Credibility and Popularity of Nutrition Influencers' Websites

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Eyasu Yakob (1), Melissa A. Fernandez (2), Kim D. Raine (2)

(1) WISEST Summer Research Program, (2) School of Public Health, University of Alberta

INTRODUCTION

Social media has become a low-cost and instant method of disseminating all sorts of information, including health advice, with 80% of U.S. Internet users having searched for health information online (Chen et al. 2018). The Internet and social media are prominent sources of nutrition information (Mete et al. 2019) where anyone can generate content and share information about food and nutrition recommendations without any formal education or credentials (Granheim 2019). Misleading information can be amplified through social validation (e.g., number of social media followers/subscribers) enabling misinformation to spread (Mena et al. 2020).

OBJECTIVE

The objective of this study is to assess the credibility of nutrition influencers' websites in relation to their popularity on social media

METHODS

A subsample of 39 health and nutrition influencers were identified from a larger social media study on Instagram influencers (Black et al. 2019). From each influencer, website information was documented using Chrome Extension "GoFullPage - Full Page Screen Capture".

The credibility of information on influencers' websites was assessed holistically using "Tips to Spot Misinformation" developed by the Dieticians of Canada and PEN: Practice-Based Evidence in Nutrition (Dietitians of Canada and PEN 2020). Using the five tips to spot misinformation a credibility score (0-5 points) was generated based on five dichotomous criteria:

- 1. Does the website discuss miracle cures or quick fixes that sound too good to be true?
- 2. Does the website sell food or nutrition supplements?
- 3. Does the website use personal stories or anecdotes in place of evidence?
- 4. Does the website base claims on research or evidence?
- 5. Is the website managed by an influencer that is a registered dietitian (RD)?









METHODS CONTINUED

Based on scores, websites were grouped into three categories: low credibility (score 0 or 1), medium credibility (score 2 or 3), and high credibility (score 4 or 5).

To determine the influencers' popularity, the combined number of followers/subscribers was recorded across five common social media platforms (Twitter, Facebook, Instagram, Pinterest and YouTube) for each influencer. The average number of followers for each credibility category was then calculated.

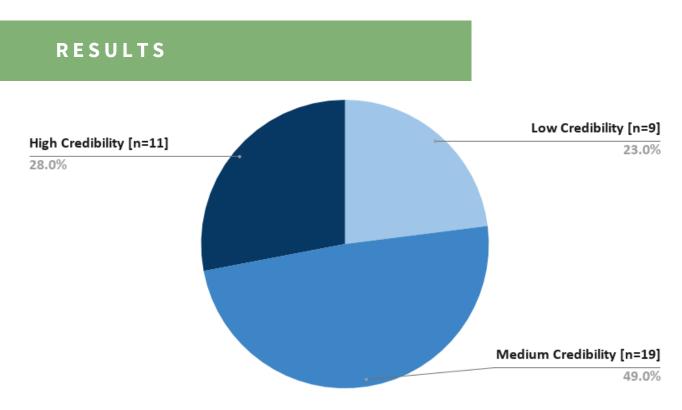


Figure 1. Percentage of nutrition influencers' websites in each credibility category [n=39]

Table 1: Percentages of websites rated for each credibility criteria

	Miracle cures n (%)	Food or nutrition supplements n (%)	Personal stories of anecdotes n (%)	Research or evidence n (%)	Registered dietitian n (%)
Low credibility websites [n=9]	6 (67%)	7 (78%)	8 (89%)	0 (0%)	0 (0%)
Medium credibility websites [n=19]	0 (0%)	3 (16%)	15 (79%)	4 (21%)	4 (21%)
High credibility websites [n=11]	0 (0%)	1 (9%)	0 (0%)	5 (45%)	10 (91%)
All websites [n=39]	6 (15%)	11 (28%)	23 (59%)	9 (23%)	14 (36%)

RESULTS CONTINUED

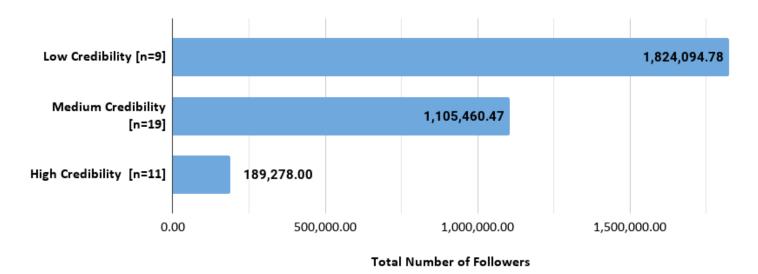


Figure 2. Average number of influencers' social media followers for each category of website credibility

DISCUSSION

Almost half (49%) of the websites were categorized as medium credibility, and there was a similar percentage of high (28%) and low credibility websites (23%). Most influencers with high credibility websites were RDs (91%) but less than half provided research-based claims (45%). Additionally, none of the high credibility websites promoted miracle cures (0%) or used personal anecdotes (0%) and minority sold food products or nutrition supplements (9%).

Alternately, none of the influencers with low credibility websites were RDs (0%) or provided research-based claims (0%), and the majority of low credibility websites promoted miracle cures (67%), sold food or nutrition supplements (78%), and used personal anecdotes (89%). Overall, nutrition influencers with highly credible websites had 10 times fewer followers than influencers who had websites with low credibility.

Further research should be conducted to devise strategies to increase the visibility and reach of influencers that provide highly credible information to the public. Additionally, research into increasing the media literacy among the public is also warranted to develop savviness towards identifying misleading health information.

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