Misinformation and Health Literacy 2-Part Learning Collaborative Series

Session One: April 14, 2023 at 1:00 PM EST

Session Two: April 28, 2023 at 1:00 PM EST





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Director of the Geriatric and Extended Care Nurse Practitioner Residency program at the Durham VA Health Care System



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The National Nurse-Led Care Consortium (NNCC) is a non-profit membership organization that supports nurse-led care and nurses at the front lines of care.

NNCC, in partnership with the CDC, works to support efforts to build COVID-19 vaccine confidence among nurses and the communities they serve.

Learn more at NurseLedCare.org

ABOUT THE SERIES

- Free 2-part learning collaborative series for nurses on community program planning, implementation and evaluation.
- 1.5 CEU will be offered for each session attended live. An evaluation will be sent out to attendees following each session, complete the brief questionnaire to receive CEU credit. Learn more here.

This project was funded in part by a cooperative agreement with the Centers for Disease Control and Prevention (grant number NU50CK000580). The Centers for Disease Control and Prevention is an agency within the Department of Health and Human Services (HHS). The contents of this resource center do not necessarily represent the policy of CDC or HHS, and should not be considered an endorsement by the Federal Government.

EXPECTATIONS FOR THE SERIES

- . Please mute yourself during the presentation, unless speaking to the group.
- Participate in breakout discussions!
- . This session will be recorded and posted to the NNCC website
- . Snacks and lunch are okay!
- . Complete post-series survey following session 2.

Disclosure Statement

The vaccine hesitancy information discussed at these Learning Collaborative meetings may be used for educational and research purposes. All information used will remain anonymous.

Welcome



Letha Joseph, DNP, AGPCNP-BC, FFNMRCSI, FAANP

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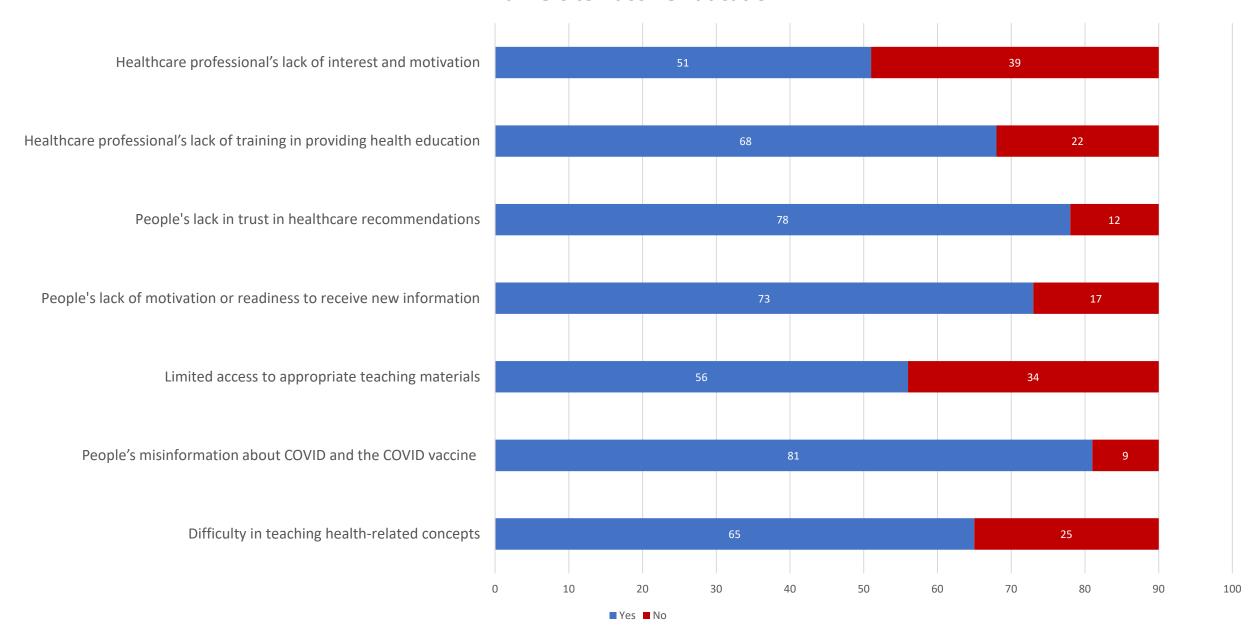
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Misinformation and Health Literacy Learning Collaborative Series

Session 1: Health Literacy, Medical Misinformation, and Vaccine Hesitance

Barriers to Vaccine Education





Barriers in COVID-19 Vaccine conversation-Breakout Activity

Objectives

1

Discuss medical misinformation and highlight factors that facilitate the spread of misinformation

2

Analyze common misinformation that affects health-related behaviors

3

Describe the interplay between health literacy and medical misinformation

4

Appraise the impact of medical misinformation on healthcare outcomes

"Infodemic" - Another Epidemic

Fake news

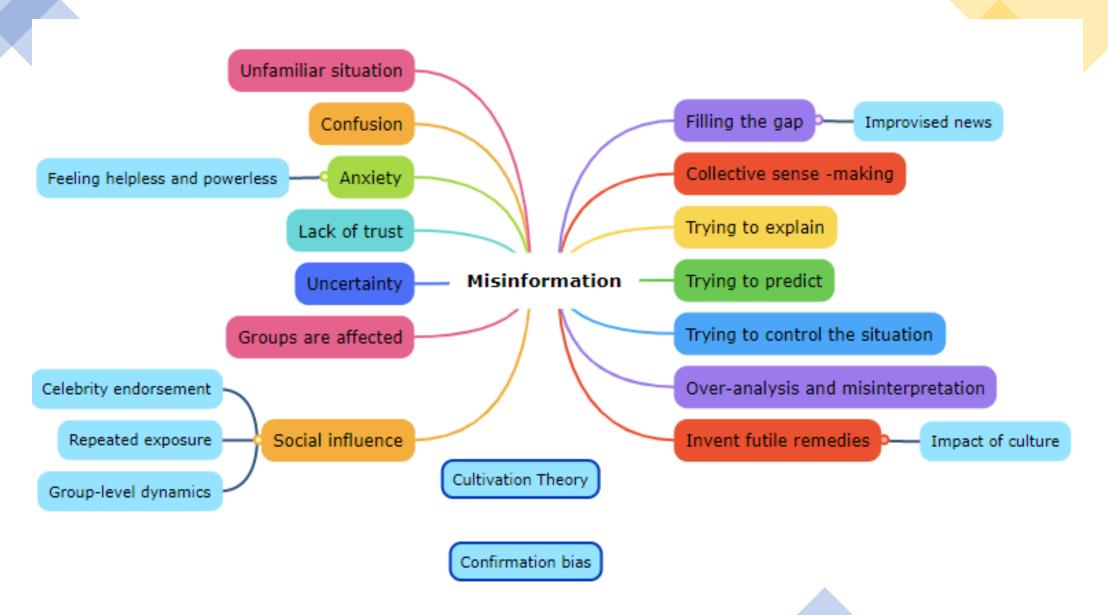
Misinformation

Disinformation

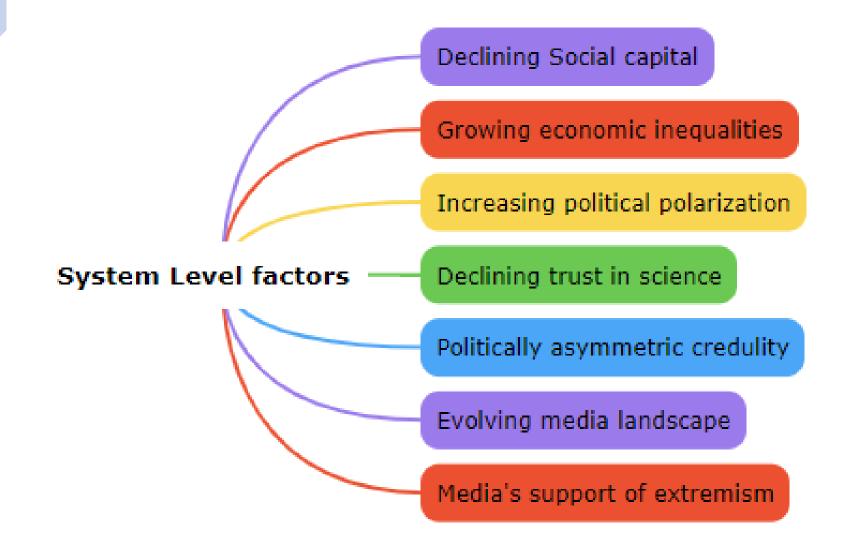
Uninformed and misinformed at same time

Active and misinformed people

Infodemic - spreading fake news, false claims, wrong information or conflicting information



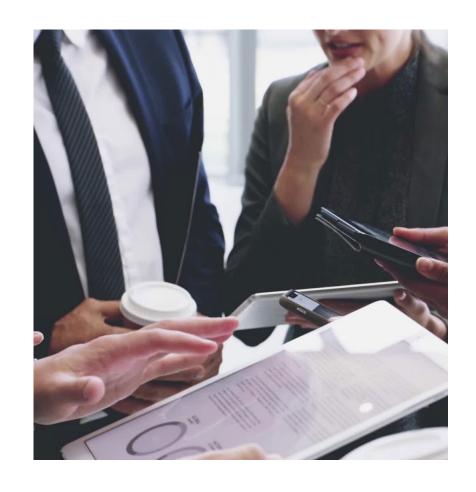
Joseph, L.M., Rahman, A., & Varghese, R. (2023). Medical Misinformation and Healthy Information Environment: A Call to Action, The Journal for Nurse Practitioners. 19(4). doi: https://doi.org/10.1016/j.nurpra.2022.11.012.



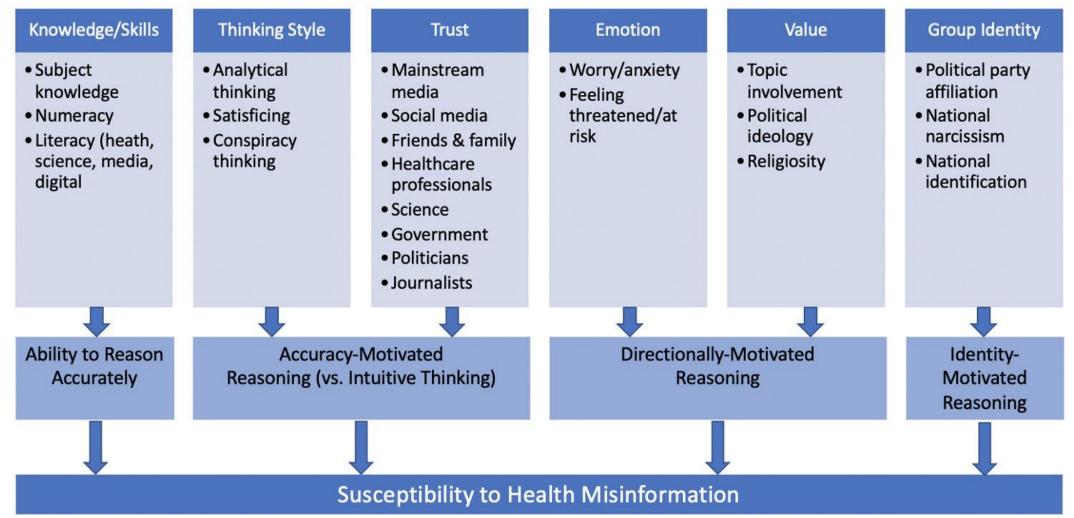
The National Academies of Sciences, Engineering, and Medicine. (2016). Science literacy: Concepts, contexts, and consequences. The National Academies Press. https://doi.org/10.17226/23595

Medical Misinformation

- Lack of trust
- Feeling let down or dismissed
- Higher levels of anxiety
- Poor health literacy
- Online community association
- Health problems and solution often complex
- Misinformation often offers very simple explanations
- Seeking quick fixes



Susceptibility to Misinformation

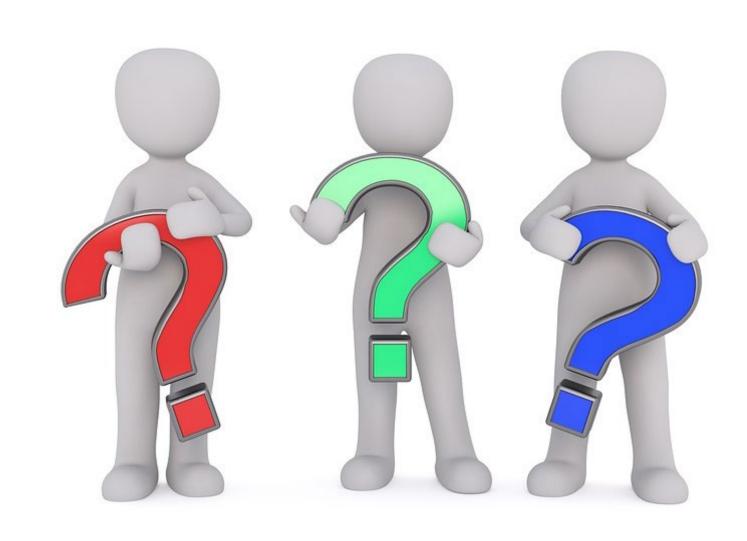


Nan, X., Wang, Y., & Their, Kathryn (2022). Why do people believe health misinformation and who is at risk? A systematic review of individual differences in susceptibility to health misinformation Social Science and Medicine, 314, 115398

Give a quick answer

You are running a race, and you passed the person in 2nd place. What place would you be in now?

- a) First place
- b) Second place
- c) Third place



Drivers of False Beliefs

Intuitive thinking Cognitive failures Illusory truth Lack of analytical Neglect source cues Familiarity **Cognitive drivers** thinking and/or and/or knowledge Fluency deliberation Forget source and/or Cohesion counter-evidence False beliefs Source cues Worldview Socio-affective Elites **Emotion** drivers In-group Emotive information Personal views Attractive Emotional state Partisanship

BiasesCognitive
Societal
Algorithmic

Health Literacy and Medical Misinformation



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 (Nutbeam, WHO, 1998)

Engagement in a wide range of health actions that extend from personal behaviors to social action to address the determinants of health (Nutbeam, SSM, 2008)

Health Literacy

Degree to which individuals have the capacity to obtain, communicate, process, and understand basic health information and services needed to make appropriate health decisions (Affordable Care Act, 2010)

Competence to recognize the severity of a given situation, acquire a basic grasp of how to protect themselves and others, and understand the scope of their choices.



Health Literacy- CDC Definition

Personal health literacy is the degree to which individuals have the **ability to find, understand, and use information and services to inform health-related decisions and actions** for themselves and others.

Organizational health literacy is the degree to which organizations equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others.

Poll Question

True or False?

People with high literacy levels is expected to have high health literacy

- True
- False

Limited Health Literacy

Can be anyone

Racial and ethnic minorities

Non-native speakers of English

Low socioeconomic status

Medically underserved people

Poll Question

Qn. Evidence-based health literacy intervention to ensure that you have explained information clearly so that patients and their families understand.

- a) Patient Education Materials Assessment
- b) Teach-back
- c) Short Assessment of Health Literacy (SAHL)
- d) Rapid Estimate of Adult Literacy in Medicine (REALM)

Health Literacynew dimensions

Literacy, digital literacy, media literacy, health literacy

Peer to peer communication- improved access to health information

Understand and critically evaluate information

Ability to fact check information

Health Literacy and Perceived Trustworthiness

- African Americans with lower health literacy were more likely to trust YouTube and Twitter for information
- African Americans with higher health literacy were more likely to trust online governmental and religious groups
- Older adults who had low health literacy
 - were more likely to trust Facebook
 - lower trust in online support groups for health information

Health Literacy and Vulnerability

- Participants with lower health literacy were more likely to give low quality ratings to a high quality website and high-quality ratings to a low-quality website
- Health literacy positively correlated with the number of successful information tasks participants completed
- Health literacy positively correlated with perceived self-efficacy in evaluating online health information

Benotsch, E. G., Kalichman, S., & Weinhardt, L. S. (2004). HIV-AIDS patients' evaluation of health information on the internet: the digital divide and vulnerability to fraudulent claims. Journal of consulting and clinical psychology, 72(6), 1004–1011. https://doi.org/10.1037/0022-006X.72.6.1004

van Deursen, A. J., & van Dijk, J. A. (2011). Internet skills performance tests: are people ready for eHealth? Journal of medical Internet research, 13(2), e35. https://doi.org/10.2196/jmir.1581

Meet Ms. Janice

- Janice has recently been diagnosed with lymphoma.
- Wanting to learn more about lymphoma but not knowing where to start, Janice searches online forums for information about the cancer
- Shares the diagnosis on her Facebook page where she seeks help finding a doctor
- She uses Twitter to search for discussions about 'cancer cures'.
- Janice quickly is confused by the conflicting information found through her searches and replies to her pleas.
- One Facebook page called 'Society of Natural Cures' claims her lymphoma can be cured by adhering to an alkaline diet,
- An acquaintance comments on her Facebook page she should try magnetic therapy.
- Janice's watched a YouTube video that teaches her about 'cupping', which is touted as an alternative cancer treatment in the video.
- What might happen if Janice had a higher level of health literacy?

Medical Misinformationnot new

- 'AIDS denialism' deprived people of HIV treatment claiming over 330,000 AIDS-related deaths between 2000 and 2005
- 'Over-highlighted' risk for myalgia with statins
- Misinformation about MMR vaccine
- Misinformation about fluoride safety
- Pharmaceutical industry is all about making money

What is your experience?

COVID- related Misinformation

Disease characteristics

Origins and spread of virus

Federal, state, and local government and organization responses

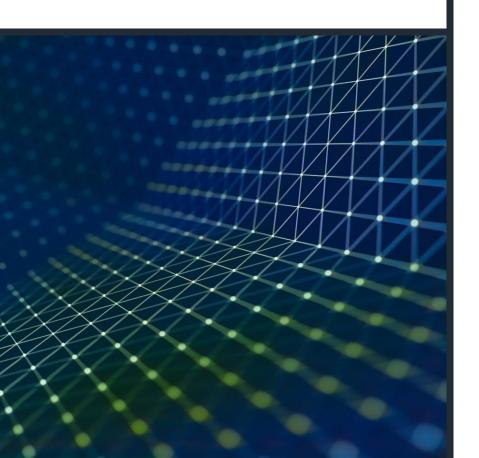
Individuals' prevention behaviors

Unproven treatments

Vaccine attitudes

Medical Misinformation and Healthcare Outcomes

Individual Level



Fear, anxiety, distrust & confusion

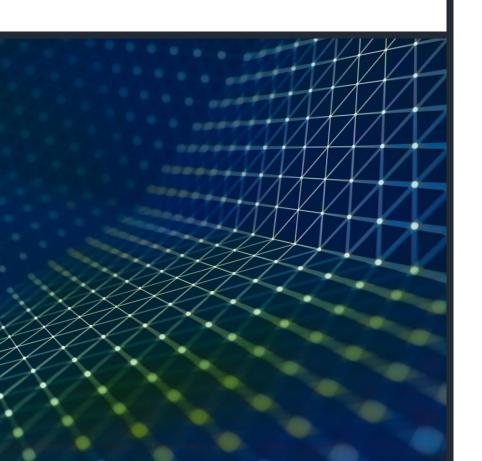
Missing treatments

Unproven treatments

Conflicts

Polarization

Patient -Clinician Relationship

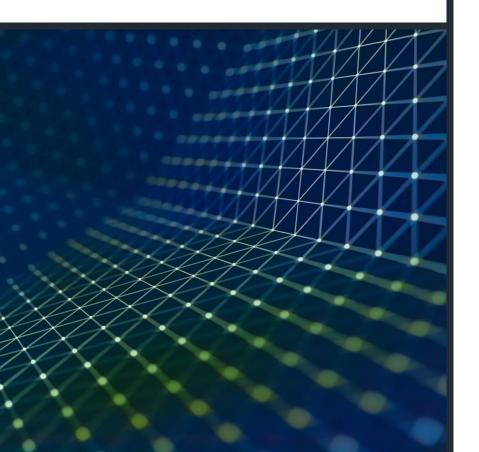


Demand for unproven treatments

Harassment & violence against healthcare workers

Provider distress

Public health



Mistrust in healthcare

Rejecting public health measure

Using unproven treatments and miracle cures.

Missing treatments and preventive measures.

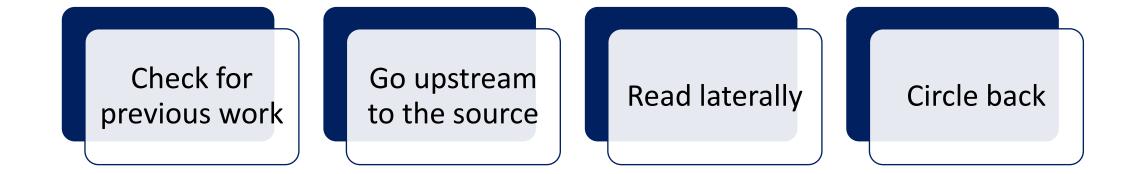
How to Combat Medical Misinformation?

Information- To believe or not?

- Accuracy + Context = Truth
- Can be factual but may not be truthful
- Correlation Vs. causality
- Seeing is not believing
- Be open to facts we don't like



How to Fact-check?





Evaluate the Source with CRAAP

Currency

Relevance

Authority

Accuracy

Purpose

Blakeslee S. The CRAAP Test. LOEX Q. 2004;31(3). Article 4. Accessed July 23, 2022. https://commons.emich.edu/loexquarterly/vol31/iss3/4

Is your information any good? Check:

This Photo by Unknown Author is licensed under CC BY-SA-NC

Information Source

- Accuracy
- Authenticity
- Commercials/advertisements
- When was this website updated?
- Paywall/ need to download a software

What can we do about misinformation?



Be curious and actively investigate.



Check source for accountability, ethics & standards.



Recognize our own biases and compensate for them.



Use critical thinking and judgment before sharing.

Before Sharing Information



Who/What is the source?



What is the evidence?



What are other sources saying?



What else the source has said?



Do we have the required details to verify the information?



Did we ask the right questions to discover the truth?

Resources- Health Literacy and Medical Misinformation

<u>Health Misinformation — Current Priorities of the U.S. Surgeon</u> <u>General (hhs.gov)</u>

<u>Health Literacy | Agency for Healthcare Research and Quality (ahrq.gov)</u>

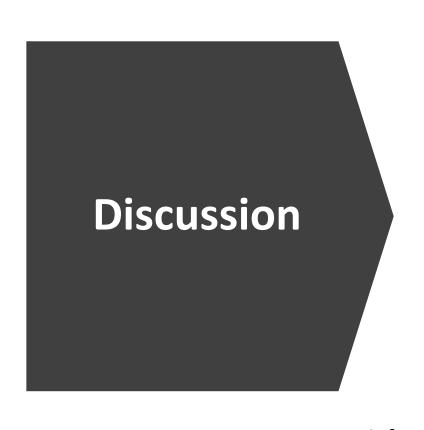
<u>Teaching Patients with Low Literacy Skills | Health Literacy Studies | Harvard T.H. Chan School of Public Health</u>

Toolkit for addressing misinformation is available at the U.S. Surgeon General's cite

Book "Teaching Patients with Low Literacy Skills" is available for free download from the Harvard cite.

Cites for Fact-checking

- Politifact
- Factcheck.org
- Washington Post Fact Checker
- Snopes
- Truth be Told
- NPR Fact-Check
- •Lie Detector
- Hoax Slayer





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