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Unwillingness or reluctance of Palestinians to get the COVID-19 vaccine: the reasons behind it and how to persuade them



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ABSTRACT

Objectives: A brief discussion with policy leaders and citizens was conducted to understand the unwillingness of people to get the COVID-19 vaccine and their suggestions to increase the vaccination level. *Background:* Despite the crucial benefits of the COVID-19 vaccine, people are unwilling to get vaccinated. Vaccine hesitancy is a significant problem globally. In Palestine, at the time of this study only about 30% of the population were vaccinated.

Methods: We used a descriptive qualitative design with semistructured interviews.

Discussion: The unwillingness of Palestinian people to get the COVID-19 vaccine was attributed to the spread of false rumours, misinformation, and conspiracy theories they received about the vaccine on the social media and mistrust towards vaccines the government purchased. There is a dire need to develop motivational strategies (i.e., incentives) and reconsider the media discourse and its unification to encourage people to get the vaccines. Social media and professionals should report the benefits/effectiveness of vaccination and avoid exaggerating its' side-effects.

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Introduction

Palestine is an Arab country located in the eastern Mediterranean region, has a population of 5.23 million people. Of them, 2.11 million (40.2%) reside in the Gaza Strip and 3.12 million (59.8%) live in the West Bank (Palestinian Central Bureau of Statistics, 2021). Palestine has recently faced the third wave of the COVID-19 pandemic, where it recorded 348,234 cases (66,583 per million inhabitants) by August 12, 2021 (World Health Organisation, 2021b). About 3889 inhabitants of the total confirmed cases died; with a mortality rate of 744 per million head of population. Despite the sharp increase in infections among Palestinians (Abu-Odah et al., 2021), the demand for COVID-19 vaccination was still low. The Palestinian Ministry of Health reported vaccine uptake of only 113,863 (5.4%) citizens in the Gaza Strip and 512,416 (16.4%) citizens in the West Bank (World Health Organisation, 2021b).

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Despite the availability of vaccines in Palestine, people are reluctant to get the vaccine. Palestine received the first shipment of 2000 doses of the Moderna COVID-19 vaccine on February 1, 2021 (Palestine News and Inf Agency, 2021), and targeted healthcare professionals caring for patients with COVID-19. On March 17, as part of the first wave allocation, the government received 37,440 doses of the Pfizer COVID-19 vaccine and 24,000 doses of the AstraZeneca vaccine from the COVAX facility (World Health Organisation, 2021a). The government has started to vaccinate citizens over the age of 60 years, patients with cancer and kidney disease, and everyone at risk of injury that may cause complications (World Health Organisation, 2021a). With aims of reaching herd immunity and breaking the transmission chain, the Palestinian government has recently expanded the vaccination campaign, targeting academic staff in universities, students aged 16-18 years, and all employees of government organizations.

The World Health Organization has indicated that at least 60%–70% of the population must be vaccinated to achieve herd immunity and break the transmission chain (World Health Organisation, 2020). The Palestinian Authority is struggling to vaccinate its population; about 30% of eligible citizens have received at least

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the first dose of vaccine (BBC, 2021). The Palestinian Authority, on its part, provides the vaccines and even follows up with citizens with appeals and indicative advertisements to get the COVID-19 vaccine; however, many Palestinians fear getting the vaccine, including healthcare professionals. Only 6236 (14.5%) Palestinian professionals are now vaccinated (World Health Organisation, 2021b) atrend also seen in other countries (Wang et al., 2021).

Few studies have explored the exceedingly low vaccination rate in Middle Eastern countries, including the Arab countries of Jordan, Kuwait, and Saudi Arabia. One study attributed the high rates of COVID-19 vaccine hesitancy among Arab countries' general public to false beliefs that vaccines included microchips and were responsible for infertility (Sallam et al., 2021). Another study conducted by Maraqa et al (2021) underscored that the main reasons for vaccine hesitation among Palestinian professionals were insufficient knowledge about the vaccine, concerns about long-term side effects, fear of the vaccine causing the disease, and questioning its' effectiveness. However, there is a lack of studies exploring vaccination willingness among Palestinian residents and policy makers which has particular relevance given the complexity of the Palestinian situation in terms of two recent events in Palestine.

First, in June 2021, the Palestinian government signed a deal to swap 1 million doses of Pifizer COVID-19 vaccines with Israel. Then it was determined that the doses of vaccine received from Israel were too close to their expiration and the swap/agreement was called off. Even so, this scandal disseminated on social media with the Palestinian government accused of accepting subpar vaccine (Rubin, 2021). The situation still influences community's hesitation to be vaccinated. Second, the siege imposed by Israel prolonged the arrival of doses of vaccine to the Gaza Strip. Israeli authorities' dealys in approving transport of vaccine into the Gaza Strip may affect the vaccine's quality, which then influenced the hesitation to vaccinated. Programs to promote vaccinate uptake should consider cultural, contextual, and service system in order to optimize the effectiveness of existing strategies, such as education, vaccine promotion, monitoring of the circulation of misinformation on social media, and public communication (Merkley and Loewen, 2021, Wang et al., 2021). Given the complexity of the Palestinian context the low COVID-19 immunization rate in Palestine, the purpose of this study was to explore the unwillingness of the people to get the vaccine and their suggestions to increase vaccine uptake.

Methods and analysis

A descriptive qualitative design was used in this study. Semistructured interviews were conducted with policy leaders (experts from the Ministry of Health who have a pivotal role in vaccination-related policy making) and citizens to explore their views about unwillingness of people to receive vaccination and suggestions to enhance vaccination level.

The population were individuals identified as having a role in the community, including citizens, community leaders, and policy leaders. Policy leaders included experts from Ministry of Health who have a pivotal role in vaccination-related policy making. Community leaders were individuals who have a social and spatial character among the citizens, such as "Sheikh/ Spiritual Heads," "Mukhtars/Mayors," dignitaries, and reform men. Through their estimated positions, they can influence acceptance and implementation of government policies. For example, Mukhtars, heads of clans, are appointed by the executive authority and serve as representatives of the Palestinian President. They play active societal roles in reconciling relationships and bridging rifts between families, resolving conflicts and social problems, relaying critical information on COVID-19, and raising awareness within their families. In Mosques, spiritual heads have aired the safety guidelines issued by the World Health Organization and the Palestinian health authorities in order to promote the values of collective humanitarian action and community solidarity in the fight against the spread of the virus

A purposeive sampling approach was used in this study. The list of potential participants was prepared on the basis of the first author's (HAO) experience in the Palestinian society and understanding of the Palestinian context. A total of 11 participants (n = 6 policy leaders and 5 citizens) were invited and agreed to participate in the study. Semistructured in-depth interviews of about 20 minutes were conducted by HAO through Skype and were audio recorded. The participants were asked 2 questions: 1) "Why are people unwilling to get the vaccine?" and 2) "What suggestions do you have for strategies to increase the vaccination level among citizens?" A qualitative content analysis approach was adopted to analyze the interviews.

Results

Reluctance to received COVID-19 vaccine: the unwillingness of Palestinian people to get the COVID-19 vaccine was attributed to two overall factors: 1) the spread of false rumors, misinformation, and conspiracy theories they received about the vaccine on social media and 2) the mistrust toward the vaccines the government purchased. The spread of false rumors and misinformation and exaggeration about the vaccine's side effects led to panic and fear among the Palestinian people and reluctance to receive the vaccine. Below are some quotes of the discussion with leaders:

"...I heard that this vaccine is connected with an electronic chip and will inject it into our bodies to monitor us in the future" (Palestinian citizen).

"Some of the professionals intentionally or unintentionally overemphasised about the side effect of vaccine than its effectiveness" (Policy leader in community health).

The lack of confidence toward the safety concerns of vaccines the government purchased was noted by one of the citizen:

"I think the quality of vaccines supplied to the Palestinian Authority is not good... many of these vaccines are about to be expired... I heard about the exchanging vaccines agreement between the Palestinian Authority and Israel still have resonated in my thought" (Palestinian citizen).

Because of the low response to get the COVID-19 vaccine, the Palestinian government has resorted to reactivating the Palestinian Public Health Law (No. 20-2004) (Palestinian Legislative Council, 2004), which permits the government to vaccinate the community compulsorily. This decision has created a state of grumbling in the Palestinian streets, as the majority refuses to receive the vaccination. There are conflicting opinions among Palestinian experts about whether to adopt compulsory vaccination.

".....the problem is not lie in compulsory vaccination, but rather in the policies and nature of the Palestinian community in terms of traditions, norm, and culture" (Policy leader in public health).

Suggestions: several strategies were suggested to encourage people to get vaccinated. These included exempting vaccinated people from some health insurance premiums, social media promotion, and organizational, and community responsibilities.

"...we need to develop motivated strategies to push people to take the vaccination. For instance, exempting vaccinated people from some health insurance premiums and exempting drivers from some taxes...We also need to communicate with and persuade municipalities and communications companies to offer

relative exemptions to everyone who has been vaccinated" (Policy leader in public health).

"....I call for a reconsideration of the media discourse and its unification" (Policy leader in community health).

Conclusions

Building confidence between citizens and the government is considered a high priority to increase the response of Palestinians to receive the COVID-19 vaccine. The government should expand its promotion of vaccination on mainstream media as well as on social media. Efforts have recently been applied by health officials to reduce misinformation and rumors, such as a campaign on Facebook entitled "Rumors about Corona is not freedom of expression" (Palestinian Center for Development and Media Freedoms, 2021) and online news on COVID-19 by the Ministry of Health (Abu-Odah et al., 2021). However, these efforts are limited in their coverage to impact people's willingness to receive the vaccine. Increasing the healthcare professionals' awareness of the benefits of receiving the vaccination is an essential factor that the government should consider, which will positively influence the public willingness to receive the vaccine.

The COVID-19 vaccination willingness is a complicated and multifactorial phenomenon is primarily influenced by complacency (perception of risk), confidence (trust in safety and effectiveness), and convenience (availability and affordability) (Sallam, 2021). Findings from this brief discussion suggested that the low vaccination rate in Palestine could be attributed to massive uncertainty toward the risks of COVID-19 and safety issues around vaccination. The apparent vaccine hesitancy call for a priority joint efforts of governments, health policy makers, healthcare professionals, and media sources to build confidence between the citizens of Palestine and their government. It is suggested to foster COVID-19 vaccination trust among the public through distributing timely, scientific, and clear messages through trusted channels, advocating the safety and efficacy of COVID-19 vaccines.

A limitation is that this study employed a brief discussion about vaccination hesitancy among a small sample of Palestinian citizens. Therefore, further research is needed with a wider group of Palestinian people to provide a deeper understanding of the problem and actionable strategies to receive the COVID-19 vaccine.

Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Author contributions

HAO carried out the study. All authors drafted and revised the manuscript and gave final approval for publication.

Ethical Approval

An ethical approval was undertaken from the health research department at the Palestinian Ministry of Health. Written informed consent was also obtained from the study participants.

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References

Abu-Odah H, Ramazanu S, Saleh E, Bayuo J, Abed Y, Salah MS. COVID-19 Pandemic in Hong Kong and Gaza Strip: Lessons Learned from Two Densely Populated Locations in the World. Osong Public Health Res Perspect 2021;12(1):44–50.

BBC. Covid: Palestinians cancel vaccine swap deal with Israel; 2021. Available from: https://www.bbc.com/news/world-middle-east-57525252. [Accessed 16 August 2021].

Maraqa B, Nazzal Z, Rabi R, Sarhan N, Al-Shakhra K, Al-Kaila M. COVID-19 vaccine hesitancy among health care workers in Palestine: A call for action. Preventive Medicine 2021:149.

Merkley E, Loewen PJ. Assessment of Communication Strategies for Mitigating COVID-19 Vaccine-Specific Hesitancy in Canada. JAMA Network Open 2021;4(9)

Palestine News and Inf Agency. "Health": Priority in vaccinations against COVID-19 was limited to medical staff, the elderly and chronic patients; 2021. Available from: https://www.wafa.ps/Pages/Details/17104. [Accessed 15 Dec. 2021].

Palestinian Center for Development and Media Freedoms. MADA launches campaign "Rumors about Corona are not freedom of expression"; 2021. Available from: https://www.madacenter.org/en/article/1287/. [Accessed 16 December 2021].

Palestinian Central Bureau of Statistics. Population indicators.; 2021. Available from: https://www.pcbs.gov.ps/site/lang_en/881/default.aspx?lang=en. [Accessed 17 August 2021].

Palestinian Legislative Council. Public health law. 2004.

Rubin S. Israel struggles to restore vaccine swap deal after Palestinians reject doses for being too old.; 2021. Available from: https://www.washingtonpost.com/world/middle_east/israel-pa-vaccine-diplomacy/2021/06/20/fd718aee-d18f-11eb-a224-bd59bd22197c_story.html. [Accessed 7 March 2022].

Sallam M. COVID-19 Vaccine Hesitancy Worldwide: A Concise Systematic Review of Vaccine Acceptance Rates. Vaccines (Basel) 2021;9(2).

Sallam M, Dababseh D, Eid H, Al-Mahzoum K, Al-Haidar A, Taim D, et al. High Rates of COVID-19 Vaccine Hesitancy and Its Association with Conspiracy Beliefs: A Study in Jordan and Kuwait among Other Arab Countries. Vaccines (Basel) 2021;9(1):42.

Wang J, Feng Y, Hou Z, Lu Y, Chen H, Ouyang L, et al. Willingness to receive SARS-CoV-2 vaccine among healthcare workers in public institutions of Zhejiang Province. China. Human Vaccines & Immunotherapeutics 2021:1–8.

World Health Organisation. Episode #1 - Herd immunity; 2020. Available from: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/media-resources/science-in-5/episode-1. [Accessed 18 August 2021].

World Health Organisation. Arrival of first wave consignment of COVAX COVID-19 vaccine doses; 2021a. Available from: http://www.emro.who.int/media/news/arrival-of-first-wave-consignment-of-covax-covid-19-vaccine-doses.html. [Accessed 15 Dec. 2021].

World Health Organisation. Coronavirus disease 2019 (COVID-19) Situation Report 79. 2021b.