Editorial: Health and Wellbeing by Design

TSEKLEVES Emmanuel
Lancaster University
doi: 10.21606/drs.2018.019

One of the most complex global challenges is improving wellbeing and developing strategies for promoting health or preventing ‘illbeing’ of the population. The role of designers in indirectly supporting the promotion of healthy lifestyles or in their contribution to illbeing is emerging.

Motivated by the challenges of an ageing population and the associated rise in the number of people living with non-communicable disease this track has been formed. Its aim is to provide a collection of the state-of-the-art design-led work that look at the ways design is contributing to the health and wellbeing of population.

The diverse collection of papers in this track offers an insight into the significant role and value of design in an area traditionally dominated by health sciences. Divided into three distinct themes, a total of 15 papers explore various aspects of health and wellbeing, namely health by design, health management, healthcare applications and medical devices.

The session on ‘health by design’ provides an overview of the challenges and opportunities in healthcare, including the role of designer within this space, the advent of the Internet of Health of Things. In this session, Nusem presents under ‘Design in Healthcare: Challenges and Opportunities’ a synthesis of theory on the application of design and design research to healthcare. It also presents a matrix of this synthesis and then describes a small study with focus groups. In their paper entitled ‘Design research opportunities in the Internet of Health Things: A review of reviews’, Tsekleves and Cooper provide a review of the review articles that have been published on the topic of the Internet of Things within healthcare, with a specific focus on health IoT within the home environment. They identify eight key areas for design intervention. In ‘The role of the designer in public discourse – A critical discourse analysis of a medical brochure for diabetes patients’, Jacoby explores the role of a designer in producing medical related information brochures, using work done with a diabetes patients group as a case study. Next, Dunn et al, in ‘Building Relationships and Sustaining Dialogue between Patients, Caregivers and Healthcare Practitioners: Designing Digital Platforms for Ventricular Assist Device Users’ offer a review of digital platforms to support Ventricular Assist Device Users, and propose a set of criteria for how these interventions could be designed to be more effective and user focussed. Lastly, in ‘Social innovation by design in mobile healthcare for sleep disorders’ Catoir-Brisson explores how a methodology based on systematic design, which includes the different profiles of stakeholders of a complex healthcare problem, such as insomnia, contributes to re-design the whole experience of the patient care journey and to design educational kit tools for patients and care professionals.
Health Management has its own session looking into different ways of self-health management at an individual and community level. More precisely, Tan et al. in their paper entitled ‘Healthy Self-Management Communities by Design’ offer an insight on how communal spaces have been created in Singapore to help older people enjoy better health and well being. In ‘Mention: piloting design fiction on dementia policy’, Darby and Tsekleves discuss the use of participatory design fiction to explore the future implications of UK dementia policy. Young-ae presents in ‘Socio-cultural factors in diabetes management in South Korea’ the outcomes of research activities that identify the socio-cultural factors triggering diabetes and how patients cope with the disease. Etherington et al. present in their paper ‘Cascading Mentorship: Designing a Support Tool for Patients with Ventricular Assist Devices’ holistic design considerations for Ventricular Assist Devices and training, that were developed with a co-design approach. The inclusion of the stakeholders reveals concrete considerations that can improve the lives of their users. Kopanoglu presents in ‘Design for Multi-Dimensional Stages of Lymphoedema Self-Management’ a literature review and a preliminary framework of four themes and their stages, in order to assist designers in understanding how people with lymphoedema experience self-management.

The session on healthcare application and medical devices demonstrates a number of case studies of design interventions for the management of diverse health conditions. In ‘Toward a more granular management of the calibration process for hearing devices: The role of design-based knowledge translation’ Picinali and Atvur examine how design might help translate technical and medical knowledge to allow people to self-calibrate their hearing aid device. They argue that design thinking provides valuable insights to make translation process easier. Menheere et al. present in ‘Encouraging physical activity and self-enhancement in women with breast cancer through a smart bra’ the design research supporting the design & prototype of a temperature-activated bra for registering feedback to breast cancer survivors in their recovery from surgery and treatment. In the paper entitled ‘A Qualitative Inspection of Human Centeredness of Turkish Medical Devices Industry’, Cifter and Kose examine human centred design in Turkey in relation to medical device development. The authors suggest that there is a ‘lack of attention’ paid to human centred design amongst Turkish medical device manufacturers. Stead et al. explore in ‘Do-It-Yourself Medical Devices: Exploring Their Potential Futures Through Design Fiction’ the possible future implications of do-it-yourself medical devices from both democratised innovation and regulatory perspectives, through speculative design. Lastly, in ‘Does feedback from this device change my unhealthy habit? Lessons from my PhD project’ Hermsen explores the mechanisms for user feedback from personal digital devices in respect to engendering long-term behaviour change.