

Investigative report into coronavirus vaccine; perspectives of different demographics and how design can play a crucial role in education about the vaccine.

The question is framed on one of the world's largest and hottest subjects, the coronavirus pandemic and the vaccine. Due to its effect and the problems that have arisen from its spread, it is of interest. The study of this subject should be both informative and interesting. A topic that certainly interests me.

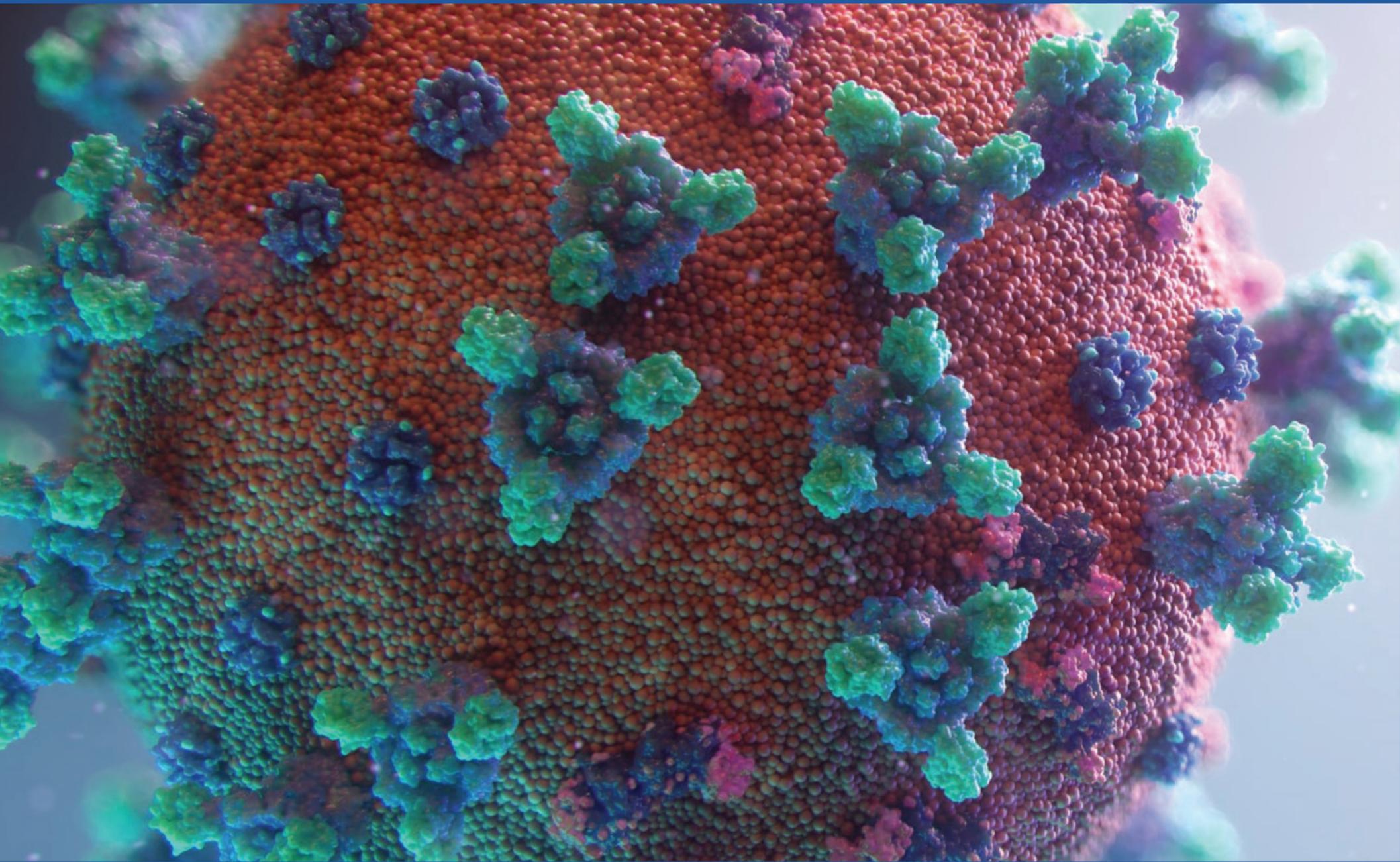


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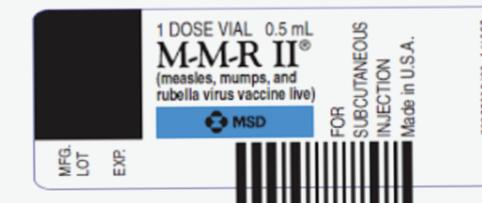
Framing The question

The Coronavirus pandemic is one of the biggest and the hottest topics globally since it began in 2019. It is of interest due to its impact and the issues that have arisen from its spread. The COVID-19 pandemic continues to devastate the world, with the United Kingdom being heavily affected. COVID-19 is an illness caused by the Coronavirus. Countless people have lost their lives since the beginning of the pandemic. People have lost their loved ones, which no cost can cover. Statistics show 2.29 million deaths around the world, 110 Thousand within the UK, and 4867 Death in Wales alone within the last 14 months (BBC News, 2021): as we know, throughout history, nothing has killed more human beings than this infectious disease. Covid-19 shows how vulnerable we remain.

Coronavirus is affecting the entire world, not just the UK; it is not an epidemic.

Its impact is not being felt by just one country, but everyone in every single country around the world has been impacted because of the virus in different ways; whether through contracting the virus, loss of loved ones, or the restrictions on socializing because of the lockdown measures which have led to school closures, damaged economies and millions of jobs lost. Socializing has become impossible; more people face a mental health crisis than ever reported before, suicide rates, domestic violence, child abuse rates are rising. Far too many people are not getting the support they need and are ending up in crisis, not knowing what will happen.

Tests, treatments, and vaccinations are the solutions, costing just a fraction of the vast economic damage that the pandemic causes each week. The best chance for a sustainable solution to the management of the pandemic is a vaccine. It is commonly seen that a vaccine is one of the critical resources for ending the current Coronavirus crisis. No less than 199 vaccines, 24 of which are currently in clinical trials, are in development Worldwide (Halls-worth, 2020). Point out that vaccines must be approved and used by a vast majority of the population to be effective. At the same time, however, there has been growing concern that many people may still not take the COVID-19 Vaccine when it arrives for everyone because of the different perceptions



Aims & objectives

This report aims to investigate and clarify the behaviours and barriers to vaccination. This will be done by collecting primary and secondary data, which will be analysed to determine a pathway to solving the problem. Primary data will be collected using a combination of quantitative and qualitative methods, while secondary data will be involved review of existing data and literature.

The first aim of this study is to explore Coronavirus and how it impacts the lives of people. This will be done by exploring existing literature on the subject and investigating its impact through primary data collection methods. This will include the use of peer-reviewed articles, perspective reports, and news reports on the Coronavirus and the COVID-19 Vaccine. To ensure reliability, Data will be obtained in a more condensed way, and different sources will be evaluated and compared.

The second aim of this study is to establish the degree of human understanding of the Coronavirus vaccine and the behaviours behind decision-making from an individual basis or perspective. This will be completed using interviews and surveys to find out about consumer behaviour, influences, and general knowledge of this topic, enabling individuals' views.

The third aim of the study is to use the conclusions and findings to investigate how design visual culture can solve this problem. The design and visual culture must be analysed to do this as a contribution to a solution.

Methodology

For this investigative project, both qualitative and quantitative research methods were used. For personal insights, primary research is much more useful, whereas, for factual investigation, secondary research is more effective and helps to save time. (Eichberd, S., 2014) Therefore, by utilizing these methods, the study was completed in the timeframe given. The author has researched the global Pandemic, Coronavirus and COVID-19 Vaccine literature. This was to strengthen perception and understanding while identifying new information that the researcher did not know about the Vaccine. Trustworthy outlets have been used to locate research, papers, and educational materials, such as the World health organisation (WHO).

Considering how Covid-19 is a scorching topic now, primary data did not prove itself challenging to find. The most effective way to gather data was to create surveys and interview people on their opinion regarding the Vaccine. This was done to understand the perceptions and views of why the Vaccine is so highly disliked by so many and find out why others believe it is a necessity.

	Interview Type	Demographic	Reference
1	Individual/ Facet me	IF Female, 22, Frontline NHS	{#1 NHS Frontline worker Vaccinated}
2	Individual/ Facet me	JH Male, 27, Unemployed	{#2 General public Demographic}
3	Individual/ Facet me	IMJ Female, 55	{#3 Public Demographic Vaccinated}
4	Individual/ Facet me	SN Female, 31, Pharmacist	{#4 Frontline worker Vaccinated}
5	Individual/ Facet me	VR Male, 25, Police Officer	{#5 Frontline worker}
6	Individual/ Facet me	SB Male, 21, Student	{#6 General public Demographic}
7	Individual/ Facet me	TY Male, 21, Student	{#7 General public Demographic}
8	Individual/ Facet me	BH Female, 28, Healthcare Assistant	{#8 Frontline worker}
9	Individual/ Facet me	SR Male, 65, Unemployed	{#9 General Public Demographic}
10	Individual/ Facet me	RT Female, 47, Teacher	{#10 General Public Demographic}

The table above shows the interviews performed with a reference that is used in the discussion to refer to the interviewee for confidentiality purposes.

Interviews were often used on a structured basis. A total of 10 participants were interviewed separately; out of the 10, 3 had already had the Vaccine. The author used a different structured questionnaire to the ones who have not currently had the Vaccine.

(Zojceska, A., 2018) as mentioned in a report by: talentlyft
In a structured interview, questions are planned and prepared in advance.

Discussion

There are three vaccines in the UK that are approved for use currently out of over 199 vaccines from around the world. Remarkable, since we are less than 14 months from the declaration of a pandemic. Furthermore, Pfizer, Moderna, and Oxford University vaccines have been shown to be several times more effective than first expected, in some cases by over 90 percent. (Ling, T., 2020)

How are they different from each other and how will they protect us against the disease?



UK was the first country in the world to authorize the COVID-19 Vaccine for use by Pfizer/BioNTech. Studies have shown the jab is 95% effective and works in all age groups.

In a race against the global coronavirus threat to human health, Oxford University is also working on the COVID-19 Vaccine; the team operates at an incredible pace, making it the second COVID-19 Vaccine approved by UK regulators (Research, OX., 2021).

It is made from a weakened version of a common cold virus (known as an adenovirus) from chimpanzees. It has been modified to look more like Coronavirus - although it cannot cause illness. It stimulates the immune system to produce antibodies when the Vaccine is inserted into a patient and prepares it to attack any coronavirus infection. Research has shown it is incredibly useful. In trials, no one who was administered the Vaccine experienced extreme Covid or required hospital care. The Oxford vaccine can be stored in a regular refrigerator, unlike Pfizer's jab - which must be held at a freezing temperature (-70C). This makes delivery much simpler. (Gallagher, J., 2020.)

Moderna vaccine becomes the third COVID-19 Vaccine approved by UK regulators.

The Vaccine has been approved after meeting the required safety, quality, and effectiveness standards. The Moderna vaccine gave nearly 95 percent immunity towards severe Covid in trials of more than 30,000. These vaccines require a second booster shot, but a first dose is likely to be given to as many people as possible. No vaccine is 100 percent effective, and building immunity takes time. It is important to note; we do not know how long immunity will last for with all Covid vaccines. (Roberts, M., 2021)

Infectious diseases will rapidly begin to spread again if people avoid being vaccinated. It is difficult for infectious diseases to spread if a large portion of the population is vaccinated, it means there are not many individuals who can be infected; this is called herd immunity. Some people in the community rely on herd immunity to protect them. These groups are particularly vulnerable to disease but often cannot safely receive Vaccines. This includes new born babies, older people, and people whose immune systems does not work correctly.

(NHS, UK., 2019)

Pfizer/BioNTech vaccine effectiveness.
95%

AstraZeneca vaccine effectiveness.
90%

Moderna vaccine effectiveness.
95%

Each Vaccine is given by an injection, although there is some possibility that it will be administered via a nasal spray. A team at Swansea University is working on a prototype for the 'intelligent patch' COVID-19 vaccine, which is being developed in Wales. To protect themselves and others, individuals who have obtained a coronavirus vaccine can continue to follow social distancing laws. (Barret, A., 2021)



Academics at the University of York and Oxford submitted a document. In it, the legalities around technically making a vaccine compulsory was discussed and recommended to the government. "Should give serious consideration to compulsory immunisation as a means of reducing the impacts of Covid-19" (Rahman, G., 2020). People who decide not to have the Vaccine will most likely not travel, dine out even attend individual offices (Slater, B., 2021). NHS workers must also have the Vaccine, as if they deny it, they could be penalized for it because care and treatment must be provided in a safe way for service users also, they would be contradicting themselves by convincing others to take it without taking it (Wright, M., 2020). The COVID-19 pandemic has inflicted almost unimaginable harm on many nations' life, health, and economy. Along with hygienic and behavioural control measures, vaccination is the most successful way of limiting or eliminating viral infection and spread.

Infectious diseases will rapidly begin to spread again if people avoid being vaccinated. It is difficult for infectious diseases to spread if a large portion of the population is vaccinated, it means there are not many individuals who can be infected; this is called herd immunity. Some people in the community rely on herd immunity to protect them. These groups are particularly vulnerable to disease but often cannot safely receive Vaccines. This includes new born babies, older people, and people whose immune systems does not work correctly. (NHS, UK., 2019) However, a priority order focused on who is at the most significant risk of death has been suggested by the Joint Committee on Vaccination and Immunisation (JCVI, GOV., 2021).

The vaccination program, which has been hailed as the biggest in British history, started with health staff, people living in nursing homes, and the elderly but will grow to include other demographics (JCVI, GOV., 2021).

Their order is:

- Older adults in a care home and care home workers
- All those aged 80 and over and health and social care workers, though they may move up the list.
- Anyone 75 and over
- People aged 70 and over
- All those aged 65 and over
- High-risk adults under 65
- Moderate-risk adults under 65
- All those aged 60 and over
- All those 55 and over
- All those aged 50 and over
- The rest of the population, with priority yet to be determined.



survey Analysis

The author created an online survey to gather information on the public's general views regarding the COVID-19 Vaccine with a total of 84 respondents. To meet a larger audience, the survey was distributed on many forms of social media. Due to Coronavirus restrictions, an online survey was used rather than a paper survey. As part of the survey, people were asked questions such as their age, ethnicity, religion or beliefs, demographics, personal or local impact of the virus, and whether these views are changing over time. Among the answers obtained from the survey, the aim was to identify categories, themes, and trends, to ensure that the data gathered was relevant and not a repetition of what already exists. One of the methods that were used to organise the primary data was charts. The charts below show the different aspects that are considered when researching whether people had enough information and if they want to take the Vaccine or not.

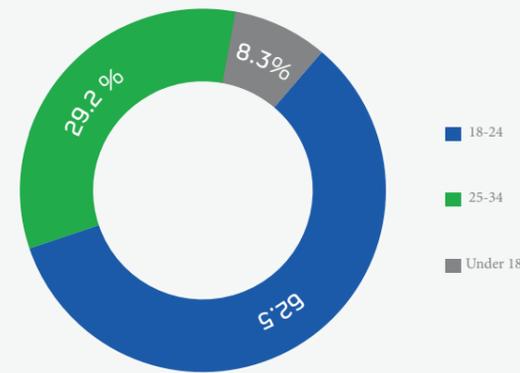


Figure 2: Respondent Demographic of primary survey

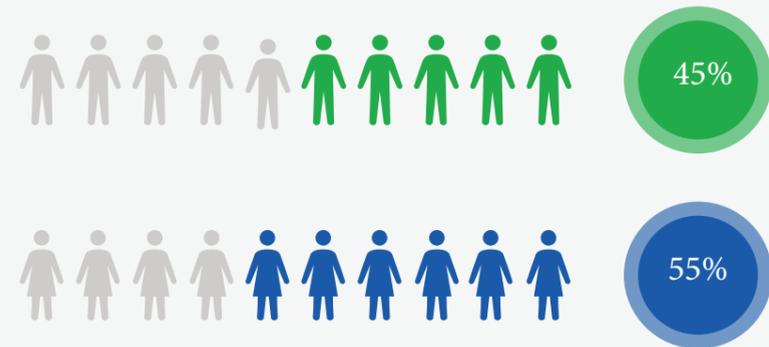


Figure 3: Respondent Demographic of primary survey

Ethnicity

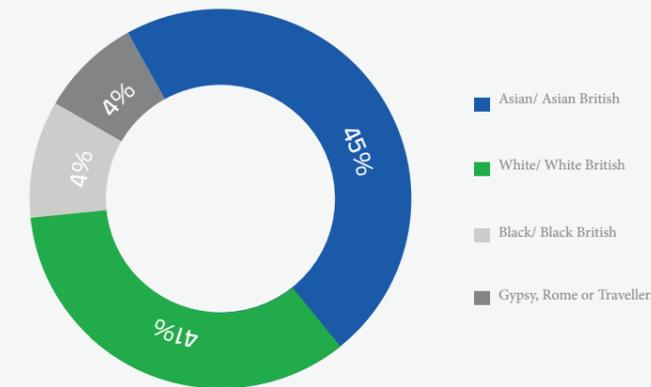


Figure 4: Respondent Demographic of primary survey

Religion



Figure 5: Respondent Demographic of primary survey

The first graph provided (Figure 2) shows the average age groups of the people that participated in the surveys. As shown, the graph indicates that the majority of participants were aged between 18-24, whilst there were not really any participants aged over 35.

The second graph (Figure 3) shows the gender group of the people that participated in the surveys. The actual number of participants was 45 female and 38 Male.

The charts above (Figure 4) indicate that other factors have been discussed while studying whether their faith believes or different ethnicities will have different consequences and effects on whether they wish to be vaccinated.

Looking at the graph, the results indicate that a majority of racial groups participated in the study and that of the 84 people who participated in the survey, 41 percent were White British, 45 percent were Asian or Asian British, 8 percent were Black or British Black, and the remaining 4 percent were either Gypsy, Rome, Travelers.

Religion plays a mJOR part in medicine and have worked together for decades to combat illnesses, but the relationship has been complicated at times. In recent years, public health providers have focused on the help of mosques or church leaders, particularly in colour communities, to create faith in the promotion of health initiatives. (Ajinkya, s., 2012). The coronavirus pandemic has been yet another example of the dynamic interaction between faith and science.

do you feel that you have received enough information about the covid-19 vaccine to be able to decide whether or not you will be vaccinated?

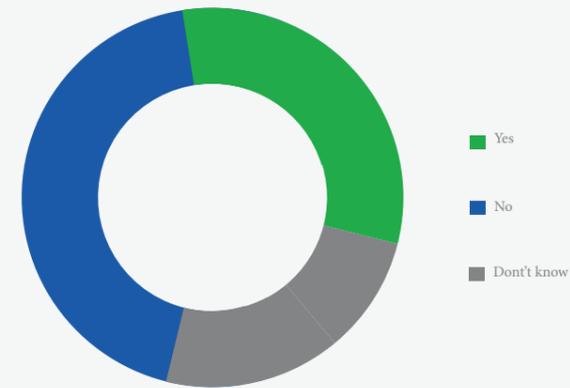


Figure 6: Respondent Demographic of primary survey

The author asked this question because knowing how educated people are on the Vaccine will determine whether they get the Vaccine or not. This question will also show whether people need to be given more information on the Vaccine itself, the benefits and what has been included; being more informed will allow the public to trust the Vaccine and have the correct information at hand.

The results above (Figure 6) show that 33% of people feel that they have received enough information about the coronavirus vaccine to be able to decide whether or not they will be getting the Vaccine. However, the larger percentage of 45.8% people believe that they do not have enough information about the coronavirus Vaccine to decide if they should or should not get vaccinated. Furthermore, 20.8% of people who participated think that they do not know if they have enough information on the Covid Vaccine. However, this does not determine whether the public that answered yes or no, will or will not get the Vaccine.

Now that the NHS Covid-19 vaccine has been approved how soon after it becomes available to you do you think you would get vaccinated?

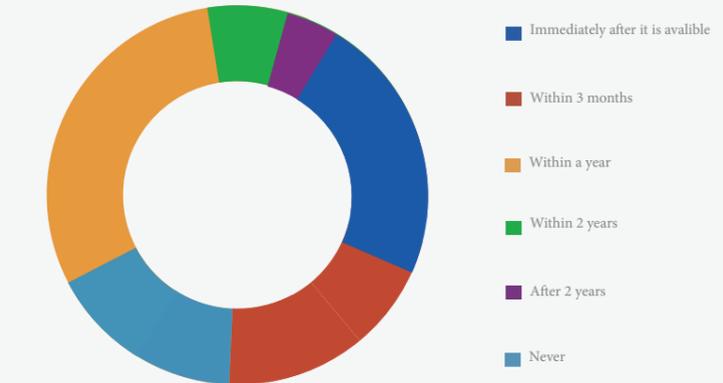


Figure 7: Respondent Demographic of primary survey

The question above (Figure 7) states exactly how many people that took part in the survey will, will not, and over what time period they are likely to have the Vaccine now that the NHS has approved it. The findings show that 29.2% of the people who participated in the survey will take the Vaccine immediately after its available this shows that there are people who might have enough information on the Vaccine to be able to trust it, and 16.7% of the participants have stated they would wait three months before getting the Vaccine as they still might be unsure on how affective this Vaccine maybe, 29.2% of the participants would wait a year before getting the Vaccine this could be because these people do not have enough information and want to make sure it is safe. A small percentage of participants would wait within two years or after two years to ensure the Vaccine is entirely secure. Graph shows a higher percentage of the population would wait a year or more to get the Vaccine than get it straight away, this demonstrates they have little or no knowledge about the Vaccine. Out of that, 12.5% of the participants stated they would never have the Vaccine. This could be because they have no experience or have seen negative information regarding the Vaccine.

The Author also asked for a reason for figure 7 Answer selected.

The individuals who stated they would get the Vaccine as soon as its available have said

“The sooner everyone gets it, the quicker this is all over. I don’t see a reason not to, I trust the scientists who’ve developed the various vaccines available and the process required for them to be approved.”

“I would be glad to get the vaccine, to ensure my family’s safety”.

The more popular views from the individuals that would wait a year or more to get vaccinated include:

“they would like to see the side effects it has on other people, both physical and mental ones, prior to me taking the vaccination on themselves, as they still do not fully trust the vaccine as of yet not enough information available”.

“Studies haven’t shown exactly what is inside the vaccine or have shown possible side effects”

“Don’t trust it too many different vaccines becoming available”.

“Because there could be unforeseen side effects that effect you later in life like having children”

“I’m unsure if it is safe as it was developed so quick”.

interview findings

It was decided that speaking to people who have and haven't already had the Vaccine this would give a greater understanding of the topic. Interviews were conducted with various members of the general public with different backgrounds, employment status, vaccine status and ethnicity. This was done to ensure key representations of views across the whole community are taken into consideration and not just one type of population demographic is represented in the findings. The consensus was that there is not enough information for the public to make confident decisions as stated by interviewee #2.

From this we can see that people are not heavily informed in terms of possible side effects in regard to whether they should have the vaccine or not. Side effects have been stated by an Interviewee who has had the vaccine said, "I felt drowsy, suffered with headaches and flu like symptoms" (#1).

Most people rely on news channels and social media and have felt that they could have been more informed. Individuals having access to social media have had a more negative effect in terms of knowledge of the benefits and disadvantages of the vaccine and thus this has had a direct negative correlation on opinions of the public.

When analysing the interviews, it is evident that the public require more knowledge of the side effects and these side effects need to be put into proportion on the grand scale of the pandemic. It is apparent that there is currently nothing in the public eye to demonstrate this effectively.

The interviews also make obvious that there is a general negativity towards the vaccination in the Muslim population more specifically, the unemployed and uneducated sector. In comparison to White British unemployed members of the public. Furthermore, front line workers have more positive views on the vaccine and are more likely to receive their vaccination, this can be due to receiving more information on the vaccine which is not in the general public eye.

“would not get vaccinated straight away I feel like there are side effects yet to be discovered but in the future ones I know everything I need to know then definitely. (#2).

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In comparison to this Figure 5: Respondent Demographic of primary survey When asked about the positive impacts of the vaccine, the general consensus is that public safety will increase eventually and getting back to normality is one of the biggest advantages of the vaccine as quoted by #1.

“helps get us back to normality and protects myself and my family also has been found to be over 90% effective.”

On the other had relating back to ethnicity as she has had the vaccine she has clearly done research in to the vaccine and has come to the conclusion it was a good idea for her getting vaccinated as also quoted by an interviewee #3:

“Yes, if it means saving your life and others around you. I would definitely recommend the vaccine to those who have a medical history.”

It is apparent the general public can be driven to receive their vaccinations on this basis alone. The author believes targeting social media will have a huge impact on vaccine uptake.



influence shot

We live in an interactive community where social media has become a part of most people's daily lives, now more than ever before. People use social media to stay in touch with friends and relatives, share personal knowledge, opinions, or suggestions, collect data on certain topics, such as health, and get advice from others. Unverified facts, false fears, and misleading warnings to chat groups and social media regarding the risks of vaccination against Covid-19 have a genuine influence on personal decisions about the need for inoculation.

As stated by an interviewee Samuel B:

“I think certain news channels offer some information at the same time people on social media are saying another thing but there is nothing to follow up and confirm so I believe that I have some information but not everything I would like to know”. (Samuel B 2021).

On the other hand, we can argue social media contradicting with the news media. We can see that the news is trying to push positive information regarding the vaccine. Doing so by broadcasting statistical information as well as the prime minister pushing out his thoughts and his plans regarding the future. To compare this with social media we are able to see social media showing the positives and negatives regarding the vaccine to evidence this:

As stated by an interviewee Tiliewa:

“seeing the vaccine on social media not working properly on people makes me not have faith in the vaccine to work to its full Capacity”(Tiliewa.Y, 2021).

With this information we can see two sides of the story, regarding social media, there can be a lot of positives and negatives which can influence a person's mindset about the vaccine. As we can see in Tilewa's statement his mindset is very negative due to social media, this can be due to assumptions such as anti-vaccine groups who promote negative connotations which is spread to millions of people. Although, this could be the same with news outlets promoting positive information daily through television which is seen by millions. However, individuals seem to be more influenced by the more personal stories shared on social media.

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The study shows that social media plays a significant role in people's views about the vaccine itself, as the public depends heavily on social media for information as confirmed by interviewees. This is because social media presents a positive or negative picture of the Vaccine to the public which can immediately focus their opinion. In the same way as the media has the potential to drive a significant number of people away from the Vaccine, they still have the power to share optimistic news about the importance of vaccines and to rebuild faith in vaccination. According to posts shared around social media, these will decide how many more people will have or turn away from the Vaccine.



Actor Ian McKellen shared a photo on social media of him receiving the Pfizer vaccine, making him one of the first celebrities to do so.

“I Feel very lucky to have had the vaccine. I would have no hesitation in recommending it to anyone.” Ian McKellen.

How design can play a crucial role?

Overall, the genuine and much more severe threat to patients and society as a whole is Covid-19 itself-not the Vaccine designed to combat it. In reaction to the pandemic, communities must weigh the balance of factors between immunizing the population and doing little to stem the scourge.

Design has a crucial role in vaccine uptake, it can communicate and have a positive impact. Whether used to advise or offer information on symptoms, treatment, and disease, looking back at it, graphic design plays an essential role in the frontline response to infectious diseases, making life-saving communications available to everyone. Examples of this can be used in bold graphics to raise awareness of HIV/AIDS in the 1980s and NGO ads during the 2014 and 2015 Ebola outbreaks.

In the 1950s, Marie Neurath collaborated with health officials in Nigeria to set up the famous Isotype Information Design Method to use the fight against the spread of leprosy.

Changing minds can happen. Marketing has a vital role to play. This is a significant opportunity for Designers to use their special creative skills to make a substantial contribution to making people understand the importance of the Vaccine. (Saleska, J., 2021).

conclusion

To summarize, Design has a vital role in society and culture through the visual experiences and languages that design creates. The impact is even more dramatic when you consider the digital world we live in, a world that conditions every generation to think, communicate and interact more visually. The direction of my design question has not changed I have discovered many common trends within perspectives of different demographics into the coronavirus vaccine. The data obtained Many people do not have the necessary knowledge about the Vaccine, and their perspectives are misled from unofficial sources, which can cause conflict. Misunderstandings and a lack of communication can be potentially harmful and cause distress to those who believe in the efficacy of the vaccine. The design question remains:

coronavirus vaccine; perspectives of different demographics and how design can play a crucial role in education about the vaccine.



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(Image 1 Unsplash 2020.,) <https://unsplash.com/photos/wgKEokhajKw>

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