

Advancing Effective Obesity Communications Workshop

National Academies of
Sciences, Engineering, and
Medicine

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Communication in context: Mental
models, salience, and competing
information about obesity

Dr. Brian Southwell

bsouthwell@rti.org



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL



Disclosure

I direct Science in the Public Sphere program at RTI International, teach at Duke University & UNC, and host public radio show, *The Measure of Everyday Life*, on WNCU.

Military diet: 3-day diet or dud?

By Sandee LaMotte, CNN

Updated 4:58 PM ET, Thu March 8, 2018



Photos: The real US military diet

Thinking of trying the three-day crash "military diet," supposedly invented to get overweight recruits into

More from CNN



Franco Columbu, Arnold Schwarzenegger's 'best friend,' dies at 78



Long-lost cemetery likely found under apartment complex

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Communication about obesity: challenges and opportunities

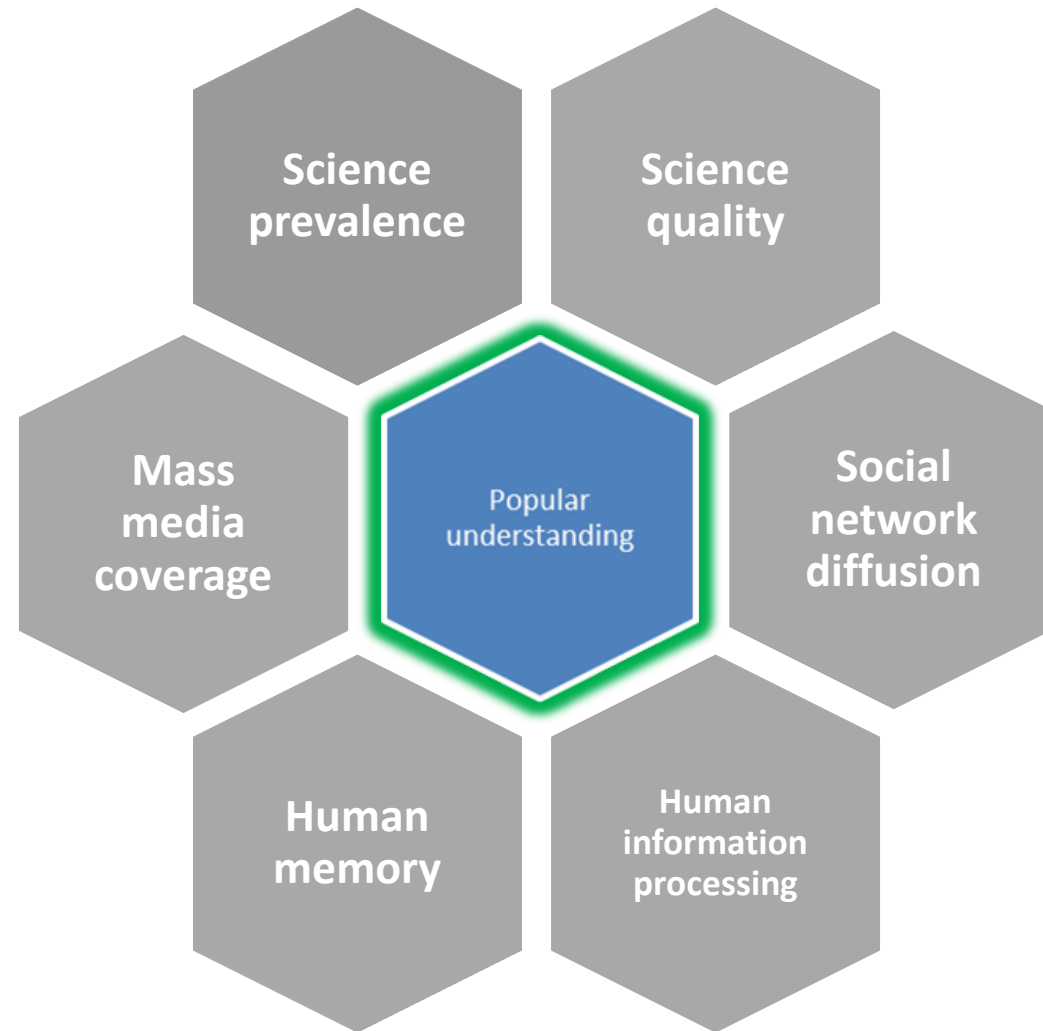
- Consider context: We don't face a blank slate
- Existing *mental models* of health processes matter
 - See Southwell et al. (2018) in *Emerging Infectious Diseases*
- Existing *information environment* matters





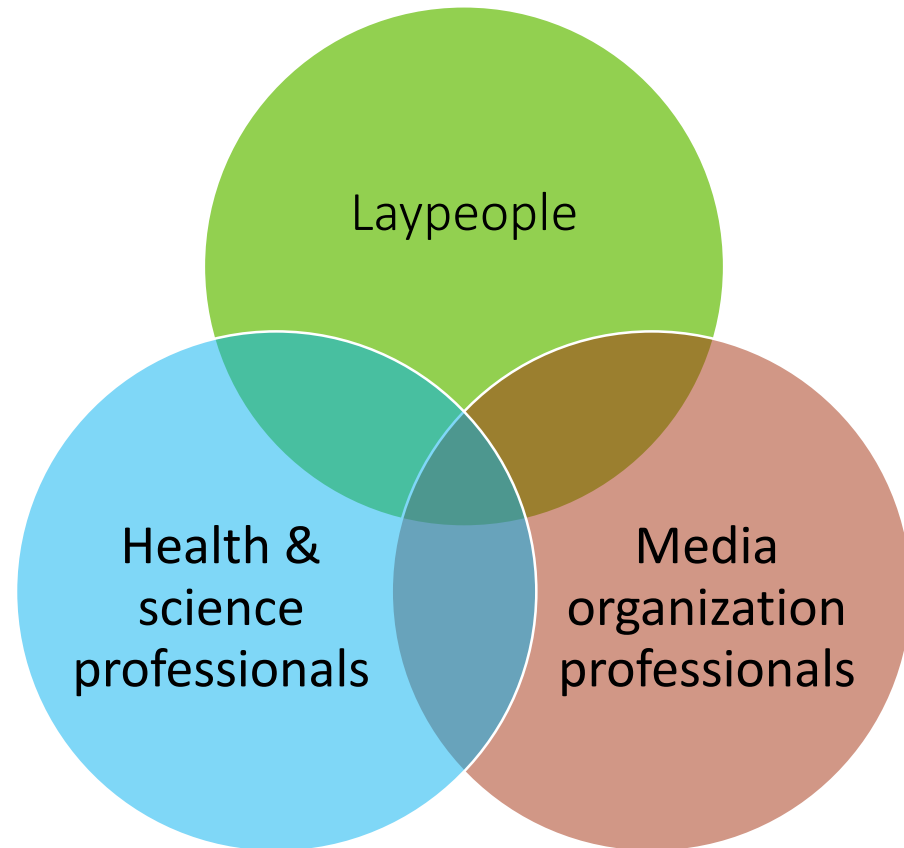
How can science
communication support
public understanding of
obesity?

Popular understanding reflects many authors



Public engagement: At the *intersection of groups*

Southwell, Reynolds, and Fowlie's
(2013) framework for public
understanding of science

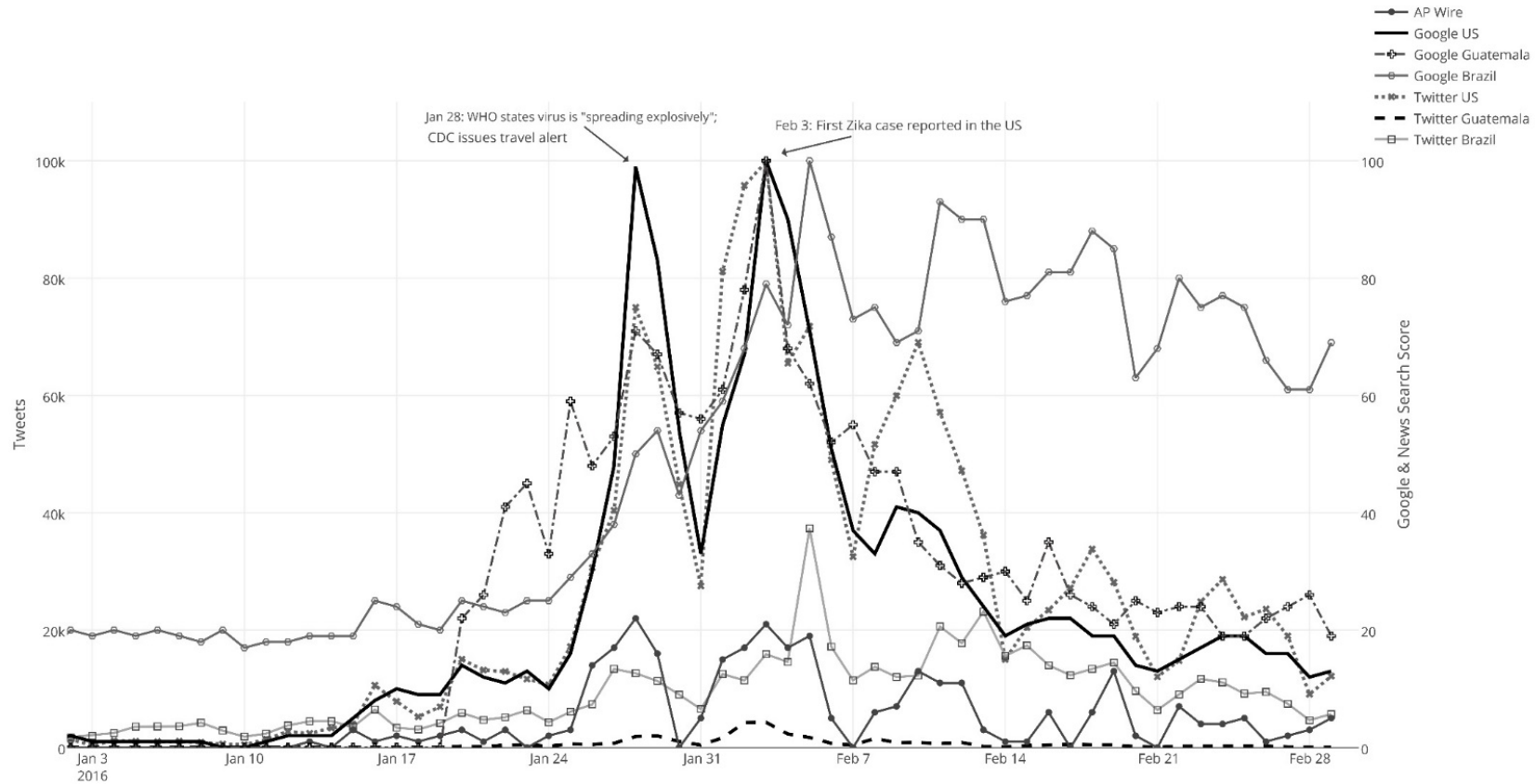


Best practices suggest
we must do *more than*
present accurate
information.

Salience matters

Example: Southwell et al. (2016)

- http://wwwnc.cdc.gov/eid/article/22/7/16-0415_article



Trust matters

- Example: CDC's CARE+ (Check and Report Ebola) program to screen in-bound travelers to U.S.

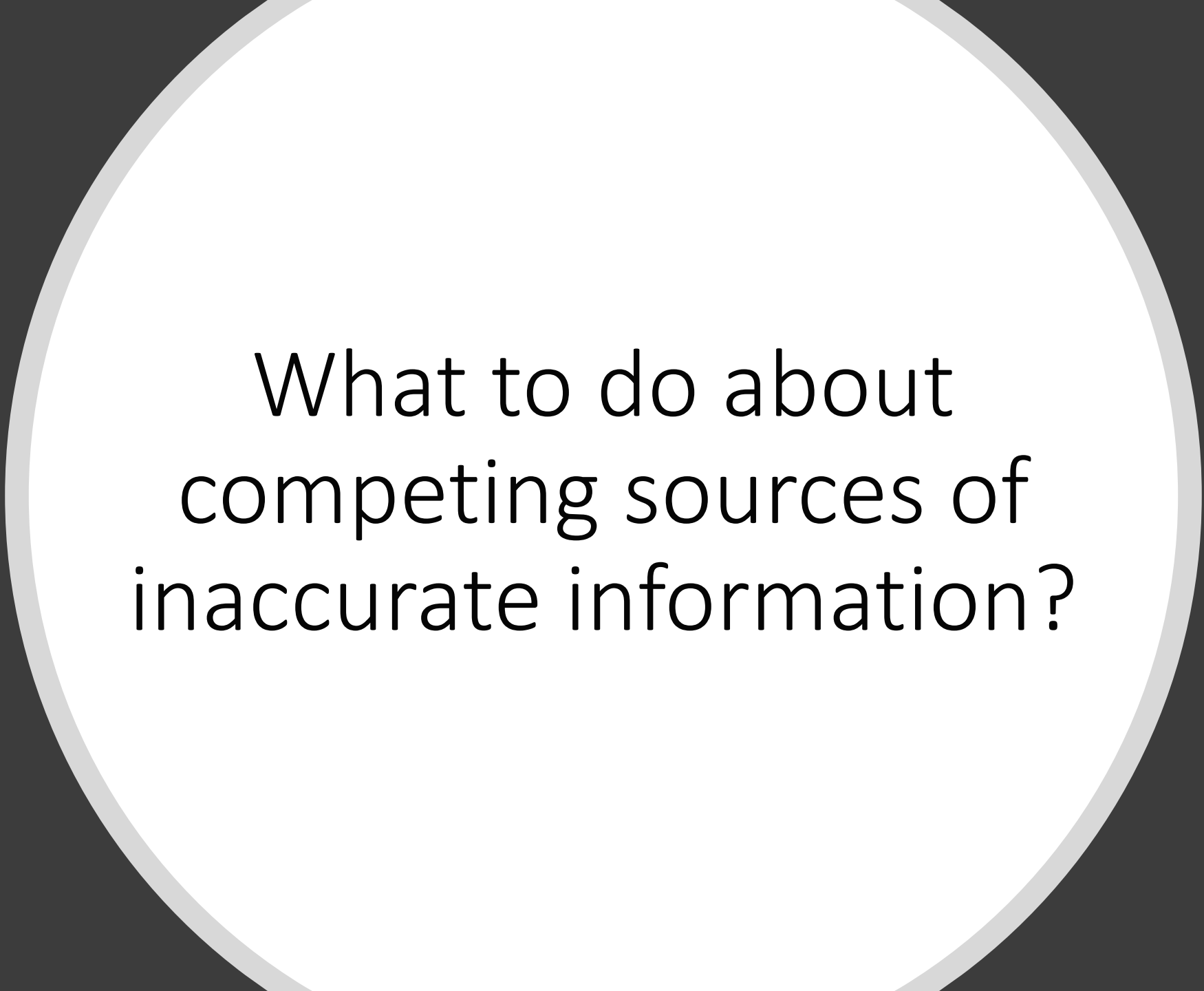
EBOLA CARE KIT

INTRODUCTION

Welcome to the United States

Whether you are returning home or just visiting, we hope you enjoy your time in the United States. We know that you just came from a country with an Ebola outbreak and that this can cause worry and fear. We want to make sure that you know what to do now. We also want to make sure you know what to do to protect your health and the health of those who are close to you.

This is the **Check and Report Ebola** (or, CARE) Kit. The kit has information about Ebola. It also contains tools to help you do daily health checks for the next 21 days. Your daily health check will include a temperature check and a symptom check.



What to do about
competing sources of
inaccurate information?

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Do we
misunderstand
our own
vulnerabilities to
misinformation?



We need social connection.



We need hope for future.



The lack of either affords
opportunity for science
communication challenges.

BELLE GIBSON

FOUNDER OF THE BEST-SELLING APP AND
COOKBOOK *THE WHOLE PANTRY*

My life-long struggle with the truth

Belle Gibson claimed to be healing her terminal cancer with wholefoods – but now it's proven to be a cruel web of lies.

Yet is Belle a hoax mastermind or simply

FRESH-FACED. EARNEST. Naive. When Belle Gibson speaks, she cries easily and muddles her words. She's passionate about avoiding gluten, dairy and coffee, but doesn't really understand how cancer works. All of which begs the question: is this young woman really capable of masterminding one of the

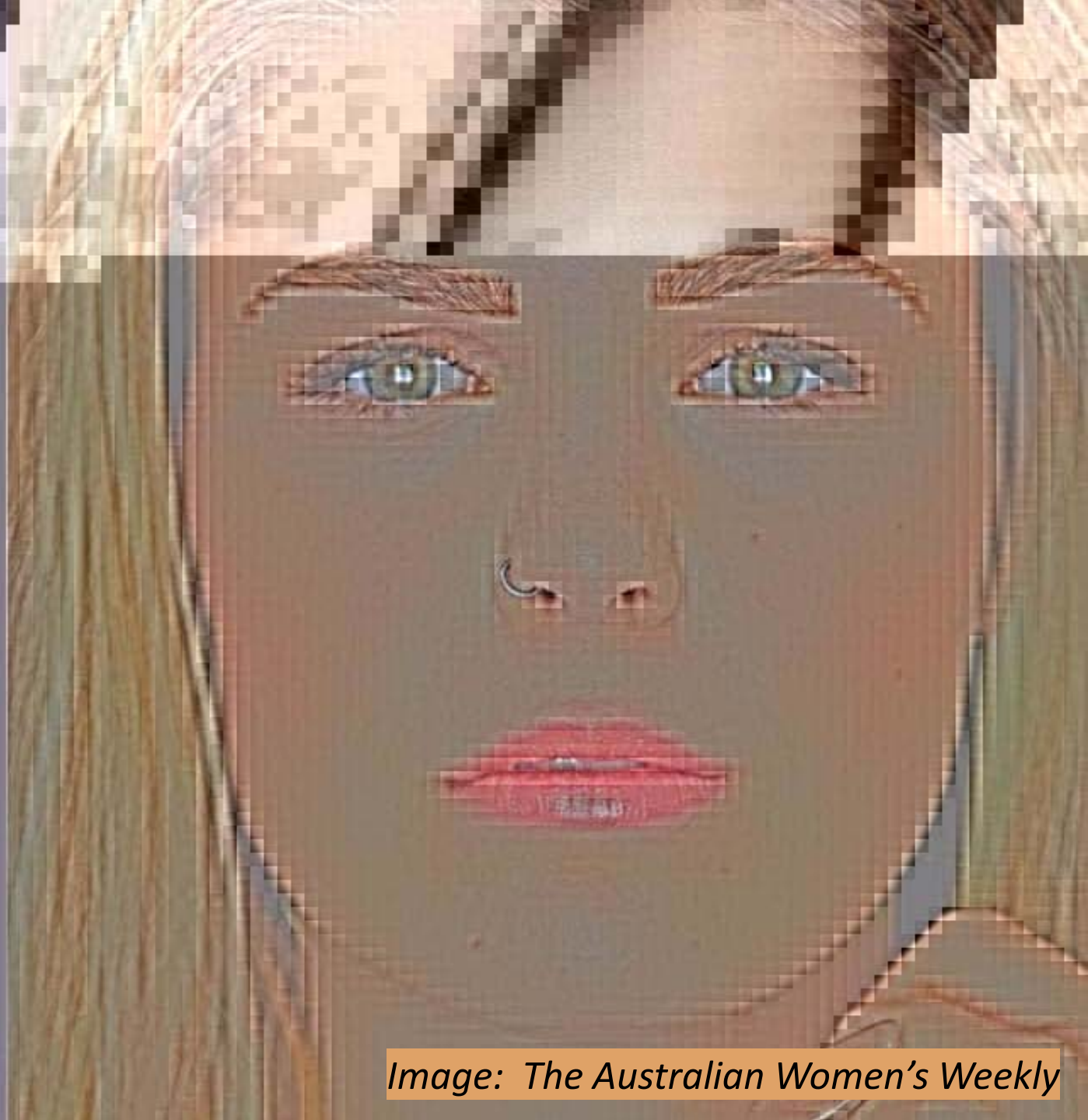


Image: The Australian Women's Weekly

Our multifaceted vulnerabilities

- We are *biased toward acceptance*.
- There are *reasons why we share* misinformation.
- Our *regulatory approach* (in democracies) emphasizes post hoc detection.
- *Correction is hard*.

Applause from Miranda Cheatham, Nancy Watzman, and 32 others



Brian Southwell

Director, Science in the Public Sphere @ RTI International, Faculty Member @ Duke University and UNC-Chapel Hill, & Public Radio Professional @ WNCU (90.7 FM)

Mar 28 · 5 min read

Why we lie to ourselves and others about misinformation

Or, why we underreport our spread of misinformation—just as we do about other behaviors like smoking, drinking, and unprotected sex



Do we *misunderstand* misinformation?

Southwell et al. (2019):

- Misinformation is not all equal in consequence.
- New media platforms differ from old in authorship, oversight, and algorithms.
- Misinformation can have indirect effects aside from acute, short-term ones.
- Misinformation correction may itself have unintended consequences.
- System-level challenges warrant system-level, future-oriented remedies.

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Preventive Medicine

CURRENT ISSUES

Misinformation as a Misunderstood
Challenge to Public Health

Brian G. Southwell, PhD,^{1,2,3} Jeff Niederdeppe, PhD,⁴ Joseph N. Cappella, PhD,⁵
Anna Gaysynsky, MPH,⁶ Dannielle E. Kelley, PhD,⁶ April Oh, PhD,⁶ Emily B. Peterson, PhD,⁶
Wen-Ying Sylvia Chou, PhD⁶

What do we need to do?

- **Consider interaction** of human psychology, news norms, governance, and various systems.
- **Monitor and seek to understand** – rather than prejudice – public information environments.
- **Build and maintain trust** between science institutions and citizens by acknowledging shared interests.

Thank you!

Dr. Brian Southwell

bsouthwell@rti.org