VISWANATH LAB

Cancer Communication and Equity in the new information ecosystem:

Five Key Takeaways

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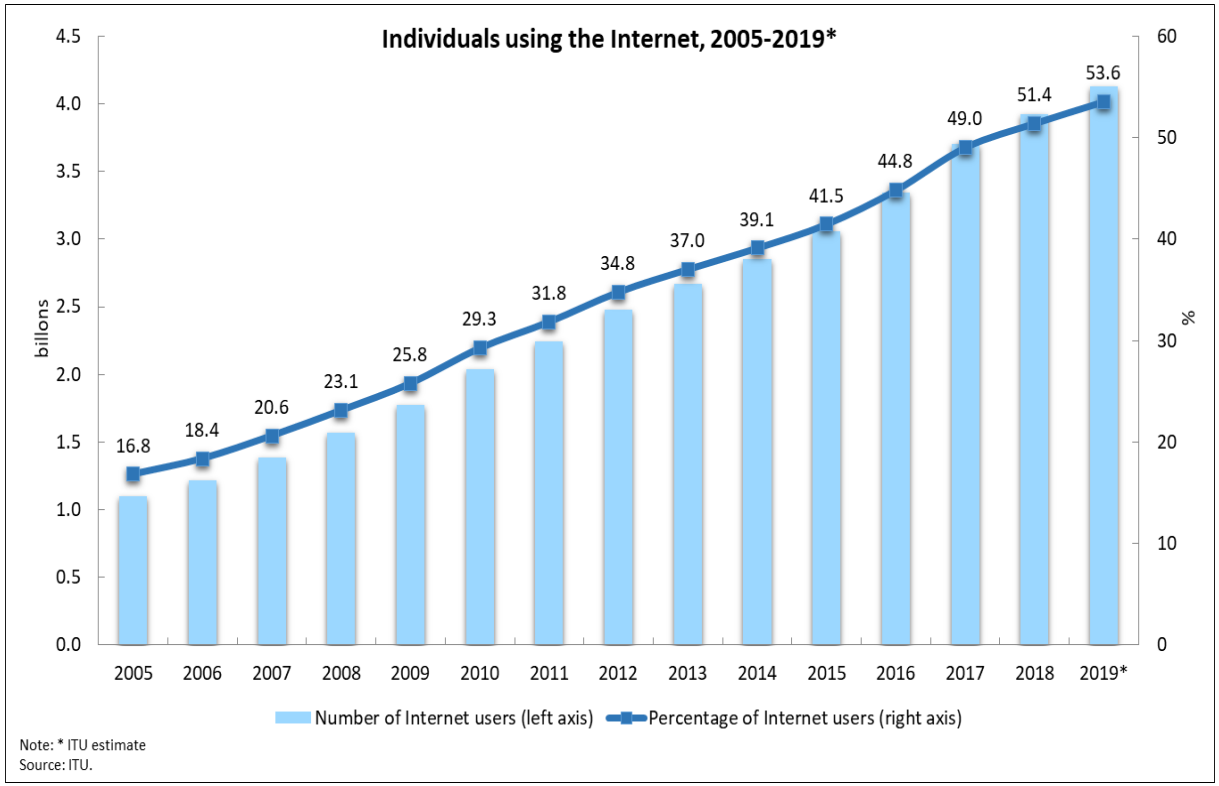
Five Key takeaways

#1

Proliferation of Platforms and (Mis)information

- Proliferation of information platforms
  - Generation and dissemination
- Generation of an enormous amount of data from different sources
- Networked environment

Internet Usage, 2005-2019



Note: * ITU estimate
Source: ITU.

JUL 2020

SOCIAL MEDIA USE AROUND THE WORLD

THE NUMBER OF PEOPLE WHO ACTIVELY USE SOCIAL NETWORKS AND MESSENGER SERVICES

TOTAL NUMBER OF ACTIVE SOCIAL MEDIA USERS	SOCIAL MEDIA PENETRATION (USERS vs. TOTAL POPULATION*)	ANNUAL GROWTH IN THE TOTAL NUMBER OF SOCIAL MEDIA USERS	TOTAL NUMBER OF SOCIAL MEDIA USERS ACCESSING VIA MOBILE PHONES	PERCENTAGE OF TOTAL SOCIAL MEDIA USERS ACCESSING VIA MOBILE
				
3.96	**51%**	**+10.5%**	**3.91**	**99%**
BILLION		**+376 MILLION**	**BILLION**	

SOURCES: KEPIOS ANALYSIS; SOCIAL MEDIA COMPANY STATEMENTS AND EARNINGS ANNOUNCEMENTS; SOCIAL MEDIA PLATFORMS' SELF-SERVICE ADVERTISING TOOLS; CNNIC; MEDIASCOPE; CAFEBAZAAR (ALL LATEST DATA AVAILABLE IN JULY 2020). ***NOTES:** PENETRATION FIGURES ARE FOR TOTAL POPULATION, REGARDLESS OF AGE.
◈ **COMPARABILITY ADVISORY:** SOURCE AND BASE CHANGES.

Two key features of this data deluge

- *Information Deluge…..*
- *Limited or no gatekeeping*

#2

The Production of health, science and risk information: Who generates it?

Who generates risk "information"?

Scientists provide the science, but..

- Mass Media
- Health systems
- Private Sector
- Activists Groups
- User-generated content

- Penetration of Social Media and apps has allowed individuals to
  - Produce information
  - Disseminate information
  - Network effect

#3

Information ≠ Communication

Distinguish

- Information
- Misinformation
- Disinformation

Consumption of Health Information

- **Flood of health information is overwhelming**
- **Culture of science and culture of communication**
  - Episodic
  - Seemingly contradictory and conflicting
  - “they can’t make up their mind”
- **Innumeracy, healthy literacy and low “research literacy”**

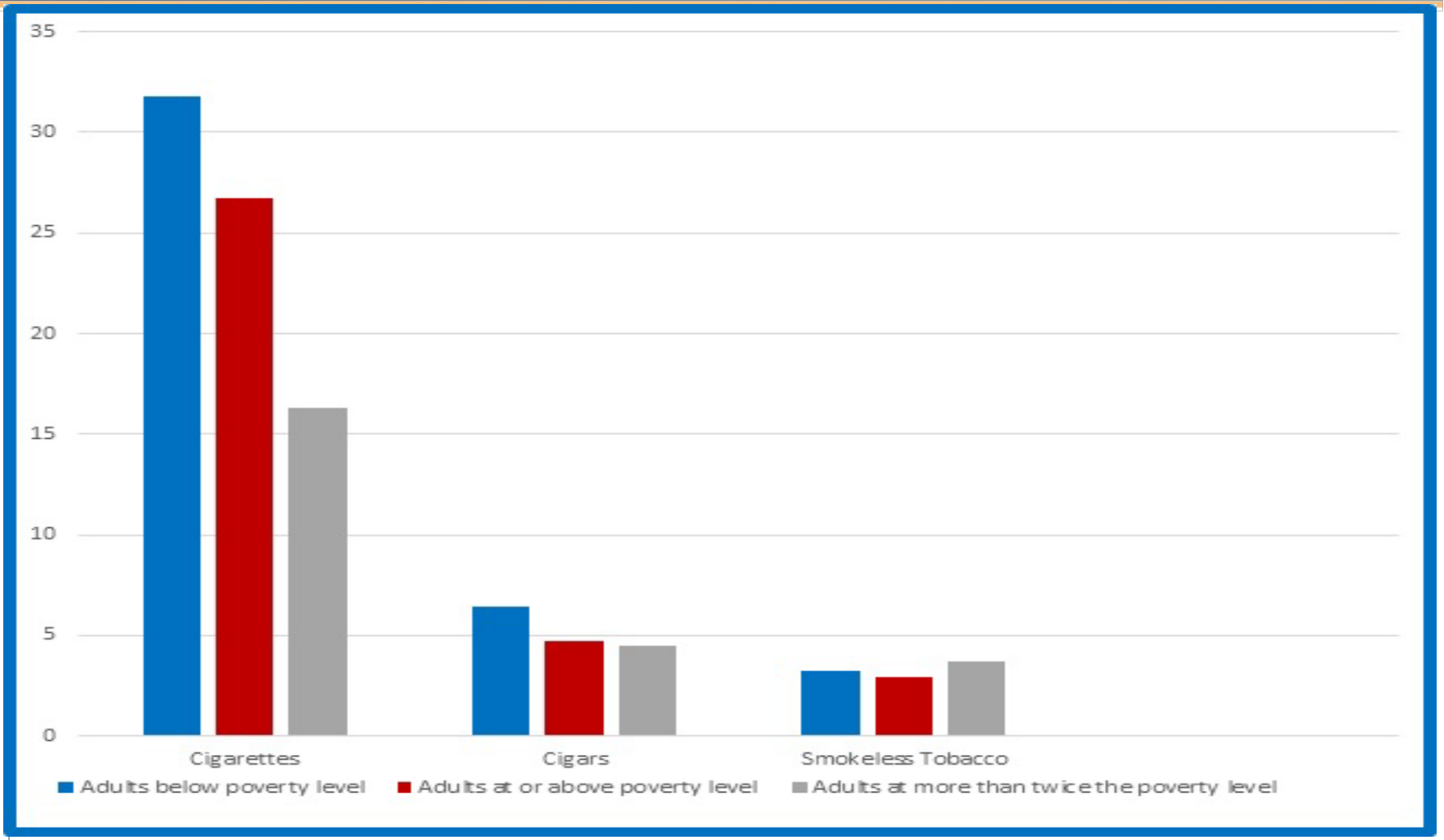
#4

Health & Communication Inequalities

Health Inequalities

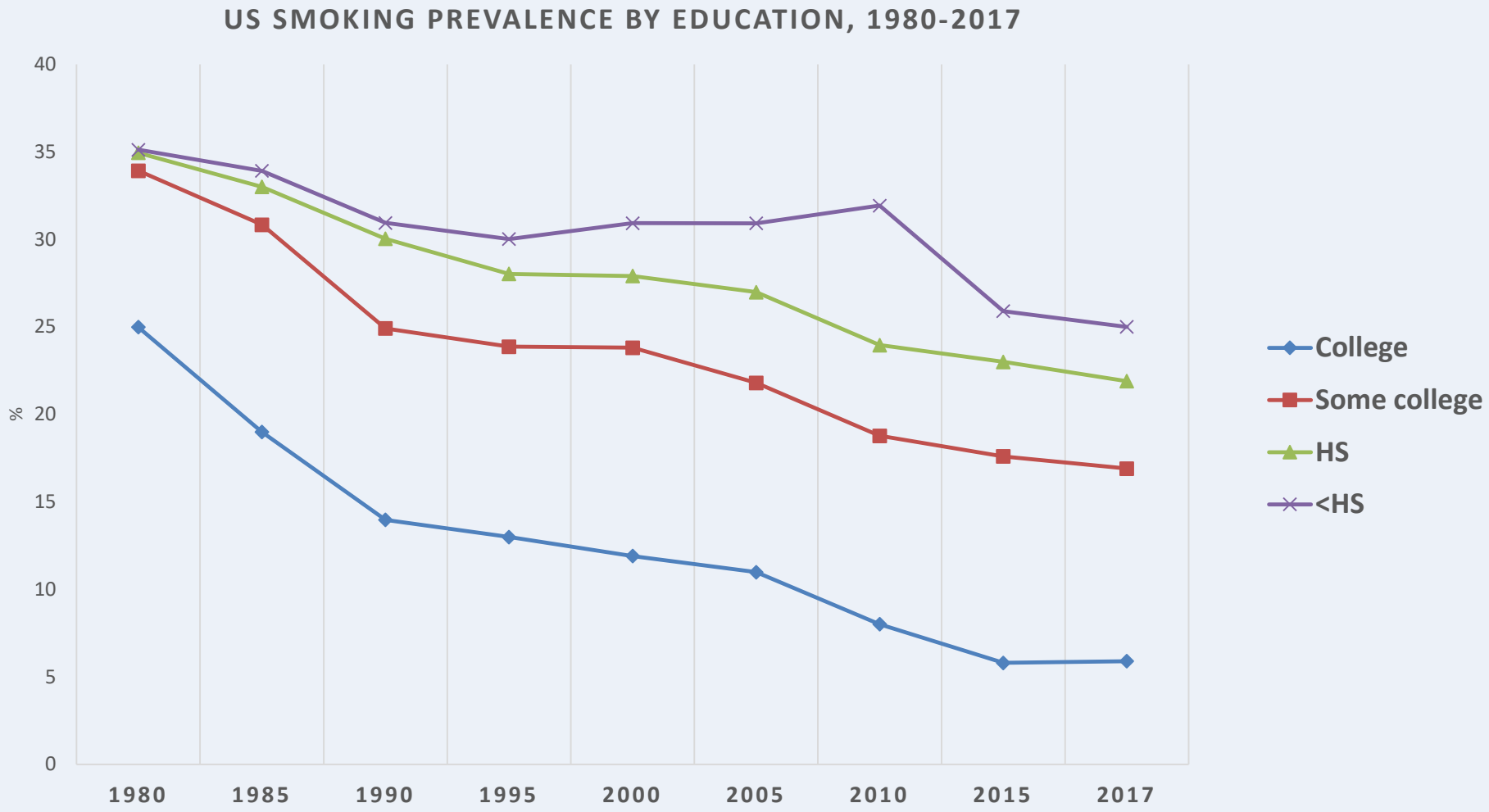
- Health, like wealth, is unequal
  - People from higher SEP, and those living in wealthy neighborhoods/cities are healthier
  - Mortality is distributed unequally across social groups
  - Risk factors are unequally distributed
    - More prevalent among low SEP
  - Poverty has pernicious effect on wellbeing
    - Leads to isolation, disconnectedness, lack of access to health services, less access to telecommunication services, more unhealthy behaviors

Tobacco use among low SEP groups



Centers for Disease Control (2021) Cigarette Smoking and Tobacco Use Among People of Low Socioeconomic Status. Accessed at https://www.cdc.gov/tobacco/disparities/low-ses/index.htm

US Smoking Prevalence by Education, 1980-2017

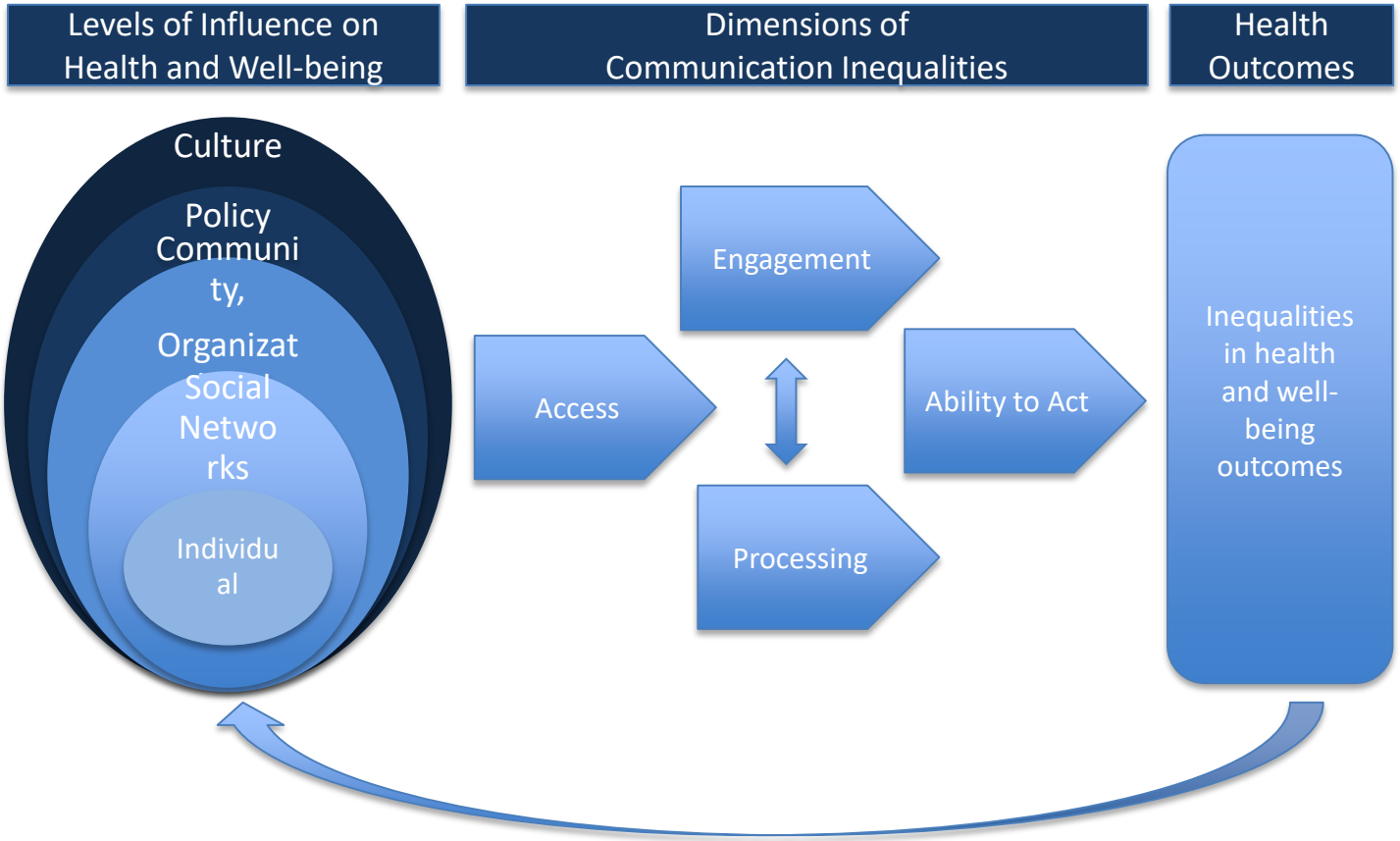


Data Source: National Center for Health Statistics, CDC

* National Health Interview Surveys have been conducted since 1957. NHIS data for 2015 and 2017 added to CDC graph from 1980-2010

Communication Inequalities

- Communication inequalities manifest at multiple levels
  - Macro-Level: Differences in generation, processing and distribution of health information between different groups and institutions
  - Individual-Level: Differences in accessing, processing and using health information → precluding certain groups from taking advantage of the information revolution



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c|net

COVID-19 vaccines aren't getting to those in need. Blame the broadband gap

For many seniors and people of color, technology is a barrier to getting the vaccine.

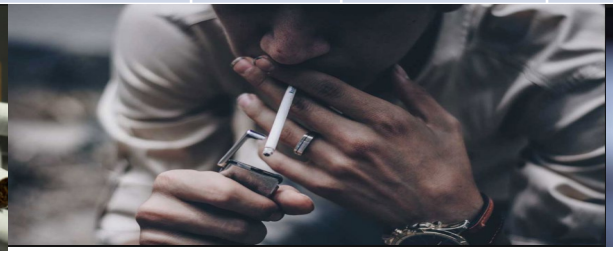
- What matters
  - Class matters
  - Race (& ethnicity) matters
  - Place matters
  - Policy matters
- Data Absenteeism

Data Absenteeism

The absence of data from groups experiencing social and structural vulnerability – whether by class, race or ethnicity or geography, in sufficient quality and quantity, resulting in a failure to draw reliable inferences about the groups with implications for practice and policy in science communication (Viswanath et all., 2022; Lee & Viswanath, 2020; National Research Council, 2004)

Expanded view: Smoking

	GfK (weighted)	Community-based Subgroups					
		Community-based total (n=498)	White (n=166)	African American (n=105)	Hispanic (n=188)	Below $20K (n=249)	Homeless (n=85)
Have smoked 100 cigarettes in lifetime	40%	55%	78%	45%	41%	63%	83%
Current smoker	11%	40%	57%	35%	32%	53%	76%
Out of all current smokers..							
Smoke every day	20%	59%	64%	55%	58%	73%	82%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Consequences of Communication inequalities

- Lower knowledge
- Norms conducive to unhealthy behaviors
- Limited or no access to services
- Inability to act on opportunities even when available
- Higher disease incidence, prevalence and even mortality

#5

What can be done?

- Science of message construction
- Science of Engagement
  - Participatory science
- Inclusive science
- Beyond cancer-related policies

Desideratum or even need of the hour….

Need a new approach that requires laser focus on the underserved, engages communities and where science communication is participatory with feedback loops built-in

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