# Dispensing the Truth: Recognizing and Combating Medical Misinformation

Mira Haddad (Ohio State University), Milton Childs (Roosevelt University), Peter Hiller (University of South Carolina), Michal Stout (University of Texas at Tyler), James Nawarskas, Pharm.D., Ph.C., BCPS (University of New Mexico)

## What is Medical Misinformation?

- Medical misinformation encompasses health claims based on unreliable and inaccurate information, attributed to lack of existing knowledge or is contradicting to current science[1,2]
- Medical misinformation is disseminated through social media, news media, politicians, works of fiction, and more[2]
- Understanding the roots and consequences of this issue is imperative for devising effective strategies to mitigate its harmful effects
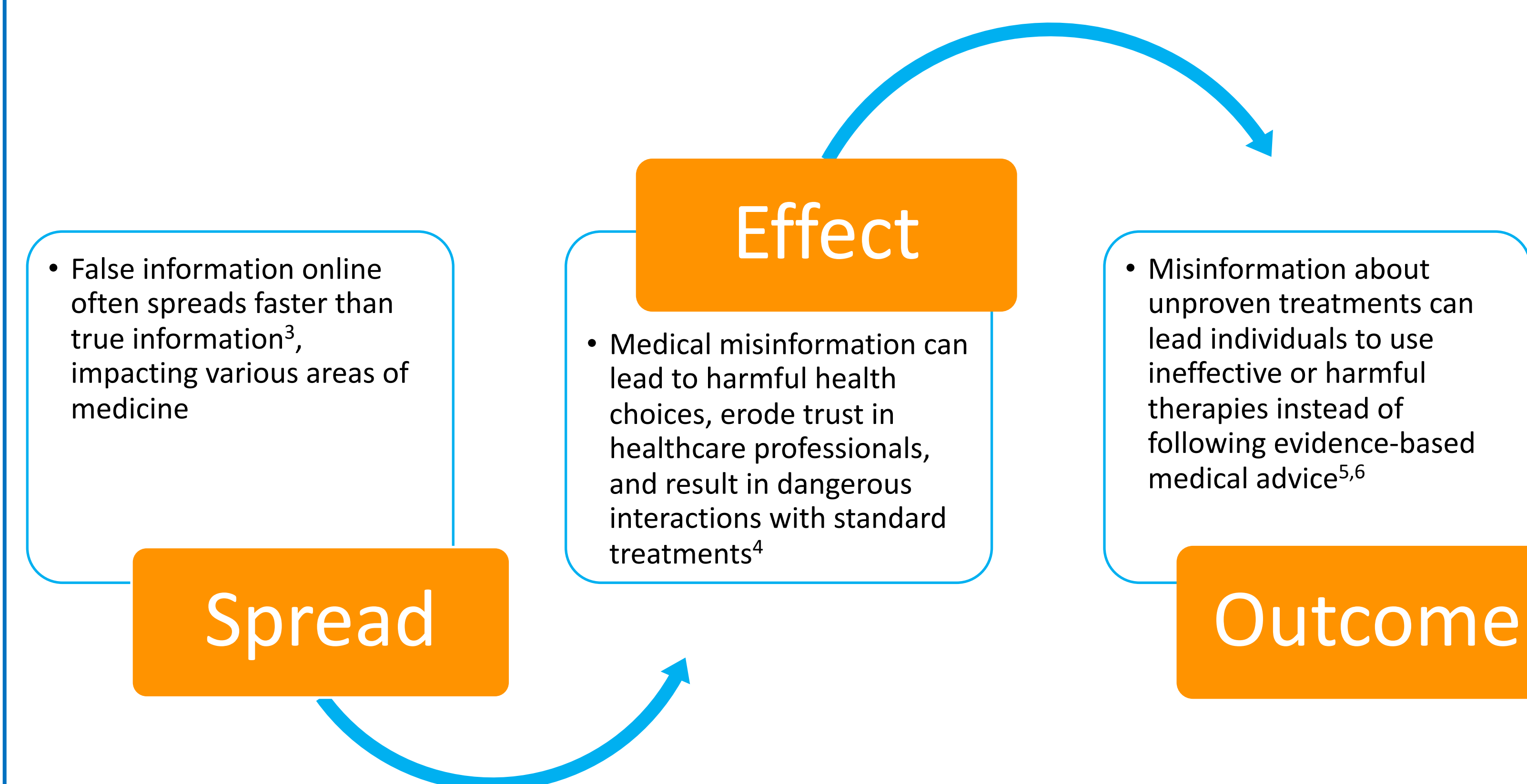
## Objectives

- Examine the influence that medical misinformation has on the medical community
- Discuss strategies for identifying and combating medical misinformation through education and training

## Methods: Literature Search

- Databases: Cochrane Library and PubMed
- Search terms: medical misinformation, spread, pharmacy, education
- Limits: published from 2018-2024

## Why Is Medical Misinformation A Problem?



- False information online often spreads faster than true information[3], impacting various areas of medicine

**Spread**

- Medical misinformation can lead to harmful health choices, erode trust in healthcare professionals, and result in dangerous interactions with standard treatments[4]

**Effect**

- Misinformation about unproven treatments can lead individuals to use ineffective or harmful therapies instead of following evidence-based medical advice[5,6]

**Outcome**

- COVID-19 has intensified the spread of misinformation, with media sources and bias contributing to infection incidence[7]
- Lack of trust in physicians, hospitals, and scientists, belief in conspiracies, and trust in social media were associated with people taking ineffective and potentially toxic treatments (e.g., ivermectin, hydroxychloroquine) for COVID-19[5]
- Some argue this occurs due to the "too little, too late" strategy from public health officials, and the corrective information often includes too much medical terminology[2]

## How Do We Address Misinformation?

- A credible source (e.g., provider or local hospital system) should correct misinformation versus a non-healthcare user[8]
- Correction of misinformation does not harm the credibility of the source and is seen as appropriate for such entities therefore creating opportunities to engage with the public
- Use of social media is recommended to address misinformation since it allows direct communication and rapid correction
- Proactive engagement by providers via local media and public health messages should be used to address misinformation[9]
- Community groups in partnership with local healthcare professionals should develop local strategies to identify and correct misinformation

## How Can We Prepare Future Providers?

- To identify medical misinformation, instruct learners that information should come from a credible source
- Surgeon General Information Advisory recommends educating students and the public on common tactics used by those who spread misinformation online[9]
- Improving healthcare professionals' grasp and interpretation of evidence-based research helps them better discern and resist misinformation[10]
- Research partnered with government reinforcement will provide more data to support or defend a questionable topic, providing more clarity for the population[10]
- Recent and modern research provides up-to-date and credible information, and its use should be encouraged[10]
- In the ACPE 2025 Standards, "Critical analysis" of "other information resources" is a required curriculum element, and educating students on medical misinformation helps to fulfill that requirement

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