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Applying Cultural Intelligence to Improve Vaccine Hesitancy Among Black, Indigenous, and People of Color

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KEYWORDS

- Cultural intelligence • Mindfulness • Vaccine hesitancy • Structural racism • COVID-19

KEY POINTS

- With the COVID-19 virus being a novel disease with scientific discovery occurring in real time, trust and reluctance is magnified.
- Structural racism and unethical research practices have contributed to resistance to COVID-19 vaccines and treatments among Black, Indigenous, and People of Color (BIPOC).
- Cultural intelligence can contribute to clinician's understanding of cultural beliefs and practices that may impact vaccine reluctance.
- Cultural intelligence, emotional intelligence, and mindfulness can facilitate trust building among clinicians and patients to improve openness to the COVID-19 vaccine.

INTRODUCTION

There is much criticism surrounding resistance to the COVID-19 vaccine. The problem is that not much thought is given to the possible reasons behind the vaccine resistance and hesitancy. According to the World Health Organization Strategic Advisory Group of Experts on Immunization, vaccine hesitancy is defined as the delay in acceptance or refusal of vaccines despite the availability of vaccination services.¹ Despite the overwhelming evidence to support the benefits of vaccines for preventable diseases and improving health outcomes throughout the world, vaccine hesitancy has been around for centuries.² Growing concerns over vaccine hesitancy, resistance, and reluctance were already present before the COVID-19 pandemic.³ With the COVID-19 being a novel disease with scientific discovery occurring in real time, trust and reluctance

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are magnified. It is difficult for nonscientists to grasp the idea that frequent updates in information as new insights are gained contribute to mistrust and increased reluctance to participate in prevention and treatment measures. Vaccine hesitancy perpetuates disease progression and deaths. Among Black, Indigenous, and People of Color (BIPOC) the pervasiveness of inequities in resource availability and other discriminatory practices that created the social determinants of health and proliferated health disparities directly impacted the number of infections and deaths reported in marginalized communities since the outbreak of the COVID-19 pandemic.⁴

The world has been dealing with the COVID-19 pandemic for more than 2 years now. As of March 2021, there have been more than 114.5 million recorded global cases of COVID-19 and 2.54 million COVID-19 related global deaths.⁵ In the United States alone, more than 30 million people have been diagnosed with COVID-19, with more than 590,000 deaths as of June 2020.⁶ These alarming statistics validate the significant need for prevention through medical intervention.

Further exploration of the statistics reveals that BIPOC has suffered tremendously and disproportionately from COVID-19. According to Laurencin, BIPOC accounts for 1 in 800 COVID-19 deaths nationally, whereas White Americans account for 1 in 3125 COVID-19 deaths.⁴ Mortality from COVID-19 for BIPOC is 2.7 times higher than Whites. Black Americans account for 13.4% of the US population and 24% of COVID-19 deaths.⁷ Based on statistical data associated with COVID-19-related health outcomes for Black and other marginalized communities of color, one could surmise that in similar circumstances in which new pathogens invade society, the outcomes could be similar. This validates the reality of the impact of structural racism on health disparities and increased morbidity and mortality among BIPOC and emphasizes the need to develop strategic actions that advance health equity. Despite having a 10% higher risk of contracting COVID-19, being 3 times more likely to be hospitalized from coronavirus infection, and having a 2 times higher risk of death, hesitancy and resistance to vaccination continue to persist among BIPOC.⁸

It is essential that health-care providers explore historical and cultural suppositions surrounding BIPOC beliefs and opinions regarding participation in newly developed medical advances. Critical and deliberate consideration must be given to historical factors that continue to perpetuate mistrust in the health-care system. This article will explore vaccine hesitancy and apprehension through a cultural intelligence (CQ) lens and outline possible contributing factors through a historical context. It will also provide some recommended strategies that nurses can apply to clinical practice.

BACKGROUND

People from historically marginalized and oppressed populations continue to suffer from generational trauma associated with structurally racist and oppressive systems that impact all aspects of health. Transformation of these systems in health care implores nurses and other health-care providers to consciously consider that reality. Strategic planning for increasing COVID-19 vaccine participation among BIPOC requires acknowledgment and consideration of cultural and historical variables. The complicated nature of scientific discovery in real time compounded by the historical influence of unethical and inhumane health-care research and clinical practices contributed to resistance and failure of BIPOC to seamlessly engage in obtaining the vaccine. Establishing trusting relationships with BIPOC is a key element for nurses to consider in impacting education and buy-in related to the coronavirus and the COVID-19 vaccine. It also important to note that there are many nuanced cultural differences and causal factors that are vital to consider in provider-patient relationship building.

Controversies

Structural racism is defined as a system resulting from institutional policies and practices that reinforce racial inequities.⁹ Systems and institutional frameworks predicated by centralization of Whiteness in ways of being, doing, thinking as the norm or standard spawned foundational layers (Fig. 1) that have historically ignored or diminished the health needs of non-White populations. Unfortunately, this failure to consider multiple lived experiences, cultures, and ways of existing created a distortion in the perception of the “why,” “what,” and “how” in terms of refusal or hesitancy in vaccine reception. “Why” are people from BIPOC and other marginalized communities skeptical and mistrusting of medicine and science? “What” are the precipitating factors? “How” do cultural beliefs impact decisions? These are all questions that clinicians should consider before labeling or judging people whose beliefs and decisions differ from theirs. The alarming realities of the impact of coronavirus on BIPOC have compelled scientists and clinicians to take a deeper look at disparities and acknowledge the contribution of racism to inequitable health outcomes. The Centers for Disease Control and Prevention, National Institutes of Health, and other national funding agencies have prioritized investigations and initiatives aimed at examining the connections among structural racism, health disparities, research participation, and vaccine hesitancy.

Inequitable systems, unethical research studies, and medical practices are direct contributors to mistrust and hesitancy related to science and health care among BIPOC. It is imperative that clinicians acknowledge the historical perspectives when soliciting vaccine participation. The *Tuskegee Study of Untreated Syphilis in the Negro Male* is one contributor of reluctance and fear.¹⁰ This was an observational United States Public Health Services study conducted on Black men in Tuskegee, Alabama, for 40 years.¹⁰ The study initially involved 600 Black men, of whom 399 were infected with syphilis, and none were allowed the opportunity to give informed consent.¹⁰ Researchers did not tell the men the truth about the purpose of the study, and participants were not offered or provided with treatment once it became available.¹⁰ Under the guise of incentive for participation in the study, the men received free medical examinations, free meals, and burial insurance.¹⁰

Another instance in which structural racism was a contributing factor to mistrust and hesitancy to participate in scientific discovery is the unethical, unconsented research

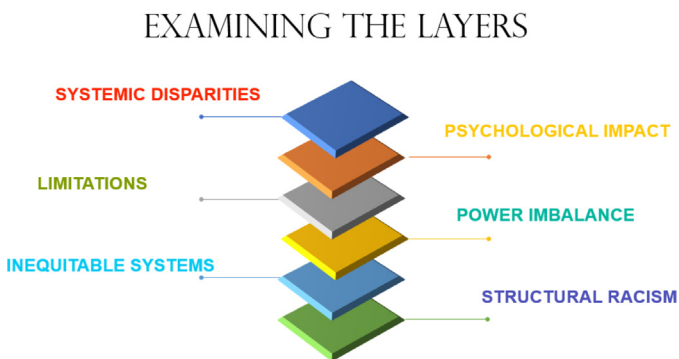


Fig. 1. Multiple variables or layers have historically impacted and continue to influence mistrust of the health-care system among BIPOC. Structural racism is the foundation that created inequitable systems, power imbalances, limitations, negative psychological repercussions, and ultimately, systemic health disparities. Each layer must be considered in isolation and in totality to understand the prevailing issues surrounding vaccine hesitancy.

and subsequent deception and profiting from Henrietta Lacks' appropriately named "immortal cells."^{11,12} Henrietta Lacks was a young, impoverished Black woman whose cervical cancer cells were shared with researchers without her knowledge or consent.^{11,12} Although Ms. Lacks gave informed consent for surgery related to her cancer, she did not give consent to collect and share her tissue specimens for research.¹¹ Biomedical researchers named her cells HeLa, using the first 2 initials of her first and last name.^{11,12} HeLa cells have been used in pioneered notable research efforts that contributed to the development of the polio vaccine, cloning, gene mapping, in vitro fertilization and much more. Her cells were mass-produced and sold for profit, whereas she and her family lived in poverty.¹² These cells are still being used for extant research and treatment developments. This is a prime example of the historical and structural lack of regard for and exploitation of people from marginalized populations. It is important to note that the Tuskegee study and the Henrietta Lacks situation contributed to the development of ethical research principles and laws.

Power imbalances created by limited representation of BIPOC providers limit influence, increase vulnerability, have a negative psychological impact, and perpetuate structural racism and its corollaries. Structural racism and power imbalances create additional limitations and further disadvantages for historically underrepresented, marginalized, and stigmatized populations. This domino effect was quite evident in the outset of the coronavirus pandemic when access to testing was scarce for people from underrepresented and underserved populations.

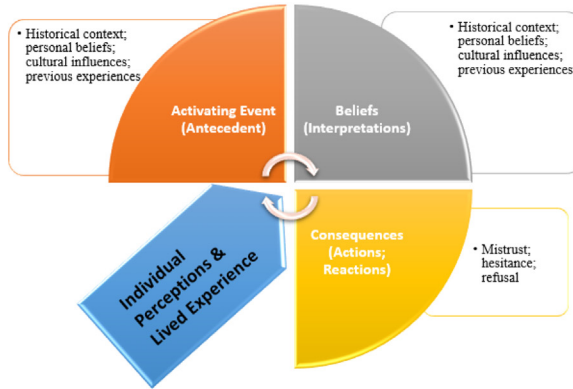
Nurses must be aware of the negative psychological impact that marginalization has on people who experience it. People often feel devalued and choose not to access or consistently participate in health care. This consequently inhibits progress and negatively impacts health outcomes. Systemic disparities are a result of biased, incongruent interactions with and inconsistencies in approaches to health care for BIPOC and other individuals from marginalized and stigmatized groups. Marginalization affects all aspects of personhood, including physical, mental, social, and environmental health.^{13,14} Hall and colleagues¹⁴ defined marginalized as peripheralization of people based on identities, affiliations, experiences, and environment. Hesitancy and refusal to get the COVID-19 vaccine propagates further marginalization of Black and other people of color because criticism of their choices as irresponsible is made without considering the context within which these decisions are being made.

PERSPECTIVE MATTERS

Cognitive behavior theory suggests that behaviors are largely determined by individual perceptions of the world and lived experiences.^{15,16} The adaptive behavioral components (ABC) Model (Fig. 2A, B) has been used widely in cognitive behavior therapy, and these concepts can be applied to help clinicians understand individual perceptions about vaccines and other health-care resources that may not be voluntarily accessed by BIPOC communities. This model is explained by 3 factors, the "activating" event, the person's "beliefs" and assumptions about the activating event, and the "consequences" and reactions that result from those beliefs.²² Understanding how cultural influences and lived experiences influence decisions can assist in navigation of partnerships with individuals, families, and communities who are seeking health-care advice during health-care visits. This insight can inform the clinical approach to educating and interacting with people who are hesitant not only to engage in COVID-19 vaccine reception but also when people from marginalized groups are reluctant to engage in any other medical intervention.

Behavioral ABC Model: Understanding Vaccine Hesitancy

A



Behavioral ABC Model: Understanding Vaccine Hesitancy

B



Fig. 2. (A) Antecedents to perception about vaccines include the historical context, personal beliefs, cultural influences, and previous experiences within health-care systems. Interpretations and beliefs are formed because of the same variables from that precede the beliefs: historical context, personal beliefs, cultural influences, and previous experiences. The consequences are the actions and reactions based on the antecedent and the beliefs that are formed from because of the activating event. (B) Activating events such as unethical research practices, bias-influenced care, racism, and negative health outcomes for BIPOC people influenced preconceptions about the coronavirus and the COVID-19 vaccine. Lived experiences and cultural influences are also symbiotic with the activating events of historical contexts. Negative beliefs and assumptions about the COVID-19 vaccine are a direct result of fears perpetuated by prolific bias, racism, and discrimination. The beliefs and concerns about negative motives are associated with previous experimentation, unethical research, and substandard health-care practices. The resultant consequences (behaviors/actions/reactions) include mistrust, vaccine hesitance, and vaccine refusal.¹⁷⁻²¹

Attribution theory is also useful in understanding how to build trust and establish healthy relationships with patients who may not be eager to receive vaccines. The broad emphasis of this theory is on assignment of motives to behaviors, both personal

and internal, as well as external assignment of motives to others.^{17–21} According to attribution theory, after observing behaviors, people opine on whether behaviors are deliberate or not and then ascribe the behaviors to either an intrinsic cause or to a situational cause.^{17–21} Motives can be assigned to others based on nonverbal interactions that do not involve direct exchanges and interactions among people.^{17–21} Internal motives may be influenced by lived experiences and cultural influences, and external or circumstantial motives may be assigned based on context or contingent on current circumstances and situations.

Clinicians can use this theory to explore the following questions in relation to vaccine hesitancy:

- How do preconceived ideas affect the current situations and interactions?
- How does bias influence interactions with people who are averse to the COVID-19 vaccine?
- How does this affect establishing a trusting relationship?
- What motives are being assigned to the health-care system by BIPOC regarding administration of the COVID-19 vaccine? Why are these motives being assigned? How can I, as a clinician, be an ally for this community?
- How can I effectively support or impact attitudes, behaviors, and opinions among BIPOC communities regarding the COVID-19 vaccine?

Much of how relationships are managed is influenced by individual perceptions of others. Establishing relationships and building trust are essential for effective patient–provider partnerships in health care. Clinicians must be cognizant of personal perspectives and simultaneously attuned with the perspectives of the persons to whom care is delivered. Cultural illiteracy can be detrimental to health outcomes because misinformation and knowledge gaps about cultural differences often catalyze stereotypes and bias. Conversely, cultural literacy and fluency can have a profound effect on openness to differences, understanding opposing preferences and choices, and improving health outcomes for people from underrepresented populations. Through development and application of CQ, clinicians can acquire mindfulness of implicit thoughts that may manifest as visceral reactions and translate to untoward words and behaviors aimed at marginalized individuals. This is important in terms of strategies that lend to mitigating bias-influenced health-care decisions, especially those based on misperceptions and stereotypes.

Application of Cultural Intelligence to Impact Attitudes About Vaccine Hesitancy

Oftentimes, individuals and groups are judged, labeled, and stereotyped because as humans, we see things from personal life experiences and preferences rather than from a global perspective that offers consideration of multiple perspectives. Most clinicians operate from a humanitarian state of mind and embody humanitarian principles. Subsequently, espousing these principles may engender frustrations with people when they forego opportunities to achieve or maintain a so-called healthy state. This frustration may fuel negative clinician attitudes toward people who opt out of obtaining the COVID-19 vaccination.

CQ is a globally recognized, evidence-based approach to assessing and improving effectiveness in culturally diverse interactions.²³ It is defined as the skill and confidence to work effectively in diverse or multicultural situations and environments.²⁴ Developing and effectively using CQ depends on individual levels of emotional intelligence (EQ). EQ measures perception, management, expression, and evaluation of personal emotions, as well as the ability to interact within interpersonal relationships in prudent and empathetic ways.²⁵ Cultural and emotional intelligence (EQ) are

interdependent and obligatory for establishing and sustaining productive relationships within cross-cultural/multicultural relationships.²³ There are 3 levels of CQ (**Table 1**): low, moderate, and high.^{23,24} The level of CQ displayed may vary depending on context and other factors, such as level of EQ, situational distractions, and lack of planning.^{23,24}

The CQ framework (**Fig. 3**) has 4 distinct capabilities that, when applied collectively, work together to improve the understanding of different perspectives, enhance effective communication, and ultimately strengthen partnerships and collaborations.²³ In general, consistent application of CQ enhances open-mindedness and facilitates accommodation of different ways of being.^{23,24} Clinicians can use CQ to develop conscious awareness of personal feelings, assess knowledge gaps, and gauge readiness to effectively interact with patients from marginalized populations. There is an inherent sense of comfort to interact in the space of sameness and commonalities. Cultural intelligence (CQ) offers opportunities to intentionally learn about cultural differences. Clinicians who with a moderate-to-high CQ can optimize interactions with patients whose beliefs about vaccines or other medical and nursing interventions are incongruent with their own. Additionally, clinicians can use CQ to develop an understanding of where personal biases, attitudes, and perspectives originated, as well as understand and adapt to the cultural differences that contribute to the perspectives, biases, and attitudes of others. Consistent use of CQ during patient interactions has several benefits including but not limited to the following:

- Mindfulness and acceptance of differences and unique lived experiences (ie, unconventional health-care practices, beliefs, attitudes about health and health care)
- Openness to different perspectives
- Development of customized patient visits and treatment plans
- Effective and trusting patient (person), family, and community partnerships
- Greater influence on informed patient (person) decision-making

Additional Strategies and Considerations

Vaccine hesitancy in marginalized communities, particularly the COVID-19 vaccine, poses a crucial challenge to public health on a national and global level. Both empathy and truthful information are essential in reducing hesitancy. Addressing vaccine uptake disparities requires a multipronged strategy that focuses on the needs of marginalized communities. This strategy must acknowledge that vaccine hesitancy is rooted in systemic and structural racism. It should be designed to help BIPOC regain trust in the government and the medical establishment. According to Bogart and colleagues⁷, lack of honesty from the government regarding the origins of the pandemic and the vaccine is a leading factor in vaccine hesitancy. Additionally, vaccine hesitancy among BIPOC results from the limited data on the long-term adverse effects of the COVID-19 vaccine.⁶ Complete transparency regarding the risks and benefits of vaccines and providing reassurance on robust vaccine safety is necessary to minimize vaccine hesitancy.²⁶

Most times, truthful information about vaccines is not enough. BIPOC need culturally sensitive efforts to build trust in the medical information about vaccines discussed in the literature. According to Shen and Dubey, individuals who receive vaccine advice from their family physicians are more likely to trust the information that they are provided.²⁶ In addition, face-to-face counseling with up-to-date vaccine information from a family physician compared with information gathered from the Internet, family, and friends is received entirely better by marginalized communities.²⁶

Levels of Cultural Intelligence (CQ)		
Low CQ	Moderate CQ	High CQ
<p>Low CQ is evidenced by the following:</p> <ul style="list-style-type: none"> • Reacting to external influences during multicultural interactions • Judgements being made about others from personal cultural contexts • Ignoring or marginalizing cultural differences 	<p>Moderate CQ is evidenced by the following:</p> <ul style="list-style-type: none"> • Recognition of other cultural norms and accommodating or adapting into thoughts and behaviors • Interest in learning more about cultural differences but may still focus on commonalities among people 	<p>High CQ is evidenced by the following:</p> <ul style="list-style-type: none"> • Adaptation to other cultural norms as needed • Embracing cultural differences to enhance innovation • Subconscious ability to interrelate in multicultural contexts • Knowledge that homogeneous cultures are not monolithic • Sustained interest in cultural diversity • Ongoing efforts to understand cultural differences • Planning for multicultural interactions, with recognition that each situation is unique • Being flexible in all multicultural interactions

Family physicians who marginalized people trust can soften the mistrust that BIPOC communities have in the medical establishment and pharmaceutical companies, which stems from a history of unethical research practices. Trust can be strengthened if the vaccine information is disseminated by physicians and nurses from the same ethnic background.

Community campaigns on vaccination awareness can be pivotal in decreasing vaccine hesitancy, especially when there are opportunities for people to ask questions in a nonthreatening environment. Campaigns must be planned and implemented effectively. If the campaign is poorly designed and conducted, it could undermine the campaign's intentions. Because faith is an essential pillar of BIPOC communities, faith-based campaigns to mitigate vaccine hesitancy can be promising.²⁷ Religious and local opinion leaders have the potential to build trust and vaccine advocacy within BIPOC communities.

However, to ensure that the attitudes and beliefs of community leaders are unbiased and shaped by science, community leaders need training and continuing education on vaccine safety to debunk the narrative in BIPOC communities that vaccines are not safe.²⁸ The US government can support these efforts by awarding financial grants to religious and community leaders to appropriately train individuals for vaccine advocacy. Pastors have earned communities' trust through years of dedicated service. They can be the empathic listener and trusted messenger that health officials can use to ensure that messages about vaccines are received and accepted.²⁷ Additional trusted messengers may include educators, responsible and reputable social media

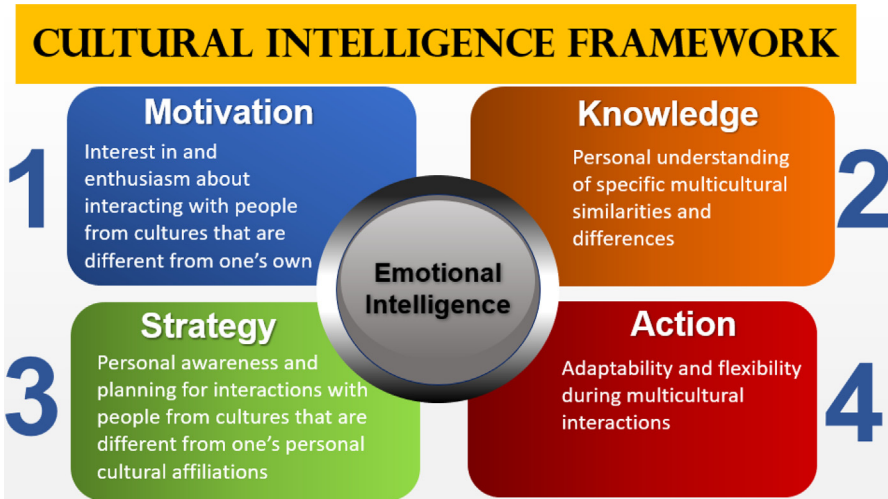


Fig. 3. The CQ framework is composed of 4 distinct capabilities: (1) motivation, (2) knowledge, (3) strategy, and (4) action. During multicultural interactions, application of these 4 functions in tandem with EQ reflects cultural intelligence.^{23,24}

platforms, and alternative and complementary medicine practitioners who tend to have a voice during crucial times of vaccine decision-making in BIPOC communities.

CLINICS CARE POINTS

When caring for persons who exhibit vaccine hesitancy or resistance, consider the following:²⁹

- Race, ethnicity, nationality, religious affiliations. These characteristics often impact willingness to receive vaccines but do not generalize or make assumptions about individuals based on general demographic categories or cultural practices.
- Conspiracy theories. In a nonthreatening and nonjudgmental manner, probe the person for more information to develop a mutual understanding and dispel any myths about the vaccine.
- Offer evidence-based patient-centered information. If the person refuses, accept it.
- At each clinic visit, offer the vaccine again, unless the patient adamantly states that they are not interested and requests not to engage in the conversation about vaccines at future visits.

SUMMARY

As it relates to opposition to vaccines and other health-care resources, there are times when health-care professionals do not have the time and space to use mindfulness and empathy toward patients/people in the clinical setting. Mindfulness is described as conscious awareness of something.³⁰ Mindfulness is a technique that can be used to interrupt bias-influenced decisions and actions by assisting people to transfer thoughts from a state of unconscious awareness to a state of conscious awareness. Once thoughts are in the conscious mind, the action that follows can be controlled.¹⁵ Successful use of mindfulness requires time and psychological space to develop

conscious awareness of personal thoughts and feelings that often translate into unintended actions that may precipitate sentinel events in the clinical environment.

In the case of vaccine hesitancy, awareness and consideration of lived circumstances of individuals can assist clinicians in circumventing the negative thoughts, attitudes, and behaviors that often impact patient outcomes. Negative behaviors toward people who are vaccine hesitant can potentiate resistance not only to the COVID-19 vaccine but also to mistrusting and accessing the health-care system. Mindfulness, in tandem with EQ and CQ, has a great potential to improve clinician–patient relationships through the development of intentional approaches to caring for people from marginalized populations who may present with reluctance and mistrust. These approaches must include partnerships that offer individuals the option of independent or shared decision-making, provide informed communication specific to the person’s unique needs, and consider the lived experiences and current social conditions of the individual. The intended outcome of these strategies is to increase openness of BIPOC individuals to learning more about the COVID-19 vaccine, increase vaccine participation, and decrease COVID-19 hospital admissions and deaths.

DISCLOSURE

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