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RESEARCH ARTICLE

STATUS AND DRIVERS OF COVID 19 VACCINE HESITANCY

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The nations globally are struggling to contain the virus with various interventions ranging from lock

down, masks, social distancing etc. But the vaccine seemed to be only modality to mitigate this virus.

But advent of vaccine along with promising hope also brought along vaccine hesitancy.

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ABSTRACT

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INTRODUCTION

SARS-COV 2 or COVID 19 has engulfed the whole world raising the toll of mortality and morbidity. The pandemic has completely upended people's lives for almost a year (Zheng, 2020). To control the effect of virus on public health, the economy and society, a vaccine was direly needed. This led to the tireless endeavors worldwide by scientists for the development of the vaccine at an unprecedented pace (Kaur, 2020 and Parker, 2020). Everyone was eagerly waiting for the surfacing of the vaccine amid deadly unstoppable pandemic. The future decline in rates of covid 19 can only be predicted by the Vaccination. Vaccine development was hoped to offer varied advantages that encompassed decrease in covid 19 hospitalization, reduction in hospital strain and reduction in mortality toll (Cawthorn, 2020 and Anon, 2020). In no time in contrast to past, many nations inched closer to a number of covid candidate vaccines and it seemed we are at edge of culmination of this pandemic but another wave of, population hesitancy was found mounting (Amyl, 2020). Though the imminent challenges like equitable access, adequate supply, and efficient rollout were being addressed at faster pace throughout world but vaccine hesitancy posed another hurdle (Etzioni-Friedman, 2020 and Schuster, 2015). Public hesitancy has been named as Top 10 Threats to Global Health in 2019, affecting not only public health, but businesses and economies by WHO⁹. Data from various countries has depicted that other than challenges of manufacturing a vaccine and its distribution to the masses, one of the biggest barrier is public hesitancy or

*Corresponding author: Pranav Puri, India rather vaccine confidence or vaccine hesitancy or anti vax (Ten. 2019). Vaccine hesitancy or anti Vax is the hesitance in getting vaccinated. It stems from multiple key factors including a person's lack of confidence (mistrust of the vaccine and/or healthcare provider), complacency (the person does not see a need for the vaccine or does not see the value of the vaccine), and convenience (access to vaccines) (Coronavirus, 2020 and COCONEL, 2020). And this has been validated in current scenario by the reluctance so evident in population despite having faced the debilitating effects of this pandemic. But why we should be worried for the decline in acceptance? --Because all efforts would to be of no use that led world at the verge of getting pandemic extinguished with the instrument of vaccine. Till now many promising vaccines have come up and being rolled out in many countries but emanating vaccine skepticism has raised concerns in its uptake. The latest World Economic Forum-Ipsos survey elaborated the decline in masses confidence in getting covid 19 vaccination since August when news of vaccine coming in market started ¹³. It showed that on average, across 15 countries, almost 3/4rth of adults were not so forthcoming with idea of getting vaccinated, if vaccine is available. UK is the first country globally that has taken lead in getting vaccination for the masses¹⁴. But, study showed that Blacks, Asians, and ethnic minority groups (BAME) — including the Indian Diaspora are not ready for covid vaccine immunization. The study so done by Royal Society for Public Health (RSPH) depicted that 79 per cent of the British public was ready for the vaccine if so prescribed by their doctor or if getting more information about the vaccine.¹⁵ The surprising fact is the reluctance is maximum from Asian community in UK

especially those who are less literate and from poor economic background, which are disproportionately been affected most. Covid-19 pandemic had more debilitating effects on these ethnic groups owing to their living conditions and lack of access to medical resources. So, rapid and proactive targeted efforts must be taken by government and public health stakeholders for these communities ensuring that the disproportionate impact of Covid is not exacerbated. In this pandemic people have been showered with abundant information and misinformation, an 'infodemic' (Jinling, 2020) on a global scale. A lot of contribution is generated by media in creating a lot of mistrust around the COVID-19 vaccine by overall chaotic messaging around the pandemic. People have been exposed inevitably to misinformation and false conspiracy theories, which has eroded their confidence in vaccination.

Another study eliciting mapping trends in vaccine hesitancy in around 150 countries between 2015 and 2019, found that skepticism about the safety of vaccines tended to mushroom more alongside political instability and religious extremism (Misinformation, 2020). These findings corroborated with that of IPSOS survey that showed a statistically significant decline in the willingness to get a vaccine in individuals owing to mixed feelings or mixed messages around vaccines emanating from political campaigns (Jon Roozenbeek, 2020). A sizeable number of populations got hesitant on grounds of religious values too. Concerns regarding speedy clinical trials or side effects were also evident from many countries. Population in Japan mostly showed its worry regarding untoward side effects $(62\%)^{20}$. Discontentment with speedy clinical trials was reported most in Brazil and Spain (Coronavirus, 2021). (by 48% in both countries). Though not anti vax, many individuals wanted to "wait and see", if there are any unknown side effects from others who receive first and hence leaving the door open to getting the vaccine in future. A small number of people cited a specific fear of getting the live virus from the vaccine (2.1% of all responses mentioned this). They never wanted to be "guinea pigs" (Doshi, 2020) for the too "new vaccine" that others may take as a big break through the horizon that has emerged in a too short span of time.

Another attributing factor is "half knowledge" of herd immunity (Roy M Anderson, 2020). Many individuals globally are waiting to be protected by herd immunity only. But, the correct percentage values for the population are not as yet defined for enabling herd immunity. Herd immunity is shaped by multiple factors like efficacy of vaccine, basic reproduction rate (Ro) etc. And as per the statistical data of various studies showing Ro of 3.32, more than 70% of population has to be vaccinated to achieve herd immunity²⁴. Similar findings were evident in PYMNTS²⁵most recent national consumer survey. It was found that 37.9 percent of those - "strongly" planning to get a COVID vaccination were outnumbered by 38.4% who were reluctant and a quarter of consumers (23 percent) still unsure. In USA too resistance is being felt from black and brown community. Despite discovery of covid vaccine being a positive news, these communities were not comfortable with the idea of a population-wide, mass inoculation program. Moreover, in past multiple times not health promoting rather dangerous health policies or human experiments have been targeted towards them. The lessons so learned from Tuskegee²⁶ experiment may make black and latinx community to eye at new vaccine with skepticism.

The breakneck unprecedented pace of development of covid 19 vaccine is a proof of current innovative medical system and research. It also highlights the collaborative development efforts by pharmaceutical companies and public health agencies. So even after having approval of COVID-19 vaccine in a spree to stem the pandemic, it is important to understand that for many, it will take time to feel comfortable and confident in getting the vaccine. While the politicization of the vaccine is to blame for some of that delay, the increased reluctance of people to get a COVID-19 vaccine runs much deeper than politics. Moreover some senior scientists too emphasized that vaccine can't curb the pandemic like when pharmaceutical major Pfizer made the headlines on the release of their Covid-19 vaccine, its former Vice President and Chief Scientist²⁷ commented that no vaccine is needed to extinguish a pandemic.

Hence, many faces of vaccine skeptics has to be allayed. There is a need to understand and be sensitive to masses concerns that can prevent optimal uptake. Efforts have to be focused, credible from reliable sources, demonstrating that getting vaccinated is important, beneficial, easy, quick and affordable. We should not forget about the success of previous novel vaccines and ensure that we build on lessons learned in their implementation, including capitalizing on early public enthusiasm shown during a pandemic. Supporting health-care professionals in their role as educators will ensure people have adequate and accessible information from a trusted source, to optimize vaccine uptake. Persistent, transparent, empathetic and proactive communication pertaining to risks and vaccine availability would indeed instill trust in masses. Collaborative efforts have to be pooled in from Public health stakeholders, medical experts and politicians in communicating to masses about the importance of this vaccine, that it is vetted and safe. Undoubtedly, by addressing these drivers the population would be moved in to accept it.

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