Pablo Alvarado D206 March 23, 2020 DEN1200 Principles of Dental Hygiene Care II Prof. Anna Matthews

Community water fluoridation online: an analysis of the digital media ecosystem

Mohammad Helmi, Mary Kate Spinella, Brittany Seymour. *Journal of Public Health Dentistry*, 2018 Sep;78(4):296-305. doi:10.1111/jphd.12268. https://pubmed.ncbi.nlm.nih.gov/29603251/

The use of fluoride in your oral health care regimen can greatly improve the health and life of your teeth. It helps strengthen your enamel while fighting off the chance of cavities forming in the first place. Some people think that fluoride is too dangerous or too nonessential to be used regularly but without the use of fluoride in our toothpastes, mouthwash, and community water supply, we run the risk of cavities running rampant throughout the population. This article offers a longitudinal quantitative analysis of how information regarding community water fluoridation spreads across different types of online media: official professional and governmental websites, scholarly publications, content found on YouTube, blogs, and social media sites like Facebook and Twitter. In this study, the authors used a media analysis platform called Media Cloud. This platform allowed them to search the internet for any article, blog, or user-generated content that spoke about community water fluoride between August 1, 2015 and July 31, 2016. Researchers then analyzed the content and evaluated whether it was advocating for fluoride, against fluoride, or remained neutral on the topic.

The researchers found that, although the pro-fluoride media types had more reliable sources, the anti-fluoride media types had more search results. This means that more people are against fluoride in the water. The problem with this is the lack of reliable sources and information in the argument against fluoride. This lack of reliability demonstrates how misinformation gets spread: people "cherry pick" certain facts or findings from a reliable media type to support their argument, and the next person either does the same or cites the person who was selective with their information. This creates a domino effect of misinformation. The researchers also emphasize that people are more inclined to believe another human being than a funded government organization like the American Dental Association (ADA) or the Centers for Disease Control and Prevention (CDC).

This study is very important because it reminded me to check my sources whenever I hear something on the news, on social media, or on YouTube. One could apply that same lesson to the field of dental hygiene, since as future medical professionals, we should aim to never spread misinformation. More likely than not, patients will listen very carefully to everything we say when we are speaking to them. Therefore, we should do our own research before we recommend anything to a patient. If we don't know something when we are asked, we should avoid giving the patient an ill-informed answer. Having now worked with patients in our dental hygiene clinic, I have actually met one patient who refused fluoride treatment because he had heard that it could be dangerous. I tried to help him understand that the fluoride is a great tool to strengthen his teeth and fight off the formation of cavities; still, he still chose to refuse fluoride treatment.

As a future dental hygienist, I am grateful for coming across this article. Upon analyzing it, I have gained some insight into how and why fluoride is stigmatized among some people. This article has helped shape the way I will approach making sure my patients understand that fluoride is their friend.

Other articles/ sources:

- Frangos, Zachary, et al. "Water fluoridation and the quality of information available online". *International dental journal*, Feb. 2018, https://www.ncbi.nlm.nih.gov/pubmed/29441567
- Centers for Disease Control and Prevention. "Community Water Fluoridation". CDC. https://www.cdc.gov/fluoridation/index.html?CDC_AA_refVal=https%3A%

2F%2Fwww.cdc.gov%2Ffluoridation%2Findex.htm. Accessed 23 Mar. 2020.

- American Dental Association. "Fluoridation FAQs". ADA. https://www.ada.org/en/public-programs/advocating-for-the-public/fluorideand-fluoridation/fluoridation-faq. Accessed 23 Mar. 2020.
- Mullane, D.M, et al. "Fluoride and Oral Health". *Community Dental Health*. Jan. 2016, https://www.who.int/oral_health/publications/fluroide-oral-health/en/
- *ILikeMyTeeth*. The Debate Over Fluoridated Water". https://ilikemyteeth.org/fluoridation/. Accessed 23 Mar. 2020.