A renewed Neurology-Stroke Simulation including Stroke Nurses and ED Input

NHS King's College Hospital NHS Foundation Trust

Authors: Dr Jesal Acharya, Education & IMT Wellbeing Fellow (KCH)
Dr Owain Williams, Stroke Consultant (KCH)
Dr Evangelia Theochari, Neurology Consultant (KCH)

Background

Stroke and Neurology, although allied, work differently clinically. Stroke is heavily protocolised[1] and care is best when the pathway is known by all team members, who know each other and focus on efficiency. Neurology is less protocolised and relies more on patient-centred clinical skills. Both simulations were previously offered by King's College Hospital's (KCH) Sim Centre but since archived. Alongside 2 consultants (one stroke, one neurology) I co-organised its return as a joint day.

Aims

The aims were to improve knowledge, teamworking, confidence & clinical management amongst both SHOs, SpRs and stroke CNS'.

Methods

Dates were booked in the KCH Sim Centre calendar, recurring every few months in time with trainee rotation. The stroke scenarios were written anew whereas neurology used historic scenarios with minor adjustments. Pre- and post-course questionnaires were written to address the aims. An Emergency Medicine (or ED) SpR (working as an Education Fellow) joined as faculty as the ED point of view is vital learning for stroke teams. The rota coordinators released SHOs and SpRs and stroke CNS' for half-days; we ran stroke in the morning and neurology in the afternoon.

Results

In stroke, the percentage of candidates rating 4 or 5 out of 5 (where 5 is the highest) increased from 62.5% to 100% on confidence in assessing and managing stroke, 62.5% to 80% on comfort with contents and implementation of the KCH stroke pathway, and 75% to 100% on knowing their role and working within the acute stroke team. In neurology, the percentage of candidates rating 4 or 5 out of 5 for pre-course confidence in managing acute neurological conditions was 25%; post-course, it was 100% for acute encephalitis and 67% for myasthenic crisis. Written feedback praised both halves, with suggested improvements for stroke being slicker scenarios and for neurology being clearer learning objectives and involvement of CNS'/radiographers.

Stroke	% of candidates rating >=4/5 PRE	% of candidates rating >=4/5 POST
Confidence in assessing/managing stroke	62.5	100
Comfort with KCH stroke pathway	62.5	80
Knowing the role and working within stroke team	75	100

General Feedback	
Praiseworthy	To improve
Nice organisation, good cases and constructive feedback	Scenarios can be slicker

Neurology	% of candidates rating >=4/5 PRE	% of candidates rating >=4/5 POST
Managing acute neurological conditions	25	n/a
Managing acute encephalitis	n/a	100
Managing myasthenic crises	n/a	67

General Feedback	
Praiseworthy	To improve
Good to practise, knowledgeable faculty, good cases	Learning objectives not always clear, involve CNS'/radiographers

Fig 1: Table showing pre- and post-course questionnaire scores across various domains for stroke and neurology learning, and some written feedback for the simulations

Discussion

The results showed improvements across multiple domains. Feedback requesting making the scenarios slicker was taken on board, with the understanding that as this was the first running with our new team there were bound to be teething problems. Simulation outcomes are subjective, and the data needs to be looked at as such. Overall, it was well received and we will use the feedback to improve subsequent sessions.

Conclusion

The course improved knowledge, confidence, teamworking and clinical management for stroke & neurology professionals, both doctors and nurses.

Reference

[1] – Stroke and transient ischaemic attack in over 16s: diagnosis and initial management. https://www.nice.org.uk/guidance/ng128