prepared' (AOR 5.46 (95% CI 1.87,15.87), p< 0.002) to have preserved social functioning.

**Conclusion(s).** Preserved parental social functioning in early bereavement is associated with feeling prepared for their child's EOL and the absence of significant HMH. Interventions focused on educating parents on what to expect as their child nears EOL and on offsetting financial hardships may improve parental psychosocial and health outcomes in bereavement.

**Impact.** This is the first study examine the role of predeath factors on parental bereavement and novel in the focus, not on negative psychosocial outcomes, but instead on those parents who have preserved social functioning despite living through the death of their child. We have identified targets for future supportive interventions in cancer-bereaved parents.

Keywords. Family caregivers,/Pediatrics

## SOPHIE: Testing a Virtual, Interactive, AI-Augmented End-of-Life Communication Training Tool (RP122)

Kurtis G. Haut, MSCS BA, University of Rochester. Ronald Epstein, MD, University of Rochester School of Medicine and Dentistry. Thomas M. Carroll, MD PhD, University of Rochester. Benjamin Kane, MSCS BS, University of Rochester. Lenhart Schubert, PhD, University of Rochester. Ehsan Hoque, PhD, University of Rochester.

#### Outcomes.

- 1. Comprehension Participants will demonstrate an understanding of how SOPHIE addresses the challenges of traditional communication workshops and its potential to enhance clinician-patient interactions.
- 2. Application Participants will be able to assess the research design used in the study and evaluate its appropriateness for investigating the effectiveness of communication training tools.

**Key Message.** SOPHIE is a web-based digital tool designed for healthcare professionals to practice and improve communication skills with realistic, diverse virtual patients. Our results show that SOPHIE training improved key communication skills. It is scalable and customizable, potentially improving availability of high-quality communication training worldwide.

**Importance.** Effective clinician-patient communication is vital for improving care for patients with serious illness, however, traditional training is often costly, challenging to scale, and logistically complex [1 2, 3, 4, 5, 6].

**Objective(s).** To evaluate whether a virtual, interactive, AI-augmented communication training program can provide an effective, easily accessible alternative for improving end-of-life communication [7, 8, 9, 10].

Scientific Methods Utilized. We conducted a randomized, controlled pilot study to determine whether SOPHIE (Standardized Online Patient for Health Interaction Education), a digital tool using an onscreen "virtual patient" with automated, personalized feedback, can improve end-of-life communication skills. Participants (N=30) included 12 medical students, 9 nurses, 4 residents, 2 physician assistants, 2 psychologists, and 1 chaplain who were randomly assigned to Control (no training) or training using SOPHIE. Feedback criteria and outcome measures using human standardized patients included validated measures of end-of-life communication skills (e.g., Empathize, be Explicit, and Empower) based on the Medical Situation, Values, Plan (MVP) model [11].

**Results.** SOPHIE participants outperformed (p < 0.05) control in aggregate scores (36.06 vs 29.6), overall communication quality (6.0 vs 5.067), patient empowerment (6.133 vs 5.267), and empathy (0.8 vs 0.333). Participants reported that the system was easy to use, and that SOPHIE looked realistic, responded appropriately to medically-related questions, and showed emotion through voice and language. They suggested improvements in SOPHIE's fluency, understanding and facial expressiveness [12].

**Conclusion(s).** SOPHIE is a promising prototype for a new generation of accessible, scalable, inclusive, low-cost communication skills training resources

**Impact.** The SOPHIE training system has the potential to provide communication skills training to clinicians worldwide; augmenting, reinforcing or partially replacing in-person training, making access more equitable. Importantly, SOPHIE's age, race, language, clinical scenarios, and feedback criteria can be easily customized, allowing for the training to be available to clinicians in diverse cultural contexts and settings.

**Keywords.** Innovative technologies/Educational, training and supervision

### References:

- 1. R. Hagerty, P. N. Butow, P. Ellis, S. Dimitry, and M. Tattersall, "Communicating prognosis in cancer care: a systematic review of the literature," Annals of oncology, vol. 16, no. 7, pp. 1005–1053, 2005.
- 2. B. M. Korsch and V. F. Negrete, "Doctor-patient communication," Scientific American, vol. 227, no. 2, pp. 66–75, 1972.
- 3. J. F. Ha and N. Longnecker, "Doctor-patient communication: a review," Ochsner Journal, vol. 10, no. 1, pp. 38–43, 2010.
- 4. D. Riedl and G. Sch ußler, "The influence of doctor-patient com-munication on health outcomes: a systematic review," Zeitschrift f ur Psychosomatische Medizin und Psychotherapie, vol. 63, no. 2, pp. 131–150, 201

- 5. M. A. Stewart, "Effective physician-patient communication and health outcomes: a review." CMAJ: Canadian medical association journal, vol. 152, no. 9, p. 1423, 1995.
- 6. T. Begum, "Doctor patient communication: a review," Journal of Bangladesh College of Physicians and Surgeons, vol. 32, no. 2, pp. 84–88, 2014.
- 7. D. H. Arnold, C. J. Lonigan, G. J. Whitehurst, and J. N. Epstein, "Accel- erating language development through picture book reading: replication and extension to a videotape training format." Journal of educational psychology, vol. 86, no. 2, p. 235, 1994.
- 8. K. Ijaz, A. Bogdanovych, and T. Trescak, "Virtual worlds vs books and videos in history education," Interactive Learning Environments, vol. 25, no. 7, pp. 904–929, 2017.
- 9. K. Fiscella, P. Franks, M. Srinivasan, R. L. Kravitz, and R. Epstein, "Ratings of physician communication by real and standardized patients," The Annals of Family Medicine, vol. 5, no. 2, pp. 151–158, 2007.
- 10. A. Teherani, K. E. Hauer, and P. O'Sullivan, "Can simulations measure empathy? considerations on how to assess behavioral empathy via simulations," Patient education and counseling, vol. 71, no. 2, pp. 148–152, 2008
- 11. R. K. Horowitz, L. A. Hogan, and T. Carroll, "Mvp—medical situation, values, and plan: A memorable and useful model for all serious illness conversations," Journal of pain and symptom management, vol. 60, no. 5, pp. 1059—1065, 2020.
- 12. Haut, K., Wohn, C., Kane, B., Carroll, T., Guigno, C., Kumar, V., ... & Hoque, E. (2023). Validating a virtual human and automated feedback system for training doctor-patient communication skills. arXiv preprint arXiv:2306.15213. To appear in Affective Computing and Intelligent Interaction (ACII) 2023.

# Speaking Compassionately with Seriously Ill Chinese Immigrants and Their Caregivers (仁医仁语) (RP120)

Zhimeng Jia, MD SM, Temmy Latner Centre for Palliative Care. Allison M. Kurahashi, MEd, Temmy Latner Centre for Palliative Care. Ramona Mahtani, MD, Temmy Latner Centre for Palliative Care. Irene Yeh, MD MPH, Dana-Farber Cancer Institute. Richard E. Leiter, MD MA, Dana-Farber Cancer Institute. Kiern L. Quinn, MD PhD, Sinai Health, University of Toronto. Leah Steinberg, MD MA FCFP, Mount Sinai Hospital. Jeff Myers, MD MSEd CCFP(PC), University of Toronto. Justin J. Sanders, MD MSc, McGill University.

Robert Gramling, MD DSc, University of Vermont. James A. Tulsky, MD, Dana-Farber Cancer Institute. Russell Goldman, MD MPH, Temmy Latner Centre for Palliative Care. Rashmi K. Sharma, MD MHS, University of Washington.

### Outcomes.

- 1. Identify hidden costs to implementing theorydriven, culturally safe and linguistically aligned palliative care research with one immigrant Asian subpopulation.
- 2. Recognize perceived role(s) and lived experiences of specialist PC among Chinese immigrant inpatients and their caregivers.

**Key Message.** Inpatient specialist palliative care clinicians may enhance Chinese families' serious illness experience by enacting therapeutic presence, balancing competing priorities, and pacing time-based health information. Further research is needed to triangulate Chinese families' palliative care experiences across clinical contexts and to elucidate clinician behaviors that promotes shared illness understanding.

**Importance.** Ethnically Chinese adults in North America frequently experience culturally disrespectful care at the end-of-life. Understanding Chinese patients' and their caregivers' lived palliative care (PC) experiences may uncover modifiable factors and clinician practices that promote health equity.

**Objective(s).** Examine the perceived role(s) and lived experiences of specialist PC among Chinese immigrant inpatients and their caregivers.

Scientific Methods Utilized. From September 2022 to August 2023, we consecutively approached (n=21) and recruited (n=15, 71.4%) Chinese immigrant inpatients and their caregivers (n=14) referred to PC at one Canadian academic teaching hospital. Informed by Tan's Culturally Appropriateness in Health Communication framework, we collected participant self-reported questionnaires on sociodemographics, acculturation level (single item Suinn-Lew Asian Self-Identity Acculturation) and perceived clinician empathy (Consultation and Relational Empathy measure). We also conducted in-depth, post-consultation interviews (n=10) in Mandarin and/or English, which were recorded, transcribed, translated, and thematically analyzed.

Results. Patients were older-aged (73.5±16.2 years), 8/15 female, 9/15 college-educated, 10/15 non-religious, 14/15 diagnosed with cancer, and had low acculturation (mean=1.8±0.9/5.0), and Caregivers were middle-aged (50.6±15.5 years), 11/14 children, 8/14 female, 12/14 college-educated, 10/14 non-religious, and had moderate acculturation (mean=2.5±1.2/5.0). Most families (11/15) rated "very good" or "excellent" on all domains of the clinician empathy measure. We identified four themes from the post-consultation interviews: families arrive at PC with historical trauma that underscore distrust; PC ameliorates abandonment