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## THE USE OF SIMULATION IN IMPROVING STROKE RECOGNITION, ASSESSMENT AND MANAGEMENT

Farah Jaffar<sup>1</sup>, Madiha Hashmi<sup>1</sup>, Basaam Aweid<sup>1</sup>; <sup>1</sup>*The Hillingdon Hospital NHS Foundation Trust, London, UK*

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**Background:** Stroke remains the second leading cause of death worldwide and an important diagnosis requiring early recognition and action for optimal clinical outcomes which are time dependent<sup>[1]</sup>. With heterogeneity in healthcare systems according to trust and resources, it is key that healthcare workers are aware of the local pathways for time-critical conditions such as stroke. Delayed recognition and management of an inpatient stroke prompted the development of an acute neurology simulation course at a London district general hospital aimed at junior doctors.

**Aim:** The aim of the course was to inform about the local stroke pathways, ensure juniors are comfortable with recognition of stroke and to develop the non-technical skills required in stroke management, thus enabling skill acquisition in a safe environment.

**Method:** An innovative course was created using SimMan 3G with a focus on ensuring high fidelity to overcome the limitations associated with the practical aspect of stroke assessment in a mannequin. Five scenarios were created to last 15 minutes: three of which involved acute stroke diagnosis and two about stroke 'mimics'. These scenarios included the involvement of a junior doctor, an acting nurse and acting members of the multi-disciplinary team as required. The debrief following each scenario would cover the technical aspects of management and self and group reflections. To add to the fidelity when assessing a mannequin for neurological conditions, we ensured that slurred speech could be mimicked, weakness in the limbs was showcased and facial asymmetry represented with innovative techniques using the mannequin.

**Results:** Two sessions have been delivered involving nine junior doctors and this has been implemented as a regular course for junior doctors and nurses. All attendees felt more confident with stroke recognition, awareness of stroke mimics and of the local pathways when managing patients with acute stroke.

**Implications for practice:** The positive feedback received and the outcome that all attendees felt more confident following the course suggest that stroke recognition and management can be learnt using simulation with a focus on the human factors required to optimize patient care. We hope to continue delivering this course to junior doctors rotating through the hospital and hope to open it up to the wider multi-disciplinary team including nursing staff, healthcare assistants and therapists with a focus on recognition and escalation. Dissemination of learning on local pathways and management using simulation is effective and can impact patient care.

### REFERENCE

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## INCREASED SELF-EFFICACY IN GENERAL PRACTICE AND HIGHER PSYCHIATRIC TRAINEES FOLLOWING SIMULATION-BASED EDUCATION TO SUPPORT INTER-PROFESSIONAL CO-CONSULTING IN PRIMARY CARE

Kalina Tcholakova<sup>1</sup>, Owen P. O'Sullivan<sup>2</sup>, Hannah Iannelli<sup>1</sup>, Chris Attoe<sup>1</sup>; <sup>1</sup>*Maudsley Learning, South London and Maudsley*

*NHS Foundation Trust, UK<sup>2</sup>Maudsley Simulation, South London and Maudsley NHS Foundation Trust, UK*

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**Background:** Learning Together is a training model providing general practice (GP) and higher psychiatric trainees with peer learning opportunities across London in partnership with Health Education England. The initiative encompasses inter-speciality training days and joint clinics delivered by trainee pairs aiming to bridge the gap between mental healthcare in primary and secondary care. On the basis of this model, a full-day online simulation-based education (SBE) course for these groups was designed and delivered with a specific focus on inter-professional education and issues related to co-consulting<sup>[1]</sup>.

**Aim:** The aim of this study was to use SBE to enable sharing of knowledge, skills and approaches to clinical practice to improve inter-professional collaboration in the context of co-consulting in primary care.

**Method:** A full-day online SBE course for GP (ST2/3) and higher psychiatric trainees (ST4 and above) was delivered to 64 participants over six deliveries. It included five live scenarios using professional actors depicting mental health presentations to reflect the overall learning objectives. Scenarios were followed by a structured psychologically informed debrief chaired by trained facilitators with support from an external senior GP. A mixed-methods evaluation was used. Participants completed the Human Factors Skills for Healthcare Instrument (HuFSHI) pre- and post-course, rating their level of self-efficacy in managing issues, such as 'constructively managing others' negative emotions at work' and 'working effectively with a new team in clinical situations' (Cronbach's alpha = 0.96)<sup>[2]</sup>. Participants rated aspects of course quality on a 5-item scale and provided additional course feedback via open-ended questions.

**Results:** Responses from 51 participants were analysed (response rate = 79%). Median HuFSHI scores increased from 70 to 86 for the overall group ( $Z = 5.881, p < 0.001$ ). Sub-group analysis between both trainee groups (i.e. GP and higher psychiatric trainees) showed no significant HuFSHI score differences. High scores were reported for scenario quality (90% of participants) and provision of a safe and constructive learning environment (91.7% of participants). Ninety per cent of respondents would recommend the course to colleagues. Emerging themes from the qualitative data were positive reflections on the importance of patient-centred care and appreciation of the value of inter-professional collaboration and joint clinics.

**Implications for practice:** Findings demonstrated improvements in participants' self-efficacy as measured by HuFSHI. Qualitative data suggest a deeper understanding and appreciation of patient-centred care and inter-professional collaboration. Considering the need for early intervention, prevention and delivery of mental healthcare in primary care, this early evidence supports the potential role of SBE in developing integrated care.

### REFERENCES

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