



STRATEGIES FOR IMPROVING COVID-19 VACCINATION UPTAKE

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Abstract: With the rapid development of vaccines against COVID-19 is an extraordinary achievement, successfully vaccinating the global population presents many challenges, from production to distribution, deployment, and importantly, acceptance. Trust in the vaccines is vital, and is critically dependant on the ability of governments to communicate the benefits of vaccination, and to deliver the vaccines safely and effectively. Public engagement and effective communication through clear, transparent messaging will play a central role in building confidence in the COVID-19 vaccines. This rapid expert consultation describes a variety of public engagement and communication strategies that can be implemented at the national, state, and local levels to change patterns of interaction with the public, address uncertainty about the vaccines, and build trust. In general, given the prevalence of local concerns and information needs, it is important to support local communities with the resources needed to engage people and reinforce information coming from the federal and state levels. Strong community engagement aimed at identifying and understanding local concerns will help determine what messaging, delivered by whom, will be most effective. Moreover, it will be essential to provide people who are uncertain, reluctant, distrusting, or otherwise unmotivated with respect to the COVID-19 vaccines with the resources, information, and support they need to make the vaccination decision that is right for them. This paper highlights overall strategies for engaging the public and building trust, as well as strategies to ensure demand for and promote acceptance of the vaccines.

Keyword: Strategies, COVID-19. vaccination uptake

Introduction

The worldwide scientific community is broadly agreed that mass vaccination of communities throughout the world is the most effective approach to combat the COVID-19 pandemic. According Chibuzor et al (2021), Coronavirus is a communicable disease that affect not only the respiratory system but the entire major organ of the body system due to the chemistry chain from the brain to liver and other part of the body that will experience a similar symptoms. The creation of COVID-19 vaccines has been a compelling illustration of how significant public financing, intense focus, and unprecedented levels of scientific collaboration may help stimulate innovation in order to address global public needs in a relatively short period of time. However, the approval and deployment of vaccinations does not signal the quick end of the health crisis, because achieving people's invulnerability would need the vaccination of a very large part of the population,

which will be a big task (OECD, 2021) To succeed in the worldwide drive to immunize billions of people as soon as possible, governments must prioritize resolving issues of trust - confidence in vaccines as well as trust in the institutions in charge of the vaccination campaign. They must instill public trust in the efficiency and safety of vaccinations, as well as in governments' ability to manage logistical problems properly, which is the foundation of this study.

Statement to the Problem

It is important to ensure significant demand for and acceptance of the COVID-19 vaccinations in order to achieve people protection, safeguard the most vulnerable groups, and reopen social and economic life (NASSEM, 2020a). Two separate difficulties must be solved in order to achieve this goal. People who are willing and eager to be vaccinated must be able to do so easily, with minimal friction and hassle; people who are hesitant, reluctant,

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distrusting, or otherwise unmotivated to be vaccinated require resources, information, and support in order to make the vaccination decision that is right for them. Each of these issues necessitates a unique approach. This quick professional consultation gives advice on how to deal with the second problem. It is designed to help decision makers establish public trust in the COVID-19 vaccines and communicate with the public about the vaccination process and deployment by emphasizing techniques for public involvement and message delivery to assure demand and encourage acceptance.

The Study's Objectives

This article proposes strategies for Improving COVID-19 vaccination uptake when COVID-19 vaccinations are rolled out, and it includes examples of excellent practices that other countries have done that help boost people's trust in immunization programs in this region. The part that follows examines the importance of government competence in fostering faith in vaccinations, with the ones that follow considering integrity, transparency, and fairness in this context.

Review of Literature

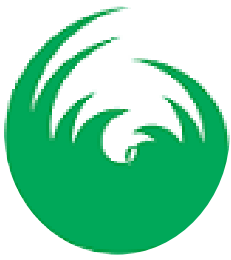
Despite an early "rally behind the flag" impact early in the epidemic, many nations are witnessing growing mistrust in government competence to handle the situation and implement cohesive measures (OECD,). As a result, there has been a decline in compliance with public health-related laws, as well as an increase in pessimism regarding long-term economic recovery. More generally, the pandemic has resulted in widespread misinformation, undermining understanding and acceptance of science and public policy (de Figueredo et al., 2020), and this extends to vaccination uptake. Despite broad acknowledgment that COVID-19 is a significant concern for individuals all around the world, many people are still hesitant to be immunized. However, an average of 76 percent of the population in 11 OECD nations showed readiness to be vaccinated in February 2021, up from 66 percent in December 2020. (Ipsos, 2021). However, current OECD figures suggest that a quarter of the population in France, Germany, and the United States may decline COVID-19 immunization, with an even greater proportion among younger demographic cohorts. More than half of French 25- to 34-year-olds and one-third

of Dutch 25- to 34-year-olds indicated they would not be vaccinated if given the choice (Kantar, 2021).

Trust in vaccinations must be accompanied with trust in the organizations in charge of immunization. Lack of acceptability of vaccination may arise from prior failures of health systems and governmental institutions to successfully serve and gain the trust of particular demographic groups. In general, confidence in institutions is important for society's successful functioning and acceptance of public policies, especially during a crisis. Trust is defined as one's conviction that another person or institution will act in line with one's expectations of good behavior from others (OECD, 2017), and institutional trust is seen as a critical indicator of government success (OECD, 2019). The OECD has created a Trust Framework to assist countries in implementing concrete policy initiatives to increase public trust. The Trust Framework is based on the five aspects of government mandates that research has shown explain a substantial portion of people's trust. Overall, the success of vaccination campaigns will be heavily impacted by people's faith in the efficacy and safety of vaccinations, the competency and dependability of the institutions that provide them, and the values that guide government choices and actions.

STRATEGIES FOR PUBLIC ENGAGEMENT IN THE COVID-19 VACCINES TO COMBAT THE VIRUS

Public participation is important for overcoming distrust and inculcating faith in the COVID-19 vaccinations. Public involvement is more likely to have an influence (and develop confidence beyond COVID-19 immunization programs) if it is formed and organized in such a way that public values (ascertained via engagement) can be transferred into practice and policy. If given the necessary resources, public health practitioners can build a strong infrastructure that helps earn community trust by organizing for policy change, providing accessible COVID-19 testing and treatment, listening to the needs of communities, addressing the structural factors that cause greater exposure to and poorer treatment for COVID-19, and ensuring the equitable allocation of vaccines. This section highlights six public engagement initiatives aimed



at reducing distrust and increasing trust in the COVID-19 vaccinations.

1. Form Alliances with Community Organizations

Partnerships with community groups that already have strong community stakeholders are essential. These companies are connected to their audiences, understand how to successfully adapt information to those audiences, and, most importantly, have trusted leaders who can serve as effective spokespersons. According to research, genuine partnerships need early two-way conversation to develop trust and construct a common vision for tackling an issue, citizen engagement in decision-making, and information exchange that is intelligible and relevant to local needs (NASEM, 2020a; Quinn et al., 2020). A communication planning strategy for building partnerships at a New Jersey environmental agency, for example, included the following steps: identify the issue; set goals; understand the issue, audience, and constraints; assess audiences; identify messages and methods; implement a communication strategy; and evaluate, debrief, and follow up (Pflugh et al., 1992). As a result, local governments might use or leverage existing relationships, social capital, and resources to increase vaccination confidence. Faith-based networks, current community health worker programs, and local advocacy and action groups might all be potential partners (e.g., organizers of get-out-the-vote efforts or the census, or neighborhood coalitions formed to improve walkability or green spaces).

2. Engage with and prioritize the voices and perspectives of trusted messengers with community roots.

Evidence shows that attempts to combat vaccine reluctance and encourage immunization should prioritize putting "people first" (Schoch-Spana et al., 2020). The potential effectiveness of dialogue-based interventions, such as social mobilization and engagement with trusted community representatives, has been highlighted in research, as has the importance of community involvement in creating, adjusting, and implementing these solutions to ensure adequate buy-in and trust (Dubé et al., 2015; Jarrett et al., 2015; NASEM, 2020a). Social media or advertising efforts that encourage community members to express their reasons for being vaccinated, such as the "what's your

why" factor and "black why smatter" social media hashtags, might be convincing.

The development of long-term connections with reliable community members is central to this strategy a time-consuming but necessary process. If such connections do not already exist, local health departments can start by listening to community members' concerns and offering assistance and resources to ensure that they receive culturally relevant vaccine information and, most importantly, equal access to vaccination.

3. Participate in a Variety of Accessible Channels

Community engagement will need to take place through a variety of channels that are well suited to reaching vulnerable populations, such as those who are unable to attend public meetings (for example, because they work, live remotely, are incarcerated, or are undocumented), have limited broadband service, speak languages other than English, or cannot use written text (NASEM, 2020a). It is critical to determine which channels are most suited to specific groups. State and municipal officials can interact via town hall meetings, special community events, or faith-based gatherings.

4. Begin or continue your work toward racial equity.

Recognizing existing disparities should be the first step in public involvement regarding immunization, particularly with communities. A health department, for example, may gain supporters and allies and raise the profile of racial equity by acknowledging how institutional racism has harmed these areas and describing how the department is striving to create health for all populations.

Talking about vaccinations in isolation risks promoting firmly held views that health (or poor health) is only a result of individual actions (such as choosing to be vaccinated) and hiding the larger structural variables that also influence health, such as housing, jobs, and health care access. Authorities must recognize these larger gaps in health equity, position the COVID-19 vaccinations as one of several instruments that may assist advance equality in pandemic-affected regions, and reassure those populations that this sort of effort will continue beyond the epidemic. The epidemic has revealed several health inequities, and public health policies and actions, like as immunization,



must reflect a stronger commitment to equality (Berkowitz et al., 2020).

5. Permit and Encourage Public Ownership of COVID-19 Vaccine

Public ownership of COVID-19 immunization, as exemplified by public scrutiny and community involvement, can instill more trust in COVID-19 vaccination. Best practices for public ownership include aggressively pursuing public involvement, listening to and reacting to criticism, establishing local public oversight committees, and using bottom-up techniques with community people spearheading solutions. Public ownership of vaccination through governance systems that engage community people has also been emphasized in research, with the potential for those processes to increase trust and enhance access (Schoch-Spana et al., 2020). Emphasizing vaccination as a public good is also useful (e.g., "I'm doing this because my immunization benefits the community as a whole, and I care about my fellow citizens").

6. The provision of high-quality products and services is an important measure of a government's competency.

To foster public faith in these goods, governments must demonstrate that no quality or safety requirements were sacrificed in the sake of expedited development and clearance.

processes. COVID-19 vaccines, like other medical items, have been and continue to be manufactured.

created, reviewed, and authorized in compliance with current regulatory and legal requirements specifications (EMA, 2020[10]). They are first evaluated in the laboratory (in pre-clinical research), then in clinical trials with human volunteers.

These trials are designed to confirm how the vaccinations function while also elucidating their safety and protective effectiveness. In more normal conditions, creating new vaccines may be a protracted process, with the various stages of development being carried out consecutively. In the case of COVID-19, a number of factors contributed to a significant acceleration in both vaccine development and the likelihood of successful candidates. Regulatory examination and approval processes were also sped up,

thanks in part to a rolling review of data as it became available and the employment of emergency procedures that allow for the acceptance of more preliminary evidence in cases of severe unmet demand or public emergency.

monitoring for the appearance of potentially harmful consequences

Ongoing monitoring for the possible development of harmful effects, utilizing well-developed pharmacovigilance systems to identify issues or adverse responses not discovered in clinical trials, is also necessary to sustain public trust. With the introduction of COVID-19 vaccines, strict regulatory bodies (e.g., FDA, EMA) are increasing vaccination monitoring processes and providing frequent safety updates.

As recent controversies over the safety of the Oxford/AstraZeneca vaccine have highlighted, authorities face a number of complex challenges in communicating about vaccine safety and effectiveness, as well as promoting and maintaining public trust in vaccines as they are rolled out, particularly in the context of health emergencies.

However, while dealing with these challenges provides an opportunity to remind the people that

When pharmacovigilance mechanisms are in place, it is critical to ensure that information about possible safety signals is handled with openness and care. To properly explain what is and is not known, and to avoid reinforcing reluctant people's cognitive biases, communication must be balanced and contextualized, and it should ideally be influenced by the knowledge of behavioural scientists and risk communication specialists. Particular attention should be paid to confirmation bias (the propensity to pick information that confirms people's views) and negativity bias (the tendency of negative sentiments and information to have a larger influence on individuals than positive or neutral ones). For example, a study of parents' opinions toward vaccination information when searching online revealed that individuals prefer belief-consistent material and perceive it as more trustworthy, informative, and persuasive (Meppelinka et al., 2019[11]).

EFFECTIVE COMMUNICATION TO BUILD CONFIDENCE IN THE COVID-19 VACCINES

Principles for Effective Communication



This section discusses five principles of effective risk communication, which were derived from CDC guidance: (1) act immediately; (2) establish credibility; (3) communicate plainly; (4) demonstrate empathy and respect; and (5) accept uncertainty and manage expectations. These principles may be used to guide communication activities and the creation of strategies and tactics for increasing trust in and adoption of the COVID-19 vaccinations.

Do Not Delay

Immediately Begin Communicating. Once developed, attitudes are notoriously difficult to alter (Weber and Johnson, 2006). As a result, COVID-19 immunization campaigns will need to immediately create a communication plan. Because the majority of individuals create judgements about new concepts based on narratives built from prior experiences, communication strategies may serve to cue or activate people's pre-existing mental models, causing them to perceive the COVID-19 vaccination as something they are already familiar with (i.e., the prototypical childhood vaccines, which are widely accepted in the United States).

Maintain Credibility

Maintain Consistency and Transparency. Transparency is critical, even more so when more data becomes accessible. Any vaccination will almost certainly have some adverse effects and dangers connected with its usage, which must be communicated properly and in ways that are understandable to target audiences. Similarly, uncertainties regarding vaccinations (e.g., whether they will prevent viral transmission in addition to symptoms; when the whole population will be vaccinated) must be addressed. Greater clarity on the vaccine authorization and distribution procedure, for example, may alleviate worries about the process being politicized (Quinn et al., 2020).

Make Yourself Clear

Utilize Clear, Jargon-Free Messages. Accessible communications that minimize jargon and are customized to the target audience's literacy level are critical. Avoiding jargon does not only require excluding difficult chemical or biological terminology from messages; it also entails inspecting seemingly easy terms for missed issues (e.g., whether "important" refers to a person or thing).

importance (either statistical or meaningful). Additionally, tailoring communications to the target audience's health literacy and numeracy capabilities will increase comprehension.

Demonstrate Empathy and Respect

Attempt to Avoid Ignoring Concerns. It is critical to ensure that people feel heard not to disregard their concerns because if they do not feel heard, they are unlikely to listen. Rather than that, successful communication requires listening to people's concerns, rephrasing and restating them, and empathically delivering pertinent new information. For instance, replies against disinformation may begin, "I realize that you have reservations about X. There is a wealth of information available, and some of it is accurate, while others are not. Allow me to share with you what I know..."

Recognize Uncertainty and Control Expectations

Recognize Uncertainty. Throughout a pandemic, what is known and what is unknown evolves continually, and policies and programs adapt in response. Even now, as the vaccine deployment continues, some perceive fluctuations in dosage availability, allocation, and priority groups as evidence of government or scientific ineptitude or error. Quinn and colleagues (2013) assert that anticipating uncertainty aids in the public's acceptance of change and trust in connected communication. With regards to COVID-19 immunization, the public might be prepared with remarks such as, "While we would prefer to proceed quicker, we cannot always anticipate how many doses we will have each week, and our limited dosages imply that vaccination will take longer."

Avoid much reassurance. The vaccination distribution will take considerable time and effort. By candidly giving realistic timetable predictions, you may effectively control people's expectations. On the other hand, exaggerating the speed with which the procedure will go might erode trust. Additionally, clear information on how to schedule vaccine visits and the different channels for doing so is critical for setting appropriate expectations. Proactively and extensively disseminating this preparatory information will assist in managing expectations and reducing irritation, and will hopefully promote fair coverage of the process as it develops.



Communication Strategies for Promoting COVID-19 Vaccine Acceptance

There is no one-size-fits-all approach to vaccination reluctance. Rather than that, various nuanced methods are critical for ensuring that individuals who are reluctant do not grow into outright vaccination rejection and for addressing existing health disparities. This section contains nine effective practices for communicating about the COVID-19 vaccinations in order to increase public confidence.

1. Meet people where they are and refrain from attempting to convince everyone

According to models of behavior change, persons who are "considering" a specific self-protective action, such as vaccination (Why should I adopt it?) have different knowledge and resource demands than those who have chosen to take the action (How do I go about doing it?). Thus, it is critical to design distinct messages for individuals who are eager to get vaccinated and want information on how to do so, as well as those who are reluctant yet curious. Furthermore, attempting to convince those who are adamantly opposed to vaccination is a waste of resources (Public Health Institute, 2020), particularly given that, as previously stated, the majority of people who are unwilling to get vaccinated immediately can be classified as hesitant or skeptical, with only a small percentage of the population being completely opposed to vaccination (Bruine de Bruin et al., 2019).

The research on COVID-19 vaccination, and more generally on regular vaccination, stresses the critical role of empathy in engaging with people who may be vaccine reluctant or dubious, particularly through approaches such as motivational interviewing between clinicians and patients (Ferreri, 2020; Gagneur, 2020; Martin, 2021; Maurici et al., 2019). In these context,

It is critical to utilize phrases such as "I recognize that you may have concerns regarding the vaccination, and I'm here to assist you in any way I can..."

2. Avoid Making Duplicate False Claims

Correcting material that contradicts scientific findings is difficult in the majority of cases (Cook and Lewandowsky, 2011; Lewandowsky et al., 2012; NASEM, 2017). It additionally, it should be emphasized that repeating

incorrect statements and disinformation runs the danger of unwittingly amplification and reinforcement of the information. However, public health practitioners may occasionally be confronted with fraudulent claims (Ecker et al., 2017). It is critical to warn receivers before to presenting them with erroneous information in certain instances (e.g., "The following assertion is misleading...") and to stress the facts above the disinformation (MacFarlane and Rocha, 2020). Additionally, practitioners might employ a pivot strategy to avoid immediately addressing and correcting erroneous claims and disinformation, instead shifting the listener's attention to worries about disease risk (Omer et al., 2017).

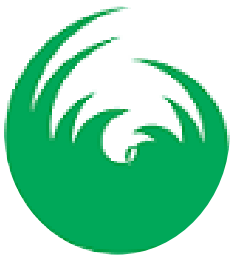
Additional strategies for debunking misinformation and overcoming its effects, according to MacFarlane and Rocha (2020), include preemptively explaining flawed arguments, using visual representations to aid in data comprehension (Dixon et al., 2015), and providing alternative explanations for the debunked phenomenon (e.g., that purveyors of misinformation are interested in selling alternative remedies or promoting a political ideology) (Ecker et al., 2010).

The nation's fractured media climate also means that individuals are receiving widely disparate messages regarding the epidemic, while information dissemination has shifted from "top-down" to "bottom-up." Rather of seeing doubters as the "other" and adopting a "those people" mentality toward vaccine-hesitant individuals, the evidence shows that it is preferable to use a strategy that fosters empathy (Hausman, 2020).

3. Messages Should Be Tailored to Specific Audiences

Different groups will interpret messages differently. To be effective, communication regarding COVID-19 vaccinations must reflect an awareness of the intended audience, including their concerns, motivations, and sources of trust. It is critical to acknowledge that the information requirements of various audiences may or may not coincide assumptions made by communicators concerning such needs. If the audience does not believe the information to be accurate

They will disregard it if it is not relevant or responsive to their information requirements.



As a result, effective communication tactics place a premium on demographic segmentation.

Understanding the need of developing distinct tactics for distinct subgroups, as defined by variables from the epidemiology, psychographic, and demographic sciences. Effective communication will include the following:

Appropriate strategies for reaching vaccine-skeptic populations that vary in age, gender identity, and marital status, degree of education, refugee and immigrant status, and health behaviors/standards race and ethnic origin, as well as those on the social margins. Data from surveys can give useful information relevant to target audiences, such as pre-existing views and information to avoid, which can serve as an educational tool.

Amin et al., 2017; Parvanta et al., 2013; 2018; Rutjens et al.). Qualitative data derived from first-person accounts can also be used.

It is important as well to consider tailored messaging needs down to the individual level, including through such strategies as the aforementioned motivational interviewing (Gagneur, 2020), despite the anticipated difficulty of widespread scale-up of such strategies. For example, messaging that explains why the COVID-19 vaccines cannot alter DNA might cause more harm than good if disseminated widely to an audience not already concerned about this misconception.

However, particular individuals may benefit from hearing this message or others like it. This example highlights the importance of tailored individual conversations rather than broadly disseminated communications in certain contexts.

6. Identify Trusted Messengers to Deliver Messages

Messages about a new COVID-19 vaccine will be novel to all target audiences. Trust in the person or institution that delivers a message, built over previous years, will boost its credibility. Different groups may have different trusted messengers and preferred mediums and channels. Decision makers can identify groups that represent trust gaps in their community and trusted sources within and outside their organization who can convey public health messages to those groups.

7. Pay Attention to Delivery Details That Also Convey Information

Trust in a vaccination program may be undermined if the user experience with enrolling and getting vaccinated is poor. If exposed to reports of online sign-up portals crashing, dirty clinic sites, or long wait times, for example, people may infer that the vaccine itself is also faulty.

Conclusion

The most important public health action to end the pandemic remains increasing vaccination coverage, which saves lives, prevents illness, and reduces the spread of COVID-19. Effective COVID-19 prevention strategies are well documented and can help reduce community transmission until high vaccination coverage is achieved. Public engagement and messaging are critical to addressing the issues discussed herein to promote public confidence and trust in the COVID-19 vaccines. Given the prevalence of local concerns and information needs, it is important to support local communities by providing the resources they need to engage community members and reinforce accurate, clear information. Accessible, consistent, and transparent communication is crucial to converting hesitancy about vaccination to acceptance. Everyone employers, health care providers, faith leaders, elected leaders, and public health officials has a role to play. All strategies for increasing vaccine confidence need to take into account that vaccine decision making is part of a nuanced ecological model in which individual beliefs and behaviors are influenced by experiences at the community, organizational, and policy levels. As the COVID-19 vaccination campaign continues, it will be important to employ a coordinated approach that is supported at the federal and state levels and invests in local resources, expertise, and involvement. A variety of strategies at the national, state, and local levels will be required to change the pattern of interactions with the public, address vaccine hesitancy, build trust, and ultimately ensure a successful COVID-19 vaccination campaign.

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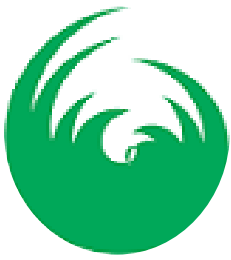
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