Abstract

Vaccine Hesitancy is seen as one of the world’s most pressing global health threats. Fueled by lack of confidence, complacency, and inconvenience, Vaccine Hesitancy is present globally. However, refugees and displaced persons are particularly at risk due to a unique set of barriers, such as lack of access to vaccination centers, lack of distributed information about vaccines, lack of nearby medical care, and misinformation. Specific examples from the Somali, Russian-speaking, and Afghan populations are offered to demonstrate the causes and effects of Vaccine Hesitancy. Tackling Vaccine Hesitancy successfully in refugee and displaced populations can only be completed by multidisciplinary efforts coordinated by government and community organizations.

Introduction

Vaccinations have long been seen as one of the most successful public health interventions and innovations throughout history. However, in 2019, the World Health Organization declared Vaccine Hesitancy as one of the world’s top ten global health threats, leading to the “urging of regular monitoring of vaccine sentiments at national and subnational levels.”

What is Vaccine Hesitancy?

Vaccine Hesitancy is a relatively new term defined by the Strategic Advisory Group of Experts (SAGE), the principal advisory group to the World Health Organization for vaccines and immunization, as the “delay in acceptance or refusal to vaccinate oneself or others despite availability of vaccination services.” The term and belief is hard to define as it entails a continuum of attitudes, behaviors, political factors, and spiritual acceptance across time, place, and vaccines. Globally, Vaccine Hesitancy is heterogenous across sub-populations depending on gender, age, ethnicity, religion, and socioeconomic status. However, the consequences of Vaccine Hesitancy are concrete and endless for society. As a result of decreasing lower rates of childhood and adult vaccinations, there have been increasing outbreaks of diseases once thought to be eradicated or controlled, such as Haemophilus influenzae type B disease, varicella, measles, and pertussis.

Reasons for Vaccine Hesitancy

The SAGE Working Group has categorized reasons for Vaccine Hesitancy into three main factors: lack of confidence (in effectiveness, safety, the health system, advisors, policy makers, etc.), complacency (perceived low risk for acquiring the diseases), and lack of convenience (in availability,
accessibility, time, language, culture etc.).\textsuperscript{4,5}

Additionally, with the blossoming of the internet and social media, there has been a proliferation of misinformation resulting in public mistrust in science. Notably, many concerns of vaccines were initiated by the now discredited Lancet study which associated the measles, mumps, and rubella (MMR) vaccine with the development of autism.\textsuperscript{2} In fact, in 2008 and 2009, the United Kingdom’s Health Protection Agency attributed a large measles outbreak to a concurrent drop in children receiving the MMR vaccine as a direct result of the article. While it has now been retracted, the article has had sustaining and lasting effects which has led to dramatic health consequences of vaccine hesitation.\textsuperscript{6}

**Barriers Leading to Vaccine Hesitancy in Refugee Communities**

Refugees and individuals who have been displaced face a unique set of circumstances and barriers towards accessing vaccines, which, in turn, can lead to varying degrees of acceptance.\textsuperscript{7} As a result, refugees, immigrant communities, and displaced individuals experience lower immunization rates and higher burden of vaccine-preventable diseases.\textsuperscript{1}

For those resettled in low- and middle-income host countries, availability of vaccines may be limited. For example, in the year 2020, 85% of refugees were hosted in lower- and middle-income countries but 85% of vaccines were distributed to wealthy countries. With the limited inventory, individuals who are displaced are oftentimes deprioritized, which can lead to mistrust of vaccines once they are finally accessible.\textsuperscript{7}

Mistrust can be perpetuated by limited knowledge of vaccines and their positive effects particularly if there was lack of government outreach or official information in either the home or host country. This may be rooted by cultural beliefs or simply because it is a low priority when governments are not even providing essential services like food or shelter\textsuperscript{7}.

In the host country, vaccine information campaigns are not usually in the refugee’s native language or the individuals may not have the devices necessary to receive the information (e.g., computer, radio, television, etc.). Additionally, many refugees or displaced persons may not have access to the medical professionals charged with informing the community, as seen in the COVID-19 vaccination roll out in Uganda and Australia.\textsuperscript{7}

Lack of access to health care professionals to ask questions about the risks and benefits of health information may further perpetuate the spread of misinformation and mistrust mentioned previously. Individuals may also fear having side effects from the vaccines without access to appropriate medical professional help.

Physically accessing vaccine centers also poses a large barrier for refugee communities, especially for those living in camps or settlements. Unless vaccines are brought to them specifically, they may have a very difficult time getting to the nearest vaccination centers, which are often located in urban areas far from the rural settlement communities. Other barriers include transportation access and cost, inability to take time off from work, and limited mobility. Safety concerns of
traveling to the sites, especially for women, may also prevent access.\textsuperscript{7} Further, some individuals may be fearful of xenophobia or of needing to provide valid documentation in the host country in order to receive or register for vaccination.\textsuperscript{1,7}

Finally, as misinformation of vaccines has grown globally, refugees and displaced persons may be exposed to vaccine sceptics in the host countries. Thus, the refugees may feel reinforced in their pre-existing concerns about vaccinations, leading to even further Vaccine Hesitancy.\textsuperscript{2}

Specific Population Examples

Somalia

As mentioned previously, research was published in the Lancet erroneously showing a causal relationship between the MMR vaccine and autism which was ultimately picked up by many media sources. The consequences of this misinformation were significantly felt by Somali refugees and immigrants living in the United States, but particularly in the state of Minnesota. Minnesota is home to the largest Somali immigrant and refugee populations in the U.S. In 2004, the state MMR vaccination rate was 92\% but by 2016, vaccination rates had fallen to 42\%.\textsuperscript{1} Reportedly, much of the drop was driven by anti-vaccination activism targeted specifically at the Somali Minnesotan community, which led to the population questioning the benefits of some vaccines. Unfortunately, it has led to multiple outbreaks of measles in Somali children living in Minnesota throughout the past decade in addition to lasting anti-vaccination sentiments in the Somali population.\textsuperscript{1,8}

Afghanistan

Vaccinations rates in Afghanistan have been intertwined with the presence (or absence) of the Taliban. Around 2000, at the height of the Taliban’s rule, less than one third of Afghan children had received any immunizations. By 2014, the rates of childhood immunizations were nearly 60\%, thanks to nationwide campaigns led by United Nation agencies. However in recent years, with less foreign presence, the Taliban gained more control and banned door-to-door visits by polio workers. Subsequently, cases of polio in Afghanistan have tripled. Additionally, eight vaccinators and polio workers were killed by ISIS in 2021, as there were concerns that the home visits were being used to collect intelligence. As a result, Afghan refugees and displaced persons may feel particularly vaccine hesitant in light of safety concerns, mistrust, and overall misinformation\textsuperscript{9}.

Russian-speaking population

In Russia, following many generations of government oppression, there is a deep-rooted distrust in authority which has led to parents choosing to “not vaccinate their kids almost as an expression of agency.”\textsuperscript{10} According to the Federal Center of Hygiene and Epidemiology, 48.7\% of Russian children born in 2016 had not been vaccinated fully or on a medically prescribed schedule.\textsuperscript{10} The mistrust has persisted amidst the COVID-19 pandemic as Russia has the lowest rates of vaccination globally.\textsuperscript{11}
Russia also amplified Poland’s anti-vaccine movement which was associated with political populism, anti-science, anti-western, and anti-immigration sentiments. Clinics in the United States that treat refugees from former USSR territories are seeing the impacts of long-standing anti-vaccination sentiment, as well. A Family Resource Manager for a community clinic in Sacramento advertised COVID vaccinations on a Russian-language Facebook group which was reacted to with “several angry emojis and the response, ‘Horror! Why advertise poison?’” The clients have cited persistent mistrust in the government for their rationale opposing vaccinations.

What can we do about it?

As outlined by Oxfam International, in order to address Vaccine Hesitancy in the refugee and migrant populations, governments of refugee-hosting nations must do the following:

- Explicitly include all populations on their territory in their vaccine roll out plans with specific plans to reach displaced persons on an equal timeline
- Address administrative barriers faced by displaced people including flexible identification and multi-language registration for those with internet and those without
- Promote vaccination drives where displaced populations are located
- Target outreach to displaced people to tackle Vaccine Hesitancy specific to each population’s cultural beliefs

Conclusions

Vaccine Hesitancy is a public health concern that is threatening the health of populations all across the world. However, refugees and displaced persons may be at particular risk for Vaccine Hesitancy due to their unique circumstances and barriers that they face. In order to combat it, we must take into consideration their specific needs in an effort to prevent further marginalization of already vulnerable populations.

References


5. WHO SAGE working group dealing with vaccine hesitancy. Strategies for
Addressing Vaccine Hesitancy - A Systematic Review.; 2014.


