ORIGINAL RESEARCH

HUMAN FACTORS BASED SIMULATION TRAINING FOR INTERNATIONALLY EDUCATED NURSES

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Introduction: Between 2022-2023, Internationally Educated Nurses (IEN) comprised over 40% of new registrants to the Nursing and Midwifery Council [1]. IENs report a 'culture shock' and feel like 'strangers' when arriving in the NHS [1,2]. Moreover, human factors (such as communication) are a known cultural barrier faced by IENs. There is therefore a need for investment in training that facilitates cultural and linguistic competence [1].

Within our centre, a preceptorship programme exists for IENs. This includes the opportunity to attend an inter-professional simulation course, with a focus on human factors acquisition and development.

Aim: To evaluate the self-reported confidence of IENs in human factors themes, and the impact of an interprofessional human factors-based simulation course.

Methods: All IENs were invited to attend a multi-professional simulation course as part of their preceptorship programme. 54 nurses attended 18 sessions between October 2023 and April 2024. An initial workshop on human factors was undertaken, before completing four simulated scenarios. A thorough human factors orientated debrief for each scenario was undertaken utilising the centre's preferred model.

Self-reported confidence values across human factors themes were assessed using the Human Factors Skills for Healthcare Instrument (HuFSHI) [3]. Anonymous baseline and immediate post-course scores were collected.

Results: Thirty-seven IENs completed the baseline HuFSHI questionnaire, 18 of which completed the post-course questionnaire. Those who only completed the post-course questionnaire were excluded due to incomplete demographic details.

The most common ethnicity of attendees was Asian/Asian British followed by Black/Black British, Caribbean or African. 81% did not speak English as a first language and 73% had no previous human factors training.

All HuFSHI parameters demonstrated notable improvements following the course (Table 1-A77). Initially, 33% felt neutral/underconfident in asking team members for information in a busy ward whereas, following the course, 100% felt confident or very confident. Overall, all participants viewed the session as useful to understanding the impact of human factors on patient care.

Discussion: The need for human factors training for new IENs has been demonstrated alongside the positive impact that a simulation course has on IEN confidence values across human factors themes. To further assess the longevity of this intervention, a three-month follow up questionnaire will be circulated. Future research should consider whether this positive impact translates into improved patient safety and staff integration.

Ethics statement: Authors confirm that all relevant ethical standards for research conduct and dissemination have been met. The submitting author confirms that relevant ethical approval was granted, if applicable.

REFERENCES
1. Lanada JA, Culligan K. The experiences of internationally educated nurses who joined the nursing workforce in England. The British Journal of Nursing. 2024;33(2):78–84.
2. Winkelmann-Gleed A, Seeley J. Strangers in a British world? Integration of international nurses. The British Journal of Nursing. 2005;14(18):954–961.

Table 1-A77. Human Factors Skills for Healthcare Instrument (HuFSHI) self-reported confidence values

Table 1. Human Factors Skills for Healthcare Instrument (HuFSHI) self-reported confidence values

	Constructively managing others negative emotions at work		Requesting help from colleagues in other professions		Communicating effectively with a colleague with whom you disagree		Prioritising when many things are happening at once		Speaking up as part of a team to convey what you think is going on		Involving colleagues in your decision making process	
	Baseline	*Post-Course*	*Baseline*	*Post-Course*	*Baseline*	*Post-Course*	*Baseline*	*Post-Course*	*Baseline*	*Post-Course*	*Baseline*	*Post-Course*
Definitely cannot do	0%	0%	0%	0%	3%	6%	0%	0%	0%	0%	0%	0%
Possibly cannot do	3%	0%	0%	0%	3%	0%	3%	0%	8%	0%	3%	0%
Neutral	54%	22%	38%	11%	41%	6%	30%	6%	41%	6%	27%	0%
Possibly can do	38%	67%	43%	50%	46%	67%	57%	39%	38%	50%	54%	50%
Definitely can do	5%	11%	19%	39%	8%	22%	11%	56%	14%	44%	16%	50%
	Dealing with uncertainty in your decision making process		Asking other team members for the information I need during a busy ward environment		Recognising when you should take on a leadership role		Monitoring the 'big picture' during a complex clinical situation		Anticipating what will happen next in clinical situations		Working effectively with a new team in clinical situations	
	Baseline	Post-Course	Baseline	Post-Course	Baseline	Post-Course	Baseline	Post-Course	Baseline	Post-Course	Baseline	Post-Course
Definitely cannot do	0%	0%	3%	0%	3%	0%	3%	0%	0%	0%	0%	0%
Possibly cannot do	8%	0%	8%	0%	5%	0%	5%	0%	5%	0%	3%	0%
Neutral	46%	0%	22%	0%	41%	11%	46%	6%	41%	6%	35%	11%
Possibly can do	35%	72%	49%	61%	30%	44%	38%	67%	43%	61%	43%	56%
Definitely can do	11%	28%	19%	39%	22%	44%	8%	28%	11%	33%	19%	33%

3. Reedy GB, Lavelle M, Simpson T, Anderson JE. Development of the Human Factors Skills for Healthcare Instrument: a valid and reliable tool for assessing interprofessional learning across healthcare practice settings. BMJ Simulation and Technology Enhanced Learning. 2017;3(4):135–141.