



The 65th ASH Annual Meeting Abstracts

POSTER ABSTRACTS

901.HEALTH SERVICES AND QUALITY IMPROVEMENT - NON-MALIGNANT CONDITIONS

Effective Targeting of Evolutions in Concerns Underpinning COVID Vaccine Hesitancy in Patients with Sickle Cell Disease across the Lifespan of the COVID19 Pandemic

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COVID vaccine hesitancy among patients with sickle cell disease (SCD) was prevalent during the pandemic. This subset of vaccine hesitancy within the SCD population is of particular concern due to the elevated risk of severe illness associated with COVID-19 in individuals with SCD. Numerous factors contribute to vaccine hesitancy in this context, including concerns specific to SCD, such as potential interactions with disease-modifying therapies, uncertainty regarding vaccine efficacy in this population, mistrust in healthcare systems, and historical disparities in healthcare access and delivery. Underlying psychological factors, such as fear and anxiety, may also influence vaccine hesitancy in patients with SCD.

We sought to survey our patients' feelings towards the COVID19 vaccination in the peak of the pandemic (Sept-Dec 2021), as we had noted that some patients had declined the offer of vaccination and others had had a one or two doses, then stopped. 54 patients with SCD were surveyed anonymously and data analysed in excel and NVivo. 27.8% had had no doses and only 14.8% had had the 3 doses as recommended at that time leaving 57.4% partially vaccinated. Breaking this down by age, the younger patients (<16y) were more likely to have had no doses (0%) with progressive rise in uptake to the older age group (>35) where 13.9% had had no doses. Even in this older age group, only 19.4% were fully vaccinated however (A).

Qualitative analysis of text responses (B) revealed themes of concern regarding:

- Lack of trust in the new and 'untested' vaccine:
- Fear of side effects and complications, particularly concerns about the vaccine's compatibility with their conditions and medications.
- Mistrust in the vaccine's efficacy and necessity
- Lack of long-term research and unknown effects
- Influence of social media and misinformation
- Personal choice and autonomy
- Desire for more information and communication

We then undertook semi structured interviews with volunteers to understand these concerns in greater depth and progressively developed a toolkit of resources around commonly reported concerns to inform shared decision making. Discussion of these resources with patients increased our understanding of the concerns in greater depth and permitted iterative improvements to the resource such that it reduced hesitancy in all respondents, garnering a self-reported reduction of 61% on a 1 to 5 Likert scale.

More recently, we have noted a significant cohort of patients who, although they were happy to accept the initial offer of 2-3 doses, have not assented to have further booster doses. We therefore re-surveyed (July 2023). 44 patients replied. 20.5% had had no doses and only 11.4% had had the 5 doses recommended leaving 68.2% partially vaccinated (C). A similar age dependent increase in acceptance was seen (60% of under 16s unvaccinated vs. 16.7% of 35 & overs). Only 36.4% had accepted the offer of a broader coverage booster (D).

There was an evolution in qualitative themes (E)

- Mistrust in/scepticism about vaccine technology
- Doubts about vaccine efficacy
- Side effects experienced
- Anger at being singled out/'forced' to get boosters
- Boosters reminding of the pandemic's impact on mental health

Most worryingly, there are statements regarding dissatisfaction with healthcare providers' responses regarding the vaccine and suggestions that continuing to promote the vaccine in the face of deep-rooted objections is eroding the doctor-patient relationship and level of trust and confidence in the team which is frequently hard won and highly prized by patients with SCD.

Appreciating the causes of the underlying concerns and development of tailored interventions are necessary to develop targeted educational campaigns that address SCD-specific concerns, effective communication strategies that involve healthcare providers and patient advocacy groups, and the provision of accurate and transparent information. The more recent set of themes are more challenging to develop targeted resources towards, but they contain critical learning for physicians regarding the potential damage caused by promoting the vaccine too strongly to those who remain sceptical. By more fully understanding the sources of ongoing vaccine hesitancy among patients with SCD we can best support our patients to mitigate the potentially devastating consequences of the disease in this vulnerable population whilst maintaining the fragile therapeutic alliance.

Disclosures Sharif: *Pfizer Ltd:* Current Employment. **Shastri:** *Pfizer Ltd:* Current Employment.

<https://doi.org/10.1182/blood-2023-174380>



Figure 1