

Navigating the Media Ecosystem of Health Information: Cross-Platform Coordination of Real and Mis-information in China's Online Environment

Xiaohui Wang, Xiao Meng, Xuechen Cao, Liang Chen, **Ye Sun**

Health misinformation frequently spills across media platforms and is amplified through cross-platform interactions, posing substantial challenges to its containment. Although extensive scholarship has investigated misinformation diffusion, limited attention has been given to the cross-platform coordination mechanisms governing both real information and misinformation. Drawing upon a media ecosystem perspective, this study investigates the differential diffusion patterns of real and misinformation across various types of digital media platforms and elucidates the distinct roles these platforms play in the dissemination process. We analyzed 876,339 posts related to weight management collected from major Chinese digital platforms between June 2024 and March 2025. Vector autoregression (VAR) modeling was employed to uncover the temporal dynamics of inter-platform information flow, while social network analysis mapped the structure and directionality of cross-platform dissemination. Preliminary results suggested that the spread of both truth and falsehood involved a highly coordinated cross-platform process. Social media, aggregators, and news websites occupied distinct ecological niches, and the information flows among them were asymmetrical. Moreover, we identified divergent cross-platform flow patterns between real and mis-information. These results illuminate the mechanisms of platform collaboration within China's digital media ecosystem and offer actionable insights for designing systematic interventions to enhance the quality and reliability of health information environments.