

# A qualitative study of factors influencing COVID-19 vaccine hesitancy among South Asians in London

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## Abstract

### Objectives

This qualitative study sought to elicit the views and experiences of patients and health-care professionals to identify the factors associated with COVID-19 vaccine hesitancy among South Asians in London.

### Design

In-depth semi-structured telephone and virtual interviews.

### Setting

UK.

### Participants

Convenience and purposive sample of 12 individuals including patients, clinicians, and a medical receptionist.

### Main Outcome Measures

Our dataset identifies and explains the reasons for distinguishing between those individuals who are COVID-19 vaccine-hesitant, and those who are COVID-19 vaccine-anxious.

### Results

COVID-19 vaccine hesitancy and the decision on whether to - or not to - vaccinate against COVID-19 involves ongoing and unresolved inner conflict about COVID-19 vaccines. Our findings therefore suggest that some individuals may be existing in a state of *inbetweenness*; where they are neither pro nor anti vaccination, while simultaneously questioning the many 'truths' surrounding COVID-19 and not just one truth such as the safety of COVID-19 vaccines. We argue that this *in-between* state is intensified by technology and social media; culminating in the *Rashomon Effect*, whereby a combination of truths, fractured truths, subjective realities, and unreliable or contradictory sources impact on our perceptions of COVID-19.

### Conclusions

Given the complexities arising from the multiple factors influencing vaccine hesitancy and scepticism, 'quick fixes' and 'one size fits all' solutions to address COVID-19 vaccine hesitancy will be ineffective. Therefore, promoting trust and prioritising good after-care as well as ongoing care as a response to the effects of the pandemic is vital.

## Keywords

COVID-19 pandemic, vaccine hesitancy, qualitative study, patient care

## Introduction

The rapidly growing literature on vaccine hesitancy reveals deep-seated levels of mistrust and a tsunami of misinformation as the root causes of COVID-19 vaccine hesitancy amongst UK South Asians.<sup>1–3</sup> Authors have raised grave concerns that not only does this threaten to undermine vaccine take-up in this group, but that it will also place unvaccinated South Asians at higher risk of serious illness, hospitalisation, and death from COVID-19.<sup>4</sup> While COVID-19 vaccines have proven to be highly effective in reducing the risks from COVID-19,<sup>4</sup> a cycle of mistrust and misinformation around the vaccines continue to persist.

Authors have pointed to the multifaceted nature of this mistrust.<sup>5–9</sup> The following have been identified as key contributors to vaccine hesitancy in minority ethnic groups: a history of systematic racism, a disproportionate number of healthcare workers from ethnic minority groups who died from the virus, the health and safety of ethnic minority groups perceived to be a lower priority for leaders, and low trust in Government and medical authorities. These concerns are coupled with several other concerns—which are specific to COVID-19 vaccines—such as the side-effects of vaccines, the speed with which they were developed, fears of the impact on women's fertility, and that the vaccines may contain alcohol or pork. These fears are exacerbated by underlying health conditions.

Some writers have also argued that individuals are more likely to use information about COVID-19 via social media than relying on more traditional formats such as radio, TV Broadcasts, and Government agencies—thus leaving them more vulnerable to consuming misinformation and anti-vaccination conspiracy theories.<sup>10,11</sup>

Valid as these points may be, they are limited in at least three respects. First, there is a constant tendency on the

part of authors to regurgitate the same information about mistrust and misinformation without acknowledging that these dynamics are fluid. There have been some notable changes which show that intent and uptake has significantly risen among the South Asian population as well as black ethnic groups, thus narrowing the gap between them and their white counterparts.<sup>12</sup>

Second, the overemphasis on contextual factors such as ethnicity can be seen as stigmatising and an oversimplification given that the explanations do not consider the ways in which certain psychographics such as interests, attitudes, and lifestyles might also contribute to vaccine hesitancy and scepticism among individuals within South Asian communities.

Third, over-focusing on vaccine misinformation and conspiracy theories as barriers to vaccine intent and uptake in turn obscures the complex, multiple influences on how we think as individuals and how we might engage in decision-making processes. It also assumes that we passively consume media content and that we do not exercise thought as we engage social media.

Several authors agree that the views of vaccine hesitant people are legitimate and should not be dismissed as irrational.<sup>2</sup> While we endorse this view, we contend that, however well intentioned, these statements remain in the shadow of the dominant discourse; which calls for people to urgently come forward for a COVID-19 vaccination—be it a first, second, or booster dose. This sense of ‘urgency’ has been accompanied with several initiatives<sup>12</sup> that have been set up specially to tackle vaccine hesitancy; which, the World Health Organisation (WHO) identifies as one of the top ten threats global health.<sup>13</sup> Amid these initiatives, and the reports detailing the extent of their success, there is little data that specifically gives insight into the views of South Asians.<sup>14</sup> It is therefore possible to assert that the attention to factors influencing individuals’ decision-making processes is seriously limited in current discussions on vaccine hesitancy—hence signalling to vital information being missed on how we can better understand factors affecting vaccine intention and acceptance among South Asians. It is essential to understand their views or concerns and to define strategies to ensure a better relationship between South Asian communities and healthcare. We therefore chose to carry out an in-depth qualitative interview study of South Asians to explore views on the COVID-19 vaccine, including the decision-making methods employed by them whether to - or not to - vaccinate against COVID-19.

## Method

### Study design

We used a qualitative methodology consisting of in-depth semi-structured interviews to explore vaccine hesitancy among South Asians. Our research participants, whose

ages ranged between 20 and 50 years, comprised of 12 participants: seven individuals who are registered patients at a large National Health Service (NHS) general practice in Southall, a town also notable for its long-established South Asian communities in the Borough of Ealing. Our participants also comprised of a receptionist working at this general practice and four healthcare professionals; including three GPs and a clinical fellow who have all had first-hand experience of addressing vaccine hesitancy among South Asian groups. All participants were British; 11 represented Indian, Pakistani, and Afghani backgrounds, and one of the GPs was White British.

Interviews were carried out between 29 July 2021 and 02 November 2021. The topic guide was developed through iterative cycles and informed by the situation of the pandemic and the different phases of the COVID-19 vaccine roll-out. Participants were asked broadly about their own experience of the pandemic and their views concerning the COVID-19 vaccine in order to obtain a more holistic understanding of vaccine hesitancy.

### Participant recruitment

South Asian patients registered at the general practice were recruited using purposive sampling. In the first instance, calls for voluntary participants were made via text messaging; where patients were informed about the project and provided a web link directing them to the Practice website which detailed the purpose of the project. The GPs were selected using convenience sampling; with the aim of recruiting professionals known to one of the authors (also the lead GP Partner at the practice). Several other healthcare professionals were also contacted; one healthcare professional (the clinical fellow) responded and agreed to an interview.

Participant information sheets were sent via email and informed consent was acquired in writing prior to arranging an interview. All participants were assured that measures were in place to ensure that their identity would only be known to the researcher. As this work was part of a quality improvement project, aimed at enhancing our understanding of vaccine hesitancy and the decision-making process, it did undergo an approval process with the practice team at the general practice in Southall. The project did not require NHS ethics approval, in line with guidance from the NHS Health Research Agency.

### Data collection and analysis

In-depth semi-structured interviews were conducted by telephone or online using the “Zoom” call software; depending on what was convenient and comfortable for the respondent. Interviews lasted between 30 and

**Table 1.** A summary of key factors associated with COVID-19 vaccine hesitancy among South Asians in London.

| Factors influencing COVID-19 vaccine hesitancy in participants  | Quotes / Evidence  |
|---|--|
| <p><b>CONFIDENCE</b></p> <p><b>(i) Low confidence in COVID-19 vaccines</b><br/> <b>Most participants:</b><br/> Vaccine content, fast development of vaccines, potential side-effects, underlying health conditions, anecdotal evidence from family/friends who had had / were continuing to experience side effects post vaccination(s), questioning the number of vaccinations / 'boosters' needed</p> <p><b>COVID-19 Vaccine Anxious participants:</b><br/> Potentially affecting fertility and pregnancy outcomes (female participants only), experienced mild-moderate side effects post vaccination(s)</p> <p><b>(ii) Low confidence in external agencies</b><br/> Information given by health authorities and Government perceived as inconsistent and contradictory, ongoing unfair treatment of NHS staff</p> | <p>"Third vaccination is giving me severe anxiety, should I or should I not... And then they text me about the pneumonia jab... I mean how many jabs are they gonna give me? I'm gonna be like a voodoo doll at the end of it." - <u>Male patient 1</u></p> <p>"It's been overwhelming. I'm not listening to anyone anymore. I don't believe in it. It's been tough. I've had [two vaccinations] ...no more!" - <u>Receptionist</u></p> <p>"I think it's a really interesting psychological phenomenon that even, however educated, intelligent, even Doctors, even if you are a Doctor yourself... I had the first and second vaccine and I felt fine. I had a booster recently and fell ill afterwards... And does it make you hesitant afterwards? It does unfortunately..." <u>GP 3</u></p> <p>"A lot of contradictions going on with the Government... they know no one is going to look at [the data]... [Telling] Nurses... if you don't get [vaccinated], you are losing your job. [When] there was no vaccine, you were okay with them risking their lives then." - <u>Male patient 2</u></p> |
| <p><b>COMPLACENCY</b></p> <p><b>COVID-19 Vaccine-Hesitant male participants:</b><br/> Likening COVID-19 to the flu, confident in fitness levels, nutrition, natural remedies, immune system, curious to see how the virus evolves and distrust of Government, willing to avoid busy social settings.</p>  | <p>"I'd rather take my chances with COVID [than take the vaccine]... a risk [me and my wife] are willing to take. If we get it again [we are] willing to take our chances. I am not an anti-vaxxer." - <u>Male patient 3</u></p>   |
| <p><b>COMMUNICATION</b></p> <p><b>Most participants</b><br/> Mainstream media and social media platforms had further increased concerns and anxiety / scaremongering the public</p>   | <p>"...rumours and misinformation spreads five or eight times faster than true information - see Social Dilemma or Netflix for further details." - <u>GP 1</u></p> <p>"The reason I was pro Astra Zeneca was because of political reasons... all the Pharma Companies are making so much money with Pfizer and all the others whereas Astra Zeneca was not-profit. I was not fazed by the news of the blood clots; felt it was designed so that people took the others." - <u>Female patient 2</u></p>   |
| <p><b>CONTEXT</b></p> <p><b>COVID-19 Vaccine-Hesitant participants</b><br/> Working from home</p> <p><b>COVID-19 Vaccine-Anxious participants</b><br/> Pressure to receive vaccination due to various reasons, that is, 'save lives and livelihoods'</p>  | <p>"[My husband's] got his parents and they're quite vulnerable and elderly and then we've got two [children]... And I think that really pushed me towards it and also take into account that I work in elderly care services... I need to consider all the bigger factors here... and it's not just about me... so yeah, that's why I took that path to go and get the injections done." - <u>Female Patient 3</u></p>  |

90 minutes. All interviews were recorded, with prior authorisation through an informed consent protocol. Interviews were transcribed and anonymised. The data was analysed using an interpretive approach and categorised to identify key themes and patterns.<sup>15</sup> We used the 'Four Cs' model of vaccine hesitancy (see Table 1), which focuses on issues pertaining to confidence, complacency, communication and context which are considered to influence an individual's decision about COVID-19 vaccines.<sup>16,17</sup>

## Results

### Views and experiences on COVID-19 vaccination

The WHO Strategic Advisory Group of Experts Working on Vaccine Hesitancy, define vaccine hesitancy as the 'delay in acceptance or refusal of safe vaccines despite

availability of vaccination services'.<sup>18</sup> Elsewhere, and perhaps a more fluid definition is one given by Osama and Majeed, who state that 'The vaccine-hesitant represent those who are uncertain about getting vaccinated, but remain open to it if they are convinced that vaccines are safe, effective, and necessary. In the vaccine-hesitant, it is essential to differentiate between vaccine-associated misinformation and mistrust'.<sup>7</sup>

Before COVID-19, all our participants and their relationship with vaccines seem to have been an easy and unproblematic one. However, in the COVID-era, our participants reported a range of views on COVID-19 vaccines; and it was clear from the outset that their concerns and hesitations were specific to these particular vaccines. It is for this reason, that we use the terms *COVID-19 vaccine-hesitant* and *COVID-19 vaccine-anxious* to describe and distinguish our respondents (with the exception of the healthcare

professionals given that it was clear from the outset that they had all been vaccinated).

In the *COVID-19 vaccine-hesitant* category, which comprised of three participants, they explicitly stated that they were hesitant; with the understanding that this hesitancy is based on a delay in acceptance of COVID-19 vaccines rather than a flat-out refusal.

The *COVID-19 vaccine-anxious* represent those who may or may not have been COVID-19 vaccine-hesitant, have had a COVID-19 vaccination(s), however remain concerned about aspects of the vaccines, and are not entirely confident about the COVID-19 vaccination rollout programme. Of the five participants (four patients and the receptionist) who had been vaccinated, they had all received both their first and second doses. Their views at the time of interview continued to reflect their anxiety over the COVID-19 vaccines.

## Discussion

### Statement of principle findings

We attempted to explore the views of a diverse range of individuals on vaccine hesitancy as experienced in the COVID-19 era. A key finding was that a lack of trust operated on multiple levels in perpetuating vaccine hesitancy. Thus, the lack of trust in healthcare authorities and Government as well as various media platforms were present among most of the participants. For some participants, this was coupled with concerns about the coercive measures that could be deployed in the near future to increase vaccine uptake. According to some participants, such coercive methods were already in effect; including incentivising people with the opportunity to travel abroad (for one patient, the potential threat of not being able to travel and hence alter her 'lifestyle' proved to be an incentive to receive her vaccination).

What is perhaps more worrying are coercive methods that involve threatening people from earning a livelihood; which one of the participants (the receptionist) reported to have experienced in her previous workplace. At this point it is worth noting that while healthcare workers were one of the first groups to receive a COVID-19 vaccination, there have also been reports of vaccine hesitancy among them.<sup>19,20</sup> Further, in 2021, legislative measures for COVID-19 vaccination to be mandatory by April 2022 for NHS staff in England was given serious consideration,<sup>21</sup> where NHS staff were informed that unless medically exempt, they would be required to have two doses of a COVID-19 vaccine, or face deployment or complete dismissal. Several authors raised serious concerns that such measures would only further exacerbate staff shortages on a health service that is already exhausted and depleted.<sup>22,23</sup> These concerns played a key role in the Government announcing, in March 2022, the removal of such

regulations coming into effect.<sup>24</sup> The perception of NHS staff being treated unfairly strongly suggests that the distrust of vaccines cannot be considered in isolation, but rather, it is multifaceted in nature.

Against this backdrop of accumulated mistrust, news circulating on social media and by word-of-mouth is also seen as a contributing factor to an individual's level of confusion, distress or mistrust around their social world—which, within the context of ongoing uncertainties, should not be underestimated.<sup>25</sup> This indicates, and as articulated elsewhere, 'individuals may be reacting to information made available and exemplifying how hesitancy is a complex, time-dependent construct that is influenced by several [constant] factors'.<sup>18</sup> It also suggests that some individuals, particularly those who we identified as *COVID-19 vaccine-anxious* are making pragmatic decisions in light of the emerging data; and that such a decision making process simultaneously involves managing ongoing and unresolved inner conflict about the COVID-19 vaccines.

Interestingly, our findings also show that the continuing mistrust has contributed to motivating some participants to become more fluent in their understanding of vaccines (including reading literature that focuses specifically on COVID-19, i.e. the ZOE COVID study),<sup>26</sup> which they admitted, to have taken very little interest in prior to the outbreak of the pandemic. This thirst for knowledge includes increasing their understanding of other health-related topics too.

The motivation to educate ourselves in arenas that we would have otherwise been ignorant in, arguably, represents something good. Yet, a major concern among health and governmental authorities about COVID-19 is how this knowledge is being consumed and understood; particularly as it opens up the possibility for people being vulnerable to both mis—and—disinformation—which in themselves have been identified as key contributors to bolstering vaccine hesitancy as well as promoting anti-vaccine movements.<sup>11</sup> More specifically, according to WHO, the world is also fighting an 'infodemic' which is described as 'a few facts, mixed with fear, speculation and rumour' which, within the context of ongoing uncertainties and knowledge gaps, has been amplified through technology and social media platforms'.<sup>16</sup>

In acknowledging an 'infodemic', authors place emphasis on how mis—and—disinformation is feeding on people's fears and anxieties about the pandemic.<sup>27,28</sup> While this argument is valid, it is nevertheless limited in its scope; for the overemphasis on the terms mis—and—disinformation, is in itself, a distracting premise to think critically from. The over usage of these terms encourages the perpetration of either / or scenarios where people are set up in binary opposition; those who are consuming (correct) information and those who remain misinformed—leaving very little space to entertain the idea that there might be individuals who,



‘presently’ exist in a state of *in-betweenness*, where they are neither pro nor anti COVID-19 vaccines, but instead are questioning many of the so-called indisputable “truths”—and therefore not just one truth such as the safety of COVID-19 vaccines. It is for this reason therefore, that it is imperative to consider the *Rashomon Effect* in light of our findings.

The 1950 film *Rashomon*, by Japanese director Akira Kurosawa, deals with themes of fractured truths, subjective realities and unreliable sources; themes which, arguably, characterise the postmodern world.<sup>29</sup> It could also easily be argued that the COVID-era has amplified these themes — especially as it is also representative of a time in which the pandemic induced lockdown only increased many people’s consumption of social media thus amplifying the *Rashomon Effect*.

As Mirzoeff argues, the effects of global media are such that this has resulted in us existing in a world where ‘whether by choice or not, we see a version of events that makes no effort to be comprehensive’.<sup>29</sup> As a people, including our participants and health professionals alike, we each have access to social networking around the clock, and we each choose a set of media sources with which we are sympathetic and align with our own beliefs and universal truths—such as the healthcare professional (GP 1) who stated relying continually on BBC1 News for information. As a result, algorithms steer us towards our ‘interests’ which has led Mirzoeff to conclude, ‘We are all living in our own version of *Rashomon*’.<sup>29</sup> Mirzoeff wrote this in 2014, but our findings demonstrate that the arguments may be more salient today than they were in 2014. Our dataset therefore demonstrates that any dialogue on COVID-19 vaccine hesitancy is incomplete without acknowledging the *Rashomon Effect*.

### Strengths and weaknesses of the study

This is the first study that we are aware of that considers the *Rashomon effect* in relation to COVID-19 and highlights its relevance in enhancing our understanding of vaccine hesitancy and people’s responses to the pandemic. We duly note that these qualitative research findings cannot, by the nature of sampling and data collection methods used, be generalised to some broader set of conditions of what still remains, a novel area of inquiry.

### Strengths and weaknesses in relation to other studies, discussing particularly any differences in results

This was a relatively small in-depth study. At the same time, it promotes the view that it is worth considering the ways in which certain psychographics such as

interests, attitudes, and lifestyles might also contribute to vaccine hesitancy and scepticism among South Asian communities and beyond rather than limiting it to, for example, demographic differences like age, income, and ethnicity only.<sup>30</sup>

### Meaning of the study: possible mechanisms and implications for clinicians or policymakers

This project acknowledges that the NHS faces challenges which extend beyond the pandemic. Going forward, it will be critical that lessons have been learned and continue to be learned during this pandemic so that the importance of inclusiveness in health systems are not only acknowledged but also embedded in policy response.

### Unanswered questions and future research

Given the impact of the coronavirus pandemic, further research might explore and implement innovative ideas that will build understanding and trust and prioritise after-care as well as on-going care for all.

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