

# 臨床心理学特講 8 「眠りを疎かにしている日本社会」

1	9月29日	オリエンテーション	
2	10月6日	眠りの現状1(ぜひ見て欲しいビデオ上映)	はじめに & 1章
3	10月13日	眠りの現状2	2, 3章
4	10月20日	眠りを眺める	4, 5章
5	10月27日	寝不足では？	6, 7章
6	11月10日	いつ寝てもいい？	8, 9章
7	11月17日	眠りと物質	10, 11章
8	11月24日	様々な眠り	12, 13章
9	12月1日	睡眠関連疾患	14, 15章
10	12月8日	眠りの社会学	16章、附録、おわりに
11	12月15日	スリープヘルス	追加事項
12	12月22日	研究発表の準備	
13	1月12日	研究発表	
14	1月19日	試験	

## 知りたいことリスト

質と量に波、個人差、睡眠と脳、ショートスリーパーとロングスリーパー、悪夢、睡眠とストレス、加齢変化、夜ねむれず昼寝てしまう、DNAの影響、眠りのメリットデメリット、眠りの基本

- 身体を休ませる、脳の記憶の整理
- 夢の影響(視覚と記憶の結びつき)
- 昼間の出来事(頭に入っていること いやなこと)、脳の刺激
- 自分を休める 気持ち体力をリセット 質も時間も大切
- 生活のルーチン 眠らないと生活できない
- 脳の考えていること、昼間の出来事が影響
- 心身の面多メンテナンス 疲れとる 活力を養う 1日の過ごし方
- ブルーライト 体内時計
- 翌日の行動に悪影響しないもの 寝る前の行動 印象に残ったこと
- 現実と理想のギャップで影響する
- 疲れとるための休息 日中の出来事 疲労度
- やすらぎ安寧をとれる時間 気分精神状態が影響 眠らないと気が狂う
- 眠りと精神は双方向に影響
- 疲れた体を戻す休める 夢(不安期待)が眠りに影響
- 休息 脳が昼間の働きとは違うことをするため
- 光 音 疲れをとる 大切 生活習慣が影響 携帯
- 前日までの疲れを翌日に持ち越さないため 3大欲求 環境(光 場所 枕)
- 夜中に何回も起きることに影響(中途覚醒) 悪夢に影響

# 頭の体操

- 3人グループに分かれます。Breakout room.
- 話す順番を決めてください。
- テーマを全員あてのメッセージでお伝えします。
- 30秒考えます。
- その後一人30秒で話をしてください。
- 30秒ごとに全員あてのメッセージをお伝えします。

# 読後感

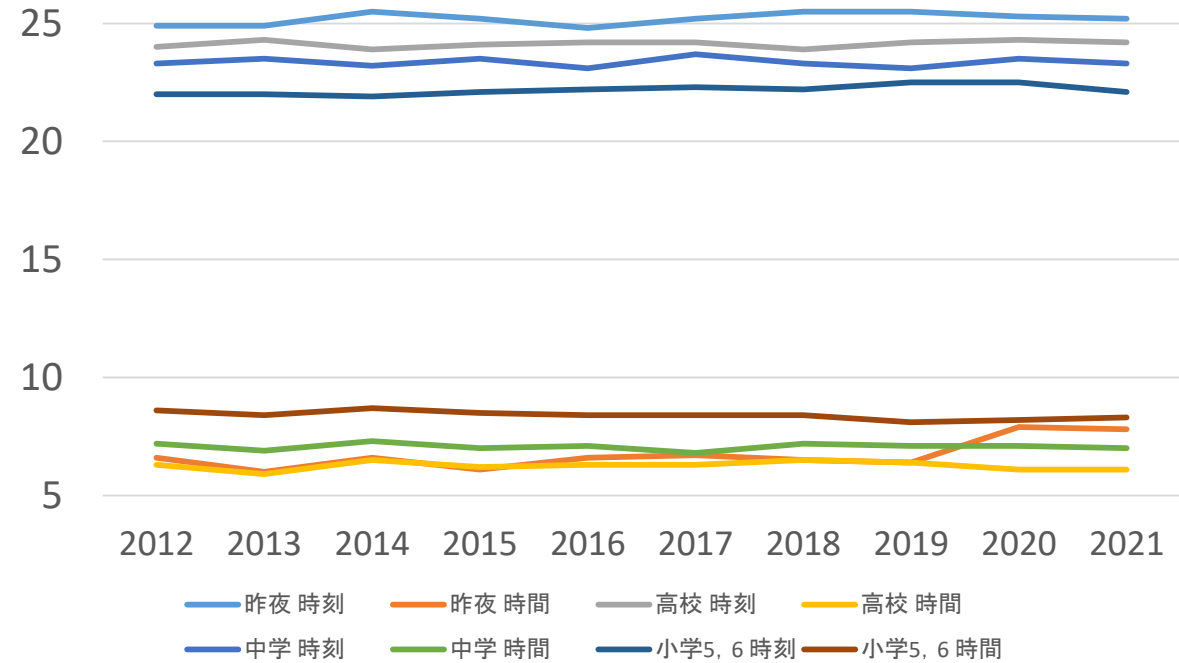
- 日本が睡眠時間が短いことを知って驚いた。学校とバイトがあると6時間になる。赤ちゃんはなぜ短い？アジアが夜更かしなのはなぜか？国により差、身体への影響、適切な睡眠時間は？労働時間生活習慣IT使用が原因？スマホの依存度は世界3位。電車で寝る人多い。オーストラリアは早寝、日曜は朝寝坊。

# あなたの睡眠時間;小中高時代と今

- あなたは昨日何時に寝て何時間寝ましたか？
- 高校時代は？
- 中学時代は？
- 小学校5, 6年生のころは？

昨夜		高校		中学		小学5, 6	
時刻	時間	時刻	時間	時刻	時間	時刻	時間
	9		5		7		9
24	6	24	6	23	7	20	9.5
26	5	24	6	23	7	22	9
24	8	23	8	21	9	21	10
27	7	24	6	24	6.5	23	7.5
	6		7		7		9
24	9	22	7.5	23	7.5	22	9
24	8	27	5	24	7	24	5
26	11	23	8	23	8	22	9
	10		4		6		8.5
26	8	26.5	5	25.5	6	23	7.5
26	7		6		6		6
25.2	7.8	24.2	6.1	23.3	7.0	22.1	8.3

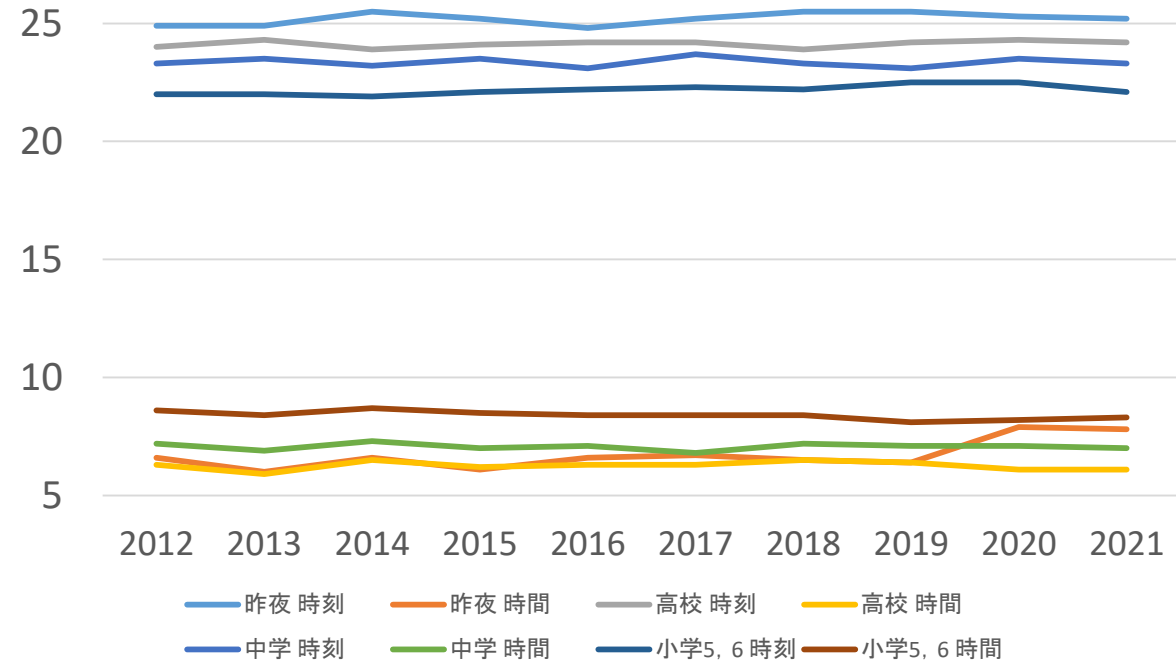
# 就床時刻、睡眠時間の2012年からの推移



	昨夜		高校		中学		小学5, 6	
	時刻	時間	時刻	時間	時刻	時間	時刻	時間
2012	24.9	6.6	24	6.3	23.3	7.2	22	8.6
2013	24.9	6	24.3	5.9	23.5	6.9	22	8.4
2014	25.5	6.6	23.9	6.5	23.2	7.3	21.9	8.7
2015	25.2	6.1	24.1	6.2	23.5	7	22.1	8.5
2016	24.8	6.6	24.2	6.3	23.1	7.1	22.2	8.4
2017	25.2	6.7	24.2	6.3	23.7	6.8	22.3	8.4
2018	25.5	6.5	23.9	6.5	23.3	7.2	22.2	8.4
2019	25.5	6.4	24.2	6.4	23.1	7.1	22.5	8.1
2020	25.3	7.9	24.3	6.1	23.5	7.1	22.5	8.2
2021	25.2	7.8	24.2	6.1	23.3	7	22.1	8.3
	25.2	6.7	24.1	6.3	23.4	7.1	22.2	8.4

気になる点は？

## 就床時刻、睡眠時間の2012年からの推移



	昨夜		高校		中学		小学5, 6	
	時刻	時間	時刻	時間	時刻	時間	時刻	時間
2012	24.9	6.6	24	6.3	23.3	7.2	22	8.6
2013	24.9	6	24.3	5.9	23.5	6.9	22	8.4
2014	25.5	6.6	23.9	6.5	23.2	7.3	21.9	8.7
2015	25.2	6.1	24.1	6.2	23.5	7	22.1	8.5
2016	24.8	6.6	24.2	6.3	23.1	7.1	22.2	8.4
2017	25.2	6.7	24.2	6.3	23.7	6.8	22.3	8.4
2018	25.5	6.5	23.9	6.5	23.3	7.2	22.2	8.4
2019	25.5	6.4	24.2	6.4	23.1	7.1	22.5	8.1
2020	25.3	7.9	24.3	6.1	23.5	7.1	22.5	8.2
2021	25.2	7.8	24.2	6.1	23.3	7	22.1	8.3
	25.2	6.7	24.1	6.3	23.4	7.1	22.2	8.4

赤はコロナの影響？



lockdown, during which public life came to a standstill and many people experienced increased flexibility regarding social schedules, led to improved individual sleep-wake timing and overall more sleep. At the same time, however, many people suffered from a decrease in sleep quality in this burdening and exceptional situation. Potential strategies to mitigate the adverse effects of the lockdown on sleep quality may include exposure to natural daylight and exercise.

SUPPLEMENTAL INFORMATION

Supplemental Information contains one figure, one table, and experimental procedures, all of which can be found with this article online at <https://doi.org/10.1016/j.cub.2020.06.021>.

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**Sleep in university students prior to and during COVID-19 Stay-at-Home orders**

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Sleep health has multiple dimensions including duration, regularity, timing, and quality [1–4]. The Coronavirus 2019 (COVID-19) outbreak led to Stay-at-Home orders and Social Distancing Requirements in countries throughout the world to limit the spread of COVID-19. We investigated sleep behaviors prior to and during Stay-at-Home orders in 139 university students (aged  $22.2 \pm 1.7$  years old [ $\pm$ SD]) while respectively taking the same classes in-person and remotely. During Stay-at-Home, nightly time in bed devoted to sleep (TIB, a proxy for sleep duration with regard to public health recommendations [5]) increased by ~30 min during weekdays and by ~24 mins on weekends and regularity of sleep timing improved by ~12 min. Sleep timing became later by ~50 min during weekdays and ~25 min on weekends, and thus the difference between weekend and weekday sleep timing decreased — hence reducing the amount of social jetlag [6,7]. Further, we find individual differences in the change of TIB devoted to sleep such that students with shorter TIB at baseline before the first COVID-19 cases emerged locally had larger increases in weekday and weekend TIB during Stay-at-Home. The percentage of participants that reported 7 h or more sleep per night, the minimum recommended sleep duration for adults to maintain health [5] — including immune health — increased from 84% to 92% for weekdays during Stay-at-Home versus baseline. Understanding the factors underlying such changes in sleep health behaviors could help inform public health recommendations with the goal of improving sleep health during and

following the Stay-at-Home orders of the COVID-19 pandemic.

The COVID-19 pandemic has led to unprecedented changes in human behavior worldwide. We conducted an observational study to investigate changes in multiple dimensions of sleep health behaviors during the COVID-19 pandemic by comparing baseline sleep log data collected from January 29 to February 4, 2020 (before the COVID-19 outbreak spread across North America), to sleep log data collected in the same university students from April 22 to April 29, 2020, when the Stay-at-Home/Safer-at-Home order was in effect. We used daily sleep logs to assess bedtimes and waketimes across each study week. Classes at the University of Colorado Boulder officially switched from in-person teaching to remote learning on March 16, 2020. Thirteen participants subsequently moved out of the local Mountain Time Zone (7 moved one time zone west, 5 moved one time zone east, and one moved two time zones east). Because students continued remote learning with classes scheduled according to Mountain Time, the sleep logs for all participants were analyzed according to Mountain Time. Institutional review board approval was obtained.

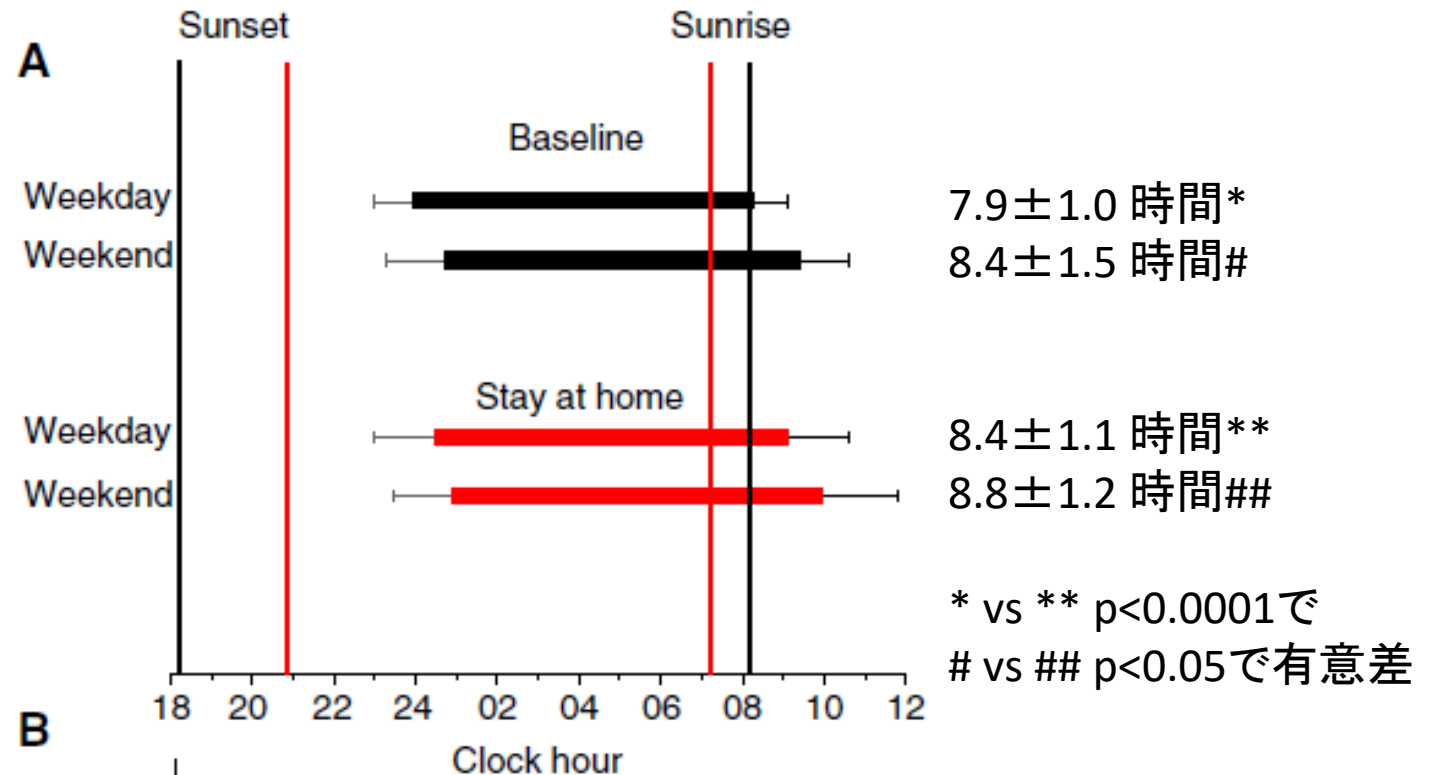
Outcomes included daily, weekday, and weekend TIB devoted to sleep, bedtimes, waketimes, and sleep midpoints — middle of the reported sleep opportunity — and regularity of sleep timing. Regularity was quantified by the standard deviations of bedtimes, sleep midpoint times and waketimes of each individual with lower scores indicating more regular sleep schedules. We also computed social jetlag — the difference between sleep midpoint on weekends versus weekdays [6] — and the percentage of individuals reporting  $\geq 7$  h sleep per night.

Three dimensions of sleep health behaviors significantly changed during Stay-at-Home (Table S1, in Supplemental Information, published with this article online): (i) TIB devoted to sleep increased on weekdays (Baseline =  $7.9 \pm 1.0$  h, Stay-at-Home =  $8.4 \pm 1.1$  h,  $p < 0.0001$ ) and weekends ( $8.4 \pm 1.5$  h,  $8.8 \pm 1.2$  h,  $p < 0.05$ ) during Stay-at-Home (Figure 1 panel A) — in fact, TIB increased every day of the week ( $p < 0.05$ ) except for Saturday ( $p = 0.29$ ; see Supplemental Information), and more participants reported the recommended 7 h TIB [5] on

Classes at the University of Colorado

139 university students (aged  $22.2 \pm 1.7$  years old [ $\pm$ SD])

January 29 to February 4, 2020 (before the COVID-19 outbreak spread across North America), April 22 to April 29, 2020, when the Stay-at-Home/Safer-at-Home order was in effect.



**Table 1. Mean Sleep Duration and Self-rated Health by Country and Sex**

Country	Men			Women		
	Mean Sleep Duration, h (95% CI)	No.	Poor Self-rated Health, %	Mean Sleep Duration, h (95% CI)	No.	Poor Self-rated Health, %
Belgium	7.69 (7.54-7.84)	244	7.4	7.90 (7.76-8.04)	261	7.3
Bulgaria	7.81 (7.68-7.93)	336	10.4	8.00 (7.88-8.12)	377	14.1
Colombia	7.14 (7.02-7.26)	378	4.0	7.24 (7.11-7.37)	325	6.5
England	7.40 (7.29-7.52)	372	8.3	7.37 (7.24-7.49)	330	10.0
France	7.55 (7.42-7.68)	312	6.4	7.73 (7.60-7.86)	322	13.4
Germany	7.39 (7.26-7.52)	309	10.4	7.60 (7.48-7.71)	372	6.5
Greece	7.86 (7.74-7.98)	350	3.7	7.87 (7.75-7.99)	371	7.5
Hungary	7.55 (7.39-7.71)	216	8.8	7.55 (7.42-7.68)	323	12.4
Iceland	7.21 (7.07-7.34)	294	7.1	7.56 (7.43-7.68)	337	6.8
Ireland	7.21 (6.98-7.44)	97	11.3	7.67 (7.55-7.80)	329	8.2
Italy	7.58 (7.49-7.67)	641	8.0	7.71 (7.64-7.78)	1092	14.5
Japan	6.20 (6.03-6.38)	172	38.4	6.09 (5.92-6.26)	186	45.7
Korea	6.80 (6.64-6.96)	208	35.6	6.86 (6.75-6.97)	440	42.7
Netherlands	7.79 (7.65-7.92)	275	8.7	7.92 (7.81-8.04)	404	8.9
Poland	7.24 (7.11-7.37)	312	4.5	7.42 (7.30-7.53)	390	10.5
Portugal	7.72 (7.61-7.83)	431	10.7	7.84 (7.73-7.95)	431	16.0
Romania	8.04 (7.91-8.16)	337	12.8	7.72 (7.60-7.84)	365	27.9
Slovak Republic	7.76 (7.66-7.86)	511	8.6	7.59 (7.50-7.68)	663	9.8
South Africa	7.26 (7.12-7.40)	268	14.2	7.71 (7.57-7.84)	289	12.8
Spain	8.02 (7.87-8.18)	215	6.0	7.82 (7.68-7.97)	257	7.4
Taiwan	6.61 (6.43-6.79)	162	18.5	6.51 (6.33-6.68)	171	31.0
Thailand	6.95 (6.82-7.08)	306	25.2	7.08 (6.98-7.18)	520	23.3
United States	7.17 (7.07-7.28)	463	4.3	7.08 (7.01-7.15)	1069	4.7
Venezuela	7.32 (7.19-7.44)	323	2.8	7.31 (7.18-7.44)	309	3.9
<b>Total</b>	<b>7.45 (7.29-7.60)</b>	<b>7532</b>	<b>10.1</b>	<b>7.49 (7.32-7.65)</b>	<b>9933</b>	<b>13.6</b>

Abbreviation: CI, confidence interval.

# Sleep Duration and Health in Young Adults

Andrew Steptoe, PhD, DSc; Victoria Peacey, MSc; Jane Wardle, PhD

## 研究とは？

仮説 仮説を立証するための方法(実験) 実験(調査)結果 結果を踏まえた仮説の検証(議論)

**Background:** Both long and short sleep durations have been associated with negative health outcomes in middle-aged and older adults. This study assessed the relationship between sleep duration and self-rated health in young adults.

**Methods:** Using anonymous questionnaires, data were collected from 17 465 university students aged 17 to 30 years who were taking non-health-related courses at 27 universities in 24 countries. The response rate was greater than 90%. Sleep duration was measured by self-report; the health outcome was self-rated health; and age, sex, socioeconomic background, smoking, alcohol consumption, body mass index, physical activity, depression (Beck Depression Inventory), recent use of health services, and country of origin were included as covariates.

**Results:** Sixty-three percent of respondents slept for 7 to 8 hours; 21% were short sleepers (6%, <6 hours;

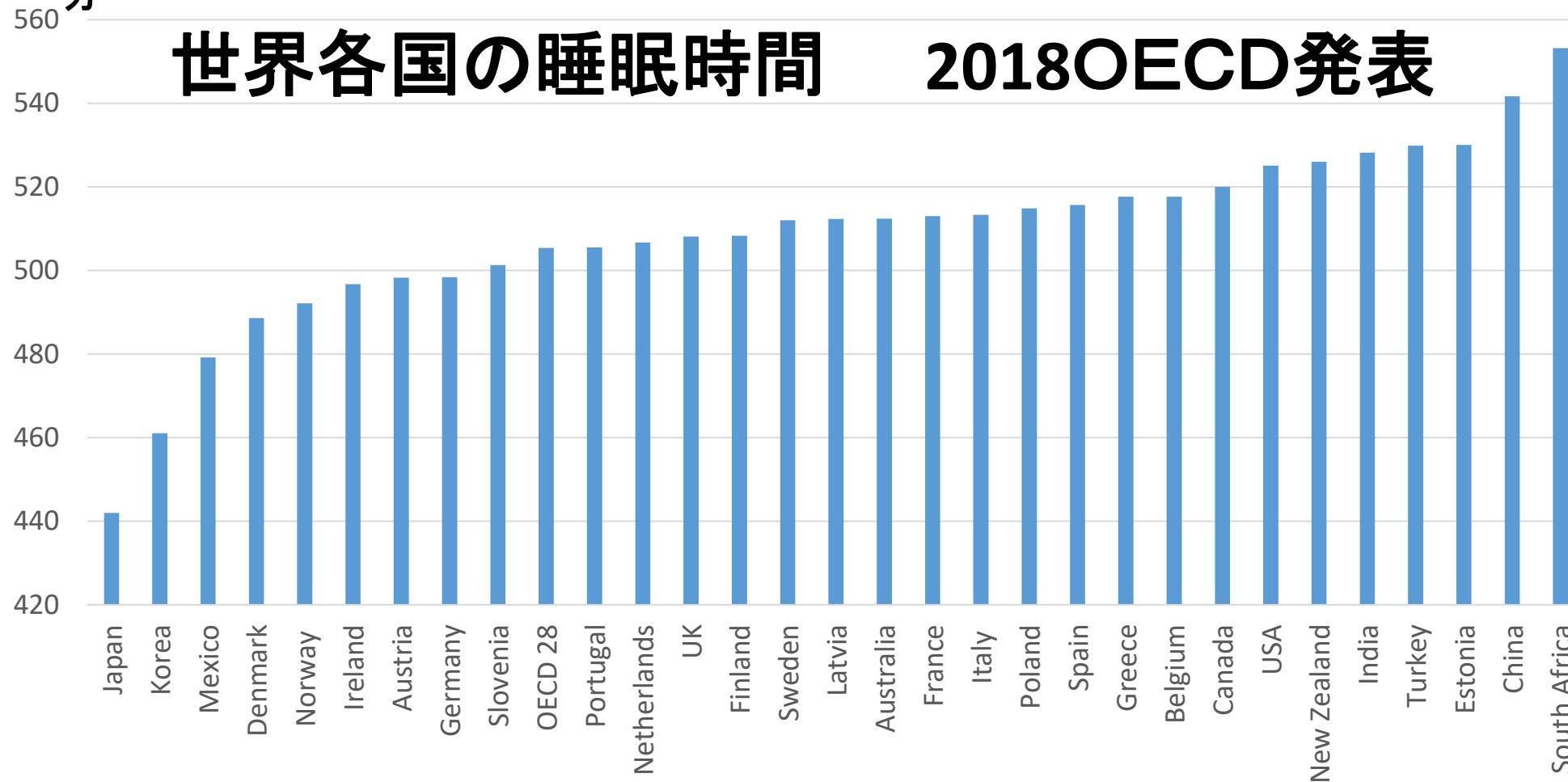
15%, 6-7 hours); and 16% were long sleepers (10%, 8-10 hours; 6%, >10 hours). Compared with the reference category (7-8 hours), the adjusted odds ratio of poor health was 1.56 (95% confidence interval [CI], 1.22-1.99) for respondents sleeping 6 to 7 hours and 1.99 (95% CI, 1.31-3.03) for those sleeping less than 6 hours. The same significant pattern was seen when the results were analyzed separately by sex. When respondents from Japan, Korea, and Thailand (characterized by relatively short sleep durations) were excluded, the adjusted odds ratios were 1.33 (95% CI 1.03-1.73) and 1.62 (95% CI, 1.06-2.48) for those sleeping 6 to 7 hours and less than 6 hours, respectively. There were no significant associations between self-rated health and long sleep duration.

**Conclusion:** Our data suggest that short sleep may be more of a concern than long sleep in young adults.

*Arch Intern Med.* 2006;166:1689-1692

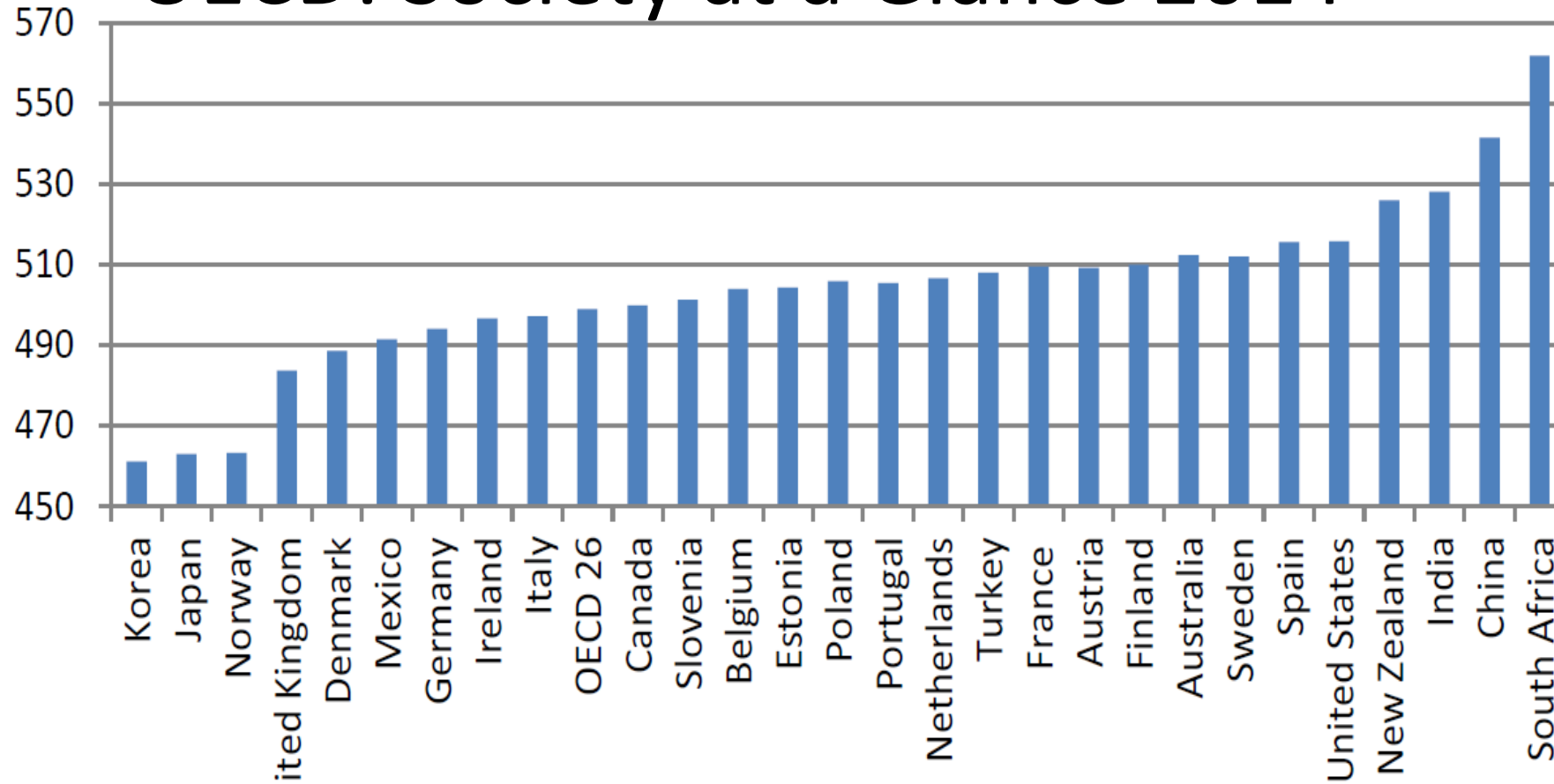
分

# 世界各国の睡眠時間 2018OECD発表



日本442分(男性448分、女性435分)、韓国461分、  
・・・OECD平均505分(男性502分、女性510分)  
・・・米国525分、中国542分、南アフリカ553分

# OECD: Society at a Glance 2014

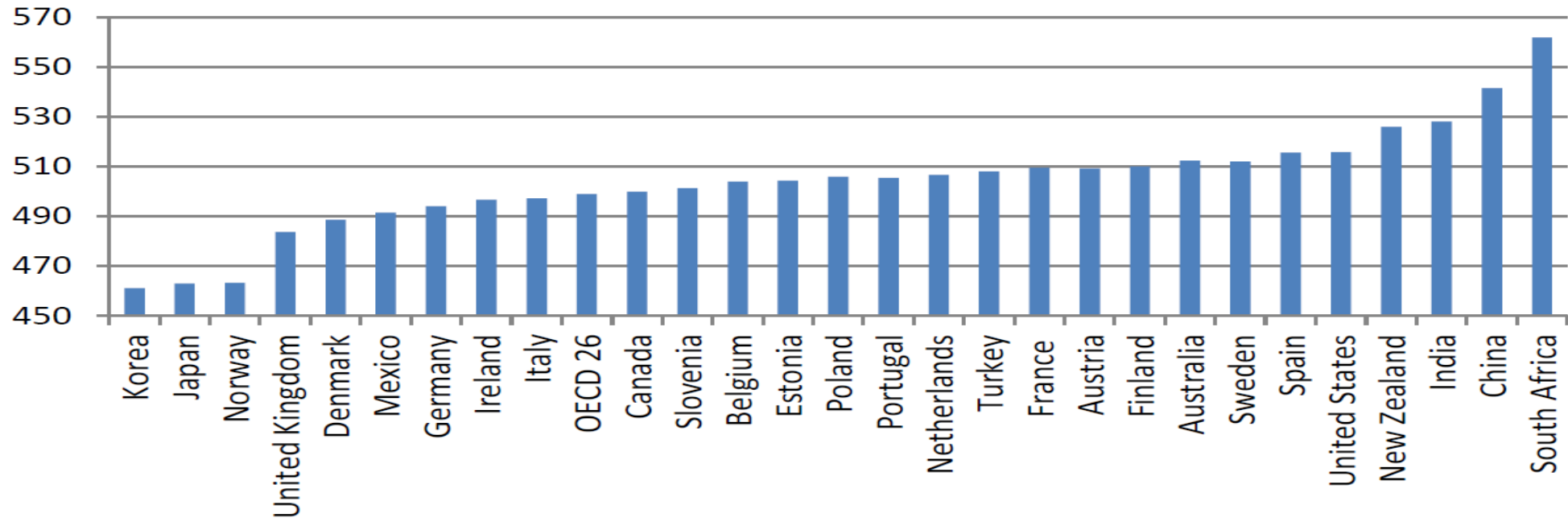


韓国461分、日本・ノルウェー463分、UK484分、

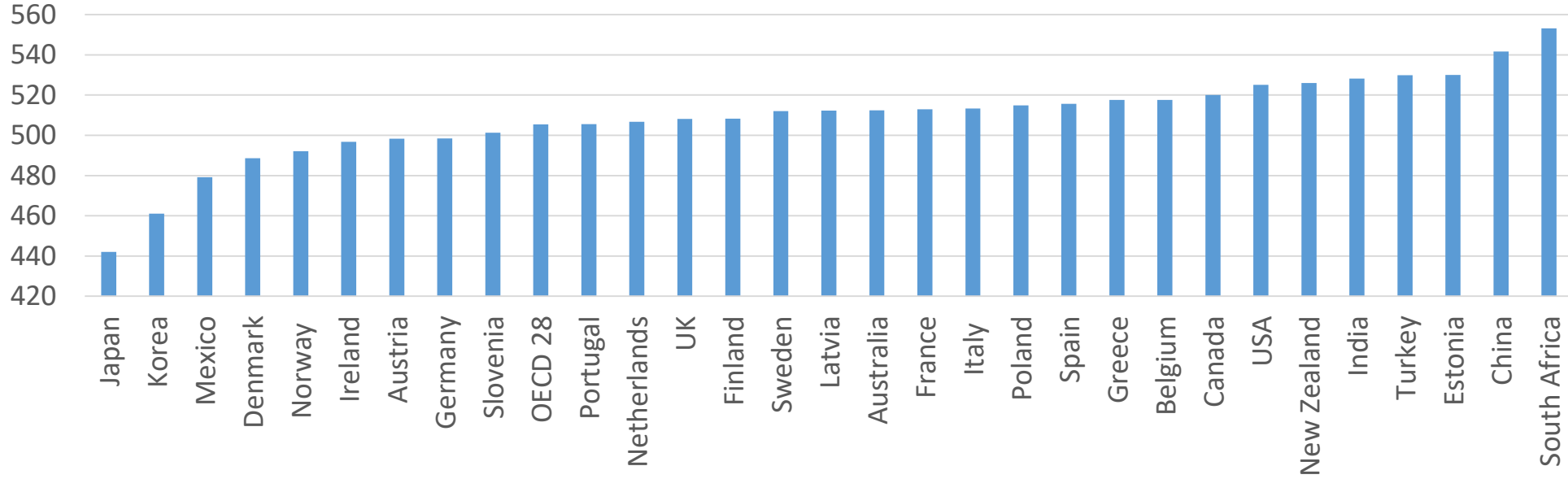
・・・OECD26 499分

・・・ニュージーランド526分、中国542分、南ア562分

2014

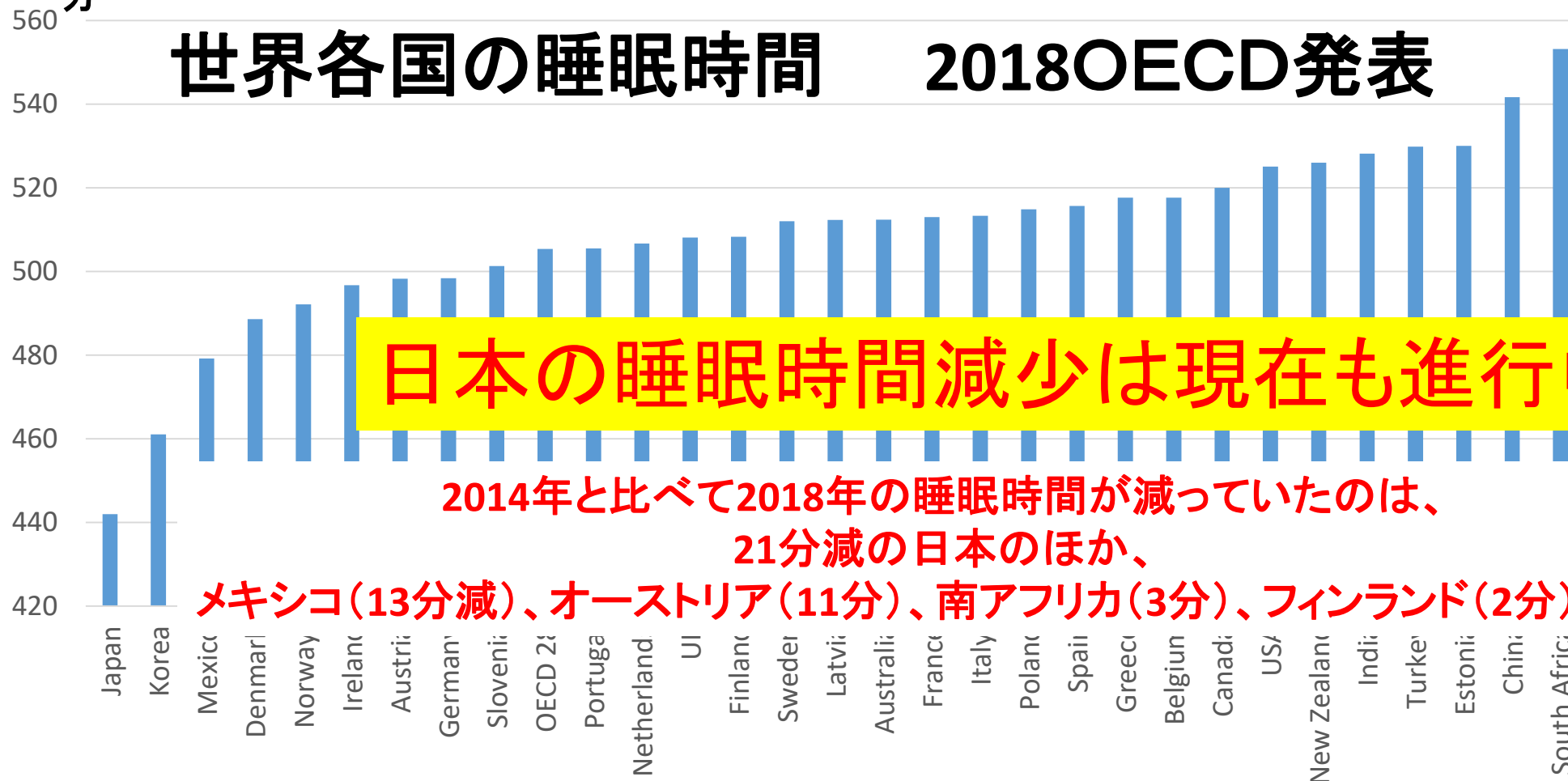


2018



分

# 世界各国の睡眠時間 2018OECD発表

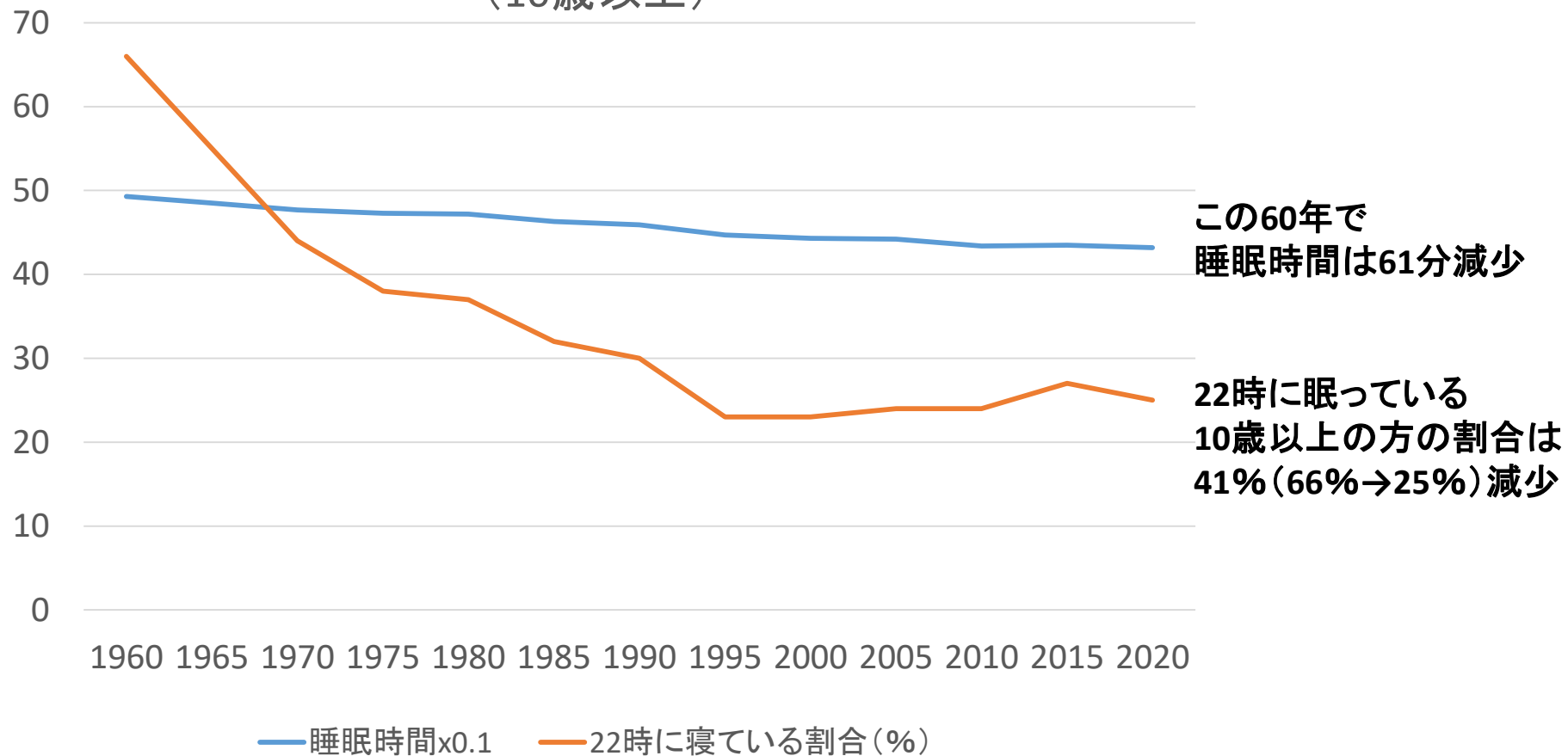


**日本の睡眠時間減少は現在も進行中**

2014年と比べて2018年の睡眠時間が減っていたのは、  
21分減の日本のほか、  
メキシコ(13分減)、オーストリア(11分)、南アフリカ(3分)、フィンランド(2分)のみ。

日本442分(←463分)、韓国461分(←461分)、・・・ノルウェー(492分←461分)・・・  
・・・OECD平均505分(男性502分、女性510分)  
・・・米国525分、中国542分、南アフリカ553分

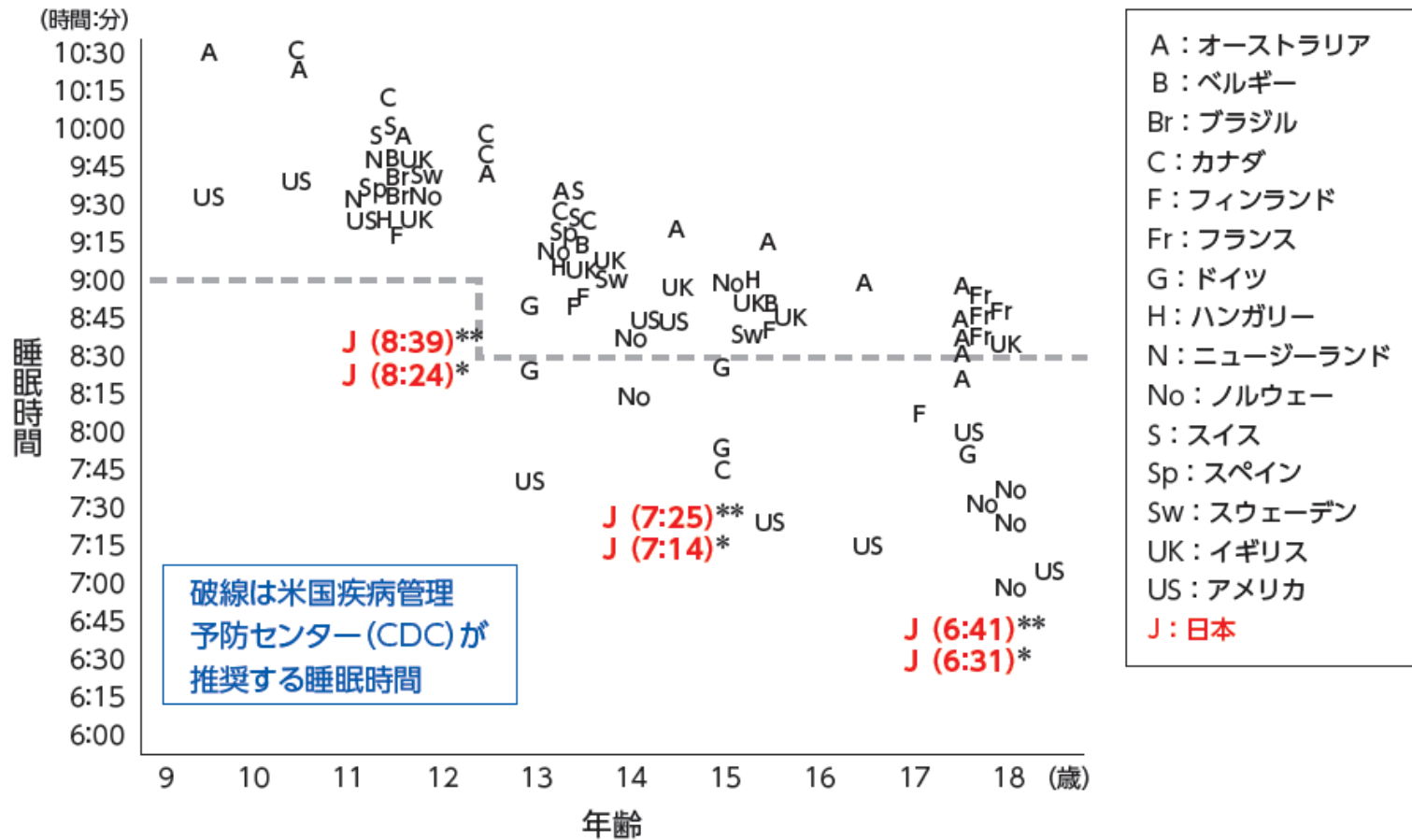
## 睡眠時間と22時に眠っている方の割合の推移 (10歳以上)



	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
睡眠時間x0.1	49.3	48.5	47.7	47.3	47.2	46.3	45.9	44.7	44.3	44.2	43.4	43.5	43.2
22時に寝ている割合(%)	66	55	44	38	37	32	30	23	23	24	24	27	25



図5-4 世界各国の思春期前後の睡眠時間



Olds T, et, al. Sleep. 2010 ;33(10):1381-8. より一部改変

\*全国養護教員会「平成18年度 児童・生徒の生活と睡眠に関する調査」より

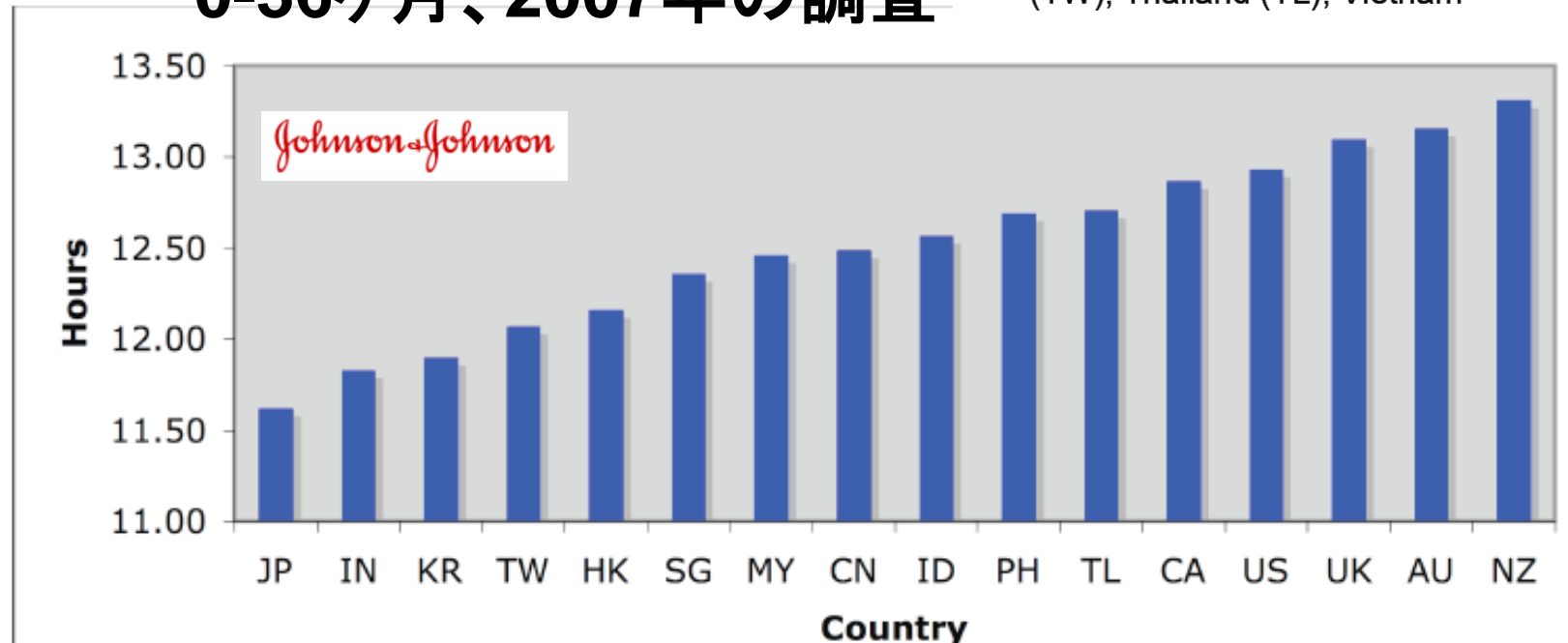
\*\*財団法人 日本学校保健会「平成20年度 児童生徒の健康状態サーベイランス調査報告書」より

# Total sleep time

Nighttime sleep + daytime sleep

- Predominantly Caucasian = 7960
  - United States (US), Canada (CA), United Kingdom (UK), Australia (AU), New Zealand (NZ)
- Predominantly Asian = 20,327
  - China (CN), Hong Kong (HK), India (IN), Indonesia (ID), Japan (JP), Korea (KR), Malaysia (MY), Philippines (PH), Taiwan (TW), Thailand (TL), Vietnam

## 0-36ヶ月、2007年の調査



調査参加17か国中、日本の赤ちゃんの睡眠時間が最も少なかった。

# Take home message

- 日本は大人も子どもも短睡眠時間
- 今後の宿題;では短睡眠時間は問題なのだろうか？
- 次回は眠りの観察と眠りと脳の話
- ご自身の母子手帳を手に入れて！

# 母子健康手帳

- [http://www.mhlw.go.jp/file/06-Seisakujouhou-11900000-Koyoukintoujidoukateikyoku/s2016\\_10.pdf](http://www.mhlw.go.jp/file/06-Seisakujouhou-11900000-Koyoukintoujidoukateikyoku/s2016_10.pdf)
- “母子健康手帳” を検索
- 母子健康手帳について | 厚生労働省 をクリック
- 母子健康手帳について
- 母子健康手帳の様式について
- PDF 省令様式 [3,630KB] をクリック

# 臨床心理学特講 8 「眠りを疎かにしている日本社会」

1	9月29日	オリエンテーション	
2	10月6日	眠りの現状1(ぜひ見て欲しいビデオ上映)	はじめに & 1章
3	10月13日	眠りの現状2	2, 3章
4	10月20日	眠りを眺める	4, 5章
5	10月27日	寝不足では?	6, 7章
6	11月10日	いつ寝てもいい?	8, 9章
7	11月17日	眠りと物質	10, 11章
8	11月24日	様々な眠り	12, 13章
9	12月1日	睡眠関連疾患	14, 15章
10	12月8日	眠りの社会学	16章、附録、おわりに
11	12月15日	スリープヘルス	追加事項
12	12月22日	(研究発表の準備)	追加事項
13	1月12日	研究発表	
14	1月19日	試験	

## 知りたいことリスト

質と量に波、個人差、睡眠と脳、ショートスリーパーとロングスリーパー、悪夢、睡眠とストレス、加齢変化、夜ねむれず昼寝してしまう、DNAの影響、眠りのメリットデメリット、眠りの基本

# 今後の講義のやり方

- 資料を以下のメールでやり取りします。
- 気になった点等があればこのメールに連絡をお願いします。
- [J.koyama@u-sacred-heart.ac.jp](mailto:J.koyama@u-sacred-heart.ac.jp)
- HP <http://www.j-kohyama.jp/> に授業で使用した資料をアップします。