COVID-19 RISK COMMUNICATION AND COMMUNITY ENGAGEMENT STRATEGY

EpiC Project

Egypt - March 2023

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EpiC
Meeting Targets and Maintaining Epidemic Control

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ACRONYMS

COVID-19	Coronavirus Disease 2019
EpiC	Meeting Targets and Maintaining Epidemic Control
FHI 360	Family Health International
HBM	Health Belief Model
IEC	Information, Education, and Communication
IPC	Infection Prevention and Control
MHPSS	Mental Health and Psychosocial Support
MoHP	Ministry of Health and Population
NGO	Non-Governmental Organizations
RCCE	Risk Communication and Community Engagement
SBC	Social and Behavior Change
SEEC-II	Supporting Egypt's Efforts in Combatting COVID-19 (Phase II Project)
USAID	United States Agency for International Development
USG	United States Government
WHO	World Health Organization

EXECUTIVE SUMMARY

The goal of the Supporting Egypt's Efforts in Combatting COVID-19 Phase II (SEEC-II) project's COVID-19 Risk Communication and Community Engagement (RCCE) strategy is to increase demand for and uptake of COVID-19 vaccines by designing and implementing targeted RCCE interventions that address key barriers to demand and adoption of COVID-19 vaccines (primary series) and recommended booster doses and reinforce confidence in their continued use. This will be done through theory-based and evidence-informed RCCE activities that go beyond increasing knowledge to catalyzing meaningful interactions as a trigger for action and the adoption of COVID-19 vaccines and other COVID-19 prevention behaviors.

Activities under this RCCE strategy will focus on increasing accurate knowledge of COVID-19 and COVID-19 vaccines to improve health literacy, increase motivation to adopt COVID-19 vaccines and other preventative behaviors, increase perceived severity of and susceptibility to COVID-19, and improve understanding of the benefits of COVID-19 vaccines and other preventative behaviors. RCCE activities will use an open-ended and conversational approach that invites priority audiences into a deeper reflection and discussion around their context, barriers, and actions to take. RCCE messages will emphasize both the health and non-health benefits of adopting priority behaviors.

Given the widespread low completion of full primary COVID-19 vaccine series and limited uptake of recommended booster doses in Egypt, SEEC-II will focus on implementing RCCE activities to reach individuals and households within the general population, with a specific focus on four priority audiences – older adults (60 years of age and up), adults with comorbidities, pregnant women, and health care workers. It will focus on individuals and households with low socioeconomic status living in slums and rural areas who are more susceptible to the negative health, economic, and social impacts of COVID-19. It will also implement activities to reach youth (12-18 years). SEEC-II has segmented these heterogeneous audiences using psychographic characteristics to focus on those audience segments that exhibit low risk perception of COVID-19 and high levels of concerns about vaccine safety and efficacy.

Using the Health Belief Model (HBM) as a theoretical framework, SEEC-II explored the motives of individuals willing to get vaccinated, and more importantly the reasons behind refusing vaccination. Based on these findings, SEEC-II will design RCCE activities and messages to enhance the five major constructs of the model – perceived susceptibility, perceived severity, perceived benefits, perceived barriers, and cues to action – using a bottom-up, community-based approach. SEEC-II will use community awareness events (small and large scale) and outreach through community outreach workers, as well as recruit and train key community influencers, such as health care providers, religious and community leaders, to deliver RCCE activities and messages within their communities. Community events and outreach will be complemented by low-literacy print materials, and, in Giza and Alexandria, hotlines established by local non-governmental organization (NGO) partners under SEEC-II. SEEC-II will also integrate key COVID-19 and COVID-19 vaccine messages into women's empowerment, economic empowerment, home-based support, Mental Health and Psychosocial Support (MHPSS), and health care facility capacity building activities.

1- PROJECT OVERVIEW

The Supporting Egypt's Efforts in Combatting COVID-19 Phase Two (SEEC-II) is a 23-month project funded by the United States Agency for International Development (USAID). SEEC-II is implemented by Family Health International (FHI 360) through the Meeting Targets and Maintaining Epidemic Control (EpiC) project and aims to reduce the transmission and spread of Coronavirus Disease 2019 (COVID-19) in Egypt by engaging private health facilities, whether for-profit or not-for-profit, and providing tailored support to vulnerable populations highly affected by the pandemic.

The objectives of SEEC-II are to:

- Build the capacity of COVID-19 frontline health care providers and support delivery of quality health services in the private health care sector to mitigate the risks of the pandemic
- Support the efforts of non-governmental organizations (NGOs) and civil society in raising public health awareness and promoting Social and Behavior Change (SBC) through Risk Communication and Community Engagement (RCCE)
- Build capacities and support the most affected by the pandemic to deliver COVID-related health promotion interventions to their communities
- Develop a monitoring and learning system to assess performance of the project and its activities, measure improvements and provide lessons to strengthen future public investments.

The project will accomplish these objectives by implementing activities in the following areas:

- Infection Prevention and Control (IPC)
- COVID-19 case management
- Surveillance and data management
- RCCE
- Mitigating secondary impacts of the pandemic on the most affected groups in the community through: Economic empowerment, women's empowerment, Mental Health and Psychosocial Support (MHPSS), and home-based support activities

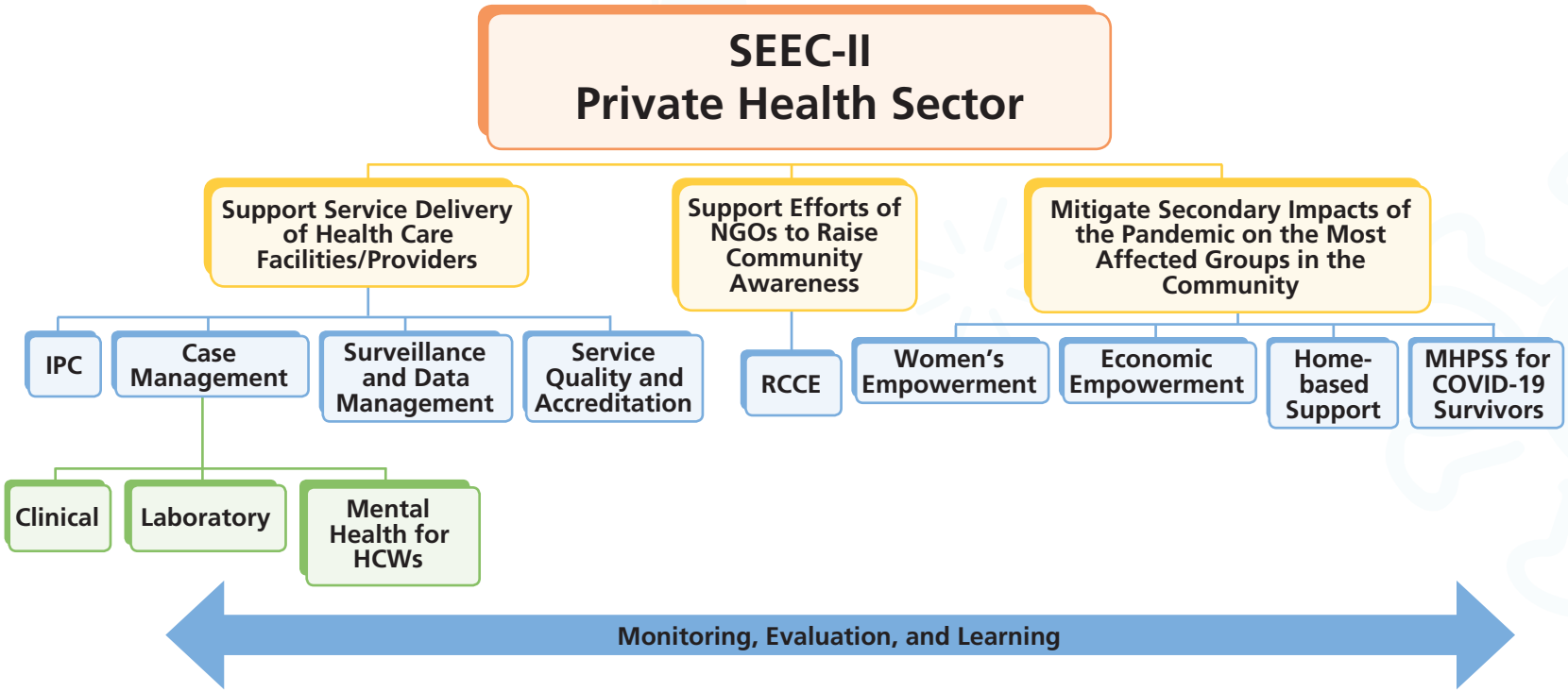

Figure 1: *SEEC-II Priority Technical Areas Illustration*

Figure 1 above illustrates SEEC-II's main areas of work to reduce the transmission and spread of COVID-19 and its health, economic, and psychosocial impact on communities.

SEEC-II is being implemented in four governorates — Cairo, Giza, Alexandria, and Luxor. These four governorates were selected to serve all geographic divisions of Egypt including Nile River Delta, Upper Egypt, and the coastal region and their population size comprises roughly 25% of Egypt's total population.

The project builds on FHI 360's previous work under the SEEC-I project (2021-2022), through which EpiC partnered with hospitals and laboratories from the Ministry of Health and Population (MoHP) and the Supreme Council of University Hospitals to reach a broad network of health care providers and laboratory technicians to strengthen Egypt's COVID-19 response in focus areas — IPC, clinical management, laboratory systems strengthening, and COVID-19 surveillance.

2. SUMMARY OF SITUATION ANALYSIS

2.1 Overview of COVID-19 Situation in Egypt

The first confirmed case of COVID-19 in Egypt was reported on February 14, 2020. Since its first emergence, Egypt has experienced six waves of COVID-19 cases. To date, there have been more than 515,000 confirmed cases of COVID-19 and approximately 25,000 COVID-19 deaths reported in Egypt[1, a].

In response to the emerging pandemic, on March 21, 2020, the Government of Egypt closed all mosques, churches, schools, and universities, as well as suspended festivals and external and internal tourism to tourist cities, including Luxor and Aswan. The government launched awareness campaigns, including the "Stay home, stay safe" campaign on social media, to raise public awareness about COVID-19 and to promote social distancing, frequent handwashing, cough etiquette, use of face masks, reduced hand-to-face contact, and avoiding crowding in public transportation. The Egyptian MoHP also launched a specialized hotline to provide medical counseling services to those in need.[2] As the pandemic evolved over the past two years, additional measures were added including mask mandates, limitations on social gatherings, quarantine, and testing requirements, and, with the introduction of COVID-19 vaccines in 2021, a government mandate for vaccination.

COVID-19 vaccinations were mandated by the Egyptian government in October 2021, with the Cabinet of Ministers issuing an official circular ordering all ministries in Egypt to implement a regulatory decision to prevent their workers from entering workplaces unless they had received a COVID-19 vaccine.[3] Additionally, proof of vaccination was required for individuals to collect government pensions, enter government buildings, and to access exams at public universities.[3] To facilitate mass vaccination, the Egyptian health authorities set up mobile vaccination sites throughout the major urban centers in the country and conducted a door-knocking campaign in seven governorates. As of October 2022, over 98,911,000 doses of COVID-19 vaccines have been administered in Egypt.[1]

While the initial uptake of COVID-19 vaccines was high, many people did not complete the primary vaccine series, receiving only one of the two required doses of the vaccines. The uptake of the first and second booster has been extremely low, resulting in inadequate levels of vaccine-acquired immunity in the population. Additionally, while children ages 12 to 18 are eligible to receive the Pfizer vaccine as of January 2022, vaccine uptake among this group is believed to be low.

[a] The actual number of COVID-19 cases in Egypt is likely much higher than those officially reported to the WHO. Asymptomatic cases, underutilization of COVID-19 testing services, hesitancy to use health services during the pandemic, and, in some cases, using CT scans in informal laboratories for diagnosis are likely to have impacted reporting the true number of COVID-19 cases in Egypt.

2.2 COVID-19 and COVID-19 Vaccine Knowledge, Attitudes, and Beliefs

The section below presents key findings and insights from a formative assessment conducted by SEEC-II to assess the current knowledge, attitudes, beliefs, and practices related to COVID-19 and COVID-19 vaccines in Egypt.

2.2.1 General Perceptions of COVID-19

There is a widespread feeling among the general population that the COVID-19 pandemic is over. This belief is reinforced by the fact that all COVID-19-related protective measures and mandates have been lifted or are no longer actively enforced, including those requiring masks, social distancing, and proof of vaccination. The limited mass media coverage of COVID-19 and public discourse on the pandemic have also reinforced the perception that COVID-19 is no longer present or poses a threat in Egypt. Additionally, the declining number of COVID-19 cases reported in Egypt and across the globe have created a perception that COVID-19 is ending, and therefore people feel a sense of safety.

Among those people who do believe COVID-19 is still present, there is also a perception that the current strains of COVID-19 have a lower viral load or are generally weaker than previous strains of the virus. This has led to the belief there is less risk of getting infected or, if infected, of developing severe COVID-19. Many participants reported they are no longer worried of COVID-19, and many mentioned that COVID-19 is now akin to the seasonal flu. As a result, most people do not believe they are at risk of getting COVID-19 and no longer perceive COVID-19 as a serious disease. Only a small minority of participants expressed concerns about the severity of COVID-19, and those concerns were only for high-risk groups, such as children and the elderly.

While people do not have a high-risk perception of acquiring COVID-19, they do perceive the economic impacts the COVID-19 pandemic has had on their lives and the Egyptian economy. While many people believe the pandemic-related shutdowns in early 2020 were necessary to save lives, they thought that those restrictions severely damaged the economy, resulting in higher unemployment and a reduction in wages.

2.2.2 General Perceptions of COVID-19 Vaccines

The general perception of the COVID-19 vaccines is mixed, with some people expressing their positive perception and attitude towards getting vaccinated while others having a negative perception due to many vaccine-related rumors circulating among people. Some participants in the formative assessment reported the vaccines might reduce the probability of getting COVID-19 or limit the severity of COVID-19, and therefore vaccines gave them a sense of security and ease. On the other hand, concerns about the safety of the vaccines and negative side effects from the vaccines were frequently mentioned by participants. Concerns about the safety of the vaccines stem from the speed at which the vaccines were developed, and the belief they were not properly tested, as well as the belief the better vaccines were given to health care workers, and that those given to the public were of lesser quality. Many respondents mentioned they were

reluctant to take the vaccines and the majority that took them only did so because proof of vaccination was mandated in order to enter governmental facilities or to be able to receive their pension or salaries. Others mentioned that they only decided to get the vaccine because they felt a strong sense of responsibility to protect family members, especially elderly people.

2.2.3 Knowledge of COVID-19 Vaccines

Accurate knowledge of the COVID-19 vaccines is limited among the general population, with many people commonly citing inaccurate information, myths, and misinformation about the vaccines. There is generally poor understanding of the vaccines' efficacy and how the vaccines work to prevent severe cases, hospitalization, and deaths from COVID-19, but not necessarily COVID-19 infections. People inaccurately believe the COVID-19 vaccines are intended to prevent all COVID-19 infections, and therefore view people who get COVID-19 after being vaccinated as proof that the vaccines do not work and have low efficacy.

2.2.4 Beliefs and Attitudes About COVID-19 Vaccines

A nationally representative survey from six randomly selected governorates in Egypt, urban and rural areas, that was conducted between March and April 2021 found a low level of COVID-19 vaccination acceptance.[4] COVID-19 vaccine hesitancy resulted due to a number of different factors, including doubts in the ability of the vaccine to prevent COVID-19 infection, lack of trust in the vaccines due to rapid production, deficiency of information about the vaccines, and fear of side effects.[4]

The formative assessment conducted by SEEC-II also found that people believe the COVID-19 vaccines cause COVID-19 infections, infertility, cancer, and other negative health impacts. There is also limited understanding of the common side effects of vaccinations, in general, including fever, fatigue, and pain at the injection site, with people citing these as proof the vaccines might make one sick or as reasons for not completing their primary series or receiving booster doses.

2.2.5 Demand Creation for COVID-19 Vaccines

The formative assessment revealed that participants need more information on how to protect themselves and need trusted sources of information to guide them through vaccine decision-making. The two most mentioned trusted sources of information were medical personnel, including doctors, pharmacists, and nurses, and religious leaders. The assessment found that COVID-19 was discussed among family members and at workplaces. Respondents mentioned the power of getting information about COVID-19 and vaccines from word of mouth, for instance during conversations at work, Gomaa prayers at mosques, church, coffee shops, and on the street. Considering these insights, harnessing interpersonal communication, and building trust are both critical in building vaccine confidence.

Participants mentioned that they want communication on COVID-19 and COVID-19 vaccines to be engaging. People want to hear positive stories about other people who took a COVID-19 vaccine and had a positive experience. The assessment found that the willingness of participants to get vaccinated increased when personal stories of others who took the vaccine were shared.

3. GOALS AND OBJECTIVES OF THE RCCE STRATEGY

3.1 Goals and Objectives of SEEC-II COVID-19 RCCE Strategy

The purpose of the SEEC-II COVID-19 RCCE Strategy is to increase demand for and uptake of COVID-19 vaccines by designing and implementing targeted RCCE interventions that address key barriers to demand and adoption of COVID-19 vaccines (primary series) and recommended booster doses and reinforce confidence in their continued use. Key barriers include limited correct knowledge on COVID-19 and COVID-19 vaccines, low perceived severity of COVID-19, limited understanding of the benefits of COVID-19 vaccines, fear of side effects from COVID-19 vaccines, and myths and misinformation about COVID-19 and COVID-19 vaccines.

The SEEC-II COVID-19 RCCE Strategy specifically seeks to:

1. Increase accurate knowledge on COVID-19 and COVID-19 vaccines to improve health literacy
2. Increase motivation to adopt COVID-19 vaccines and other preventative behaviors
3. Increase perceived severity of and susceptibility to COVID-19
4. Improve understanding of the benefits of COVID-19 vaccines

RCCE messages and activities will address key barriers by increasing knowledge, dispelling myths and misconceptions, motivating audiences, shifting attitudes, and facilitating self-efficacy. RCCE messages will emphasize both the health and non-health benefits of adopting priority behaviors. For example, economic benefits such as saving money and time away from work, social benefits such as not missing social and cultural events, and family wellbeing.

3.2 SEEC-II RCCE Priority Audiences

Given the widespread low completion of full primary COVID-19 vaccine series and uptake of recommended booster doses among Egyptians, SEEC-II will focus on implementing RCCE activities to reach individuals and households within the general population, with a specific focus on increasing vaccine uptake among:

- Older adults - elderly, 60 years of age and up
- Adults with comorbidities (e.g., diabetes, hypertension, asthma, heart disease, lung disease, kidney disease, obesity, HIV, cancer, etc.)
- Health care workers
- Pregnant women

It will target individuals and households with low socioeconomic status living in slums and rural areas who are more susceptible to the negative health, economic, and social impacts of COVID-19. SEEC-II will also implement activities to reach youth (12-18 years).

Building on global evidence and formative assessment that found homogeneity in the barriers and facilitators to vaccine uptake across demographic segments, SEEC-II will use psychographic segmentation to focus and appropriately tailor its RCCE messages and activities for the general population. Global evidence from previous vaccine introductions and rollout has identified five key psychographic audience segments related to vaccine acceptance and uptake – the "Easy Sells", the "Poorly Reached", the "Unconcerned", the "Hesitant", and the "Active Resister."

Table 1: *Psychographic segments based on global evidence*

Audience Segment	Key Barriers to Vaccine Acceptance and Uptake
The "Easy Sells"	• Lack awareness of COVID-19 vaccine availability and schedule • Agree with or do not question vaccines
The "Poorly Reached"	• Limited or difficult access to vaccination services due to physical distance, cost, or low health literacy • High perception of inconvenience (e.g., time, cost, and quality of services) to access vaccination
The "Unconcerned"	• Low perceived threat (risk and severity) of COVID-19 • Consider vaccination a lower priority
The "Hesitant"	• High concerns about safety • Low belief in vaccine effectiveness • Low trust in institutions promoting vaccines
The "Active Resister"	• Strong personal, cultural, or religious anti-vaccine beliefs

Based on findings from the formative assessment, which found widespread low risk perception of COVID-19 and high levels of concerns about vaccine safety and efficacy, SEEC-II will focus its RCCE messages and activities on reaching and addressing the "Unconcerned" and the "Hesitant". None of the participants in the formative assessment or the validation meetings mentioned lack of awareness of the availability of vaccines, and vaccine accessibility as being an issue.

3.3 Priority Behaviors

This strategy focuses on increasing demand for and uptake of COVID-19 vaccines.

In addition, RCCE messages and activities will also promote the adoption of other COVID-19 preventative behaviors, including:

- Frequent and proper handwashing
- Wearing face masks in crowded public spaces
- Seeking correct information and care if exhibiting symptoms of COVID-19

3.4 Process for Developing the SEEC-II COVID-19 RCCE Strategy

The SEEC-II COVID-19 RCCE Strategy was developed through the following process:

1. Formative assessment to understand attitudes and current behaviors towards COVID-19, public health measures, vaccination, and current public health messages
2. Meetings with local NGO partners and community members in the four governates to validate key findings from the formative assessment
3. Technical reviews and feedback from MoHP, USAID, select implementing partners, and other key stakeholders.

4. STRATEGIC APPROACH

4.1 Theoretical Framework

To enhance vaccine demand and uptake requires a clear, coordinated, and concerted public health effort. There are several well-tested theories available to understand the mechanisms of social and behavior change (SBC), with a common denominator being the conceptualization that people engage in an internal decision-making process, weighing the pros and cons of taking a specific action, in this case, being vaccinated against COVID-19.

This RCCE strategy uses the Health Belief Model (HBM)[5] as a theoretical framework to explore the motives of individuals willing to vaccinate, and more importantly to investigate the reasons behind refusing vaccination. The major premise of this model is that existing beliefs can predict future behaviors. When applied to disease prevention, the Health Belief Model suggests that one's willingness to prevent an illness combined with their expectations of a particular action (such as receiving a vaccine) can serve as a predictor for future behaviors. According to the model, people will be more motivated to adopt healthy behaviors if they believe they are at risk of a negative health outcome.

The Health Belief Model includes five major constructs, namely: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, and cues to action. Perceived susceptibility refers to an individual's belief about the likelihood of acquiring a disease. Perceived severity refers to an individual's belief about the severity of the illness. The perceived benefits construct is

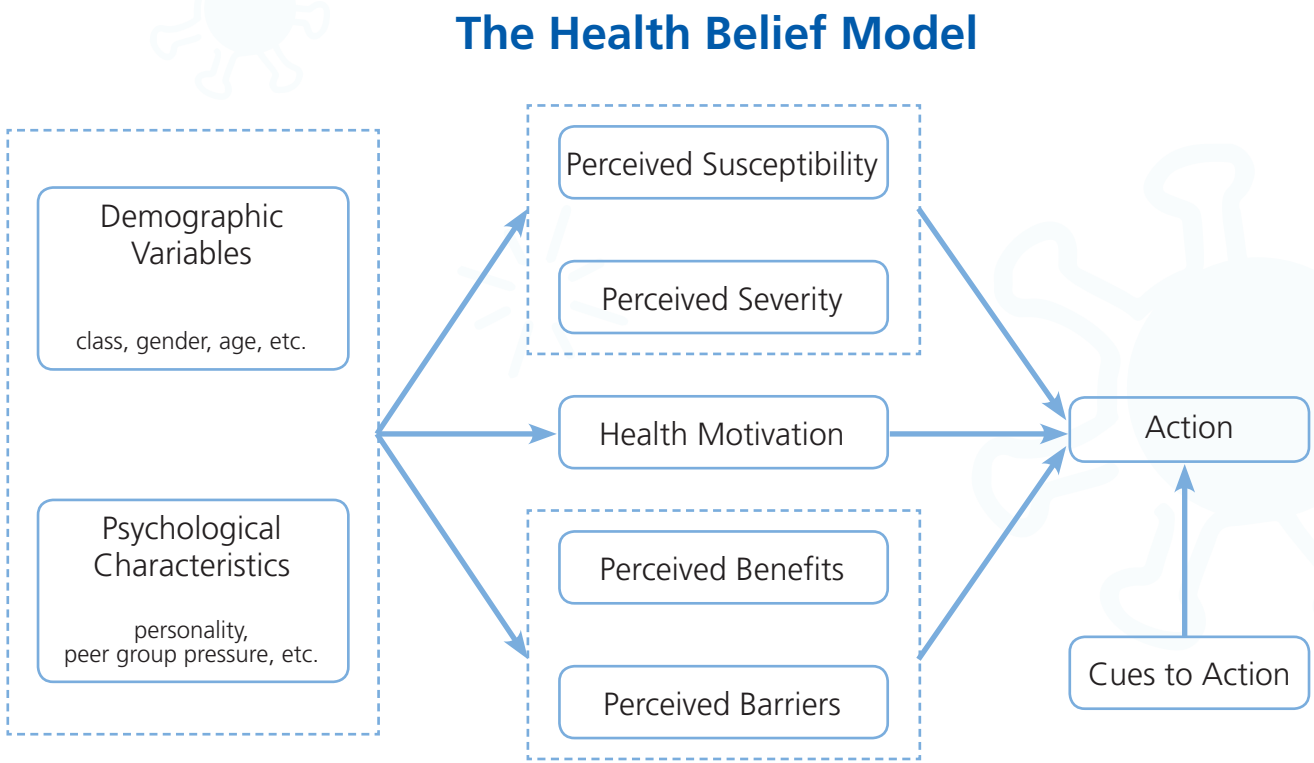

Figure 2: *illustrates the constructs of the Health Belief Model*

related to one's perception of the usefulness of a particular health behavior, in this case, the benefits of vaccination. Perceived barriers correspond to the individual's assessment of obstacles that could prevent them from performing the health behavior. Lastly, cues to action refer to the cues that stimulate an individual to adopt a specific behavior.

4.2 Channels of Communication

Previous RCCE efforts have focused on a top-down approach, using large scale mass media and awareness campaigns regarding COVID-19 and the COVID-19 vaccines. While these messages and campaigns were effective at reaching the majority of the

population with information about COVID-19 and COVID-19 vaccines, there is widespread misinformation, myths, and disinformation circulating within the general public with regards to both the disease and vaccines. At this point in the pandemic, many people have had multiple opportunities to be vaccinated, and have actively chosen not to be vaccinated. Therefore, a more bottom-up, community-based approach is needed to address these more complex barriers to vaccination. This was confirmed in the findings from the formative assessment and during validation meetings with community members and local NGO partners in the four governorates.

The SEEC-II RCCE activities will focus on using channels which facilitate two-way communication and bottom-up messaging since the barriers to COVID-19 vaccine uptake require dialogue and discussion. RCCE activities will use a more open-ended and conversational approach that invites priority audiences into a deeper discussion and self-reflection around their context, barriers, and actions to take. SEEC-II will use community awareness events (small and large scale) and outreach through community outreach workers (i.e., community members recruited and trained by SEEC-II to conduct outreach in their community) on the street and at coffee shops, community forums and meetings, etc.

The formative assessment confirmed that local health care providers, social care workers (i.e., community volunteers, village health workers, and social workers), religious leaders, community leaders, and other local influencers are critical to engage to effectively promote COVID-19 vaccines. Based on this, these community influencers will be recruited, trained, and used as trusted channels to deliver RCCE activities and messages within their communities.

Community events and outreach will be supported with low-literacy print materials, and, in Giza and Alexandria, hotlines established by local NGO partners under SEEC-II to provide additional channels for receiving accurate information.

SEEC-II will also integrate key COVID-19 and COVID-19 vaccine messages into women's empowerment, economic empowerment, home-based support, MHPSS, and health care facility capacity building activities to amplify these messages and reach those most at risk.

RCCE activities will be implemented through four local NGO partners in Alexandria, Cairo, Giza, and Luxor.

4.3 Tailoring and Customizing RCCE Interventions

Each local partner will tailor and customize the delivery of RCCE activities for their governorate based on their deep understanding of the local context and which community influencers and channels are best placed to reach the priority audiences. For example, one local partner may conduct community awareness events through churches and mosques and outreach through the project's community outreach workers in slum areas within their governorate, while another local partner may use community theatre groups and community outreach workers to reach urban and rural communities in their governorate.

4.4 Key RCCE Strategies and Tactics

The SEEC-II COVID-19 RCCE Strategy will focus on the following key SBC strategies and tactics:

- ***Increase accurate information and knowledge:***
  Although most people know about COVID-19 and COVID-19 vaccines, certain fears, misinformation, myths, and misconception exist and act as barriers to accessing vaccine services and completing the full primary vaccine series and the recommended booster doses. Therefore, RCCE activities will go beyond increasing knowledge to also addressing myths and misinformation as well as fears about side effects and other health concerns related to vaccines.

- ***Promote health and non-health benefits:***
  RCCE messages and activities will connect audiences' values, dreams, and aspirations to their choices and actions related to their health – creatively positioning messages on what people care about and value most (e.g., protecting and providing for their family, having more money, as well as being healthy and strong).

- ***Increase risk perception:***
  Many people in the community no longer fear COVID-19 or believe that the COVID-19 pandemic is over, and therefore no longer see the benefit of vaccination. RCCE messages and activities will be designed to increase priority audiences' risk perception of the health and non-health consequences associated with COVID-19, and the benefits COVID-19 vaccines play in reducing the risk of developing severe illness, hospitalization, and death from COVID-19.

- ***Promote effective management of side effects from vaccines:***
  During the formative assessment and validation meetings, many community members stated that previous RCCE efforts did not adequately convey information about possible side effects or how to address and manage these side effects if they were to occur. This lack of effective communication and understanding about common side effects of COVID-19 vaccines, such as fever, pain at the injection site, and fatigue, has led to high rates of discontinuation of COVID-19 vaccines and persistent fears of side effects, and what they mean, within the community. In order to address this barrier, SEEC-II will develop job aids and materials to support health care workers, community outreach workers, and other community agents in counseling on possible side effects associated with COVID-19 vaccines, how to mitigate or treat the most common side effects, and where to seek additional counseling or services, if needed. SEEC-II will provide referrals to the toll-free hotlines and private and public sector facilities for additional information on side effects management.

- ***Transform social norms:***
  RCCE messages and activities will strive to establish COVID-19 vaccination as the norm within communities by amplifying the voices and statistics of people who have completed a full course of the vaccine and the benefits they experienced as a result.

- ***Use the positive deviance theory and the diffusion of innovation theory:***
  SEEC-II will collect and use testimonials from early adopters and positive deviants to encourage and motivate others in similar settings who face the same barriers to the adoption of COVID-19 vaccines and other preventative measures.

5. SUMMARY TABLE OF RCCE APPROACH BY PRIORITY AUDIENCE

In the section below, each priority audience is presented, along with the detailed table highlighting priority behaviors, secondary audiences, key barriers and motivators, and key strategies and tactics for overcoming barriers and achieving behavior change. The section also includes message points that show what we want audiences to KNOW, THINK, and FEEL, as well as key partners and channels that will be used to reach each priority audience.

Please Note: Structural barriers, such as distance to health facilities, commodity stockouts, and costs associated with accessing services, are not included in the priority barriers in the detailed tables below. While often mentioned as barriers to accessing and using products and services, these barriers are better addressed by the supply side activities.

5.1 Priority Audience 1: Unconcerned

5.1.1 Detailed Behavior Table for Unconcerned

Priority Behavior: Complete a full course of the COVID-19 vaccine (primary series) and any recommended booster doses

Primary Audience: Adults (18+), with a specific focus on Adults (18-59 years) with co-morbidities, Elderly (60 years and above), Pregnant women, Health care workers; Youth (12-18 years)
Secondary Audiences: Health care workers; Religious and community leaders; Community health workers

Communication Objective: Increase in the proportion of individuals who: (1) perceive COVID-19 to be a serious disease, (2) understand the benefits of the COVID-19 vaccine in preventing severe COVID-19, hospitalization, and death

Promoted Key Sub-behaviors	Key Barriers
1. Go to a health facility or outreach (i.e., metro/ community-based vaccination or door-knocking campaigns) offering COVID-19 vaccines 2. Accept the COVID-19 vaccine available at the health facility or outreach 3. Complete the full course of the COVID-19 vaccine doses as instructed by the health care provider 4. Return to the health facility for booster dose(s) as recommended	• **Belief one's health is up to God's will:** Widespread belief that a person's health is in God's hands and up to His will; therefore, individuals do not have control over whether they will get or can prevent COVID-19. • **Belief the COVID-19 pandemic is over:** Widespread belief the COVID-19 pandemic is over, as a result people do not believe they are at risk of getting COVID-19. This belief is reinforced by lifting mandatory COVID-19 prevention measures (i.e., mask wearing, social distancing, travel restrictions) and the decline of COVID-19 coverage in news/media. People do not see COVID-19 in their communities because it is a "hidden" disease, since most people have asymptotic or mild cases. • **Limited risk perception of the severity of COVID-19:** People believe that COVID-19 has weakened and is no longer a severe disease. People reported that most cases are mild, and therefore, COVID-19 is not a major threat. People have learned how to deal with COVID-19 and believe they can manage COVID-19 illness if they were to get it. • **Limited understanding of the importance of getting vaccinated against COVID-19:** There is widespread misunderstanding about the benefits of COVID-19 vaccination and how the COVID-19 vaccines work to protect the health of individuals. People believe the COVID-19 vaccines are intended to prevent people from getting COVID-19, and don't understand the significant benefits COVID-19 vaccines play in preventing severe COVID-19 illness, hospitalization, and death.

Strategies and Tactics	Message Points	Channels and Approaches
• Increase risk perception of severity of COVID-19 and possible complications, including long COVID-19/post-COVID-19 syndrome • Endorsements from health care providers on the severity of COVID-19, as well as highlighting the consequences of not completing a full course of the COVID-19 vaccine or delaying booster doses • Positive testimonials from people who have been vaccinated and the benefits they received from vaccination. As well as negative testimonials from those who have not been vaccinated and the consequences of non-vaccination • Increase perception of missing out due to COVID-19 illness (e.g., missing work, school, religious or cultural events, holidays, and time with family and friends) • Promote economic benefits of vaccination (e.g., save money by avoiding costly treatment and complications, not missing work) • Use data/statistics on the number of Egyptians, as well as people globally, who have had COVID-19	**Know** • Health, economic and physical (personal) benefits of getting the COVID-19 vaccine (what's in it for her/him/the family?) • Risk of potential complications and negative impacts if they are not vaccinated against COVID-19 **Feel** • Confident to go for a COVID-19 vaccine and complete the full course • Urgency to go to a health facility or outreach to get a COVID-19 vaccine • At risk of potential COVID-19-related complications or negative impacts if they are not vaccinated **Think** • COVID-19 vaccines will help protect me and my family from severe COVID-19 • COVID-19 vaccines will allow me to continue going to work/school, maintain social interactions, and not miss days due to illness **Do** • Go to a health facility or outreach to get a COVID-19 vaccine • Accept the COVID-19 vaccine available at the health facility or outreach • Complete the full course of the COVID-19 vaccine doses as instructed by the health care provider • Return to the health facility for COVID-19 booster doses as recommended by health care provider	• Community awareness events (small and large scale) – leveraging religious leaders, testimonials from the community members, community theatre • Outreach through community outreach workers in the community (i.e., coffee shops, street, community forums and meetings, etc.) • Print materials - Community takeaways (i.e., notebook, playing cards, etc.) - Low literacy leaflet • Job aids for community outreach workers • Cue cards/discussion guides • COVID-19 hotline • Integrate COVID-19 key messages into Women's Empowerment, home-based support, Mental Health and Psychosocial Support, and health care facility strengthening activities

5.2 Priority Audience 4: Hesitant

5.2.1 Detailed Behavior Table for Hesitant

Priority Behavior: Complete a full course of the COVID-19 vaccine doses (primary series) and any recommended booster doses

Primary Audience: Adults (18+), with a specific focus on Adults (18-59 years) with comorbidities, Elderly (60 years and above), Pregnant women, Health care workers; Youth (12-18 years)
Secondary Audiences: Health care workers; Religious and community leaders

Communication Objective: Increase in the proportion of individuals who: (1) believe the COVID-19 vaccines are safe, (2) believe the COVID-19 vaccines are effective, (3) trust the information being provided to them about the COVID-19 vaccines

Promoted Key Sub-behaviors	Key Barriers
1. Go to a health facility or outreach (i.e., metro/community-based vaccination or door-knocking campaigns) offering COVID-19 vaccines 2. Accept the COVID-19 vaccine available at the health facility or outreach 3. Complete the full course of the COVID-19 vaccine doses as instructed by the health care provider 4. Return to the health facility for booster dose(s) as recommended	• **Belief COVID-19 vaccines are not safe:** Belief the COVID-19 vaccines are unsafe, and were developed too quickly • **Fear COVID-19 vaccines will cause adverse health outcomes:** Widespread belief the COVID-19 vaccines will cause a variety of adverse events, including infertility/sterilization, cancer, death (i.e., heart attack/stroke, death within 1-2 years after vaccination) • **Belief COVID-19 vaccines will cause COVID-19 illness:** Belief the COVID-19 vaccines contain the COVID-19 virus and will cause a person to contract COVID-19 • **Belief COVID-19 vaccines will expose pregnant women to risks:** Belief the COVID-19 vaccines will cause COVID-19 to be transmitted to fetuses and/or kill fetuses • **Concerns about efficacy of COVID-19 vaccines:** People question the efficacy of the vaccines, especially because some regimens require two doses, and all regimens require booster doses. People equate needing more doses as an indication the first dose is not effective and therefore question why to keep taking it. People also question the efficacy of the vaccines because even after getting vaccinated they still got COVID-19 or know someone who was vaccinated and got COVID-19 • **Fear of side effects:** People fear the side effects associated with the vaccines, such as fever, pain at the injection site, and fatigue. While these are normal side effects from all vaccines, this is not widely understood or known in the community and viewed as an indication the vaccines are making people sick • **Belief COVID-19 vaccines exacerbate preexisting conditions:** Belief COVID-19 vaccines will exacerbate symptoms of underlying health conditions, such as diabetes, and therefore vaccines are not safe for people with these conditions

Strategies and Tactics	Message Points	Channels and Approaches
• Improve health literacy and correct information on COVID-19 and COVID-19 vaccines • Testimonials on the safety of COVID-19 vaccines from men and women who have completed a full dose of COVID-19 vaccine • Targeted messaging for health care providers given their strong influence in the adoption of this behavior • Testimonials from local nurses and doctors on the safety and efficacy of COVID-19 vaccines • Targeted messaging for community gatekeepers (mothers/mothers-in-law, religious leaders, cultural leaders, etc.) who are trusted sources of information and/or influence other people's decisions about COVID-19 vaccines	**Know** • Correct information about COVID-19 and COVID-19 vaccines • Where and how to access correct information about COVID-19 and COVID-19 vaccines if they have additional questions **Feel** • Confident COVID-19 vaccines are safe and effective **Think** • COVID-19 vaccines will not harm their health • COVID-19 vaccines are effective at preventing severe COVID-19 illness, hospitalization, and death **Do** • Go to a health facility or outreach to get a COVID-19 vaccine • Accept the COVID-19 vaccine available at the health facility or outreach • Complete the full course of the COVID-19 vaccine doses as instructed by the health care provider • Return to the health facility for COVID-19 booster doses as recommended by health care provider	• Community awareness events (small and large scale) – leveraging religious leaders, testimonials from the community members, community theatre • Outreach through community outreach workers in the community (i.e., coffee shops, street, community forums and meetings, etc.) • Print materials - Community takeaways (i.e., notebook, playing cards, etc.) - Low literacy leaflet • Job aids for community outreach workers • Cue cards/discussion guides • COVID-19 hotline • Integrate COVID-19 key messages into Women's Empowerment, Homebased Care, Mental Health and Psychosocial Support, and health care facility strengthening activities

5.3 Special Considerations for Specific Sub-populations

Within the priority audience segments mentioned above, SEEC-II will implement special programming to reach and engage the following sub-populations.

5.3.1 Women, Including Pregnant Women

Pregnant women are at an increased risk of developing complications from COVID-19; however, many women believe that COVID-19 vaccines are unsafe for pregnant women to receive and will harm a fetus or cause miscarriage. RCCE activities will increase pregnant women's understanding of the importance of COVID-19 vaccination during pregnancy, as well as convey correct information about the safety of COVID-19 vaccines during pregnancy.

Women are an important group not only as individuals, but also for the role they play in informing health decisions for their children and other members of their household, including household members with comorbidities and who are elderly.

In order to reach women, including pregnant women, SEEC-II will implement outreaches through community outreach workers to areas where women commonly gather, such as markets and other public venues. Promotion of COVID-19 vaccine and other preventative health behaviors will also be integrated into the project's women's empowerment activities and service delivery activities with private providers, to ensure women are reached with these important messages.

5.3.2 Health Care Workers

Health care workers will be targeted as both a priority and influencing audience. Due to their potential increased risk of exposure to COVID-19 in the workplace and the vital role they play in ensuring a functioning health system, health care workers are an important audience for COVID-19 vaccines; however, based on conversations with stakeholders, the uptake of recommended booster doses have waned following initial uptake spurred by the government's earlier mandates. Vaccine hesitancy among health care workers in Egypt is high; with a survey conducted in 2021 findings an estimated 52% of Egyptian health care workers reporting hesitancy to take the COVID-19 vaccine.[6] Health care workers are also critical to the uptake of COVID-19 vaccines among their patients and communities, as they are often trusted sources of health information and are an important channel for reaching other priority audiences, such as adults with comorbidities and pregnant women. SEEC-II will address vaccine hesitancy among private health care workers engaged in the service delivery component of the project, as well as sensitize them on how to counsel and frame discussions with patients to promote the uptake of COVID-19 vaccines.

5.3.3 Elderly

As a vulnerable population to the effects of COVID-19, elderly people are at greater risk of developing severe COVID-19, hospitalization, or death if they acquire COVID-19

and are not vaccinated. While initial vaccination uptake among the elderly in Egypt was high, stakeholders expressed concerns that the uptake of booster doses has waned. The project will conduct targeted RCCE activities with caregivers of the elderly, as well as elderly people living in managed facilities.

5.3.4 Adults with Comorbidities

Adults with comorbidities, including people with diabetes, hypertension, asthma, heart disease, lung disease, kidney disease, obesity, HIV, cancer, among others, are at an increased risk of developing severe illness from COVID-19. Since people with comorbidities can be difficult to identify for targeting (without access to their health files), SEEC-II will conduct community awareness events and community outreach with the general population to increase knowledge about the increased risk from COVID-19 among adults with comorbidities and the importance of COVID-19 vaccination among this population. SEEC-II will also seek to strengthen health care workers' counselling on COVID-19 vaccinations to people with comorbidities so that they can be targeted with specific messages during clinical services.

5.3.5 Youth

To promote acceptance and uptake of COVID-19 vaccines among youth ages 12 to 18 years, RCCE activities will target youth through activities at youth centers and clubs.

6. IMPLEMENTATION

6.1 Role of FHI 360/EpiC Egypt and SEEC-II Local Partners in Implementing the RCCE Strategy

The SEEC-II RCCE Strategy will be implemented by FHI 360/EpiC Egypt, with support from the four local implementing partners – one for each of the four project governorates. Table 2 below provides an overview of the roles and governorate each partner will implement in under this strategy.

Table 2: *Role of SEEC-II Consortium Partners in Implementing the RCCE Strategy*

PARTNER	ROLE	GOVERNORATE
FHI 360/EpiC Egypt	• Lead the development of the RCCE strategy • Design and pretest RCCE messages and activities • Train local partners on RCCE strategy, messages, and activities • Quality assurance and quality improvement (QA/QI), support supervision, and monitoring of RCCE activities	All
Caritas Egypt	• Recruit, train, and supervise community outreach workers • Implement all RCCE activities • Monitor and report on RCCE activities	Alexandria
Freedom Program	• Recruit, train, and supervise community outreach workers • Implement all RCCE activities • Monitor and report on RCCE activities	Cairo
Gozour Foundation	• Recruit, train, and supervise community outreach workers • Implement all RCCE activities • Monitor and report on RCCE activities	Giza
Afaq Foundation	• Recruit, train, and supervise community outreach workers • Implement all RCCE activities • Monitor and report on RCCE activities	Luxor

7. MONITORING, EVALUATION, AND LEARNING

Routine performance monitoring will be conducted to ensure SEEC-II meets the output targets for the planned program activities informed by this strategy using two indicators selected from the "COVID-19 Saving Lives Now and Global Vaccine Access Initiative Indicators" compendium, namely Standard Indicators CV.1.1-1 and CV.1.3-3 (see Table 3 below).

Building the capacity of members of the community to reach out to the public with COVID-19 vaccine-related messages will be tracked using the selected standard indicator CV.1.3-3 "Number of staff and volunteers trained on COVID-19 vaccine-related topics with United States Government (USG) support." Capacity building activities will strengthen responsive risk communication feedback mechanisms, engage the affected communities in advocacy efforts, support the operations of helplines, and equip community volunteers with the relevant knowledge and skills needed to conduct outreach to vulnerable populations.

Standard Indicator CV.1.1-1 "Number of people reached through USG-supported mass media and social media with COVID-19 vaccine-related messaging" refers to a handful of communication channels, e.g., mobile and telephone services, hotlines included, and hard copy printed materials, including information, education, and communication (IEC) materials. The indicator will therefore reflect progress with a myriad of program activities, including responding to inquiries via supported helplines, outreaching the public through the appointed community members using IEC materials, and disseminating information through the distribution of SBC materials to the community during public awareness events and at civil society community service centers.

Additionally, improvements in program outcomes will be monitored by continuously surveying the changes in targeted opinions and health behaviors of samples of the outreached communities. The desired program outcomes include having the outreached communities and vulnerable population groups embrace those public health measures contributing to the curbing of COVID-19 transmission. Templates for data collection will be developed and will comprise the various parameters which would provide indication of any shift in attitudes and resulting actions following exposure to the program's interventions.

Table 3: *List of USG Standard Indicators used to monitor the implementation of SEEC-II activities*

Objective: *Accelerate widespread and equitable access to and delivery of safe and effective COVID-19 vaccinations*
Indicator under *Community Engagement and Demand*: Number of people reached through USG supported mass media and social media with COVID-19 vaccine-related messaging (Standard indicator: CV.1.1-1)
Indicator under *Human Resources for Health*: Number of staff and volunteers trained on COVID-19 vaccine-related topics with USG support (Standard indicator CV.1.3-3)

8. REFERENCES

1. World Health Organization. WHO Coronavirus Disease (COVID-19) Dashboard. covid19.who.int. Accessed October 22, 2022. https://covid19.who.int/region/emro/country/eg

2. Saied AA, Metwally AA, Madkhali NAB, Haque S, Dhama K. Egypt's COVID-19 Recent Happenings and Perspectives: A Mini-review. *Frontiers in Public Health.* 2021;9(696082). doi:https://doi.org/10.3389/fpubh.2021.696082

3. Rashwan N. Egypt Imposes a Vaccine Mandate for All Government Workers and University Students. *The New York Times.* https://www.nytimes.com/2021/10/20/world/egypt-covid-vaccine-mandate.html. Published October 20, 2021.

4. Salem GM, Said RM, Abdelsalam AE. Acceptance Rate of COVID-19 Vaccination and Its Predictors in Egypt: An Online Survey. *The Journal of Infection in Developing Countries*. 2022;16(06):993-1000. doi:https://doi.org/10.3855/jidc.15603

5. Becker MH. The Health Belief Model and Sick Role Behavior. *Health Education Monographs.* 1974;2(4):409-419. doi:https://doi.org/10.1177/109019817400200407

6. Amer SA, Shah J, Abd-Ellatif EE, El Maghawry HA. COVID-19 Vaccine Uptake Among Physicians During the Second Wave of COVID-19 Pandemic: Attitude, Intentions, and Determinants: A Cross-sectional Study. *Frontiers in Public Health.* 2022;10. doi:https://doi.org/10.3389/fpubh.2022.823217

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