Public Perceptions and Commitment to Social Distancing during COVID-19 Pandemic: A National Survey in Saudi Arabia

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Abstract

Objectives: Social distancing measures are currently implemented to control COVID-19 pandemic in many countries, including Saudi Arabia. The aim of this study was therefore to evaluate the awareness and adherence of the Saudi population to these measures.

Methods: A web-based questionnaire was designed with 16 questions (8 questions related to demographics, 3 in relation to awareness about social distancing and 5 related to overall practice of social distancing).

Results: 5105 participants completed the survey [58.4% female, 66.3% young individuals (aged 18-37 years), 55.8% bachelor degree holders, and 51.0% from the western region]. The Saudi Ministry of Health (MOH) was the main source of information about COVID-19 for most participants (78.2%). High awareness (81.3%) regarding social distancing was observed, associated mainly with female participants, those from the middle region and those with high education and income. Overall implementation of social distancing was satisfactory (score 3.13/5), with 37.8% never leaving home during the home-stay period. Better adherence to social distancing was observed for female participants, higher degree holders and those aged over 38 years.

Conclusions: Organised plans by the Saudi MOH have been effective in raising awareness and improving practice of social distancing among public. However, the observed lower practice of social distancing by individuals with lower education and income indicates the need for targeted interventions to achieve better outcome.

Keywords: COVID-19, SARS-CoV2, Public Awareness, Public Practice, Social Distancing and Saudi Arabia

Introduction

In late December 2019, a novel strain of coronavirus emerged, which was first reported as a national outbreak in Wuhan, china [1,2]. Subsequently, this disease was designated as coronavirus disease 2019 (COVID-19), which is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) [3]. The wide spread of the disease since then led the WHO to announce COVID-19 as a pandemic on March 11th, 2020 [4]. To date (May 11th, 2020), SARS-CoV-2 has led to over 4 million cases and 285000 deaths globally [5]. In addition to the lack of effective vaccines or treatments, SARS-CoV-2 has high infectivity even before the onset of symptoms, which can take up to 14 days to manifest [2,6], during which transmission is possible [1,2,7]. Consequently, this pandemic has been announced as a high concern for health with the very challenging task to contain its worldwide spread [1,8]. Currently, health authorities are left only with preventive measures to tackle the spread of the pandemic [1,9].

A few measures, such as social distance, self-isolation, home-isolation and self-quarantine, have been introduced as feasible precautionary steps that can be implemented to limit, delay or flatten the reproduction rate (R0) of the SARS-CoV-2 [7,10]. These terms have showed up more frequently in the media and various scientific publications [11,12,13]. The exact definition of such terms overlap as they generally share similar meanings, which can emphasise physical separation or distance between healthy people and individuals with confirmed or suspected infection [2,7,9]. Social distancing measures were used in the past to combat the spread of other viral and bacterial contagions, including the Plague and severe acute respiratory syndrome (SARS) [14]. Implementing these measures and precautions in the current SARS-CoV-2 pandemic has proven its effectiveness in controlling or containing this infection in China and other far eastern countries [7].

Even before the first confirmed case of COVID-19 in the Kingdom of Saudi Arabia (KSA), the national authority closed shopping centres and suspended flights, face-to-face education and physical attendance at most governmental agencies as preventive steps [6]. Further precaution was followed by suspending prayers at mosques and implementing a lockdown in cities with numbers of cases [6,15]. This aimed to limit population mobility and minimise social gatherings in order to control transmission. Nevertheless, up to date (May 11th, 2020) statistics reported over 41000 cases and 255 deaths in KSA and the numbers continue to rise [16]. Therefore, in order to confirm whether preventive steps have been

successfully implemented in KSA, evaluation of overall understanding and adherence of the general public to physical separation should be conducted. Likewise, it is crucial to ensure that the public access information about preventive measures from well-trusted agencies. Hence, the aim of the current study was to evaluate awareness and practice of the Saudi population in relation to social distancing (home-staying).

Methods

Study design and setting

A cross-sectional, observational study was conducted to evaluate overall awareness and adherence of the Saudi population to social distancing to control the spread of COVID-19. A survey tool was written in Arabic, the mother tongue of the target population, and was built using an online survey forms. To ensure a wide distribution, dissemination to the target participants was carried out using various social media (Twitter, WhatsApp and Snapchat) between March 25th and April 17th, 2020. The questionnaire included introductory information to inform participants about the purpose of the study and consent information to ensure voluntary participation in the study while ensuring confidentiality of personal data. Participants under 18 years were excluded from this study.

The questionnaire was created according to novel coronavirus (2019-nCoV) infection guidelines [17]. To ensure the accuracy of collected information, multiple choice and close-ended questions were used in this study. Validation of the questionnaire were conducted by five multidisciplinary experts to suit the target participants. The resulting pre-final survey was piloted with 20 individuals from the general population from different age groups and genders to address any ambiguity in the questions and assess the extent to which these questions are related to the objectives of this study. The questionnaire was then edited based on the collected feedback, which was used to prepare a final version for the study.

Measurement

The final questionnaire contained 16 questions, allocated to three sections. The first covered the demographics of the participants (age, gender, monthly income, education level, marital status, occupation and geographical region of residence). The second covered their main sources of information about COVID-19 (the MOH, the WHO, friends and relatives or social media), their understanding of who should stay at home during the pandemic (the elderly, children, symptomatic people or the whole population), as well as their beliefs about the possibility of asymptomatic transmission. The final section comprised of five questions (Supplement 1) about practice of participants in relation to social distancing. This included questions about the reasons for going out (work, buying necessities, purchasing a meal or entertainment), time spent out (days per week and hours per days), and practices when leaving the home (whether they leave alone or with others).

112 **Scoring system and statistical analysis**

113 Responses provided by participants to each question were given designated scores; one
114 point [1] for the most appropriate answer and no points [0] for the least appropriate or
115 uncertain (I do not know) responses (Supplement 1). Collected responses to the questions
116 intended to measure adherence to the home-stay strategy were scored as a quarter [0.25], half
117 [0.5] or one [1] point for responses of two hours spent outside, less than one hour outside or
118 never leaving the home, respectively. All statistical analyses were performed using SPSS
119 software version 25.0 (IBM Corp, Armonk, NY). The numbers of participants, their
120 percentages, the mean, standard deviation (SD) and the median in relation to variables
121 describing knowledge and practices were assessed using descriptive analysis. Overall scores
122 related to practices were analysed based on demographic characteristics using a one-way
123 analysis of variance (ANOVA) and independent sample *t*-test for normally distributed data,
124 while Kruskal-Wallis and Mann-Whitney tests were used for non-parametric analysis [18].
125 Questions testing knowledge were analysed using Chi-square or Fisher's Exact Test to find
126 out if there are significant differences between responses in relation to demographic
127 characteristics.

128 Multivariable linear regression was used to identify factors associated with overall
129 scores describing practices, which were determined using the stepwise method. To quantify
130 the relationship between variables, odds ratios (ORs), unstandardized regression coefficients
131 and 95% confidence intervals (CIs) were calculated. Statistical significance was defined by a
132 *p*-value below 0.05. The maximum score assigned to individuals with perfect adherence to
133 the home-stay strategy was 5. Cronbach's alpha coefficient of the questionnaire (five
134 question for practice) was 0.81, indicating very good internal consistency between questions.

Results

Demographic characteristics of participants

A total of 5105 participants completed the survey, out of whom 58.4% were female, and most were young individuals (29.4% and 36.9% from age groups 18-27 and 28-37 years, respectively) and married (60.9%). In addition, contributors to this survey were mainly bachelor degree holders (55.8%), employees (45.2%), with low income (40.9%), living in the western of Saudi Arabia (51%) and residents of cities (93.8%) (Supplement 2).

Awareness of Saudi population about COVID-19

Participants were asked about their sources of information about COVID-19 to determine the most widely used sources by the Saudi population. about 78% and 49% of participants selected the Saudi MOH and social medial as their main sources of knowledge, respectively. Seeking information about COVID-19 from friends, colleagues or relatives was the least favorable source used by Saudi people (Table 1).

Participants expressed their views about social distancing; the majority of responses (94.7%) were of the view that "everyone" should observe social distancing as a preventive measure, and most expressed beliefs that asymptomatic transmission was possible (85.2%). This translates to 81.3% awareness based on both items taken together. Knowledge regarding social distancing differed between genders, age groups and education levels ($p < 0.05$) (Table 2). Multiple logistic regression analysis (Table 3) showed that females (OR 1.779, $p < 0.001$) and participants from the middle region (OR 1.549, $p = 0.007$) were considerably more likely to choose the appropriate response to the question about social distancing. In contrast, participants from the age group 38-47 years (OR 0.705, $p = 0.014$) and those with secondary education or below (OR 0.561, $p < 0.001$) were less likely to choose the appropriate response to the question. Likewise, in relation to the question about asymptomatic transmission, there were clear differences related to demographic characteristics, including gender, education level, income, employment and geographical region ($p < 0.05$) (Table 2). Participants with higher educational levels (Master or PhD; OR 2.28, $p < 0.001$) and those with high income (>20000 SR; OR 1.787, $p = 0.017$) were more aware of the likelihood of asymptomatic transmission of COVID-19 patients (Table 3). In contrast, lack of awareness about asymptomatic transmission was found to be associated with participants from the southern part of the Kingdom (OR 0.671, $p = 0.01$), secondary and below educational level (OR 0.452,

$p < 0.001$), diploma holders (OR 0.712, $p = 0.011$) and those with low income (<3000 SR) (OR 0.74, $p < 0.001$) (Table 3).

Practice of social distancing by the Saudi population

The practice of participants was scored based on Supplement 1; a summary of the scores in relation to demographics is shown in Table 4 and the results of regression analysis are shown in Table 5. The average score of the respondents was approximately 3.13 (SD 1.38, range 0-5), representing 62.6% implementation. However, just over a third (37.8%) of participants confirmed they never left home since the start the social distancing application (Table 6). The score significantly differed in relation to gender, age, marital status, educational level, monthly income, employment and geographical region (Table 4). Multiple linear regression analysis showed that females (β 0.969, $p < 0.001$), Master and PhD holders (β 0.190, $p = 0.002$), people from age group 38-47 years (β 0.108, $p = 0.016$) and individuals older than 47 years (β 0.316, $p < 0.001$) were associated with a higher score (Table 5). In contrast, participants with low income (3000-5999 SR, β -0.175, $p = 0.001$), employees (β -0.438, $p < 0.001$), entrepreneurs (β -0.561, $p = 0.006$), retired participants (β -0.237, $p = 0.011$) and residents in the south (β -0.180, $p = 0.018$) or north (β -0.302, $p < 0.001$) of the Kingdom were associated with a lower score (Table 5). Almost half (46.9%) the participants went out to buy necessities, whereas going to work or hospital was the reason for leaving home for almost 13% of the respondents. In addition, nearly a third (30%) and about a quarter (24%) of the participants stated that they spent one day per week and less than an hour per day outside, respectively. Approximately one in five respondents acknowledged leaving their home 2-3 days a week for a total time of 1-2 hours per day (Table 6). In the context of practicing social distancing, about 41% of participants went out alone while 19% were accompanied by an adult.

Discussion

Awareness of the public is crucial in controlling the spread of COVID-19 nationally and internationally because the level of awareness in society affects implementation of precautionary measures [7]. Therefore, this study was conducted to analyse the knowledge and practice of the population in KSA in relation to staying at home as a preventive measure to contain the COVID-19 pandemic. To the best of our knowledge, this is first study performed to evaluate adherence of individuals to the home-stay measure in KSA and to provide suggestions of multiple reasons behind any deficiency in its application.

A survey was distributed and 5105 responses were returned by participants from different demographics to ensured that the collected data are representative, to an acceptable level, of the Saudi population. The responses indicated high awareness among the Saudi population with the majority of participants (94.7%) expressing views that everyone should practice social distancing. The respondents (85.2%) were also aware of asymptomatic transmission of infection. A population with this level of awareness is speculated to successfully practice social distancing. Previous studies conducted on the Chinese and Japanese populations [13,19] showed similar findings regarding public knowledge towards COVID-19.

In the context of raising awareness, the local public health has established multiple campaigns and launched health applications and call centers, offering the public with information about COVID-19 as well as providing answers to related queries [6]. This approach has provided Saudi individuals with information related to the benefits of staying at home and encouraged its implementation [6]. The respondents indicated that the Saudi MOH was their main source of information (78%), followed by social media, such as Twitter (49%), which suggests a limited opportunity for misinforming the Saudi population about COVID-19.

High awareness of the Saudi population demonstrated in the early stages of the pandemic indicates the existence of established plans by the government to educate the nation about coronaviruses. This might be the result of the response to the Middle East Respiratory Syndrome (MERS) epidemic in 2012; both Saudi people and the MOH learned from this previous experience in order to contain similar infections [15,20]. Consequently, the Saudi authorities acted very early (even before the pandemic reached KSA) by establishing

campaigns to enhance public awareness and engage the public in active learning and searching for information about COVID-19 and related precautionary measures. In contrast, a recent study conducted in the initial stage of this pandemic demonstrated moderate knowledge (66%) of participants living in three Arabic-speaking countries, including Saudi Arabia [21]. This could be because more than a quarter of the participants were older than 50 years. During COVID-19 pandemic, information to raise awareness of individuals was mainly delivered using online, which may not be accessible or easy to use by the elderly. In contrast, since the majority of recruited people in this study were found to be young, it can be speculated that the observed high knowledge of participants is linked with their ability to access online information about COVID-19 more easily. Therefore, since elderly people are more susceptible to COVID-19 than younger individuals [22], national public health need to ensure that information about this pandemic are received by all age groups. The local health authority has started recently the approach of texting individuals with information about COVID-19 in multiple languages. This step would increase the knowledge of people from various age groups and languages as well as residents of rural area where the internet connection is not well established. In line with findings by [13,21], the level of education was positively associated with increased awareness. This is self-evident as educated individuals are able to seek, access and understand information far more easily than those who are less well educated.

Regional discrepancies were demonstrated in relation to awareness of the Saudi society about social distancing, with participants from the middle of the Kingdom showing higher levels of knowledge compared to other regions. Although the total number of recorded COVID-19 cases is almost equal between cities from the western region, e.g. Makkah (3381) and Medina (2438), and the middle region (Riyadh, 2679), the daily reported cases have dropped dramatically to about 150 cases in Riyadh compared to 200 cases in Makkah and Medina [16]. Therefore, higher awareness of individuals in the middle region of Saudi Arabia may have contributed to the decrease in the numbers of daily cases in Riyadh. Similarly, the majority of respondents were fully aware of asymptomatic SARS-CoV-2 carriers, which was positively correlated with their level of education and income. Being aware of asymptomatic transmission should be sufficient to ensure successful engagement and effective implementation of preventive measures to contain COVID-19.

With respect to the practice of staying at home, overall implementation of social distancing by participants was found to be moderate (3.13/5). However, a high level of implementation (5/5) was conducted by 37% of participants who never left home since the application of the home-stay. In addition, participants who left home quoted reasons, such as buying necessities (47%), going to work (13%) or going out for leisure (around 2%). Furthermore, the majority of those who left home (46% of respondents) returned within two hours, and their frequency of leaving was less than three days a week, showing a satisfactory level of implementation of social distancing. Moreover, the majority of responders either went out alone (41%) or with an adult (19%), indicating a positive adherence by limiting contact between individuals to reduce viral dissemination among the population [23]. These results are supported by a mobility report for the Saudi communities during COVID-19 pandemic, which was provided by Google, in which about 45% reduction was observed in the number of people visiting food warehouses and pharmacies in the Kingdom [24]. These outcomes should increase the overall home-stay practice from moderate to high level; however, there still remains possibility for more improvement, encouragement and support to reach higher levels of adherence, especially for those who left home seeking entertainment. As good adherence to social distancing by Chinese individuals was a key element in efforts by authorities to contain COVID-19 pandemic [7], containment of COVID-19 may be managed in Saudi Arabia quite early. Nevertheless, behavior changes of the Saudi population to the implementation of precautionary measures (e.g. washing hands) outside of the home need to be investigated.

Statistical analysis of responses revealed that females, people aged 38 years or over and Master and PhD holders showed higher commitment to social distancing compared to their counterparts. This is in agreement with a previous study on awareness of Saudi people about MERS, which demonstrated that females were more likely to apply safety precautions than males [20]. A possible explanation might be that culturally males tend to go out more frequently than females. In relation to the better adherence by people of middle age and older, people of this age group may be influenced by published findings from Chinese epidemiological studies, which showed that older patients are more prone to developing invasive forms of COVID-19 with high fatality rate [22]. Likewise, respondents with higher degrees were more likely to practice social distancing, suggesting that education is positively associated with improved practice towards preventive action [13]. In addition, the study showed reduced practice of staying home among employees and entrepreneurs possibility

because the nature of their work requires leaving the home regularly compared to other type of jobs. Notably, residents of the northern and southern parts of KSA presented lower practice of social distancing, which could be attributed to delayed appearance of COVID-19 cases in those regions. Areas with limited cases of COVID-19 tend to be associated with reduced knowledge and practice [13]. The immediate application of the lockdown strategy has shown its effectiveness in flattening the curve of COVID-19 spread in cities (regions) in the Kingdom, as the northern and southern parts were protected from a sharp propagation of cases [6,15]. Full curfew (24 hours a day) was applied to cities with high numbers of daily cases in the west, east and middle regions, whereas less affected cities in northern and southern regions were locked down partially (12-15 hours a day) [15]. This might explain the variation in overall adherence between regions. However, it was found that the application of the lockdown strategy managed to limit frequency of leaving home for about 35% of participants. Establishment of the national lockdown strategy may have been treated by individuals as an alarming sign, indicating the serious and urgent need for action, and this may have encouraged them to practice better adherence.

In line with [13], responses by low-income individuals with showed lower social distancing practice, and this finding might be related to the need to work to secure their income. Fortunately, a minority of respondents admitted lack of commitment to social distancing, mainly because of the absence of cases in their areas. Poor practice can result from lower knowledge of individuals about asymptomatic carriers who can spread the infection. These groups whom lacking the good practice to social distancing, especially those with low income need to be investigated more closely, so that appropriate solutions to enhance their adherence can be implemented.

Conclusion

The current study indicated a relatively high level of knowledge and adherence to the home-stay strategy by the Saudi population due to continuous efforts by the local public health to raise awareness using various media channels. Demographic characteristics affected knowledge and adherence to social distancing, which should be used by policymakers to identify target individuals and suitable actions to achieve better knowledge and adherence. Current awareness and adherence of the Saudi population to social distancing seem to be in the right direction to facilitate the containment of COVID-19 pandemic, although further targeted efforts to people with reduced knowledge and practice of social distancing need to be considered by public health authorities.

Conflict of interest

The authors declare that there is no conflict of interest.

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Ethical approval

This study was approved by Ethics Committee at the University of Hail (Ethics approval reference number H-2020-080).

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Table 1| Responses of participants to the question about the sources they used to obtain information and updates about the COVID-19 pandemic.

Question	Choices	Number of responses [a] (% of responses)
Source of knowledge about COVID-19	Ministry of Health	3990 (78.2)
	Social media	2531 (49.6)
	TV	1412 (27.7)
	World Health Organization	1178 (23.1)
	Friends and relatives	577 (11.3)
	Other	205 (4)

[a] Participants were permitted to select more than one response to this question

437 **Table 2**| Responses of the participants to two questions about knowledge regarding social
438 distancing and awareness about asymptomatic transmission of COVID-19.

439

Demographic characteristics		"Everyone" was the response to Question 1 [b]		"YES" was the response to Question 2 [b]	
		Total number of responses (%)	*p*-value	Total number of responses (%)	*p*-value
Gender	Male	1976 (93)	<0.001 [a]	1841 (86.6)	0.018*
	Female	2859 (95.9)		2511 (84.3)	
Age group	18-27 years	1441 (96.1)	0.006 [a]	1262 (84.1)	0.322
	28-37 years	1787 (94.9)		1607 (85.3)	
	38-47 years	985 (93)		906 (85.6)	
	Above 47	622 (94)		577 (87.2)	
Marital status	Single	1698 (95.4)	0.054	1503 (84.5)	0.126
	Married	2925 (94.1)		2670 (85.9)	
	Divorced	212 (96.8)		179 (81.7)	
Educational level	Secondary and below	1125 (92.3)	<0.001 [a]	922 (75.6)	<0.001*
	Diploma	496 (94.5)		441 (84)	
	Bachelor	2732 (95.8)		2503 (87.8)	
	Master and PhD	482 (94.5)		486 (95.3)	
Monthly income	Less than 3000 SR	1980 (94.9)	0.318	1698 (81.4)	<0.001*
	Between 3000-5999 SR	672 (95.6)		586 (83.4)	
	Between 6000-10000 SR	690 (94)		633 (86.2)	
	Between 11000-15000 SR	783 (93.8)		740 (88.6)	
	Between 16000-20000 SR	368 (93.9)		360 (91.8)	
	Above 20000 SR	342 (96.3)		335 (94.4)	
Employment	Unemployed	1441 (95.1)	0.240	1228 (81.1)	<0.001*
	Student	666 (95.8)		576 (82.9)	

	Employed	2185 (94.6)		2046 (88.6)	
	Entrepreneur	34 (89.5)		32 (84.2)	
	Retired	287 (93.5)		275 (89.6)	
	Others	222 (92.5)		195 (81.3)	
Geographical regions	West	2448 (94)		2207 (84.8)	
	Middle	1232 (96.2)	0.096	1102 (86)	0.033*
	East	254 (94.8)		238 (88.8)	
	North	620 (94.7)		566 (86.4)	
	South	281 (94.3)		239 (80.2)	
Do you live in	City	4533 (94.7)	0.832	4087 (85.4)	0.320
	Village	302 (95)		265 (83.3)	

Everyone means all individuals in the Saudi population. [a] statistical significance. [b] Question 1: Who should stay at home during COVID-19 pandemic? Question 2: Do you believe in asymptomatic transmission of COVID-19?

444 **Table 3**| Multiple logistic regression analysis on demographic characteristics associated with
445 responses to two questions about knowledge regarding social distancing and awareness about
446 asymptomatic transmission of COVID-19.

Model 1	**OR**	***p*-value**	**OR 95% confidence interval**	
			Lower bound	**Upper bound**
Question 1: Who should stay at home during COVID-19?				
Gender (female)	1.779	<0.001 [a]	1.389	2.28
Age (38-47 years)	0.705	0.014 [a]	0.533	0.931
Education (Secondary and below)	0.561	<0.001 [a]	0.432	0.728
Region (Middle)	1.549	0.007 [a]	1.127	2.128
Constant	15.501	<0.001 [a]		
Question 2: Do you believe in asymptomatic transmission of COVID-19?				
Education (Secondary and below)	0.452	<0.001 [a]	0.38	0.537
Education (Diploma)	0.712	0.011 [a]	0.548	0.924
Education (Master and PhD)	2.28	<0.001 [a]	1.477	3.52
Income (Less than 3000 SR)	0.74	<0.001 [a]	0.629	0.87
Income (Above 20000 SR)	1.787	0.017 [a]	1.111	2.873
Region (South)	0.671	0.01 [a]	0.496	0.908
Constant	8.264	<0.001 [a]		

447 OR, odds ratio, [a] statistical significance

448

449 **Table 4**| Total scores of participants in relation to practicing staying home strategy during the
450 COVID-19 pandemic.

Demographic characteristic		Mean	Standard deviation (SD)	Median	*p*-value
Gender	Male	2.50	1.14	2.25	<0.001 [a]
	Female	3.60	1.37	3.75	
Age group	18-27 years	3.21	1.42	2.75	0.002 [a]
	28-37 years	3.06	1.39	2.75	
	38-47 years	3.10	1.35	2.75	
	Above 47	3.23	1.32	2.75	
Marital status	Single	3.19	1.44	2.75	0.002 [a]
	Married	3.09	1.35	2.75	
	Divorced	3.38	1.41	3.25	
Educational level	Secondary and below	3.26	1.37	3.00	<0.001 [a]
	Diploma	2.91	1.33	2.50	
	Bachelor	3.15	1.41	2.75	
	Master and PhD	2.98	1.31	2.50	
Monthly income	Less than 3000 SR	3.50	1.37	3.50	<0.001 [a]
	Between 3000-5999 SR	2.92	1.40	2.50	
	Between 6000-10000 SR	3.02	1.35	2.75	
	Between 11000-15000	2.84	1.35	2.50	
	Between 16000-20000	2.73	1.24	2.50	
	Above 20000 SR	2.73	1.26	2.50	
Employment	Unemployed	3.67	1.32	3.75	<0.001 [a]
	Student	3.33	1.42	3.00	
	Employed (public or private)	2.71	1.29	2.25	
	Entrepreneur	2.54	1.38	2.25	
	Retired	3.17	1.30	2.75	

	Others	3.32	1.38	3.00	
	West	3.19	1.38	2.75	
Geographical regions	Middle	3.26	1.41	3.00	<0.001 [a]
	East	3.05	1.39	2.75	
	North	2.91	1.35	2.50	
	South	2.72	1.34	2.25	
Do you live in	City	3.14	1.39	2.75	0.381
	Village	3.06	1.44	2.75	

451 [a] statistical significance

452 **Table 5**| Multiple logistic regression analysis of the association of demographic
453 characteristics with participants' scores in relation to practicing the staying home strategy.

Variables	β	*p*-value	OR confidence interval (95%)	
			Lower bound	Upper bound
Gender (female)	0.969	<0.001 [a]	0.89	1.047
Age (38-47 years)	0.108	0.016 [a]	0.02	0.197
Age (Above 47)	0.316	<0.001 [a]	0.189	0.443
Education (Master and PhD)	0.19	0.002 [a]	0.072	0.307
Income (3000-5999 SR)	-0.175	0.001 [a]	-0.276	-0.074
Employment (Employed)	-0.438	<0.001 [a]	-0.521	-0.355
Employment (Entrepreneur)	-0.561	0.006 [a]	-0.963	-0.159
Employment (Retired)	-0.237	0.011 [a]	-0.421	-0.054
Region (South)	-0.18	0.018 [a]	-0.328	-0.031
Region (North)	-0.302	<0.001 [a]	-0.405	-0.199
Constant	2.775	<0.001 [a]		

454 β, slope of the regression line, [a] statistical significance

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456 **Table 6**| Responses of participants to questions assessing their practice during COVID-19
457 pandemic (n = 5105).

Questions	Choices	Total number of responses (%)
Do you leave home during the home-stay period?	No	1930 (37.8)
	Yes	1353 (26.5)
	Yes, but I have stayed home since the application of the curfew	1822 (35.7)
What is your main reason for leaving home?	Purchasing necessities	2394 (46.9)
	Buying a meal	30 (0.6)
	Going to work or hospital	653 (12.8)
	Having fun and leisure time	20 (0.4)
	Not taking any restrictions, as there are no confirmed cases in my area	51 (1)
	Meeting a friend	27 (0.5)
	I never left home	1930 (37.8)
How many days do you leave home per week during the pandemic of COVID-19?	One day	1531 (30)
	Two to three days	944 (18.1)
	Four to five days	434 (8.5)
	More than six days	266 (5.6)
	I never left home	1930 (37.8)
Approximately, how much time per day do you spend outside during the COVID-19 pandemic?	Less than one hour	1235 (24.2)
	Between one and two hours	1098 (21.5)
	More than two hours	587 (11.5)
	Other	255 (5)
	I never left home	1930 (37.8)
Who joins you when you leave home?	No one	2077 (40.7)
	Adult	950 (18.6)
	Child	36 (0.7)
	Whoever wants to join	112 (2.2)
	I never left home	1930 (37.8)

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