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The Role of Emirati Women in Confronting Social Media Misconceptions on the Covid Vaccine

By Muhammed Musa¹, Ahmed Mansoori²

Abstract

As disagreements rage about the source of the Covid-19 virus, one universal consensus has been established. It is that humanity's surest guarantee to curbing and mitigating the deadly pandemic is the discovery and wide administration of a vaccine to prevent infection, serious illnesses, and hospitalizations etc. As different countries grapple to roll out the covid vaccine, the world is confronted by another virus that could prove to undermine efforts at curbing Covid-19. Vaccine misinformation is playing into the hands of anti-vaccine groups who are taking advantage of social media platforms that are easily accessible and devoid of editorial gatekeeping to propagate often unfounded rumors about vaccine efficacy and safety. As a result, today, vaccine hesitancy is undermining the efforts put in place to fight the virus. Despite this, today the UAE is among the top three countries in the world with the highest vaccinated population.

This paper attempts to provide insight into the uptake of Covid vaccine among Emirati women. The paper assumes that the decision to take covid vaccine or not is, among others, a product of information and perception. Given the centrality of social media as a source of information to most people in the UAE, we inquire into its role in shaping perceptions and attitudes on the covid vaccine among Emirati women. Our findings reveal that over 84% of respondents are vaccinated and factors that account for such vaccine uptake among Emirati women are both general and specific and center around communication and government policy.

The paper concludes that contrary to established stereotypical images of Middle Eastern, Arab, Muslim women as passive and laid back, the attitude of Emirati women towards the vaccine brings to fore the role of women in social change thereby challenging established stereotypes.

Keywords: Emirati women, Covid-19, Change agents, Social media, Vaccine

Introduction

While controversy continues on human agency behind the Covid-19 virus, there is universal consensus that a vaccine is the surest guarantee towards managing and mitigating the spread of the virus. Yet, different parts of the world are witnessing different public responses to receiving the Covid-19 vaccine. The rise of the anti-vaccine movement is happening alongside a rise in vaccine hesitancy. This tells us that vaccine, in spite of its immense benefit in addressing the current covid crisis, distribution is confronted by problems of perception and adoption.

In the UAE, the government has responded to the spread of the virus through a program of public awareness that aims to educate the population on the need to adhere to the measures and protocols put in place to mitigate its spread. Between the times of the reported outbreak of the Covid-19 virus from January 2020 to the 30th of September of 2021, the UAE has recorded about

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730,000 cases and a total number of 2,100 mortalities (National Emergency and Crisis Management Authority (NECMA) 2021).

The UAE is acknowledged as a global center of tourism, and Dubai airport is ranked among the busiest airports in the world. The country is the home to both Emirates and Etihad airways which are also ranked among the world's leading airlines. Dubai is currently hosting the global 2020 Expo while Abu Dhabi is also known as the host of the Abu Dhabi Grand Prix. These factors along with few others, point to the UAE as a hub of intense human traffic in and out of the country, thus increasing its vulnerability to influx of Covid-19 through passengers who fly in and out of the country.

Consequently, the measures put in place by the government through its health authorities are based on real and not imaginary threats. It is for this reason that the UAE government, like many others, heralded the discovery of a covid vaccine as a pathway to the restoration of normalcy. Yet, studies have indicated that public response and attitudes to vaccine use are the product of information and knowledge as well as governmental policies in the form of mandates. In the UAE today, internet penetration is put at 99%, with another 99% of the population being active social media users (See Globalmediainsight.com 2021). Thus, the contemporary social space in the UAE is fundamentally altered as social media are central information sources, fully embedded and therefore playing a central role in the construction of perceptions on health issues.

It is in realization of the extent of social media's role in people's daily life, and its centrality as an information source in the country, that the government regularly communicated the Covid-19 protective measures and situation report including vaccine roll out through social media platforms in addition to conventional media. Part of the measures put in place by the National Emergency Crisis and Disaster Management Authority (NECMA) in mitigating the spread of the virus include closure of public places such as malls, schools, and worship centers as well as use of masks, sanitizers, and social distancing. NECMA also updates the public regularly on infection and mortality rates through social and conventional media.

The initiatives and measures put in place by the government and NECMA have altered normalcy that people were used to and, through that, as well as regular updates on the Covid-19 cases and mortalities, have created awareness about the threat posed by the virus to existence as a whole. Both the UAE government and NECMA have expressed satisfaction with public awareness initiatives that were put in place through social and conventional media.

Some studies in other countries, however, are pointing to mixed outcomes in relation to the role played by social media in creating appropriate health behavior in relation to Covid-19 (See Hamad, M.A 2021, Yas, et al 2021). Earlier health crises such as HIV-AIDS, Ebola virus, and SARS have suffered from rumors and conspiracy theories that undermine initiatives at mitigating the diseases (See Bogart and Bird, 2003, Enders, J.E, 2020). These had had negative consequences for society.

Our motivation for this study, therefore, is to gain insights into the role of social media in the second phase in the fight against Covid-19 through vaccine administration. Whereas public awareness initiatives in the first phase of Covid-19 had focused on inculcating appropriate health behavior among the population at large, this study is interested in understanding the perceptions and attitudes of female Emirates towards the vaccine and factors that informed their uptake of the vaccine. Our interest in studying women's attitudes is predicated on our desire to gain insight into their role in social change especially in times of crisis. Given 99% internet penetration in the UAE, and with over 80% of the women population being active social media users, our study is keen to

inquire into how Emirati women's social media use has shaped both their perceptions and attitudes toward the Covid-19 vaccine.

Even though as of August 2021, over 80% of UAE population had been vaccinated, (NECMA 2021) this situation does not tell the full story. At the initial stage of the vaccine roll-out, there was some reluctance among people to come forward and vaccinate. Several anti-vaccination messages circulated on social media, for instance, have alluded to unverifiable and unfounded claims that the Covid-19 vaccine poses threat to humans and is especially capable of impacting fertility in women.

These hesitations made the NECDMA spokesman Saif Al-Dhaheri proclaim that:

Strict measures are being considered to restrict the movement of unvaccinated individuals and to implement preventive measures such as restricting entries to some places and having access to some services (The National Newspaper 2021).

By September 2021, the percentage of fully vaccinated people in the UAE had reached 84.7%. (NECMA, 2021). This study sets to find out the role of social media in the circulation of information about the vaccine in the UAE. The study will also seek to determine how engagement with anti-vaccine measures has shaped perceptions and attitudes toward vaccination among women in the UAE and if vaccine hesitancy was witnessed in the initial phase of the vaccine roll-out, what informs the current pro-vaccine attitude among women in the UAE? Past studies have indicated that visual social media messages are processed faster and tend to be accepted and remembered for a longer time. Additionally, are there incentives or threats by the UAE government that led to more positive attitudes towards the vaccine? Could there be non-health related factors communicated in social media that led to attitude changes toward vaccine among Emirati women?

Literature Review

The contemporary communication landscape has been transformed since the emergence of broadband internet. Once upon a time, news and information sources central to the construction of social reality were largely the conventional media of press and broadcasting whose major defining feature is professional gatekeeping characterized by content vetting to ensure its adherence to professional standards and requirements called news values (See Allan 2004, Gans 2004, Tuchman 1980, Berger and Luckmann 2015, Couldry and Hepp 2017). Today, broadband internet has ushered in Web 2.0 internet applications referred to as social media. The major defining features of these platforms are ease of access, interactivity, and absence of gatekeeping that exist in conventional media (see Van Dijck J. 2013). Social media allow users real time communication and interaction. In their participation in public discourse, users of social media can do so through texts, pictures, as well as uploading and sharing audio and video files. The interactivity of social media enables users to endorse i.e. 'like' and therefore 'follow' other users and keep getting updated with their postings. Consequently, one can develop a specific network of content or those that confirm and support one's beliefs. The ubiquity of social media has made content shared through them reach billions of users all over the world and for some content to go 'viral'.

However, one of the major points of attraction for social media, i.e., lack of gatekeeping, is also among its leading risks. Its use for creating and disseminating unverified information or propaganda has brought to the forefront the notion of fake news. As any opinion can be shared as a fact, it makes it more difficult for many to be accurately informed on important issues. The

consumption of falsehoods and creation of doubt is especially harmful to society when the subject concerns health (see Puri et al. 2020, Ketchell 2020, Yee Li et al. 2019). One can appreciate the implications when one considers that a much-reduced entry to social media use flattens or democratizes the public sphere for discourse.

According to Donzelli et al. (2018),

media and social media can create either a negative or a positive attitude towards vaccine and can provide a platform for lobbyists and key opinion leaders to influence other citizens. ---, social media allow users to freely voice opinion and experiences and they can facilitate the organization of social network in favor of or against the vaccine.

To understand how impactful social media can be on desirable or undesirable health behavior in the era of fake news, we need to investigate a few key areas such as their agenda setting capacity, as sources of information and a basis for communicative action, and a catalyst for vaccine hesitancy. By raising the importance of certain subjects and perspectives over others, such as when they go viral, the social media cannot only direct people's minds on what to think about, but also raise the perceived importance of such point of views (See Feezeli 2018, McCombs and Shaw 1972).

As a source of news and information, we can look at two key functions that social media play. First, because of the drastic reduction of cost of entry into the social media communication landscape, fringe groups have now found the opportunity to disseminate their propaganda on Covid-19 and especially their anti-vaccine stand. At a second level, such messages eventually become a basis for discussion on various platforms such as Twitter, Facebook, WhatsApp, and blogs (See Wilson and Wiysonge, 2020). In their study of media representation of vaccine side effects, Buch Xuan Tran et al. (2018) found that people who receive information from friends and through SM networks are more likely to refuse vaccines.

Immunomic Therapeutics (IT) observes that while vaccines have immense benefits as shields against serious diseases, they are still bedeviled by problems of perceptions and adoptions. Such perceptions can range from people being suspicious, confused, or even complacent about the threat of the disease that the vaccine is meant to fight. Any of these mindsets can negatively undermine vaccine uptake which, in the end, will affect the coverage and lead to the outbreak of the disease.

In accounting for factors behind modern day vaccine fear, Immunomic Therapeutics opines that as the number and complexity of vaccines grow, people are left to navigate information in a 'fractured media environment'. IT proposes among others, appropriate communication with those that are hesitant and extends incentives to them so they can develop the right frame of mind about vaccines. People often have confidence in their doctors and for these reasons, doctors should be incentivized to be more involved in communicating the right message and information about vaccines to the public. For scientific information to be properly communicated to the public, health officials should utilize media personnel as well as motivational speakers or what it calls those "who influence our culture" (Harvey, 2017).

Public health policies are also cited as essential components in the attempt to achieve high vaccination coverage. IT cited the case of Italy where vaccinating children was made a condition for school registration, while Germany announced fines on parents who fail to get their children vaccinated. Australia is also cited with the policy of "No Job, No Pay" that allows only parents of

immunized children to receive childcare benefits and Family Tax Benefits etc. (IT 2021). The outcome is that in all these cases improved vaccine uptake is recorded when the mandates are put in place.

In their study on ‘social media and vaccine hesitancy in the era of Covid-19 and globalized infectious diseases’, Puri et al. (2020) observed that among the barriers to vaccination uptake include misinformation on its benefits, composition, and adverse effects. They also cited the vaccine hesitancy resulting from health information generated from the internet and from peer network interactions such as those in social media as a problem that needs to be addressed.

--- there is also substantial potential for harmful misinformation to spread across networks which may be propagated via the contemporary anti-vaccination movement, fueling vaccine hesitancy (Puri et al. 2020, 2586).

The threat that internet and social media-generated information pose to vaccine uptake is further heightened by the feeling of isolation arising from social distance protocols imposed in many countries. As restrictions are imposed on physical contacts and gatherings, people are more likely to spend more time on the internet and social media platforms (Limaye et al. 2020). As a result, misinformation and anti-vaccination rumors and messages capable of threatening public confidence on vaccines began to surface even before the vaccine is released (See Danovan 2020). It is because of these concerns that the American Medical Association appealed to tech companies to block such content that spreads vaccine misinformation on their platforms (Lou and Ahmed cited in Puri et al. 2020).

Other studies have established a direct causal relationship between exposure to anti-vaccine blogs and websites and negative intention to vaccinate (See Betsch et al .2010, Nan and Madden 2012). Similarly, Ahmed et al. (2018), in their study of social media use and the influenza vaccine, found inverse association between the use of Twitter and Facebook with influenza vaccine uptake. Despite these, Puri et al. (2020) opine that it is still ‘not readily evident’ why social media use could promote vaccine hesitancy.

In their study ‘measuring the impact of Covid-19 vaccine misinformation on vaccination intent in the UK and USA’, Loomba et al. (2021) agreed that while the widespread acceptance of SARS-CoV-2 vaccine will be a major step in the fight against the Covid-19 pandemic, they also acknowledge that achieving a high vaccine rate will be a serious challenge because of misinformation on social media among others. In both the UK and the USA, the study reveals that fewer people are ‘definitely’ disposed to taking the vaccine than is ‘likely required for herd immunity’ and that vaccine misinformation has prompted a decline in intent of 6.2 percent in the UK and 6.4 percent in the USA among those who indicated they ‘would definitely accept a vaccine’. More interestingly for our focus, the study inquired into how misinformation differentially affects sociodemographic groups. In this regard, their findings indicate that females are ‘less robust to misinformation than males’ in their consideration for vaccines to protect others.

Another interesting revelation of their study is the lack of evidence to support popular claims such as by Callaghan et al. (2020) about correlation between trust in health experts and intent to vaccinate.

We find no evidence that individuals who trust health authorities are less likely to be impacted by misinformation (after controlling for their sociodemographic characteristics); however, trust in experts has been

recently found to be associated with intent to pursue Covid-19 vaccine in the USA (Loomba et al 2021, 341).

In her study on 'social media's impact on vaccine hesitancy' Argyris found that visuals on social media are more likely to be believed and remembered for long especially because of 'personalized dramatization of vaccine injuries.' In addition, the study found that social media users with anti-vaccine messages on social media have a negative effect on their intention to get vaccinated, but on the other hand, social media users' engagement with pro-vaccine messages does not show significant association (Argyris, 2021). Overall, the study found anti-vaccine messages on social media of diverse themes, all of which point to safety/injury and conspiracy theories aimed at discouraging trust on vaccines. The messages appear trustworthy so that it will entice users with digital literacy not to fall for them.

In outlining themes in the history of vaccine hesitancy and refusal, Schwartz (2012) identified two main issues. The first argues that vaccines do more harm than good in relation to the diseases they are meant to prevent. The second in the themes is the link between the promotion of the vaccine as a condition for children's enrollment in schools in Boston in 1827.

Compulsory vaccination that is contemplated in some countries today and enforced in others has a long history. For instance, the enforcement of 19th century smallpox vaccine requirement in England was backed by fines and jail terms for non-compliance. In the US, the Anti Vaccination Society of America established in 1879 brought together Anti-Vaxxers from different religious and ethnic backgrounds and even included medical practitioners holding views outside the mainstream of the profession. Principal opposition to vaccine in the 1960s was hinged on three objections such as 'government intrusions on religious beliefs, distrust of medical science and infringement on personal liberties' (Jackson 1969).

Contemporary opposition to vaccines has largely hinged around the same objections and the only difference being in their spread and organization. For instance, while past oppositions were largely local and at the grassroots level, today's opposition is national and even international and have benefitted from development in means of communication, especially the internet. Whereas early opposition made use of pamphlets, today's Antivaxxers use blogs and social media.

Wilson and Wiysonge (2020) study on social media and vaccine hesitancy is an attempt to evaluate the effect of social media and online foreign disinformation campaigns on vaccination intent and overall attitudes towards vaccine safety. To them, social media use is at two levels. The first is its use by the public to organize action and the second is the level of anti-vaccine discourse on social media platforms. They are also able to look at foreign sourced disinformation activities on social media in each country.

In evaluating vaccine hesitancy, the study used polls to understand the proportion of the public in each country that thinks vaccines are safe and, secondly, they looked at the annual data of actual vaccinations administered according to WHO data in each country. The findings of the study indicated that use of social media in organizing offline action is highly predictive of the belief about vaccines being unsafe. As well as this, the dissemination of foreign disinformation is found to be highly statistically and substantially significant in predicting a drop in mean vaccination coverage over time (Wilson and Wiysonge 2021). The study concluded therefore, that there is a significant relationship between activism on social media and vaccine hesitancy and that there is a relationship between foreign disinformation campaigns and vaccination decline.

In a quantitative analysis of YouTube videos to study misinformation on vaccination, Donzelli et al. (2018) cited the Strategic Advisory Group of Experts (SAGE) on immunization

which grouped the determinants of vaccine hesitancy into three categories i.e., contextual, individual, and group influences and vaccine/vaccination specific issues (Donzelli et al. 2018, 1644).

In all these, SAGE attributed vaccine hesitancy to poor or inadequate communication. In this regard, it is observed that media and social media can be a positive or negative influence and they can provide platforms for opinion leaders to influence others. Given their interactivity, social media can provide an avenue for organization of social networks and activism in favor or against vaccination.

The study by Donzelli et al. (2018) analyzed 560 YouTube videos that were alluding to a link between vaccination and autism in Italy in 2016. The result indicated that most of the videos were negative in tone and that there was an increase in the annual number of uploaded videos during the sample period from 31 July to 27 December 2017 of the same year with a peak of 224 videos in the first seven months. The data confirmed the prevalence on YouTube of perspectives supportive of the allusion between vaccines and autism in children. A very important feature of the data is that the negative YouTube videos were more viewed, shared, and received more likes than positive or neutral videos. This confirmation bias or ‘myside’ bias is the tendency for people to go for information or views that confirm their beliefs and avoid or reject others that are contrary to those beliefs. Such filter bubbles result in an ‘echo chamber’- a place where people only encounter information and opinions similar to theirs. In this regard, the effect will be that vaccine hesitant users will become more likely to have their views confirmed and reinforced. Moreover, YouTube has, on the right of the video one is watching, further recommendations of additional videos along the same line of thinking.

Yee Li et al. (2020), point out that as the largest public health emergency of the century, the successful management of the Covid-19 pandemic is through ‘effective dissemination of factual information.’ Consequently, they set out to study YouTube in terms of the usefulness and accuracy of information on Covid-19 that it disseminates to billions of its viewers.

Using keywords ‘Coronavirus’ and ‘Covid-19’, a YouTube search was undertaken on 21 March 2020 where the top 75 videos were analyzed from each search. In this exercise, the primary outcome was useability and reliability of the videos. The outcome of the analysis showed that among the viewed English videos on Covid-19 on YouTube, 27.5 carried non-factual information from sources that include ‘entertainment news, internet news and consumer sources reaching 62 million views worldwide’ (Yee Li et al. 2020, 6). On the other hand, videos that carried factual information from sources that include professional and government organizations, even though they carried high quality and informative content, were ‘highly underrepresented in terms of viewership’ (Yee Li et al. *ibid*).

Tran et al. (2018) submit that the media have contributed to widespread public distrust on vaccines in Vietnam as they did in other countries around the world. While conventional media have long been major sources of news and information, in recent years, the internet and social media have risen to center stage as sources. They also add: “Indeed, dissemination of negative information about immunization has been increased by advancement of websites such as Facebook and Twitter” (Tran et al. 2018, 1718).

In all, 68.2% of the subjects interviewed in the study indicated that they felt hesitant about vaccines after hearing about their adverse effect in the media. Such high hesitancy, however, was recorded more in urban settings in northern Vietnam ‘after hearing about adverse effect of immunization from media and social media where, in the case of the latter people followed opinions of friends through social network platforms.

A few issues emerge from the literature. First, controversy on vaccines is not new and consequent anti-vaccine movements are not new either. Believers and unbelievers in vaccines have always found the media a channel to propagate their stands and beliefs. The difference today is that while in the past many unverified assumptions could be vetted in public media through gate-keeping process, everything could pass in the social media world of today.

Secondly, through social media, anti-vaccination movements can coordinate and spread their anti-vaccination views or rumors on a world-wide scale on platforms that are accessed freely and without hindrance. What also emerges is that mandates that are contemplated or put in place in many countries are not new as was seen with the smallpox vaccination mandate in England in the 19th century as well as in Italy, Germany, and Australia. Studies of YouTube influence on perceptions of vaccines or accuracy of information indicate that negative videos receive more views but interestingly, it is also revealed that confirmation bias is at work as users tend to view videos that confirm or reinforce their perspectives.

Method

At a time when anti-vaccine movements and vaccine hesitancy are undermining rollouts in many countries around the world, the UAE remains among the top three countries whose majority population is double jabbed. The objective of our study is to examine what motivated Emirati women to respond so positively to Covid-19 vaccination. Given that human action is a product of information, and given the embeddedness of social media in the daily lives of Emiratis, our study enquires into the social media networks Emirati women engage in.

Our motivation to focus on women rather than the entire population is informed by two main reasons. First, we want to move away from the dominant, and stereotypical image of the Middle Eastern, Muslim, Arab women as marginal, passive, and laid-back actors in society and therefore underserving of attention. Second, with a literacy rate of 95% and accounting for 66% of the public sector workers and over two thirds of the student population at government universities (See UAE Gender Balance Council), we want to understand how these positive numbers impact social change especially in times of pandemics such as the Covid-19 pandemic.

Given the importance of communication and public policy as components of vaccine uptake, and for the elimination of vaccine hesitancy in society or within a community, our research seeks to enquire about the nature of communication on the Covid-19 vaccine among Emirati women on social media, as well as government policies in terms of 'sticks and carrots' that aid vaccine uptake among Emirati women.

The study used a survey method and administered a structured questionnaire from the 1st to the 15th of August 2021 among 605 female respondents. Women recruited were 18 years and over, able, and willing to participate in the study, and verified with a written informed consent. All the participants were recruited from within the UAE and spread across the seven Emirates that make up the country. Owing to Covid-19 imposed restrictions, the questionnaire was administered online using [surveymonkey.com](https://www.surveymonkey.com) between the first and 15th of August 2021.

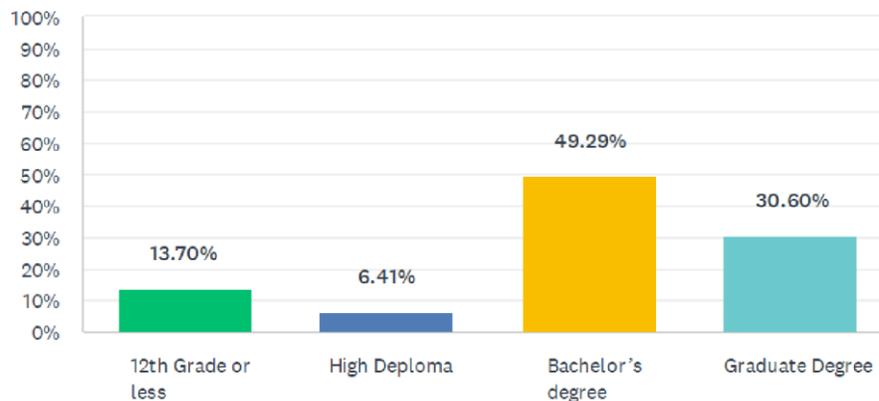
Among the key questions in the survey were those that sought to understand the demographic spread of the participants in terms of level of education and employment status. Others included the top three most used social media platforms and number of hours spent on social media daily. Using a scale of 'extremely, somehow, minimum effect, and no effect' the survey asked the respondents to indicate the extent to which information from social media affected their decision on the vaccine. The survey asked respondents their current Covid-19

vaccination status and what informed or guided their decision on taking the vaccine or otherwise. Survey Monkey Premium was used in extracting the information, and its statistical function was used in the analysis.

Results and Discussion

Results generated from the survey indicate that about 80% of the respondents hold a bachelor’s degree and above, and that over 50% spend five hours and above on social media daily (See Figure 1).

Figure 1: Educational Qualifications of Respondents



WhatsApp, Instagram, and Snapchat are the three most preferred SM platforms among respondents. About 57% of the respondents revealed that information obtained from SM extremely or somehow affected their decision on the vaccine. Overall, 78% of respondents have taken two doses of the vaccine, while 6% have taken the first dose. This indicates that 84.4% of respondents have received the vaccination. This figure is close to the government record that shows that 86% of the country is vaccinated (NECMA 2021). Our data shows that about 10% of respondents have no intention to take the vaccine because they are not convinced (See Figures, 2, 3, and 4).

Figure 2: Most Preferred Social Media Platforms

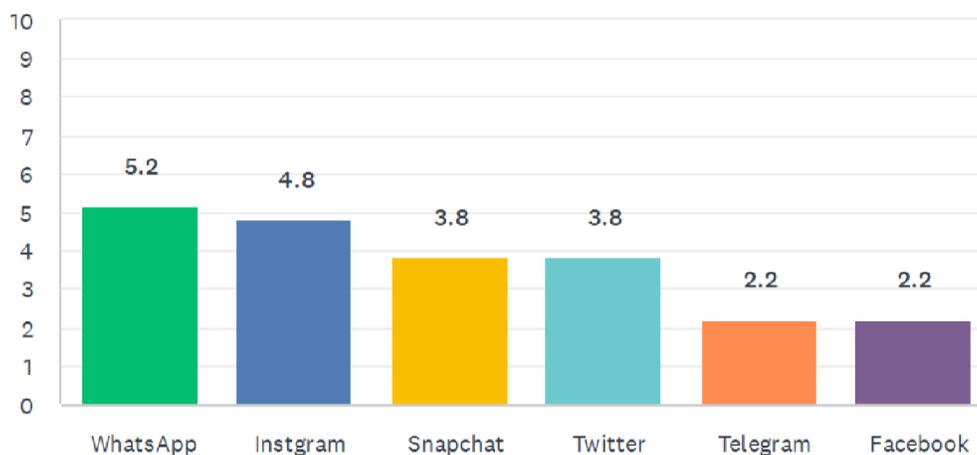


Figure 3: Social Media Influence on Decision about Vaccine

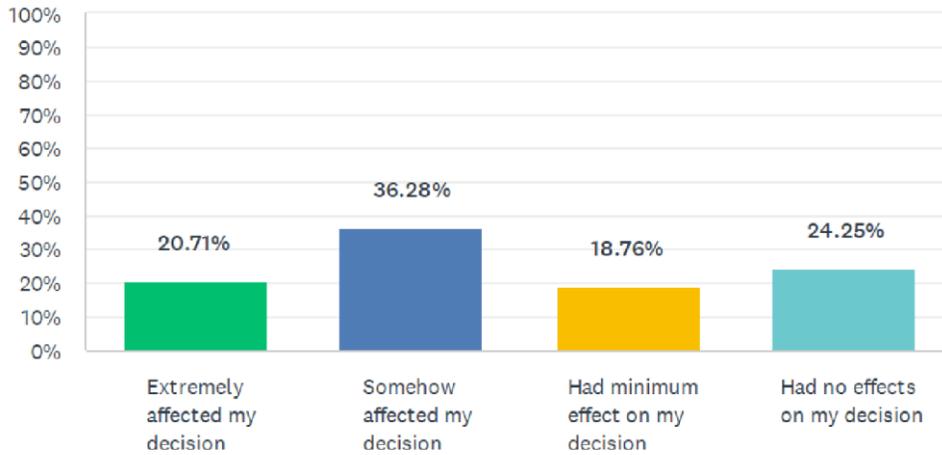
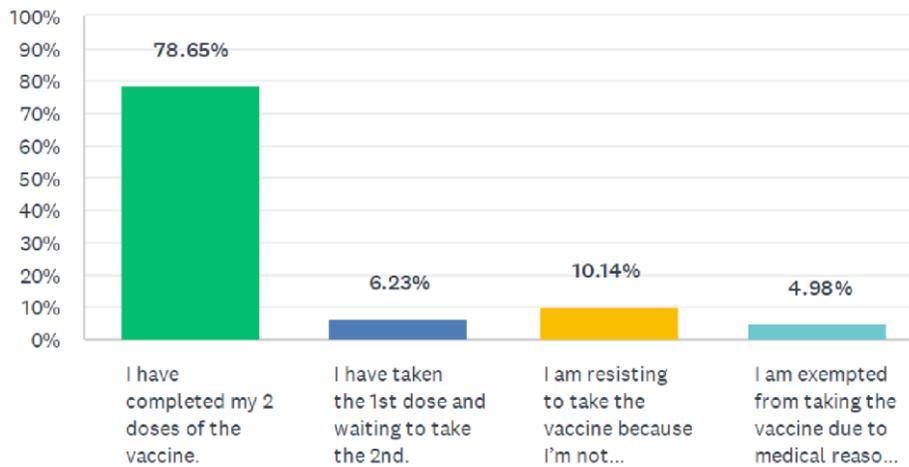


Figure 4: Covid-19 Vaccine Status



Again, 67% of respondents revealed that they were persuaded to take the vaccine when they saw videos and images of UAE leaders and government officials taking the vaccine on SM (See Figure 5).

Figure 5: Extent of Leadership Influence on Vaccine Decision

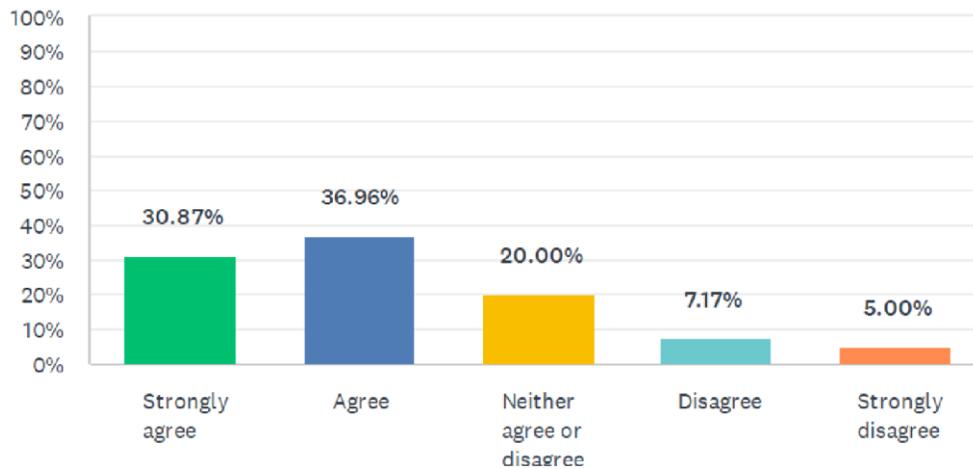
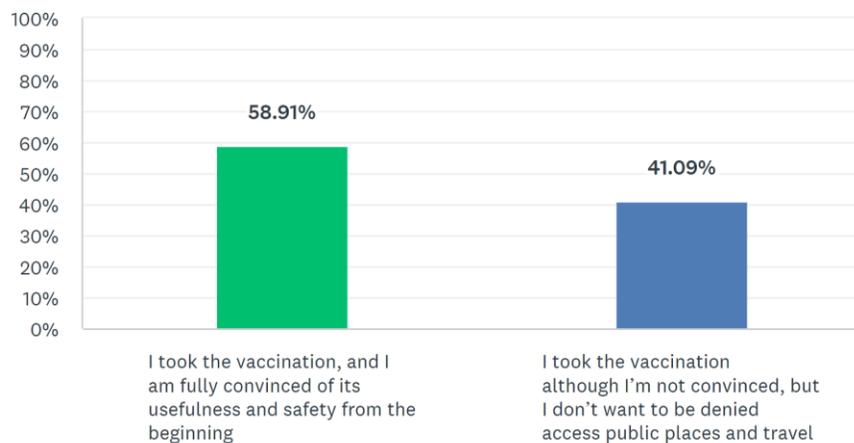


Figure 6: Respondents' Conviction for Taking the Vaccine



Respondents who took two and one vaccination were asked if they were convinced about the usefulness and safety of the vaccine (Figure 6). On this, 58.9% indicated they were convinced but 41.09% indicated that their reason for taking the vaccine is because they do not want to be denied access to public places and the ability to travel. This is clearly in response to the government mandate in the UAE where access to public buildings and malls is only open to vaccinated people.

Conclusion

Covid-19 imposed restrictions have made people remain at home for most of 2020 and 2021 in the UAE. Lack of movement and reduced interaction among people has resulted in higher social media use. Being highly educated has raised the likelihood of digital literacy among respondents and therefore a high chance of resistance to unverified and anti-vaccine messages on social media.

Positive disposition to vaccine means that respondents are more likely to consume social media content that confirms or reinforces their already formed opinion or perspective on the vaccine. The online conversation respondents hold with similar minded users reinforce their

intention or action towards the vaccine. This speaks to Habermas theory of communicative action where individuals cooperate and arrive at a consensus through mutual deliberation on issues that affects their lives (Habermas 1981).

This study set out to enquire into the perceptions and attitudes of Emirati women on the covid vaccine. Past studies have tended to investigate the response of an entire national population. Our study chose to investigate the attitudes of women to understand the role of Arab Muslim women in social change as a deviation from their stereotypical notion as passive actors in societal changes.

The study took off from the assumption that among others, human behavior is a product of information and knowledge. Consequently, given the embeddedness of social media into the social space we tried to look at how their use as informational resources by Emirati women has shaped attitudes towards vaccine use or non-use.

The study indicates that over 84% of respondents are vaccinated. Factors that account for such vaccine uptake are both general and specific. At a general level, we have discovered that communication and government policy in terms of vaccine mandates have shaped and guided attitudes of Emirati women towards covid vaccine usage.

Using social media between five to seven hours daily, Emirati women tend to gain information and knowledge about Covid vaccine as well as hold conversations and exchange views with friends on the subject through social media.

However, like is confirmed in other studies, respondents tend to seek the kind of information that confirm their already formed perspectives. Such 'confirmation bias' moreover, leads them to pro-vaccination 'echo chambers'. While unfounded anti-vaccination views are circulating on social media, the digital literacy among Emirati women tends to position them for oppositional interpretation of encountered anti-vaccination messages on social media. Also, conversations and exchange of views with friends on social media is another way through which pro-vaccine respondents further reinforce their views.

Government policy on the covid vaccine has shaped the response of Emirati women in two ways. First, the introduction of a 'Green Pass' indicating one's vaccine status, as a requirement for access to shopping malls and public and utility buildings has left respondents with little choice but to take the vaccine. About 67% of respondents have indicated that they strongly agree or agree to taking the vaccine, so they are not denied important activities in their lives, i.e., access to shopping malls and overseas travel for holidays.

The data also shows that there are factors that operate at specific levels in shaping attitudes of Emirati women towards the covid vaccine. At the communication level, Government's announcement of heavy fines against anyone found disseminating rumors and misinformation on the covid vaccine has limited circulation of misinformation and anti-vaccine messages on the UAE social media landscape. At the policy level, it can be pointed out that the public appearance of national leaders being vaccinated has, according to 67% of the respondents, reassured them of vaccine safety and efficacy. This symbolic leadership, we argue, has contributed to the general pro-vaccine attitude in the country at a time some leaders in other countries are leading the way in questioning the science of covid protocols such as masks, social distancing, and vaccination.

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