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COMMENTARIES

Buyer Beware: Misinformation in the Healthcare Industry – What Can Clinicians Do?

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Abstract

In today's healthcare landscape, the exchange of medical information between physicians and industry is crucial for advancing knowledge and improving patient care. However, this collaboration also introduces challenges, including the potential for bias and misinformation. Amidst efforts to navigate the post-COVID-19 healthcare environment and maintain market competitiveness, the prevalence of misinformation has become increasingly evident (Ecker, 2022). This article explores the impact of misinformation in the medical industry, particularly concerning its drivers and persistence. Through an analysis of psychological and behavioral factors, the authors identify fear as a primary driver of bias, leading to the dissemination of inaccurate information (Tannenbaum, 2015). Additionally, deliberate efforts to manipulate narratives and facts contribute to the endurance of misinformation, posing significant risks to patient safety and healthcare integrity (Ecker, 2022). The authors highlight various methods employed to deliver misinformation, including social media, professional collaborations, and selective data sharing. These tactics obscure truth and hinder informed decision-making among healthcare practitioners (Rea, 2017). Despite the challenges posed by misinformation, the authors propose practical solutions for clinicians, emphasizing the importance of research, critical analysis, and collaboration with trusted sources to verify information and safeguard patient care (Wu, 2018). This comprehensive exploration of misinformation in the healthcare industry underscores the critical role of healthcare practitioners in combatting false narratives and ensuring the integrity of medical information. By equipping clinicians with the tools to discern truth from misinformation, this article aims to promote evidence-based practice and uphold the highest standards of patient care.

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Introduction

In 2002, author Susan Coyle reminded the medical community, "Physicians and industry have a shared interest in advancing medical knowledge. Nonetheless, the primary ethic of the physician is to promote the patient's best interests, while the primary ethic of the industry is to promote profitability" (Coyle *et al.*, 2002). These alliances advance the exchange of medical information but can also create opportunities for bias and misinformation. As medical industries strategize to restore pre-COVID-19 levels of business, the pressure to maintain and increase market share produces inevitable challenges and the rise of competitive misinformation (Ecker, 2022).

In response to access restrictions, traditional methods of receiving new information have been streamlined through direct communication, commonly called 'professional speech' (Wu, 2018; Abrams, 2021; Ecker, 2022). The psychology of forming a belief is complicated enough without competitive marketing tactics that distort scientific results. The lag time between evidence and use in clinical practice cycles is about 17 years after evidence shows it is helpful to patients (Gupta, 2017). However, the gap from evidence to practice is more complex than simply plugging in a new procedure or product and centers on perceived benefits to the practitioner, the facility, and the patient (Gupta, 2017).

More recently, Ecker *et al.* identified that misinformation and deception are significant practice influencers when obtained in a trusting medical/industry collaboration stating, "Not only can belief in misinformation lead to poor judgments and decision-making, [but] it also exerts a lingering influence on people's reasoning after it has been corrected, an effect known as the continued influence effect" (Ecker, 2022). This influence is not accidental; it is the power of intentional marketing with several facets practitioners should know.

Drivers of medical misinformation

Ecker points out that fear is one of the main drivers of bias in the medical industry—fear of losing revenue and market share and the fear of harming patients. In a 2015 *Psychology Bulletin*, Tannenbaum explained that messages aiming to generate fear of harm change

attitudes, intentions, and behaviors under certain conditions if recipients feel they can avoid the harm (Tannenbaum, 2015). This clever maneuver brings about an almost instantaneous shifting of beliefs compromising the validity of research and research findings. Misinformation and disinformation in healthcare have become a recognizable tactic in the medical industry marketing, where wordsmithing and using cloudy science is becoming persistent, designed to undermine essential information providers need to make sound patient-focused decisions. When faced with negative narratives, key elements to consider include:

- Negative claims that are generally refutable by having FDA clearance/approval.
- Comparative characteristics in completely different product types.
- Laboratory findings that use products out of context or in differing amounts than commercially represented by the product being evaluated.
- Data that is difficult to understand, unclear, or unfamiliar.

As scientific evidence becomes more complex, the opportunities to present limited or confusing information are alluring. A change in practice goes beyond learning and implementing new knowledge. The intricate process of unlearning and discarding old knowledge is significant when asking providers to abandon even outmoded and low-value care, especially when it disturbs the status quo. After interviewing primary care physicians in a Cleveland VA Medical Center and clinics, the researchers found contributing factors to slowing practice changes. "Reluctance is solidified if it disturbs the current equilibrium where change may be a struggle; and when the change involves the 'evidence' itself and the tension between the evidence and context" (Gupta, 2017). However, as if this were not enough, purposeful rejection of scientific evidence carries a heavier set of consequences that must be addressed before realizing actual change.

Foot-dragging before change reaches beyond product reimbursement, tapping into cognitive, social, and affective factors that support the formation of false beliefs. Ecker found when sources of information are perceived to be credible rather than non-credible, the messages are more persuasive and ring truer when the information may be wholly or partly false. In false

narratives, elements of truth usually help to disguise the actual objective (Ecker, 2022).

Why does misinformation endure?

When information turns out to be misleading, the lingering impact is far more treacherous and purposeful. These actions not only compromise integrity but also patient safety, healthcare denying patients access to ground breaking healthcare. Health disinformation takes misinformation several steps further. Disinformation is deliberately providing misleading or biased information; manipulating narratives or facts; or causing propaganda-driven doubt with a malicious objective

(<https://www.technologyreview.com/2018/01/22/146087/the-tricks-propagandists-use-to-beat-science/>).

In the medical industry, malicious intent can involve:

- Spreading mistrust in product efficacy and safety.
- Deceiving well-meaning end-users to gain a market advantage.
- Stalling a competing product's usage.

One author suggested that messengers appearing to be passive sharers rather than those with overt malicious stances may be a more significant problem (Abrams, 2021). Interestingly, false information is not the primary precursor to false-believe formation. There are other factors. Once the seed of misinformation has been planted, truth judgments readily reject science and rely heavily on emotional associations (Ecker, 2022). The process then defaults to established 'relationships' that have been helpful in the practitioners' personal views. Moreover, as unlikely as it sounds, it is not about reimbursement but more trust for the practitioner and revenue generation and market share for the industry representative.

Methods of delivering misinformation

Increasing or holding onto revenue is crucial. As the revenue cycle edges closer to outcomes, it is a common hope for many in the medical industry that product selection will be outcomes-driven, eventually dividing disinformation from the truth. In the meantime, it is helpful to identify how false information spreads:

- Biased, false, or faulty information through social media, advertisement wordsmithing, printed/published articles that sound like similar performance.
- Through "professional speech" from trusted collaborations.
- Selective sharing of confusing data.

While these narratives are exploited, truth is obscured to the average medical reader, often in the unfamiliar language of laboratory analysis, testing techniques, and other industry-specific terms.

Targeting specific psychological profiles is the latest marketing technique, emphasizing some points and allowing the reader to overlook or ignore information that would call into question the message and indicate conflicting data. It has become so prominent a problem that some facilities and institutions have banned marketing altogether or made more stringent policies on marketing access to practitioners. In a Carnegie Mellon University post, a study of the influence of marketing tactics on physician prescribing practices, found, "that [stricter] 'detailing' policies were associated with an 8.7 percent decrease in the market share of the average detailed drug. Before policy implementation, the average drug had a 19.3 percent market share" (Rea, 2017).

Implications and solutions for practitioners

As authors explore the reasons behind persuasive professional speech, the targets of the misconceptions and deceptions face the reality that in-group members are believed to be more reliable than the out-group members (Ecker, 2022). How do you protect yourself and patients against faulty information?

- Research claims and explore competitor statements.
- Determine who benefits from the narrative.
- Compare other research findings.
- Ask for a professional opinion, as in the case of laboratory testing, seeking input from those familiar with the techniques used.

Regardless of the source, this places an added responsibility on healthcare practitioners to correct inaccurate or false information and to verify the information before decisions are made (Wu, 2018).

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References

1. Coyle, S. L., & Ethics and Human Rights Committee, American College of Physicians-American Society of Internal Medicine. Physician-industry relations. Part 1: individual physicians. *Annals of Internal Medicine*, 2002;136(5), 396–402. <https://doi.org/10.7326/0003-4819-136-5-200203050-00014>
2. Ecker, U.K.H., Lewandowsky, S., Cook, J. *et al.* The psychological drivers of misinformation belief and its resistance to correction. *Nat Rev Psychol*, 2022;1, 13–29. <https://doi.org/10.1038/s44159-021-00006-y>
3. Wu, J.T., & McCormick, J.B. Why Health Professionals Should Speak Out Against False Beliefs on the Internet. *AMA Journal of Ethics*, 2018; 20(11), E1052–E1058. <https://doi.org/10.1001/amajethics.2018.1052>
4. Gupta, D.M., Boland, R.J. & Aron, D.C. The physician's experience of changing clinical practice: a struggle to unlearn. *Implementation Sci* 2017;12,28. <https://doi.org/10.1186/s13012-017-0555-2>
5. Abrams Z. Controlling the spread of misinformation. American Psychological Association. Published March 1, 2021. <https://www.apa.org/monitor/2021/03/controlling-misinformation>
6. Tannenbaum, M. B., Hepler, J., Zimmerman, R. S., Saul, L., *et al.*. Appealing to fear: A meta-analysis of fear appeal effectiveness and theories. *Psychological Bulletin*, 2015; 141(6), 1178–1204. <https://doi.org/10.1037/a0039729>
7. Rea, S. Restricting Pharmaceutical Rep's Marketing Tactics Changes Physician Prescribing Behavior. Dietrich College of Humanities and Social Sciences Carnegie Mellon University Published May 2, 2017. Accessed August 10, 2022. <https://www.cmu.edu/news/stories/archives/2017/may/marketing-and-prescribing-behavior.html>

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