




BMJ Open Identification of multicultural learning experiences following an international cross campus medical student exchange programme between the UK and Malaysia: a qualitative study

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ABSTRACT

Objectives In an increasingly global society, there is a need to develop culturally competent doctors who can work effectively across diverse populations. International learning opportunities in undergraduate healthcare programmes show various benefits. In medical education, these occur predominantly towards the end of degree programmes as electives, with scant examples of programmes for preclinical students. This study set out to identify the multicultural learning experiences following an early year international medical student exchange programme between the UK and Malaysian campuses of one UK medical school.

Setting Two cohorts of international exchange programme for second year medical students in the UK and Malaysia.

Design Interpretivist qualitative design using semistructured interviews/focus groups with students and faculty.

Methods Participants were asked about their learning experiences during and after the exchange. Data were recorded with consent and transcribed verbatim. Thematic analysis was used to analyse the data.

Results Four themes were identified: (1) overall benefits of the exchange programme, (2) personal growth and development, (3) understanding and observing a different educational environment and (4) experiencing different healthcare systems.

Conclusion The international exchange programme highlighted differences in learning approaches, students from both campuses gained valuable learning experiences which increased their personal growth, confidence, cultural competence, giving them an appreciation of a better work–life balance and effective time management skills. It is often a challenge to prepare healthcare professionals for work in a global multicultural workplace and we would suggest that exchange programmes early on in a medical curriculum would go some way to addressing this challenge.

INTRODUCTION

Developing culturally competent healthcare practitioners in this ever-increasing global

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ Data was collected from both sets of students (across 2 years, at different time points—during and after their exchange programme) and from staff, offering strength to the findings.
- ⇒ This is a unique student exchange with two sets of students attending the same University and experiencing the same medical curriculum across two different continents representing different healthcare systems.
- ⇒ Students who volunteered to take part in the study may be different from the rest of their cohort due to higher levels of interest in cross-cultural and international working.
- ⇒ Data was collected from students at different time points due to the global pandemic. Higher than usual workloads caused by the pandemic prohibited staff from taking part in the second year of data collection.

society has never been more important.^{1–5} Higher education institutes recognise the need for graduates to work effectively across diverse social and cultural environments and are focussing internationalisation efforts to better prepare their graduates to participate globally within their profession.^{6–10} Internationalisation has been defined as:

The intentional process of integrating an international, intercultural, or global dimension into the purpose, functions, and delivery of post-secondary education, in order to enhance the quality of education and research for all students and staff and to make a meaningful contribution to society (11, p29)

Internationalisation of healthcare education occurs through initiatives at the university's home campus,¹¹ through activities



organised abroad as part of learning, such as international placements or exchanges,^{12–15} and via establishment of campuses on other continents.¹⁶ Most frequently, international contact starts in the later years of health-care profession education, once students have sufficient clinical experience to enable them to work in a clinical environment abroad. There is a wealth of literature on the impact of international exchanges for allied health professionals, including nursing, occupational therapy, physiotherapy and speech–language pathology.^{14 17–20} The impact of international learning opportunities, such as through academic exchange programmes, includes benefits for personal and professional development, increased cultural competence and improved communication skills.^{5 10 12–14 17 20 21}

In medical education, the first opportunity for international experience usually comes between the penultimate and final year of study, in the form of an elective.^{22–24} An elective typically lasts 4–8 weeks and focuses on an area of medical practice often in an international setting, organised by the student.^{25 26} Examples of international programmes for preclinical medical students are scarce, and UK medical students have called for initiatives to increase international partnerships and collaborations, to learn about healthcare systems and global issues.^{12 27 28} In this paper, we describe and explore the learning experiences from an early year international exchange programme established between the UK and Malaysian campuses of one UK medical school.

BACKGROUND AND STUDY SETTING

In 2009, Newcastle University established a fully owned international branch campus in Malaysia, called Newcastle University Medicine Malaysia (NUMed). NUMed offers the same 5-year undergraduate degree in medicine (MBBS) as the Newcastle UK campus. See [box 1](#) for additional information.

In 2018, a student exchange programme was established by the programme leads in Malaysia (CG) and the UK (KM), for second year MBBS students in Newcastle and NUMed. This programme ran again in 2019, but not in 2020 and 2021 due to the global pandemic. The initiative was set up to offer students the opportunity to be part of a transnational medical school and all that this may offer including different healthcare, cultural and academic experiences both within and outside the medical school and the community.

In the 2018 exchange programme, 16 Newcastle students went to NUMed (13 British and 3 international) and 20 NUMed students went to Newcastle (16 Malaysian and 4 international). In 2019, 28 Newcastle students went to NUMed (27 British and 1 international) and 15 NUMed students went to Newcastle (8 Malaysian and 7 international). Faculty at NUMed are a mixture of Malaysian and international staff together with approximately a quarter of staff seconded from Newcastle University, UK.

Box 1 Contextual information describing Newcastle University's medical curriculum and the composition of Newcastle and NUMed's medical student cohorts

Newcastle University Medicine Malaysia (NUMed) was the first full overseas undergraduate medical programme to be accredited by the UK General Medical Council (GMC), and it is also accredited by the Malaysian Medical Council (MMC). On graduation, MBBS students have the option to apply for provisional registration with the UK GMC and for Malaysian citizens additionally with the MMC. MBBS at the UK campus (Newcastle) admits approximately 370 students per year, with 7% international students (numbers are capped by the GMC). Newcastle University has its campus within the city of Newcastle upon Tyne in the Northeast of England and has a population of around 28 000 students in total. MBBS at the Malaysian campus (NUMed) admits approximately 150 students per year with 30%–50% international students, mostly from Asia, and home students reflecting the major ethnic groups within Malaysia (Malay, Chinese, Indian and East Malaysians). NUMed has a population of less than 1000 students in total and is in a newly developed education campus.

The MBBS curriculum is outcomes based, integrated and case-led.^{46 47}

The same outcomes and assessments are delivered on both sites, with delivery of content similar, yet tailored to the local context. In first and second years, students' study 'Essentials of Medical Practice', covering key subject areas including medical sciences, clinical skills, ethics and professionalism, organised into 25 clinical cases. The second year exchange programme ran for semester 1, from mid-September to mid-December. In semester 1, students' learning was organised into six clinical cases covering topics such as fertility, infectious disease and neuroscience. Most teaching was campus based, with some early clinical and community experience visits to clinical sites around the regions. The first exams of the year were held the following January, once students had returned to their home campus.

At the Newcastle campus, most core teaching staff are from the UK.

Research aim, objectives and research question

The aim was to identify the multicultural learning experiences of an international cross campus medical student exchange programme between the UK and Malaysian campuses of one UK medical school.

The research question was: what are the perceived multicultural learning experiences from an international student exchange?

The objectives were to gain the perceptions of both the students and staff on the international student exchange programme using focus group or individual interviews.

METHOD

This study was conducted in the interpretivist paradigm, an approach concerned with understanding the world as constructed by the participants. This aids with understanding that knowledge is generated by a mutual understanding between the researcher and the participant.²⁹ This was deemed the most appropriate research paradigm for this study to let us explore both the personal and professional development learning opportunities, as

experienced by the participants, to give a greater understanding about the value of the cross-campus exchange programmes. In line with the interpretivist approach, qualitative data methods in the form of semistructured focus groups and interviews were used to capture the data.

To ensure trustworthiness of our qualitative data findings, we followed criteria developed by Lincoln *et al.*³⁰ The criteria of *credibility* were met by the researchers being part of the university and medical schools, but still being objective as the researchers did not have a teaching role in the MBBS undergraduate curriculum. The researchers were familiar with the campus context and undergraduate curriculum, which helped with the *transferability* criteria. *Dependability* was met through ensuring participant confidentiality and through triangulation of findings across both campuses, with two cohorts of students and by drawing on staff perspectives. The final criteria—*confirmability* was met through the researchers coding transcripts separately and then coming together to discuss the themes in the data to ensure transparency of the presented data.

Patient and public involvement

Due to the nature of the study, patients and public were not involved in the design of this study.

Data collection

Data was collected from two cohorts of exchange programme students across both campuses in two consecutive years (cohort 1=academic year 2018/2019 and cohort 2=2019/2020), described in more detail in [box 2](#). To facilitate triangulation, both students and staff who had been involved in the exchange programme were invited to take part in the study. Three researchers (CR, JI and BV) conducted the focus groups and interviews. All three are experienced qualitative researchers and did not have a teaching or supervisory role on the MBBS programme,

which enabled more researcher independence and objectivity during data collection and analysis. The semistructured focus group schedules and interview guide were developed with input from the three researchers and the programme director at NUMed (CG) (online supplemental material 1).

Students and staff recruitment

An invitation email and information sheet were sent to all students (n=79) between 2018 and 2020 and staff between 2018 and 2019 (n=37) involved in the exchange programme via a university administrator from respective campuses outlining the aims of the evaluation and highlighting participation was voluntary. To facilitate confidentiality, students were invited to email the research team directly to opt into the study.

Data analysis

Focus groups and interviews were audio recorded with participants' consent and transcribed verbatim to assist with analyses. The data from both cohorts were analysed thematically following the six steps of analysis as described by Braun and Clarke.³¹ This involves familiarisation with the transcripts, the generation of codes and themes. Themes were discussed among the research team to agree the codes. The analysis was developed iteratively, drawing on evidence from the transcripts. Illustrative quotes have been used to support the findings. Identifiable information was removed from the data to protect anonymity.

RESULTS

In total, 11 focus groups took place: 5 with Newcastle medical school students and 1 with staff, and 4 with NUMed medical school students and 1 with staff. In addition, six interviews with Newcastle medical students and four with NUMed medical students took place. Student participants were all in their second year of the MBBS course and between 18 and 25 years old. Staff participants all taught on the MBBS curriculum and there were a mix of male and female gender, of different teaching levels from teaching fellows to senior lecturers. It was felt that there was a good spread of gender, age and teaching levels to provide representative views. [Table 1](#) shows a breakdown of participants in each focus group.

Analysis of the data identified four main themes: (1) overall benefits of the exchange programme, (2) personal growth and development, (3) understanding and observing a different educational environment and (4) experiencing different healthcare systems. These will be discussed in the sections below.

Theme 1: overall benefits of exchange programme

Both staff and students commented that they had enjoyed their experience. Students reported their expectations had been met, and in some instances exceeded with some reporting it had been a life-changing experience.

Box 2 A table describing the data collection process

1. Students from cohort 1 were invited to take part in a 60 min focus group near the beginning of their exchange programme at both campuses. Questions focused on gaining an understanding of student's expectations of the exchange programme and to identify any initial concerns or challenges students may be facing.
2. Both cohorts were invited to take part in a 90 min focus group at the end of their exchange programme. Questions focused on students' views on the strengths and weaknesses of the placement and identification of learning opportunities
3. Students were invited to take part in a follow-up focus group (cohort 1) or 30 min interview (cohort 2). These follow-up interviews explored the students' transition back to their own medical school, and explored if, the learning opportunity had helped or hindered with further development and future directions in their learning.
4. Staff who had taught students were invited to take part in a focus group (cohort 1) to explore their experiences teaching the exchange students.

Table 1 Participant demographics broken down by individual data collection points

Students	Timeline	Participants
Cohort 1: September to December 2018–2019		
Newcastle students		
Newcastle students at NUMed campus	October 2018, focus group	8 (M=4, F=4)
	December 2018, focus group	7 (M=3, F=4)
Newcastle students at Newcastle campus	March 2019, focus group	11 (M=6, F=5)
NUMed students		
NUMed students at Newcastle campus	October 2018, focus group	13 (M=5, F=8)
NUMed students at Newcastle campus	December 2018, focus group	9 (M=6, F=3)
NUMed students at NUMed campus	March 2019, focus group	8 (M=3, F=5)
Staff		
Newcastle	April 2019, focus group	6 (M=4, F=2)
NUMed	April 2019, focus group	10 (M=5, F=5)
Cohort 2: September to December 2019–2020		
Newcastle students		
Newcastle students at NUMed campus	December 2019, focus group	8 (M=4, F=4)
	December 2019, focus group	7 (M=2, F=5)
Newcastle students at Newcastle campus	May 2020, interviews (delayed due to COVID-19 pandemic)	6 (M=2, F=4)
NUMed students		
NUMed students at Newcastle campus	December 2019, focus group	12 (M=7, F=5)
NUMed students at NUMed campus	January 2021, interviews (delayed due to COVID-19 pandemic)	4 (M=3, F=1)
NUMed, Newcastle University Medicine Malaysia.		

All students commented that they would recommend it to future students, and many commented that the programme should be run for longer than the 3 months so that they had time to adapt and adjust to changes in the learning and cultural environment. In addition, students reported benefit from exposure to different healthcare systems, cultural experiences and clinical environments, which were greatly valued and were reported by students from both campuses as being one of the main motivational factors in taking part in the exchange programme.

It exceeded all of my expectations it was honestly the best time of my life and I feel so grateful to be a part of it (Cohort 2, Newcastle student, May 2020)

...it was a good learning experience for them [Newcastle students], aside from the academic they've learnt a new culture. In NUMed itself they get a perspective of how we are doing things and they compared it with how it is done in the UK and how it is done here. (Cohort 1, NUMed Staff, April 2019)

Theme 2: personal growth and development

By being immersed in a different culture and learning environment to one they were used to, students were able to gain valuable insight into how they learnt and adapted to new situations. Experiences included: learning the importance of effective time management

and of having a work–life balance, personal growth through the development of new friendships, having the opportunity to expand their travel and social experiences, all of which increased their confidence and provided students with the opportunity to learn and develop new life skills.

Theme 2.1: learning effective time management skills

One of the main learning experiences for students across both cohorts and campuses was recognising the importance of effective time management and work–life balance, which they reported they planned to capitalise on when returning to their respective campuses. This change in attitude to time management was also something observed by staff when their students returned from the exchange programme to their respective campuses. Exposure to the UK campus showed the NUMed students an alternate approach to studying which students perceived to facilitate a better work–life balance. Consequently, some NUMed students became more critical of their full timetable in Malaysia affording them less time for extracurricular activities and self-directed learning (SDL). In contrast, UK students and staff commented that UK students had learnt better time management skills and ethos to learning which they had brought back to the UK. This shows a two-way learning process, where

both sets of students gained from learning a different approach to studying.

I would say time management skills were important because obviously we were away so we wanted to see everything, to then balance that with our studies was quite challenging, but has also made my work life balance much more efficient now coming back to the UK and I have noticed I have more time to do hobbies and stuff because I can work more efficiently now because I was so used to it in Malaysia having to work efficiently (Cohort 2, Newcastle student, May 2020, Interview 1)

By being in a different cultural environment and observing different ways of learning and studying, students reported that it was not always necessary to study for long hours and being able to better manage their study time meant that they could have a better work–life balance. This was especially apparent for the NUMed students where work–life balance was usually focused more toward studying long hours, which can often be attributed to cultural expectations.

I really like the culture of the people here [UK] because they don't just study, they also enjoy their lives. Like they had their priorities not just 100% study...I feel like this is something we need to learn (Cohort 2, NUMed student, Dec 2019)

Theme 2.2: learning experiences through building new relationships and travel

Personal gains reported by both staff and students included being able to meet and socialise with new people. Some students commented that their communication skills and confidence had increased as a result of meeting new people and travelling to a new country to study. The smaller size of the campus at NUMed was also mentioned by several Newcastle students as facilitating a friendly environment, which encouraged friendships and a sense of community. This contrasted with the Newcastle, UK campus, which was often commented on as being very large with many students, and this sometimes made it difficult to help foster a wider friendship circle.

I think the biggest point was probably the life skills more than actually learning because it was like the same course, so the lectures were kind of similar. It was the life skills of being thrown in there [NUMed] with loads of different people I didn't know before, so the communication skills really improved, and confidence improved (Cohort 2, Newcastle student, May 2020)

I think, it's just my opinion, that it's a good experience, not only for them [Newcastle students] but our students also here... It's a positive experience, not only academically but socially (Cohort 1, NUMed staff, April 2019)

Having the opportunity to travel and experience new places and cultures had helped to facilitate strong friendship bonds and increase self-confidence.

Theme 3: understanding and learning from a different educational environment

This theme is focused on three subthemes: engagement in discussions, student experiences of SDL and language barriers experienced. The first theme highlights the different cultural styles to engaging in discussions, the second theme focuses on learning approaches used at the two campuses, whereas, the final theme focuses on didactic versus SDL.

Theme 3.1: engagement in discussions

Students were able to experience and observe a different teaching and learning environment as part of their exchange programme. Both Newcastle and NUMed students and staff observed that Newcastle students were initially more confident when engaging in discussions and asking questions in lectures and seminars. NUMed students were aware of their own hesitancy to ask questions but referred to cultural norms in their own country, where students were not always encouraged to question content. In lectures, students preferred to approach staff at the end or ask questions via email.

Usually, the questions come from the Newcastle students rather than from Malaysian students. And for us it is easier to approach the lecturers at the end (Cohort 1, NUMed student, Oct 2018)

This observation was further supported by staff at both campuses who noted that the NUMed students were quieter and more reserved in class and only offered an answer to a question if asked directly. However, when asked directly, it became clear that the students did have a great deal of knowledge. This reticence by NUMed students improved with encouragement from other students and as their confidence and understanding of expectations within a UK seminar grew.

More guarded, yeah and much more shy...they always do all the pre-reading, all the preparation, they were very well prepared ...But when you are teaching them clinical skills, they wouldn't give you an answer unless you asked them, and then they would have amazing knowledge but often wouldn't share it unless probed (Cohort 1, Newcastle staff, April 2019)

At the beginning I noticed the local students were quite intimidated when they are around, ... the local ones are more timid, but then come the latter half of the seminar, I think they get used to having him or her ..., and the enthusiasm of the UK student become infectious and spread all throughout the other members (Cohort 1, NUMed Staff, April 2019)

Students and staff from both campuses observed that there was a flatter hierarchy in the UK compared with their experience in Malaysia. NUMed students welcomed



a flatter hierarchical relationship between staff and students when they were in Newcastle. However, UK students were often vocal and challenged staff at NUMed, which could be seen as disrespectful in South Asian societies. However, some NUMed staff reflected that whilst this was challenging, they learnt from the experience.

Then perhaps it also boils down to the culture because in the Southeast Asian region talking to someone in a higher rank is frowned at being disrespectful. So that's the culture that we have. So, you're not supposed to talk to someone who is your teacher, so that culture is still very obvious among locals. Unlike the other hemisphere where we are encouraged to be more vocal, more outspoken. So, you would see the clash of the cultures in session (Cohort 1, NUMed Staff, April 2019)

Personally, I found it wasn't easy to have a vocal student in any specialty small group teaching but since I was exposed to them, I get used to it. (Cohort 1, NUMed staff, April 2019)

Theme 3.2: experiences of self directed learning (SDL)

Students from both cohorts reported that there were different teaching styles across campuses with fewer time-tabled lectures and seminars in the UK, which enabled more time for self-directed study and less didactic teaching compared with NUMed. Students across both campuses commented that SDL and being a more proactive learner was encouraged more actively at the Newcastle campus. Generally, NUMed students appreciated this, stating that SDL helped them become a more independent learner, which would help them when they became a doctor as this would be an essential skill. Some NUMed students commented that they planned to continue this way of learning when they returned to NUMed. Newcastle students commented that exposure to a more didactic style of teaching at NUMed helped them focus on their learning more and reinforced their views on the importance of SDL.

In Newcastle we have a lot more self-directed learning compared to Malaysia, so it has encouraged me to learn more by myself compared to just learning to do whatever the lecturer gives here. I become more like proactive to find any resources other than lecture notes from the lectures here [NUMed] (Cohort 2, NUMed student, Jan 2021)

However, some NUMed students reported that there was initially a period of adjustment to having more SDL. Some students discussed not knowing how much depth they needed to go into subjects and found it challenging not knowing what aspects were important to learn. NUMed staff thought that NUMed students may find SDL more difficult due to differences in their school education.

I think that's an indication of the difference in the education system because in the UK from very young

that's what you're doing, do that learning yourself. (Cohort 1, NUMed staff, April 2019)

Theme 3.3: language barriers

The UK and those students whose language was not Malay (Malaysia's official language) reported having difficulties in the clinical placements in Malaysia due to language barriers. However, many students did comment that there was usually a Malay-speaking student to translate for them, which was helpful. One could also argue that having to communicate through a translator is a good learning opportunity, for when they are doctors this is a potential scenario. However, this was challenging for staff as they needed to make sure there was another student in the group to translate.

...the problem is, I have to distribute them into different consultation rooms. So, all the time this exchange student should have at least one local student with them because the language of the patients would be Bahasa (Cohort 1, NUMed staff, April 2019)

That was probably a bit more difficult [clinical placement] mainly because of the language barrier. I couldn't really do much when I was there but people in my seminar would be quite helpful and translate for me. They could speak Malay and translate it but actually it was quite difficult, the patients didn't speak any English (Cohort 2, Newcastle student, May 2020, Interview 1)

Theme 4: experiencing different healthcare systems

One of the main learning experiences for students across both campuses was that they were able to experience, then compare and reflect on the differences between their respective healthcare systems. Four subthemes emerged: opportunities to be part of a clinical team, different approaches towards patient centredness, exposure to different illnesses and reflection on healthcare systems.

Theme 4.1: opportunities to be part of a clinical team

The NUMed students commented that they appreciated having the opportunity to be part of the clinical team while under supervision, rather than having a mainly observational role as in Malaysia. In the UK, students were able to practice taking histories and examine patients. They valued being able to put what they had learnt in the classroom into practice. Observations were also made about the differences of hierarchy within the healthcare systems.

Over there [UK] you actually see what we're being taught in class, what we're taught on paper, actually being implemented and we can actually apply it much better. I can actually do it; history taking without needing anyone to translate for me (Cohort 2, NUMed student, Jan 2021)

It's just a different kind of health care system I would say. In Malaysia you will find there is like a hierarchy system where the top man will be very powerful and right at the bottom you will just listen to whatever. I think it's just a different health care system because of different environments maybe. (Cohort 1, NUMed student, Dec 2018)

Theme 4.2: different approaches towards patient centredness and confidentiality

Both cohorts of students commented on their observations of the differing approaches to patient care. Participants observed more patient centredness, and shared decision-making in the UK hospitals, which they observed to a lesser degree in Malaysia. Being able to observe patient centredness in the UK and the way The National Institute for Health and Care Excellence and General Medical Council guidelines were practised in a clinical setting was, for some NUMed students, one of the reasons they had initially chosen to do the exchange programme. One observation made by students from both campuses was how interested and surprised they were by the high number of patients in the hospitals and clinics in Malaysia compared with the UK, and how this impacted on the time doctors could spend with patients.

The waiting rooms in [Malaysia] are much larger, more crowded. There's not much privacy in [name of hospital] that's because there are more people coming in... and the doctors do a really good job of getting patients in and out, whereas in the UK I feel like the GPs take a bit more time to examine their patients ...it is always one patient to one doctor. There is always that doctor patient confidentiality whereas here in Malaysia at least I've seen two doctors in one consultation room and sometimes there is that lack of confidentiality (Cohort 2, NUMed student, January 2021, Interview 2)

Very interesting, I mean my first placement was in a clinic, so just seeing the vast numbers of people there in the clinic compared to say, the UK (Cohort 1, Newcastle student March 2019)

NUMed staff observed how natural the UK students were at taking a patient history especially regarding the more sensitive questions. However, having the opportunity to observe UK students taking patient histories was a good model for NUMed students as positive peer observation to help them become more comfortable and confident when taking patient's histories.

Also, in the history taking I noticed especially when you are taking history and in the sexual history, like something sensitive, when the UK students do it, it is very natural whereas the local students are like shy. So, I think they learnt from them how to illicit that history in a natural way. (Cohort 1, NUMed staff, April 2019)

Theme 4.3: exposure to different illnesses

Both cohorts of students noted they saw different types of illnesses in patients in Malaysia compared with the UK. NUMed students commented that there were more mental health issues in the UK, while UK students observed a wide variety of tropical diseases in Malaysia. Having the opportunity to see this variety of different illnesses was felt to be a good learning opportunity.

I think the cases are very different in Malaysia because in the UK I got to see a lot more mental health problems compared to here [Malaysia]...I think the best is the patient visit where I visit the patient three times...I can know the depression experience within the NHS, what procedure they do and then how everything is done, and then I can know about what they do to follow-up (Cohort 2, NUMed student, Jan 2021)

Theme 4.4: reflection on healthcare systems

By having the opportunity to experience and observe different healthcare systems, students were able to reflect on and appreciate their own healthcare system more. NUMed students observed that in the UK, patients had to wait a long time for appointments both in primary and secondary care, which they commented was a downside of doctors spending extra time with patients. Newcastle students commented that they welcomed the opportunity to experience a different healthcare system to the one they were used to. Some commented that it had made them appreciate the way the National Health Service operated, having had the opportunity to experience a different healthcare system.

I'd say the Malaysian healthcare system is efficient, more efficient than the NHS (Cohort 2, NUMed student, Jan 2021)

Yeah it made me appreciate the NHS so much you have no idea. It's unbelievable, I think everyone needs to do it before they criticise the NHS. No but that was for me the biggest thing (Cohort 1, Newcastle students, March 2019)

NUMed students commented that the exchange programme had influenced the way they interacted with, and viewed, patients once back in Malaysia. The learning experience had taught them to think more about the patient's perspective, be more empathetic and communicate better with patients. However, there was a feeling from some NUMed students that the way healthcare is practised in the UK may not work as in the same way in Malaysia as it does in the UK due to cultural expectations from patients and different resources available in Malaysia. UK students commented on the high number of patients who attended the hospitals.

If we take the people we are actually treating [In Malaysia], if you give them time to explore their 'ideas, concerns and expectations' (ICE) because



there are a lot of patients, and they aren't really as educated as you would like them to be. So, if the doctor spends time exploring the ICE, you wouldn't really get through it all and it's different in terms of that (Cohort 1, NUMed student, March 2019)

I think it's because of the healthcare system over in Malaysia is very paternalistic, ... But what I found out was in some aspects paternalistic aspect of the Malaysian healthcare does help, so for example with the MMR [measels vaccination] they don't have any issues there because they just do what the doctor tells them. Whereas here we clearly have some issues with the MMR... (Cohort 1, Newcastle students, March 2019)

DISCUSSION

In this paper, we have reported on the learning experiences from an early year international exchange programme established between the UK and Malaysian campuses of one UK medical school. Previous research has emphasised the importance of providing an international global experience within medical education with the aim to improve global health awareness.¹² Findings from this study have highlighted the importance and wealth of learning that can be gained from being immersed in a different country and culture, both educationally and as regards personal development.

The cross-campus exchange programme took place in the first 3 months of the second year at medical school. The exchange programme was viewed positively with students saying they had enjoyed and valued the experience. Students commented that they would recommend the exchange programme but suggested it run for longer, possibly the full year, to enable students to fully immerse themselves in the culture and the campus.

An interesting finding was the comparison that students made between the two healthcare systems. Gaining a deeper understanding of healthcare systems through the comparative experience led students to comment on the strengths and weaknesses of both and reflect on whether the approach of the host country would work in their own country. It is a valuable learning opportunity to step outside one's own healthcare system and gain learning from another healthcare system.^{15 32 33}

There are inherent cultural and systems-based tensions in running a medical programme in a different international setting. Healthcare models and practices taught within the cultural West, such as patient-centred care and shared decision-making, do not always translate effectively into a different healthcare system. Although Newcastle students noted the efficiency of the Malaysian healthcare system in terms of numbers of patients treated in reduced time, the trade-off was doctor led care drawing from a paternalistic healthcare system.³⁴ The more paternalistic approach could be driven by patient preference and cultural factors, with poorer patients

and less well-educated patients preferring the paternalistic approach.^{28 34} For example, the older generation and those less well educated may be more familiar with a paternalistic approach and prefer doctors to make the decisions for them, believing this is the doctor's role and feeling they are not qualified to take on this shared responsibility.^{34 35}

The NUMed students were notably more positive about their UK clinical exposure, which was understandable given they were receiving a Western curriculum, which was delivered in a non Western setting. Therefore, the teaching was now aligned with clinical practice and thus had more meaning. In contrast, UK students commented on the expediency of the Malaysian healthcare system where hundreds of patients would be seen and treated in 1 day, contrasting with the large waiting lists and delays in the UK. In the UK, the focus is on one-to-one consultation and patient confidentiality. However, there have been examples in the UK where expediency is important such as mass vaccination centres for COVID-19 and for children receiving their influenza vaccination via a nasal spray in large numbers in a school setting.

Personal development was viewed by students and faculty members as an important part of the exchange learning experience. Both sets of students commented that they had increased their awareness of maintaining a work-life balance to help reduce burnout in the future. This was especially highlighted for NUMed students who studied long hours due to cultural expectations, often reflecting family pressures to succeed and where becoming a doctor is viewed as a long-term investment for the family.³² Exposure to the UK campus showed the NUMed students an alternate approach to studying which facilitated a better work-life balance. Consequently, some NUMed students became more critical of their full timetable in Malaysia. In contrast, UK students commented and staff noted that they had learnt better time management skills when back in the UK. This shows a two-way learning process, where both sets of students gained from learning a different approach to studying.

Interestingly, while the NUMed students welcomed more SDL, they were less familiar with it and initially hesitant about it. This reflects differences in learning approaches³⁶⁻³⁸ for both groups of students. For example, in East and South-East Asia, there is a Confucian Heritage Culture in which individuals share social behaviours including learning approaches, based on Confucian values.³⁸⁻⁴⁰ This approach values memorisation as the first step in a sequential learning pathway to before understanding, applying, critiquing or modifying.⁴¹ Pre university, there has been more emphasis on passive learning: didactic teaching, rote learning and not questioning the teacher.⁴² This differs from a more Western, Socratic approach to learning which values questioning and inquiry as one of the first steps towards understanding.⁴¹ Having a better understanding of these different contexts helps us to understand why NUMed students were more comfortable with passive learning approaches and why

UK students were more comfortable with active learning approaches.

These differences in learning approaches provide an understanding about the ways both sets of students had to adapt to a new learning environment.^{33 36} This is further highlighted by Azila *et al* who conducted a study with Malaysian students who reported finding PBL challenging,⁴³ an issue also highlighted by NUMed students when starting at Newcastle. However, interestingly both sets of students adapted to the new approach at each campus and saw the value of a different approach to teaching and learning.^{28 38}

Both sets of students had different experiences of hierarchy and power differences (power distance relates to the extent to which power is distributed⁴⁴). Power differences in relation to hierarchy were experienced in lectures and small group teaching by both students and staff in university settings and in doctor/patient interactions in clinical settings. Different cultures operate different power distributions with some cultures having a relatively flat hierarchy and others a very pronounced hierarchy. With greater power distance, as seen more frequently in Asian cultures, staff and students are further apart and are more hesitant to express their views openly, with seniors awarded more respect. In a healthcare setting, patients are more likely to accept the doctors' view without questioning and will not necessarily expect shared decision-making.³⁸

The opportunity to experience a different healthcare system helped students to be more prepared for a multicultural workplace; for example, working with translators due to language barriers, exposure to different illnesses, having the opportunity to understand and be more sensitive to different cultures and care for patients in a multicultural clinical environment. Healthcare practitioners who have a better understanding of multicultural patients and workforce will be more adapted to the global workplace, as highlighted in a similar nursing exchange programme.¹⁵ A review of medical exchange programmes (predominantly electives for nurses) found that students increased their cultural humility, leading to students being more respectful and having a greater understanding and empathy toward multicultural patients.⁴⁵

Conclusion

The international exchange programme across the two campuses highlighted differences in teaching and learning approaches, yet students from both campuses gained valuable learning experiences which have increased their personal growth, confidence and cultural competence, giving them an appreciation of a better work-life balance and more effective time management skills. It is often a challenge to prepare healthcare professionals for work in a global multicultural workplace and we would suggest that exchange programmes early on in a medical curriculum would go some way to addressing this challenge.

Strengths and limitations

This is a unique student exchange with two sets of students attending the same university and experiencing the same medical curriculum across two different continents representing different healthcare systems. Data was collected from both sets of students (across 2 years, at different time points—during and after their exchange programme) and from staff, offering strength to the findings.

Students who volunteered to take part in the study may be different from the rest of their cohort due to higher levels of interest in cross-cultural and international working. In addition, data was collected from students at different time points due to the global pandemic and also prohibited staff from taking part in the second year of data collection caused by the pandemic and high workload.

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Newcastle and NUMed student exchange

Topic Guide for Focus Group at the end of the exchange programme

Benefits

1. First, how did the placement go?
2. What were your expectations? and then explore whether these were met?
3. Starting with the positives, can you tell me what went well?
4. What did you enjoy, was anything particularly good or interesting?

Challenges

5. Now turning to any challenges, you may have experienced, was there anything that didn't go so well? Can you say more about that?

Learning:

Thinking about the learning opportunities,

6. What are the main learning points you will take from this exchange opportunity?

Prompts ask about lectures, seminars, Self-directed learning, staff

7. Reflecting on your clinical experiences - How did your clinical experiences go?
What did you learn?
8. How did it compare with your own country?
What did you learn?

Culture

9. What about the culture in the UK/Malaysia, was there anything in particular you noticed?
10. What were your experiences outside the medical school, how did that go?

Final comments

11. Is there anything else you would like to say about your student exchange?
Would you recommend it?
Any advice for future improvements?
12. Finally, are there any other comments that you would like to make related to the exchange programme that you think we have not been mentioned?

Thanks very much for taking part.

We aim to hold one more focus group with you at the end of March (so 3 months after your return to your home campus), to capture your reflections on the exchange and any impact.

Topic Guide for Focus Groups: follow up

Overview

1. How did you find readjusting back to being in Newcastle/NUMed? explore?
2. Thinking about your student exchange, now you are back in the UK/NUMed, what are your reflections of your experience?

3. Did the exchange programme meet your expectations? Are you able to give any examples please.

Learning

4. Are there any learning experiences that you would like to share?
5. Have you changed your approach to learning following the exchange programme? If yes, in what ways – give examples.
6. What were your experiences of the healthcare service in the NHS/Malaysia? Can you provide any examples? (can be both positive and negative)
7. What were the best learning opportunities?
Anything not so good?

Future

8. Are there any suggestions you would like to make to improve the exchange programme for future students going to NUMed/Newcastle?
9. Do you have any suggestions to improve the learning experience here at Newcastle/NUMed following your exchange?
10. Would you recommend the exchange to other students?
11. Is there anything else you would like to say about the student exchange?

Thanks very much for taking part in the focus group!