

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:



WHO EVIPNet

evidencecommission.org

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:

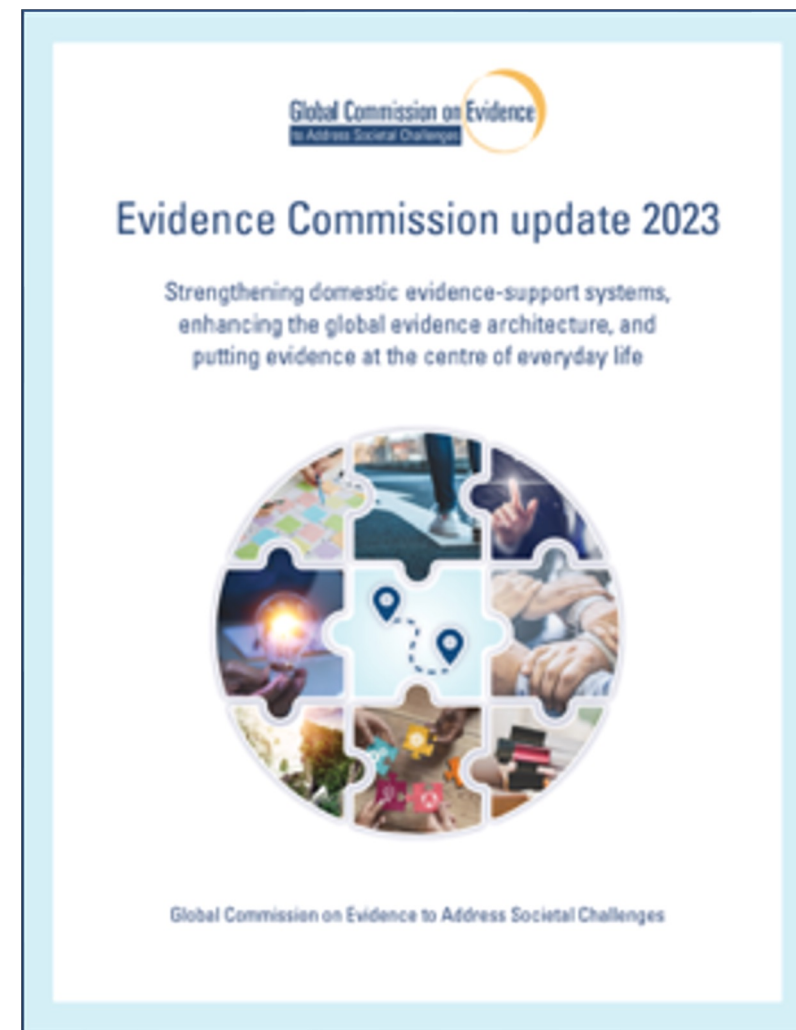
- [Session I](#). The big picture – Putting evidence at the centre of everyday life (**June 2023 – recording available**)
- [Session II](#). Citizen-backed evidence – Engaging citizens in providing evidence synthesis and support (including for evidence-informed policy-making) (**Aug 2023 – recording 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 of 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

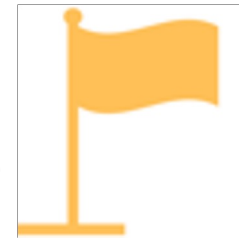
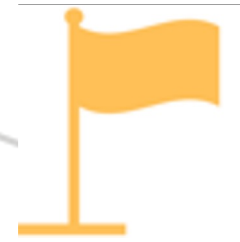
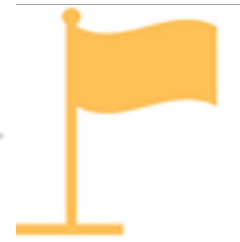


2. Enhance and leverage the global evidence architecture



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

Make evidence available to citizens when they are making choices

Engage citizens in asking questions and answering them (with new research or with existing evidence)

Make evidence-based choices the default or easy option

Tools and training to develop critical-thinking skills (e.g., thatsacclaim.org), including in schools

Online sites like GiveWell for giving to the charities that make the most of every dollar they receive

Prioritization processes that engage citizens (e.g., James Lind Alliance)
Citizen engagement in evidence synthesis (e.g., COVID-END)

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
 - Citizen-governed and citizen-serving NGOs
 - Social movements, citizen coalitions and citizen partnerships seeking to drive change
 - 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

Misinformation
false information that is spread, regardless of intent to mislead

Disinformation
intentional spreading of misinformation

Infodemic
rapid spread of misinformation (especially during the pandemic)

Learn more about **recommendation 13** in **section 7.2** of the Evidence Commission report
evidencecommission.org

10 ways to counter misinformation

- Monitoring and fact-checking
- Counter-misinformation campaigns to challenge misinformation
- Credibility labelling and content verification
- Normative, e.g., publicly outing misinformation
- Educational, e.g., developing citizens' media literacy
- Economic, e.g., issuing advertising bans and other disincentives
- Curatorial, e.g., point citizens to credible evidence sources
- 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

Learn more in **section 4.11** of the Evidence Commission report
evidencecommission.org

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 'pull' by decision-makers
- Exchanging with decision-makers

Learn more in **section 4.11** of the Evidence Commission report
evidencecommission.org

5 stages in the misinformation life cycle

- Who's spreading misinformation and what's their motivation?
- What techniques, such as bots, fake accounts or fake identities, are in play?
- What 'formats' relay the misinformation
 - claims mixing lies or incomplete information, personal opinions, and elements of truth
 - fabricated, or de-contextualized
 - fabricated websites and polluted datasets
- What platforms (e.g., dark web, social media) and using what platform features (e.g., algorithms and business models) relay misinformation?
- Who is affected (e.g. citizens, scientists and journalists; research centres and news agencies; communities such as Black communities and Indigenous peoples; and systems such as electoral processes) and how they react

Learn more in **section 4.11** of the Evidence Commission report
evidencecommission.org

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

Learn more in **section 4.9** of the Evidence Commission report
evidencecommission.org

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](#)

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

INFODEMIC:

/,ɪnfə(ʊ)'dɛmɪk/:



“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

MYTHS & MISCONCEPTIONS

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

DISINFORMATION

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

IDEOLOGICAL INFORMATION

- Information that is deliberately distorted or incomplete
- Serves a values-based agenda
- Ex: Abstinence-only sex ed

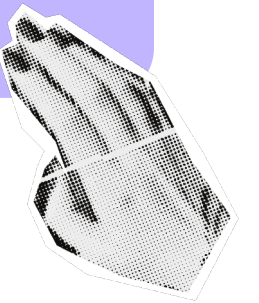
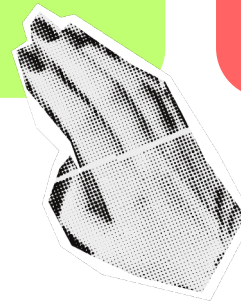
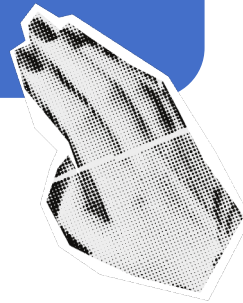
HOW DO ACADEMICS identify misinformation?

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]



ANNUAL
AND IDEAS HAVE
THEY REPRESENT
POWERFUL T

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 2.
- Global Commission on Evidence to Address Societal Challenges. The evidence commission report: a wake-up call and path forward for decision-makers, evidence intermediaries, and impact-oriented evidence producers. Hamilton: McMaster Health Forum.
- Gauvin FP, Ciurea P, Moat KA, McKinlay J, Smith M, Irons A, Trehan N, Lavis JN. Panel summary: Putting evidence at the centre of everyday life in Ontario. McMaster Health Forum.
- Pope J, Byrne P, Devane D et al. Health misinformation: protocol for a hybrid concept analysis and development [version 1; peer review: 1 approved, 1 approved with reservations]. HRB Open Res 2022, 5:70 (<https://doi.org/10.12688/hrbopenres.13641.1>)



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.

The collage consists of four video thumbnails, each with a teen host and a topic related to digital literacy and fact-checking. Each thumbnail includes the MediaWise logo, the PBS NewsHour Student Reporting Labs logo, and the 'Is This Legit?' series title.

- Top Left:** Host: A young woman. Topic: **GUN LAWS AND BOOK BANS FINDING MISSING CONTEXT**. Visuals: A book cover for 'To Kill a Mockingbird' and a gun.
- Top Right:** Host: A young woman. Topic: **JOURNALISTIC MEAT OR PINK SLIME FRAUDULENT FILLER?**. Visuals: A piece of ground meat.
- Middle:** Host: A young woman. Topic: **IS THIS KEANU ACCOUNT ACTUALLY A DEEPPFAKE?**. Visuals: A video frame showing Keanu Reeves in a bathroom.
- Bottom:** Host: A young man. Topic: **CHATGPT: SEPARATING FACT FROM FICTION IN THE ERA OF AI**. Visuals: The ChatGPT logo.

Be MediaWise Curriculum

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

 **MediaWise**

TEEN FACT-CHECKING NETWORK



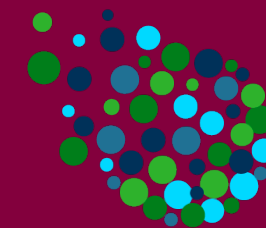
OLLSCOIL NA GAILLIMHÉ
UNIVERSITY OF GALWAY

iHealthFacts

Dr Paula Byrne
Battling the Bunk
2023



iHealthFacts



EVIDENCE SYNTHESIS
IRELAND

University
ofGalway.ie

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 cold
seawater
swimming
improve
health?

Does using
antiperspirant
cause breast
cancer?

Is exposure to
WIFI
associated
with brain
cancer?

Does wearing
a facemask
prevent
COVID-19
infection?

Does
consuming
protein after
workout build
muscle?

iHealthFacts review process



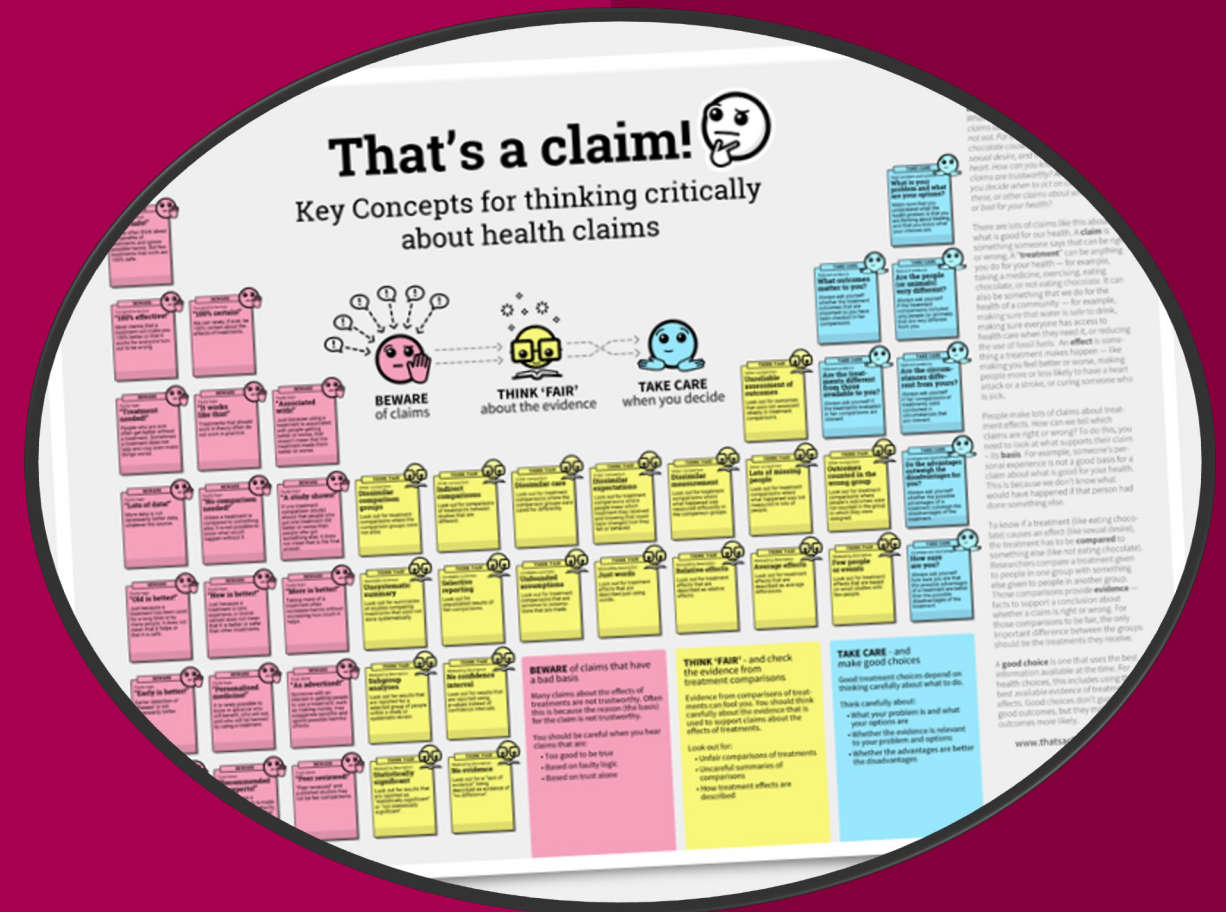


iHealthFacts answers

Short answer



Longer summary with links





iHealthFacts answers

Short
answer

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 helps bone density





iHealthFacts answers

Longer
summary
with links

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 50g/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.



iHealthFacts answers

Key
concepts

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.



OLLSCOIL NA GAILLIMHE
UNIVERSITY OF GALWAY



iHealthFacts

Thank you!



@iHealthFacts1



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EVIDENCE SYNTHESIS
IRELAND



Cochrane
Ireland

University
ofGalway.ie

David Ajikobi, Nigeria
editor, 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
 - Offline 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