quickly on social media. Public health involves establishing high vaccination rates and if herd immunity is hampered by disinformation, public health will be negatively impacted by misinformation on vaccine safety. These misconceptions



are often spread by people on social media in attempts to gain a following or a fanbase while in reality, they cause irreparable damage to the people's trust in the healthcare system.

Another factor contributing to vaccine hesitancy is mistrust of pharmaceutical firms. Concerns regarding vaccine development and promotion being driven more by financial gain than safety and efficacy arise from the widespread belief held by the public that pharmaceutical companies place a higher priority on profit than public health. People believe this because of former cases in which this has occurred. As a result, some people are reluctant to embrace vaccinations because they believe that the reasons for vaccination do not align with the interests of public health but are rather intended to create profit for large pharmaceutical corporations. To regain the public's trust, the pharmaceutical business needs to operate more ethically and transparently. The current level of transparency is not good enough to alleviate the effects of misinformation.

Public Healthcare

Misinformation about public healthcare has detrimental effects. Truly destroying the trust that currently exists between the public and hospitals. This affects vaccination percentages as trust dissipates and the public is much less likely to get vaccinated. Following the example set by people not taking vaccines, the community members who were previously getting vaccinated also started abstaining from this activity. This results in healthcare providers losing motivation to be actively involved in vaccination. They will stop setting up vaccination centers and providing recommendations for vaccinations if they know people are abstaining from vaccination. This turns it into a cycle of constantly being impacted by misinformation and nobody seeing them straight.

Moreover, the Public healthcare system comes under massive strain when people choose not to go get vaccinated. As mentioned before, diseases that are easily preventable or hard to treat now are easily contagious. This causes a fast spread due to the herd immunity being low and this means that healthcare institutions need to act speedily while being under the strain of so many sickly people. The already strained public healthcare system can not handle this and other than working on its facilities we should promote vaccination and actively combat misinformation.



Increased Disease Outbreaks

Due to low vaccine rates and increased vaccine skepticism, it is very common for disease outbreaks. These may be diseases that were previously thought to be extinct or they may also be highly contagious. Preventable diseases are also accentuated by this phenomenon. These include diseases such as measles, mumps, and whooping cough. This poses a threat to not just the individuals who would get infected but the community as a whole. People who live a fit and healthy life and are still young may be able to combat these diseases with their immune systems and help from health care. However, people who are more vulnerable such as those with a disability, health issues, the elderly, and even obese people will be severely affected in the event of low herd immunity.

The diseases would also be highly contagious and this means that we would face more difficulty whilst using techniques such as lockdowns and isolation. This means that if a future pandemic such as covid were to occur it would have many more negative effects on the global population. Even then if vaccine skepticism is still rising we would be unable to use vaccines as a method of combating this hypothetical pandemic. Instead of using all available methods, we are constraining ourselves with skepticism.

Economic Costs

The economic costs of vaccine skepticism cannot be ignored. It consists of both direct and indirect costs to the public and the government. Firstly as previously mentioned preventable diseases will skyrocket, this means that all the costs associated with disease treatments and healthcare institutions will greatly increase. They will also pertain to the indirect cost of lost opportunity as all these people are sick and unable to work or provide for the economy. Another massive cost is the expenditure for preventative measures and disease outbreak control, as well as campaigning for awareness about the disease. Therefore not only due to the economic cost but all these issues together create a big problem of vaccine skepticism.



Major Parties Involved

Pharmaceutical Companies

Companies such as Pfizer, Moderna, Johnson & Johnson, and AstraZeneca are major players in vaccine development and distribution. Their transparency and ethical practices are crucial in building public trust.

United States

There is a great deal of vaccination skepticism in the US, which is mostly brought on by political conflict, false information on social media and mistrust of the government and pharmaceutical industry. The FDA, the CDC, and several state health departments actively work to dispel myths and promote immunization.

United Kingdom

In the UK, vaccine skepticism has been influenced by historical events such as the MMR vaccine controversy. Public Health England and the NHS work to address these issues through public health campaigns and educational initiatives.

France

France has one of the highest rates of vaccine skepticism in Europe. Factors include historical vaccine controversies and a general distrust of government institutions. The French Ministry of Health and various public health organizations are involved in efforts to improve vaccination rates.

India

In India, vaccine skepticism is often linked to misinformation and lack of access to reliable healthcare information. The Ministry of Health and Family Welfare, along with organizations like the Indian Council of Medical Research (ICMR), work to promote vaccination through large-scale campaigns and community outreach.



Centers for Disease Control and Prevention (CDC)

The CDC in the United States conducts extensive research on vaccine safety and effectiveness. It also runs public health campaigns to promote vaccination and addresses vaccine misinformation.

World Health Organization (WHO)

The WHO provides a framework for countries to combat misinformation and raise their vaccine percentages. They also are actively involved in this issue.

Timeline of Key Events

Date	Description of event
February 28, 1998:	Andrew Wakefield published a study in "The Lancet" suggesting a link between MMR vaccine and autism.
February 2, 2010	"The Lancet" fully retracts Wakefield's study, acknowledging that elements of the research were falsified and unethical.
April 25, 2019	The World Health Organization (WHO) reports a 300% increase in global measles cases compared to the previous year, attributing the rise to vaccine hesitancy.
January 14, 2021	The WHO publishes a report on global vaccine confidence, identifying misinformation and lack of trust as major barriers to vaccine uptake.
April 8, 2021	Facebook and Instagram announced a ban on content that spreads misinformation about vaccines.



UN involvement, Relevant Resolutions, Treaties and Events

- Global Vaccine Action Plan, May 17, 2012 (A65/22)
- Political Declaration on Universal Health Coverage, September 23, 2019 (A/RES/74/2)
- Resolution on Immunization Agenda 2030, May 27, 2020 (WHA 73.6)
- Global Health and Foreign Policy: Strengthening Health System Resilience through Affordable Healthcare for All, December 9, 2020 (A/RES/75/130)
- Resolution on COVID-19 Response, April 20, 2020 (A/RES/74/270)

Previous Attempts to solve the Issue

While previous attempts have been made to solve this issue there is still a lot left to be desired. One such example was the way community engagement was done in the United States during the COVID-19 pandemic. There are many limitations to this type of approach. The idea of collaborating with community leaders and religious leaders to reduce skepticism is a good one. The execution left a lot to be improved for example in some cases the community leaders themselves were skeptics of vaccines. This backfired as in some cases influential leaders would broadcast negative statements about vaccines and spread even more skepticism and misinformation. Causing conflict between what they were saying and healthcare insertions further damaging the trust in the healthcare institute.

Another approach that was met with negative feedback was the door-to-door approach used in Pakistan and Nigeria during polio outbreaks. While some regional forces were able to go from door to door to vaccinate children and educate families on polio and its vaccine. Some regions completely refused to have their kids vaccinated because they were misinformed that this was part of some elaborate scheme. This then spread through social channels and turned into a complete boycott of the polio vaccine. Even though it was an attempt to help, people no longer wanted to use it.

A strategy that was implemented during the COVID pandemic was to transform convenient places into vaccination centers to attract more people to come and get vaccines. The problem with this is that it may work for more developed and modern nations. Although, it does not address the



truly important issues such as misinformation and more deeply situated skepticism. Therefore this solution did not assist with the root cause and could not tackle it as a whole.

Possible Solutions

Firstly we must take inspiration from solutions that have already been attempted and learn from them. Therefore we must try to better engage with community leaders and the community itself. Making sure that every step we take is transparent and clear. Conveying this information to religious or community leaders to then share with their respective communities allows us to gain a trusted icon to speak facts rather than misinformation. It allows them to read the unbiased facts straight to the public or at least guide them in that direction. For this to happen though we need to be extremely transparent. Requesting utmost transparency from especially pharmaceutical companies and vaccine manufacturers. This will allow us to rebuild our trust within the community and restore relations between public healthcare institutes and the public.

Secondly, to combat misinformation we must have a multifaceted education campaign. Which will allow us to educate all types of people in a manner they understand. This will be done in ways to address vaccine safety and how to verify information online specifically about vaccines. Advised by community leaders that we have engaged with previously this will be a huge step in combating misinformation.

Additionally, we must aim to motivate people to take these vaccines and give them a reason rather than the big words of herd immunity, providing economic incentives is the way to do this. For example, providing things such as a small gift card or voucher for every vaccination or entry to a raffle will incentivize people to get vaccinated. It will work wonders on especially the people who live in poverty and already distrust the healthcare system. These three solutions put together may put a stop to some of the problems that back vaccine skepticism but it will need a lot of infrastructure and funding to succeed as well as an organization to lead the initiative. These may be some useful steps in combating vaccine skepticism.



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Appendix or Appendices

Appendix I

Report on vaccine skepticism during COVID 19 pandemic, National Library for Medicine

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10130805/>

Appendix II

Determinants of COVID-19 skepticism and SARS-CoV-2 vaccine hesitancy in the USA

<https://bmcpublikealth.biomedcentral.com/articles/10.1186/s12889-022-13477-2>

