Vaccine hesitancy in the Gulf Cooperation Council countries

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Abstract

Background: Vaccination has a tremendous impact on health at the regional and global levels, however, the tendency for people to hesitate on vaccination has been increasing in the past few decades.

Aims: We assessed vaccine hesitancy and its determinants in the Gulf Cooperation Council countries.

Methods: We conducted a literature review to assess peer-reviewed articles published up to March 2021 on vaccine hesitancy in the Gulf Cooperation Council countries using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses approach. A search was conducted via PubMed and 29 articles were identified. After the removal of duplicates and irrelevant articles, 14 studies remained relevant and were used for the review.

Results: Vaccine hesitancy in the Gulf Cooperation Council countries ranged from 11% to 71%. Differences in rates were noted for vaccine type, with COVID-19 vaccine having the highest reported hesitancy (70.6%). The likelihood of accepting vaccination was associated with previous individual acceptance of vaccine, specifically the seasonal influenza vaccine. The most common determinants of vaccine hesitancy were distrust in vaccine safety and concerns about side-effects. Healthcare workers were among the main sources of information and recommendations about vaccination, but 17–68% of them were vaccine-hesitant. The majority of the healthcare workers had never received any training on addressing vaccine hesitancy among patients.

Conclusions: Vaccine hesitancy is prevalent among the publics and healthcare workers in the Gulf Cooperation Council countries. There is a need to continually monitor perceptions and knowledge about vaccines and vaccination in these countries to better inform interventions to improve vaccine uptake in the sub-region.

Keywords: Vaccine confidence, vaccination strategy, immunization, vaccine refusal, vaccine acceptance, immunization, trust

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Introduction

Infectious diseases affect more than one billion people each year, causing severe complications and leading to 17 million deaths annually (1). Effective vaccines are available for many preventable infections that cause serious, and sometimes fatal, complications such as meningococcal, pertussis, pneumococcal and diphtheria. Vaccines prevent over 3 million deaths each year and an additional 1.5 million deaths could be saved by increasing global vaccination coverage (2). The World Health Organization (WHO) and regulatory bodies around the world are working to ensure the safety of vaccines and to monitor any adverse events reported from all vaccines approved for use.

Despite the regulatory monitoring of vaccine safety and evidence that vaccines work and saves lives, critics of vaccines exist in local and global communities. The link between the measles, mumps and rubella vaccine and autism based on a fraudulent retracted study conducted in 1998 is still raising fears among the public as the false information is still circulating on social media (3). There are debates on vaccine safety and relevance based on nonevidence or inaccurate information on traditional and social media (4). These debates raise and reinforce concerns among the public, and even among healthcare workers, about how vaccines work, including its safety, efficacy, effectiveness and relevance (5).

Lack of confidence in vaccine has a significant impact on its acceptance by the public and reduces vaccination coverage at the community level, a phenomenon driving vaccine hesitancy. Vaccine hesitancy is defined as a "delay in acceptance or refusal of vaccination despite availability of vaccination services" (6). Lack of confidence is a major factor influencing vaccine hesitancy (7) and a major cause of low vaccination rates in the community.

Vaccination has a tremendous impact on national, regional and global health. In the past few decades, the tendency among community members to hesitate or delay vaccination has been increasing as emerging diseases spread and new vaccines are developed. As access increases and information (which sometimes is misleading or inaccurate) becomes viral through social media, people increase in knowledge and become more skeptical about new vaccines (8,9).

Misleading information spreads virally among different age groups over social media in the Gulf

Cooperation Council countries (GCC) countries, especially whenever there is news of a new vaccine or an emerging disease, as in the case of human papillomavirus (HPV), H1N1 and lately COVID-19 (8). To address this issue, we need to assess vaccine hesitancy among communities and understand why they feel hesitant towards vaccines. This can help health authorities boost vaccine acceptance and limit the spread of a disease by increasing herd immunity (10). Our review assessed and explored vaccine hesitancy and its determinants in the Gulf Cooperation Council countries.

Methods

Data collection strategy

This review was conducted to assess vaccine hesitancy and its concomitant factors in the Gulf Cooperation Council countries: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. A review of peerreviewed original research articles on vaccine hesitancy in the GCC countries published from 2009 until March 2021 was conducted using PubMed, Web of Science and Embase search engines. The key terms used during the search were "(Saudi or Kuwait or Qatar or Oman or Bahrain or "United Arab Emirates") AND ("vaccine delay" or "vaccine refusal" or "vaccine confidence" or "vaccine hesitancy" or "vaccine acceptance")".

Study eligibility criteria

Inclusion criteria were: studies conducted in the GCC countries; epidemiology of vaccine hesitancy and confidence and their associated factors; and published in the English language in peer-reviewed journals. Literature review, systematic review and preprint papers were excluded.

Study selection and data analysis

From the peer-reviewed literature, 29 articles were initially identified (Figure 1), out of which 14 were excluded. After reviewing the retrieved articles, 15 articles met the search criteria. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses approach (PRISMA) was used to review existing studies (Figure 1). Data were collected, synthesized and summarized using the narrative approach based on vaccine type and population studies. Collected data were categorized based on an overview of the study, including study year, study setting, population, study design, data collection tools used and main findings in regard to vaccine hesitancy, acceptance, confidence and their determinates. The



403

overall prevalence of vaccine hesitancy was reported as a range of percentages (highest–lowest).

Results

Overview

A total of 29 articles were identified from the original search in PubMed. Articles on irrelevant topics or different populations were excluded. One study met the inclusion criteria but was excluded because it was in preprint form. Only 14 studies were included in the study after the removal of duplicates and irrelevant articles.

The majority of studies included in this review were cross-sectional studies (12); there was 1 qualitative study and 1 cohort study. The studies were categorized into 2: studies where the target population was the public (Table 1) and studies where the target population was healthcare workers (HCWs) (Table 2).

Four main vaccines were targeted: influenza, COVID-19, H1N1 and HPV. Some studies focused on childhood vaccination and parents' hesitancy. The studies covered in this review were published during 2009–2021. Sample size ranged between 33 and 7821 participants. The majority of the studies were conducted in Riyadh, Saudi Arabia, but others were conducted in other GCC countries, such as Kuwait, Oman, Qatar and the United Arab Emirates. No studies conducted in Bahrain were identified in the search.

The tools used to construct the assessment of vaccine hesitancy and associated factors were the Vaccine Attitudes Examination Scale, the Strategic Advisory Group of Experts on Immunization Vaccine Hesitancy survey, the Vaccine Conspiracy Belief Scale and the Parent Attitudes about Childhood Vaccines survey.

Vaccine hesitancy prevalence ranged between 11% and 71%. Differences in rates were noticed for population and vaccine type. Hesitancy to receive the recommended vaccines was present among both the public and HCWs.

Childhood vaccination

In a cross-sectional study (2017–2018) conducted among parents in Saudi Arabia, 36% of children were not fully vaccinated in accordance with the vaccination schedule. Incomplete vaccination status of children and vaccination hesitancy among parents were associated with negative beliefs about vaccine effectiveness and the importance of vaccination. Parents with a higher education level were more hesitant to get their children vaccinated (P < 0.001) (11). In another Saudi Arabian study, 11% of parents were hesitant to get their children vaccinated, but in this case there was no significant association between education level and vaccine hesitancy (12). A study conducted in the United Arab Emirates found that 12% of parents were hesitant to get their children vaccinated, and the most common concern reported was vaccine side-effects (13).

A survey to assess acceptability of the COVID-19 vaccine across Saudi Arabia found that 65% were willing to get vaccinated against COVID-19, with a relatively higher prevalence among those with a higher education level (69%) (14). A national survey conducted in Qatar found 20% of participants were not willing to be vaccinated against COVID-19 and 20% were unsure. The most common concerns for COVID-19 vaccine refusal were the safety of vaccines and their long-term side-effects (15). In a 2020 cross-sectional study in a number of countries [Jordan, (*n* = 2173, 64%), Kuwait (*n* = 771, 23%) and Saudi Arabia (*n* = 154, 5%)], acceptability rates were 29% for the COVID-19 vaccine and 30% for the influenza vaccine. Higher scores were recorded on the Vaccine Conspiracy Belief Scale for female participants, those with lower education levels and those relying on social media as their main source of information (16).

Human papillomavirus vaccine

We identified 2 studies conducted among female students to assess HPV vaccine acceptability. Both were conducted in Riyadh, Saudi Arabia. The first (2013-2014) found only 11% of the participants were aware of HPV vaccines and 96% had a poor knowledge level, which was associated with years of education (P < 0.01) and specialization (P < 0.001) (17). The most common reason for HPV vaccine hesitancy was concern about its sideeffects (52%) and the majority (65%) reported that they trusted vaccination recommendations from their family physician. The second study (2020) found that 31% of the participants were aware of HPV vaccines, and the reason for HPV vaccine hesitancy was concern about its sideeffects (70%) and fear of injections (55%) (18). Almost 85% of participants had poor knowledge about the vaccine, which was statistically significantly associated with years of education, specialization and age. Students whose parents were health professionals had a higher level of knowledge (P < 0.01).

Influenza A virus subtype (H1N1)

A prospective cohort study (2009) conducted during the Hajj season in Saudi Arabia found that almost 47% of participants were willing to be vaccinated against H1N1. Vaccination acceptance was greater among non-HCWs (71%) than among HCWs (35%). The most common reason for H1N1 vaccine refusal was the belief that the disease was not fatal (25.4%) (19). A cross-sectional study conducted at Aramco Medical Services Organization, Saudi Arabia, found that the vast majority (94%) were aware of the H1N1 influenza situation and 69% of participants felt susceptible to H1N1 (20). Only 31% were willing to get vaccinated against H1N1 and vaccine acceptance was significantly associated with profession (other than physician and nurse) [odds ratio (OR) = 3.4, 95% CI: 1.45-8.07] and influenza vaccine acceptance (OR = 7.9, 95% CI: 3.5-17.6); 11% of the participants believed that the H1N1 vaccine caused infertility and 18% believed that the vaccine caused Guillain-Barré syndrome (20).

	Main results	17% were vaccine hesitant The most reported reason for vaccine refusal was: "It doesn't have any positive effect or benefit" There was no significant relationship between education level and receiving influenza vaccination. The most common sources of information about the vaccine were awareness campaigns and medical staff (36% for both)	20% of parents were hesitant to get their child vaccinated Parents with higher education levels were more vaccine hesitant (<i>P</i> < 0.001) Negative beliefs toward vaccination (safety and effectiveness) were associated with increase hesitancy and incomplete vaccination status of children	Only 12% of parents (95% CI: 8.5–16.2) were found to be vaccine-hesitant Parents' greatest concerns were mainly side-effects (35%), safety of vaccines (45%) and their child getting too many injections (28%)	Overall, 89% of parents scored < 50, hence deemed not to be hesitant about childhood vaccination There was no significant association between high education level or social media exposure and vaccine hesitancy	64% showed interest in accepting the COVID-19 vaccine if it was available Willingness to accept a future COVID-19 vaccine was relatively high among older age groups, participants with postgraduate degree or higher (68.8%), non-Saudi (69.1%), employed in government sector (68.9%)	20.2% of the respondents stated they would not take the vaccine and 19.8% reported being unsure about taking the prospective COVID-19 vaccine Concerns around the safety of COVID-19 vaccine and its longer-term side-effects were the main participants concerns Personal research around COVID-19 and vaccine were by far the most preferred methods that would increase confidence in accepting the vaccine across all demographic groups
e hesitancy among the public in the GCC Countries up to March 2021	Data collection tool	Survey on influenza vaccine hesitancy	Strategic advisory group of experts on immunization vaccine hesitancy survey	Survey on attitudes about childhood vaccines to determine prevalence of vaccine hesitancy among parents in the United Arab Emirates	3-part questionnaire: sociodemographic and economic questions, Parent Attitudes about Childhood Vaccines	Online survey to assess the prevalence of the acceptance of COVID-19 vaccine and their determinants among people in Saudi Arabia	National cross-sectional survey to evaluate the degree of vaccine hesitancy and its sociodemographic and attitudinal determinants
	Study setting/ population	300 participants King Abdulaziz Medical City, a tertiary care hospital in Riyadh, Saudi Arabia	500 parents Ourpatient clinics at King Khalid University Hospital, Riyadh, Saudi Arabia	300 parents Ambulatory health-care services in Al-Ain city, United Arab Emirates	288 parents Outpatient clinics of King Khalid University Hospital, Riyadh, Saudi Arabia.	992 participants recruited across Saudi Arabia through social media platform	7821 participants Migrant-majority population in Qatar
	Vaccine	Influenza	Childhood vaccination	Childhood vaccination	Childhood vaccination	COVID-19	COVID-19
	Study design	Cross-sectional	Cross-sectional	Cross-sectional	Cross-sectional	Cross-sectional	Cross-sectional
	Country	Saudi Arabia	Saudi Arabia	United Arab Emirates	Saudi Arabia	Saudi Arabia	Qatar
Table 1 Studies on the vaccin	Year of study (reference)	2015–16 winter season (21)	July 2017 & October 2018 (11)	2020 (13)	October 2019–March 2020 (12)	2020 (14)	2020 (I5)

Table 1 Studies on the vaccin	te hesitancy a	mong the public in	the GCC Cou	ntries up to March 2021 (c	oncluded)	
Year of study (reference)	Country	Study design	Vaccine	Study setting/ population	Data collection tool	Main results
2020 (16)	Kuwait, Saudi Arabia (multi-Arab countries)	Cross-sectional	COVID-19	3414 participants General public in Jordan, Kuwait and Saudi Arabia recruited via social media platforms	Online survey to assess the association between COVID-19 vaccine acceptance and conspiracy beliefs using the Vaccine Conspiracy Belief Scale	The acceptance rates for COVID-19 and influenza vaccines were 29.4% and 30.9%, respectively Participants with higher education levels and those with history of chronic disease had higher rates of COVID-19 vaccine acceptance Belief that COVID-19 vaccines are related to infertility was found in 23.4% of participants Higher Vaccine Conspiracy Belief Scale scores were found among participants with lower education levels and respondents relying on social media platforms as their main source of information
2020 (18)	Saudi Arabia	Cross-sectional	ЧРV	966 participants Female students enrolled at the University of Hail, northern Saudi Arabia	Self-administered questionnaire	Lack of knowledge about HPV vaccine among 84.8% of participant Knowledge score was associated with the duration of education and students specialization Vaccine uptake barriers included concerns about its side-effects and a lack of information
2013-2014 (17)	Saudi Arabia	Cross-sectional	ИРV	1400 participants Female students in Health Colleges at Princess Nora Bint Abdul Rahman University, Riyadh	Self-administrated questionnaire	Only 11% of the participants were aware about HPV vaccines, and 96% had poor knowledge, which was associated with their years of education $(P < 0.01)$ and specialization $(P < 0.001)$ Perceived barriers to the vaccine were fear of injections and vaccine side-effects.

Influenza

In a cross-sectional survey conducted in Riyadh among patients and healthcare workers, the most common reason for influenza vaccine refusal was doubt about its efficacy and effectiveness; there was no statistically significant association between education level and vaccine uptake (21). The majority reported high confidence in the information received on vaccines from the Ministry of Health and HCWs. In a qualitative study conducted in the United Arab Emirates among HCWs, the majority expressed hesitancy to receive the mandatory influenza vaccination. Misinformation on vaccines on social media was of major concern to HCWs: most reported that they had never received training on how to address their patients' concerns regarding vaccine hesitancy (22). In a cross-sectional study conducted among HCWs in Oman, influenza vaccine uptake was 60%, with the most common reason for vaccine hesitancy being the side-effects. The mean knowledge score was higher among those who had received the influenza vaccine [7.2, standard deviation (SD) 2.14] than among those who had not (6.3, SD 2.2). The odds of having the vaccination were higher among those who believed in mandatory influenza vaccination (OR = 2,95% CI: 1.2-3.0) (23). There was no significant association between education level and influenza vaccine uptake in a study conducted among HCWs in Saudi Arabia (24). The most common reason for influenza vaccine uptake was self and family protection and the most common reason for refusal was the perception that they did not need the vaccine or were not susceptible to the dusease.

Discussion

In this study, we determined that there was a proportion (11–71%) of the population of the GCC countries who were vaccine-hesitant. Differences in hesitancy rates were noted in relation to population and vaccine type. The highest hesitancy (70.6%) toward the COVID-19 vaccine was among the public (16). Hesitancy to receive the recommended vaccines ranged between 11% and 71% among the public, and between 17% and 68% among HCWs. The likelihood of accepting to be vaccinated was associated with individual previous acceptance of vaccine, specifically seasonal influenza vaccine (OR = 2, P < 0.01). This association has been observed in a national survey conducted in the United States of America (25).

A number of sociodemographic determinants of vaccine hesitancy were found among the majority of the populations studied. Age was sometimes strongly associated with vaccine hesitancy (26), but in other research age was associated with willingness to be vaccinated (14,18). Some studies found an association between vaccine hesitancy and

	Main results	Less than half the respondents (46.8%) accepted the vaccination. The vaccination acceptance rate was higher among non-HCWS, 71.4%; only 34.5% of HCWS accepted (OR = 1.103, 95% CI: 0.488-2.496) The most common reason for vaccine refusal was the impression that the disease was not fatal (25.4%)	17% expressed vaccine hesitancy The most common reason given for vaccine refusal was: "It doesn't have any positive effect or benefit" (21%) There was no significant relationship between education level and receiving influenza vaccination. The most common sources of information about the vaccine were awareness campaigns (36%) and HCWs (36%)	Many participants were hesitant to receive the mandatory influenza vaccination Misinformation regarding vaccines on social media was a major concern Most participants reported never receiving any training on how to address vaccine hesitancy among patients	60% of HCWs were vaccinated in the 2018/2019 influenza season; vaccine uptake among nurses was 52%, uptake was higher among women. Self-protection and protection of the community were the most cited reasons for vaccine acceptance, with side-effects being the main reason for hesitancy Vaccinated respondents had a higher mean knowledge score (7.18; SD = 2.14) than unvaccinated respondents (6.30; SD = 2.2). Odds of having the vaccination were highest among respondents who believed that influenza vaccine should be mandatory for HCWS (OR = 2.04, 95% CI: 1.30–3.18).	The top reason for vaccination was protection of self and family, while the top reason for refusal was not considering the vaccine to be necessary. Education level had no significant effect on the likelihood of being vaccinated	36.6% of respondents stated that they received the seasonal influenza vaccination in 2008–2009, 31.1% expressed their willingness to take the 2009 H1N1 vaccine. 10.6% thought the vaccine caused infertility, and 18% thought the vaccine caused Guillain–Barré syndrome. H1N1 vaccine acceptance was significantly associated with profession (OR = 3.4, 95% CI: 1.45–8.07) and influenza vaccine acceptance (OR = 7.9, 95% CI: 3.5–17.6).
es up to March 2021	Data collection tool	Survey was used as the primary method for data collection	Participants anonymously completed a validated questionnaire on influenza vaccine hesitancy	Face-to-face interviews; an inductive thematic framework was developed based on the European Centre for Disease Prevention and Control guide for vaccine hesitancy among HCWs	Self-administered questionnaire	Online survey	Self-administered questionnaire
ers in the GCC Countri	Study setting/ population	126 participants National Guard employees during 2009 Hajj season, Saudi Arabia	300 participants HCWs at King Abdulaziz Medical City, a tertiary care hospital in Riyadh, Saudi Arabia	33 participants HCWs at ambulatory health care services in the Al Ain region, United Arab Emirates	390 participants HCWs at South al Batinah governorate in Oman	633 participants HCWs at multi medical facilities in Saudi Arabia	161 participants HCPs at Saudi Aramco Medical Services Organization, Dhahran, Saudi Arabia
thcare work	Vaccine	HiN1	Influenza	Influenza	Influenza	Influenza	INIH
y among the heal	Study design	Prospective cohort	Cross-sectional study	Qualitative study	Cross sectional study	Cross sectional study	Cross sectional study
cine hesitancy	Country	Saudi Arabia	Saudi Arabia	United Arab Emirates	Oman	Saudi Arabia	Saudi Arabia
Table 2 Studies on the vace	Year of study (reference)	2009 (19)	2015-2016 winter season (21)	2020 (22)	2019 (23)	2016 (24)	2009 (20)

education while others found no significant association (12,21). Among those with a higher level of education, vaccine hesitancy was greater (18). Parents with higher education levels were more hesitant to get their children vaccinated (P < 0.001) (11). Some studies, however, found the opposite association: vaccine hesitancy increased among those having a lower level of education (14,16). The complexity of the determinants of vaccine hesitancy, including education level, has been noted in other systematic reviews (9,27).

The willingness of individuals to be vaccinated was associated with their beliefs and information received on vaccine safety, effectiveness and importance. The main reported sources of information were the ministries of health and HCWs. Sources of misinformation on vaccines were mainly social media. The most common reported determinants of vaccine hesitancy were distrust in vaccine safety and concerns about side-effects. Beliefs about vaccine association with health conditions (e.g. infertility and Guillain-Barré syndrome) were noted among the public and HCW populations. A systematic review conducted to assess vaccine hesitancy at the global level found that beliefs about vaccines were complex, but they had a powerful impact on vaccine hesitancy (28). Hesitancy to be vaccinated can be explained by the beliefs among individuals on such things as hidden agendas and negative perceptions about vaccine safety and effectiveness.

HCWs have a role in addressing vaccine hesitancy amont the public We found that they were among the main sources of information and recommendation about vaccination and the majority had high confidence in the information given by HCWs because they are considered to be knowledgeable about the risks and benefits of vaccines (29). Previous research has found that many HCWs were themselves vaccine-hesitant and 43% were not recommending vaccines to their patients (29). We found that vaccine hesitancy was prevalent among HCWs (range 17–68%), and that a proportion did not recommend vaccination to their patients. Many HCWs had never received any training on how to address vaccine hesitancy among their patients (22).

This review of literature indicates that relatively little research has been conducted on vaccine hesitancy in the GCC countries. Most research was conducted in Saudi Arabia, and mostly targeted HCWs and parents. The vaccines that were most often assessed for public hesitancy were the COVID-19, influenza and HPV vaccines. The majority (if not all) of the studies on vaccine hesitancy in the GCC countries were published in the past 10 years. This highlights how important this issue has become as a research interest in the last decade in the countries of this region.

Misinformation among the public contributes to a lack of trust in the healthcare system, pharmaceutical

companies and political institutions. Rebuilding public trust and vaccine confidence will require mobilizing the community and engaging different sectors to solve this health problem. Vaccines are among the major public health successes in recent history. To maintain this success, confidence in vaccines and trust in the decisions of health authorities should be strong among the majority of community members.

Vaccine hesitancy is prevalent among the public and HCWs in the GCC countries. Determinants of vaccine hesitancy vary by population and vaccine type. Due to the complexity of vaccine hesitancy, there is no single approach to meet it (7). Understanding the concerns of the population and increasing their confidence in vaccines and trust in health authorities will help address this issue. As the governments of the GCC countries aim to improve vaccination coverage among their populations, they need to tackle the issue of vaccine hesitancy. These countries are facing a rising burden of vaccine hesitancy with rapid changes in public beliefs on vaccine safety and efficacy. Concerns about vaccine safety were associated with misinformation from personal beliefs and misinformation from media sources. Vaccine hesitancy should be continually monitored to understand the beliefs and knowledge about vaccination among the public, address the implications of hesitancy and motivate the population towards improving vaccine uptake to realize the vaccination goals.

This review had certain strengths and limitations. Variation in vaccine hesitancy rates in the studies we reviewed may be attributed to the different sensitivities of the tools used in assessing vaccine hesitancy among the different populations. Some of the studies used assessment tools that had not been tested for validity and reliability.

Review retrieval was limited to the PubMed search engine. Although PubMed is one of the largest databases of medical research, we cannot claim that we reviewed all the relevant articles related to vaccine hesitancy in the GCC countries.

As discussed previously, vaccine hesitancy is am emerging concept, not yet frequently used at either the regional or the global level, and this presented challenges in identifying validated tools and studies that assessed the phenomenon. Therefore, only 14 studies – the majority of them small-scale cross-sectional studies – were included in this review. Despite the nature of the studies conducted and the low number of studies on vaccine hesitancy in GCC countries, this review provides a comprehensive assessment of currently available studies on the status of vaccine hesitancy in these countries, thus, it provides a foundation for future research in the region on the subject matter.

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La réticence face à la vaccination dans les pays membres du Conseil de coopération du Golfe

Résumé

Contexte : La vaccination a un impact considérable sur la santé aux niveaux régional et mondial, mais la tendance à l'hésitation en matière de vaccination s'est accrue au cours des dernières décennies.

Objectifs : Nous avons évalué la réticence face à la vaccination et ses déterminants dans les pays membres du Conseil de coopération du Golfe.

Méthodes : Nous avons procédé à un examen de la littérature afin d'évaluer les articles publiés jusqu'en mars 2021 et revus par des pairs sur la réticence face à la vaccination dans les pays membres du Conseil de coopération du Golfe à l'aide de l'approche des éléments de notification préférés pour les revues systématiques et les méta-analyses (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). Une recherche a été menée via PubMed et 29 articles ont été identifiés. Après élimination des doublons et des articles inappropriés, 14 études sont restées pertinentes et ont été utilisées dans le cadre de l'examen.

Résultats : Dans les pays membres du Conseil de coopération du Golfe, le taux de réticence vaccinale se situait entre 11 % et 71 %. Des différences de taux ont été observées pour le type de vaccin, le vaccin contre la COVID-19 ayant le plus grand nombre d'hésitations signalées (70,6 %). La probabilité d'accepter la vaccination était associée à une acceptation individuelle antérieure du vaccin, en particulier du vaccin contre la grippe saisonnière. Les principaux déterminants de la réticence à se faire vacciner étaient la méfiance à l'égard de l'innocuité des vaccins et les inquiétudes concernant ses effets secondaires. Les agents de santé faisaient partie des principales sources d'information et de recommandations sur la vaccination, mais 17 % à 68 % d'entre eux étaient réticents face à la vaccination. La majorité des agents de santé n'avaient jamais reçu de formation sur la manière de prendre en compte la réticence des patients face à la vaccination.

Conclusions : La réticence face à la vaccination est très répandue au sein de la population et parmi les agents de santé des pays membres du Conseil de coopération du Golfe. Il est nécessaire de surveiller en permanence les perceptions et les connaissances relatives aux vaccins et à la vaccination dans ces pays afin de mieux éclairer les interventions qui visent à améliorer l'adoption des vaccins dans la sous-région.

التردد في أخذ اللقاحات في بلدان مجلس التعاون الخليجي

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الخلاصة

الخلفية: للتلقيح تأثير هائل على الصحة على المستويَيْن الإقليمي والعالمي، ومع ذلك ازداد ميل الناس إلى التردد في أخذ اللقاحات في العقود القليلة الماضية.

الأهداف: هدفت هذه الدراسة إلى تقييم التردد في أخذ اللقاحات ومحدداته في بلدان مجلس التعاون الخليجي.

طرق البحث: أجرينا استعراضًا للمواد المنشورة لتقييم المقالات التي استعرضها الأقران والمنشورة حتى مارس/ آذار 2021 بشأن التردد في أخذ اللقاحات في بلدان مجلس التعاون الخليجي، باستخدام نهج PRISMA. وبالبحث في موقع PubMed وجدنا 29 مقالة. وبعد إزالة المواد المكررة وغير ذات الصلة، تبقَّت 14 دراسة ذات صلة واستُخدمت في الاستعراض.

النتائج: تراوحت نسبة التردد في أخذ اللقاحات في بلدان مجلس التعاون الخليجي بين 11٪ و71٪. ولوحظت اختلافات في النسب ترجع إلى نوع اللقاح، إذ كان أعلى معدل للتردد يرتبط بلقاح كوفيد-19 (7.0.6). وكان احت_ال تقبُّل التلقيح مرتبطًا بالتقبُّل الشخصي السابق للتلقيح، بالتحديد لقاح الإنفلونزا الموسمية. وكانت أكثر محددات التردد في أخذ اللقاحات شيوعًا هي عدم الثقة في مأمونية اللقاحات والمخاوف بشأن آثارها الجانبية. وكان العاملون في مجال الرعاية الصحية من بين المصادر الرئيسية للمعلومات والتوصيات بشأن التلقيح، ولكن ما نسبته ك مترددين في أخذ اللقاحات. ولم يتلقَّ أغلب العاملين في مجال الرعاية الصحية أي تدريب على التصدي للترحد في أخذ اللوض

الاستنتاجات: التردد في أخذ اللقاحات منتشر بين عامة الناس والعاملين في الرعاية الصحية في بلدان مجلس التعاون الخليجي. وثمة حاجة ماسة إلى مواصلة رصد المعتقدات والمعلومات المتعلقة باللقاحات والتلقيح في هذه البلدان من أجل توجيه التدخلات بشكل أفضل لتحسين الإقبال على اللقاحات في هذا الإقليم الفرعي.

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