Seeking solutions: how COVID-19 changed sleep around the world
Introduction and methodology

Among the most common fears and concerns in any crisis, including during a global viral pandemic, is a mounting sense of vulnerability and loss of control. Active participation in self-care regarding sleep may be considered as part of our efforts to bring back some order and predictability to our daily lives, as well as to enhance our overall well-being.

In recognition of World Sleep Day 2021, Philips commissioned its annual survey with KJT Group, Inc., which looks at the attitudes, perceptions and behaviors around sleep of people in 13 countries: Australia, Brazil, China, France, Germany, India, Italy, Japan, the Netherlands, Singapore, South Korea, the U.K. and the U.S. With this survey data, Philips continues its commitment to raise awareness around the sleep challenges people face worldwide. Philips will use these new findings to seek to address 80% of the most common sleep issues and help people take an active approach to their overall health, in addition to providing solutions for the millions of people suffering from sleep issues like insomnia and sleep apnea.

This survey was conducted online by KJT Group, Inc. on behalf of Philips from November 17 – December 7, 2020 among 13,000 adults ages 18 and older in 13 countries (Australia: n=1,000; Brazil: n=1,000; China: n=1,000; France: n=1,000; Germany: n=1,001; India: n=1,000; Italy: n=1,000; Japan: n=1,000; Netherlands: n=1,000; Singapore: n=1,000; South Korea: n=999; the U.K.: n=1,000 and the U.S.: n=1,000). The survey was web-based and self-administered in the primary language(s) of each country. These were non-probability samples and thus a margin of error cannot be accurately estimated. For complete survey methodology, including weighting variables, please contact Meredith Amoroso at meredith.amoroso@philips.com.
Demographics

13,000 respondents representing 13 countries

- **United States**
- **UK**
- **Brazil**
- **France**
- **Netherlands**
- **Germany**
- **India**
- **Australia**
- **China**
- **Japan**
- **South Korea**
- **Singapore**

- 13,000 respondents representing 13 countries
- **42.9 years** mean
- **65%** live with a partner/spouse
- **51%** male
- **49%** female
- **<1%** other
- **55%** are employed full time
- **48%** report having at least one child at home

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2020 was a stressful year...

Almost half of (48%) global consumers report that the COVID-19 pandemic negatively impacted their stress.

With unprecedented events happening all around the world, we struggled to put our phones down. Compared to results from the Philips 2020 World Sleep Day survey, significantly more people say they use a cell phone in bed.

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>74%</td>
</tr>
<tr>
<td>2021</td>
<td>84%</td>
</tr>
</tbody>
</table>

Of those looking at their phone before bed, four-in-ten (41%) are reading news about the COVID-19 pandemic or political events (37%).

Also, 73% report scrolling through social media before bed.

And it impacted our sleep

Stress is the top barrier to a good night’s sleep (24%).

In addition to the pandemic, people are most worried/stressed about financial challenges (53%) and work responsibilities (44%).

Only 55% of adults are satisfied with their sleep.

70% report they are experiencing one or more new sleep challenges since the beginning of the COVID-19 pandemic, with 43% saying waking up during the night is a challenge. 37% say the pandemic is negatively impacting their ability to sleep well.

How much sleep are adults getting?

On average, people sleep 6.9 hours per weeknight and 7.7 hours per weekend night. The recommended amount of nightly sleep for a healthy adult is 7–9 hours per night.

<table>
<thead>
<tr>
<th>Sleep Duration</th>
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<tbody>
<tr>
<td>6.9 hours weeknight</td>
</tr>
<tr>
<td>7.7 hours weekend</td>
</tr>
<tr>
<td>7–9 hours recommended</td>
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</tbody>
</table>
We’re more likely to be proactive about addressing our sleep issues

Use of almost every lifestyle strategy to improve sleep has increased since the 2020 Philips World Sleep Day survey.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>WSD 2020</th>
<th>WSD 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soothing music</td>
<td>35%</td>
<td>14%</td>
</tr>
<tr>
<td>Meditation</td>
<td>25%</td>
<td>10%</td>
</tr>
<tr>
<td>Specialized bedding</td>
<td>24%</td>
<td>19%</td>
</tr>
<tr>
<td>Sunrise alarm clocks</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>Reading</td>
<td>37%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Use of less traditional strategies have become slightly more common as well.

- Consuming alcohol before bedtime: 11% (WSD 2020) vs. 14% (WSD 2021)
- Using CBD oil: 6% (WSD 2020) vs. 8% (WSD 2021)

People have also used family members (32%) or friends (27%) as a resource to learn more about sleep/sleep treatments.

Of those who have ever used online resources to learn about sleep/sleep treatments, many did so for the first time during the COVID-19 pandemic.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Usage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online search engines</td>
<td>70%</td>
</tr>
<tr>
<td>Online health sources</td>
<td>63%</td>
</tr>
<tr>
<td>Telehealth/healthcare specialist online</td>
<td>60%</td>
</tr>
<tr>
<td>Online quiz</td>
<td>53%</td>
</tr>
</tbody>
</table>

And we’re more willing to use telehealth

This year, the COVID-19 pandemic spurred a global increase in telehealth services.

- Almost one-third (31%) of global consumers had a telehealth appointment during COVID-19.
- More than half (55%) say their first telehealth visit was during the COVID-19 pandemic.

However, these telehealth visits are unlikely to be related to sleep needs... yet.

- Very few people have sought help from a sleep specialist via telehealth (15–16%), with many (70%) expecting it would be at least somewhat difficult to find a sleep specialist through an online or telephone-based program.
- However, there is a strong willingness to use telehealth for a sleep related need in the future, with 58% reporting being willing to try it, more so than for non-sleep related concerns (36%).
Sleep apnea patients continue to struggle with therapy adherence

Sleep apnea continues to be one of the most common chronic sleep conditions around the world. Estimates show that almost one billion people around the world are living with the condition. 27% of global consumers believe that they may be at risk for sleep apnea and 31% believe that their spouse may be at risk.

Consumers suffering from sleep apnea are significantly less likely to be currently using their CPAP compared to results from Philips 2020 World Sleep Day survey (18% vs. 36%). Among those who discontinued CPAP therapy, almost three quarters (72%) cited a reason related to COVID-19, like financial challenges (55%) or limited access to supplies (44%).

Currently using CPAP: 36% vs. 18%
Never prescribed CPAP: 57% vs. 48%
Never used CPAP prescribed: 16% vs. 10%

What’s the big deal?
If left untreated, sleep apnea can lead to a host of severe health problems, including coronary artery disease, heart attack, and stroke. If you think you or a loved one is at risk for sleep apnea, you can take an online quiz at Philips.com/SleepApnea to better understand your symptoms, and be sure to talk to your health care provider right away.

And perceptions are changing
There have been significant increases in negative attitudes towards sleep apnea, particularly among those who do not have the condition.

30% vs. 23% Treatment is worse than sleep apnea itself
27% vs. 21% They are afraid of taking a sleep test because they do not want to know if they have sleep apnea
24% vs. 18% It is not necessary to be treated for sleep apnea
25% vs. 20% If diagnosed with sleep apnea, they would not use a CPAP machine

This year, global consumers are more likely to agree that it is not necessary to be treated for sleep apnea, and that treatment is worse than the disease itself.
Gender plays a role in sleep discrepancies

Throughout the COVID-19 pandemic, women have struggled with sleep issues more so than men.

**Compared to men...**

- **39% vs. 33%**
  - Watching television

- **41% vs. 33%**
  - Reading

- **37% vs. 33%**
  - Soothing music

- **73% vs. 66%**
  - Women are more likely to experience new sleep challenges since the start of the pandemic

- **28% vs. 25%**
  - Reducing caffeine consumption

- **21% vs. 17%**
  - Natural/organic sleep aids

Women are more likely to try a variety of strategies to address sleep issues compared to men.
Experts weigh in

Mark Aloia, Ph.D.,
Global Lead for Behavior Change at Philips

It is alarming to hear that half of the global population is not satisfied with their sleep. It is encouraging, however, to see consumers exploring strategies to improve their sleep. As sleep specialists, we need to guide consumers by helping to identify the barriers they face in achieving quality sleep, and provide solutions to address and overcome these challenges. For example, there seems to be an increased willingness to use telehealth, but a lack of confidence in people’s ability to navigate their way to a sleep specialist. This is a problem we can solve. We need to educate people on available resources and their proven benefits to encourage people to act on their desires to improve sleep quality.

John Cronin, M.D.,
Medical Leader, Sleep and Respiratory Care at Philips

COVID-19 has greatly accelerated the telehealth capacity of our medical systems, which has been a silver lining of this pandemic. However, we still have more work to do to demonstrate the value of telehealth to both patients and providers, to engender and facilitate trust, and to make the experience a more human one for all involved. While telehealth may vary depending on the condition and specialty, sleep is well suited to telehealth in general, with sleep apnea and insomnia being quite amenable to telehealth solutions.

Teofilo Lee-Chiong, M.D.,
Chief Medical Liaison, Sleep and Respiratory Care at Philips

Among the most common fears and concerns in any crisis, including during a global viral pandemic, is a mounting sense of vulnerability and loss of control. Therefore, it makes sense to more actively participate in sleep care as part of our efforts to bring back some order and predictability into our daily lives, as well as to enhance our overall well-being. This active engagement in sleep health is particularly important for those living with conditions like sleep apnea. While clinicians and technology play a large role in care, patients should understand that comprehensive care of persons with sleep apnea must focus on self-management. Collaborative management among patients, primary care clinicians, sleep medicine specialists, medical professional societies, patient advocacy groups and technology providers is key to long-term success of any sleep apnea therapy.
To learn more about the importance of sleep and the prevalence of undiagnosed sleep disorders, visit

www.philips.com/worldsleepday.

1 Indicates “somewhat” or “complete” satisfaction with sleep
2 How Much Sleep Do I Need? Centers for Disease Control and Prevention
3 OSA may affect nearly 1 billion adults worldwide, Healio Pulmonology
4 Obstructive sleep apnea, Mayo Clinic

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