Original Article



Medical students working as health care assistants: an evaluation

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SUMMARY

Background: The General Medical Council requires that medical students are taught human values and how to work effectively with colleagues. Health care assistants (HCAs) provide fundamental patient care as part of the wider health care team. Reports suggest that medical students gain valuable insights when working as HCAs.

Methods: In 2015, a pilot was developed for medical students to work as and with HCAs. The experience involved 3 days training in preparation for three supervised shifts. The pilot was expanded to involve more students and clinical partners.

Results: A total of 131 students completed the HCA project between 2015 and 2018. Students were asked to complete a guestionnaire where they scored a set of statements using a 5-point Likert scale, and gave open comments that were analysed thematically. A total of 119 students completed the questionnaire, of which 91% of students rated the experience as good or excellent and 98% of students agreed or completely agreed that they had met the learning outcomes. Themes centred around: feeling empathy; building confidence; appreciating the HCA team role; and how this experience may influence

their future practice as doctors. A total of 87% of students said the experience should be mandatory.

Conclusions: Students find the opportunity to work as HCAs meaningful and enjoyable. This brief initiative may help students develop a number of skills and attributes that assist in shaping future doctors. Further to helping medical students understand what values-based practice actually means and why it matters to patients, it also clarifies HCAs' and other professionals' contribution to the wider health care team. A research study is underway to evidence its impact.

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he importance of doctors incorporating human values in their practice has been outlined by the General Medical Council (GMC) in the UK and by the Liaison Committee on Medical Education in Canada and the USA.^{1,2} Such values-based practice not only relates to patient care but also underpins interprofessional practice.³ Therefore, helping medical students to see the person in the patient is important, as doctors may be separated emotionally from their patients. 4-6 Thomas emphasises the need for medical curricula to help foster human values that represent a set of consistent measures and behaviours chosen and followed in practice, including empathy. The literature reminds us that early practical experience can have a positive impact on students in this regard,8 and implicates that health care assistants (HCAs) may be particularly effective in supporting medical students in this pursuit.4-7

Created within the UK's National Health Service (NHS) in 1986, HCAs work under the quidance of a qualified health care professional providing personal and medical care. The HCA role is found in many other countries, but with different titles.9 Experience of their role is reported to help medical students become 'ward smart', 10 and gain a wider understanding of what different members of the interprofessional team offer to the care pathway. Fearnley reported that his experience of working as an HCA as a medical student resulted in the more thoughtful prescribing of medicines. 11 However, our understanding of how medical students benefit from working as HCAs remains limited.

Context

To help promote the desired skills and values needed for medical students to work together with others as they care for patients,

the Centre for Interprofessional Practice (CIPP), located within Norwich Medical School (NMS) at the University of East Anglia (UEA), in the UK, initiated the development of an 'HCA pilot' in 2015. The CIPP director and the course director for the Medicine Bachelor and Bachelor of Surgery (MBBS) together outlined seven learning outcomes (LOs) that students were to achieve when working as HCAs (Box 1).

Three local hospitals were invited to take part in the development of the pilot. The CIPP worked in close collaboration with the hospitals to agree the content and delivery of the training and logistics surrounding the work shifts (Box 2).

All (~170) first-year medical students were invited to take part in the HCA pilot; 31 volunteered and were randomly assigned to one hospital. The CIPP developed a feedback questionnaire to evaluate the pilot.

Following excellent feedback, the pilot - now known as the 'HCA

project' - was expanded to include Foundation as well as Year-1 medical students. At the UEA, the Foundation year acts as a gateway into the 5-vear MBBS course. A number of smaller community hospitals, providing a range of integrative services including inpatient rehabilitation to local communities, and two care homes were approached to accommodate the additional students.

Since the original pilot, the HCA project has continued to evolve. To date, core components remain the same but some changes have been made in response to feedback from stakeholders involved in the project. Medical school staff and representatives from all clinical sites meet annually to share good practice, and act on comments from students and staff collated from the evaluation. In this paper we present data collected during 2015-2018.

METHODS

Participants

Table 1 provides participant profiles of those who successfully

Box 1. Learning outcomes of the health care assistant (HCA) project

- ... to demonstrate knowledge and skills associated with care delivered by an HCA and thus gain an understanding of the contribution of an HCA to the care pathway
- ... to describe how hospital wards 'work' and how different staff members contribute to the care delivery of each patient
- ... appreciate the stresses of shift work patterns
- ... identify common challenges associated with the role and responsibilities of an HCA
- ... describe interprofessional and professional-patient interactions and communications as an HCA within a real clinical environment
- ... describe some differences and similarities between own future profession and that of an HCA, in providing high-quality and safe care
- ... appraise what knowledge, skills, attitudes, values and behaviours a doctor needs in order to enhance the contribution of all members of health care staff
- The learning outcomes (LOs), initially outlined by the directors of the Medicine Bachelor and Bachelor of Surgery and the Centre for Interprofessional Practice, were endorsed by all clinical partners. The second LO was amended to include '... hospital wards and/or care homes "work"...' when the HCA project was expanded to include further stakeholders

Box 2. Health care assistant (HCA) training and shifts

Training

- Agreed in collaboration with the clinical sites and the Centre for Interprofessional Practice (CIPP)
- Enables the students to learn the skills and knowledge related to:
 - confidentiality
 - diversity and equality (D&E)
 - safeguarding
 - fire safety
 - basic life support
 - manual handling
 - · hand washing and infection control
 - blood pressure
 - temperature, pulse and respiration
 - · early warning signs
 - urine analysis
 - nutrition
 - · feeding and washing
 - dementia awareness
 - death and dying
- Majority delivered by clinicians to groups of students at each of the hospitals involved
- Some training now available online and delivered by Norwich Medical School, e.g. confidentiality and D&E
- On average, it takes around 3 days to complete
- Clinicians assess each student on site to ensure that they are adequately prepared

Shifts

- Generally, three 6-hour unpaid shifts, including one late and one early shift
- Students are allocated to wards, or care homes, as pairs, but with some as individuals
- Students are supervised by an HCA mentor during the shifts
- Each HCA mentor is briefed by clinical staff about the purpose and learning objectives of the HCA project
- The CIPP provides HCA mentors with a certificate for their contribution after the project
- The CIPP arranges accommodation, travel and uniforms

completed this initiative between 2015 and 2018.

Collection and analysis of evaluation data

Students completed and returned the feedback questionnaire after

their shifts. Upon receipt, students were provided with a certificate. Students were asked to rate the overall experience (1, very poor; 2, poor; 3, OK; 4, good; 5, excellent) and their level of agreement with statements linked

to the LOs on a 5-point Likert scale (1, completely disagree; 2, disagree; 3, not sure; 4, agree; 5, completely agree).

Students were also asked if all students should complete this project, what they learned and to elaborate on a situation that had made a particular impact upon them. The free text comments were analysed by both authors using principles of thematic analysis.¹²

RESULTS

During 2015–2018, 131 students completed this initiative (Table 1). The questionnaire response rate was 91% (119/131). Of these students, 91% (108/119) rated the experience as 'good' (4), or 'excellent' (5), and 98% (117/119) 'agreed' (4) or 'completely agreed' (5) that they had met the LOs. Figure 1 shows the breakdown of the students' average response to each of the LOs.

The open text comments indicated that students viewed their time working as HCAs as memorable and humbling. Four main themes emerged from the data:

- empathy including the opportunity to feed, wash and support patients, as well as recognising the importance of HCAs in fostering compassionate care;
- confidence confidence improves with the time spent with patients and with seeing how the ward works;
- 3. HCA role an appreciation of the range of roles conducted in a busy environment yet maintaining a person-centred approach as they provide high quality and safe care;
- 4. future doctor recognition of the HCA, how they work with other professionals and how doctors can benefit from their knowledge; many said that this experience will make them better doctors.

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Table 1. Descriptive profile of participants (average age 19 years)

Academic year	Course	Gender	
		Male	Female
2015/16	Year-1 MBBS*	9	19
2016/17	Foundation year**	10	15
	Year-1 MBBS*	5	25
2017/18	Foundation year**	10	15
	Year-1 MBBS*	4	19

^{*}MBBS - Medicine Bachelor and Bachelor of Surgery.

The health care assistant (HCA) project is voluntary for first-year MBBS students and is compulsory for Foundation students. All of the students study at Norwich Medical School and the University of East Anglia.

Box 3 provides example extracts from anonymised student comments for each of the four main themes.

When comparing their own future profession with that of an HCA, students had not appreciated some of the clinical skills that both HCAs and doctors perform. Many acknowledged the close contact that HCAs have with patients and how much time they spend with patients compared with doctors.

Although the majority of students agreed that all medical students should experience working as HCAs (87%, 104/119), a small percentage felt that the HCA project should be optional for medical students. Examples of the rationale given for this included: the length of the shifts; that it was very hard work; and that not all students would be able to help patients with some daily HCA tasks, e.g. supporting patients with their personal hygiene.

Responses from students completing their shifts in care homes were equally positive compared with those who completed their shifts on a hospital ward. Similarly, Foundation students evaluated this initiative on par with the MBBS students.

DISCUSSION

The findings presented here show that medical students see the opportunity to train and work as HCAs as a very worthwhile experience. They suggest that this relatively brief intervention, with 3 days of training followed by three shifts working as HCAs, is

Students' perceptions of how they achieved each of the learning outcomes

1 = I completely disagree; 2 = I disagree 3 = I am not sure; 4 = I agree; 5 = I completely agree;

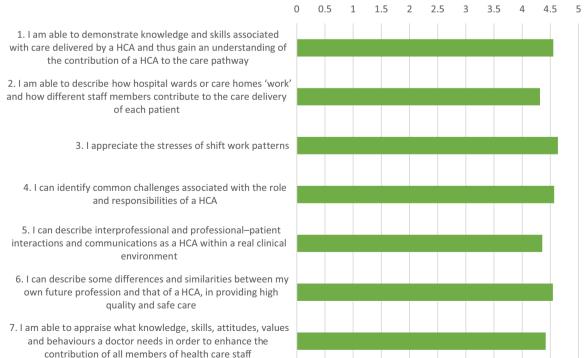


Figure 1. Average response of how students felt they achieved each of the learning outcomes. Each bar shows the average response from the 119 students who completed the questionnaire after the successful completion of the health care assistant (HCA) initiative.

^{**}Foundation year - gateway into the MBBS (also referred to as a 'Year 0').

Box 3. The four main themes emerging from the comments made by students, along with representative extracts

Empathy

'Being able to put yourself in someone else's position and simply imagine what they are going through was a humbling experience. Subsequently, while I was on my HCA shift I was able to sympathise with the patients when they would get frustrated or upset' (Student 98)

The HCAs I was paired with were all empathetic, hardworking, confident people who were real accolades to the NHS and the service they provided. They completed their jobs with dignity, respect and such enthusiasm that they have inspired me, for the rest of my career to always show that much love to my job – regardless of the hardships' (Student 112)

Confidence

'I never had such close contact with a patient and I never really experience[d] how working life in the hospital is, but this project gave me the opportunity to learn and get a first-hand experience, which helps improve my confidence in patient contact even in a very short period of time' (Student 61)

'I believe it has helped me so much in being confident in talking to patients and remembering that they are equal to us. Furthermore, it has reminded me exactly why I am at medical school! The experience has grounded me, and I think it would be very beneficial to all first years as they are more likely to respect the whole MDT [multidisciplinary team]!' (Student 28)

• The health care assistant (HCA) role

'I honestly didn't know what exactly the role of the HCAs was and certainly wasn't aware of the extent to which they help the patients' (Student 2)

'The 3 shifts. They were by far the largest and quickest learning curve, which I have experienced. I enjoyed supporting the patients and helping them with their day-to-day activities, which we take for granted! It was a privilege to work with them' (Student 7)

Future doctor

'It was clear that they were looked down upon by the doctors – even junior doctors seemed to think they were better than the HCAs, most of which had many more years of experience. I honestly feel that I now have a lot of respect for them, having seen how hard they work and how patient they are. HCAs are certainly not to be undermined' (Student 38)

'I feel this experience has helped me to understand the importance of HCAs in the NHS and has allowed me to appreciate their roles – I will continue to do so throughout my career' (Student 89)

sufficient for students to achieve a number of learning outcomes (Box 1; Figure 1) that are likely to support the students' development of the desired human values sought in doctors, 1,2,7 as well as their abilities to practice interprofessionally.3

The HCA project appears to be successful in promoting feelings of empathy (Box 3), which is thought to help students connect the emotional and physical boundaries of taking time to provide good person-centred care when also fulfilling their clinical duties. During this experience students are able to talk and build relationships with the patients, which not only plays a key role in building empathy but also builds their confidence (Box 3). Indeed, the findings

presented here support previous evidence that suggest that HCAs can enhance students' learning in the workplace by allowing them to become more 'ward smart'.¹⁰

Early exposure working as HCAs appears to help medical students to relate to patients as individual people, augmenting the findings presented by Littlewood and colleagues regarding the benefits of early patient contact.⁸ Through this close and daily contact with patients, HCA work can help foster important human values,⁷ which are likely to positively influence students' perceptions of compassionate care and interprofessional practice.⁴

Previous findings reported from the CIPP show that early exposure to interprofessional learning (IPL) helps students understand their respective roles, as well as fostering positive attitudes between professions in providing high-quality and safe patient care. 13 Although this experience is not IPL, in that it only involves one student profession and with LOs designed for students only, rather than the HCAs, it does allow students to achieve a number of LOs linked to interprofessional practice, including the opportunity to appraise what attitudes and values will be important to them as future doctors (Boxes 1 and 3).

As exemplified briefly in Box 3, students express admiration for the HCAs and many were surprised to learn about all the different aspects of care that they provide and the valuable information that HCAs contribute to other members

Students completed and returned the feedback questionnaire after their shifts The HCA project appears to be successful in promoting feelings of empathy ...

Box 4. Some recommendations to those who wish to develop a similar project

- Involve clinical partners from the outset
- Agree learning outcomes
- Identify suitable environments for shifts
- Identify preparation needed for shifts
- Develop training together in light of the above
- Agree process of 'assessment' to ensure adequate preparation for shifts
- Ask clinical partners to identify and prepare health care assistant supervisors or mentors
- Make sure students know what to expect
- Pilot your agreed approach
- Evaluate appropriately, and share data with students, clinical partners and colleagues
- Be transparent about changes made in light of comments
- Allow some flexibility to meet the constraints and/or opportunities of different clinical sites
- Share best practice
- Celebrate success

of the health care team, including doctors. 10 Students mention a number of memorable moments that they believe they will carry with them into their future careers as doctors, which was also discussed by Fearnley. 11

Box 4 lists a set of key points based on their experience to date that may be of help to educators who wish to develop a similar intervention at their university.

Interestingly, some students feel that this type of project should be voluntary, as they believe that some students may struggle with some aspects of the work, e.g. dealing with personal hygiene. This warrants further exploration as we investigate the impact of this intervention. Indeed, we appreciate that there are a number of limitations of this paper in that it only presents evaluation data derived from feedback questionnaires from a relatively small number of students. Many of the participants had volunteered and are thus more likely to give positive responses. An in-depth research study is

underway to explore the lived experience of medical students working as HCAs and the perceived impact of this experience on their values and future practice.

CONCLUSIONS

Being at medical school is all about becoming prepared for a career as a future doctor. It is reasonable to conclude that the findings presented here suggest that students consider working as HCAs to be a privilege, as well as an enjoyable and meaningful learning experience, that is likely to influence their future careers as doctors.

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Ethical approval: As this is an educational intervention, ethical approval was not deemed necessary; however, data are presented adhering to ethical principles, including ensuring the anonymity of students, staff and patients. As students volunteered for the HCA project, they were told that their evaluation data might be used for publication but that their identification would be removed. It was confirmed by the chair of the Faculty Research Ethics Committee at the UEA that it was not necessary to seek ethical approval to share these data because they were collated when evaluating an educational intervention (through evaluation forms), and the feedback shared were treated confidentially so that students, staff or patients could not be identified.

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