Do information tools need adapting for an effective communication in healthcare?

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Objective

Health information from a comprehensive perspective

- The *rhetoric of health information* (how to communicate information)
- *Sociological, psychological and cognitive aspects* that can impact the effectiveness of “good” health information

What to avoid and how to develop health information

Example

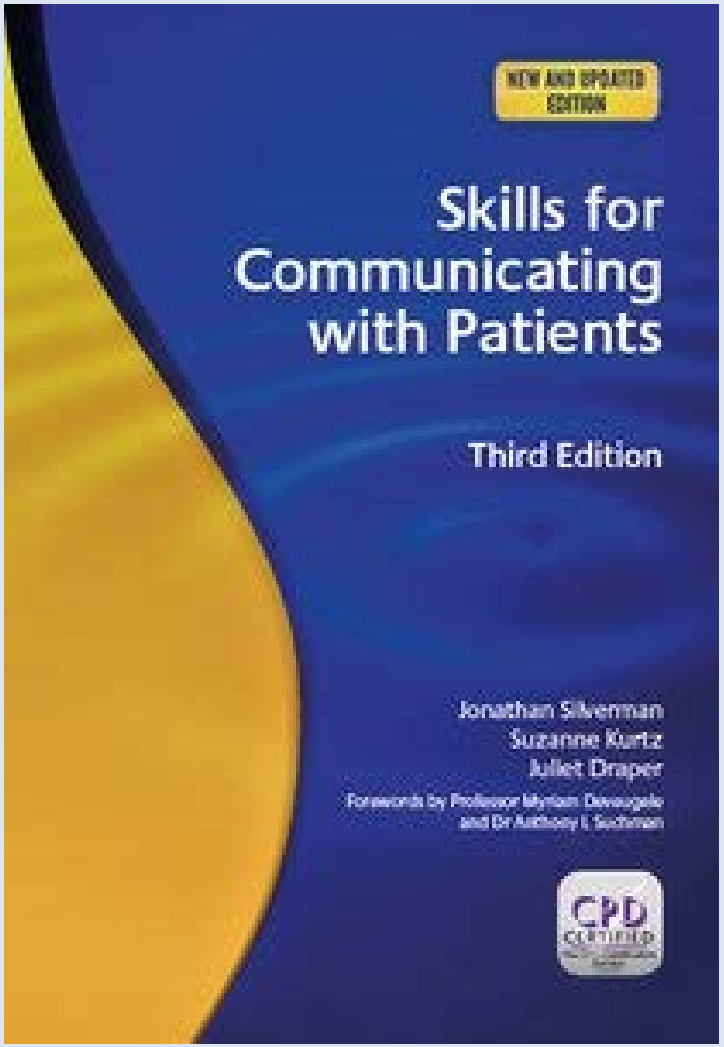
From U.S. Department of Health and Human Services:

"Four reasons why health information is difficult to use and understand:

- **Complexity** of information presentation;
- Use of **unfamiliar scientific and medical jargon**;
- Demands of **navigating the healthcare system**, including locating providers and services and filling out forms; and
- Difficulty that people of all **literacy levels** have in understanding information."

Example

The value of communication skills for health professionals:

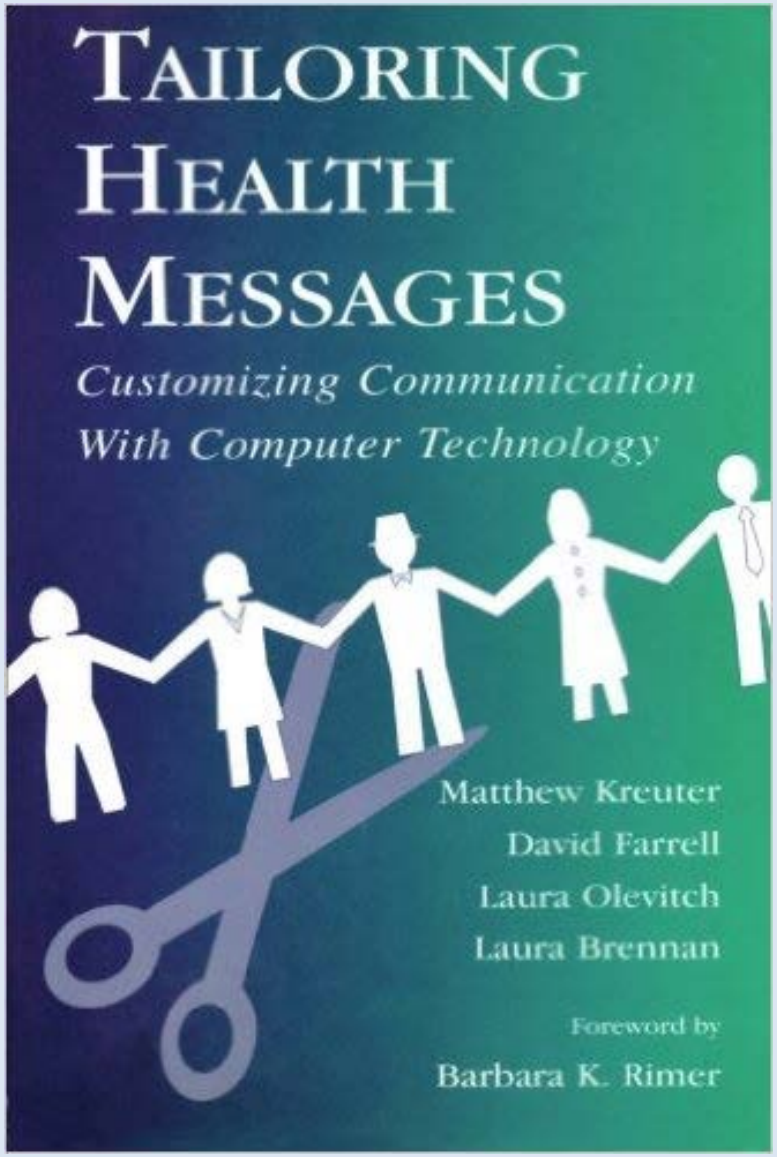


Evidence 2/6
Communication skills

From Silverman et al. (2013):

- Initiating the consultation
- Gathering information
- Providing structure to the interview
- Building the relationship (including non-verbal communication)
- Explanation and planning
- Closing the session
- Specific issues (e.g. breaking bad news) …

Methodologies for enhancing effectiveness of health information



Example

Criteria for the **evaluation of health information on the internet**

- Who runs the website
- What is the purpose of the website
- What is the original source of information on the website
- What is the evidence …

JAMA. 2002 May 22-29;287(20):2691-700.

Empirical studies assessing the quality of health information for consumers on the world wide web: a systematic review.

Eysenbach G[1], Powell J, Kuss O, Sa ER.

Evidence 5/6
Guidelines on health advertising

Example from U.S., guidelines on direct-to-consumer (DTC) advertising

The FDA requires all DTC information:

- to be accurate and not misleading
- to make claims only when supported by substantial evidence
- to reflect balance between risks and benefits
- to be consistent with the FDA-approved labeling

Evidence 6/6
(How to communicate risks, Fagerlin et al. 2011)

Box 1.

Summary of recommendations for risk communication to patients

1. Use plain language to make written and verbal materials more understandable.
2. Present data using absolute risks.
3. Present information in pictographs if you are going to include graphs.
4. Present data using frequencies.
5. Use an incremental risk format to highlight how treatment changes risks from preexisting baseline levels.
6. Be aware that the order in which risks and benefits are presented can affect risk perceptions.
7. Consider using summary tables that include all of the risks and benefits for each treatment option.
8. Recognize that comparative risk information (eg, what the average person's risk is) is persuasive and not just informative.
9. Consider presenting only the information that is most critical to the patients' decision making, even at the expense of completeness.
10. Repeatedly draw patients' attention to the time interval over which a risk occurs.

An extreme but significant case

Home › News › UK

Student Eloise Parry 'burned up from the inside' and died after taking DNP diet pills

By Rose Troup Buchanan

PUBLISHED
21/04/2015

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COMMENTS

SHARE

Health literacy

Health literacy: the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health (WHO, 2007)

Health literacy (Nutbeam 2000)

"Basic/functional literacy—sufficient basic skills in *reading and writing* to be able to function effectively in everyday situations, broadly compatible with the narrow definition of 'health literacy' referred to above.

Communicative/interactive literacy—more advanced cognitive and literacy skills which, together with social skills, can be used to actively participate in everyday activities, to extract information and derive meaning from different forms of communication, and to apply new information to changing circumstances.

Critical literacy—more advanced cognitive skills which, together with social skills, can be applied to critically analyse information, and to use this information to exert greater control over life events and situations."

A main skill for critical health literacy

Individuals' skill of **evaluating optimal versus suboptimal information** to inform their own decision-making

Challenges:

1) There can be *low-quality but persuasive* health information
2) There can be *high-quality but not persuasive* health information
3) The evaluation implies *knowledge and judgement skills*

Elaboration likelihood model (ELM)

People engage differently in elaboration and evaluation of information

Elaboration = engaging in issue-relevant thinking

Extensive issue-relevant thinking *versus*

Not so much issue-relevant thinking

Central versus peripheral routes

The **central route:** achieved through thoughtful examination of an issue

The **peripheral route:** through the application of simple decision rule

- E.g., whether receivers of information like the communicator or whether they find the communication credible

Factors affecting the degree of eleboration (from O'Keefe, 2015)

- **Personal relevance** (what is relevant *for me*)
- **Perceived difficulties** (what is difficult *for me*)
- **Need for cognition** (whether *I* like thinking)
- **Distraction** (what diverges *my* attention)
- **Prior knowledge and beliefs** (what *I* know and believe)

I can be wrong! But still this is what I think ***unless someone convinces me of the contrary*** *…*

Health communication has to be **person-centred** in targeting the individual

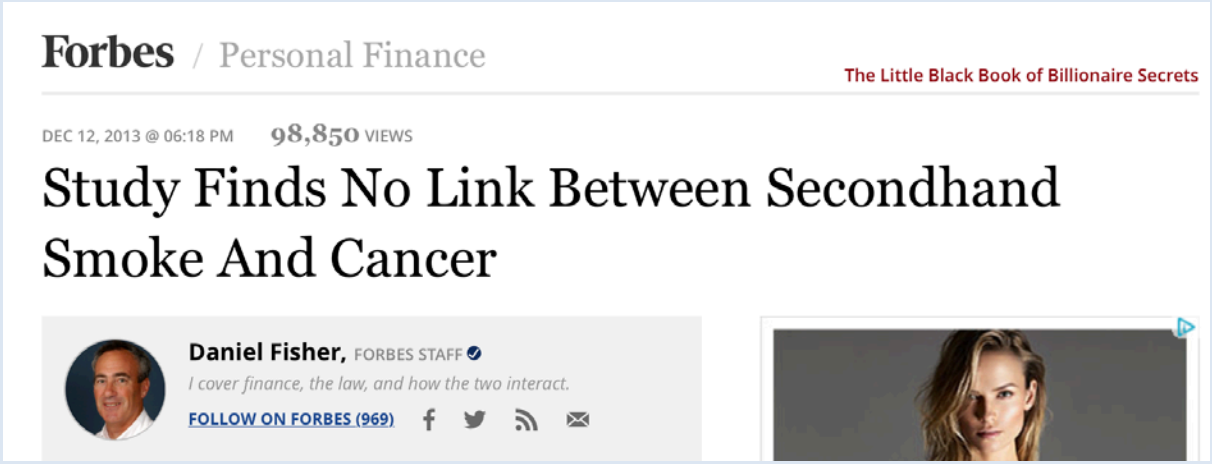
Distraction: health information overload

EVIDENCE-BASED INFORMATION? Yes but …

INCONSISTENT

GENERIC

DE-CONTEXTUALISED



The difficulties of health behavior change

DON'T SMOKE!

I love smoking …

LOSE WEIGHT!

I love cakes …

EXERCISE!

I hate it …

1) Following treatments and changing lifestyles can lead to a *perceived reduction of pleasure and quality of life*

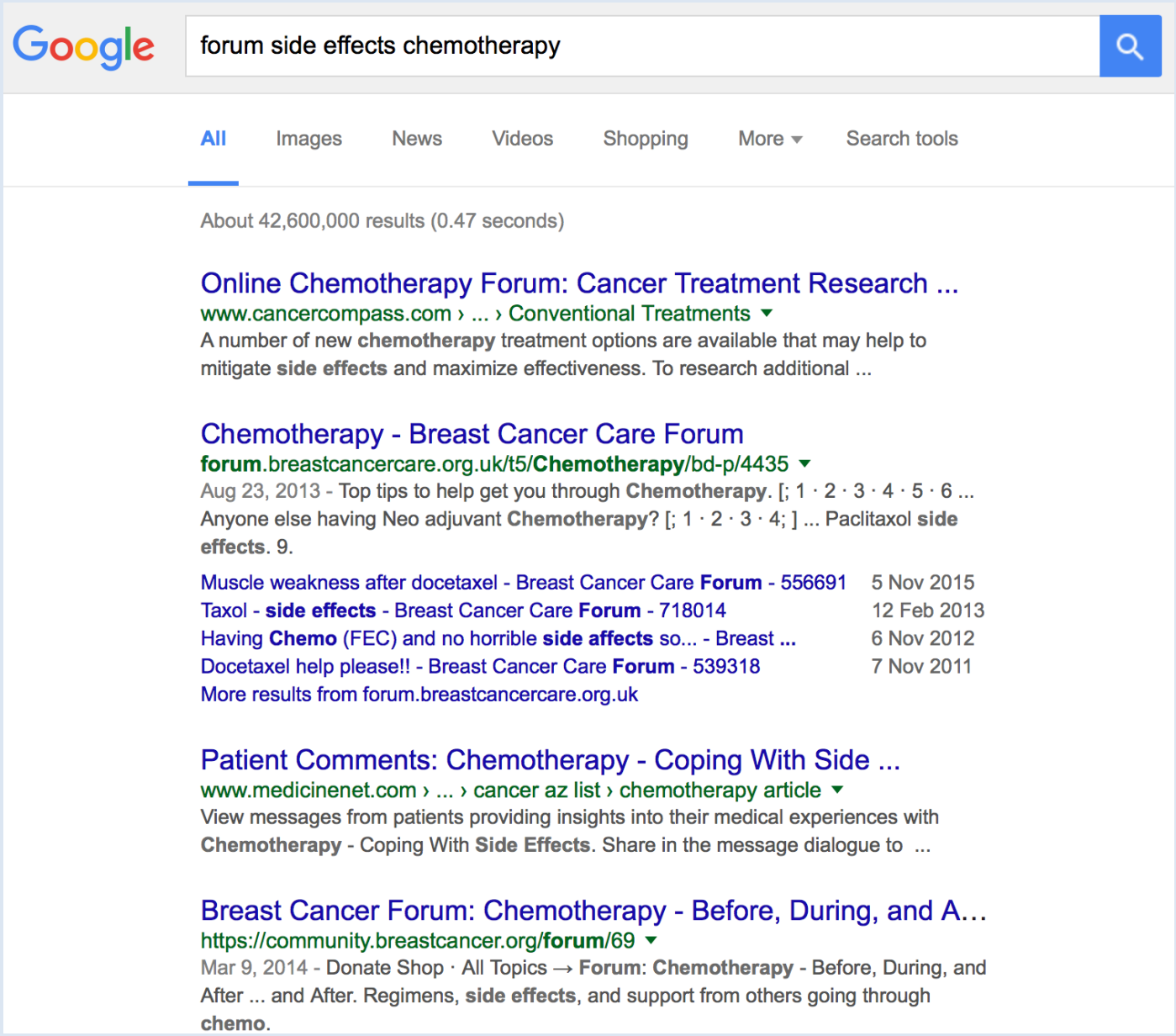
2) The goal of "health" is not always attractive

- In risk communication and health promotion: "it does not happen to me!"

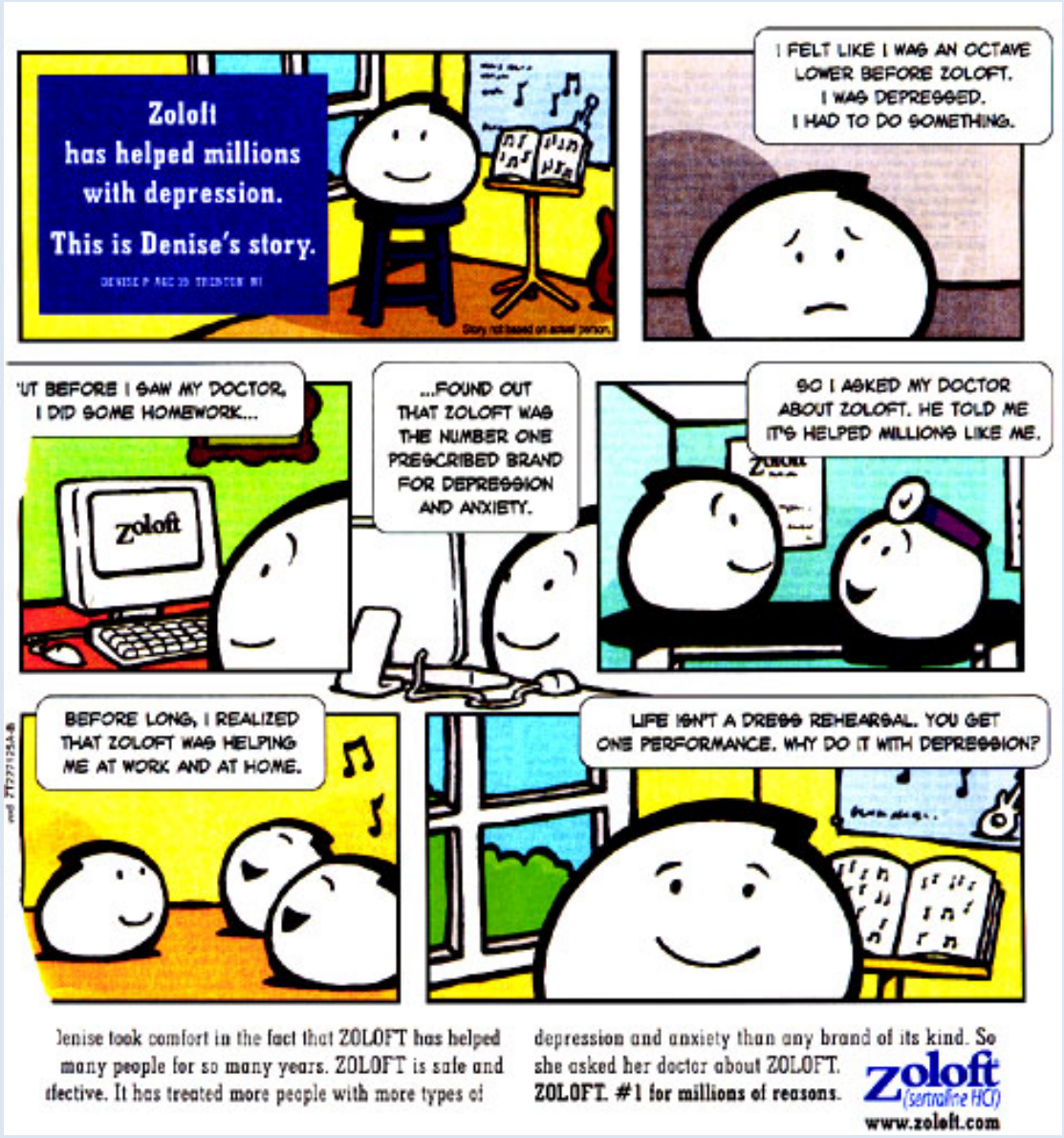
3) The goal of "health" is not always achievable

- The life burden of chronic health conditions

“Unregualted discussions” on side-effects



Between persuasion and manipulation



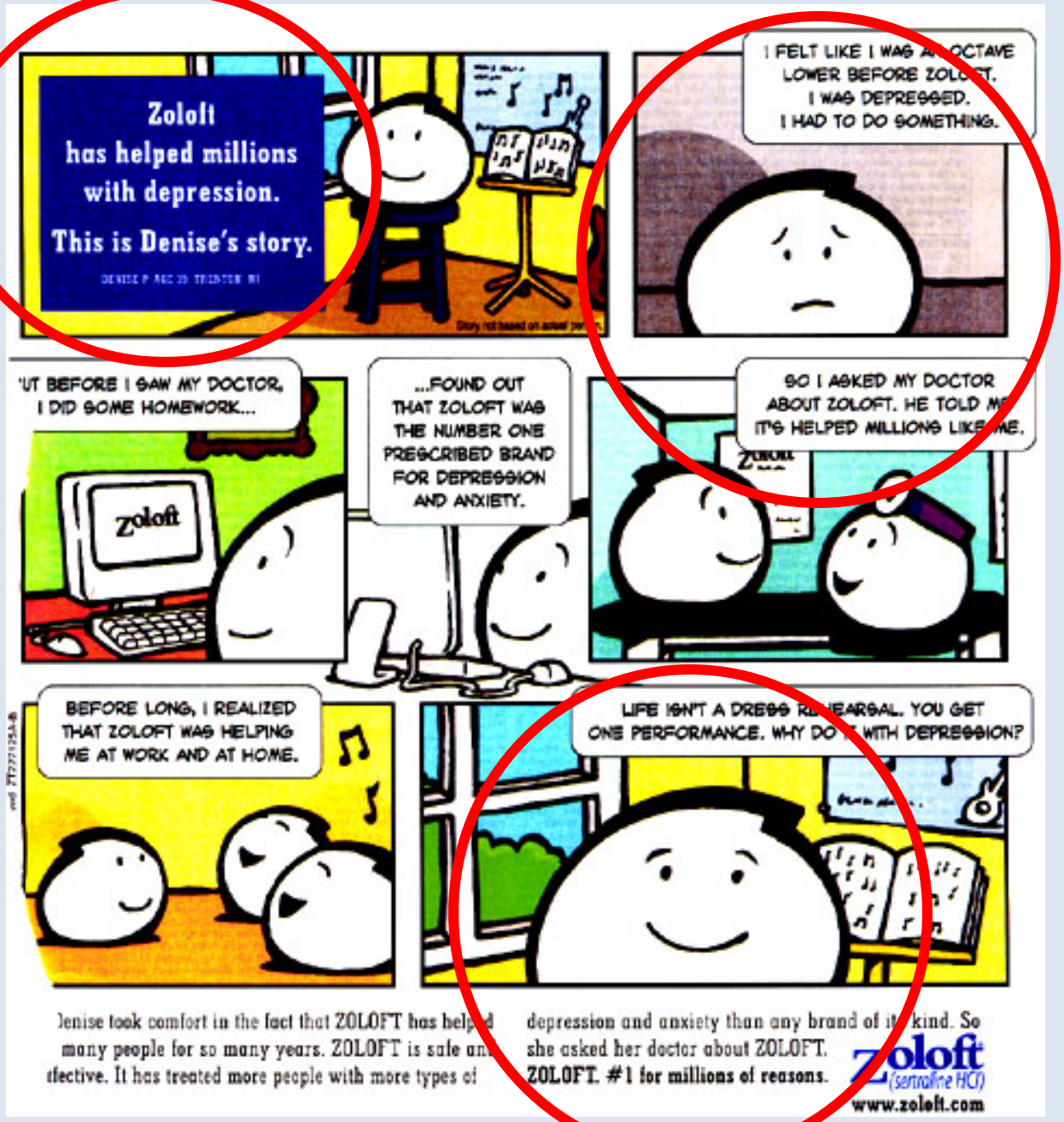
From Rubinelli et al. (2008)

Results 1: What is the ad suggesting that readers do?

Types of answer	N	%
If you are depressed, you must get *Zoloft*	14	38.9
Ask your doctor about *Zoloft*	13	36.1
Make research on *Zoloft*	3	8.3
Stop being depressed	2	5.6
Other conclusions	4	11.1

Results 2: What are the reasons for doing so?

Types of answer	N of answers
Zoloft will make my life happy	10
We just have one life and we can do it without depression	10
Many people take *Zoloft*	8

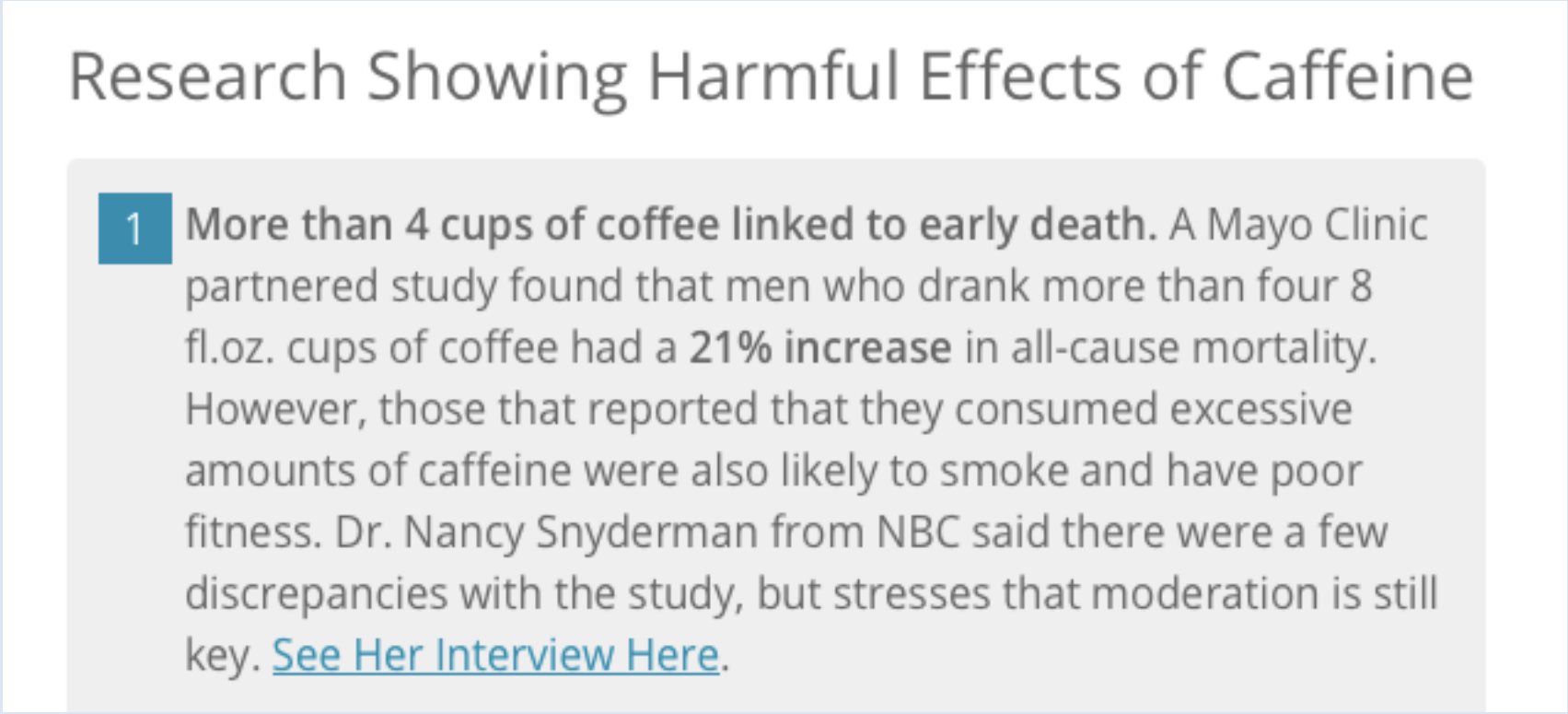

Zoloft
has helped millions
with depression.
This is Denise's story.
I FELT LIKE I WAS AN OCTAVE LOWER BEFORE ZOLOFT. I WAS DEPRESSED. I HAD TO DO SOMETHING.
'UT BEFORE I SAW MY DOCTOR, I DID SOME HOMEWORK...
zoloft
...FOUND OUT THAT ZOLOFT WAS THE NUMBER ONE PRESCRIBED BRAND FOR DEPRESSION AND ANXIETY.
SO I ASKED MY DOCTOR ABOUT ZOLOFT. HE TOLD ME IT'S HELPED MILLIONS LIKE ME.
BEFORE LONG, I REALIZED THAT ZOLOFT WAS HELPING ME AT WORK AND AT HOME.
LIFE ISN'T A DRESS REHEARSAL. YOU GET ONE PERFORMANCE. WHY DO I WITH DEPRESSION?
Denise took comfort in the fact that ZOLOFT has helped many people for so many years. ZOLOFT is safe and effective. It has treated more people with more types of depression and anxiety than any brand of its kind. So she asked her doctor about ZOLOFT.
ZOLOFT. #1 for millions of reasons.
Zoloft (sertraline HCl)
www.zoloft.com

Patients and consumers find the information “they want”

Do you like coffee and you think you should not stop drinking it?

Online patients and consumers find the information “they want”

Do you want to convince someone to stop drinking coffee?



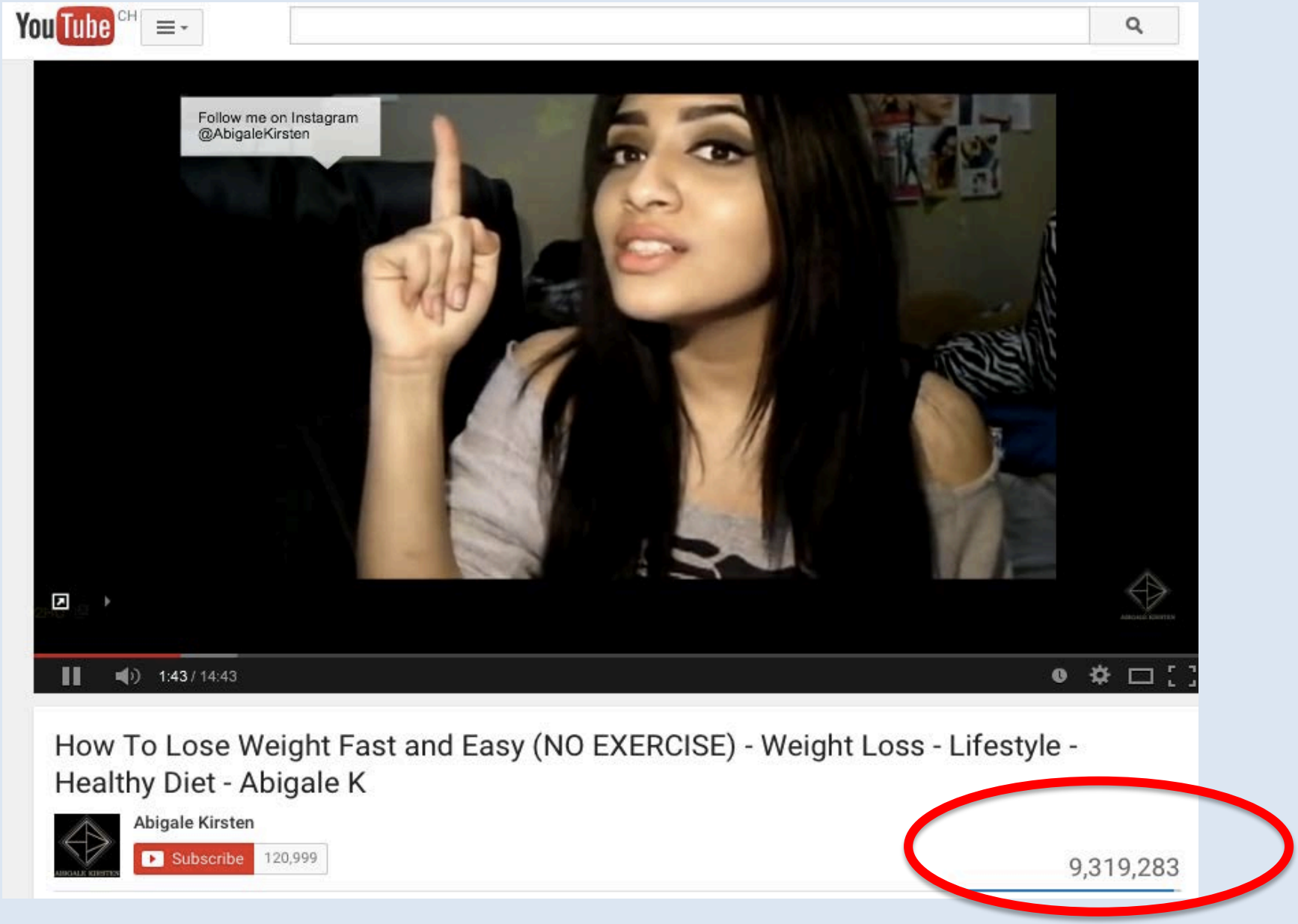
Medicine is not an exact science

IS MEDICINE AN EXACT SCIENCE?

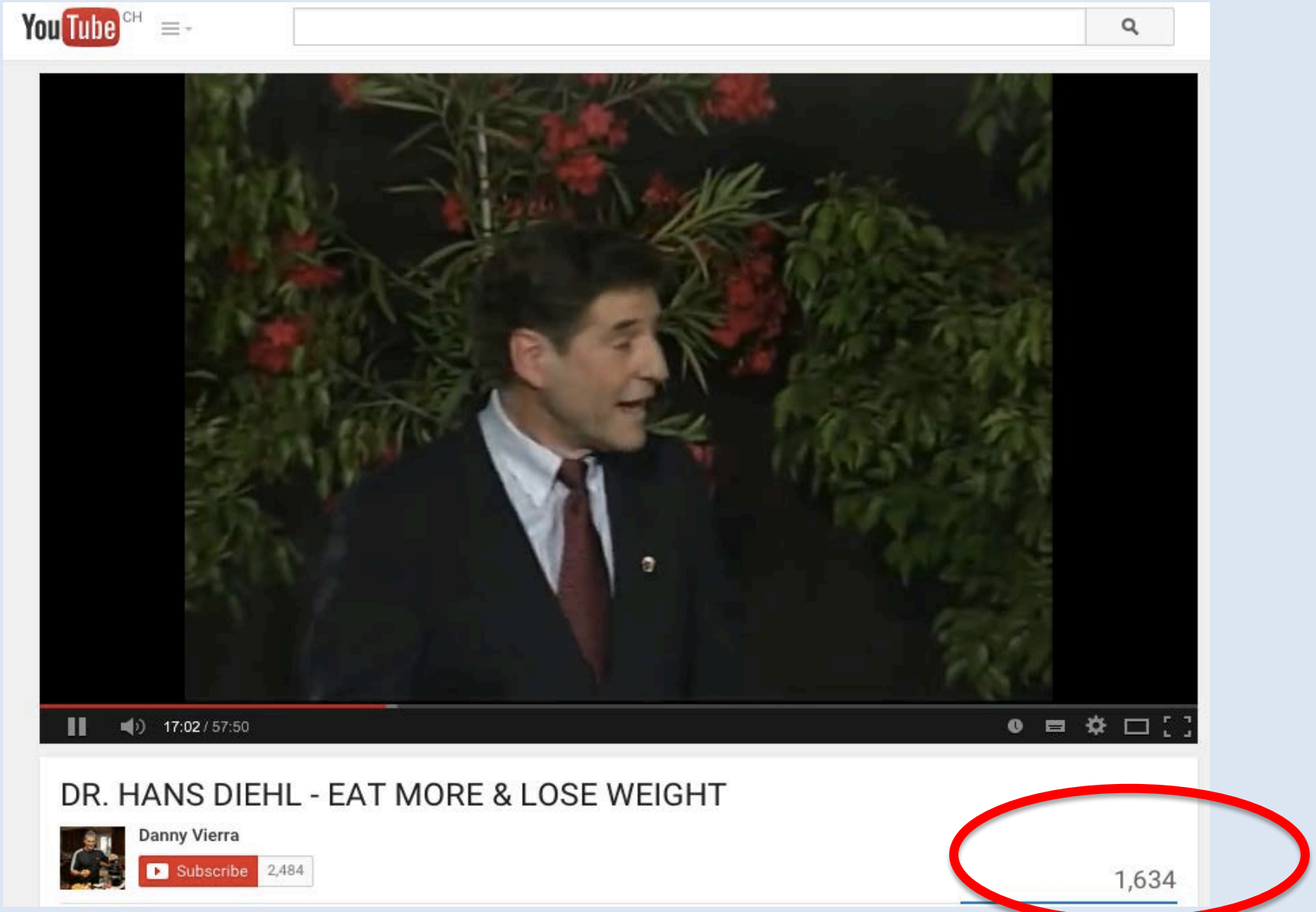
LESTER S. KING, M.D.

It is an interesting paradox that on the one hand intemperate enthusiasm greets new medical discoveries. On the other hand, the lack of science in medicine is paraded from time to time, usually as a matter of apologetics, as, when a physician wishes to excuse an error, a lawyer to discredit a physician, or a jury to render a verdict contrary to medical evidence. Philosophers who insist on the mathematical or quantitative aspects in any definition of science ascribe very little that is truly scientific to biology in general or to its daughter medicine in particular. Jerome Frank comments approvingly that "many scientific-minded physicians today deny that medicine is, or is likely ever to be, a science." (4) Articulate physicians themselves may be highly critical. Dr. Ian Stevenson, for example, declares, "Medicine will not achieve the status of a science until the basic laws of health and disease have been disclosed. But the search for these laws has hardly begun." (10) Stevenson goes on to point out that instead of seeking basic laws, medicine is concentrating on facts, from which no laws emerge.

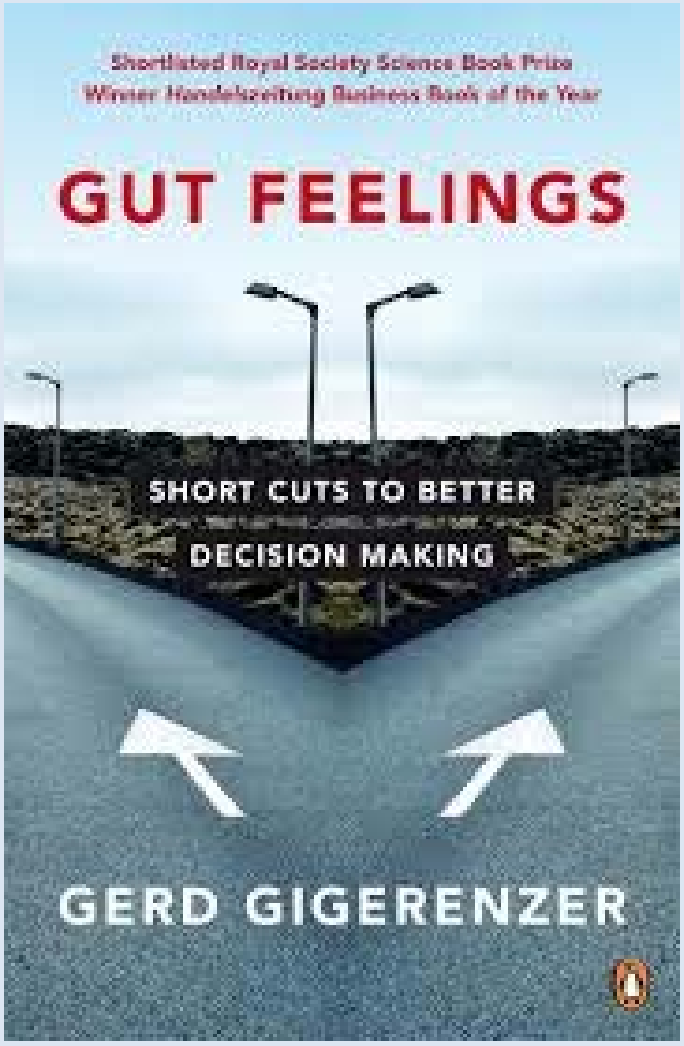
Successful marketing of easy ways to achieve desired goals



Successful marketing of easy ways to achieve desired goals

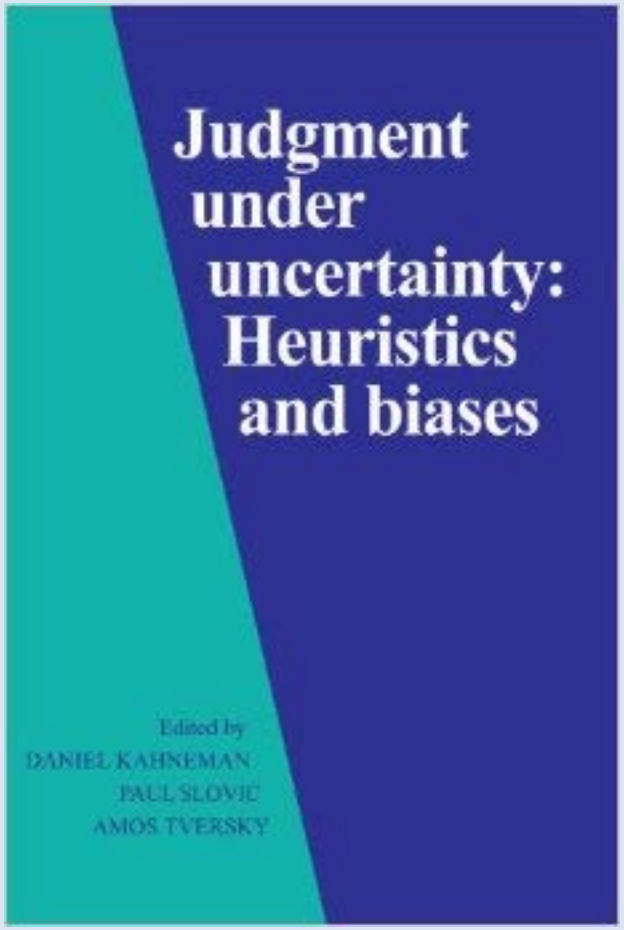


Gigerenzer (2010)



Heuristics and biases

Kahneman et al. (1974)



In health promotion: overconfidence bias

1st Heuristic

Anchoring and adjustment: when people rely heavily on the first information offered. This information acts an an anchor when they make decisions

- Difficulties in changing the first impression and to revised it according to new knowledge

I took antibiotics once and I did not feel well …

The availability heuristic

When making judgements, people tend to recall more recent information

Seeing someone with a health condition in the family …

3rd Heuristic

Representativeness heuristic: tendency to associate phenomena for their similarities

Evaluation based on stereotypes

Addressing solutions

Use existing evidence/guidelines of health information

- Design health information through *participatory design*
  - Targeting health information according to sub-groups
  - Identifying health information needs
  - What are attitudes/beliefs/values/behaviors regarding this specific health topic?
  - What cultural factors might influence the way specific health information is received?
  - What is difficult to understand about the recommended actions?

- Be careful about standardization

Limit the production of new health information

Patients and consumers need guidance in navigating

- Not simply a list of links
- *Institutional websites dedicated to specific health topics, with content managers screening and guiding users on what is online*
  - Institutional partnership to maximize efforts
  - Allocation of resources
  - Assuming responsibility of evaluating and classifying (online) health information
    - Evaluation based on:
      - Right or wrong (relatively easy)
      - Different schools of thoughts (more complex)

Consider all dimensions beyond health information

The value (support) and challenge of interpersonal heath professional-patients communication

- Training in communication skills
- Empowering interventions targeting health literacy

Health conditions are burdens: emotions can play a role over strict rationality

- But health information appraisal requires rationality!

Marketing and health information do not always go together

- Medicalization of normal human experience
- Attractive information to “sell” health products


MANY THANKS FOR YOUR ATTENTION