A15 – Using virtual human technology to study hospital nurses’ decisions about care for people with dementia
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Evidence suggests hospital nurses are poorly prepared to provide quality care for people with dementia. Studies report how hospital nurses inappropriately manage behavioural symptoms, such as aggression and wandering, with physical and chemical restraints. To improve care, it is necessary to gain a better understanding of the types of decisions nurses make. This descriptive correlational study explores nurses’ clinical decision-making for people with dementia using dual-processing theory (DPT) and is a work in progress. DPT provides an explanatory model for the role of expertise and experience in decision making processes. It proposes two distinct cognitive processes – type 1 (intuitive or experiential) and type 2 (analytical or hypothetico-deductive). This study investigates whether independent variables such as experience, place of work, and level of training and education are associated with type 1 or type 2 processing and with the quality of nurses’ decisions. The data collection tool is a virtual simulation constructed from a clinical case vignette, validated through an expert panel. The vignette illustrates aggression and agitation in a person with dementia who has untreated pain. The virtual simulation is multimodal, integrating virtual human avatars, video clips, and virtual clinical documentation. The avatars are built to spontaneously interact with users via both speech and non-verbal communication, including gestures and facial expressions, thus enhancing clinical reality and context. Data will be collected nationally by recruiting 200 hospital nurses to undertake the virtual simulation. Data will comprise a computer-generated record of decision pathways and cues plus a text record of user/avatar conversations. Analysis will explore associations between pathways, cues and user language and formulate theoretical conclusions. Today’s presentation will demonstrate how virtual simulation can provide an innovative method for data collection in research.