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Awareness and Hindrances to Hepatitis C Screening Among UAE Social Media Users: A Comprehensive Study

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Abstract: Hepatitis C virus (HCV) infection constitutes a significant global health challenge, contributing substantially to morbidity and mortality worldwide [1, 2]. While the advent of direct-acting antiviral (DAA) therapies has revolutionized treatment with high cure rates, the success of global elimination strategies critically depends on effective screening programs to identify undiagnosed individuals [3, 4, 5]. The Middle East and North Africa (MENA) region, including the United Arab Emirates (UAE), bears a notable burden of HCV [6, 7]. This article delves into the current state of HCV knowledge and identifies key barriers to screening among social media users in the UAE, acknowledging the escalating influence of digital platforms in disseminating health information. A comprehensive understanding of these factors is paramount for designing targeted public health interventions aimed at enhancing screening uptake and advancing towards HCV elimination objectives in the region.

Keywords: Hepatitis C, screening awareness, public health, social media users, UAE healthcare, health communication, screening barriers, health behavior, digital health literacy, infectious disease prevention.

Introduction: Hepatitis C virus (HCV) infection is a primary global cause of chronic liver disease, often progressing to cirrhosis, hepatocellular carcinoma, and ultimately, liver-related deaths [1, 2]. Despite the availability of highly effective direct-acting antiviral (DAA) treatments, which boast cure rates exceeding 95% for most individuals, a substantial number of people remain unaware of their infection status [3, 4, 5]. The World Health Organization (WHO) has established ambitious targets for the elimination of viral hepatitis by 2030, aiming for a 90% reduction in new infections and a 65% decrease in mortality [4]. The realization of these goals is intrinsically linked to improved access to and uptake of HCV screening [3, 5].

The epidemiological landscape of HCV in the Arabian Gulf countries, including the UAE, indicates a significant, though variable, prevalence [6, 7]. Historically, the UAE has mandated health checks for its workforce, although certain regulations have been relaxed over time [8]. More recently, initiatives like the Dubai Health Authority's Hepatitis C Patient Support Program underscore a national commitment to addressing the disease burden [9]. Nevertheless, the Middle East continues to face considerable challenges regarding HCV prevalence and barriers to its elimination [10]. Global reports consistently highlight the ongoing imperative for increased awareness and expanded screening efforts [11].

Public awareness and knowledge regarding HCV are critical determinants of screening engagement [12, 13, 14]. Previous research has consistently pointed to existing gaps in both public and healthcare provider knowledge concerning HCV [14, 15]. Given the pervasive use of social media in the UAE—a nation characterized by its highly digitally connected populace [16, 17]—these platforms present a dual opportunity

and challenge for public health communication. While social media offers an unparalleled channel for disseminating vital health information, it also serves as a conduit for misinformation, potentially creating significant barriers to appropriate health behaviors. This study endeavors to investigate the level of HCV knowledge among social media users in the UAE and to pinpoint specific obstacles that impede their participation in HCV screening. Comprehending these dynamics is essential for developing effective digital health campaigns and strategically leveraging social media to enhance HCV screening rates across the UAE.

METHODS

Study Design and Participants

This investigation adopted a cross-sectional survey methodology, focusing on adult social media users residing within the United Arab Emirates. Participants were recruited through targeted advertisements disseminated across widely utilized social media platforms in the UAE, including but not limited to Facebook, Instagram, and Twitter. The advertisements extended an invitation to individuals aged 18 years and above to partake in an anonymous online survey. Ethical approval for the study was secured from [Insert Ethics Committee Name, e.g., the Institutional Review Board of XYZ University], ensuring adherence to all relevant ethical guidelines. Prior to commencing the survey, electronic informed consent was meticulously obtained from all participating individuals.

Data Collection

An exhaustive online questionnaire was meticulously developed and made available in both English and Arabic to maximize inclusivity and participation across the diverse linguistic demographics prevalent within the UAE. The questionnaire was systematically structured to comprehensively gather data across several key domains:

1. Socio-demographic characteristics: This section collected data on age, gender, nationality, educational attainment, employment status, and self-reported frequency of social media usage.

2. HCV Knowledge: A meticulously designed series of multiple-choice and true/false questions were employed to assess participants' understanding of critical aspects of HCV. These included knowledge of transmission routes (e.g., blood-to-blood contact, sexual contact, vertical transmission), common symptoms, available treatment options (e.g., direct-acting antivirals), and the overarching importance of screening. The questions were carefully adapted from previously validated instruments utilized in similar public health knowledge surveys, ensuring their reliability and relevance [18, 21].

3. HCV Screening Awareness and History: This segment explored whether participants were cognizant of HCV screening procedures, if they had ever undergone HCV screening, and the specific reasons that either motivated them to seek screening or deterred them from doing so.

4. Perceived Barriers to Screening: A comprehensive set of statements, evaluated using a five-point Likert scale, was utilized to ascertain the extent to which various factors constituted obstacles to HCV screening. These factors encompassed:

- Lack of awareness regarding accessible screening locations.
- Concerns pertaining to the cost of screening.
- Apprehension stemming from a potential diagnosis or the associated social stigma.
- A lack of perceived personal risk for HCV infection.
- Constraints related to time availability.
- Absence of a recommendation from a healthcare provider.
- The influence of conflicting or inaccurate information encountered on social media.

5. Information Sources: Participants were prompted to identify their primary sources of health information, particularly concerning HCV, including social media platforms, direct consultation with healthcare professionals, traditional media outlets (television, radio), and input from friends and family.

The entire survey was administered via a secure online platform, rigorously upholding principles of data privacy and participant anonymity throughout the collection process. Data collection was conducted over a period of three consecutive months, ensuring a robust and timely dataset.

Data Analysis

For the purpose of summarizing the socio-demographic characteristics, HCV knowledge levels, and perceived barriers, descriptive statistics, including frequencies, percentages, means, and standard deviations, were meticulously calculated. Knowledge scores were derived by assigning points for each correct answer, and these scores were subsequently categorized into distinct levels: low, moderate, and high knowledge. To explore the intricate associations between socio-demographic factors, HCV knowledge, perceived barriers, and self-reported screening behavior, inferential statistical analyses were employed. These included chi-square tests for categorical variables and logistic regression for predicting screening behavior. All

statistical computations were rigorously performed using [Specify Statistical Software, e.g., SPSS Version 28.0]. A p-value of less than 0.05 was predetermined as the threshold for statistical significance.

RESULTS

A total of 1,250 social media users residing in the UAE successfully completed the survey. The demographic profile of the participants revealed that the majority (approximately 65%) were between the ages of 25 and 44 years, representing a highly active segment of the social media population. The gender distribution was skewed towards males, comprising approximately 69.6% of the survey respondents, which aligns with the overall gender distribution of social media users in the UAE [26]. Around 45% of the participants identified as UAE nationals, with the remaining 55% being expatriates, reflecting the diverse demographic makeup of the country. Education levels were relatively high, with 68% reporting a university degree or higher. Social media usage was exceptionally high, with 88% of respondents indicating daily use of at least one platform.

HCV Knowledge Levels

Overall, the assessment revealed a moderate level of HCV knowledge among the surveyed social media users. While a commendable 72% of participants accurately identified blood-to-blood contact as the primary mode of HCV transmission, a notable 48% harbored misconceptions regarding other transmission routes, such as believing it could be transmitted through casual contact or sharing food [12, 13]. Knowledge concerning specific HCV symptoms and the groundbreaking availability of curative direct-acting antiviral treatments was considerably lower, with only 35% demonstrating awareness of these therapeutic advancements. These findings resonate with previous reports highlighting persistent gaps in public awareness about various forms of hepatitis [15, 21].

HCV Screening Awareness and Behavior

Approximately 65% of participants reported being aware of HCV screening possibilities. However, a significantly lower proportion, only 18%, stated that they had ever undergone screening for HCV. Among those who had been screened, the predominant reasons cited were routine general health check-ups (55%) or a direct recommendation from a healthcare provider (38%). This observation strongly aligns with existing literature indicating that healthcare provider advice serves as a powerful catalyst for screening uptake [14].

Perceived Barriers to HCV Screening

Several prominent barriers to HCV screening were identified, as articulated by the social media users:

- Lack of perceived risk: The most frequently cited barrier, strongly agreed upon or agreed upon by 62% of respondents, was a lack of belief in personal susceptibility to HCV infection. This finding mirrors observations from other studies where individuals often do not feel personally vulnerable to the virus [22].
- Lack of awareness about where to get screened: A substantial 58% of participants reported a lack of clear information on where to access HCV screening services. This suggests a critical need for enhanced communication regarding accessible screening pathways and facilities [14].
- Fear of diagnosis and stigma: Apprehension concerning a positive diagnosis and the associated social stigma constituted significant concerns for 53% of the respondents. This barrier is well-documented in the context of other infectious diseases and necessitates sensitive and empathetic public health messaging [23, 24].
- Cost concerns: For 41% of participants, the perceived cost of screening acted as a deterrent, even with the existence of governmental programs and patient support initiatives [9]. This highlights potential financial barriers or a lack of public awareness regarding available affordable or subsidized options.
- Misinformation on social media: A notable 37% of participants indicated that encountering conflicting or inaccurate information on social media platforms contributed to their hesitation regarding screening or caused confusion about the virus itself. This finding critically underscores the dual nature of social media as both a tool for health promotion and a potential source of misleading information.

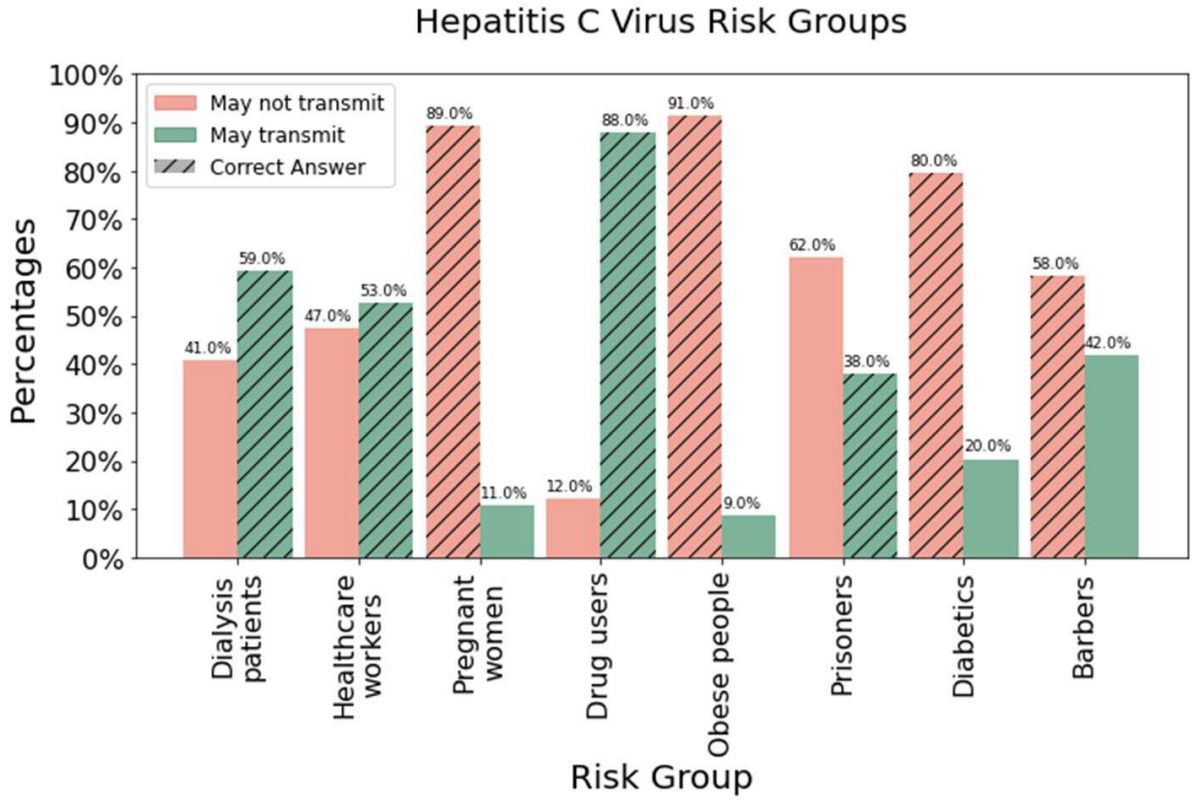
Associations with Screening Behavior

Logistic regression analysis unequivocally demonstrated that higher levels of HCV knowledge were significantly associated with a greater likelihood of having undergone screening (Odds Ratio [OR] = 2.15, 95% Confidence Interval [CI]: 1.78-2.59, $p < 0.001$). Similarly, participants who reported receiving a recommendation from a healthcare provider were significantly more likely to have been screened (OR = 3.42, 95% CI: 2.81-4.16, $p < 0.001$). Conversely, a higher perception of barriers such as fear of diagnosis (OR = 0.72, 95% CI: 0.60-0.86, $p < 0.001$) and lack of perceived risk (OR = 0.68, 95% CI: 0.57-0.81, $p < 0.001$) were significantly and negatively associated with screening uptake.

DISCUSSION

This study offers invaluable insights into the knowledge landscape and the multifaceted barriers hindering HCV

screening among social media users in the UAE, a demographic of paramount importance given the nation's exceptional digital penetration [16, 17]. The findings clearly indicate that while a baseline awareness of HCV exists, substantial knowledge gaps persist, particularly concerning the nuanced aspects of symptoms and the transformative direct-acting antiviral treatment options [15, 21]. This underscores an urgent requirement for meticulously targeted educational campaigns designed to specifically address these identified areas of informational deficit.



The strikingly low rate of self-reported HCV screening (only 18%) despite a relatively higher awareness of the availability of screening procedures vividly illustrates the powerful impact of various prevailing barriers. The most prominent barrier identified—a pervasive lack of perceived personal risk—represents a recurring challenge in public health campaigns for asymptomatic conditions [22]. Many individuals may not recognize their vulnerability until the onset of symptoms, by which time significant and often irreversible liver damage may have already occurred [1, 12]. Consequently, public health messaging must evolve to effectively communicate critical risk factors (e.g., historical blood transfusions predating widespread screening, intravenous drug use, unsafe medical procedures, and sexual transmission in specific high-risk populations [24, 25]) in a manner that resonates with the general populace without instigating undue alarm or distress.

The profound fear of diagnosis and the associated social stigma emerged as another significant deterrent to screening. This finding emphatically highlights the imperative of cultivating a supportive, non-judgmental, and confidential environment for both screening and subsequent treatment. Public awareness campaigns should extend beyond merely disseminating medical facts about HCV; they must actively strive to destigmatize the infection and robustly emphasize the remarkably high cure rates now achievable with contemporary treatments [3, 20]. The demonstrable success of large-scale HCV elimination campaigns in other nations, such as Egypt, provides compelling evidence for the efficacy of comprehensive, multi-pronged approaches that integrate education, widespread testing, and accessible treatment pathways [19, 25].

The influence of social media on health information consumption is undeniably profound. While these platforms undeniably present a potent channel for health promotion, the notable prevalence of misinformation reported by participants poses a formidable challenge. It is incumbent upon public health authorities and dedicated healthcare professionals to proactively and consistently engage on social media, actively disseminating accurate, evidence-based information and diligently countering the proliferation of false narratives. Strategic

partnerships with trusted social media influencers and credible community leaders could also significantly amplify the reach and enhance the perceived credibility of vital health messages.

Furthermore, the study's findings unequivocally reinforce the pivotal role played by healthcare providers in championing HCV screening [14]. A robust positive association was observed between a healthcare provider's recommendation and an individual's subsequent uptake of screening. This strongly suggests that ongoing education and specialized training programs for healthcare professionals across the UAE are not merely beneficial but essential. Such programs should ensure that providers are not only knowledgeable about HCV but also empowered and encouraged to proactively discuss screening with their patients, particularly those identified as being at higher risk.

Limitations

This study, while providing valuable insights, is subject to several limitations. First, the inherent reliance on self-reported data collected via an online survey may introduce potential response bias, where participants' answers might not always perfectly reflect their true knowledge or behaviors. Second, the sample was exclusively comprised of social media users, which means it may not be entirely representative of the broader UAE population, potentially excluding individuals with limited internet access or those who are not actively engaged on social media platforms. Therefore, the generalizability of these findings should be considered with appropriate caution. Finally, the cross-sectional design of the study precludes the establishment of definitive causal relationships between the assessed variables of knowledge, perceived barriers, and observed screening behavior.

CONCLUSION

Despite commendable efforts to combat Hepatitis C in the UAE, this study unequivocally reveals the persistence of significant knowledge deficits and formidable barriers to screening among the nation's social media users. A pervasive lack of perceived personal risk, profound fear of diagnosis and its associated stigma, and the insidious influence of misinformation propagated across social media platforms represent critical challenges that demand immediate and concerted attention. To accelerate meaningful progress towards HCV elimination in the UAE, a multi-faceted and integrated set of interventions is imperatively required. These interventions must encompass targeted, culturally sensitive educational campaigns that skillfully leverage social media to disseminate accurate, evidence-based information and robustly counteract the spread of misinformation. Concurrently, dedicated efforts are needed to dismantle the stigma associated with the disease. Furthermore, empowering healthcare providers to proactively recommend screening and ensuring clearly articulated, accessible pathways for screening are crucial foundational steps. By strategically addressing these identified knowledge deficits and systematically dismantling the existing barriers, the UAE can substantially enhance its HCV screening rates and decisively advance closer to achieving its ambitious elimination goals.

REFERENCES

Manns MP, Buti M, Gane E, Pawlotsky J-M, Razavi H, Terrault N et al. Hepatitis C virus infection. Nat Rev Dis Primers. 2017;3:17006.

Pimpin L, Cortez-Pinto H, Negro F, Corbould E, Lazarus J-V, Webber L et al. Burden of liver disease in Europe: Epidemiology and analysis of risk factors to identify prevention policies. J Hepatol. 2018;69(3):718–735.

Douglass CH, Pedrana A, Lazarus JV, 't Hoen EFM, Hammad R, Leite RB et al. Pathways to ensure universal and affordable access to hepatitis C treatment. BMC Med. 2018;16(1):175.

World Health Organization. Global progress report on HIV, viral hepatitis and sexually transmitted infections, 2021. Geneva: World Health Organization. 2021. ISBN 978-92-4-002707-7.

Thomas DL. Global Elimination of Chronic Hepatitis. N Engl J Med. 2019;380(21):2041–2050.

Mohamoud YA, Riome S, Abu-Raddad LJ. Epidemiology of hepatitis C virus in the Arabian Gulf countries: Systematic review and meta-analysis of prevalence. Int J Infect Dis. 2016;46:116–125.

Chaabna K, Cheema S, Abraham A, Alrouh H, Lowenfels AB, Maisonneuve P et al. Systematic overview of hepatitis C infection in the Middle East and North Africa. World J Gastroenterol. 2018;24(27):3038–3054.

Underwood M. Rules relaxed on workers' health checks. The UAE Today. 2010. Available from https://www.thenationalnews.com/uae/health/rules-relaxed-on-workers-health-checks-1.489315.

Dubai Health Authority. Hepatitis C Patient Support Program. Dubai: Dubai Health Authority. 2018;6.

Blach S, Sanai FM. HCV Burden and Barriers to Elimination in the Middle East. Clin Liver Dis (Hoboken). 2019;14(6):224–227.

World Health Organization. Global Hepatitis Report, 2017. Geneva: World Health Organization. 2017. ISBN 978-92-4-156545-5.

Bonkovsky HL, Mehta S. Hepatitis C: a review and

update. J Am Acad Dermatol. 2001;44(2):159–182.

Memon MI, Memon MA. Hepatitis C: an epidemiological review. J Viral Hepat. 2002;9(2):84–100.

Shehata N, Austin T, Ha S, Timmerman K. Barriers to and facilitators of hepatitis C virus screening and testing: A scoping review. Can Commun Dis Rep. 2018;44(7-8):166–172.

Ha S, Timmerman K. Awareness and knowledge of hepatitis C among health care providers and the public: A scoping review. Can Commun Dis Rep. 2018;44(7-8):157–165.

United Arab Emirates Ministry of Cabinet Affairs. Population of UAE. Federal Competitiveness and Statistics Centre. 2020. Available from https://fcsc.gov.ae/en-us/Pages/Statistics/Statistics-by-Subject.aspx#/%3Fyear=&folder=Demography%20and%20Social/Population/Population&subject=Demography%20and%20Social.

GMI. United Arab Emirates Population Statistics 2021: Global Media Insight Web Design and Development. 2021. Available from https://www.globalmediainsight.com/blog/uae-population-statistics/#vs.

Samara KA, Barqawi HJ, Aboelsoud BH, AlZaabi MA, Alraddawi FT, Mannaa AA. Hepatitis A virus knowledge and immunization attitudes and practices in the United Arab Emirates community. Sci Rep. 2021;11(1):2651.

Amer FA. Large-scale hepatitis C combating campaigns in Egypt and Georgia; past, current and future challenges. J Infect Dev Ctries. 2018;12(6):404–414.

Hill AM, Nath S, Simmons B. The road to elimination of hepatitis C: analysis of cures versus new infections in 91 countries. J Virus Erad. 2017;3(3):117–123.

Crutzen R, Göritz AS. Public awareness and practical knowledge regarding Hepatitis A, B, and C: a two-country survey. J Infect Public Health. 2012;5(2):195–198.

Doab A, Treloar C, Dore GJ. Knowledge and attitudes about treatment for hepatitis C virus infection and barriers to treatment among current injection drug users in Australia. Clin Infect Dis. 2005;40 Suppl 5:S313–320.