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Covid-19 vaccine hesitancy in ethnic minorities: an urgent public health concern

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The rapid development of safe and effective covid-19 vaccines is one of the greatest triumphs of modern science, and remains our best hope for ending the current pandemic and returning to normal life. However, the success of the vaccines depends upon the uptake, with mounting evidence that this differs between population groups. With mass covid-19 vaccination efforts underway in many countries, including the UK, it is essential to understand and redress the disparities in its uptake.

Data until 14th February 2021 show that over 90% of adults have received or would be likely to accept the covid-19 vaccine if offered.[1] However, surveys have indicated significantly higher vaccine hesitancy amongst some ethnic minorities.[2,3] In one survey (December 2020), vaccine hesitancy was highest amongst Black (odds ratio 12.96 [95% CI:7.34, 22.89]), Bangladeshi, Pakistani (both 2.31 [95% CI:1.55, 3.44]) compared to White ethnicity; though levels of vaccine hesitancy were comparable to Whites in other groups, such as Chinese.[4] This picture is reflected internationally in systematic reviews; the intention to be vaccinated for covid-19 is lower among some ethnic minorities.[5] Even more worryingly, data up to January 15th 2021 show substantially lower rates of covid-19 vaccinations in over-80s in England amongst ethnic minorities (White 42.5% vaccinated, Black 20.5%) and deprived communities (least deprived 44.7%, most deprived 37.9%).[6] Similarly, data from an NHS trust shows lower covid-19 vaccination among ethnic minority healthcare workers (White 70.9% vaccinated versus South Asian 58.5%, Black 36.8% p<0.001 for both).[7]

The higher rates of covid-19 vaccine hesitancy and lower vaccination rates in ethnic minorities follow a historic trend of lower vaccine uptake in areas with a higher proportion of ethnic minority groups in England.[8] Cohort studies using a primary care database of 12 million individuals show consistently lower uptake of influenza and pneumococcal vaccines in Black Caribbean and Black African populations (50%) compared to the White population (70%)[9]; lower vaccine uptake was also observed in South Asian ethnicities.[9]

This has profound implications. The pandemic continues to have a disproportionate impact on ethnic minorities, with higher covid-19 morbidity and mortality and greater adverse socio-economic consequences.[10] Without an effective vaccination strategy to mitigate the risks, the situation will worsen. Moreover, the differential uptake will further exacerbate pre-existing health inequalities and historic marginalisation of minority ethnic groups.

Vaccine hesitancy, characterised by uncertainty and ambivalence about vaccination, is a legitimate viewpoint, underscoring the failure or lack of effective public health messaging. Vaccine-hesitant individuals can still be convinced of the vaccines' safety, efficacy, and necessity,[11]and most importantly they are not 'anti-vaxxers'. Vaccination rates are also lower

in population groups that change address frequently, making NHS records inaccurate, which is common among ethnic minorities.[12]

The most common reasons for hesitancy are concerns regarding side effects and the long-term effects on health,[2] and lack of trust in vaccines, particularly amongst Black/Black British respondents.[4] Some have capitalised on these concerns to spread misinformation [11] but it is essential to differentiate misinformation from the historic mistrust of government and public health bodies that runs deep in some ethnic minorities.

Trust is eroded by systemic racism and discrimination,[10] previous unethical healthcare research done on Black populations,[13] under-representation of minorities in health research and vaccine trials,[9] and negative experiences within a culturally insensitive healthcare system.[10] The disregard for religious festivals of ethnic minorities have further undermined trust. Residential segregation, a form of systemic racism, affects health, and access to healthcare and resources to enhance health in multiple ways, creating conditions that amplify mistrust[10]. Segregation is rising in Europe, and in the UK, Bangladeshi and Pakistani people are the most segregated communities.[14] Ethnicity intersects with socioeconomic status and educational attainment, thereby accentuating the effects.[10] [14] Access barriers including vaccine delivery location, time, and distance are other factors that could aggravate the disparities in uptake.

Trust could be established by funding and supporting community and primary care-led vaccination efforts, as GPs are likely to be more trusted[3] by the communities they serve through longitudinal and relationship-based care. Engaging community groups, champions, and faith leaders and resourcing targeted, culturally-competent interventions would also help reduce vaccine hesistancy.[15] For example, assuaging doubts regarding the religious acceptability of vaccines will require consistent, non-stigmatising messages in targeted populations, co-designed, shared and endorsed by those within the community, including health professionals and faith leaders.[9] [16]

Prioritising vulnerable ethnic minorities, in particular healthcare workers, for covid-19 vaccination and recognising their roles as trusted sources of information could reduce the perceptions of risk of covid-19 vaccines among ethnic minorities. However, to date the Joint Committee on Vaccination and Immunisation (JCVI) has failed to do this. This risk communication can be further enhanced through educational resources in multiple languages to increase awareness,[17] including through social media using video messages from respected elders. Making the vaccination delivery more convenient and accessible including the provision of transportation, particularly for people who work in lower-paid public-facing roles,[17] and using places of worship as vaccination sites.[18]

The legitimate concerns and information needs of ethnic minority communities must not be ignored, or worse still, labelled as 'irrational' or as 'conspiracy theories'. It is important to engage, listen with respect, communicate effectively, and offer practical support to those who have yet to make up their minds about the vaccine. Covid-19 vaccination is one of the most important public health programme in the history of the NHS. Addressing vaccine hesitancy and ensuring vaccination coverage is high enough to lead to herd immunity are essential for its success.[19]

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