Abstract During the last twenty years there has been a significant growth in the training of overseas students especially within the European Union. This development has been paralleled by the emergence of off-shore medical schools in the American hemisphere. These facilities are to be found in both traditional established universities as well as less robust institutions. This review will deal specifically with students trained within established universities far from their own communities. It will concentrate particularly on the European Union where there are now more than 20 such English Parallel courses. The review considers the experience of students studying in a foreign culture with different teaching and learning norms. It suggests the need to develop support networks and to encourage the emergence of specialist cultural advisors with links across the European Union to ensure that the specific needs of such students should be considered for when they return to their home communities. The long-term benefits of building a trans-European medical workforce are also discussed briefly.

Keywords Undergraduate, Medicine, Non-home, English Parallel

1. Introduction

The education and training of students from countries other than that of the host institution occurs commonly. Indeed, as part of its drive to create a European identity, the European Union (EU) has long been committed to the principles of mobility between member countries and common recognition and equivalence of qualifications. This has been embodied in the Socrates and Erasmus programmes. However, international movement of students has a far wider basis - including the experience of people from former British and French colonies as well as that of Chinese and Japanese students. Host institutions which provide such training are widespread with experience gained from the Soviet Union and China as well as the USA, Britain and France. Based on this international practice it is possible to investigate many aspects of training outside country of birth and apply the findings to overseas students who have sought training in medical schools in the UK as well as British students on English Parallel courses in Central and Eastern Europe. There are now at least twenty such programmes within the EU. (1,2) Quantitative studies have shown the magnitude of the problem. Between 1990 and 2005 one thousand six hundred and fourteen (1614) doctors, who had trained in the selected universities from Eastern Europe, registered with the General Medical Council (GMC) in the United Kingdom and 58 were registered in Ireland. (1) However, the data have limitations and may well underestimate the true magnitude of the problem. In particular it is not readily possible to distinguish British and Irish citizens who trained in these institutions from indigenous graduates who then moved to the UK and Ireland. Clearly “English Parallel” courses are not directly comparable to programs conducted in the native language of the region. In particular there will be differences in the nature of patient contact. The recent emergence of comparable schools at Pavia and Milan in Italy, Groningen in the Netherlands and the inclusion of English Parallel courses in Zagreb and Split in Croatia during 2013 gives some urgency to the need to understand the needs of students studying outside their home country. [2] In 2006 China recognised the value of such medical training programs in which the medium of instruction is English and designated 50 of its medical schools as suitable for providing such training. The widespread development of English Parallel courses also identifies a need to develop integration programs for such graduates when they return to their home communities to practice. The need for such support clearly emerges from a qualitative study of relevant medical student blogs posted on the internet. (3) Six blogs from across Central and Eastern Europe written over various periods, with one as long as six years, emphasized the culture shock, associated with depression and loneliness, experienced by many students in such circumstances. They also confirmed the need for good quality learning environments and practical training in clinical procedures. Such concerns are linked with the nature of patient contact experienced by these students. The difficulties reported in these blogs needs to be contrasted
with the experience of Norwegian medical students training within the EU. (4) In excess of 70% of Norwegian students in Central and Eastern Europe are in medical studies. In general they receive support from Norway and its government is aware of details of individuals and their training and so able to offer support to returning graduates.

2. National Approaches to Teaching and its Impact on Students from a Different Culture

In addition to work on migrant students, it is important to incorporate other cross-cultural research into any analysis. For example, between 1967 and 1973 Geert Hofstede collected data on leadership behaviour from a range of countries. He used questionnaires to collect this information - the data represent an average for that nation and do not reflect individual characteristics. Indeed use of such stereotypes is subject to criticism because there is often significant variation within groups. (5) In addition it creates a racial stereotype which can form the basis for discrimination. However, from these data, he suggested five dimensions to national culture:

- Power Distance
- Individualism versus collectivism
- Masculinity versus femininity
- Uncertainty avoidance
- Short-term versus long-term orientation (6)

He defined Power Distance as:

“the extent to which a society accepts the fact that power in institutions and organisations is distributed unequally. It’s reflected in the value of the less powerful members of society as well as in those of the more powerful ones.” (6)

Uncertainty avoidance is a measure of the:

“extent to which a society feels threatened by uncertain and ambiguous situations and tries to avoid these situations by providing greater career stability, establishing more formal rules, not tolerating deviant ideas and behaviour, and believing in absolute truths and the attainment of expertise” (6)

Amongst the original 40 countries included in the study were: USA, UK, Belgium, France, Ireland, Italy, Finland, Denmark, West Germany, Austria, Spain, Italy, Netherlands, Norway, Sweden and Turkey. Subsequent work has taken place in the Czech Republic, Hungary, Poland and Slovakia. (7,8 & 9) (Table 1). More recent extensions of the work now include Asian and African countries.

Table 1. Hofstede’s Cross Cultural Dimensions (5)

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3. Student Experiences in a New Culture

As long ago as 1956, Carey conducted a subjective qualitative review of the experience of colonial students in Britain. Students were asked to write essays outlining their experiences in the UK Common themes observed were an initial excessive optimism followed by chronic disillusionment.(10) The cause was mainly found in the ignorance of British people about the students' culture and attitudes. Of 140 comments made in 73 invited essays from overseas students written in 1963, 121 were unfavourable and included remarks such as “reserved, patronising, superior, critical and unfriendly”.(11) Although this project did not use modern sampling methods to ensure that the views were representative, these opinions are in no way unique to the British, or to that period. Such attitudes are likely to have a direct and adverse effect on the learning environment. For many, such experiences come as culture shocks.(12) They can be characterised by:

1. Strain resulting from psychological adaptations
2. A sense of loss and deprivation of friends and family
3. Rejection by members of the new culture
4. Confusion as to one's new role
5. Surprise and indignation at the cultural differences
6. Feelings of impotence and an inability to cope

Work in the 1980s on overseas students during their first year in Brisbane showed them to be at significantly greater risk of severe clinical depression and loneliness than students from Australia. (13) Feelings of isolation continue to be a problem in the 21st century.(14) Research amongst British and French students who spent a year abroad studying and working in the French or English language have shown that factors such as accommodation, finance and support from the school were important for success.(15) Ten years later these students had resolved into one of two groups – those that realised they belonged “at home” and a second group who became more aware of other cultures and who developed a more varied approach to their future careers.(16)

Of course, such problems are not unique to students training away from their home country, but can also be felt by students based at home. However, the situation for students working away from their home country can be more severe. The very nature of the course limits integration into the host environment. For some authors culture shock is a transient phenomenon and may ultimately have a positive value, allowing students to broaden their value base and develop new attitudes.(17,18) However, it is this culture shock which may be one cause for the high drop-out rate experienced in some courses, especially at the beginning of a program. A comparison with the experience of students who are integrated into training programs, which use the national language, would allow some insight into this drop out phenomenon.

4. The Role of Homesickness

In addition, homesickness has been recognised as a problem. Studies on English psychology students have suggested that it is probably short-lived. (19) However, these studies did not look at students living in a different communion at some distance from their home base. Factors which are linked to feelings of homesickness include:

1. Long distances from home.
2. Studying at a university which was not the student's first choice.
3. Poor quality residence (20)

Fisher has suggested that homesickness can directly affect performance resulting in a poorer quality of work.(21) Medical students blogs, in particular The Pragueress of Dan Kameiny, confirm the role of these issues, as well as commenting on the quality of training offered. (3)

5. Potential Solutions

In some institutions, there is an awareness of the problems encountered by students in such situations. However, the
pastoral care offered to such students seems, in practice, to be very limited. Social support networks, including those outside of the university environment, could provide some help in overcoming these difficulties. Through such networks a student can feel cared for, valued and develop a sense of belonging. In other words, they develop a sense of community. Such a community feeling may emerge from study groups or simple friendships. Sharing stressful experiences can strengthen the group. Although many students develop these relationships through a process of trial and error, the separation of students into small groups for clinical teaching can enhance their development, especially if students are encouraged to identify their own groups, rather than having the membership imposed by management and course organisers. For some students the problem remains one of isolation. They study alone, they do not integrate into the local community and lack support mechanisms for courses, which are still characterised by multiple and frequent examinations. An intriguing analysis of the Framingham Heart study has shown that social networks in that community are associated with happiness. In addition changes in individual happiness can ripple through the network and affect members up to three degrees removed from the individual.

The development of a network, which includes local nationals, will increase a student's adjustment and satisfaction with his or her stay. Again, such developments could be facilitated through linking visiting with that of indigenous students. Indeed the quality of contact between students and local nationals is one measure of whether they are tourists or sojourners.

To some degree, the strict segregation of these two groups of indigenous and English Parallel students is a challenge to the planned integration of higher education across the European Union and in newer provider countries, such as China. The role of academics and members of the teaching staff in programs of integration needs official encouragement and further evaluation. As mobility increases and the concept of a European workforce develops such integration becomes both desirable and mandatory. It is an opportunity to breakdown nationalistic barriers which prevent free and easy movement of skilled labour throughout the Union. English Parallel courses in medicine and dentistry would be an ideal area in which to initiate such work and should attract appropriate funding from the EU. The current movement by the British government to impose checks on the English linguistic abilities of graduates from outside the country fails to recognise these needs and opportunities. Brislin has suggested that training for academic staff who work with foreign students should focus on:

- Self-awareness about their own cultural behaviour.
- Training about the cultures of their students
- An understanding of explanations for behaviour of other societies, in particular those of their students.
- Behaviour modification
- Experiential learning through role-play.

However, the impact of such programs is yet to be evaluated in a formal trial. The appointment of cultural advisors to all medical training programs could expedite this form of training and the emergence of a European professional association could strengthen their role in all member states of the Union as well as countries such as China, Turkey, Russia and Armenia.

6. What Students Could Hope to Gain from their English Parallel Courses?

A practical example of issues that can arise from culturally different perceptions about academic learning may be seen in the Confucian view that success comes from effort and failure through lack of effort, On a simplistic level it takes no account of the Western view that success is due to ability, while failure reflects a lack of ability.

Chan and Drover have suggested that foreign students are seeking the basic requirements that make up a good quality learning environment. These would include lectures that are well prepared and relevant, easy access to an up-to-date library, a computing centre and a faculty who are both knowledgeable and committed to the concept. The assessment of the learning environment largely depends upon national quality assurance programs. In the case of medicine these may include formal assessment by the national licensing authority for clinical practice. Nevertheless there is a place for seeking a broader European wide body, which assesses learning environments as well as course content. Indeed such a body could operate worldwide. Its purpose would be to ensure ease of mobility throughout the European Union, both for undergraduate students as well as qualified medical practitioners. The European Association for Quality Assurance in Higher Education (ENQA) was delegated by the Ministers of the signatory states to the Bologna Process to begin such work. Standards by which member states can be assessed were drafted in May 2005 and have already been used to assess the performance of universities in Central and Eastern Europe.

Such a body could encourage both tutorial staff and students to seek education at a range of medical schools, so broadening experience and ensuring the concept of professionals able to deliver a comparable service throughout the member states. Indeed, in 2008, Semmelweis University opened a branch in Hamburg allowing students to complete their clinical studies either in Germany or Hungary. This followed on from an annual arrangement with the University of Canberra whereby 18 graduates in medical science were able to complete a shortened medical course of three years. If this sort of approach is to be achieved on a wider basis then national differences in educational systems will need to be reconciled. Although such differences are in many ways stereotypes they do have an underlying pattern. For example, French universities are said to place an emphasis on acquisition of facts with regular class attendance, while German
universities encourage student freedom and place their emphasis on understanding concepts. (35) Traditionally examinations in Eastern Europe have required oral presentations randomly selected from a published list of topics.(36) This has required an extensive factual knowledge base and, to some degree, there has been a lack of emphasis on critical analysis. However, in 1994 Teichler suggested that on the basis of the experience of those working with Erasmus students the standards achieved by British students were rather lower than those from other parts of Europe.(37) In order to overcome these limitations effort is needed from both teacher and student. This effort must characterise any integration of cultures across Europe, not just those of universities and academia.

Work from Cluj-Napoca, Romania has indicated that this may not be easy. Two years after the introduction of curriculum reform the majority of respondents to a structured questionnaire agreed that there was a positive climate for educational innovation. Influential members of the teaching faculty were in support of the program, but it lacked adequate finance and staff felt excluded from the decision making process. (38) An additional problem recognised by Brown and Atkins is the extra time required of academic staff when supervising students from other countries.(39) This may adversely impact on their research output and other committee and administrative work. (40) Successful Education Requires Cooperative Learning in Which “the teacher becomes an advisor, guide, helper, supporter and partner” (41)

Such an approach is different to that traditionally seen amongst lecturers from Central and Western Europe. However, the need for “individual programs of study for students” is now being recognised and implemented. (42) In the Ukraine it has been accompanied by a realisation that there must be exchanges with academic institutions where such practices are common place. At Yerevan State Medical University in Armenia reforms related to the Bologna Declaration have meant that the medical course is now integrated around systems with clinical skills and knowledge interwoven into the early years, which were once purely pre-clinical in nature. In addition, examinations are now written and multiple choice in character, rather than oral, more frequent and assess less content.(43) The implications for the teaching faculty include:

- Improved presentation skills and in-house instructional material
- Use of evidence based material to underpin instruction and to demonstrate to students its role in the delivery of medical care
- To develop an understanding of how to write learning objectives and goals for modules.

Again, specific training of the faculty is needed together with appropriate finance. The EU could encourage these developments through formal courses and the recognition of medical teaching champions and cultural advisors in each medical school. Their role would be to promote good practice.

7. Potential Areas of Research:

Although the research on students who have trained on “English Parallel” courses is very limited and largely descriptive there are significant barriers to future research. Firstly there is no clearly defined cohort of such students. British and Irish students on such courses have registered on an individual basis and there is no central list. This means that even simple measures of “drop-out” and failure rates can only be gleaned with the cooperation of individual medical schools who provide such courses. Once graduated and registered in the UK or Ireland there are no easy ways to identify such graduates with certainty. There is a particular problem with students with Asian or Middle Eastern surnames. From available data it is impossible to distinguish British and Irish citizens with such names from graduates outside these two countries who have subsequently registered to practice medicine within them.

There needs to be a drive to encourage:

1. All UK and Irish students to register with a voluntary body supported by the GMC and Irish Medical Council. It would then be possible to track the progress of such students prior to graduation and subsequently. With the interest now taken by the GMC in medical students within the UK it would not seem unreasonable to offer support and monitoring to British students outside the UK but within Europe. For those students who trained outside the EU jurisdiction in countries such as China, India, Pakistan, Armenia and Russia there remains a requirement to pass the Professional and Linguistics Assessment Board (PLAB) examination and so they may be clearly identified.

Once a system for recognition of students on English Parallel courses within the EU exists there is a clear need for research on:

1. The motivations of such students.
2. Causes for “drop-out” and examination failure
3. Views about the adequacy of teaching and practical experience
4. The impact of limitations on patient contact through language issues
5. The subsequent integration of such trainees into clinical practice on their return home.
6. Problems of obtaining employment as doctors within the UK and Ireland
7. Subsequent experience with professional monitoring bodies such as the GMC

8. Conclusion

The expansion of the European Union and the internationalisation of education provide a major challenge to conventional patterns of medical education. For the student body it can cause homesickness, clinical depression and drop-out. For the teaching facility it can challenge cultural pre-conceptions and undermine traditional teaching formats. However, if accepted, it can strengthen teaching and
improve clinical practice throughout the EU
At present there are at least twenty medical schools within
the EU which offer training on “English Parallel” courses.
New courses appear each year and the number expands with
the expansion of the EU, most recently through the
admission of Croatia. In addition there are many such
schools in candidate countries, such as Turkey, Ukraine and
Armenia. Almost two thousand such graduates registered to
practice in the UK up until 2005 with a significant expansion
after the admission of Central and Eastern European
countries to the EU. Conservative estimates would indicate
that there may be 2000 medical students with British
citizenship on such courses. Graduation gives automatic
entitlement to practice throughout the EU. However, there is
limited knowledge of these students and no monitoring or
support is offered to them. We have no data on “drop-out”
rates or failure rates. We have data limited to medical student
blogs on the difficulties which they may experience.
Concerns about an adverse impact on their assessment limit
readiness to take part in qualitative research (3). This paper
suggests the need for formal involvement of the GMC and
the Irish Medical Council in the identification and support of
these students. Such an approach would allow more formal
studies and would ensure appropriate man-power planning.
In the past some groups of junior doctors were labeled “the
lost tribe”. (44) Such a title befits this group of students.

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