

Digital Health

Spring 2025

UNIVERSIDAD POLITÉCNICA DE MADRID

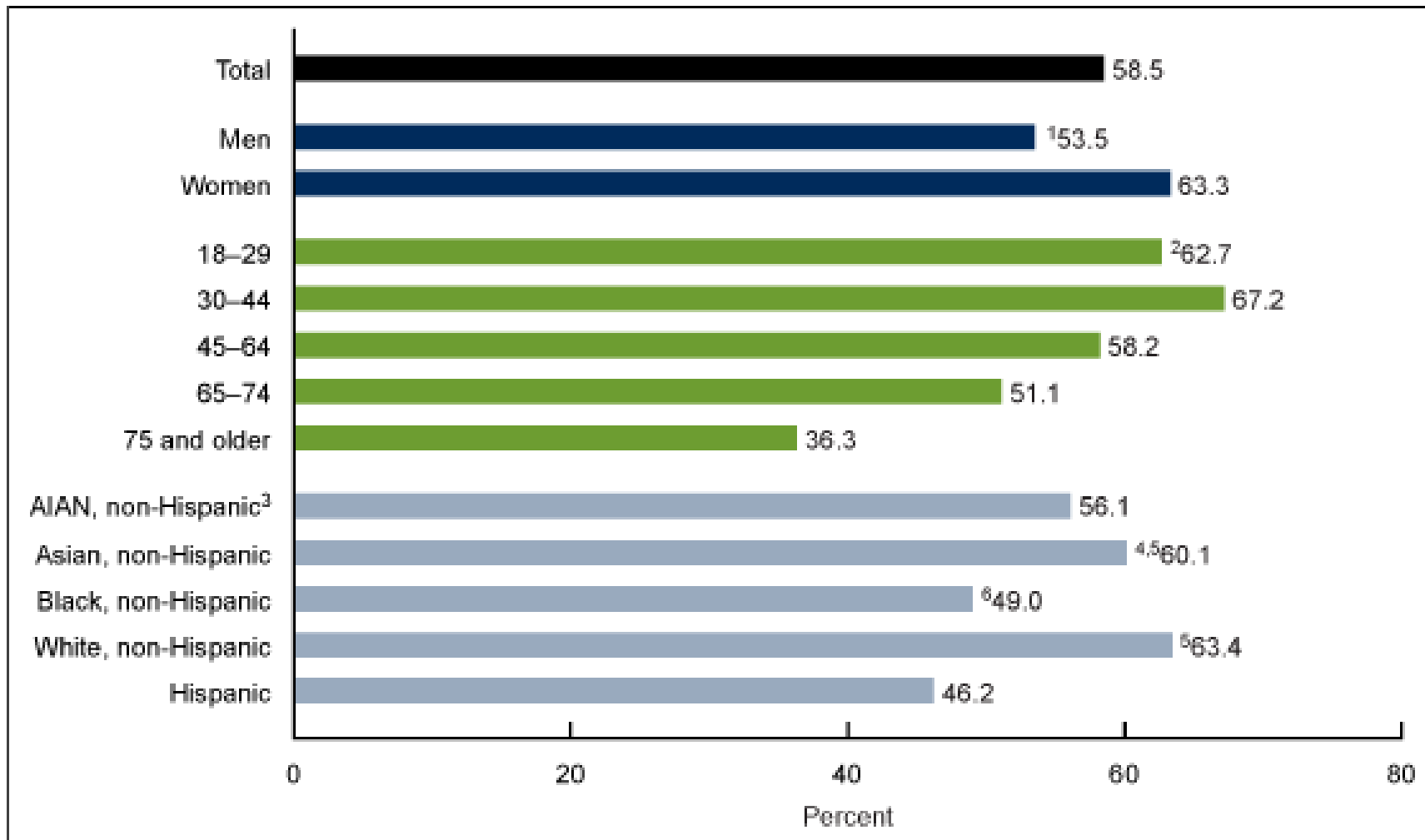


#7

Health communications and social media

Agenda

- Questions from Last Week?
- Today's Learning Objectives: Discipline literacy, critical analysis skills, applied and integrative learning, ethical reasoning, global or civic engagement, oral communications
- Present homework #3
- Lecture, watch videos, discussions
- Web Game / Prizes
- Guest speaker: Karen Weintraub, Journalist and Professor at Massachusetts Institute of Technology, teaching science writing
- Next session: Biomedical informatics



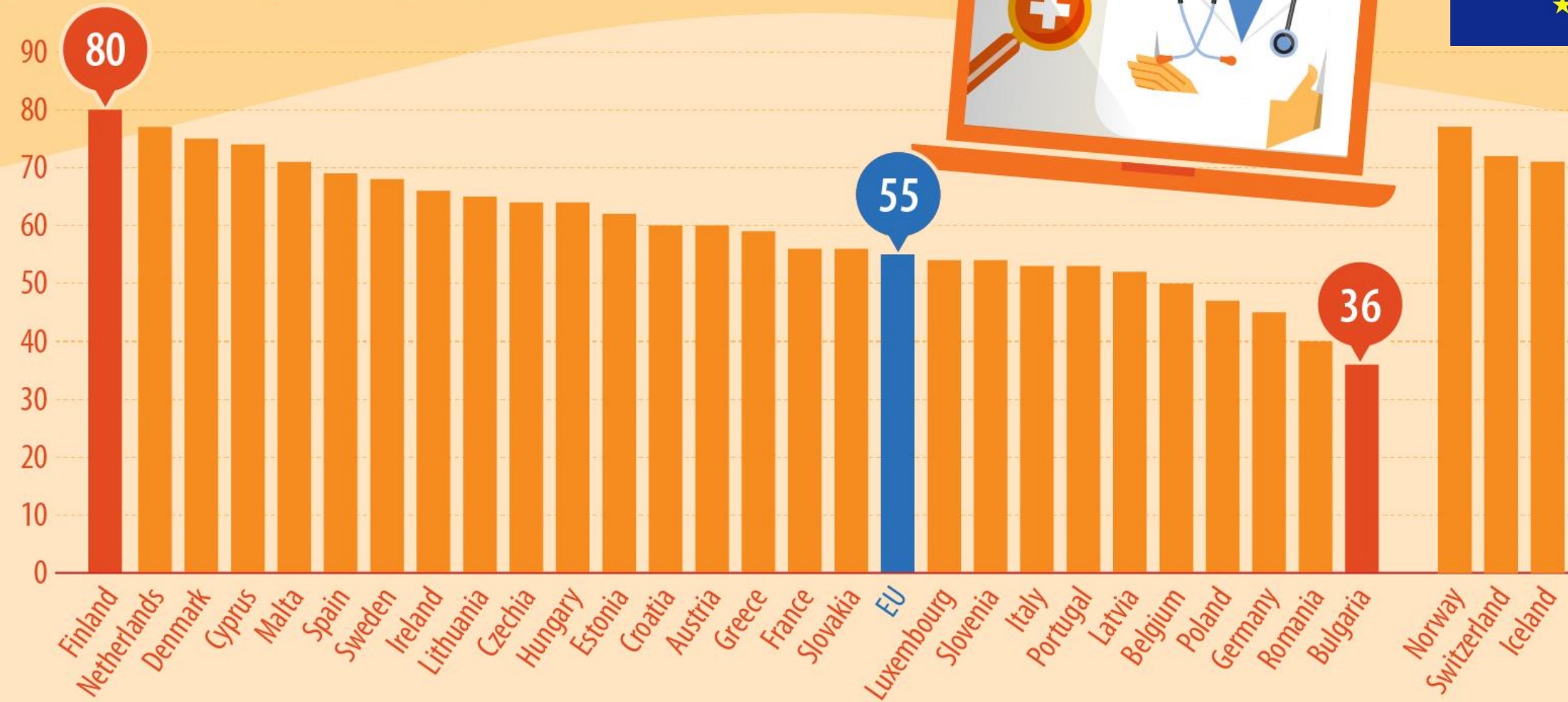
Most Common:
Women
30-44
White



In the U.S., according to the Centers for Disease Control (CDC), 58.5% of adults used the internet to look for health information between July and December 2022.

Share of people seeking health information online in the last three months prior to the survey

(% of all individuals aged 16 to 74, 2021)



People seeking health information online

THE PROS

- Learn about prevention
- Be informed about minor problems
- Start a conversation with professionals
- Change the frequency of visits to a doctor?
- Low cost

The CONS

- Inability to understand medical terminology
- Opportunity costs with deep dives
- Quality of information
- Greater fear and anxiety
- Hysteria, false hope

Web sites for doctors and researchers



www.Medscape.com
Subscription based
News and continuing medical
education

Cochrane Library – used in 130 countries

- [Watch About us | Cochrane](#) (3 minutes)
- Become a member – points for membership
- [About us | Cochrane](#)

Web Sites for Consumers and the Public



- Who.int (fact sheets)
- Mayoclinic.org
- Hopkinsmedicine.org
- Medlineplus.gov
- Statnews.org
(subscription)
- European Medicines
Agency
<https://www.ema.europa.eu/en/homepage>

Web Sites for Consumers and the Public

- Solve the outbreak - Check out this tool from the USA, Centers for Disease Control
- [Solve The Outbreak](#)

Online Communities

- Offer self-movement, self-organizing tools with
 - moderated forums, blogs, advice, support, academic references, and a place to shop for relevant products.



Online communities

1.They provide patients and caregivers with new resources.

Relief when finding a group online for people with the same condition.

Understanding and Solidarity.

2. They offer new insights for doctors to learn about the emotional and behavioral aspect of diseases.

3. They challenge traditional power dynamics between patients and doctors.

Patients want to be involved in the process and decision making.

4. They form part of a growing trend in data collection.

https://ssir.org/articles/entry/the_emerging_world_of_online_health_communities

Online Communities

- Watch video (2 minutes). Think about the pros and cons of these sites.
 - My Counterpane – Support community for people with multiple sclerosis
 - [MyCounterpane: Healing in Chronic Illness Through the Story of You](#)
 - <https://www.youtube.com/watch?v=NQwO3zKRqDQ>
- [Watch video \(2 minutes\) Healthunlocked.com](#)
 - [HealthUnlocked - The World's Largest Social Network for Health](#)

Online communities

Patientslikeme.com

750,000 members with 7,000 communities that cover 2,800 conditions

Pool their feedback on efficacy of therapies, side effects, and disease progression

Started as a way to support ALS (amyotrophic lateral sclerosis, a highly deadly disease)

Sell their data to pharma companies, no ads



Online Communities – More examples

- Togetherall.com
- Care Opinion (UK, Ireland, Australia)
- [Genetic Alliance.org](http://GeneticAlliance.org)
- Findacure.org
- IBDrelief.com
- ParkinsonNet
- HealthBoards
- MedHelp

Fake News -Misconceptions

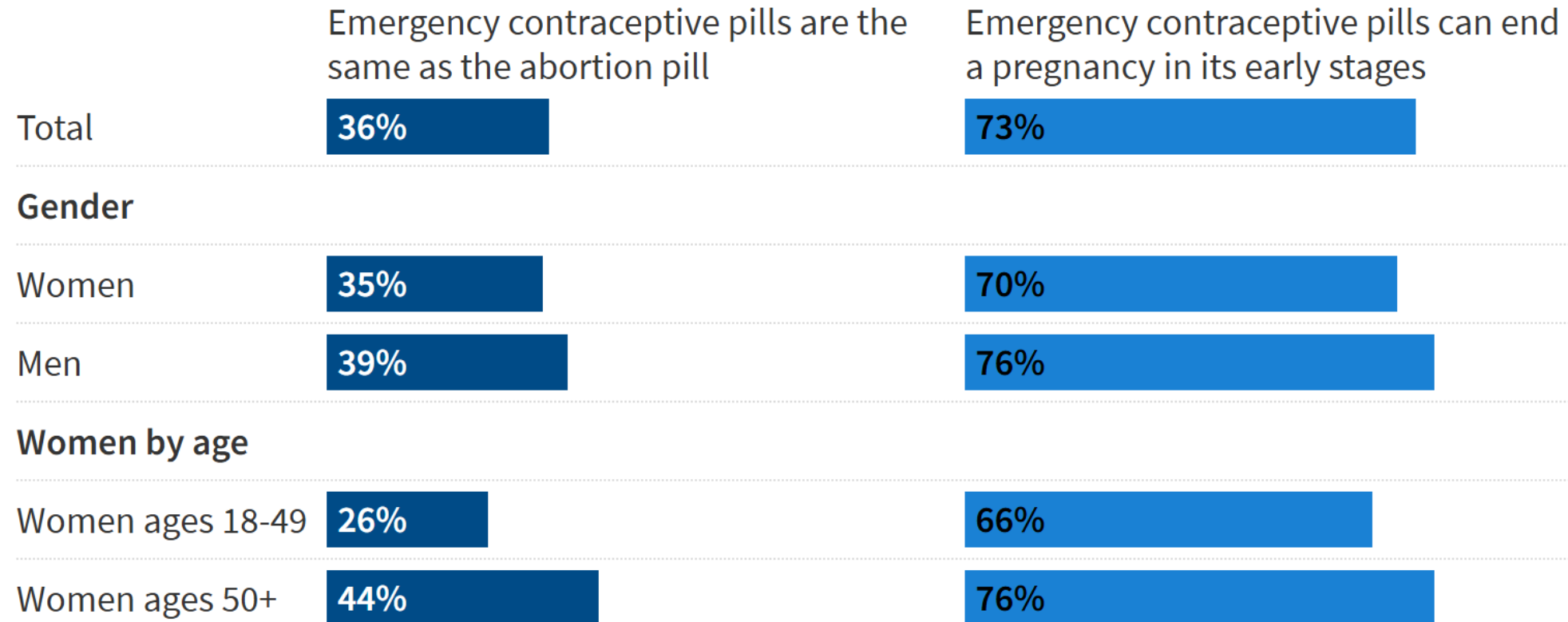
- Inaccurate: Oral contraceptives (PlanB) or IUDs as abortifacients
- Anti-abortion groups claim that these methods can terminate an existing pregnancy or affect a developing embryo.



Plan B One-Step is a pill that contains levonorgestrel and can prevent pregnancy after unprotected sex. It works by stopping ovulation, fertilization, or implantation, and is most effective within 72 hours of sex.

A Third of Adults Incorrectly Believe Emergency Contraceptives are the Same as Abortion Pills, and Three in Four Incorrectly Say Contraceptive Pills Can End a Pregnancy in its Early Stages

Percent who **incorrectly** say each of the following are true:

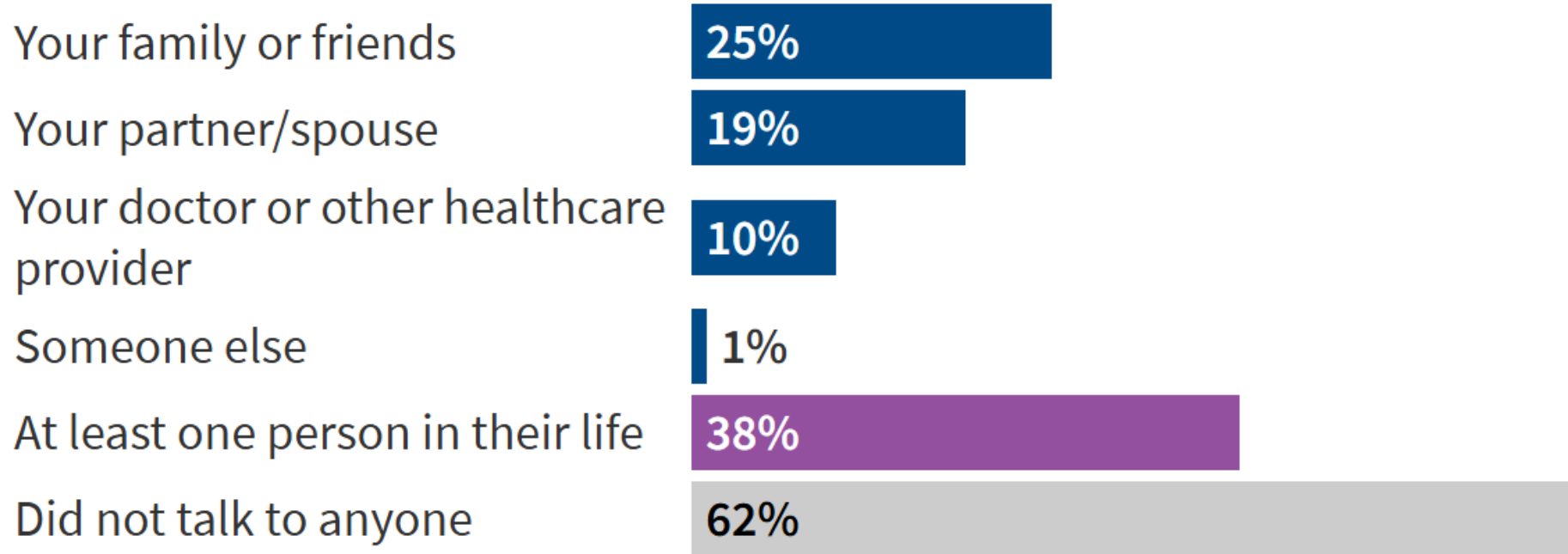


Note: Among those who have heard of emergency contraceptive pills, sometimes called morning after pills, or "Plan B." See topline for full question wording.

Source: KFF Health Tracking Poll (January 17-24, 2023) • [Get the data](#) • [Download PNG](#)

Four in Ten Reproductive Age Women Who Have Seen or Heard Birth Control Information on Social Media Have Talked to Someone About The Content

In the past 12 months, have you talked to any of the following people about what you saw or heard about birth control on social media? Please select all that apply.



Note: Among women ages 18 to 49 who say they have seen or heard anything on social media about birth control. Includes those who answered the female set of questions with regard to sexual and reproductive health section of the survey.

Source: KFF Women's Health Survey 2024 • [Get the data](#) • [Download PNG](#)

Women's Health
Survey 2024

KFF

More Fake News

- **Ivermectin (an antiparasitic drug used in veterinary medicine) cures Covid-19**
- **Inhaling bleach** cures Covid-19
- Vaccines cause autism
- Supplements prevent aging

More fake news - Measles

Isn't advised at all for measles

Cod liver oil, which contains vitamin A, **isn't advised at all for measles** — and would need to be consumed in a potentially dangerous amount to get the recommended dosage of the vitamin used during an infection.

[RFK Jr. Misleads on Vitamin A, Unsupported Therapies for Measles](#)

www.factcheck.org/2025/03/rfk-jr-misleads-on-vitamin-a-unsupported-therapies...

Was this helpful?  

News about Cod Liver Oil Measles

bing.com › news



 TECHNICA · 11d

Cod liver oil embraced amid Texas measles outbreak; doctors fight misinfo

US Health Secretary and long-standing anti-vaccine advocate Robert F. Kennedy Jr. is ...

Facebook, YouTube, Instagram, TikTok, X/Twitter – Buyer Beware

- Facebook - participate in research, receive financial or moral support, set goals, and track personal progress, join communities, gain an audience for professionals.
- Instagram as a support community for people With fibromyalgia
- TikTok – harms of vaping aimed at 16-24 year olds
- X/Twitter for miracle weight loss pills, varicose vein treatment
- Youtube – so many health channels, blogs, storytelling

Other tools – chatbots



- Smart algorithm-powered, text or voice-based interfaces
- Eva, from Spain-based Bots4Health – health reminders, for example, to quit smoking
- Out of business

Chatbots

- A Hospital in NY, USA is using chatbots to explain and remind patients to show up for their colonoscopies (40% no show rate before using the chatbot)
 - <https://www.hcplive.com/view/northwell-leveraging-chatbots-reduce-no-shows>



Health communications and social media – A Good Idea

Health On the Net Foundation (HON), a Swiss not-for-profit organization based in Geneva with support from the EU promoted a code of conduct for websites providing health information and offered certificates to those in compliance.

Discontinued in 2022.

Code of conduct suggested eight principles:

- 1. Authoritative
- 2. Complementarity
- 3. Privacy
- 4. Attribution
- 5. Justifiability
- 6. Transparency
- 7. Financial disclosure
- 8. Advertising policy





Web sites – Discussion questions

- Which web sites do you use to seek health and wellness information?
- What do you like and dislike about these web sites?
- What are the benefits and potential harm?
- Do you trust the information on these sites?

More Discussion Questions

- What role does advertising play on web sites or online communities?
- As the web manager, how do you keep the web sites and online community avoid misinformation?
- As the web manager, how do you keep the site unbiased and ethical?



The Web Game

- Prizes for the highest score
- Find the answers to these questions online.

Guest speaker

- Karen Weintraub, Health/Science Journalist
- Editor/Reporter for USA Today
- Author of books and many articles for Scientific American, STAT and The New York Times.
- She has taught science writing at MIT, Boston University and Harvard Extension

Summary – Health Communications and Social Media - Need to Know

- Role of digital media in disseminating health and medical information
- Uses: News, research, online support, sell products
- Benefits: pooled patient info, disruptive power dynamic with doctors, new insights, save costs
- Challenges: Need to understand medical terminology and research results, question the accuracy, convert to lay person language, trust, false hope
- Characteristics of good tools – accuracy, reliability, unbiased

Next session

- Biomedical informatics and population health
- Read: Santangelo, O.E. (2019). Digital epidemiology: assessment of measles infection through Google Trends mechanism in Italy. Ann Ig 2019; 31: 385-391 doi:10.7416/ai.2019.2300
- Read: Big data analysis identifies new cancer risk genes
- <https://www.irbbarcelona.org/en/news/big-data-analysis-identifies-new-cancer-risk-genes>
- Read: Opportunities and Limits: The role of AI in population health
- <https://www.linkedin.com/pulse/opportunities-limits-what-role-ai-population-health-rz8re/>