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Assessment of Knowledge, Attitude, and Practice among Saudi Residents Regarding Hepatitis E Virus

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Abstract. Global data, including those from Saudi Arabia, that examined public knowledge, attitudes, and practices (KAP) toward hepatitis E virus (HEV) are limited. This study examined KAP levels of the general population in Saudi Arabia toward HEV. A cross-sectional study was conducted among 768 participants. An Arabic electronic questionnaire that contained demographic data and had 35 questions was used to measure KAP of the participants concerning HEV. Collected data were analyzed at a significance level of 0.05. A total of 768 individuals participated in the study, of whom 16.3% ($N = 125$) were males and 83.7% ($N = 643$) were females. Study subjects were 18 years and above. Most of the participants were Saudi citizens (95.6%; $N = 734$), and from Western Saudi Arabia (76.4%; $N = 587$). Thirty-four percent ($N = 261$) of the participants had not heard of HEV, and 48% were aware that yellowish skin or eyes are the most important sign of hepatitis. The level of participants' knowledge about HEV was low (39.5%). However, positive attitudes and practices were apparent and tended to aim at how to avoid becoming infected with HEV. In conclusion, the level of HEV-related knowledge among the participants was low, and their practices and attitudes were aimed at avoiding HEV infection. Awareness campaigns are required to increase the public's HEV-related knowledge.

INTRODUCTION

Viral hepatitis involves inflammation of the liver and is a significant public health problem. Hepatitis E virus (HEV) is one of the world's leading causes of acute viral hepatitis and accounts for 20 million infections and approximately 44,000 deaths each year.[1,2] HEV is classified into eight major genotypes with four genotypes implicated in most cases. HEV genotypes-1 and 2 (HEV-1 and -2, respectively) infect only humans and are transmitted via the fecal–oral route.[1,3–5] HEV-3 and -4 are zoonotic genotypes that are contracted by humans through consumption of undercooked pork and boar meat.[6] The primary transmission of the virus is through water and food, particularly when they are contaminated with fecal matter.[7] HEV usually causes self-limiting acute hepatitis in healthy adults and rarely causes chronic hepatitis in immunocompromised individuals.[1] The main risk group for HEV infection and its resulting complications include elderly males, pregnant women, immunocompromised patients, and patients with preexisting liver disease.[8] Preventative measures, such as vaccination and improved general knowledge, are imperative for eradicating and preventing epidemics of communicable diseases, including HEV.[9–11]

For the past 20 years, HEV infection has been considered an imported disease in developed countries, and the incidence of confirmed cases in high-income countries has been progressively rising in recent times.[12,13] Worldwide data, including those from Saudi Arabia, that has examined public knowledge, attitudes, and practices (KAP) toward HEV are limited. In this regard, most of the studies available in the literature regarding fecal–oral hepatitis transmission address hepatitis A virus (HAV); HAV shares the same transmission and prevention measures as HEV. In this regard, a study was conducted in Pakistan and assessed KAP toward hepatitis. That study showed a significant correlation between knowledge and practice while correlations between attitude and practice or knowledge were weak. The authors also reported that the level of the disease knowledge of even well-educated patients regarding disease transmission and complication was poor.[14] A recent HEV study was conducted in France among pig farmers and veterinarians in which it was reported that 77.8% of the pig farmers and 8.7% of the veterinarians had never heard about HEV.[15] The lack of HEV knowledge and its transmission was also reported in a pervious study from the United Kingdom.[16] In summary, data measuring the public KAP regarding HEV are scarce, both globally and locally in Saudi Arabia. Therefore, this study was conducted to assess KAP among Saudi residents regarding HEV infection.

METHODS

Study settings and participants. This study was a descriptive cross-sectional study conducted among Saudi residents who were conveniently invited to participate in this study. The study was conducted from December 2020 to February 2021. Participants who were above 18 and lived in the Kingdom of Saudi Arabia (KSA) were included in the study, whereas children and those living in other countries were excluded from the study. The study protocol was approved by the local ethics committee.

Sample size calculation. The sample size was calculated by sample size equation: $\boldsymbol{n = z^2 \times p\ (1-p)/e^2}$ in which $\boldsymbol{n}$ is the sample size, $\boldsymbol{z}$ is the z-score associated with a level of confidence, $\boldsymbol{p}$ is the sample proportion expressed as a decimal, and $\boldsymbol{e}$ is the margin of error expressed as a decimal. The calculated sample size was 383 participants. Data were collected from 768 residents of Saudi Arabia (citizens and foreigners), including men and women 18 years or older, who were willing to volunteer and participate in the study.

Study tool and measures. The study tool was an online self-administered questionnaire designed after consulting

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previously published literature. The questionnaire contained demographic data in addition to 35 questions that assessed the KAP of the Saudi population toward HEV. The questionnaire was prepared in English, translated into Arabic, and uploaded on Google forms for implementation of the survey. The questionnaire consisted of four sections that are described below:

Section 1: *Demographic Questions.* Participants were asked to indicate their age, marital status, and the highest attained education level.

Section 2: *Knowledge Assessment Questions.* This section contained 20 questions assessing the knowledge and beliefs of the participants toward HEV infection. The knowledge questions were scored using one point for correct answer and zero for incorrect answer. The percentage of those having the correct answer was used to calculate the knowledge score for the study participants.

Section 3: *Attitude Assessment Questions*. This section contained five questions assessing the attitudes of the participants toward HEV infection.

Section 4: *Practice Assessment Questions.* This section contained 10 questions assessing the practices of participants aimed at preventing HEV infection.

Statistical analysis. Statistical analyses were performed using the Statistical Package for Social Sciences, (IBM Corporation, NY), version 22. Descriptive statistics were generated for the responses, and correlation coefficients were used to describe relationships between two continuous variables. For independent variables, a χ^2 test (or Fisher's exact test) was used to compare categorical variables. A P value of < 0.05 was considered significant.

RESULTS

Demographic characteristics of the study participants. A total of 768 participants successfully completed the online questionnaire, and the responses were saved on a Google drive in a password protected manner. Baseline demographic characteristics of the respondents are shown in Table 1. As shown, most of the participants were females ($N = 643$; 83.7%). The age of the participants ranged from 18 to $>$ 60 years. Because of the small numbers of participants who were older than 60 years, they were merged with the group consisting of 51- to 60-year-old people. Both groups were included in a single group ($>$ 50 years) and analyzed as such. In this regard, exactly half of the participants (384; 50%) had ages ranging from 18 to 30 years whereas 88 (11.5%) were aged $>$ 50 years. On the other hand, most of the participants were Saudi citizens ($N = 734$; 95.6%) and were residents of the western region of Saudi Arabia ($N = 587$; 76.4%). In addition, more than half of the participants were married ($N = 411$; 53.5%) and most of them had a college degree ($N = 572$; 74.5%; Table 1).

TABLE 1
Baseline demographic characteristics of the respondents

Demographic characteristics		Frequencies, *n* (%)
Gender	Male	125 (16.3)
	Female	643 (83.7)
Age (years)	18–30	384 (50)
	31–40	160 (20.8)
	41–50	136 (17.7)
	$>$ 50	88 (11.5)
Nationality	Saudi	734 (95.6)
	Non-Saudi	34 (4.4)
District of residence	Eastern Saudi Arabia	26 (3.4)
	Western Saudi Arabia	587 (76.4)
	Central Saudi Arabia	76 (9.9)
	Northern Saudi Arabia	13 (1.7)
	Southern Saudi Arabia	66 (8.6)
Education level	University	572 (74.5)
	Other*	16 (2.6)
Marital status	Married	411 (53.5)
	Unmarried	339 (44.1)
	Divorced or widow	18 (2.4)

* Others include none/primary, middle, high school, and other degrees, e.g., diploma, master's, or PhD degree.

Assessment of the HEV knowledge of study participants. The knowledge questions were scored as one point for the correct answer and zero for the incorrect answer. The percentages of those correctly answering the knowledge questions are shown in Table 2. As shown, 66% of the participants had heard about HEV, and 82% of them knew that hepatitis is an inflammation of the liver while 54% of them knew that HEV infection is viral in nature. Also, 68% of the participants knew that HEV can cause serious hepatitis, and 41% knew that personal hygiene can prevent HEV infection. In addition, half of the participants believed that HEV infection can cause death of the infected subject, whereas only 29% knew that a blood test is necessary for confirming HEV infection. Moreover, 68% of the participants knew that HEV can be prevented, and less than half of them knew a vaccine for HEV is available (29%).

Furthermore, less than 10% of the participants knew that individuals are not screened for HEV before donating blood and that using sterile needles for injections does not prevent HEV infection. On the other hand, acceptable percentages of knowledge regarding the curability of HEV (53%) and poor knowledge about its mode of transmission (22%) were found. In summary, the overall mean knowledge score was 39.5%.

As shown in Table 2, the knowledge of the study participants regarding HEV was low (39.5%). In this regard, inferential analysis shown in Table 2 revealed that participant knowledge about the viral cause of HEV was associated with the gender of the participants ($P = 0.043$), education level ($P = 0.036$), and marital status ($P < 0.001$) for which young participants (18–30 years) and those with a high level of education tended to respond correctly. Also, the knowledge about personal hygiene regarding prevention of HEV was highly associated with gender ($P = 0.004$) and with the age group of the participants ($P < 0.001$). In addition, the knowledge regarding vaccination against HEV was below average in which only 29% of the participants properly answered the questions for vaccination of HEV. This result was not significantly associated with age of the participants ($P = 0.201$) or marital status ($P = 0.476$) but was significantly associated with gender of the participants ($P = 0.007$). Regarding HEV treatment, the participants showed moderate knowledge that HEV is treatable as 41.1% answered yes to this question. This aspect was highly associated with gender ($P = 0.001$) but not associated with age, education, or marital status ($P > 0.05$). Most of the participants had poor knowledge regarding the necessity of blood screening for HEV before donation (3.4%) and that the use of sterile needles

TABLE 2
Assessment of the knowledge about HEV

Section	Response, N (%)			Correct answer, *n* (%)	*P* value			
	Yes	No	I don't know		Gender	Age group	Education group	Marital status
Have you heard about HEV?	507 (66%)	261 (34%)	0 (0.0)	507 (66%)	0.005†	0.340	0.184	0.005†
Hepatitis is an inflammation of the liver?	630 (82%)	9 (1.2%)	129 (16.8%)	630 (82%)	< 0.001†	0.082	0.098	0.045*
Hepatitis E is caused by a virus?	416 (54.2%)	42 (5.5%)	310 (40.4%)	416 (54.2%)	0.043*	0.050	0.036*	< 0.001†
Hepatitis E is a contiguous disease?	341 (44.4%)	160 (20.8%)	267 (34.8%)	341 (44.4%)	< 0.001†	< 0.001†	0.586	0.004†
Hepatitis E makes the skin and eyes go yellow?	369 (48%)	32 (4.2%)	367 (47.8%)	369 (48%)	0.395	0.010*	0.673	0.050
Hepatitis E can cause serious liver disease?	524 (68.2%)	10 (1.3%)	234 (30.5%)	524 (68.2%)	0.019*	0.095	0.199	< 0.001†
Hepatitis E can cause cirrhosis?	458 (59.6%)	17 (2.2%)	293 (38.2%)	17 (2.2%)	0.107	0.115	0.410	0.025*
Hepatitis E can cause death?	390 (50.8%)	31 (4%)	347 (45.2%)	390 (50.8%)	0.020*	0.214	0.553	0.229
A blood test is the only way for making sure to know if you have hepatitis E?	223 (29%)	147 (19.1%)	398 (51.8%)	233 (29%)	0.004†	0.041*	0.036*	0.009†
HEV can be detected in other body fluids?	218 (28.4%)	65 (8.5%)	485 (63.2%)	65 (8.5%)	0.127	0.335	0.086	0.965
Blood should be screened for HEV before blood transfusion/donation?	588 (76.6%)	26 (3.4%)	154 (20.1%)	26 (3.4%)	0.192	0.003†	0.650	0.682
Infection with HEV can be prevented?	522 (68%)	21 (2.7%)	225 (29.3%)	522 (68%)	0.108	0.382	0.016*	0.033*
Clean and cooking food thoroughly can prevent HEV?	345 (44.9%)	88 (11.5%)	335 (43.6%)	345 (44.9%)	0.038*	0.768	0.930	0.371
Personal hygiene can prevent HEV?	315 (41%)	133 (17.3%)	320 (41.7%)	315 (41%)	0.004†	< 0.001†	0.558	0.244
Using sterile needles for injection can prevent infection with HEV?	357 (46.5%)	65 (8.5%)	346 (45.1%)	65 (8.5%)	0.661	0.001†	0.205	0.026*
Hepatitis E can be transmitted from the mother to the fetus?	189 (24.6%)	94 (12.2%)	485 (63.2%)	189 (24.6%)	0.055	0.203	0.259	0.030*
Hepatitis E can be transmitted by eating food prepared by an infected person?	169 (22%)	195 (25.4%)	404 (52.6%)	169 (22%)	0.074	0.629	0.815	0.057
Is HEV curable?	412 (53.6%)	37 (4.8%)	319 (41.5%)	412 (53.6%)	0.127	0.261	0.129	0.996
Is there a vaccine for hepatitis E?	223 (29%)	85 (11.1%)	460 (59.9%)	223 (29%)	0.007†	0.201	0.831	0.476
Is there an available treatment of hepatitis E?	316 (41.1%)	50 (6.5%)	402 (52.3)	316 (41.1%)	0.001†	0.098	0.732	0.662
Average				**303.7 (39.5%)**				

HEV = hepatitis E virus.
* Significant.
† Highly significant.

does not prevent HEV infection (8.5%). Both responses were highly significantly associated with the age of the participants ($P < 0.001$; Table 2).

Assessment of participants' attitudes toward HEV. Table 3 shows the respondents' attitudes toward HEV. As shown, 36.9% of the participants had no objections to dealing with someone who has an HEV infection. This attitude had no significant association with gender or education level ($P > 0.05$). However, this response was significantly associated with age and marital status ($P = 0.001$ and 0.006, respectively). Also, ~75% of the participants strongly disagreed/disagreed to share their personal tools with others. This finding was significantly associated with age and marital status ($P < 0.001$ each). More than half of the participants (54%) strongly agreed/agreed that people with HEV should not work in restaurants or coffee shops; this finding was not significantly associated with gender ($P = 0.692$) but was significantly associated with age, marital status, and education level ($P < 0.001$; Table 3). Also, most of the participants (81.3%) strongly disagreed/disagreed with the idea of allowing persons with HEV infection to donate blood, a response that was not significantly associated with either marital status ($P = 0.462$) or educational level ($P = 0.107$). However, this response was highly associated with age and gender ($P < 0.001$) of the study participants (Table 3). On the other hand, only 10.8% of the participants strongly agreed/agreed that it is safe to have a meal with an HEV patient, a finding that was not significantly associated with gender, age, educational level, or marital status ($P > 0.05$; Table 3). Taken together, the above data suggest that the participants express attitudes that are aimed at avoiding HEV infections.

Assessment of study participants' practices toward HEV. Ten questions to assess practices related to HEV infection among the participants were found on the questionnaire (Table 4). As shown in the question asking about cooking food at an appropriate temperature for an appropriate time, 83.2% of the participants chose "always/usually" ($N = 639$). The choice of this answer was significantly associated with age ($P = 0.023$), education level ($P = 0.017$), and marital status ($P = 0.024$). Also, most of the participants chose "never/rarely" when answering the question "I eat raw beef" and "I drink raw milk of cow or goat" with a frequency of 732 (95.3%) and 636 (82.8%), respectively. In this regard, this answer was highly associated with the gender of the participants and eating raw beef or drinking raw milk ($P < 0.001$; Table 4). In addition, a significant difference in the question regarding avoidance of eating from street vendor food due to the fear of infection was found for which almost half of the participants chose I always/usually do not eat vendor food. This response was significantly associated with age and marital status of the participants ($P < 0.001$ each). On the other hand, 266 (34.6%) of the participants chose "always/usually" when asked about sharing dinnerware with strangers with respect to fear of infection (Table 4). This answer was significantly associated with gender, age, and marital status ($P = 0038$, 0.002, and 0.007, respectively). Moreover, a significant association between both marital status and age with respect to the question asking

TABLE 3
Assessment of the attitude of the study participants regarding HEV

Section	Response, *N* (%)					*P* value			
	Strongly agree	Agree	Natural	disagree	Strongly disagree	Gender	Age	Education	Marital status
I don't mind dealing with an HEV infected person.	79 (10.3%)	204 (26.6%)	300 (39.1%)	126 (16.4%)	59 (7.7%)	0.088	0.001*	0.377	0.006*
I don't mind sharing my personal tools with others.	31 (4%)	54 (7%)	104 (13.5%)	208 (27.1%)	371 (48.3%)	0.202	< 0.001*	0.050	< 0.001*
HEV infected people should not be working in restaurants or coffee shops.	256 (33.3%)	159 (20.7%)	230 (29.9%)	62 (8.1%)	61 (7.9%)	0.692	< 0.001*	< 0.001*	< 0.001*
HEV infected person should be allowed to donate blood.	9 (1.2%)	19 (2.5%)	116 (15.1%)	240 (31.3%)	384 (50%)	< 0.001*	< 0.001*	0.107	0.462
It is safe to have a meal with HEV patient.	21 (2.7%)	62 (8.1%)	278 (36.2%)	225 (29.3%)	182 (23.7%)	0.834	0.458	0.324	0.507

HEV = hepatitis E virus.
* Highly significant.

about eating on restaurant dinnerware and asking for the single-use plastic ones ($P = 0.026$ and 0.034, respectively) for which only about a quarter of the participants answered always/usually for this question. Furthermore, 666 (86.7%) of the participants in Saudi Arabia selected "never/rarely" when asked about sharing their personal items (clothes, towels, toothbrushes, and earphones) with others. This answer was significantly associated with marital status and age ($P = 0.002$ and 0.001, respectively). On the other hand, 394 (51.3%) participants chose "never/rarely" when answering the questions "I avoid shaking hands or sitting next to a person infected with HEV." This response was significantly associated with gender and age ($P = 0.024$ and 0.047, respectively). In addition, 302 (39.3%) of the participants selected "always/usually" for the question about sterilizing their personal tools with a sterilizer after use. This answer was not significantly associated with gender, age, education level, or marital status ($P > 0.05$). Finally, 703 (91.5%) of the

TABLE 4
Assessment of the practices of the study participants associated with HEV

Section	Response, *N* (%)					*P* value			
	Always	Usually	Sometimes	Rarely	Never	Gender	Age	Education	Marital status
I cook food in an appropriate temperature for an appropriate time.	481 (62.6%)	158 (20.6%)	100 (13%)	25 (3.3%)	4 (0.5%)	0.225	0.023*	0.017*	0.024*
I eat raw beef.	4 (0.5%)	3 (0.4%)	29 (3.8%)	37 (4.8%)	695 (90.5%)	< 0.001†	0.256	0.366	0.467
I drink raw milk of cow or goat.	25 (3.3%)	20 (2.6%)	87 (11.3%)	127 (16.5%)	509 (66.3%)	< 0.001†	0.066	0.392	0.172
I avoid eating from street vendors' food for fear of infection.	259 (33.7%)	123 (16%)	236 (30.7%)	96 (12.5%)	54 (7%)	0.075	< 0.001†	0.552	< 0.001†
I don't share dinnerware with others for fear of infection.	157 (20.4%)	109 (14.2%)	244 (31.8%)	120 (15.6%)	138 (18%)	0.038*	0.002†	0.144	0.007†
I don't eat in restaurants dinnerware and I ask for the single use ones.	96 (12.5%)	91 (11.8%)	242 (31.5%)	165 (21.5%)	174 (22.7%)	0.089	0.034*	0.128	0.026*
I share my personal items (my clothes, my towel, my toothbrush, earphones) with others.	15 (2%)	19 (2.5%)	68 (8.9%)	103 (13.4%)	563 (73.3%)	0.504	0.001†	0.845	0.002†
I avoid shaking or sitting next to a person infected with HEV.	138 (18%)	78 (10.2%)	158 (20.6%)	167 (21.7%)	227 (29.6%)	0.024*	0.047*	0.502	0.060*
I sterilize my personal tools with sterilizer after use.	200 (26%)	102 (13.3%)	228 (29.7%)	153 (19.9%)	85 (11.1%)	0.847	0.436	0.158	0.381
I use clean water supply.	616 (80.2%)	87 (11.3%)	40 (5.2%)	9 (1.2%)	16 (2.1%)	0.001†	0.024*	0.381	0.146

HEV = hepatitis E virus.
* Significant.
† Highly significant.

participants reported that they "always/usually" use a clean water supply. This response was significantly associated with age ($P = 0.024$) and highly significant with gender ($P = 0.001$). The data shown above suggest that most of the participants' practices tended to aim at preventing HEV infection.

DISCUSSION

The current study was conducted from December 2020 to February 2021 with subjects from the general population of Saudi Arabia to assess the KAP of the Saudi Arabian residents toward HEV. A total of 768 individuals participated in the study. HEV knowledge of the KSA residents was low (39.5%). Also, the practices and attitudes of the participants were aimed at avoiding HEV infection. Several findings of this study warrant further discussion. In this regard, there is almost no data in the literature examining the KAP about HEV among the general populations. A recent search of the literature found only one study that examined HEV knowledge among only one hundred subjects in Pakistan.[17] That study[17] showed that apprehensive HEV knowledge is found only in a minority of the participants. Consequently, many of the comparisons referred to HAV-related studies since they share the same transmission and prevention measures.

About 54.2% of our participants knew that HEV is caused by a virus. In this regard, a study among patients visiting a hepatitis clinic in a tertiary care hospital in Rawalpindi, Pakistan,[14] found that only 15.3% of the participants knew that hepatitis is a viral disease, which is much lower than our findings. However, our study assessed the KAP specifically about HEV and that study[14] was for all types of viral hepatitis.

The knowledge about HEV prevention in our study was above average (68%); however, less than half of the participants knew that personal hygiene is effective in preventing HEV (41%). In this regard, a study among Puerto Rican adults found that 86.3% of the total participants ($N = 710$) recognized the importance of good sanitation and personal hygiene in preventing HAV,[18] which is very similar in its route of transmission to HEV. That study[18] supports our result as HEV and HAV spread via the same route of transmission and, thus in turn, have the same preventive measures.

Awareness of HEV vaccination in our study was low (29%). In a study among Puerto Rican adults that examined the knowledge regarding HAV vaccination, it was found that one-half (50.7%) of the participants knew that HAV can be prevented by a vaccine.[18] Regarding HEV curability, 412 (53.6%) of our participants believed that it is curable. Results from a study conducted among patients visiting a hepatitis clinic in a tertiary care hospital in Rawalpindi, Pakistan, in which they found that 48% of the participants indicated that viral hepatitis is curable coincides with our study results.[14]

Regarding our study participants' attitudes toward HEV, it was found that 36.9% of them strongly agreed/agreed that they were willing to deal with someone who has an HEV infection. In this regard, a recent study showed that 308 (77.2%) of the participants feel confident about dealing with hepatitis-infected patients.[14] More than half of the participants (54%) in our study strongly agreed/agreed that people with HEV infection should not work in restaurants and cafeterias. This response was significantly associated with age ($P < 0.001$), education, and marital status, and these results agree with a study that surveyed dentists showing that 32 (78%) of them agreed that people with viral hepatitis should not work in restaurants and cafeterias.[19]

Another finding from our study indicated that 48.3% of the participants strongly disagreed with the statement "I don't mind sharing my personal tools with others"; this finding presents a good attitude toward avoiding the spread of infectious diseases, including HEV. Also, we found that 50% of the participants strongly disagreed with the statement "An HEV-infected person should be allowed to donate blood," a finding that indicates a negative attitude since HEV is not routinely transmitted via blood transfusion.

Participants in our study correctly believed that it was wise to avoid eating food from street vendors because of fear of infections in which 382 (49.7%) chose "always" and "usually" for that question. These responses were significantly associated with the age and marital status of the participants ($P < 0.001$). On the other hand, the percentage of participants who chose "always" and "usually" in response to sharing personal items (clothes, towels, toothbrush, and earphones) with others was 34 (4.5%), "never" was 563 (73.3%), and "rarely" was 103 (13.4%). This result shows a good positive practice among the participants toward HEV. Also, in our study, only 227 (29.6%) participants did not mind shaking hands with an HEV-infected subject. This practice is considered bad because HEV is rarely transmitted by shaking hands although only a small percentage avoided shaking hands with anyone.

Although this study provided important information regarding KAP toward HEV, it has several limitations. These limitations include questionnaire-based limitations in the data collection, such as refusal to participate in the study, which was expected to happen. Also, the study was an internet-based survey and consequently older people, illiterate people, and individuals who did not have access to social media did not participate. In addition, the study was planned for the four districts of KSA, but most of the participants were from one district (western region); therefore, the results of the research may not represent the entire population of Saudi Arabia.

SUMMARY AND CONCLUSIONS

The literature examining the KAP of Saudi Arabian residents about HEV is limited. Accordingly, we assessed the KAP among Saudi Arabian residents toward HEV. We found that the level of knowledge regarding HEV is low (39.5%) among KSA residents. The practices and attitudes were aimed at avoiding HEV infection. Therefore, we suggest increasing the knowledge about HEV by conducting awareness campaigns to improve the general public's literacy toward HEV. Planning for a nationwide study examining KAP of the entire classes representing the society in KSA, especially for illiterate people, non-Saudi nationals, and elderly subgroups of the society, is recommended.

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