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Public perceptions of HIV/AIDS awareness in the Gulf Council Cooperation countries: a qualitative study

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Abstract

Background Awareness of Human Immunodeficiency Virus (HIV) is limited in Muslim countries, even among high-risk populations. Several factors contribute to the misunderstandings and stigma surrounding HIV, including socio-cultural and religious aspects. This study explored people's experiences and perceptions of HIV awareness campaigns in the Gulf Cooperation Council (GCC) region.

Methods We conducted a qualitative study using semi-structured interviews with participants from the GCC region. The data were analysed using reflexive thematic analysis methods.

Results Twenty-seven participants took part in this study. The data revealed five main themes: *The Necessity of HIV/AIDS Awareness*, *The Contrast Between Traditional and Modern Awareness*, *Exploring the Balance: Moral vs. Health Messages*, *HIV/AIDS Awareness in GCC countries*, and *Key Providers of HIV/AIDS Awareness*. All participants emphasised the need to raise awareness about HIV in the GCC, believing that recent societal changes and increased openness justify the need for sexual health education. They stressed the importance of delivering clear and assertive health education to raise awareness while minimising the reliance on fear-based messaging. However, some participants expressed concerns about promoting condom use and HIV treatment, fearing it might encourage extramarital sex. Additionally, the lack of a religious component in the awareness messages raised concerns among some participants, as they believed adhering to religious practices was the best protection against HIV.

Conclusions Muslims in the GCC recognise the importance of spreading awareness about HIV. However, they stress the need to balance religious sensitivity with the delivery of open and transparent health messages. Engaging the target community, including high-risk individuals, in planning health campaigns is crucial for improving the acceptance, reach, inclusivity, and understanding of health awareness programs.

Keywords Sexually transmitted infections, Culture, Religion, HIV/AIDS, Health awareness, Qualitative

Introduction

Human immunodeficiency virus (HIV) continues to pose a significant global public health concern. In 2023, approximately 1.3 million people became newly infected with HIV, and around 630,000 individuals died from Acquired Immunodeficiency Syndrome (AIDS)-related illnesses worldwide [1, 2]. While global trends indicate a decline in HIV incidence and related deaths, this decrease is not uniform across all regions [3]. Notably, the Middle East and North Africa (MENA) region has experienced a

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116% increase in new HIV infections between 2010 and 2023 [4]. This surge is often attributed to societal stigma, underfunding, and a lack of accurate surveillance and rigorous studies, leading to underreporting of HIV/AIDS cases [5, 6]. Consequently, efforts for HIV prevention, diagnosis, and treatment in the MENA region fall below global targets [5].

The Gulf Cooperation Council (GCC) includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. These countries share common socio-cultural and religious characteristics, with Islam as the predominant religion and Arabic as the primary language [7]. The region is known for its conservative social norms and cultural sensitivities, which influence attitudes toward sexual health and HIV discussions. There are over 42,000 people living with HIV residing in the GCC in 2021; higher prevalence is noted among injection drug users, female sex workers, and men who have sex with men [8]. The incidence of HIV in the GCC has been steadily increasing since 1990 [8].

Despite offering free HIV testing, GCC countries lack national policies to encourage testing and partner notification [8]. Access to testing is further hindered by denial of the infection's existence in Muslim communities and a lack of knowledge about transmission, symptoms, and preventive measures [9, 10]. Previous evidence has indicated low HIV-related understanding, even among high-risk populations, leading to misconceptions about transmission and low perception of risk [11, 12]. Socio-cultural and religious factors are well-documented barriers to HIV awareness and discussions in the MENA region, contributing to significant societal stigma surrounding HIV [9, 13]. Societal stigma, alongside a lack of trust in healthcare facilities, may contribute to limited testing and treatment access [9, 10]. It has been suggested that inadequate information limits the response to HIV in the region [14], and efforts are needed to improve people's attitudes toward HIV, increase awareness using diverse channels, and reach high-risk populations effectively [9].

Mass media interventions have the potential to reduce the societal stigma associated with HIV and people living with HIV [15]. Using mass media, especially in the form of social media, provides a platform allowing individuals to engage in discussions related to HIV prevention and treatment [16, 17]. It has been suggested that Muslims prefer obtaining sexual health information from the Internet due to the ease of access and anonymous nature [18]. Therefore, efforts were directed towards providing programs and interventions through social media platforms. Salamatak is a comprehensive health program created by the Gulf Health Council (GHC) to enhance health literacy and improve the well-being of the citizens of the

GCC [19]. The program aims to address various health issues through educational campaigns and targeted interventions, leveraging culturally appropriate content to resonate with GCC populations. In December 2020, on World AIDS Day, Salamatak released a short video about HIV/AIDS to raise awareness about the disease [20].

The video boldly addressed sensitive topics such as HIV prevention methods, including condom use, and modes of transmission, like extramarital sex. It began by depicting a man distressed after receiving a call from the blood bank, which initially implied an HIV diagnosis. However, the storyline is resolved with the blood bank recognising the man as a significant blood donor, offering a positive twist. The film ended with the message '*Do not push your luck*' in Arabic, encouraging viewers to take proactive steps in their health behaviours. Following this storyline, the video provided factual information about HIV/AIDS, including modes of transmission, treatment options, and ways to live a healthy life with the disease.

The video sparked substantial attention and intense debate across the region, mainly due to the open portrayal of condom use and extramarital sex in a conservative Muslim society [21]. This marked a significant departure from traditional approaches to health communication in the region, which often avoided such topics. Examining the impact of cultural and religious norms on the portrayal of HIV prevention methods, such as condom use, is crucial for understanding the societal dynamics influencing HIV/AIDS awareness in the GCC. Insights into Muslim and Arab communities' perceptions of HIV awareness messages can help tailor interventions that address the sexual health needs of the GCC population while respecting cultural and religious sensitivities.

Methods

This study aimed to investigate the experiences and perceptions of people in GCC countries regarding HIV/AIDS awareness campaigns. Specifically, it sought to understand public attitudes towards raising awareness about HIV/AIDS and explore the reasons for supporting or opposing awareness initiatives addressing culturally sensitive topics, including HIV prevention methods and sexual health education. Controversial interventions in this context refer to the promotion of preventive measures such as condom use and discussions about extramarital sexual activity, which challenge societal norms in the conservative Muslim-majority GCC region. The King Saud University Human Research Ethics Committee reviewed and approved this study (approval number: KSU-HE-21-151).

We used a qualitative research approach and conducted semi-structured interviews. Qualitative methodology enables the exploration of people's perceptions and

opinions to gain a deeper understanding of the reasons behind approving or rejecting controversial interventions, such as HIV and condom use in the GCC.

All participants watched the educational video created by the Salamatak program before the interviews. We ensured that all participants watched the video before the interviews to facilitate informed discussions about its content, messaging, and cultural implications. The video acted as a catalyst for deeper discussions, encouraging participants to reflect on related topics, such as the effectiveness of HIV/AIDS awareness campaigns, controversial interventions, and the interplay between health messaging and cultural norms.

Sampling and recruitment

A purposive sample was used to identify male and female individuals from different geographical regions in the GCC. We aimed to recruit people aged 18 and above from the GCC, including people living with HIV. Recruitment was conducted through social media platforms due to their widespread use and ability to reach a broad audience efficiently across diverse regions, which was crucial for accessing participants from various backgrounds within the GCC. Specifically, X (formerly known as Twitter) was chosen because it is a popular platform in the region, allowing us to engage with potential participants effectively.

An invitation was posted on X, containing information about the research aims and a link to an information sheet and consent forms. The electronic information sheet and consent forms were hosted on an external, secure online survey platform independent of the authors' institution, ensuring data privacy and accessibility. Potential participants interested in the study completed the electronic informed consent form and provided information on their preferred method of contact. Interested participants were then contacted by the lead investigator (SA) via their preferred method of communication (i.e., email or phone) to schedule the interview.

Data collection

Before the interview, each participant was asked to complete a demographic questionnaire to provide descriptive data. The questionnaire gathered information on gender, age, education, employment, and country of residence. The interviews were conducted online using Zoom, allowing participation from individuals across the GCC region. The lead investigator (SA), a Saudi female public health researcher with experience in qualitative research, conducted the interviews. The interviews were conducted in Arabic to ensure participants could express themselves comfortably in their native language. With participants' consent, the interviews were

audio-recorded. The interviews were conducted between March and April 2021 and lasted between 20 to 60 min.

A topic guide was developed based on the literature that examines people's perceptions and views of HIV and HIV awareness in Muslim communities [9, 21]. The Social Norms Theory guided the topic guide questions [22]. According to the theory, people's perceptions of a "norm" could influence their responses, potentially affecting the range of opinions shared. The theory explores how environmental and interpersonal influences, such as society, affect health behaviour. We can better understand participants' views and perceptions by exploring these factors rather than just individual aspects. Social norms theory has been successful in examining and influencing various health behaviours, particularly in relation to alcohol and tobacco use, as well as sexual health [22]. To encourage participants to express a wide spectrum of perspectives, including those that may be considered contentious or less socially accepted, we carefully phrased the questions to foster an environment conducive to open and authentic dialogue.

The topic guide also included questions about people's perceptions of the factors facilitating or hindering HIV/AIDS awareness in GCC communities. This included understanding modes of prevention (e.g., condom use) and HIV treatment. We also explored participants' views on suitable HIV awareness content and channels for GCC countries. Participants were free to discuss any relevant areas not covered by the guide. The topic guide was piloted with one participant and amended before the start of the data collection.

Data analysis

The interviews were transcribed verbatim in Arabic by a professional transcriber. The transcriber signed a confidentiality agreement prior to beginning the transcription process to ensure confidentiality. We followed a reflexive thematic analysis (RTA) method, which involves several key stages as outlined by Braun and Clarke [23, 24]. These stages include familiarisation with the data, generating initial codes, searching for themes, reviewing, defining, naming, and producing the report. We used ATLAS.ti software for managing and coding the data. The lead author (SA) familiarised themselves with the data and used an inductive approach to code all transcripts, while a sample of interviews was double-coded by the author (NA). We held meetings with the research team to review and modify the codes throughout the analysis. The codes were then grouped to create the initial set of themes, aligning with the stage of searching for themes. SA and NA refined the thematic structure iteratively and continuously reviewed interview transcripts to ensure that

the findings accurately represented the data. All themes and sub-themes were reviewed, defined, and developed through discussions among the research team to enhance rigour and reliability [24]. The quotes presented in the findings were translated independently from Arabic to English by two authors (SA and NA), who collectively agreed on the final translation. This process ensured accuracy, consistency, and fidelity to the original meaning conveyed by the participants.

Table 1 Participants characteristics

Gender	
Male	15
Female	12
Nationality	
Saudi	12
Kuwaiti	7
Omani	5
Bahraini	1
Emirati	2
Marital status	
Single	16
Married	9
Widowed/divorced	2
Age	
18–25	10
26–33	8
34–40	5
41–50	4
Educational level	
Secondary	3
Diploma	2
Bachelors	14
Post-graduate education	8

Results

Twenty-seven participants took part in this study. We had a diverse sample of male and female participants aged 18 to 50. Two participants were living with HIV. The characteristics of the study participants are detailed in Table 1. Five themes were developed from the data (see Table 2), including *The Necessity of HIV/AIDS Awareness*, *The Contrast Between Traditional and Modern Awareness*, *Exploring the Balance: Moral vs. Health Messages*, *HIV/AIDS Awareness in GCC countries*, and *Key Providers of HIV/AIDS Awareness*.

The necessity of HIV/AIDS awareness

Participants across the GCC discussed the critical importance of HIV/AIDS awareness, highlighting the societal risks of ignorance and the cultural barriers that hinder widespread education. They addressed various aspects of awareness, including general knowledge gaps, misconceptions about transmission, the availability of treatment, and differing views on preventive measures.

Awareness deficiencies and societal perceptions

Participants in the study unanimously agreed on the importance of HIV/AIDS awareness in GCC communities. They emphasised the crucial need for awareness, particularly considering recent societal changes and increasing openness in GCC countries. The participants urged for more extensive awareness initiatives to combat the potential consequences of a lack of knowledge about HIV/AIDS. The lack of HIV/AIDS awareness in GCC countries was attributed to the perceived low prevalence of the disease in the community, resulting in minimal educational efforts.

*“I support the idea of educating people to prevent them from living in ignorance and false security.”
(P26, Female, Kuwait)*

Table 2 Themes and subthemes from qualitative data analysis

Themes	Sub-themes
The Necessity of HIV/AIDS Awareness	Awareness deficiencies and societal perceptions HIV/AIDS Treatment Knowledge Condom use and cultural tension The target audience for HIV/AIDS awareness Perceived community acceptance of HIV/AIDS awareness
The Contrast Between Traditional and Modern Awareness	Clarity and transparency of health messages The use of fear appeal
Exploring the Balance: Moral vs. Health Messages	Health-oriented Messaging Religion as a tool for HIV/AIDS prevention
HIV/AIDS Awareness in GCC Countries	Sources of HIV/AIDS information Challenges in formal and informal education
Key Providers of HIV/AIDS Awareness	The impact of social media on HIV/AIDS awareness The role of healthcare professionals in HIV/AIDS awareness The role of formal health organisations

"I mean that you want to know more about it [HIV/AIDS], but it is not very common. Because I expect that in our society, it is possible that there are not many [HIV cases] or something apparent, I mean, maybe this is what makes us not pay attention to learn about it [HIV/AIDS] more." (P11, Male, Saudi Arabia)

Participants noted that while the public is aware of HIV/AIDS, they lack crucial information about the risk factors, modes of transmission, and the availability of treatment and diagnostic facilities. A major misconception about HIV transmission is the belief that it can be spread through physical contact. Participants highlighted the importance of educating the public about other modes of transmission beyond extramarital sex, such as mother-to-child transmission,

"We should shift our focus to other aspects of raising awareness about the transmission of the disease. It's common knowledge that it can be transmitted through forbidden relationships, but we need to educate people about other ways the disease can be contracted. It's important to stop associating it solely with something dangerous and terrifying." (P4, Female, Saudi Arabia)

This subtheme highlights the urgent need for targeted educational initiatives to overcome knowledge gaps and cultural barriers to HIV/AIDS awareness in the GCC.

HIV/AIDS treatment knowledge

Many participants stressed the importance of raising awareness about the availability of HIV treatment. It is often noted that there is a lack of knowledge about treatment options among GCC communities. Creating a greater understanding of the effectiveness of antiretroviral therapy in treating HIV/AIDS can potentially encourage more individuals to get tested, as HIV is frequently misconstrued as a fatal disease.

"A big problem is that many people do not know about AIDS treatment. I learned this information two years ago from a medical student friend, and I was shocked. Many people do not know this information and do not go to the hospital to get checked. They can live a normal life, marry, and have children." (P24, Male, Oman)

Most participants acknowledged the importance of educating individuals about HIV/AIDS treatment. However, a minority expressed concerns that increasing awareness of HIV treatment might lead to a rise in extramarital sexual activity. Their argument was based on the premise that if people were aware that

individuals living with HIV could maintain a healthy quality of life, it might diminish the fear associated with the disease. According to the participants, the fear of HIV/AIDS played a crucial role in discouraging extramarital relationships.

"I believe some individuals are hesitant to downplay the severity of the disease. They fear that people may become complacent if they convey it as manageable, so they want others to fear the disease and take it seriously." (P4, Female, Saudi Arabia)

This subtheme underscores the need to balance awareness of treatment options with messaging that maintains the seriousness of HIV/AIDS to prevent misconceptions and stigma.

Condom use and cultural tensions

There were different opinions among participants about the importance of public awareness of condom use as a preventive measure. Some participants believed that promoting condom use might encourage extramarital sexual activity and could be seen as supporting 'immoral' relationships. Specific individuals considered condoms as a cultural practice from foreign societies and deemed them unfitting for Muslim communities.

"Let's be clear: this is a hazardous point. Why would I give them the tools? The issue is extramarital sex; you are having a forbidden relationship, a blatant assault on our beliefs. I'm basically telling him it's allowed to have sex when it's completely unacceptable, unacceptable, unacceptable. It is haram [forbidden]." (P16, Male, Kuwait)

Some participants emphasised the need to raise awareness regarding the significance of protection and safe sexual practices. In today's world, providing youth with the necessary tools to protect themselves is essential. Others also underscored the importance of promoting awareness about other preventative measures, notably abstinence.

"We indeed live in a Muslim society, and this is against our values and beliefs. Having extramarital sex will always be and remains a personal choice. So, the least they can do is protect themselves, whether condoms or whatever they need to do to prevent infections. I believe that promoting condom use is something positive." (P24, Male, Oman)

This subtheme highlights the cultural and religious challenges of promoting condom use in GCC societies and the importance of culturally sensitive messaging in HIV prevention.

The target audience for HIV/AIDS awareness

Some participants suggested that HIV/AIDS awareness should include all members of the community, regardless of their marital status. However, one participant believed that since it is sexually transmitted, the focus should be on married couples. She suggested that providing HIV/AIDS awareness to couples preparing for marriage would be more appropriate.

"Educate people who are getting married, why would this concern me? Sexually transmitted infections are a concern for married couples." (P9, Female, Kuwait)

This subtheme illustrates diverse perspectives on who should be targeted by HIV/AIDS awareness campaigns, reflecting the need for tailored strategies to meet community needs.

Perceived community acceptance of HIV/AIDS awareness

Discussions about HIV/AIDS are traditionally sensitive and often met with resistance. However, the absence of comprehensive sex education in GCC countries has also been cited as a contributing factor to the lack of acceptance of HIV/AIDS. Participants emphasised the importance of awareness campaigns, noting their potential impact irrespective of community perceptions.

"Rejection and attack are expected, especially when discussing sensitive topics not commonly addressed in our culture. This highlights the importance of raising awareness on these issues, especially since there is a lack of sex education, even in schools." (P10, Female, Saudi Arabia)

Participants expressed that many individuals in the community perceive HIV/AIDS awareness as a threat to the community's image, as it may entail acknowledging the existence of extramarital sex. Some participants believe that Muslims often hold themselves to be morally superior and above wrongdoing. These solid religious beliefs contribute to the low-risk perception of sexually transmitted infections (STIs) among Muslims.

"They believe that they are above doing anything immoral and that extramarital sex does not exist among us. We have strong religious morals, fear of God, and self-monitoring, so they think these things can't happen among us. They also believe these things can't happen to our kids because we have raised them to fear God, so they think this is impossible. However, in reality, these things exist and are happening everywhere around us." (P7, Female, Saudi Arabia)

The contrast between traditional and modern awareness

Participants noted the evolving strategies for HIV/AIDS awareness in the GCC. The "Old Approach" refers to fear-based campaigns of the past, which frequently employed intimidation, exaggerated symptoms, and stigmatising portrayals of individuals living with HIV. These tactics aimed to deter risky behaviours but often reinforced societal stigma. In contrast, contemporary initiatives such as the Salamatak program seek to diminish stigma and promote open dialogue through clear and transparent messaging.

Clarity and transparency of health messages

In the past, HIV/AIDS campaigns in the region used fear and intimidation, negatively depicting people living with HIV. This old approach was compared to new HIV awareness content (i.e., Salamatak), which portrays individuals at risk of the disease neutrally, reducing the negative stigma associated with it.

"When I was young, I learned about HIV/AIDS from the media, and it was portrayed scarily as if it was a death sentence... This made me associate the disease with bad people. It was often portrayed as though those who had the disease deserved it because of their actions, and we used to believe that only very bad people could get it." (P4, Female, Saudi Arabia)

Participants emphasised the importance of clear and transparent health education in raising awareness. They commended the transparency of Salamatak's video in explaining the transmission of HIV, particularly in the context of sexual transmission. Explicitly detailing how HIV could be transmitted through sexual contact, rather than vaguely alluding to it, was seen as a ground-breaking and positive approach to promoting awareness.

"This is something new that we've never been shown before. In the past, they would mention 'sexual contact' without going into detail about what it actually means. Now, they are providing more specific information about what sexual contact entails, which is a positive change." (P6, Female, Kuwait)

The use of bold and direct messages in HIV/AIDS awareness campaigns was considered crucial for effectively reaching and educating the community. While some might find bold content offensive and shocking, potentially leading to resistance, others saw this shock as a necessary and impactful way of addressing reality.

"To be honest, I think the entire video was appropriate. Sometimes, we need to be bold in delivering certain information... The society will be initially

shocked, but this shock will wake them to reality.”
(P24, Male, Oman)

Transparent and bold communication has the potential to grab attention and prompt meaningful conversations about the issue, maximising the reach.

“The buzz that this video generated was good; it got people excited to see it, and people were talking about it and saying: have you seen this video? That led to many more views.” (P10, Female, Saudi Arabia)

This subtheme highlights the shift from fear-based messaging to transparency and openness, which is crucial for reducing stigma and improving HIV/AIDS awareness.

The use of fear appeal

The previous HIV/AIDS awareness campaigns were fear-based, exaggerating symptoms to discourage specific actions that could lead to the infection. Many participants mentioned that using fear appeal for health awareness is rarely effective and does not impact people's behaviour. However, some participants agreed with the use of fear appeal in HIV/AIDS awareness as they did not want to minimise the seriousness of the disease.

“In general, why would we resort to intimidation? I am not sure if this works on others, but it does not work on me at all. I think relying on fear tactics is really bad.” (P5, Female, Saudi Arabia)

The use of fear tactics in HIV awareness was considered unacceptable to most participants. However, some participants emphasised that making light of it is not an option either. There was a consensus that it's essential to inform people about the severity of the disease while avoiding causing unnecessary panic.

“We should not discuss the topic lightly either... If we start joking about these topics, it becomes a problem, and the other extreme [fear appeal] is also a bigger issue.” (P16, Male, Kuwait)

This subtheme emphasises the limitations of fear-based messaging in awareness campaigns and the importance of finding balanced approaches that educate without causing unnecessary panic.

Exploring the balance: moral vs. health messages

Participants discussed the tension between moral messaging and health-focused education in HIV/AIDS awareness campaigns. Some emphasised the importance of delivering neutral, factual health messages, while others supported incorporating religious and ethical guidance to align with societal values. Their perspectives

highlighted how different messaging approaches can influence community acceptance and drive behavioural change.

Health-oriented messaging

Participants emphasised the importance of prioritising health-oriented messages over societal perspectives in HIV awareness campaigns. Some recommended delivering a neutral health message, irrespective of religious and cultural beliefs, to enhance the effectiveness of health promotion campaigns.

“I believe the video is truly unique. One of the factors contributing to its success is its ability to challenge traditional and cultural perspectives.” (P2, Female, Kuwait)

Participants raised concerns about the potential negative impact of focusing on abstinence-only forms of education. Relying solely on messages that promote adherence to religious principles could have long-lasting health implications. They emphasised that Islam significantly values human life and supports education in all aspects.

“I believe that the detrimental health effects are more severe than the ethical consequences. Moral damages can be reversed through repentance, but health damages are irreversible.” (P27, Male, Bahrain)

Participants stated that health authorities should provide factual health information, not enforce morality. Many participants emphasised that healthcare professionals should focus on health information instead of playing the role of religious and moral educators, as each member of society should play a role based on their expertise.

“Everyone has their role or responsibility; I mean, when my doctor discusses sexual health and starts by lecturing me and giving religious advice, of course, I will not accept his advice; you are a doctor; why would you even mention Halal and Haram [religious jurisprudence].” (P27, Male, Bahrain)

This subtheme underscores the value of neutral, health-focused messaging to address HIV/AIDS effectively while acknowledging the need to respect cultural sensitivities.

Religion as a tool for HIV/AIDS prevention

Some participants believe that following Islamic teachings is crucial in preventing HIV/AIDS. They argue that health messages without any religious references are unacceptable, as they are seen to diminish the significance of religion in people's lives. They suggested

incorporating a spiritual element into health messages would improve the acceptability and impact within the community.

"I was angry that condom use was portrayed as the only solution to the issue. What's more concerning is that we're not considering the role of God and the fear of God almighty." (P16, Male, Kuwait)

"I see that, for example, when social and religious awareness is added to these topics, it can facilitate the acceptance of medical information. I mean, these things can be used to support the medical side and could be useful." (P17, Male, Oman)

While other participants emphasised that adherence to religion does not necessarily prevent individuals from engaging in extramarital sexual activities, despite the strict prohibition of extramarital sex in Islam, participants noted that a significant number of Muslims still engage in it. As a result, they expressed concerns about relying solely on religious beliefs to prevent the transmission of HIV/AIDS.

"When talking to someone who is already involved in extramarital relations and discussing the prohibition of such behaviour, it is like informing a smoker about the health risks of smoking. They already know the risks, but it doesn't change their behaviour. As a grown adult, that person should have the autonomy to make their own choices. However, it is important to encourage them to engage in such activities responsibly without causing harm to themselves or others. Instead of framing it solely as a religious issue, we should recognise that the prohibition is widely known. Simply telling someone it is haram may not be enough to make them stop." (P10, Female, Saudi Arabia)

This subtheme highlights the importance of integrating religion into health messages to improve their acceptability while recognising its limitations in influencing behaviour change.

HIV/AIDS awareness in GCC countries

Participants discussed the sources of HIV/AIDS information available in GCC countries, including media, formal education, and informal networks. They highlighted challenges such as misinformation and the lack of comprehensive education, particularly in Arabic. Their insights demonstrated how different sources of information influence community understanding and attitudes toward HIV/AIDS.

Sources of HIV/AIDS information

The primary source of information about HIV/AIDS in GCC countries was the media. Many participants mentioned that they mainly learned about the disease from movies and television shows, while others said that their primary source of information was friends.

"I learned about it [HIV] from TV shows. And when I travel, for example, my friends advise me on the protection that sexual relations lead to AIDS, and so on." (P20, Male, Kuwait)

Challenges in formal and informal education

Several participants expressed concerns about depending only on friends and the internet for information about HIV/AIDS. They found easy access to internet information problematic, and despite the younger generation's preference for online sources, many participants were worried about the accuracy of such information. In addition, participants noted the challenge of finding reliable medical information in Arabic.

"SA: You said that you moved away from Arabic content. How did you find it compared to English content?"

P20: Very different. There is a huge difference. There is no scientific basis or evidence." (P20, Male, Kuwait)

Some participants mentioned that their understanding of HIV/AIDS during their school years was limited to simply knowing the name of the disease and transmission through what was described as "immoral relationships." Teachers were unwilling to teach about STIs, which often led to these topics being skipped. Formal education about HIV/AIDS was only offered to health/medical students in colleges and lacked depth.

"In schools, the disease was only mentioned as a dangerous example without explaining its causes or details, so it didn't effectively raise awareness." (P22, Female, Oman)

This subtheme highlights the inadequacy of formal education on HIV/AIDS in GCC countries and the need for culturally relevant and scientifically accurate curricula.

Key providers of HIV/AIDS awareness

Participants identified key stakeholders in raising HIV/AIDS awareness, including healthcare professionals, parents, social media platforms, and formal health organisations. They discussed the stakeholders' roles

and the challenges they face in delivering effective and culturally appropriate HIV/AIDS education.

The impact of social media on HIV/AIDS awareness

Most participants agreed that social media is the most effective platform for spreading HIV/AIDS awareness, reaching a broad audience and providing a safe space for discussions.

"Of course, it is appropriate. It's the best way to reach the maximum number of people because the target group can be found on social media. Therefore, it should be the first place to raise awareness about sexual matters. It is the most suitable way. Not only is it appropriate, it's the most appropriate." (P6, Female, Kuwait)

This subtheme demonstrates the potential of social media, given its accessibility and broad reach, as a powerful tool for HIV/AIDS awareness.

The role of healthcare professionals in HIV/AIDS awareness

Participants emphasised the crucial role of healthcare professionals (HCPs) in raising awareness about HIV/AIDS. However, some mentioned issues with accurately communicating health messages are due to the lack of specialised infectious disease centres in the GCC. Participants living with HIV highlighted these challenges more clearly because of their frequent interactions with HCPs.

"There is a lack of awareness about HIV, even among doctors, who may not communicate the message accurately due to the absence of specialised fields dedicated to HIV here..." (P25, Male, United Arab Emirates)

Some participants faced challenges when talking about HIV/AIDS with their healthcare providers. This was often because they felt shy or inferior, so they preferred to learn about the subject through social media platforms. These participants shared their experiences of feeling uncomfortable during doctor's visits, and they frequently mentioned that the doctors seemed unwilling and uncomfortable when discussing such topics.

"The concept of 'authority' comes to mind when I visit a doctor sitting at a desk wearing a lab coat. This reinforces the idea of a superior person, leading to feelings of superiority and inferiority between patients and doctors." (P6, Female, Kuwait)

Many participants mentioned that it can be challenging to talk about sensitive health issues with HCPs due to sociocultural norms, especially when speaking with a provider of the opposite gender. They also pointed out that having a family member present during consultations

hindered open communication between patients and doctors. Some participants also felt that HCPs might be hesitant to discuss sensitive topics with patients of the opposite sex for fear of being inappropriate.

"They [doctors] could fear the patient's reactions, especially when a doctor is a man and the patient is a woman, or the doctor is a woman and a patient is a man, there would be shyness on both sides. The man, for example, knows that in society, it is unacceptable to talk about sensitive things in front of a woman... On the other hand, the man might be too embarrassed to talk about this in front of his female doctor." (P11, Male, Saudi Arabia)

This subtheme highlights the important role of healthcare professionals in communicating HIV/AIDS information in the GCC and the potential barriers to effective communication.

Parental involvement in HIV/AIDS awareness The participation of parents in raising awareness about HIV/AIDS was considered crucial in preventing the spread of the disease. Since much inaccurate information is available, clarifying and correcting these misconceptions is essential for parents.

"So I sat them down and told them to watch the video... my little boy asked, 'What is that?' He said, 'Mama, I don't understand...' Then I explained everything to them; I was not shy about anything, even the condom." (P18, Female, United Arab Emirates)

Discussing HIV/AIDS with children can be difficult, leading some parents to avoid the conversation. This hesitance may stem from shyness, shame, or the belief that their children will not engage in risky behaviour due to a good upbringing.

"We say that our children will not do these things [extramarital sex], they don't need this. We raised them well... In our societies, no one explicitly mentions the role of families in raising awareness." (P23, Male, Oman)

Participants discussed the need for parents to provide HIV/AIDS awareness and noted generational differences. They shared experiences of older parents lacking knowledge about HIV/AIDS and often conveying unsuitable messages or avoiding discussions on the topic with their children.

"I was born in the 70s, and the culture of shame is deeply rooted in us. My mother is very shy, so she does not talk about these things, and my father is very serious and difficult to talk to. So, my mother

did not know about AIDS at all... My mother and father heard from people that the disease is a malicious, dirty, and shameful disease, but they still don't know any facts about it?" (P18, Female, United Arab Emirates)

This subtheme highlights the vital importance of parental involvement in HIV/AIDS education and identifies potential obstacles to effective communication.

The role of formal health organisations

Participants highlighted the vital role of official health organisations in raising awareness about HIV/AIDS, noting the broader positive impact beyond public awareness. When these organisations take on this responsibility, it encourages other sectors and community members to actively promote health.

"I mean, there should be more awareness of the issue [HIV/AIDS] and more support from the Ministry of Health. I honestly do not know if the Ministry of Health supports this issue. The support from the health system will certainly promote raising awareness, improving numbers and everything." (P10, Female, Saudi Arabia)

Participants have consistently viewed health ministries and organisations as reliable and credible sources of health information. The importance of these entities in disseminating accurate health information must be emphasised, as the need for such information has become more pressing.

"The trust element will make discussing sensitive topics easier. The fact that Salamatak is a program produced by a governmental entity in the GCC countries creates trust, giving them confidence in what is said." (P27, Male, Bahrain)

This subtheme highlights the trust placed in formal health organisations and their critical role in fostering accurate and credible HIV/AIDS awareness initiatives.

Discussion

In this study, we explored people's perceptions and views of HIV/AIDS awareness in the GCC. All participants recognised the significance of promoting HIV/AIDS awareness in the GCC, particularly given recent social changes and increased openness. However, some participants voiced worries about promoting condom use and HIV treatment, fearing that it could be interpreted as endorsing extramarital sex. They emphasised the need for accurate health messages, yet some expressed concerns about providing education that lacked a religious component. Many stressed that the role of religion in preventing HIV

should not be underestimated. There was a comparison between former HIV awareness programs and the new form of awareness, i.e. Salamatak video. Participants highlighted the need for clear, bold health education to increase awareness while minimising fear-based messaging. They also discussed suitable channels for HIV/AIDS awareness, including HCPs, parents and official health organisations.

Previous prevention efforts in Muslim communities solely promoted abstinence, with harm reduction not being accepted in conservative communities [21]. However, recent evidence shows that promoting abstinence-only is 'unrealistic' and should be used alongside harm-reduction strategies [21]. To effectively communicate health messages, it is important to acknowledge and incorporate the scientific aspect of health while considering diverse cultural and religious sensitivities [25]. Previous literature suggests that providing sex education for young Muslims requires aligning religious advice with scientific-based health information [25]. This involves going beyond a blanket Western approach to health awareness and instead delivering scientific health messages that respect varying cultural and religious beliefs. It requires a nuanced approach that remains socially relevant and impactful while being sensitive to the specific cultural and religious contexts in which the messages are being received.

In the past, efforts to raise awareness about HIV/AIDS in the Arab region have predominantly centred around the use of fear-based messaging and campaigns [26]. Fear-based messages often focus on the adverse outcomes of engaging in risky behaviours, such as contracting HIV/AIDS, without providing clear and actionable prevention steps. Research shows that fear-based messages can effectively influence people's health behaviours [27]. However, it has been suggested that these messages are most effective for individuals who strongly believe in their ability to take action (i.e., high self-efficacy) [28]. Therefore, using fear-based messages requires careful consideration, especially in the context of sexual health, where maintaining high self-efficacy can be challenging [28].

The views of participants in the GCC regarding the necessity of HIV/AIDS awareness and acceptance are often intertwined with perceptions of risk. Many participants indicated that the primary reason for the lack of acceptance of HIV awareness campaigns was the inability to recognise their potential susceptibility to HIV/AIDS. The low perception of risk aligns with previous research on Muslims, indicating that deeply held religious beliefs influence views on HIV susceptibility [10, 29]. The denial of the existence of HIV remains common among Muslims despite an increase in HIV prevalence in Muslim

countries [30]. Many Muslims believe that adhering to religious principles provides the best protection from STIs, leading to a reluctance to use preventive measures and an increased vulnerability to STIs, including HIV [30–32].

Another factor contributing to the perception of low risk is the lack of reliable statistics on the prevalence of HIV in the GCC [9]. The lack of publicly available data on HIV prevalence challenges the need for public health interventions and policies addressing STIs. Understanding the magnitude of HIV and HIV-related risk factors could facilitate the development of prevention and treatment programs in GCC countries.

Despite the controversy, social media is a highly effective platform for transparently sharing sexual health information, reaching a broad audience, and initiating discussions [33]. Mass media interventions for raising awareness about HIV prevention and treatment have also been proven to reduce disparities [17, 34]. It is crucial to introduce comprehensive interventions to improve HIV awareness, reduce stigma, and enhance access to diagnostic services in the region.

It is important to involve the target community in planning health campaigns to improve program acceptance, inclusivity, and understanding [35]. It is advisable to use a community-based approach when developing HIV-related programs and messages to tackle social and structural barriers to HIV prevention and treatment [35]. Involving people living with HIV in creating HIV messages can help reduce the stigma and marginalisation of high-risk communities [35]. We recommend involving religious leaders in HIV awareness and prevention, as they play a crucial role in Muslim communities and could encourage HIV testing and treatment while reducing stigma towards people living with HIV.

Strengths and limitations

This study is the first to examine the perceptions and acceptance of HIV-related awareness among Muslims across different countries in the GCC, considering various demographic characteristics. Participants from multiple GCC countries were included, allowing for a comprehensive exploration of views from different social, economic, and political environments. However, we were unable to recruit participants from certain GCC countries, such as Qatar. While the focus was on GCC communities, the findings have implications for Muslim populations in other countries worldwide, as many Muslims share similar socio-cultural traditions and values [10].

The presence of social desirability bias is a recognised challenge when discussing sensitive sexual health topics such as HIV within conservative religious communities.

While it is not possible to confirm whether participants' responses were influenced by bias, we took deliberate steps to create an environment that encouraged openness and honesty. This included avoiding emotional reactions to participants' responses, employing a non-leading approach in our interview questions, and ensuring privacy and confidentiality throughout the interview process. These measures were intended to reduce the likelihood of participants feeling pressured to provide socially desirable responses. However, it is important to note that the findings may predominantly reflect the perspectives of individuals who are more open to discussing such topics than those who may have chosen not to participate in the study.

Conclusion

Muslims in the GCC acknowledge the importance of raising awareness about HIV/AIDS but also emphasise the importance of balancing religious sensitivity with delivering a clear health message. It is important to involve the target community in planning health campaigns to enhance health awareness programs' acceptance, reach, inclusivity, and understanding.

Abbreviations

GCC	Gulf Council Cooperation
HIV	Human Immunodeficiency Virus
MENA	Middle East and North Africa
AIDS	Acquired Immunodeficiency Syndrome

Acknowledgements

The authors would like to thank all research participants for taking the time to participate in the study and the Gulf Health Council for their cooperation and contribution to this study.

Authors' contributions

SA, NMA, GA, RA and NA conceptualised the study. SA conducted the interviews. SA and NA analysed the data and interpreted the findings, with input from the team, and SA drafted the manuscript. All authors read and approved the final manuscript.

Funding

Non-applicable.

Data availability

The datasets used and analyzed in this study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

The King Saud University Human Research Ethics Committee reviewed and approved this study (approval number: KSU-HE-21–151). The research is conducted in accordance with the principles embodied in the Declaration of Helsinki. Participants completed an electronic informed consent form to participate in this study.

Consent for publication

Non-applicable.

Competing interests

The authors declare no competing interests.

Received: 5 September 2024 Accepted: 27 November 2024
Published online: 18 December 2024

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