Battling the bunk – Bringing evidence and citizen engagement to bear in addressing misinformation

2 November 2023
9-10 am EDT | 1-2 pm GMT
#Evidence4Life

Registration to this webinar is free

Co-organized by:
Global Commission on Evidence to Address Societal Challenges
Cochrane Consumer Network
WHO EVIPNet
Overview of today’s webinar

Our speakers

Hosts

- Maureen Smith (co-host), Co-chair, Citizen Leadership Group, Global Evidence Commission
- Jenn Thornhill Verma, Executive Lead, Global Evidence Commission secretariat

Speakers (in order of appearance)

- Johanna Pope, PhD Candidate working on vulnerability to misinformation, iHealthFacts, Evidence Synthesis Ireland, College of Medicine, Nursing and Health Sciences, University of Galway
- Kathleen Tobin, Youth Programming Manager, MediaWise Teen Fact-Checking Network
- Paula Byrne, Senior post-doctoral researcher, iHealthFacts, Evidence Synthesis Ireland and HRB-Trials Methodology Research Network, College of Medicine, Nursing and Health Sciences, University of Galway
- David Ajikobi, Nigeria editor, Africa Check
- Sayan Banerjee, Assistant Professor, Political Science, Texas Tech University
- Francois-Pierre Gauvin, Senior Scientific Lead, Citizen Engagement and Evidence Curation, McMaster Health Forum
Putting evidence at the centre of everyday life:
A global webinar series for citizen leaders and citizen-serving NGOs

Webinar series:

• **Session I**. The big picture – Putting evidence at the centre of everyday life (June 2023 – recording available)

• **Session II**. Citizen-backed evidence – Engaging citizens in providing evidence synthesis and support (including for evidence-informed policy-making) (Aug 2023 – recording available)

• **Session III**. Battling the bunk – Bringing evidence and citizen engagement to bear in addressing misinformation (today)

• **Session IV**. Pushing past platitudes – Co-designing structures and processes to support citizens in designing, executing and holding leaders accountable for achieving changes on the ground that are felt by everyday citizens (date to be confirmed - 2024)

• **Session V** *Bonus session* – details coming soon!

Hosted by three groups working together to ‘put evidence at the centre of everyday life,’ including:

• **Cochrane** (the world’s largest producer of evidence syntheses and home to the [Cochrane Consumer Network](#))

• the **Global Commission on Evidence to Address Societal Challenges** (with one if its three implementation priorities being ‘putting evidence at the centre of everyday life,’ which is being overseen by the [Citizen Leadership Group](#))

• the World Health Organization’s [Evidence-informed Policy Network (EVIPNet)](#) with its new work on Citizen Engagement in Evidence-informed Policymaking.
Global Evidence Commission:
1) Report 2022 & Update 2023 available in six languages (with Update 2024 in January)
2) Three implementation priorities shared with Cochrane Convenes & EVIPNet action plan

1. Formalize and strengthen domestic evidence-support systems
2. Enhance and leverage the global evidence architecture
3. Put evidence at the centre of everyday life
Global Evidence Commission – Implementation priority 3: We need to put evidence at the centre of everyday life (alongside efforts to counter misinformation)

- Help citizens judge what others are claiming or more generally find (and receive) reliable information on a topic
- Tools and training to develop critical-thinking skills (e.g., thatsacaim.org), including in schools

- Make evidence available to citizens when they are making choices
- Online sites like GiveWell for giving to the charities that make the most of every dollar they receive

- Engage citizens in asking questions and answering them (with new research or with existing evidence)
- Prioritization processes that engage citizens (e.g., James Lind Alliance)
  Citizen engagement in evidence synthesis (e.g., COVID-END)

- Make evidence-based choices the default or easy option
- Using ‘nudge’ strategies to steer citizens towards evidence-based choices (e.g., automatic enrolments)
Citizen Leadership Group: Current focus of our work

• Identify promising practices and innovations, especially among
  o Citizen-governed and citizen-serving NGOs
  o Social movements, citizen coalitions and citizen partnerships seeking to drive change
  o Local governments seeking to engage citizens and communities in local change initiatives

• Document the supporting evidence, exemplar initiatives, and opportunities for improvement

• Identify key implementation and scale-up considerations for promising practices and innovations

• Raise awareness about the practices/innovations and improvement, implementation and scale-up considerations
Helpful sections from the Global Evidence Commission report: Misinformation, disinformation and infodemic

**Misinformation and infodemics**
- False information that is spread, regardless of intent to mislead
- Intentional spreading of misinformation
- Rapid spread of misinformation (especially during the pandemic)

**10 ways to counter misinformation**
- Monitoring and fact-checking
- Counter-misinformation campaigns to challenge misinformation
- Credibility labelling and content verification
- Normative, e.g., publicly using misinformation
- Curatorial, e.g., points citizens to credible evidence sources
- Educational, e.g., developing citizens media literacy
- Economic, e.g., issuing advertising bans and other disincentives
- Legislative and other policy, e.g., criminalize acts of misinformation
- Technical and algorithmic, e.g., use AI to limit spread of misinformation
- Investigative, e.g., to get to the source of misinformation

**5 strategies to help relay evidence (for ‘evidence intermediaries’)**
- Improving the climate for evidence use
- Prioritizing and co-producing evidence
- Packaging evidence for and ‘pushing it to’, decision-makers
- Facilitating ‘sell by decision-makers
- Exchanging with decision-makers

**5 stages in the misinformation life cycle**

**Contexts that shape how evidence is viewed**

Historical, social and cultural contexts can shape how evidence is viewed.

We must understand these contexts in order to produce and communicate evidence in ways that will be acted upon.

When trying to understand the potential implications for how evidence is produced and communicated, give greater attention to:

- What is and is not examined
- By whom
- How it is examined
- To what end

Helpful sections from our report:

**Section 4.11 - Misinformation and infodemics**

**Section 4.9 - Contexts that shape how evidence is viewed**

**Section 5.3 - Strategies used by evidence intermediaries**

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WHAT DO WE MEAN WHEN WE TALK ABOUT HEALTH MISINFORMATION?

FRAMING THE PROBLEM IN THEORY AND PRACTICE

Johanna Pope
Evidence Synthesis Ireland/HRB-TMRN
University of Galway
INFODEMICS AND MISINFORMATION

INFODEMERIC: \\
/ˌɪnfə(ʊ)ˈdemɪk/:

“Too much information ... during a disease outbreak” [1]
INFODEMICS AND MISINFORMATION

MISINFORMATION

SCAMS & HOAXES
- Deliberate falsehoods
- Often spread to make a profit
- Ex: False advertisements or product endorsements

CONSPIRACY THEORIES
- Disputed allegations that suggest a power group is manipulating an event
- Ex: COVID-19 lab leak theory

DISINFORMATION
- Controversial information spread deliberately, often to sow discord
- Ex: False information about an epidemic, spread by Twitter bots

MYTHS & MISCONCEPTIONS
- Health advice that is culturally accepted, but not scientifically validated
- Ex: “Sugar makes kids hyper”

IDEOLOGICAL INFORMATION
- Information that is deliberately distorted or incomplete
- Serves a values-based agenda
- Ex: Abstinence-only sex ed
HOW DO ACADEMICS identify misinformation?

- Non-credible source
- Emotional language
- Divergence from expert consensus
- Not backed by scientific evidence
CONTEXT MATTERS

But people’s views about scientific evidence may also be informed by their social and historical contexts [2]. They may also consider:

- **Inter-generational trauma caused by unethical research practices or exploitation [2]**
- **Experiences of being excluded from evidence-generating processes [2]**
- **Evidence may be presented or applied in ways that may cause social harm [2]**
WHAT ELSE MATTERS?

- Trustworthiness of institutions [3]
- Political identity and consensus (or lack thereof) [3]
- Accessibility of available information [3]
- Controversy or conflicting evidence [3]
- Different concepts of reliability [3]
- Responsiveness of evidence to context, values, or priorities
- Potential for delays in translating evidence into policy
WHERE TO NOW?

The Global Commission on Evidence to Address Societal Challenges identifies several recommendations for evidence intermediaries to support evidence use and promote resilience against misinformation [2]:

- Improve the climate for evidence use [2]
- Prioritise and co-produce evidence [2]
- Package evidence for, and ‘push it’ to, decision-makers [2]
- Facilitate ‘pull’ by decision-makers [2]
- Exchange with decision-makers [2]
REFERENCES

- Infodemic [Internet]. World Health Organization; [cited 2023 Oct 30]. Available from: https://www.who.int/health-topics/infodemic#tab=tab_1
Kathleen Tobin, Youth Programming Manager, MediaWise Teen Fact-Checking Network
MediaWise Teen Fact-Checking Network

- Digital fact-checking newsroom of teens aged 13-18, started in 2018
- Teens fact-check claims they find on social media and create a video in which they teach a media literacy tip.
- Their videos are published on YouTube, TikTok and Instagram
Let’s take a look at one!
What makes us different?

● We are a peer-to-peer teaching model.
● We reach kids where they are - on social media - and focus on topics they are interested in.
● We don’t just fact-check. We teach teens how to do it on their own.
15 lessons aimed at 6th-12th graders. Each lesson includes video, teacher tips, student handout and extension activity.

- Fact-Checking Fundamentals
- Evaluating Sources
- Recognizing “Fake News”
- Navigating Artificial Intelligence
iHealthFacts

Dr Paula Byrne
Battling the Bunk
2023
What is the purpose of iHealthFacts?

iHealthFacts is a resource where the public can quickly and easily check the reliability of a health claim circulated by social media. We hope this information will help people think critically about health claims and make well-informed choices.
Examples

- Does Arnica help heal bruising and inflammation?
- Does exposure to WIFI associated with brain cancer?
- Does wearing a facemask prevent COVID-19 infection?
- Does cold seawater swimming improve health?
- Does consuming protein after workout build muscle?
iHealthFacts review process

Question submitted
Answer drafted 1st and 2nd reviewers
External review
PPI
Health journalist
Answer published
iHealthFacts answers

Short answer + Longer summary with links
Does eating prunes improve bone density?

12 September 2023

Bone mineral density (BMD) is a measure of how dense or packed with minerals your bones are. Appropriately dense bones are stronger and healthier.

As we age, especially women, we can lose bone density, leading to weaker bones and osteoporosis. We found a possible association between eating prunes (also known as dried plums) and maintaining bone mineral density or perhaps even increasing it.

However, this is based on evidence from a small number of studies. We need more studies to examine people’s diets and lifestyle to rule out other factors that help bone density.
The Evidence

We found four relevant studies on this subject:

- **Study 1**: 160 postmenopausal women, ate either 100g/day of dried plum or 100g/day of dried apple for 1 year. The study showed that the group who ate 100g/day of dried plum had increased bone mineral density, particularly at the ulna (a bone in your arm) and spine.
- **Study 2**: 48 postmenopausal women ate either 100g of prunes or 75g of dried apple per day. The study found that the bone mineral density at the ulna and spine increased more in group who ate 100g of prunes daily compared to group who ate 75g of dried apple daily.
- Other research focused on using smaller amounts of dried plums and prunes, which can be easier for people to incorporate into their diet. A study of 235 postmenopausal women showed that 50g of prunes daily was linked with maintenance of bone density levels at the hip, even though postmenopausal women tend to lose bone at a rate of 1% annually.
- Another study of 48 osteopenic (experiencing a loss of bone density) postmenopausal women showed that either 60g/day or 100g/day of dried plums was linked to total body bone mineral density not decreasing.

Overall, the evidence suggests a possible link between eating prunes and improved bone density, but it is not definite. To be sure, we need more detailed and larger studies that consider whether a person’s diet and lifestyle contribute to better bone density. This is the only way we can be sure that eating a certain amount of prunes daily does in fact help or not help bone density.

**Guidelines and recommendations**

- We did not find any guidelines or recommendations on this topic.
Things to Remember

- Sometimes people don’t think about the side effects of treatments because they really want to see improvements. Remember even if a treatment is natural it doesn’t mean that it is 100% safe and without side effects.
- It is always important to ensure that the people who took part in studies are similar to you. For example, all the studies reported above have involved older women. Therefore, we do not know what the effects of prunes are in men or in young women.
- Just because using a treatment is associated with people getting better or worse, that doesn’t mean that the treatment made them better or worse.
- Just because these individual studies have shown some benefits of prunes on improving bone mineral density, we cannot be fully certain. It would be helpful if a systematic review was conducted to carefully provide a summary of all the evidence.
Thank you!

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David Ajikobi, Nigeria
director, Africa Check
Sayan Banerjee, Assistant Professor, Political Science, Texas Tech University
Challenges to fact-checking and digital literacy campaigns

Technological affordances

• Fact-checking is effective but may have little persuading power in polarised communities

• Polarization may take different forms depending on the dominant social or political cleavages

• Evidence is limited on utility of digital literacy campaigns

• Short term effects of digital literacy campaigns
Path ahead to counter misinformation

Supply side

• Trust gap between audience and news outlets
• News organisations: building trust with their audiences
• Strategies: editorial, transparency, managerial, engagement initiatives
• Trusting and engaged audiences are receptive towards trust-building efforts from news organisations
• Editorial strategies for building trust resonate with audiences, especially in the UK and the US
  • Solutions-focused journalism, focus on everyday people, less sensationalism, less bias
• Focus on more transparency efforts in reporting as well as organisational ownership
• Newsroom diversity is important for building trust
• More engagement initiatives, online and offline, are need of the hour
Path ahead to counter misinformation

Demand side

• Beyond audience engagement with news
• Putting ‘social’ in social media
  • Transforming short-term effects of technological affordances into long-term effects
  • Reduce intergroup polarization
  • Building intergroup social capital
  • Slow, gradual process of societal change
  • Office social networks and contact mitigate belief in online misinformation
Q&A
Stay tuned for the next session:

Pushing past platitudes – Co-designing structures and processes to support citizens in designing, executing and holding leaders accountable for achieving changes on the ground that are felt by everyday citizens.