Simulation-based education in support of HCA development

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Abstract

In the wake of the Francis Report and its 290 recommendations, the role and training of the healthcare assistant (HCA) have once again come under the spotlight. Francis asks for HCAs to be regulated and national standards for their education and training to be agreed (Francis, 2013). The HCA Crisis Avoidance and Resource Management (CARMA) course has run at the Montagu Clinical Simulation Centre (MCSC), South Yorkshire for 5 years now.

This article evaluates the impact that this course, which uses simulation-based education as a teaching methodology, has had on the attitudes of HCAs and on their role in clinical practice.

Simulation is an ideal educational method for addressing non-technical skills, such as communicating with patients and members of the multidisciplinary team (Gaba, 2004). Allowing participants to prepare for emergency situations, simulation-based education gives individuals and teams the opportunity to practise within a safe environment, making behaviours more or less permanent (Beaubien and Baker, 2004).

Key words
- Healthcare assistants
- Simulation training
- Education
- Crisis management
- Patient safety

Project details

Method

All of the HCAs from one organisation who had attended the CARMA clinical simulation training course at a regional simulation centre were invited to participate in one of two focus groups (n=42); 6 of these presented at the focus groups (n=6). Each HCA had participated in one clinical scenario, as well as watching 3 further scenarios involving their colleagues.

Results

Four main themes emerged from the data. The participants found the process a positive one, despite finding it stressful. Debrief afforded the opportunity to reflect on their actions and to ask questions in a relaxed, non-threatening environment.

Conclusion

The HCAs agreed that this type of training increased their confidence and clinical knowledge. As vital members of the healthcare team, they valued this training, which was aimed specifically at their learning needs, resulting in safer practitioners.
developed with the learning needs of HCAs in mind and educational objectives clearly identified, for example, correct measurement and recording of physiological observations, calculation of an EWS, recognition of deterioration, and communication with members of the multidisciplinary team. This course first ran 7 months after conception.

**Aim**
This study evaluated the impact of simulation training for HCAs by investigating their non-technical skills and perceptions of clinical practice through focus groups. Non-technical skills—such as communication, teamwork, situation awareness, declaring the emergency—are essential for healthcare workers to fulfil their roles. To deliver the highest level of care, they need to communicate with patients and the multidisciplinary team.

**Methodology**
Focus groups were an ideal method of data collection, to obtain opinions, attitudes and feelings of the HCAs relating to simulation training. A supportive, non-threatening climate for discussion, encouraging sharing of opinions, is essential (Kitzinger, 1995; Quinn, 2000). Therefore, the focus groups were held at the participants’ place of work.

**Sample**
All HCAs who had attended the Crisis Avoidance and Resource Management (CARMA) course were invited to participate in the focus groups, with anonymity assured (n=42). Some 6 people who had attended CARMA, agreed to participate in a focus group (n=6). Written consent was obtained.

**Data collection and analysis**
General questions attempted to initiate discussion, with more specific questions exploring experiences of HCAs during the simulation process. Other questions were asked to clarify comments made. The session lasted one hour, with discussions recorded and transcribed verbatim.

**Results**
The HCAs’ perceptions of simulation training were discussed and 4 themes emerged:
- Role of the HCA
- Realism and learning through simulation
Impact of simulation training on patient safety

Programme structure

The author acknowledges the questions may have influenced some themes by their semi-structured nature. However, posing questions to stimulate discussion is essential to the process, drawing richer responses (Howitt, 2010; Silverman, 2010).

Theme 1: Role of the HCA

As HCAs undertake, measure and record patient observations on a daily basis, the lack of a defined role is of concern to them and staff they support.

One HCA was clear what her role means for the National Health Service:

‘If we took HCAs away … what are we left with? A service that's going to collapse. We are essential to keeping the system ticking over. We are as important as anyone else.' HCA4

When HCAs were asked if they would consider training as RNs, the majority were adamant they would not:

‘I could have done my training, now I won’t … I like the hands-on care and you get to know more about the patient than the nurses do. I wouldn’t be a staff nurse. I’ll stay as I am.' HCA2

An HCA with many years’ service commented:

‘We are like the old SENs (state enrolled nurses) … the only thing we can’t do is give drugs.' HCA 6.

Theme 2: Realism and learning through simulation

The participants agreed the simulation was realistic. Despite initial anxieties, they could suspend disbelief and see the manikin as a real patient:

‘Very realistic … Apart from the dummy being false, that’s exactly what happens. The scenarios were things you are doing all the time on the wards … Once you’d got over the shock of the dummy … you just got on with it, just like you do on the ward.' HCA 2

They did not like the idea of being watched and filmed, but because they became involved in their scenario, they didn't notice the cameras.

‘When you’re watching it on film, you don’t think you’ll be able to do that; you think you’re going to feel silly talking to a doll, but, within a couple of minutes, you imagine it’s a patient.' HCA 3

Some of the HCAs suggested they felt undervalued, citing as evidence the limited training opportunities for them. Although many complete NVQ level 3 in health care

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**Box 1. Summary of a simulation session**

- Students allocated a scenario
- Pre-scenario briefing – students given background information: name and location of patient (A&E, MAU, Ward), what the patient had presented with
- Students enter simulation room (accompanied by faculty member playing a part), talk to patient and carry out an assessment
- Record observations and calculation of EWS
- Handover with HCA, nurse, doctor
- Assist with treatment options
- Documentation
- Debrief to analyse actions and learning
and social care, some have had no formal training. It was evident, however, the majority did want to learn, finding the lack of available training frustrating:

‘You never get onto any good courses, do you, as HCAs? ... Why shouldn't we have the same teaching as staff nurses? We are doing a lot of what they do.’ HCA 4

The majority agreed they learnt a lot from participating in the simulation and felt the training had reinforced, and added to, their clinical knowledge and ability on returning to their clinical areas.

‘It makes you more aware ... It makes you question things more.’ HCA 6

The HCAs suggested the simulation made them more aware of why they do things and question why they do them.

‘Coming from the simulation training and listening to other people, it has made me more aware: I want to know why I am doing things, what's happening while I’m doing that, why we do different things with different illnesses, why they have those drugs. What happens to them when they have those drugs? Even though it's not really to do with us, it is as well.’ HCA 3

There was an appreciation of the contribution of debriefing to learning. They agreed watching themselves on film was 'embarrassing', but could see benefits of 'reflecting-on-action'. Participants indicated they valued the constructive feedback from the facilitators and their peers.

**Theme 3: Impact of simulation training on patient safety**

The participants held the firm belief simulation training could improve patient safety.

‘I learnt one good thing from it. It wasn't my scenario, but this lady had collapsed, everybody wondered, had she arrested? It wasn't an arrest, but actually they had missed doing a blood sugar ...
HCAs report increased clinical knowledge and experience
HCAs report greater confidence in recognition and assessment of the deteriorating patient
HCAs are vital members of the health care team and as such need education and training to feel valued
Simulation-based education is an ideal medium for practising both technical and non-technical skills
This is an ideal method of education for adult learners who gain knowledge through ‘doing’ and ‘reflecting’ alongside their peers

On the ward, we had a chap who'd come in … we thought he was going to arrest. All of a sudden, I said, ‘Anybody checked his blood sugar?’ And we did it and it was something like 1.2. He wasn't going to arrest; all he needed was some glucose. Anything could have happened, but I picked that up from somebody else doing that scenario.’ HCA 1

This HCA knew the care the patient received was quicker and therefore safer because of something they observed in a simulation. The principle of simulation as a learning and teaching tool draws from theories of experiential learning (Kolb, 1984).

The HCAs exposed to simulation training learn through experiencing the simulated emergency and reactions to what they encounter.

‘Somewhere, someone would have done it. I focused on the dummy on the floor back at the simulation centre ... Somebody said, “What about checking the blood sugar?” That really stuck.’ HCA 1

**Theme 4: Programme structure**

On each course, each HCA participated in one scenario out of 4 (assessment; hypovolaemia; hypoxia; hypoglycaemia). Most felt one was sufficient, as they learned by watching scenarios colleagues took part in. One HCA did suggest a second might give them the opportunity to practise what they had learned.

‘Do the scenario and maybe a smaller one later, so you get two chances … We learned from watching everyone and listening to you, before and after. We saw our reaction on film. Afterwards, on the ward, I was more confident.’ HCA 4

The HCAs appreciated the opportunity to participate in simulation training. They admitted if they had known what was involved, they would not have wanted to participate, but were glad they had been put forward.

‘I was privileged we had been asked to go on this course, because, normally, anything like that, is not for us.’ HCA 5

When asked if they would do it again, they all concluded they would appreciate a second course.

‘I’d do it again. It has taken HCAs further … I think they should extend our role into lots of things.’ HCA 2

The HCAs worked across a range of clinical areas. They agreed coming together, even though they didn't know each other, was a positive aspect of the course. Traditionally, in an emergency, they would rely on friends and colleagues. During the simulated scenarios, however, they couldn't hide, as they were unaware of each other's abilities. They had to step forward and do their bit.

**Limitation of study**

The author acknowledges the potential for bias in the results, as she facilitated this HCA CARMA course, and was the sole researcher, so may have influenced responses of delegates. Additionally, the questions posed, although general, may have influenced the data.

**Discussion**

The outcomes of this study indicate this HCA training was positively received. This course was beneficial for increasing knowledge and confidence in practice, providing appreciation of effective team-working and communication, and their impact on patient safety. According to Francis (2013), these skills are essential in delivering highest quality care.

Evidence suggests patient deterioration is still not recognised and acted upon (National Patient Safety Agency (NPSA), 2007). This may result in adverse patient outcomes, including delayed admission to critical care and increased mortality. Education and training are crucial for ward staff to recognise the importance of accurate and timely observations to identify sick patients.

In many areas, these observations are delegated to HCAs rather than qualified staff, with obvious possible implications. Yet organisations seem unable or unwilling to provide HCAs with necessary education and training to perform these tasks safely. Due to budgetary constraints, reducing the numbers of HCAs seems unlikely. More emphasis must be given to communication between RN and HCA regarding patient care, with safeguards in place ensuring the safety of patients under the care of HCAs (Department of Health (DH), 2000). More education is required for HCAs (Francis, 2013); simulation-based education would contribute to improving quality and safety of care given. One clear advantage of simulation is its ability to recreate clinical scenarios and test how individuals behave in crisis situations.

HCAs need to use thought processes, essential to the success of the training. Individuals can learn by observing another person doing (Quinn, 2000). Fox-Robichaud and Nimmo (2007) acknowledge the importance of learning from experiences of others. Observing colleagues during simulated scenarios, and watching recordings during
post-scenario debriefing are vital to the process, where vicarious learning occurs. This is ‘reflection-on-action’, as described by Schon (1983), where HCAs are encouraged to think about actions after scenarios. Lasater (2007) suggests simulation brings together theory, psychomotor skills and lessons learned from clinical practice. The HCAs acknowledged that simulation experience reinforced their learning from 2 study days attended prior to the training, along with knowledge gained in practice, but in a way that kept their interest and attention.

‘Going into a classroom … with a white board … We once had a course … you sit there and shut off! But this, you were buzzing all the time!’ HCA 2

The key to any skill is practice (Makoul, 2006), a major advantage of simulation training where practice takes place in a ‘safe’ environment.

Conclusion

Overall, the participants found their simulation training experience was positive. They acknowledged they felt stressed because they feared the unknown, especially as none had participated in training of this nature previously.

HCAs appear to consider their role closely allied with RNs already and often see themselves as substitute nurses, highlighting the overlap between the work of RNs and HCAs (Thornley, 2000; McKenna et al., 2004). The findings suggest some HCAs may view these as opportunities to develop their role (Daykin and Clarke, 2000).

The issue of HCA regulation and training remains one of great debate in the UK. Francis (2013) calls for regulation, stating the Nursing and Midwifery Council (NMC) should take responsibility for regulation. For HCAs to be registered, clarification and standardisation of the HCA role would be required. Whatever the title, registration would mean a need for further education—yet more simulation training.

Montagu Clinical Simulation Centre (MCSC): www.montagusimulation.co.uk/