HEALTH INFORMATION AND MONITORING AMONG QATARI ADOLESCENTS

2017
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HEALTH INFORMATION AND MONITORING AMONG QATARI ADOLESCENTS, 2017

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This report presents the results of the first comprehensive and large-scale investigation of Qatari teenagers’ health-information and health-monitoring behavior. A survey of more than 1,100 Qataris, 13 to 20 years old, conducted in spring 2017, addressed which health issues they are most concerned about, how often they use various types of health monitoring tools and communication platforms to seek health information, how satisfied they are with what they get through these platforms and tools, how much they trust health information channels, and whether they have ever attempted to change their behavior due to health information or digital health tools.

Young people in Qatar still rely heavily on interpersonal sources of health information, including their parents, siblings, friends, and medical providers. Nevertheless, the vast majority of teens also turn to the internet for health information. The internet has far eclipsed other media as a source of health information—particularly newspapers and radio. Only television can compete, to some extent, with online sources.

Finally, health campaigns in Qatar do not reach the younger Qatari demographic as often as one would hope.

Many Qatari teens have also turned to digital devices—apps and games—beyond online health information. Health trackers, however, have not gained traction among teens.

The internet most often serves as a tool for additional information about symptoms, treatments and medication. But it is also a pathway for accessing information that could have a negative impact on their health. This is why our study underscores the importance of ensuring that accurate, appropriate, and easily accessible health information is available to teens online. But Qatari teens’ naivety when it comes to posting about personal health problems is alarming as well—reasons for making sure teens have strong digital health literacy: They need the judgment and skills to know how to assess and deal with the abundance of information they come across online.
If there is one thing that defines the current generation of teenagers, it is the degree to which they are always “connected”—spending vast amounts of time online and on their digital gadgets, using social media, surfing the web, watching YouTube videos, and using apps of all kinds.

The teenage years are also a time when young people grapple with a tangle of health concerns—many uniquely important during these particular years of life. Puberty, hygiene and weight problems: Teens must traverse a landscape replete with significant new health challenges—often while coping with substantial amounts of stress and sleep deprivation.

Qatari adolescents face severe health problems. Qatar has the highest rate of overweight boys and young men under 20 years old (34 percent) in the Middle East and in North Africa (Ng et al., 2014). Another serious cause for health problems in Qatar is smoking—of cigarettes, but also of shisha. In 2014, according to Qatar’s Hamad Medical Corporation (HMC), 37 percent of Qatar’s population aged 15 and above said that they smoke tobacco (Doha News, September 2014). And in his study of undergraduate students, Abdel-Khalek (2013) posits that mental health problems are also comparatively frequent in Qatar.

Of course, Qatar has taken steps to address these health issues through a variety of national initiatives—from campaigns for a healthier diet to “Step into Health,” an app launched by the Aspire Zone Foundation in Qatar to help users keep track of their physical activity. Qatar also has invested in measures to convince teenagers to avoid smoking shisha or to quit the habit (Almulla, 2013). As a reaction to the mental health issues in the country, Qatar’s National Mental Health Strategy was launched in 2013 “to provide the best possible mental health services for our citizens, while changing attitudes towards mental illness” (Supreme Council of Health, 2013). Last but not least, in 2015, Qatar’s Primary Health Care Corporation (PHCC) and HMC started the “Beautiful Smile” program for school children to encourage them to care more about their teeth.

But do public campaigns in Qatar actually serve their purpose? And how, if at all, does the immense increase in health-related information on the internet and on social media help Qatari teens find effective health-related information? In addition, more and more health-monitoring devices and health-related mobile applications have become available. Do these technologies aid Qatari youth to monitor and change their health behavior?

Our study is the first of its kind to comprehensively investigate how Qatari teens use the internet for health information and how they evaluate it—in comparison to the many other sources that contain health information. In addition, it is the first national survey in Qatar to document teenagers’ use of digital technologies for health, such as mobile apps, social networking sites, electronic gaming, and wearable devices.
LITERATURE REVIEW

So far, little evidence exists about health information behavior in the Gulf region among adolescents:

• Arnott-Smith and Keselman (2015) found that GCC residents of all ages “first seek information from conversations with physicians and hospital personnel, followed by family, friends, and knowledgeable elders and religious leaders in the community” (p. 174).

• Similarly, 93 percent of respondents in Saudi Arabia first expected health information from their physicians (Al Ghamdi & Almohedib, 2011). Specifically among Saudi females, personal sources of all kinds seemed to be popular (Al Ghareeb, 2009).

• Also, interviews with Qatar Cancer Society (QCS) educators revealed that “the most common information sources about cancer in Qatar originate in advice from friends and family in addition to the patient’s physician” (Arnott-Smith & Keselman, 2015, p. 173).

These results could be explained through the Arab world’s more relationship-based culture, instead of a rule-based one (Hooker, 2012). This means that social behavior is more strongly determined by one’s family, peers and superiors. In his classic work in 1984, Hofstede found a value system for the Arab world that is characterized, among other features, by masculinity and “power distance,” i.e., more hierarchical relationships. These cultural characteristics should indeed make personal health communication more successful. Also, a person’s power and charisma could count more than their professional expertise.

But interestingly, at least in Qatar, this plausible pattern is not as clear-cut as it looked for Qataris’ information behavior specifically about cancer (see above). Because for health information in general, a representative sample of Qataris in 2016 named Primary Health Care Centers (PHCCs) as the most frequently used health information source, followed by family, friends, and then the internet (especially among women and younger Qataris). On the internet, Google was the most popular search tool (Choudhury et al., 2016).

There has only been one study with (some) evidence of how media use and communication channels for health information among young people in MENA countries develop. Northwestern University’s surveys titled “Media use in the Middle East” (Northwestern University in Qatar, 2013, 2015) show that in 2015, almost half (45 percent) of Qatari internet users aged 18 to 24 years looked up health information (in the widest sense of the term) at least once a day—a sharp rise from 24 percent of that same group in 2013. In 2015, almost half (48 percent) of the same age cohort reported that the “most important source for health information” was websites; 31 percent named face-to-face personal communication, and only six percent mentioned television. Social media followed with five percent.

Not surprisingly, we find more evidence in Western countries of the important role of the internet for health communication behaviors and attitudes among teenagers: In the United States, a 2015 national survey of almost 1,200 Americans age 13 to 18 revealed that the internet is used by most adolescents (84 percent) for health information (Center on Media and Human Development, 2015). However, when asked where they got “a lot” of health information recently, only 25 percent named the internet, but more than half (55 percent) their parents. A third of the teenagers (32 percent) mentioned health classes at school and 29 percent doctors and nurses. So, yes, the internet seems an easily accessible first source for health information for U.S. adolescents. However, when it comes to finding more in-depth information, personal sources become more important.
This report describes the findings of a representative survey of Qatari teens, 13 to 20 years old. It was conducted from April 22 through May 17, 2017 with 1,117 Qatari nationals attending grades eight to ten at 36 independent (public) and international (private) schools. The survey was administered in Arabic by the Social and Economic Research Institute (SESRI) staff at Qatar University and used the platform BLAISE. The data were gathered on laptop computers with a research assistant interacting with the participants, solely for the purpose of providing instructions and answering questions. Parental and teen consent were obtained beforehand.

Sample design

In this study, the target population includes all Qatari students in preparatory and secondary schools, from grade 8 to grade 12. The sampling frame was developed by SESRI based on a comprehensive list of all public and international schools in Qatar provided by the Supreme Council of Education.

Almost 30,000 Qatari students were eligible for the survey. The schools in our sample were selected from the 114 schools with a reasonable number of Qatari nationals. Random systematic stratified sampling was performed to select a representative sample of 43 schools. Seven of those schools refused to participate, which left us with a final sample of 36.

Based on the information about the distribution of genders and grades, schools were divided into relatively homogeneous subpopulations (i.e., strata). Inside each stratum, students were randomly selected following a two-stage sampling process: In the first stage, the school was selected with a probability proportionate to its size. In the second stage, we randomly selected classes in that school. Ideally, all 1,698 students in those classes were supposed to participate in the survey. However, 374 were absent during the time of our survey, and 106 refused to fill in the questionnaire. So, 1,218 students participated.

Survey design

Our questionnaire was prepared in several steps. First of all, whenever appropriate, we used questions from the 2015 U.S. study (see above) to make intercultural comparisons possible. The questionnaire covers the following categories of questions:

Sources of health information and use of health-monitoring tools:

- Use of communication channels of all kinds for health information
- Trust in these sources/satisfaction with them
- Criteria for selecting one’s sources of health information
- Reasons for/purposes of going online for health information
- Ways of finding health information online
- Encountering specific health campaigns
- Encountering problematic content online
- The role of health classes at school
- Willingness to post health-related questions online
- Use and usefulness of health-related apps, games and health trackers
- Perceived attempts to change one’s health behavior due to health information sources and tools
Background information about our respondents:

• Health issues that Qatari teens find personally important

• Perceptions of which health issues one’s friends care about

• Satisfaction with one’s body

• Physical activity and reasons for being active

• Eating behaviors

• Traumatic experiences

• Perceived self-efficacy, i.e., confidence in one’s ability to change behavior.

A first draft of the questionnaire was developed and translated into Arabic. Cognitive interviews followed in order to test the validity of the survey questions. The students that participated in these interviews were selected from across the target age/grade range from grade 8 to grade 12. Fourteen females and ten males were interviewed. The interviews were conducted face-to-face and took about 40 to 60 minutes to complete. Open-ended questions ensured that:

• the final survey included any health issues and information tools relevant to our target group that we had not initially included,

• our questions and response options were understood properly,

• our respondents did not refuse to respond to questions because they were regarded as inappropriate or irrelevant.

Based on the findings of our 24 cognitive interviews, we constructed a revised version of the questionnaire. This version was programmed and tested in a pilot study under real-life conditions through a computer-aided self-administered interview. Thirty-four pretest interviews were completed from two classes at two schools from the two corner grades of our target group—grades eight and 12. The respondents were selected to represent the gender and age group distribution of the target population. Based on the results, the questionnaire was modified, but also shortened—to take about 30 minutes to fill in (see the appendix of this report for the final questionnaire).

Survey administration

The survey was programmed in BLAISE and administered using laptop computers. The data collection took place between April 22 and May 1, 2017. At the schools that agreed to participate in the study, opt-out consent forms were sent to the parents of eligible student participants. Signed student assent was collected prior to administering the survey. Trained data collectors provided students with laptops and instructions on how to complete the survey.

Weighting the data

For the analysis of our data, the sample design is taken into account to ensure that statistical estimates are unbiased and efficient. Particularly, a weighting variable was created for the selection probability of each respondent and for non-responses. The weights were also calibrated to align our results with population estimates. The “raking” method was used for this calibration to adjust the weights in the sample—so that the proportions of the adjusted weights for certain characteristics (e.g., proportion of students by grades) agree with the corresponding proportions of the population.
The Sample

In total, 1,218 high school students at Qatari schools were interviewed. 1,117 of them were Qatari nationals—they are the basis of our analyses. Eighty-five percent of those respondents attend an independent (i.e., public/government-owned) high school. The other 15 percent were students from international (private) schools. The Qatari nationals consisted of 49 percent females and 51 percent males. Each of the grades (8 to 12) was represented by at least 15 percent of these respondents (Table 1). Respondents’ ages ranged from 13 to 20 years (Table 2), with a median age between 15 and 16 years.

### Table 1
School grade of Qatari national respondents

<table>
<thead>
<tr>
<th>GRADE</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>10</td>
<td>29</td>
</tr>
<tr>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

N = 1,083

### Table 2
Age of Qatari national respondents

<table>
<thead>
<tr>
<th>AGE</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

N = 1,048
What do Qatari adolescents worry about when it comes to their health? To answer this, we asked which health issues are “very” important to them personally. The top health issue cited by Qatari respondents was hygiene, followed with some distance by dental health and sleep. Fitness and exercise, diet and nutrition, cancer, road safety, and heart disease are also very important for at least half of our respondents.

Interestingly, only about a fifth of all Qatari teens between 13 and 20 said “issues around puberty” were very important to them personally. That changes once we look at younger (13-15 years) and older teens (16-20 years) separately. The older group were more likely than their younger counterparts (at least ten percentage points apart) to say that issues surrounding puberty, reproductive health and bullying were very important to them personally.

Analyzing the data by gender revealed that girls ranked the personal importance of eight health issues considerably higher than boys (by at least ten percentage points). Girls were more likely than boys to rank the following topics as “very important” to them personally: domestic violence, cancer, heart disease, depression, allergies, eating disorders, hygiene and sleep (Table 3).
Perhaps unsurprisingly, Qatari teens’ perceptions of which health issues their friends care “a lot” about are a close reflection of the issues they find personally significant. Respondents said that the top five health issues of significance for their friends were hygiene, dental health, sleep, cancer, diet and nutrition—followed by fitness and exercise, heart disease, and road safety (Table 4).

### Table 4
**Health issues important to Qatari teens’ friends**

<table>
<thead>
<tr>
<th>Health Issue</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hygiene</td>
<td>72</td>
</tr>
<tr>
<td>Dental health</td>
<td>61</td>
</tr>
<tr>
<td>Sleep</td>
<td>60</td>
</tr>
<tr>
<td>Cancer</td>
<td>50</td>
</tr>
<tr>
<td>Diet and nutrition</td>
<td>50</td>
</tr>
<tr>
<td>Fitness and exercise</td>
<td>49</td>
</tr>
<tr>
<td>Heart disease</td>
<td>48</td>
</tr>
<tr>
<td>Road safety</td>
<td>47</td>
</tr>
<tr>
<td>Diabetes</td>
<td>42</td>
</tr>
<tr>
<td>Domestic violence or abuse</td>
<td>39</td>
</tr>
<tr>
<td>Depression or other mental health</td>
<td>34</td>
</tr>
<tr>
<td>Smoking</td>
<td>33</td>
</tr>
<tr>
<td>Allergies</td>
<td>31</td>
</tr>
<tr>
<td>Stress or anxiety</td>
<td>30</td>
</tr>
<tr>
<td>Colds/Flu</td>
<td>28</td>
</tr>
<tr>
<td>Attention Deficit Disorder (ADHD)</td>
<td>28</td>
</tr>
<tr>
<td>Eating disorders</td>
<td>26</td>
</tr>
<tr>
<td>Bullying</td>
<td>24</td>
</tr>
<tr>
<td>Reproductive health</td>
<td>24</td>
</tr>
<tr>
<td>Traditional healing methods</td>
<td>23</td>
</tr>
<tr>
<td>Issues surrounding puberty</td>
<td>21</td>
</tr>
</tbody>
</table>

Base: Qatars age 13-20; n=1,117.
Parents (“guardians”) can rest assured that they remain the single most cited source of health information for Qatari teens, followed closely by friends, brothers or sisters, doctors and nurses. All of these are personal communication sources. However, three online platforms—YouTube, Instagram and Snapchat—also belong to this top group of health information sources (Table 5).

Still more than half of our respondents also mention leaflets and pamphlets from hospitals, TV news, TV shows other than news, medical websites and books. The least frequently used sources for health information are Facebook, radio, print media, online forums, online magazines, and news articles. Health classes at school are literally in the middle of the rank order, with 49 percent.

### Table 5

<table>
<thead>
<tr>
<th>Health information sources used by Qatari teens</th>
<th>Among Qatari adolescents, percent who say they used the following sources at all to get information about health topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your guardians</td>
<td>79</td>
</tr>
<tr>
<td>Friends</td>
<td>78</td>
</tr>
<tr>
<td>YouTube</td>
<td>72</td>
</tr>
<tr>
<td>Instagram</td>
<td>71</td>
</tr>
<tr>
<td>Brothers or sisters</td>
<td>69</td>
</tr>
<tr>
<td>Snapchat</td>
<td>69</td>
</tr>
<tr>
<td>Doctors/Nurses</td>
<td>58</td>
</tr>
<tr>
<td>Leaflets/pamphlets from hospitals</td>
<td>57</td>
</tr>
<tr>
<td>TV shows other than news</td>
<td>57</td>
</tr>
<tr>
<td>Books</td>
<td>54</td>
</tr>
<tr>
<td>A medical website</td>
<td>54</td>
</tr>
<tr>
<td>TV news</td>
<td>53</td>
</tr>
<tr>
<td>Twitter</td>
<td>50</td>
</tr>
<tr>
<td>Health classes in school</td>
<td>49</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>49</td>
</tr>
<tr>
<td>Ads on TV</td>
<td>46</td>
</tr>
<tr>
<td>Ads online</td>
<td>46</td>
</tr>
<tr>
<td>Sahatak Awalan website</td>
<td>43</td>
</tr>
<tr>
<td>Billboards</td>
<td>40</td>
</tr>
<tr>
<td>Online news articles</td>
<td>39</td>
</tr>
<tr>
<td>Online magazine articles</td>
<td>38</td>
</tr>
<tr>
<td>Online forums about health information</td>
<td>36</td>
</tr>
<tr>
<td>Ads in newspapers</td>
<td>31</td>
</tr>
<tr>
<td>Print magazine articles</td>
<td>30</td>
</tr>
<tr>
<td>Ads in magazines</td>
<td>29</td>
</tr>
<tr>
<td>Print newspaper articles</td>
<td>29</td>
</tr>
<tr>
<td>Radio</td>
<td>28</td>
</tr>
<tr>
<td>Ads on the radio</td>
<td>26</td>
</tr>
<tr>
<td>Facebook</td>
<td>20</td>
</tr>
</tbody>
</table>

Base: Qatari adolescents age 13-20; n=1,117.

QATARI TEENS AND HEALTH INFORMATION, 2017
Among Qatari teenagers, Arabic is the most popular language to look up health information: More than four-fifths (82 percent) of our respondents use it. Only a little more than a quarter (27 percent) also use English (Chart 1).

**Chart 1**

Languages and health information seeking

<table>
<thead>
<tr>
<th>Language</th>
<th>Percent who look up health information in the following languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>82</td>
</tr>
<tr>
<td>English</td>
<td>27</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
</tbody>
</table>

Using online health searches. Most Qatari youth look up health information online fairly frequently. More than 40 percent of teens claim to seek health information online at least once a week and a fifth (20 percent) do so daily. Only six percent never look for health information on the internet (Chart 2).

All in all, a large majority of Qatari teenagers is satisfied with the health information on the internet: As many as 82 percent reply “yes” to the question: “In general, are you satisfied with the health information you’ve gotten from the internet?”
How Teens Look for Health Information Online

Search methods. Among the 94 percent of teens who use the internet for health information less than once a year or more, over four-fifths say they “often” start their searches by googling a topic. However, it is also quite common for teens to stumble upon health information: Three fourths of Qatari adolescent internet users claim that they come across the information “while browsing.” Almost as frequent is “going directly to a specific health website” and “using links from social media.” In other words, finding health information through intentional/active searches and accidental encounters seem to fairly hold the balance (Chart 3).

Social Networking Sites as a Source of Health Information

How popular are Facebook, Twitter, or other social media sites (such as Reddit, Instagram, or Tumblr) for finding information or advice on a health topic? Twitter is the most popular among Qatari teens, with half of them saying they use it for health information. Facebook seems to divide the genders—twice as many boys (27 percent) than girls have ever used it for health information (12 percent). Interestingly, a third of all respondents told us that they find health information by following links from social media at least “sometimes” (Table 6).
Not a single health campaign seems to have reached a majority of Qatari teens—even though our questionnaire tried to jog their memory by providing them with a list of the most important recent campaigns in Qatar. The most impressive of them was “Kulluna for Health & Safety,” an initiative organized by Hamad Medical Corporation (HMC) since 2012. This campaign aims to support the Qatar National Vision by raising public awareness about various health and safety issues such as heart health and children’s safety. However, only a little less than half of our respondents claimed to have encountered it (Chart 4).

“Beautiful Smile” from Qatar’s Primary Health Care Corporation—a campaign about dental health—was next. At least more than a third of Qatari teens recognized “Your Healthy Choice,” a project under the “Your Health First” or the “Sahatak Awalan” initiative organized by Weill Cornell Medicine-Qatar that aims to encourage healthier food choices, “Qatar Patient Safety Week” by the Ministry of Public Health (MoPH), “Think Pink Awareness Week” about breast cancer and organized by various Qatar Foundation institutes and universities, “Screen for Life” for breast and bowel screenings organized by the MoPH, HMC, National Cancer Program and the Primary Health Care Corporation, and finally - “Early Detection Saves Lives,” an initiative by HMC which also aims to raise awareness and educate the community about breast cancer.
Why Young People Look for Health Information Online

For the 94 percent of teens who looked for health information online “less than once a year” or more, the most common reason to do so was to find (additional) information about their own health condition: “to check my symptoms or to find out what was wrong with me” and “to learn how to treat an illness, condition, or injury I had.” More than two thirds (69 percent) mentioned at least one of these two purposes. More than half also cited the following reasons for seeking health information online: a school project, to get more information after a doctor’s visit, to get information about medications, and simply because a family member or a friend recommended a specific website.

Interestingly, almost half (48 percent) of online health-seekers claim to turn to the internet for health information that they “couldn’t talk to their guardians about” (Chart 5).

However, using online health information as a substitute for one’s guardians is put into perspective by the answers to a more forthright inquiry: “If you had a question about a sensitive health topic, how likely would you do each of the following”? Menstruation and depression were presented as examples to our respondents. Here the internet plays a much weaker role, as less than a fifth of our respondents (18 percent) would “very likely” look up a sensitive health topic online. Only eight percent would talk to someone about this type of topic online. In contrast, the most popular source for these kinds of health issues is one’s mother (35 percent), followed by other personal sources including fathers, doctors or nurses, and friends (Table 7).
Accessing Sensitive and Problematic Information Online

Just as teens can use the internet as a tool for preventive health—e.g. learning how to eat well, stay fit, and reduce stress—it can also expose them (or offer access to) information that could potentially contribute to unhealthy behaviors. Teens who are interested in smoking at an early age or who are engaging in eating disorders may actually seek out information that fuels those unhealthy behaviors. Others may simply come across such information when browsing online.

We asked the older Qatari teenagers in our sample (grades 10 to 12) how often they had “come across” certain types of information online (whether on purpose or not) that could contribute to less healthy behaviors. They were explicitly reminded that they could refuse to answer. About a fifth of our respondents found “extreme ways to lose weight” at least “sometimes” on the internet. Less than a fifth admits to have “sometimes” encountered “inappropriate sites” (a veiled expression for pornography), “how to obtain steroids” and “how to obtain cigarettes or shisha.” The low figure for the latter (eleven percent) is not surprising: The internet is not necessary to find out how to get cigarettes (Chart 6).
Perceived Quality of Health Information Sources

The most important criteria for selecting sources of health information are confidentiality and convenience (finding information “easily” and “at a time and place that is convenient for you”). More than three quarters of our respondents name these criteria. Even at the end of our list of possible reasons, there is one more convenience item that is still very popular: not having to see a healthcare professional—but also “not having to rely solely on a doctor telling you what to take/what was wrong with you” (Chart 7).
We then asked respondents which health information sources they trusted, among the sources they said they use at all. At least half of the users of a given source said they trusted it – this is quite plausible because trust is certainly one of the major considerations when choosing whether or not to use a source for health information. So, it may also be unsurprising that the most trusted sources for health information are (in most cases) also the most often used (see above, Table 5): Personal sources like guardians, doctors/nurses, and brothers or sisters top the list again. Only friends rank a little lower than before.

The top group of trusted sources (mentioned by at least three quarters of our respondents) includes leaflets/pamphlets from hospitals, books, and health classes. Interestingly, *Sahatak Awalan* is the only campaign website that is also one of the most trusted sources. It was not used by particularly many teens (see above, Table 5), but it seems that those who do use it for health information, also trust it disproportionately (Table 8).

Table 8

<table>
<thead>
<tr>
<th>Source</th>
<th>Trust Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your guardians</td>
<td>95</td>
</tr>
<tr>
<td>Doctors/Nurses</td>
<td>83</td>
</tr>
<tr>
<td>Brothers or sisters</td>
<td>87</td>
</tr>
<tr>
<td>Leaflets/pamphlets from hospitals</td>
<td>87</td>
</tr>
<tr>
<td>Health classes in school</td>
<td>83</td>
</tr>
<tr>
<td>Books</td>
<td>82</td>
</tr>
<tr>
<td>Sahatak Awalan website</td>
<td>80</td>
</tr>
<tr>
<td>Friends</td>
<td>78</td>
</tr>
<tr>
<td>Online forums about health information</td>
<td>74</td>
</tr>
<tr>
<td>Medical website</td>
<td>73</td>
</tr>
<tr>
<td>Radio</td>
<td>69</td>
</tr>
<tr>
<td>YouTube</td>
<td>68</td>
</tr>
<tr>
<td>TV news</td>
<td>67</td>
</tr>
<tr>
<td>Snapchat</td>
<td>67</td>
</tr>
<tr>
<td>Billboards</td>
<td>66</td>
</tr>
<tr>
<td>Ads in newspapers</td>
<td>66</td>
</tr>
<tr>
<td>TV shows other than news</td>
<td>64</td>
</tr>
<tr>
<td>Instagram</td>
<td>64</td>
</tr>
<tr>
<td>Print magazine articles</td>
<td>63</td>
</tr>
<tr>
<td>Ads on the radio</td>
<td>63</td>
</tr>
<tr>
<td>Ads in magazines</td>
<td>63</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>63</td>
</tr>
<tr>
<td>Twitter</td>
<td>62</td>
</tr>
<tr>
<td>Facebook</td>
<td>61</td>
</tr>
<tr>
<td>Print newspaper articles</td>
<td>60</td>
</tr>
<tr>
<td>Other social networking sites</td>
<td>59</td>
</tr>
<tr>
<td>Online magazine articles</td>
<td>59</td>
</tr>
<tr>
<td>Ads on TV</td>
<td>58</td>
</tr>
<tr>
<td>Online news articles</td>
<td>57</td>
</tr>
<tr>
<td>Ads online</td>
<td>51</td>
</tr>
</tbody>
</table>

Base: Qataris age 13-20; n=1,137.

QATARI TEENS & HEALTH INFORMATION, 2017
Our findings clearly show that Qatari teens find online health information useful. For health or medical information specifically on the internet, we had asked about a number of consequences resulting from it in the past twelve months. More than two thirds of Qatari teens agreed with all seven potential results of consulting the internet that we had presented to them. More than three fourths claimed that – based on health information found online – they tried to diagnose a health problem, felt more comfortable with advice from doctors, and sought more information.

Notably, the most common impact of seeking health content online mentioned above is about information, as opposed to real actions such as contacting a health professional or treating a health problem. But reassuringly, these two ‘actions’ were still mentioned by more than two thirds of our respondents (Chart 8).

Posting something about health. Qatari teens are not particularly reluctant to post about health issues online. Privacy concerns do not seem to play a big role for them. While Qatari teens are a little more hesitant to post about health issues on more ‘public’ social media sites (such as Facebook or Twitter) than on direct messaging services such as WhatsApp, the difference is surprisingly small. Respondents were also more likely to post about a “general health topic that doesn’t affect me personally” than to post about “a personal health problem”—but again, there is only an unexpectedly small difference (Chart 9).
Digital Health Tools: Mobile Apps, Digital Games, and Wearable Devices

Digital tools for health information and monitoring are popular. As we know (see above, Chart 2), about nine in ten Qataris have used the internet for health information (94 percent). But using (or at least downloading) mobile health apps also comes close to this impressive figure and over half of Qatari teens play video, computer, or mobile games related to health. However, wearable health trackers seem to be less attractive to teens, with around a third of respondents saying they use them (Chart 10).

Mobile health apps. Interestingly, however, among the almost four-fifths of Qatari teens who have at least downloaded mobile apps about health, almost half “hardly ever” use them. Only about one fifth said they “often” use their mobile health app (Chart 11).
Fitness and exercise, diet and nutrition, sleep, and dental health are among the top health-related issues that Qatari teens mentioned as being important to them personally—and for their friends (see above, Tables 3 and 4). No surprise, then, that these are also the topics of the apps they download. Qatari teens were also somewhat likely to download apps related to mental health (34 percent) and smoking (28 percent) (Chart 12).

We asked our respondents specifically which apps they had downloaded or used from a list of the most widespread apps used in Qatar. There are no unanimously popular ones, however. Even the two top apps only reach 15 and 13 percent of app users, respectively: “Your Health First: Calorie Counter” for nutrition and “Nike + Run Club” for fitness (Chart 13).

**Wearable health devices.** Two-thirds of Qatari teens have never used a wearable health tracker such as a Fitbit, FuelBand or the health-tracking function on a smart watch. A possible explanation for this high number could be that 66 percent of Qatari teens have “ever” used or downloaded fitness apps on their smartphones (see above, Chart 10) and may be using those apps as a substitute for health devices. Interestingly, even the relatively few users of health trackers do not find them really helpful (Chart 14).
A minority of our respondents (12 percent) said they have “never” played a health-related video, computer, or mobile game (see above, Chart 10). These three gaming devices do not vary much in popularity, although mobile games are somewhat more widespread than computer and video games (Chart 15).

Surprisingly, games about mental health issues seem to be the most popular—a third of our respondents claim to have played them. Games relating to health issues that were most important to Qatari teens personally — fitness & exercise, smoking, dental health and diet & nutrition (see above, Table 3) follow with a distance. Games relating to those issues all hover between 16 and 21 percent of Qatari teens who have ever played games about health (Chart 16).
Similar to our findings about the helpfulness of health trackers (see above, Chart 14), gamers were also unlikely to find health-related games very helpful: More than half told us that the health-related games they played were “not too helpful” at most (Chart 17).

Health Classes at School

Only seven percent of all 13 to 20-year-old Qataris said they had a full health class at school (i.e., a class that was devoted specifically to health topics and lasted for at least a semester or term). Health was covered as part of another class such as biology, or only in one or more special assemblies on health topics, for about a quarter of teens. Almost a third of Qatari teens said that they never had any classes or assemblies about health (Chart 18).
According to the Qatari teens surveyed, the most frequent topics covered in health classes (mentioned at least by half of our respondents) were hygiene, diet and nutrition, fitness and exercise, dental health, road safety, smoking, and cancer. Similar topics were taught to teens who had health covered as part of another class (such as biology) or just in special assemblies—except that now diabetes, heart disease, sleep, and colds/flu were also among the topics mentioned by at least half of our respondents (Table 9).

<table>
<thead>
<tr>
<th>Percent who say each topic was discussed</th>
<th>Among those who took a semester-long health class</th>
<th>Among those who covered health as part of another class or in a special assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hygiene</td>
<td>60</td>
<td>77</td>
</tr>
<tr>
<td>Diet and nutrition</td>
<td>58</td>
<td>78</td>
</tr>
<tr>
<td>Fitness and exercise</td>
<td>56</td>
<td>78</td>
</tr>
<tr>
<td>Dental health</td>
<td>56</td>
<td>70</td>
</tr>
<tr>
<td>Road safety</td>
<td>56</td>
<td>65</td>
</tr>
<tr>
<td>Smoking</td>
<td>55</td>
<td>71</td>
</tr>
<tr>
<td>Cancer</td>
<td>50</td>
<td>57</td>
</tr>
<tr>
<td>Diabetes</td>
<td>49</td>
<td>69</td>
</tr>
<tr>
<td>Heart disease</td>
<td>49</td>
<td>56</td>
</tr>
<tr>
<td>Allergies</td>
<td>48</td>
<td>46</td>
</tr>
<tr>
<td>Sleep</td>
<td>41</td>
<td>52</td>
</tr>
<tr>
<td>Attention Deficit Disorder (ADHD)</td>
<td>41</td>
<td>44</td>
</tr>
<tr>
<td>Depression or other mental health issue</td>
<td>40</td>
<td>43</td>
</tr>
<tr>
<td>Stress or anxiety</td>
<td>40</td>
<td>46</td>
</tr>
<tr>
<td>Colds/Flu</td>
<td>37</td>
<td>57</td>
</tr>
<tr>
<td>Domestic violence or abuse</td>
<td>35</td>
<td>40</td>
</tr>
<tr>
<td>Bullying</td>
<td>31</td>
<td>28</td>
</tr>
<tr>
<td>Traditional healing methods</td>
<td>30</td>
<td>43</td>
</tr>
<tr>
<td>Eating disorders</td>
<td>28</td>
<td>46</td>
</tr>
<tr>
<td>Issues surrounding puberty</td>
<td>27</td>
<td>29</td>
</tr>
<tr>
<td>Reproductive health</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>N</td>
<td>79</td>
<td>611</td>
</tr>
</tbody>
</table>

Health Information as a Reason for Behavior Change

Have Qatari teens changed a health-related behavior as a result of the health information they encountered? To find out, we presented them with the sources they claimed to have used for health information and asked: “Irrespective of whether you succeeded or not, have you ever tried to change your behavior because of any of the health-related information you’ve found from each of the following sources?”

Interestingly, none of these sources is really unimportant in prompting teens to attempt to change their health behavior. Even “ads on TV,” the least influential source, led more than half of their viewers to try to change their behavior. However, personal communication is the most prominent:

“Guardians” (i.e., mostly one’s parents), brothers or sisters, doctors or nurses, and friends were said to be the most influential sources. This may not be too surprising, given that these same sources are the most likely to be used and trusted by Qatari teens for the purposes of health information (see above, Table 5 and 8 respectively).

However, more than two thirds of respondents also mentioned that traditional media channels led them to try to change their health-related behavior (leaflets/pamphlets from hospitals, health classes in school, books), but online sources as well (the local Sahatak Awalan website on health, Snapchat, online forums about health communication and Facebook) (Table 10).
What kinds of health-related behavior did teens try to change because of health sources? Most often (and quite plausibly) the behaviors that they tried to change were those that are the most important to them personally (see above, Table 3): diet and nutrition, fitness and exercise, dental health, sleep, and hygiene. Still, more than 50 percent also mention stress or anxiety, issues surrounding puberty, and colds/flu (Table 11).

Table 11
Attempts to change health behaviors
Among those who said they tried to change a health behavior because of a health information source

<table>
<thead>
<tr>
<th>Percent who say they attempted to change the following types of health behavior</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Diet and nutrition</td>
<td>80</td>
</tr>
<tr>
<td>Fitness and exercise</td>
<td>79</td>
</tr>
<tr>
<td>Dental health</td>
<td>75</td>
</tr>
<tr>
<td>Sleep</td>
<td>73</td>
</tr>
<tr>
<td>Hygiene</td>
<td>72</td>
</tr>
<tr>
<td>Stress or anxiety</td>
<td>61</td>
</tr>
<tr>
<td>Issues surrounding puberty</td>
<td>61</td>
</tr>
<tr>
<td>Colds/Flu</td>
<td>56</td>
</tr>
<tr>
<td>Depression or other mental health issues</td>
<td>50</td>
</tr>
<tr>
<td>Attention Deficit Disorder/ADHD</td>
<td>48</td>
</tr>
<tr>
<td>Eating disorders</td>
<td>47</td>
</tr>
<tr>
<td>Smoking</td>
<td>40</td>
</tr>
</tbody>
</table>

Base: Qatari adolescents age 13-20; minimum n=562.
Among those who have downloaded a health-related mobile app and used a wearable health tracker, a little more than 60 percent said they have tried to change a health behavior because of those health tools. Health-related games were a little less effective: About half of their users mentioned that they have changed their behavior as a result (Chart 19).

For health-related games, particularly popular among Qatari teens (see above, Chart 10), four fifths and more of the gamers tell us that they tried to change the following types of health behaviors, in descending order: fitness and exercise, diet and nutrition, dental health, and sleep. Again, these are health issues that young Qataris are most concerned about personally (see above, Table 3). But mental health (75 percent) and smoking (66 percent) are still very important as well (Chart 20).
CONCLUSIONS

Fortunately, the health issues that young Qataris find important for themselves and their friends are still lifestyle ones, as one would assume for this age cohort. They are concerned about diet and nutrition, fitness and exercise, hygiene, and sleep. For older adolescents, issues surrounding puberty and reproductive health were also important. Severe illnesses such as cancer, diabetes, HIV and heart diseases are still not perceived as that worrying among teens.

It is surprising that our respondents are fairly open about their interest in mental health information. Mental health problems seem to have been a taboo in Qatar until recently—for example, Qatar’s National Mental Health Strategy was launched only in 2013 (Supreme Council of Health, 2013).

Despite the fact that the internet offers teens access to an abundance of information on virtually any health topic they could think of, it is heartening that young people in Qatar still rely heavily on interpersonal sources of health information, including their parents, siblings, friends, and medical providers. Even when it comes to sensitive health topics, teens are actually more likely to speak to their parents than to look up information on the anonymous internet.

But to be sure, the vast majority of teens—94 percent—also turn to the internet for health information, and one in five claims they look up health information online even every day. The internet has far eclipsed other media as a source of health information—particularly newspapers and radio.

The internet often functions as a tool for additional or supplementary information about symptoms, treatments and medication, for checking if doctors gave the correct advice, but also for school projects. To some extent, only television can live up to internet sources. So, while the internet is not replacing parents, friends, and doctors; it may be supplementing them. This is why our study underscores the importance of making sure there is accurate, appropriate, and easily accessible health information available to teens online—the information is used, and acted upon, so it had better be good.

Most teens don’t seem to explore much beyond what appears when they conduct an online search. So, our survey also highlights the importance of helping teens develop digital health literacy skills. Given that three quarters of teens said they “come across” the information they were looking for “while browsing,” there seems to be plenty of room for improvement in terms of helping them hone their search skills.

Several government agencies and public health organizations in Qatar (e.g., the Ministry of Public Health, Hamad Medical Corporation, SIDRA, and the Primary Health Care Corporation) have been spearheading teen-oriented efforts on topics such as obesity, tobacco use and dental health. But all recent health campaigns in Qatar have not been as memorable as one would hope. For example, even reminding our respondents of the names of fairly prominent health campaigns did not inspire more than half of our respondents.
to remember one of them specifically. Qatari teens were most likely to recall the more universal campaign *Kullana for Health and Safety*. But interestingly, the *Sahatak Awalan* website is not used that often—but if it is, it belongs to the most trusted sources on health among Qatari teens.

Many Qatari teens have also gone beyond online health information and turned to digital tools like apps and games. Wearable devices, however, are not particularly popular among teens. Specific health trackers seem not to be needed because apps with similar functions are also built into smartphones.

We do have to be aware that just as teens are using the internet as a source of information and advice for health promotion, it is also a pathway for accessing information that could have a negative impact on their health (e.g., helping them access porn sites and promoting eating disorders). Also, their naivety when it comes to posting personal health problems is alarming. These are even more reasons to ensure teens have strong digital health literacy—they need the judgment and skills to know how to assess and deal with the abundance of information they come across online. Teaching digital literacy skills would seem to be an appropriate part of health classes, so that teens are empowered to search effectively for information on their own, and evaluate it appropriately. Health teachers can also function as guides, helping direct teens to the best sources of information.
RECOMMENDATIONS

• Health campaigns in Qatar should be improved: All recent campaigns have not been as memorable among young Qataris as one would hope. Even reminding our respondents of the names of specific campaigns did not inspire more than half of our respondents to remember one of them specifically. The more universal campaign Kullana for Health and Safety was most often remembered. But interestingly, while Sahatak Awalan website may not be used that often, it is one of the most trusted sources on health among teens.

• Personal sources of health information and advice should be encouraged, educated and used: Young people in Qatar still rely heavily on their parents, siblings, friends, and medical providers as sources of health information. Even when it comes to sensitive health topics, teens are actually more likely to speak with their parents than to look information up on the anonymous internet.

• It is important to ensure that accurate, appropriate, and easily accessible health information is available to teens online—because the internet has become the most important mediated source. To some extent, only television can live up to internet sources. Internet information is used, and acted upon, so it had better be good.

• Digital tools—apps and games—are popular and should be used as instruments of health information and education.

• Mental health problems can be addressed in public health campaigns. Our respondents did not treat mental health as a “taboo” and were fairly open about their interest in mental health information.

• Teens should be helped develop digital health literacy and search skills. Many teens don’t seem to explore much beyond what appears when they conduct an online search. Also, their naivety when it comes to posting about personal health problems is alarming. Teaching digital literacy skills would seem to be an appropriate part of health classes. Health teachers can also function as guides, helping direct teens to the best sources of information.
REFERENCES


Appendix:
THE QUESTIONNAIRE OF THE STUDY

Teens & Digital Health Survey

Demographic questions

[All respondents]
[Separate window/page, stand alone; both questions together]
What is your Gender?
I am a female ________________________________ 1
I am a male ________________________________ 2
Refused ________________________________ 9

[All respondents]
[Separate window/page, stand alone; both questions together]
Are you a Qatari citizen?
I am a Qatari citizen ________________________________ 1
No, I am not a Qatari citizen ________________________________ 2
Don’t Know ________________________________ 8
Refused ________________________________ 9

[All respondents]
[Separate window/page, stand alone; both questions together]
How long have you lived in Qatar?
Less than 6 months ________________________________ 1
6 months to 1 year citizen ________________________________ 2
1 year but less than 2 years ________________________________ 3
2 years but less than 5 years ________________________________ 4
5 years but less than 10 years ________________________________ 5
All my life/i was born in Qatar ________________________________ 6
Don’t Know ________________________________ 8
Refused ________________________________ 9

[All respondents]
[Separate window/page, stand alone; both questions together]
[Open ended question]
[Limit responses from 13-20]
What is your age in years?

88 ________________________________ Don’t Know
99 ________________________________ Refused
Appendix

THE QUESTIONNAIRE OF THE STUDY

If age = 88 or 99 ask

In what year were you born?

8. Don’t Know
9. Refused

[All respondents]
[Separate window/page, stand alone; all both questions together;]
[If responding 8-9th or refused, there will be programmer notes in questions
applicable asking to not show certain response]

What school grade do you belong to?

8th .................................................................1
9th .................................................................2
10th ..............................................................3
11th ...............................................................4
12th ...............................................................5
Don’t Know ....................................................8
Refused ..........................................................9

[All respondents]
[Numberboxes; range 120cm to 200cm]
[Note to programmers: open question, program the question to limit
responses to the range provided. It should be in centimeters.]

How tall are you?

centimeters

[All respondents]
[Numberboxes; range 30k -230k]
[Note to programmers open question, program the question to limit responses
to the range provided in kilos.]

How much do you weigh?

kilograms
Main Questionnaire

Q1. Please mark the statement that best applies to you. (Mark one response only)
I attend an independent school/government school ___________________________ 1
I attend an international school./private school ___________________________ 2
Refused ________________________________________ 9

Q2. Now please tell us how important each of the following health topics are to YOU PERSONALLY:
Not at all important ___________________________ 1
Not too important _______________________________ 2
Somewhat important ____________________________ 3
Very important ________________________________ 4
Refused ________________________________________ 9

Depression or other mental health issues ___________________________ 1
Smoking ________________________________________ 2
Allergies ________________________________________ 3
Diet and nutrition ________________________________ 4
Fitness and exercise ______________________________ 5
Eating disorders (such as anorexia or bulimia) _______ 6
Reproductive health ______________________________ 7
Bullying ________________________________________ 8
Issues surrounding puberty (such as menstruation, acne) _______ 9
Hygiene ________________________________________ 10
Road safety ______________________________________ 11
Stress or anxiety _________________________________ 12
Sleep __________________________________________ 13
Dental health _____________________________________ 14
Colds/flu ________________________________________ 15
Attention deficit disorder (ADHD) _________________ 16
Cancer __________________________________________ 17
Diabetes _________________________________________ 18
Heart disease ____________________________________ 19
Domestic violence or abuse _________________________ 20
Traditional healing methods (e.g. acupuncture, herbal medicine, etc.) __________ 21
Other health topic not mentioned here. ______________ 22
Please Specify what other health topic not mentioned here

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3. How much do YOUR FRIENDS care about each of the following health topics?</td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>1</td>
</tr>
<tr>
<td>Only a little</td>
<td>2</td>
</tr>
<tr>
<td>Somewhat</td>
<td>3</td>
</tr>
<tr>
<td>A lot</td>
<td>4</td>
</tr>
<tr>
<td>Don't Know</td>
<td>8</td>
</tr>
<tr>
<td>Refused</td>
<td>9</td>
</tr>
<tr>
<td>Depression or other mental health issues</td>
<td>1</td>
</tr>
<tr>
<td>Smoking</td>
<td>2</td>
</tr>
<tr>
<td>Allergies</td>
<td>3</td>
</tr>
<tr>
<td>Diet and nutrition</td>
<td>4</td>
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<tr>
<td>Fitness and exercise</td>
<td>5</td>
</tr>
<tr>
<td>Eating disorders (such as anorexia or bulimia)</td>
<td>6</td>
</tr>
<tr>
<td>Reproductive health</td>
<td>7</td>
</tr>
<tr>
<td>Bullying</td>
<td>8</td>
</tr>
<tr>
<td>Issues surrounding puberty (such as menstruation, acne)</td>
<td>9</td>
</tr>
<tr>
<td>Hygiene</td>
<td>10</td>
</tr>
<tr>
<td>Road safety</td>
<td>11</td>
</tr>
<tr>
<td>Stress or anxiety</td>
<td>12</td>
</tr>
<tr>
<td>Sleep</td>
<td>13</td>
</tr>
<tr>
<td>Dental health</td>
<td>14</td>
</tr>
<tr>
<td>Colds/flu</td>
<td>15</td>
</tr>
<tr>
<td>Attention deficit disorder (ADHD)</td>
<td>16</td>
</tr>
<tr>
<td>Cancer</td>
<td>17</td>
</tr>
<tr>
<td>Diabetes</td>
<td>18</td>
</tr>
<tr>
<td>Heart disease</td>
<td>19</td>
</tr>
<tr>
<td>Domestic violence or abuse</td>
<td>20</td>
</tr>
<tr>
<td>Traditional healing methods (e.g. acupuncture, herbal medicine, etc.)</td>
<td>21</td>
</tr>
<tr>
<td>Other health topic not mentioned here</td>
<td>22</td>
</tr>
</tbody>
</table>
Appendix: the questionnaire of the study

Q4b. Have you ever taken any of the following types of health classes at school? Select all that apply

Health was covered as part of another class, such as biology

We had one or more special assemblies about health issues

I had a class that was just about health for at least a whole semester or term

Any other type of health class not mentioned here

None of these

Refused

Please specify type of other health class you took not mentioned here

[N] If typeclss (q4b) = 5 or 9., Do not ask

[Keep order of items in q2]

[If respondent selected grade 8th-9th, don’t know, or refused to answer, do not present option 7, 8, 9] [present in table, with each participant going through each option and selecting either 1 or 2]

[Other health topic not mentioned here option- open text box; keep with table]

[Display options 1-14 in one screen; 15-22 in second screen to avoid scrolling down]

Q5. Which of the following topics were covered in health class?

This topic was covered in health class

This topic was not covered in health class

Refused

Depression or other mental health issues

Smoking

Allergies

Diet and nutrition

Fitness and exercise

Eating disorders (such as anorexia or bulimia)

Reproductive health

Bully

Issues surrounding puberty (such as menstruation, acne)

Hygiene

Road safety

Stress or anxiety

Sleep

Dental health

Colds/flu

Attention deficit disorder (ADHD)

Cancer

Diabetes

Heart disease
Domestic violence or abuse 20
Traditional healing methods (e.g. acupuncture, herbal medicine, etc.) 21
Other health topic not mentioned here 22
Please specify

[All respondents]
[Multiple responses possible]
[If they choose other, move on to the next question; no follow up question needed]

Q6. What languages do you look up health information in? Select all that apply.
Arabic 1
English 2
Other Language(s) not mentioned here 3
Refused 9
State language not mentioned here

[All respondents]
[Options should be randomized. The position of f & g can change in the list as well, but they should always be presented together, with f presented first, then g. Anchor ee last]
[Display options 1-14 in one screen; 15-22 in second screen to avoid scrolling down]
[Other option they can select yes/n/r but when choosing open up textbox asking “please specify which other source you get health information from” - open text box; keep with table if possible]
[Participants should be able to skip writing something in textbox]

Q7. People get information about health from many different sources. For each of the following sources please indicate whether you have used them at all to get information about health topics.
Yes, I use this source 1
No I haven’t used this source 2
Not Applicable 3
Refused 9

a. Your guardians
b. Health classes in school
c. Doctors/nurses
d. Friends
e. Brothers or sisters
f. TV news
g. Other TV shows
(such as talk shows, reality shows, medical or other dramas)
h. Newspaper articles (print version)
i. Newspaper articles (online version)
j. Magazine articles (print version)
k. Magazine articles (online version)
l. Radio
m. Books
n. Leaflets/pamphlets from a hospital, clinic, or medical practice
o. Ads online
p. Ads on the radio
q. Ads on TV
r. Ads in newspapers
s. Ads in magazines
t. Billboards
u. Facebook
v. Snapchat
w. Twitter
x. Instagram
y. YouTube
z. Wikipedia
a. A medical website
b. Sahatak Awalan website
c. Online forums about health information
d. Any other social networking site (Reddit, Tumblr, other)
e. Another source not mentioned here.

Please specify which other source you get health information from

[Note to programmers: all other responses mentioned in q7.Ee “other” should be presented in this question as well.]
[If q7a-ee=1, ask]

[Note to programmers: this question should only be asked of respondents who chose “yes” (response 1) for any source listed in q7 (q7a-ee).]
[Only show the source(s) that the respondent selected 1 (yes) for & present the options in the same order as q7 (which will already be randomized)]
[If there are more than 14 options, please make sure 1-14 are displayed in one screen and the rest in a separate screen. This to avoid scrolling down]
[Include the response in the “other”-textbox]

Q10. In general, do you trust health information from each of the following sources?

Yes, I trust

No, I do not trust

Refused

a. Your guardians
b. Health classes in school
c. Doctors/nurses
d. Friends
e. Brothers or sisters
f. TV news
g. Other TV shows  
(such as talk shows, reality shows, medical or other dramas)

h. Newspaper articles (print version)

i. Newspaper articles (online version)

j. Magazine articles (print version)

k. Magazine articles (online version)

l. Radio

m. Books

n. Leaflets/pamphlets from a hospital, clinic, or medical practice

o. Ads online

p. Ads on the radio

q. Ads on TV

r. Ads in newspapers

s. Ads in magazines

t. Billboards

u. Facebook

v. Snapchat

w. Twitter

x. Instagram

y. YouTube

z. Wikipedia

a. A medical website

b. Sahatak Awalan website
c. Online forums about health information
d. Any other social networking site (Reddit, Tumblr, other)
e. Another source not mentioned here.

[Note to programmers: all other responses mentioned in q7.Ee “other” should be presented in this question as well.]

[If q7a-ee=1, ask]

[Note to programmers: this question should only be asked of respondents who chose response 1 for any source listed in q7 (q7a-dd). Only show the source(s) that the respondent selected 1/yes for Present the options in the same order as q7 (which will already be randomized)]

[If there are more than 14 options, please make sure 1-14 are displayed in one screen and the rest in a separate screen. This to avoid scrolling down]

[Include the response in the other-textbox]

[If possible do not show empty rows]

[In the red letters it should say “tried to change”]

Q11. Irrespective of whether you succeeded or not, have you ever tried to change your behavior because of any of the health-related information you’ve found from each of the following sources?

<table>
<thead>
<tr>
<th>Source</th>
<th>Yes</th>
<th>No</th>
<th>Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Your guardians</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>b. Health classes in school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Doctors/nurses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Friends</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Brothers or sisters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. TV news</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Other TV shows</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(such as talk shows, reality shows, medical or other dramas)

h. Newspaper articles (print version)
i. Newspaper articles (online version)
j. Magazine articles (print version)
k. Magazine articles (online version)
l. Radio
m. Books
n. Leaflets/pamphlets from a hospital, clinic, or medical practice
o. Ads online
p. Ads on the radio
q. Ads on TV
r. Ads in newspapers
s. Ads in magazines
t. Billboards
u. Facebook
v. Snapchat
w. Twitter
x. Instagram
y. YouTube
z. Wikipedia
a. A medical website
b. Sahatak Awalan website
c. Online forums about health information
d. Any other social networking site (Reddit, Tumblr, other)
e. Another source not mentioned here.

[Note to programmers: all other responses mentioned in q7.Ee “other” should be presented in this question as well.]
[If q11 a-ee= 1, ask]
[If respondent selected grade 8th-9th or refused to answer, do not present option 3]
[Note to programmers: if respondent answered (yes/1) for any of the options (a-ee) in q11, present this question. Randomize options]
[In the red letters it should say “yes or no”]
[Other “other health topic not mentioned here “- open text box; keep with table]
[Keep the format of the question as in the other cases, with each of the options appearing in the question box]

**Q12a. Have the changes you just mentioned been related to any of the following health topics?**

<table>
<thead>
<tr>
<th>Yes</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>Refused</td>
<td>9</td>
</tr>
</tbody>
</table>

- Depression or other mental health issues 1
- Smoking 2
- Issues surrounding puberty (such as menstruation, acne) 3
- Diet and nutrition 4
- Fitness and exercise 5
- Eating disorders (such as anorexia or bulimia) 6
- Hygiene habits 7
- Stress or anxiety 8
- Sleep 9
- Dental health 10
Colds/flu
Attention deficit disorder (ADHD)
Other health topic not mentioned here
Please specify the other health not mentioned in the list

[All respondents]
[Question should be viewed by itself]
[In the red letters it should say “how likely”]

13. Now I'd like you to think about sensitive health topics, like menstruation or depression. If you had a question about a sensitive health topic, how likely would you be to do each of the following:

Not at all likely
Not too likely
Somewhat likely
Very likely
Don’t know
Refused

a. Look up the information online
b. Talk to someone about it on a hotline
c. Talk to your doctor or nurse about it in person
d. Talk with your father about it
e. Talk with your mother about it
f. Talk with your friends about it

[If q7 i, k, o, u, v, w, x, y, z, aa, bb, cc, dd = 1, ask]
[This question should only be asked if they responded to q7 1 (yes) i, k, o, u, v, w, x, y, z, aa, bb, cc, dd, if not skip]

Q16. How often do you look for health information online? Select one option.

Every day
Every week
Every month
A few times a year
Once a year
Less often than once a year
Never
Refused
Appendix: the questionnaire of the study

Q17. Are any of the following reasons why you have ever gone online to look for health information?

Yes 1
No 2
Refused 9

a. For a school project
b. To get more information about something after a doctor’s visit
c. To check my symptoms or find out what was wrong with me
d. To learn how to treat an illness, condition, or injury I had
e. To get information about medications
f. Because I couldn’t talk to my guardians about it
g. My friend recommended I visit a specific website
h. A family member recommended that I visit a specific website
i. A health care professional recommended that I visit
j. Other reason not mentioned here.

Please specify the other reason you have gone online to look for health information.

Q19a. In general, are you satisfied with the health information you’ve gotten from the Internet?

Yes 1
No 2
Refused 9

Q19b. In general, what are the reasons you aren’t satisfied with the health information you’ve gotten on the internet? (Select all that apply)

 Couldn’t find the answer to my specific question 1
 The answers weren’t relevant to me or my situation 2
 Too much conflicting or contradictory information from different sources 3
 Didn’t seem reliable 4
 Turned out to be wrong 5
 Too vague 6
I don’t have the skills to find answers to my specific question____________________7
I didn’t understand the information (e.g. language was too technical) ___________8
Took too long to look through all the information____________________________9
Not culturally relevant____________________________________________________10
Other reason not mentioned here___________________________________________11
Other reason not mentioned here with information you’ve gotten from the internet_______________________________________________________________12

[If q7 i, k, o, u, v, w, x, y, z, aa, bb, cc, dd = 1, ask]
[This question should only be asked if they responded to q7 1(yes) to i, k, o, u, v, w, x, y, z, aa, bb, cc, dd, if not skip]
[Note to programmers: randomize options; options a & b can be moved around the list, but they should always be presented together. Also, option a should always come before b. ]

Q20. When you look for health information online, how often do you find it by:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Hardly ever</th>
<th>Sometimes</th>
<th>Often</th>
<th>Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Googling it</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b</td>
<td>Searching for it on a different search engine such as Yahoo or Bing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c</td>
<td>Coming across the information while browsing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d</td>
<td>Seeing it in an ad online</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e</td>
<td>Going directly to a specific health website</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>f</td>
<td>Links from social network sites (Facebook, Twitter, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Q22. What is the last health-related website you visited?

Q23. Which of the following health campaigns have you encountered?

<table>
<thead>
<tr>
<th></th>
<th>Yes, have encountered</th>
<th>No, have not encountered</th>
<th>Not Sure/ Don’t Know</th>
<th>Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Your Health Choice by Sahtak Awalan</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>b</td>
<td>Think Pink Awareness Walk</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>c</td>
<td>Screen for Life</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>d</td>
<td>Qatar Patient Safety Week</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>e</td>
<td>Yalla Natural by Sahtak Awalan</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>f</td>
<td>Early Detection Saves Lives</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>g</td>
<td>Be Like... Campaign</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>h</td>
<td>Kulluna: For Health and Safety</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>i</td>
<td>Beautiful Smile</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>j</td>
<td>Any other health campaign not mentioned here.</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

Please specify

Q24a: “Would you do any of the following...?”

Yes ___________________________________________________________ 1
No ____________________________ ___________________________________ 2
Refused _________________________________________________________ 9
a. I would post about a general health topic that does not affect me
personally on social media (e.g. Facebook, Twitter, Instagram, etc.)

b. I would post about a personal health problem on social media (e.g. Facebook, Twitter, Instagram, etc.)

c. I would post about a general health topic that does not affect me personally on direct messaging sites (e.g. Snapchat, WhatsApp, Facebook Messenger etc.)

d. I would post about a personal health problem on direct messaging sites (e.g. Snapchat, WhatsApp, Facebook Messenger etc.)

[All Respondents]

[If there are more than 14 options, please make sure 1-10 are displayed in one screen and the rest (11-15 in a separate screen. This to avoid scrolling down]

Q25. The following are things that some young people find important when they are using sources to find information about health issues, like those mentioned earlier. Please tell me whether or not this is important to you.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Refuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>
Q44. To what extent do you agree/disagree with the following statements?

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Don’t Know</th>
<th>Refuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am able to achieve most of the goals that I have set for myself—whatever they are.</td>
<td>1 2 3 4 5 8 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>When facing difficult tasks, I am certain that I accomplish them.</td>
<td>1 2 3 4 5 8 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>In general, I think that I can obtain outcomes that are important to me.</td>
<td>1 2 3 4 5 8 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I believe I can succeed at any endeavor to which I set my mind.</td>
<td>1 2 3 4 5 8 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I am able to successfully overcome many challenges.</td>
<td>1 2 3 4 5 8 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I am confident that I can perform effectively on many different tasks.</td>
<td>1 2 3 4 5 8 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Compared to my peers, I can do most tasks very well—whatever they are.</td>
<td>1 2 3 4 5 8 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Even when things are tough, I can perform quite well.</td>
<td>1 2 3 4 5 8 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q26. Have you ever downloaded or used a mobile app related to any of the following?

| Yes | 1 |
| No  | 2 |
| Refused | 31 |

- Mental health issues
- Smoking
- Diet and nutrition
- Fitness and exercise
- Sleep
- Dental health
An app related to another health topic not mentioned here __________________________ 13

[If q26 = they answered 1-13, this question is asked, if not skip]
[Multi select option]
[Randomize options, anchor 8 and 9 last]
[Other option “other health-related app not mentioned here is an option, the textbox . Please specify” is now the last option. Textbox keep with table]

Q27. Which of the following health related apps have you downloaded or used? Select all that apply.
Your Health First: Calorie Counter __________________________ 1
Step into Health __________________________ 2
FitBit __________________________ 3
MyFitnessPal __________________________ 4
MiFit __________________________ 5
Nike + Run Club __________________________ 6
Endomondo __________________________ 7
Other health-related app not mentioned here __________________________ 8
Don’t Know/Don’t Remember __________________________ 9
Refused __________________________ 10
If choosing other, display this text: Please specify which health related app __________ 11

[If q26 = 1-13, ask]
[Randomly select one app mentioned in q27. Ask q28-32 for only that app]

Q28. How often do you use this health-related mobile app?
Hardly ever __________________________ 1
Sometimes __________________________ 2
Often __________________________ 3
Refused __________________________ 9

[If q28 = 1-3, ask]
[Randomly select one app mentioned in q27. Ask q28-32 for only that app]

Q29. How satisfied are you with this health-related mobile app?
Not at all __________________________ 1
Not too __________________________ 2
Somewhat __________________________ 3
Very __________________________ 4
Refused __________________________ 9

[If q29 =1-2, ask]
[Randomly select one app mentioned in q27. Ask q28-32 for only that app]
[Randomize options, anchor 8 last]
[If choosing “other” a open text box should appear below the option and the question should ask “please specify the other reason why you were not satisfied” : keep with table]

Q30. Are any of the following reasons why you weren’t satisfied with this health-related mobile app? Select all that apply.
Yes __________________________ 1
No __________________________ 2
Refused __________________________ 9

Took too much time __________________________ 1
Appendix: the questionnaire of the study

Too complicated ___________________________ 2
Got boring ________________________________ 3
Didn’t work right __________________________ 4
Didn’t do what I thought it would __________ 5
Too many ads ______________________________ 6
Other reason not mentioned here ____________ 7
If choosing other, display this text: Please specify the other reason why you were not satisfied.

[If q29 = 3-4, ask]
[Randomly select one app mentioned in q27. Ask q28-32. For only that app]
[Randomize options, anchor 6]
[If choosing “other” a open text box should appear below the option and the question should ask “please specify the other reason why you were satisfied:”; keep with table]

Q31. Are any of the following reasons why you are satisfied with this health-related mobile app? Select all that apply.
Yes ________________________________ 1
No ___________________________________ 2
Refused ______________________________ 9

Helped me track stuff I needed to pay attention to ______________ 1
Motivated me ____________________________ 2
Was fun ________________________________ 3
Useful reminders __________________________ 4
Learned a lot ____________________________ 5
Other reason not mentioned here __________ 6
If choosing other, display this text: Please specify the other reason why you were satisfied:

[If q28=1-3, ask]
[Randomly select one app mentioned in q27. Ask q28-32 for only that app]
[Match response option order in q12]
[If choosing “other” a open text box should appear below the option and the question should ask “other health topic not mentioned already, please specify:”; keep with table]

Q32. Irrespective of whether you succeeded or not, have you ever tried to change your behavior relating to the following health topics because of this mobile app?
Yes ___________________________________ 1
No ___________________________________ 2
Refused ______________________________ 9

Mental health issues ________________________ 1
Smoking ____________________________________ 2
Diet and nutrition  3
Fitness and exercise  4
Anxiety  5
Sleep  6
Dental health  7
Other health topic not mentioned here  8
Please specify the other health topic

[All respondents]
Q33. Have you ever used any kind of wearable health tracker, such as a FitBit, FuelBand, or the health tracking function on a smartwatch?
Yes, use one now  1
Yes, used one in the past but not anymore  2
No, never used  3
Refused  9

[If q33=1-2, ask]
[Stand alone question, alone in the view]
Q34. Irrespective of whether you succeeded or not, have you ever tried to change your behavior because of a wearable health tracker?
Yes  1
No  2
Refused  9

[If q33=1-2, ask]
[Participants can only select one option]
Q36. In general, how helpful were the wearable health trackers you've used? Select one option.
Not at all  1
Not too  2
Somewhat  3
Very  4
Refused  9

[All respondents]
[If respondent answer 4 or 9= skip to {q48:satbod}]
[Stand alone question, by itself]
[Randomize options, anchor 4 last]
[Should only be able to choose 1-3 or 4 or 5; its either 1-3 or 4 or 5]
Q39. Have you ever played a video game, computer game, or mobile game that was related to a health topic? Select all that apply.
Video game on a health topic  1
Computer game on a health topic  2
Mobile game on a health topic  3
No, haven’t played any digital games on a health topic  4
Refused  5
Appendix: the questionnaire of the study

Q40. What health topic or topics were the games you played about? Select all that apply

- Mental health issues  
- Smoking  
- Diet and nutrition  
- Fitness and exercise  
- Sleep  
- Dental health  
- Other health topic not mentioned here  

Please specify the other health topic

Q41. In general, how helpful were the health-related games you played:

- Not at all  
- Not too helpful  
- Somewhat  
- Very  
- Refused  

Q42. Irrespective of whether you succeeded or not, have you ever tried to change your behavior because of a health-related video, computer, or mobile game you played?

- Yes  
- No  
- Refused  

Q43. Did you try to change any of the following because of a health-related video, computer, or mobile game?

- Mental health issues  
- Smoking  
- Diet and nutrition  
- Fitness and exercise  
- Other health topic not mentioned here  

Please specify the other health topic
Q48. Please mark whether you agree or disagree with each of the following statements:

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
<th>Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am satisfied with the shape of my body</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>I like what I look like in pictures</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>My weight makes me unhappy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Q49. When is the last time you saw a dentist? Select one.

- Within the past six months: 1
- Between six months and a year ago: 2
- One to three years ago: 3
- Three to five years ago: 4
- Never: 5
- Refused: 9

Q50. In the past 30 days, how often have you participated in physical activities, such as playing sports, running, working out, taking a dance class, or doing yoga? Select one.

- Several times a day: 1
- Once a day: 2
- Once or more a week: 3
- Once or more a month: 4
- Never: 5
- Refused: 9
[If q50= 1-4, ask]
[Randomize options]
[Should only be able to choose one option only]
[Other option “please specify the main reason not mentioned here” - open text box; keep with table]

Q51. What is the MAIN REASON you were physically active in the past 30 days? Select all that apply.
To lose weight _______________________________ 1
To be healthy _______________________________ 2
To look attractive ____________________________ 3
Because my friends are physically active ____________________________ 4
Other reason not mentioned here _______________________________ 5
Refused _______________________________ 6
Please specify the other main reason you were physically active in the past 30 days ____________________________ 7

[All respondents]
[Present in grid]

**NUTRITION QUESTIONS**

<table>
<thead>
<tr>
<th>NUTRITION QUESTIONS</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Usually</th>
<th>Always</th>
<th>Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you eat breakfast?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>How often do you eat a meal within 1 to 2 hours before sleeping?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>How often do you take vitamin supplements?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>How often do you watch the portion sizes of your foods?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>By portion size we mean how much of a food you choose to eat at one time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How often do you track/watch/count the calories of the foods you eat?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>How often do you eat a meal away from home, or get take-out food?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
</tbody>
</table>
What types of restaurants do you most frequent go to?

Fast food restaurants (e.g. McDonald's, Burger King, Pizza Hut) 1
Casual dining restaurants (e.g. Applebee's, Fridays, Buffalo's) 2
Fine dining restaurants (e.g. Edam, ..., Restaurants in 5 star hotels) 3
Café 4
Refused 9

Q52. During the past 30 days, how often did you feel

<table>
<thead>
<tr>
<th></th>
<th>All of the time</th>
<th>Most of the time</th>
<th>Some of the time</th>
<th>A little of the time</th>
<th>None of the time</th>
<th>Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>nervous?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>hopeless?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>restless or fidgety?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>so depressed that nothing could cheer you up?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>that everything was an effort?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>worthless?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>insecure?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
The next few questions ask about some things that may have happened to you.

[All respondents]

Q53. Please tell me if any of these things have happened.

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Don't Know</th>
<th>Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Were you hospitalized for 2 weeks or more due to extreme illness or injury?</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>Was there a major upheaval between your guardians (such as divorce, separation)?</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Did you experience a death of a very close friend or family member?</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>Did something happen that scared you so much you thought about it for years after?</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>Were you sent away from home because you did something wrong?</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>Were you ever beaten up by someone close to you, like a family member or a friend?</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>Were you ever sexually abused by someone close to you, like a family member or a friend?</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>
The final questions are sensitive. Please remember that your responses are anonymous and confidential. You can refuse these questions if you prefer.

Q54. Sometimes when people go online, they come across information or websites they weren’t necessarily looking for. How often, if ever, have you come across any of the following types of information online, whether you were looking for it on purpose or not?

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Never</th>
<th>Only once or twice</th>
<th>Sometimes</th>
<th>Often</th>
<th>Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Treating/managing mental illness (example: depression, schizophrenia, anxiety)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>Extreme ways to lose your weight – that is, how to eat so little you stay extremely thin, or how to throw up so you don’t gain weight</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>How to obtain/use steroids, stimulants, performance enhancement substances</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>How to get cigarettes and shisha</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>Inappropriate sites</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>Any other types of information that would be bad for your health or well-being not mentioned here.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>9</td>
</tr>
</tbody>
</table>

Please specify the other types of information that would be bad for your health or well-being.
QRESULT. Think of all the health or medical information you found on the Internet in the past 12 months. Which of the following did you do, based on that information?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don't Know</th>
<th>Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tried to diagnose a health problem</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Tried to treat a health problem</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Led you to seek further advice/more information</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Led you to contact a health care professional</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Led you to seek support from others</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Made you more comfortable with the advice you got from doctors or other health professionals.</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Made you less comfortable with the advice you got from doctors or other health professionals.</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

The information collected in this survey will be used to learn about what youth in Qatar think about health and the ways they get informed about health topics of all kinds. As mentioned previously, the answers you provided will be kept confidential and will only be seen by researchers working on this study.

Q: CONTACT
Can we contact you in the future to obtain your opinions on this subject or to participate in a similar study in the future?
Yes
No

[If answering yes, ask the following questions, if responding no skip to end of survey]

[Programmer open ended responses for pname, pmail, phone; to be displayed together]
Your Name:
Email:
Telephone number:

In case we have difficulty contacting you, we may want to contact you through your parents or guardians. Can you provide us with your mom’s contact information.
Yes
No
(Skip asking mother’s contact information open ended questions)
[Programmer open ended responses for mname, mmail, mphone; to be displayed together]
	Mother’s Name: _______________________________________
	Mother’s Email: _______________________________________
	Mother’s Telephone number: _____________________________

Can you provide us with your father’s contact information?
Yes
[Go to father’s contact information]
No
(Skip asking father’s contact information open ended questions and go to end of questionnaire)

[Programmer open ended responses for fname, fmail, fphone; to be displayed together]
	Father’s Name: _______________________________________
	Father’s Email: _______________________________________
	Father’s Telephone number: _____________________________

Thank you for completing this survey.
The information you provided will be very helpful.