# Sociotechnical Inequality, Cultural Metaphors, and the Plight of Marginalized Groups in Health Communication: A Review of the 2nd Panel Session at MHM2025

## Yujing Gao [ID]

Institute of Culture and Communication, Peking University, Beijing, China

## Xinjie Zhao [ID]

School of Journalism and Communication, Peking University, Beijing, China

## Abstract

As digital technologies, such as artificial intelligence (AI), become increasingly common in daily life, their impact on sociotechnical inequality grows more significant. On July 6, 2025, the second session of the 8th International Conference on "Medicine, Humanity, and Media" (MHM 2025) was held under the theme "Sociotechnical Inequality, Cultural Metaphors, and the Plight of Marginalized Groups in Health Communication." This session was moderated and reviewed by JIANG Crystal Li, Associate Professor at the Department of Media and Communication, City University of Hong Kong, and HE Qijun, Associate Professor at the School of Journalism and Communication, Shanghai University. During the session, five scholars presented their latest research covering diverse topics, including depression-related memes, the digital divide, intercultural health communication narratives, the experiences of senior Chinese immigrants, and social inequalities related to the adoption of AI. The symposium gathered health communication researchers from various countries and highlighted the importance of effective health communication in addressing social inequalities in the digital era.

## Keywords

Health communication; Inequality; Cultural metaphors

## Corresponding author:

Yujing Gao, Institute of Culture and Communication, Peking University, Beijing, China.
Email: sodagao2022@gmail.com

On July 6, 2025, the 8th International Conference & PHD Symposium on "Medicine, Humanity, and Media" (MHM) commenced. Panel 2 of the conference was held at the School of Journalism and Communication, Peking University.

Centered on the theme "Sociotechnical Inequality, Cultural Metaphors, and the Plight of Marginalized Groups in Health Communication," scholars including SHI Yingxuan from China Agricultural University, ZHANG Ying from the University of Pennsylvania (USA), WANG GUENIER Amily from Lancaster University(UK), the team led by ZHU Yidan from Royal Roads University (Canada) and the team led by LIU Shiyu from Xi'an Jiaotong University jointly discussed the landscape of health communication intertwined with digital technologies and social inequalities.

Associate Professor JIANG Crystal Li from the Department of Media and Communication at City University of Hong Kong and Associate Professor HE Qijun from the School of Journalism and Communication at Shanghai University were specially invited as discussants.

In the post-pandemic era, COVID-19 has profoundly impacted public mental health and healthcare systems, notably highlighting issues such as depression and anxiety. SHI Yingxuan presented "Self-Representation, Group Identity, and Resistance Toward Medicalization: A Multimodal Discourse Analysis of Depression-Related Memes in Subreddits," analyzing online interactions among individuals experiencing depression. Focusing on depression-related memes in social media, the study utilized multimodal discourse analysis to explore their role as carriers of psychological expression. The findings suggest that by posting memes, individuals with depression perform dual functions within online communities: expressing personal identity and building group identity, thereby forming unique digital cultural practices.

Professor JIANG commended SHI Yingxuan's innovative analysis of memes and digital photography and appreciated the transparency and execution of data analysis. She recommended reinforcing theoretical application and specialized terminology in the research.

ZHANG Ying from the University of Pennsylvania presented "The Silent Signal: How the Digital Divide Shapes Community Health Reporting," focusing on how digital divides influence health-related community reports. Employing social network analysis, the research integrated data from Philadelphia's non-emergency service request hotline (311) with zip code-level internet access data. Results indicated that digital divides constrains the civic voice of health concerns and narrows the range of issues that are raised. Therefore, policymakers should enhance affordable broadband internet and digital literacy among community residents, providing alternative reporting channels for under-served communities to advance public health equity.

Professor HE suggested that ZHANG Ying's study explore beyond superficial phenomena and delve deeper into the root causes of social inequality. She recommended incorporating spatial regression and social network analysis for a detailed spatial analysis, clarifying relationships between telecom infrastructure access and civic participation.

WANG GUENIER Amily from Lancaster University presented "How Metaphors Facilitate Expression of Complex Medical Concepts? An Analysis of Intercultural Health Communication

Narratives of TCM Doctors in UK Clinics," examining the role of metaphors in intercultural health communication within Traditional Chinese Medicine (TCM) practices in the UK. Through interviews with 11 TCM practitioners, the research analyzes metaphors describing medical conditions like pain, emotion, infertility, cancer, and obesity in Chinese and English. Results show that metaphors help explain complex medical ideas and bridge cultural differences between Chinese and Western medicine. Effective metaphorical language enhances the understanding of medical conditions, improves patient-practitioner communication, supports diagnosis, self-management, and patient empowerment.

ZHU Yidan and Professor Li Zhenyi from Royal Roads University, presented "Bridging the Digital Divide: Understanding Chinese Senior Immigrants' Technology Learning in Canada." Using Cultural-Historical Activity Theory (CHAT) as a framework, the study explored the critical causes of digital divides among elderly Chinese immigrants in Canada, their specific challenges using health technologies, and their adaptive strategies. The innovative "Cross-Cultural Digital Health Literacy Nexus(CDHLN)" model was proposed to enhance cross-cultural digital health interactions and improve elderly immigrants' access to health information.

Professor JIANG noted the study's emphasis on intergenerational support in immigrant families and queried about the presence of "reverse knowledge transfer," highlighting reciprocal characteristics of transnational intergenerational support, which provides insights into the digital divide and familial support systems.

Lastly, LIU Shiyu and GAO Yujing presented "Social Inequalities in AI Adoption and Its Impacts on Health Behaviors for NCD Management: Evidence from China," investigating the social inequalities influencing artificial intelligence (AI) adoption in managing non-communicable diseases (NCDs) in Golmud, Qinghai Province, China. The research found socioeconomic inequalities significantly shaped disparities in AI adoption and related health behaviors, reflecting the digital divide and limiting AI's potential to promote equitable chronic disease management. The study called for inclusive digital policies to bridge the gap and enhance health equity in China's diverse context.

Professor HE emphasized the unique geographical characteristics of Qinghai pastoral areas in the study and recommended further analysis of interactions between local lifestyles, disease patterns, and AI usage. She suggested employing comparative regional analyses and longitudinal studies to strengthen causal inference and historical analysis. She encouraged exploring narratives around "AI's impact on traditional lifestyles" to deepen the research.

Following expert evaluations, ZHANG Ying from the University of Pennsylvania received the Best Paper Award at this MHM conference for her excellent research.

The five papers presented at the session provided comprehensive discussions around health equity. They addressed technological accessibility, group expression rights, cultural adaptation strategies, and structural social support, offering multidimensional perspectives and diverse methods for addressing health inequalities in the digital age.

# References

Shi, Y.(2025), Self-Representation, Group Identity, and Resistance Toward Medicalization: A Multimodal Discourse Analysis of Depression-Related Memes in Subreddits, MHM2025.

Zhang, Y.(2025), How the Digital Divide Shapes Community Health Reporting? A Case Study of Philadelphia's Non-Emergency Service Request Patterns Using Social Network Analysis, MHM2025.

Guenier, A., Li, M. & Wang, B.(2025), How Metaphors Facilitate Expression of Complex Medical Concepts? An Analysis of Intercultural Health Communication Narratives of TCM Doctors in UK Clinics, MHM 2025.

Zhu, Y., Li, Z., Zhang, X., Yuan, M., Wang, X., Chan, C. & Zhang, W.(2025), Bridging the Digital Divide: Understanding Chinese Senior Immigrants' Technology Learning in Canada, MHM 2025.

Liu, S., Gao, Y. & Chen, Y.(2025), Social Inequalities in AI Adoption and Its Impacts on Health Behaviors for NCD Management: Evidence from China, MHM 2025.