



Department of Medical
Education

Centre for Integrated
Critical Care

Research Unit for
Multilingualism and
Cross-Cultural
Communication

Centre for Stem Cell
Systems

Language, technology, and communication in healthcare

SPEAKERS

Health technologies



'Please help us!': an analysis of public enquires about stem cells
Associate Professor Megan Munsie & Dr Claire Tanner, University of Melbourne

Megan Munsie is Deputy Director of the Centre for Stem Cell Systems at The University of Melbourne and Head of the Engagement, Ethics & Policy Program at Stem Cells Australia. Her work explores public expectation in stem cell science, how to more effectively engage and communicate scientific progress and what policy is needed to support responsible research translation.

Claire Tanner is a qualitative researcher in the Centre for Stem Cell Systems at The University of Melbourne. Her work considers the socio-ethical implications of new and emerging technologies, especially their impacts on patient populations.

This paper draws on over one thousand enquires about stem cell research and treatments received by Stem Cells Australia (n=542) and EuroStemCell (n=507) over a two-year period. While initiatives (such as Stem Cells Australia and EuroStemCell) seek to support informed decision making by patients considering purported stem cell 'treatments', to-date our understanding of patient and caregiver motivations, priorities and decision-making processes with respect to unproven interventions remains fairly limited. By empirically reporting what people who are proactively seeking information about stem cells and stem cell therapies want to know, our analysis provides valuable insight into the informational needs and priorities of a broad range of information seekers in this domain. We consider how this evidence can better inform policy efforts to enhance support for patients and governance of the industry providing unproven stem cell interventions in particular – which requires improved understandings of patient needs for risk, uncertainty and competing priorities to be best managed.



The communicative challenges of regenerative medicine
Professor Peter J. Schulz, University of Lugano

Peter J. Schulz is Director of the Institute of Communication and Health at the University of Lugano, Switzerland and Professor of Communication Theories and Health Communication. In his work he has sought to bring together thinking from the humanities, social sciences, and information technology to investigate important issues in health communications.

Within and without the medical profession, many believe we are at the eve of a medical breakthrough of tremendous proportions by the advent of regenerative medical techniques using revolutionary stem cell technologies. They promise much more efficacious treatment of a variety of diseases. The introduction of promising new forms of treatment, however, is not a matter of technology only, but will, to a large degree, be dependent on the public's consent, which will be affected in many ways by communication. As the clinical possibilities of regenerative medical technology emerge, it is critical to understand how skepticism, outrage and resistance develop. The presentation will report on first insights in the media's and the public's reaction to regenerative medicine while this technology is in its initial phases.



Deepfakes and trust in data: Data-intensive medicine and the quest for evidence

Professor Klaus Høyer

Thanks to digital tools, healthcare has become more data-intensive than ever before. To treat a patient is today also to produce, analyze and interact with data, and to allow those data to be accumulated, distributed and reused for future purposes. If the new data abundance is facilitated by one set of digital tools used in laboratories and the clinic, it in turns calls for another set of digital tools to manage, store, retrieve and even to make sense of all these data. Artificial Intelligence (AI) is hoped to deliver new forms of analytics aimed at this, and it is therefore high on the agenda in many countries. This presentation is intended to invite reflections on data-intensive healthcare and the implications of AI by placing the new technologies in historical context in order to discuss basic assumptions about knowledge and the quest for truth.

Language and healthcare interactions



Negotiating alignment and understanding in communication in medical settings

Professor Lesley Stirling, University of Melbourne

Lesley Stirling is Professor in Linguistics and Applied Linguistics and Deputy Head of the School of Languages and Linguistics at the University of Melbourne. She completed a PhD in Cognitive Science at the University of Edinburgh, and conducts research in discourse and conversation analysis, including in contexts of healthcare interaction.

A challenge for healthcare professionals across a range of different clinical and communicative settings is the need to manage asymmetrical knowledge states or differences of opinion with patients and their family members. Specific communicative tasks include establishing shared understanding and alignment both at the level of the local interactional exchange, prior to moving on with the agenda for the consultation, and at the level of the consultation overall, when there may be considerations of follow-up treatment directives or other ongoing outcomes external to the specific consultation. This communicative work can have important ramifications for patient satisfaction with consultations and with the ongoing relationship, as well as for compliance with treatment recommendations. In this talk I review collaborative research in Australian health communication settings including general practice consultations and clinical genetics consultations, to consider the linguistic cues to understanding and alignment produced by patients, as well as when and how medical professionals check for or pursue alignment and manage contexts of apparent misunderstanding or resistance by patients. One finding from this work is that in some cases communicative acts by doctors which on the face of it appear to be performing actions such as formulating treatment directives or making checks of understanding, may have an additional, even primary purpose of shifting topics or pursuing closure rather than compliance.

Digital tools and intercultural communication



Improving access to and participation in medical research for culturally and linguistically diverse background patients

Associate Professor Robyn Woodward-Kron & Professor David Story, University of Melbourne

Robyn Woodward-Kron is Associate Professor in healthcare communication, in the Department of Medical Education. Her research interests are mainly language and intercultural healthcare communication, and learner health professional discourses.



Dave Story is Foundation Chair of Anaesthesia at the University of Melbourne. His research focus is perioperative care of high-risk patients. Dave also directs the Melbourne Clinical and Translational Sciences (MCATS) platform.

People from culturally and linguistically diverse backgrounds (CALD) remain underrepresented in clinical research due to a range of language, literacy, and cultural factors such as the literacy needed to understand lengthy, paper-based consent forms. Our paper reports on research to develop and implement mobile health (mHealth) ethics and medical research information for CALD patients. Our preliminary findings suggest that while communication technologies have potential to positively impact recruitment of older CALD people, attitudinal and other sociocultural factors remain a major barrier beside language competence.



Trustworthiness of Google Translate in informed consent interactions **Associate Professor Christine Phillips, Australian National University**

Christine is a GP who trained in anthropology and public health. She is the discipline lead of Social Foundations of Medicine at the ANU Medical School. As the Medical Director of the ACT's refugee health service, she has had a long term interest in interpreted health consultations, and is the Chair of the national working party developing standards for health worker communication using interpreters. She is presenting today a collaboration of work with the ANU School of Literature, Language and Linguistics in response to the increasing popularity of automated tools like Google Translate in health consultations.

Health services, apps, and patient information

Dr Jo-anne Hughson & Professor John Hajek, University of Melbourne

Dr Jo-anne Hughson is a researcher at the University of Melbourne with an interest in intercultural healthcare communication and health equity. Jo's current projects are focussed on culturally and linguistically diverse (CALD) and Indigenous Australian population groups

Prof John Hajek is director of the Research Unit for Multilingualism and Cross-cultural Communication (RUMACCC) and Professor of Italian Studies at the University of Melbourne. He has been actively involved with colleagues in Medicine and elsewhere in a range of projects to support improved medical research and patient care outcomes.

Digital apps are increasingly recognised as providing an important avenue to understanding and to improving health outcomes, such as through the provision of accurate patient information. However, they also present a number of challenges, such as appropriate access, reliability and accuracy.

We describe aspects of the Western e-Health patient information portal for Pregnancy (We-HELP), a project to develop an app to provide freely accessible pregnancy information on a bilingual English/Vietnamese platform for women receiving maternity care at a culturally diverse Melbourne metropolitan hospital. The project involves a collaboration between linguists, medical and IT researchers and is designed to improve perinatal care outcomes. In order to do so, we need to understand what the barriers to and enablers of health literacy are - and how these and any other relevant factors could guide the development of an mHealth app as an effective solution.

Researching clinical communication teaching and learning



Patients' online stories of healthcare communication: implications for teaching and learning in the health professions

Dr Charlotte Denniston, University of Melbourne

Dr. Charlotte Denniston is a Lecturer in Work-Integrated Learning in the Department of Medical Education, Melbourne Medical School and an Education Advisor at the College of Intensive Care Medicine. Her PhD (Monash University, 2018) explored academic, clinician and patients' perspectives of healthcare communication.

Patient and public involvement is valued, but still somewhat uncommon in the design of health professions education (HPE). Patient narratives, as constructions of patients' lived realities, are one way of incorporating the patient's voice into HPE. This presentation will present recent research exploring narratives, or stories, which specifically focused on healthcare communication interactions. We employed a narrative inquiry approach to design an online questionnaire which prompted participants to share their stories. We collected 180 narratives from 124 patients about previous healthcare professional (HCP) communication interactions. Framework analysis revealed details about interpersonal factors and patient actions during and after consultations. Attention to linguistic and symbolic features such as grammar, capitalisation, repetition and metaphor highlighted rich constructions of positive and negative emotions in these stories. This presentation will conclude with practical suggestions about engaging with patient stories in HPE and highlight how this may be a useful means by which HCPs can teach, and learn about, the patient's perspective.



Teaching and learning person-centred communication: The challenges audiologists face in a technology-driven profession

Dr Caitlin Barr, University of Melbourne

Dr Caitlin Barr is an audiologist and senior lecturer in the Department of Audiology and Speech Pathology. Caitlin's research has focussed on how audiology services strive to meet the needs of older adult clients. This research has informed curriculum development in the Master of Clinical Audiology and around the world.

Recent research in hearing care service delivery reveals a mis-match between clients' needs for person-centred care. That is, hearing care which is based on biopsychosocial approach and that delivers management solutions that match individual and family's lifestyle and emotional needs is rarely observed. Instead, it is common for audiologists to focus on biomedical topics and deliver technology focussed solutions. This scenario is the consequence of many factors, one being how audiologists are educated.

This presentation will discuss how research evidence has highlighted areas of improvement in our curriculum and the challenges associated with developing teaching and learning in a profession that is technology heavy, including the impact of diverse staff perspectives, role modelling in clinical experience and integrating communication throughout the program.

Team care and communication



Surgery team communication and WHOBARS

Dr Tanisha Jowsey, University of Auckland

Tanisha is a Pakeha New Zealander from North Canterbury. She has many years of experience in public health, anthropology and medical education research and education, as well as in arts practices – improvisational theatre, fine arts, and humanities. Tanisha is a lecturer in medical education at the University of Auckland.

Each year surgical complications – including perioperative death – occur in operating rooms (ORs) the world over. As many as half of these are avoidable. In New Zealand the World Health Organization's Surgical Safety Checklist has been implemented and is used in public hospitals throughout the country. We wanted to know how OR staff viewed the Checklist and the extent by which this communication tool has facilitated cultural change towards reducing error. We observed operations, interviewed OR staff, and undertook assessment of the way the Checklist was utilised (using WHOBARS). I will present on the qualitative findings concerning Checklist administration, including the key role of senior clinicians in the quality of Checklist administration, enabling staff to speak up and informing cultural change towards improved patient safety.



An agenda for critical care communication

Associate Professor Jonathan Knott, Royal Melbourne Hospital & University of Melbourne

A/ Prof Jonathan Knott is Clinical sub-Dean for Emergency Medicine and Director of Emergency Research at Royal Melbourne Hospital. His principle research interests are in behavioural emergencies.

Clinical communication is a core requirement for all health professionals. The unpredictable nature of Emergency Medicine, coupled to the complex presentations seen in Emergency Departments every day create unique challenges to effective communication. This talk will review particularly difficult areas of communication in Emergency Departments and strategies to support staff and novice clinicians.

