Medical education without borders

Emmaline Brouwer

MEDICAL EDUCATION WITHOUT BORDERS

THE WHAT, WHY AND HOW OF INTERNATIONAL MEDICAL PROGRAMMES

Medical Education without Borders

The what, why and how of International Medical Programmes

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Emmaline Elisabeth Brouwer

Supervisor
Prof.dr. Erik Driessen

Co-supervisor
Dr. Janneke Frambach

Assessment committee
Prof.dr. Sylvia Heeneman (chair)

Prof.dr. Janusz Janczukowicz (Lodz University, Poland)

Prof.dr. Anja Krumeich

Dr. Rashmi Kusurkar (VUmc, Amsterdam)

Dr. Dominique Waterval

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Chapter 1

Introduction

Globalization & medical education

Introducing the topic of International Medical Programmes

Globalization influences our society in many ways. In higher education, blurring boundaries facilitate the flow of students, knowledge and teachers across borders. This is visible in student exchange programmes, collaborative international research projects and curriculum partnerships. In medicine, globalization encourages patients, doctors and pathogens to travel. This changes the disease epidemiology that doctors face and increases the diversity of their patients' national, linguistic and cultural backgrounds.

Undoubtedly, globalization thus has consequences for the training of future doctors. In medical education, too, the effects of these blurring boundaries are emergent. International student mobility in medicine and nursing has increased significantly over the past decade (OECD, 2019). The effects of globalization are also visible in the changing content of medical education, where curriculum internationalization, for example through global health and intercultural communication courses, aims to better prepare medical students for their diversifying future work context.

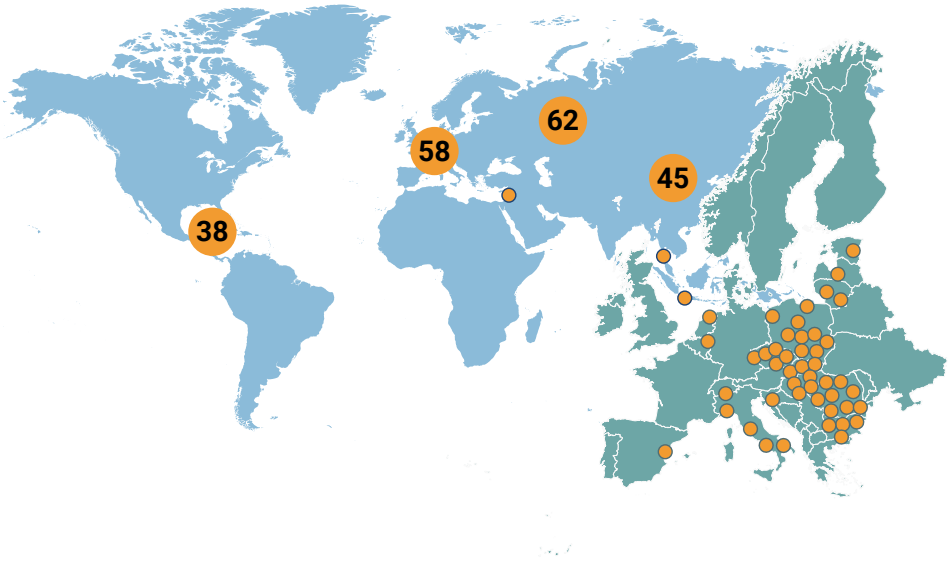

Figure 1. World map of International Medical Programmes (data from 2016)

In this thesis, I present an exploration of a particular response to globalization in medical education. International Medical Programmes (IMPs) are distinct medical programmes, characterized by active international student recruitment, English as the language of instruction and an internationalized curriculum. For example, Maastricht University since 2008 has an 'International Track in Medicine' (ITM) Bachelor programme that runs in parallel to the regular Dutch curriculum. Initially launched as a translated programme for Middle-Eastern scholarship students, today it attracts up to 60 students each year from 17 nationalities, who learn about additional themes such as global epidemiology and health system comparison as part of their course. During their BSc, these students also learn Dutch to be able to do their clinical rotations in Dutch hospitals.

Maastricht University was not the first and is not the only university with an IMP. In a mapping project that preceded the studies presented in this thesis, I found over 200 schools globally engaging in this type of education (Brouwer et al., 2017). Geographically, these schools cluster in Europe, Asia and the Caribbean. Figure 1 presents a map with IMP locations globally. While these schools share the characteristics of international student recruitment, English as a teaching language and curriculum internationalization, our mapping project also highlighted a large variation, especially in admission procedures, fees, batch sizes, programme duration and teaching methods.

This combination of shared characteristics in diverse academic contexts makes IMPs a unique environment to see the consequences of globalization in medical education in action. As I will argue in this introduction chapter, internationalizing medical education involves many different choices on the aims, the vision and the content of education. Our exploration of IMPs presented in this thesis intends to contribute to better understanding these choices and to critically reflecting upon them.

In the following paragraphs, I will first define and discuss the central concepts that form the framework for the studies in this thesis. Next, I will present the overall research question and the aims of the individual studies, followed by a brief description of the eight International Medical Programmes that shape the research context. This chapter ends with a piece on reflexivity, where I introduce myself as a researcher.

Concepts & controversies

Introducing the conceptual framework & theoretical lens

Some concepts are worth further elaboration, to better understand how International Medical Programmes are illustrative of the global developments that medical education meets and the debates around them.

First, it is important to define **globalization** in the context of higher and medical education. The term globalization originates in the field of economy and was first used in the 1980s to describe "changes in global economics affecting production, consumption, and investment" (Spring, 2008). It has since been regarded as a multifaceted concept that reaches beyond economy across essentially all areas of social life, including culture, technology and politics (Stromquist & Monkman, 2014). In the social and cultural sense, globalization entails the easier (virtual and physical) flow of people, ideas and commodities across borders. Globalization processes undeniably impact higher education in many ways. Notably, increasing global market forces and international law on trade in services legitimizes commercialization and marketization of higher education (Tilak, 2008). At the same time, higher education is regarded as an important site where information and ideas spark and circulate and that therefore fuels globalization (Hanson, 2008; Tight, 2021). In this thesis, I position globalization as an established "part of the environment in which the international dimension of higher education is becoming more important and significantly changing" (Knight, 2004). I do acknowledge, however, that globalization in higher education is not a neutral concept. Globalization obviously offers many opportunities for higher education in terms of international student recruitment and cross-border partnerships in education and research, for example. Yet, marketization and for-profit education are criticized for putting universities' roles in serving the public interests and in ensuring the integrity of research at risk (Tilak, 2008), and education quality does not necessarily benefit from, for example, competition between institutions or the widespread uptake of English as a language of instruction (Hanson, 2008; Hughes, 2008).

The concept of **internationalization** in higher education typically refers to the actions and policies that institutions develop in response to globalization (de Wit, 2013). Perhaps the most widely quoted definition of internationalization in higher education is by Knight (2004) who proposes "a process of integrating an international, intercultural, or global dimension in the purpose, function or

delivery of postsecondary education". This broad definition refers to a diverse range of activities related to teaching and learning, student recruitment and research. While globalization is mostly regarded as unalterable, internationalization involves many choices (Altbach & Knight, 2007).

As the studies in this thesis will explore and critique some of these choices, it is important to be aware of the major motivations at institutional level to engage in internationalization. These motivations are typically clustered in four categories or rationales. In the political rationale, internationalization of higher education occurs in response to a country's position and role as a nation in the world. The economic rationale can refer to long-term contribution to skilled human resources for the country, or short-term financial benefits through tuition fees. The academic rationale departs from the assumption that quality of higher education improves when teaching and research are embedded in an international dimension. Finally, the cultural/social rationale concentrates on the importance of understanding foreign languages and culture and on preservation and promotion of national culture (Mok, 2007; Qiang, 2003).

These rationales and motivations are traditionally presented as overlapping and interdependent (Mok 2007). However, more recent observations suggest that political and economic drivers dominate internationalization policies and that the traditional values of cooperation, mutual benefits, and capacity building are overshadowed by competition, commercialization and status building (Knight & De Wit, 2018).

Thirdly, the concept of **global health** deserves some attention. Global developments in health care and medicine provide specific additional arguments and motives for internationalization of health professions education. Globalization has a huge impact on the health of the world – the recent SARS-CoV-2 pandemic being a wry illustration. Epidemiology of infectious and non-communicable diseases changes, migration increases the diversity of patient populations, and medical tourism is expanding. Also, with these changes, the labour market for health care workers is globalizing. Thus, the role of and international demand for health care workers changes, prompting training institutes to rethink health professions education (Ortiga, 2014; Walton-Roberts, 2015). Acknowledging that 'global health' is difficult to define, because it can refer to the current state of global health, or to an objective (a world of healthy people), or to a research field, Koplan et al. define the concept as "an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide" (Koplan

et al., 2009). How global health can best be implemented in medical education, however, is subject of ongoing debate (Jogerst et al., 2015). Especially issues of equity, ethics and neo-colonialism are considered underrepresented in current global health teaching (Adams et al., 2016; Eichbaum et al., 2021).

The concept of **curriculum internationalization** offers an appropriate structure to approach questions on curriculum design choices in International Medical Programmes. Using a broad characterization of the concept 'curriculum', internationalization of a curriculum has been defined as "the incorporation of international, intercultural and/or global dimensions into the content of the curriculum as well as the learning outcomes, assessment tasks, teaching methods and support services of a program of study" (Leask, 2015). Leask has suggested a conceptual framework for curriculum internationalization (Figure 2), taking in account the professional discipline at the centre, and the different relevant layers of context interacting with the curriculum and decision making in curriculum design at the bottom of the framework.

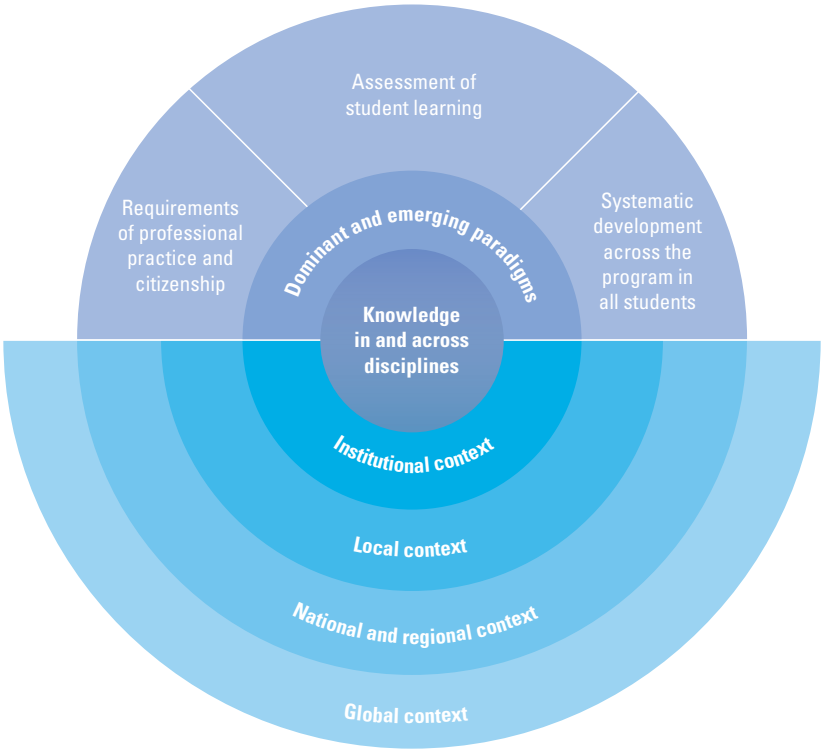

Figure 2. Conceptual framework for internationalization of the curriculum (Leask 2015, p27)

The top half of the framework is concerned with elements of curriculum design and the paradigms underpinning this. The framework reflects the complexity of the context in which curriculum internationalization takes place. The author emphasizes that "multiple allegiances of academic staff (to their discipline community, their university, industry and professional groups) and the complex roles played by universities on the local, national and global stage, create conflicting and competing demands on the curriculum" (Leask & Bridge, 2013). The choices that must be made as a result of these competing demands, in the context of IMP practice, inspired this PhD project.

In this thesis, I draw on **critical theory** to explore International Medical Programmes and internationalization in medical education on a conceptual level. Critical implies questioning and challenging in terms of equity and social justice, leading to critical consciousness (White, 2015). The controversies introduced earlier justify a critical approach to the topic. The dominance of economic and political drivers in higher education internationalization and the debate around neo-colonialism in global health education in particular indicate potential disparities and inequities that deserve further exploration. For critical theorists, reality is shaped over time through social, political, cultural, historic, economic and gender structures that distribute power in societies. Critical theorists see knowledge as political and subjective, and view language as an important mediator of reality. Critical theory has a strong element of social justice that underpins it and a desire to change the world for the better (Bunniss & Kelly, 2010; Paradis et al., 2020).

In medical education research, adopting a critical approach means "exploring the roles played by medical schools and educators in constructing power and privilege in our societies (and) asking whether they sustain a status quo or work toward greater equity" (Hodges, 2014). The approach has been used to study gender imbalances in academia and ethical issues of brain drain, for example.

While not all the empirical studies in this thesis explicitly set out on a clear critical theory stance, as a group the studies reflect a critical approach to the topic of International Medical Programmes and the controversies sketched before. The studies address ethics and equity issues, including questions around universalism, privilege and neo-colonialism and thus instigate a critical reflection and a call for action in the discussion of this thesis.

Practice & purpose

Introducing the research questions & the studies

International Medical Programmes have received little attention in the academic literature in higher and medical education. To our knowledge, besides a few published programme descriptions and evaluations (Margolis, 2013; Teichholtz et al., 2015; Yang et al., 2016), no empiric studies on this phenomenon existed prior to this thesis. Yet, the existence of International Medical Programmes raises questions on their aims, vision and programme content.

A first set of questions concerns the *aims* of IMPs. What do IMPs aim to achieve for their graduates? What is their role in preparing students for the future global healthcare workforce? Which choices do IMPs make when they consider these aims?

A second set of questions concern the *vision* of IMPs. Why do medical schools engage in international medical programmes? What are the rationales for doing so and who benefits from this education model? Which considerations, implicitly or explicitly, inform these choices?

And thirdly, questions arise around the *content* of IMPs. How do these schools decide on the curriculum for the international students? Which choices do they make regarding the teaching content and modalities, and which arguments have they considered in these decisions?

Choices around the aims, vision and content of IMPs are visible in curricula and institutional policy, and have implications for different actors involved; staff, students and graduates. These enquiries thus inspired the formulation of the overall research questions of this thesis:

> *How do choices around the aims, vision and content of IMPs play out in the curriculum and for the actors involved?*

The overall research question will be explored in more detail in the five chapters following this introduction.

The first two chapters together present a multi-centre instrumental case study of International Medical Programmes in Maastricht (the Netherlands), Pécs (Hungary) and Kuala Lumpur (Malaysia). **Chapter 2** first explores different perspectives on what International Medical Programmes (should) aim to achieve and what their curricula look like. Based on interviews with teachers and curriculum designers, and an analysis of curriculum documents such as module

descriptions and lesson plans, I describe curriculum practices, challenges and concerns across these three IMP contexts. In **Chapter 3**, I further analyse the interviews and zoom in on ethical dilemmas around the aims and the vision of internationalization in higher education and describe how they play out in the teaching practice of IMPs.

In **Chapter 4**, the perspective shifts to IMP students and alumni and their experiences of the aims and programme content. In this chapter, I explore how well prepared these graduates feel for the cross-border transition to their early careers, and which lessons for curriculum design we can draw from their experiences. To study this, recent graduates of seven different International Medical Programmes are followed during three years in a multifaceted international, longitudinal, mixed-methods study, using surveys and interviews.

While completing the previous studies, I started to recognize diverging perspectives around the purpose, value and desirability of IMPs that I did not completely grasp. **Chapter 5** results from a discourse analysis project to explore the implications of these diverging perspectives. I return to the interview data from Chapter 2 and 3, using a different lens and analytical approach, and include scholarly literature, policy documents and public domain texts in this study.

Finally, **Chapter 6** presents a conceptual paper in which I reflect on problems and solutions in medical education internationalization, exploring conflicting stakeholder interests and discussing some of the tensions in transferring education across international contexts.

The chapters' specific research questions, study design, context and data sources are summarized in Table 1 on the page on the right.

The thesis concludes with a Discussion chapter where I discuss the main findings and the implications for research and practice, followed by chapters describing the Impact of the research and an overall summary.

As this thesis is based on articles, some repetition of information cannot be avoided.

Ch	Research questions	Methodology & design	Context & participants	Data sources
2	What are the challenges experienced in international medical programme design? Which potential curriculum strategies can be identified?	Qualitative multicentre instrumental case study	26 key-informants from 3 IMPs (Netherlands, Hungary, Malaysia)	Semi-structured interviews and 125 curriculum module descriptions
3	How do academic staff in international medical education experience and act upon the ethical concerns surrounding their programmes?	Qualitative multicentre instrumental case study	24 key-informants from 3 IMPs (Netherlands, Hungary, Malaysia)	Semi-structured interviews
4	1/ What are career choices (location, specialty) of IMP graduates and motivations behind these choices? 2/ What are their experienced (international) job requirements? 3/ How do they evaluate the IMP curriculum's success in preparing them for the job market?	Longitudinal, mixed method design	7 IMPs in 7 countries and 188 graduating students with 30 nationalities	Baseline & 2 annual follow-up surveys + a series of 3 semi-structured interviews with a subset of the participants
5	How is the purpose of International Medical Programmes discursively constructed at (inter)national regulatory, institutional and individual level? And what are the implications of the co-existence of these discourses for the different stakeholders?	Critical Discourse Approach	2 IMPs (Maastricht & Pécs) and their national (policy) contexts	An archive consisting of previously conducted key-informant interviews (in Chapter 2 and 4); policy documents relevant to the two contexts; peer-reviewed scholarly literature; and public domain texts relevant to the global context
6	What problems does internationalization fix in medical education? Or does it perhaps create more problems than it solves?	Reflection on solutionism in medical education internationalization		

Table 1. Overview of studies in the thesis

Embracing diversity

Introducing the research contexts

This research project was carried out at Maastricht University in the Netherlands, where the 'International Track in Medicine' (ITM) that was introduced earlier in this chapter formed the inspiration and a core research context of the studies presented.

However, a research project on internationalization requires an international approach. Aware of the diversity in programmes and countries where IMPs exist, I aimed at including a geographic and contextual variety of research locations. The nature of the research does not aim nor allow for comprehensiveness and generalizability, but I was committed to ensure that the findings would be recognizable and conclusions applicable to the majority of IMPs globally. In an initial scoping project, I therefore first defined International Medical Programmes as medical programmes in non-Anglophone countries that actively recruit international students, have English as the language of instruction and employ an internationalized curriculum. I then used online search engines, prospective student fora, recruitment agency websites and relevant literature to compile an overview of medical schools that fit this working definition. I found over 200 IMPs worldwide and mapped their main features, including batch sizes, programme age, tuition fee, admission procedures and degree awarded. In a subset of fifty schools that had more details available online, I compared core curriculum characteristics such as teaching and assessment methods and approaches to clinical rotations (Brouwer 2017).

I approached twenty schools that represented a variety in these characteristics and invited them to take part in the study that is presented in Chapter 4 of this thesis, to which eventually seven schools responded positively. One additional school did not take part in the Chapter 4 project but did collaborate in the case study project in Chapter 2 and 3.

Table 2 on the right page summarizes the main characteristics of the eight participating institutions that together form the research context of this thesis. More details are included in the relevant chapters.

University	Country	Start date	Batch size	P/P	Curriculum characteristics	Participated in chapter
Universitas Gadjah Mada	Indonesia	2002	80	Public	5Y, integrated & PBL	4
Jagiellonian University	Poland	1994	60	Private	4Y graduate entry, lecture & discipline based	4
International Medical University Kuala Lumpur	Malaysia	1993	2x 100	Private	First 2.5 years in Malaysia, then transfer to partner school abroad; mixed teaching methods, integrated	2, 3
Maastricht University	The Netherlands	2009	60	Public & private	6Y, integrated & PBL	2, 3, 4, 5
Universita di Pavia	Italy	2009	100	Public	6Y, lecture & discipline based	4
University of Pécs	Hungary	1985	150	Private	6Y, Lecture & discipline based	2, 3, 4, 5
Riga Stradins University	Latvia	2010	200	Public	6Y, Lectures & small group seminars, discipline based	4
Zheijang University	China	2004	80	Public	6Y, lecture based	4

Table 2. Summary of the characteristics of the research contexts

Introducing me - a piece on reflexivity

London, 2011

Finalizing my MSc in Public Health, I ponder about my future career. I learned that medicine is so much more than what happens inside the hospital walls. I am an idealist. I believe that education is one of the most powerful weapons to change the world (Nelson Mandela). I want to travel, to see and learn from different places and contribute to health care development. I wonder: Can I find a career path that allows me to combine my interests in medicine, education and internationalization?

Maastricht, 2016

5 years later. My work for SHE Collaborates, the international project office of Maastricht University's School of Health professions Education, has brought me to all corners of the world. I have worked with and learned from amazing professionals in medical education at home and abroad. I feel honoured to be contributing to future doctors' training, directly as a teacher in the Netherlands and indirectly through capacity building projects internationally. Yet I also question if we do it right. And I wonder: how should medical education respond to globalization?

Lisbon, 2021

5 years later. In this thesis, I present the results of six years of learning, thinking, studying and writing. Of pausing and pondering and of not letting the issues of the day dominate. Finalizing my PhD in medical education internationalization, I obviously have more questions than answers. I wonder what's next?

I have always loved travelling.

This thesis is the result of a data collection journey through seven countries, sometimes virtually, sometimes physically, and of participating in conferences in another five. I spent a good deal of the time working on this thesis living in another country, and on planes to and from quite a few more.

This thesis is also the conclusion of an academic education journey that I started as an internationally oriented medical student, followed by public health training,

culminating in qualifications in academic teaching and research.

Like the participants in Chapter 4, I am not completely sure what I thought when I aimed for 'an international career', but I surely experience my current work as such. As a teacher, I hold various teaching roles in Maastricht University's International Track in Medicine programme and I supervise clinical students during their international electives. As a project manager, I have coordinated collaborative capacity building projects in health professions' education in more than fifteen countries in the past ten years.

I believe that these interests and experiences have contributed to the work presented in this thesis in many ways. There have been practical challenges and dilemmas in teaching that inspired research questions. There have been conversations with students and colleagues around the world that motivated me to pursue these research projects. Working with medical schools in so many contexts in various roles has taught me to appreciate diversity and challenged me to critically reflect on differences I saw.

I am also aware that my personal background, assumptions and subjectivity have shaped the research. I became aware of this, as the other journey that I travelled while this thesis was taking shape, is my journey as a researcher. As a medical doctor, and to a lesser extent as a Public Health professional, I was taught to believe that reality exists, that there is one objective truth and that research aims at finding evidence for it. This positivist approach to science fits well with most biomedical laboratory research and randomized controlled trials. In this epistemological stance, the researcher is fully objective towards the object of study, and their background is irrelevant. Starting this PhD trajectory, I may well have believed that my research would find or at least contribute to finding "the right way of doing internationalization". But the real world where education and educational research take place, is messy, uncontrollable and subjective. Learning to do research in this environment, I was guided to understand that multiple truths exist. That they are constructed by and between individuals, and that research is about better understanding various interpretations and perspectives. In these more critical and constructivist approaches to science, the researcher is part of the research process, for example when she interacts with research participants during interviews in a qualitative study. The researcher's background, my background, is intertwined with the research.

I also learned that this is not a bad thing, and that researchers engage in reflexivity to account for how subjectivity shapes the inquiry (Olmos-Vega et al., 2022).

Describing my personal journey above to make my changing perspective on research explicit in part serves this goal. A researcher's diary with written reflections collected at different stages of each study guided reflexive discussions in the research team, and each chapter includes a more detailed reflexive paragraph highlighting the role and background perspective of the different co-authors. For the studies presented in Chapters 2, 3 and 4, that were based on interviews, I involved participants in the reflexive process by sharing a summary of our data interpretations and including their comments and nuances in the further analysis.

I no longer believe that this thesis points towards the right way of doing internationalization in medical education. I do believe that my research contributes to better understanding considerations, challenges and controversies in medical education internationalization, and I've learnt that research often inspires more questions than answers. The journey will continue.

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Chapter 2

Educating universal professionals or global physicians? A multi-centre study of international medical programmes design

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Abstract

Introduction Medical schools increasingly offer curricula that specifically aim to prepare students for an international medical career. This is challenging as well as controversial: curriculum designers must balance specific local healthcare requirements with global health competencies doctors need in our globalized world. By investigating how international medical programme designers experience this balancing act, this study aims to contribute insights to the debate on local versus global medical education.

Methods We conducted a multi-centre instrumental case study across three universities with international medical programmes in three countries. The study involved 26 semi-structured interviews with key curriculum designers recruited through purposive sampling. Additionally, we performed a curriculum document analysis. Data were thematically analysed within a multidisciplinary team.

Results Participants described two profiles of international medical programme graduates: 'a global physician', equipped with specific competencies for international practice, and 'a universal professional', an overall high-level graduate fit for future practice anywhere. These perspectives presented different curriculum design challenges.

Conclusions International medical programmes teach us how we can rethink graduate profiles in a globalizing world. Yet, educational standardization poses risks and securing equity in global health education is challenging, as is preparing students to be adaptable to the requirements of a rapidly changing future local healthcare context.

Introduction

Higher education institutes introduce new internationalization modalities to prepare their students for careers in the globalising world (Altbach & Knight, 2007; de Wit, 2013; Waterval et al., 2015). In medical education, these modalities typically target specific curriculum elements such as global health education or electives (Battat et al., 2010). Yet, medical schools are increasingly offering curricula specifically targeting international students (Hodges et al., 2009; Mayberry, 2013). In an attempt to estimate the scope of this phenomenon, we found over 200 medical schools globally with international programmes that aim to prepare students for a medical career abroad. These programmes were mainly located in Europe, Asia and the Caribbean (Brouwer et al., 2017). The advantages of internationalization to universities are manifold and may range from economic and academic to political and social gains, such as enhanced research capacity and increased cultural understanding (Altbach & Knight, 2007). Yet, designing a curriculum for a diverse student group whose future work context might be anywhere in the world is challenging and raises questions about curriculum content and requirements of global and local practice (Leask, 2015).

In the higher education literature, curriculum internationalization has been defined as a process of 'incorporating international, intercultural and global dimensions into the content of the curriculum as well as the learning outcomes, assessment tasks, teaching methods and support services of a programme of study' (Leask, 2015). However, a wide variety of interpretations of curriculum internationalization exist across disciplines, institutes and individuals (Leask & Bridge, 2013). This raises the question of how those involved in preparing students for practice or training abroad interpret curriculum internationalization. An answer to this may help us better understand their approaches to curriculum design.

Research outside medical education has pointed to the complexities of curriculum internationalization (Green & Whitsed, 2015; Leask & Bridge, 2013). It will inevitably meet with competing interests between local, national and global contexts, which requires critical choices (Leask & Bridge, 2013). Medical schools designing international programmes are likely to face similar challenges. Most international medical programmes are English-language copies of a local curriculum (Mayberry, 2013; Yang et al., 2016). But can a literal translation of a locally contextualized medical curriculum, focusing on local epidemiology

and healthcare systems, work effectively for international students? Critics of international education have questioned the appropriateness of such curricula for healthcare contexts elsewhere in the world (Crisp & Chen, 2014; Frenk et al., 2010; Hodges et al., 2009) and believe that students must be recruited from and trained in the area in which they will work (Celletti et al., 2011; Miller et al., 2011). Also, literature on international medical graduates' integration into North American and British healthcare systems has reported difficulties in adaptation to local organizations, communication practices and disease patterns (Pilotto et al., 2007; Sockalingam et al., 2014; Zulla et al., 2008). At the same time, many scholars believe that, in a time of globalization, all medical students must be adequately prepared for globalized healthcare practice by exposing them to intercultural communication, health system analysis and global epidemiology (Brown, 2015; Mckimm & McLean, 2011; Rowson, Smith, et al., 2012). The rising phenomenon of international medical programmes thus reflects a global-local tension in medical education, where responses to globalization at times conflict with calls for social accountability locally (Prideaux, 2019). It is imperative that international medical curriculum designers take account of future work contexts. How they balance these different local and global contexts in designing curricula, however, has yet remained unclear.

We therefore set out to investigate how international medical programme designers experience these questions of balancing contexts. Our research questions were: 'What are the challenges experienced in international medical programme design?' and 'Which potential curriculum strategies can be identified?' The answers to these questions will not only increase our understanding of this rapidly growing, yet under-researched international medical education phenomenon, but may also provide lessons for medical programme design generally in an era of globalization and contribute to the debate on local versus global medical education.

Methods

We conducted a qualitative multi-centre instrumental case study (Stake, 2005) using semi-structured interviews and document analysis. Its main purpose was integrative rather than comparative. By investigating cases holistically and in detail, this design allowed an in-depth understanding of the variety of experienced challenges and potential curriculum strategies.

Setting

The study was set in three universities in different countries that offer international medical programmes, defined as actively recruiting foreign students and designing or adapting a curriculum specifically for practice or training abroad. We sought to draw a sample that differed in curriculum structure, teaching methods, geographic location, programme age, annual student intake and student backgrounds, since we expected this miscellany to yield diverse, rich insights regarding the research questions. After an online search and document analysis (Brouwer et al., 2017), we found over 200 schools to be eligible globally, from which we selected the three international medical programmes presented in Table 1.

Participants and sampling

Prior to sampling, we broadly defined international medical education designers as anyone who had been involved in developing curriculum materials for the international medical programme. This included current and past curriculum directors, module coordinators, lecturers, student bodies and support staff. To identify key informants at each institute, we used a purposive sampling approach, aiming for diversity in positions, years of experience, disciplinary background and views of the programme (supportive/opposing). A local co-researcher in each institute invited potential candidates by email, yielding 26 participants across the three research contexts, with experience in their international programme ranging between 2 and 26 years. Seventeen participants combined teaching with curriculum design, seven had curriculum leadership roles, one was an administrator and one was a student.

Data collection and analysis

One researcher (EB) conducted the semi-structured interviews in all contexts. The interview guide included open questions on the interviewees' roles in the curriculum, their vision for the international programme, their main challenges in curriculum design and implementation as well as some specific probes on requirements for international practice, balancing local and global contexts and student diversity approaches. Interviews lasted between 45 and 75 min and took place in English or Dutch. All interviews were audiotaped and transcribed verbatim. The language used for the coding and data analysis process as described below was English. A professional language editor translated the quotations used in this paper from the Dutch transcripts.

Data analysis followed the thematic analysis method as described by Braun and Clarke (2006). In each setting, two researchers (EB and a local co-researcher) independently coded the first three interviews, after which they discussed codes and emerging themes to create an initial codebook. When all interviews were coded, the investigators (EB with KS in Pécs; EB with VDN and NHM in Kuala Lumpur; EB with JF and ED in Maastricht) discussed the key issues, challenges and strategies that curriculum designers reported. They then shared the summaries of data interpretation with the other team members. These summaries served as a basis for the integrative analysis with the aim to find the main parallels and dissimilarities across contexts. All authors met regularly to further review and refine the overall themes and key issues. We conducted a member check by collecting participants' feedback on the summaries of data interpretation per institute, which did not lead to adjustments.

Institute	IMP start date	Student intake per year	Student background	Teaching methods	Curriculum structure & language
University of Pécs, Hungary	1984	180	50% European (not Hungarian); 50% other	Mixed, mostly lectures, subject-based	6-year MD programme in English or German (patient contact in Hungarian) in parallel to Hungarian programme
International Medical University (IMU), Kuala Lumpur, Malaysia	1993	2x100	± 70% Malaysian; 30% other (mostly South East Asian)	Mixed, integrated	First 2.5 years in Malaysia, then either transfer to partner medical school abroad for MD degree (UK, Australia, Ireland, Canada) or stay in Malaysia for MBBS track
Maastricht University, Maastricht, the Netherlands	2009	60	± 30% Dutch; 30% European; 30% Middle Eastern; 10% other	PBL, integrated	3-year BSc programme in English in parallel to Dutch programme, followed by 3-year MSc in English abroad or in Dutch in the Netherlands

Table 1. Overview of participating institutes and characteristics of their international medical programme

To triangulate the findings from the interview data, we performed a curriculum document analysis. We collected and screened 125 module descriptions across the three programmes, and coded the international dimensions that we encountered in them. In identifying these dimensions, we focused on curriculum elements that explicitly discussed international competencies as suggested in the literature, such as cross-cultural communication, global health and epidemiology (Brown, 2015; Leask, 2015; Mckimm & McLean, 2011; Rowson, Willott, et al., 2012). Prompted by the interviews, we also looked for more implicit examples of curriculum adaptations to fit the needs of the international student group and their future global practice.

Research team and reflexivity

We also sought to achieve variation in geographic and disciplinary perspectives in the research team. This project originated at Maastricht University where EB, JF and ED are all involved in educational research and in the international programme as teachers. EB is a medical doctor trained in Maastricht, JF has a background in social sciences and ED in educational sciences. KS, who has a background in linguistics, works at the University of Pécs as researcher and alumni coordinator for the international programme. VDN is a biochemist trained in the educational sciences and currently the Dean for teaching and learning at the International Medical University (IMU), and NHM is a lecturer with a background in psychology. Both teach in the international programme. Throughout the project, the team have been aware that their background and experiences shaped their assumptions and the research itself. Continuous input from all members helped to balance all these perspectives.

Ethics

The study was approved by the Ethical Review Board of the Netherlands Association for Medical Education (ref no. 00929), the Regional Ethics Committee of University of Pécs (ref no. 6746), and the IMU Research and Ethics Committee (ref no. IMU412/2018). All participants gave their informed consent and could withdraw from the study at any moment.

Results

A global physician or a universal professional

A major finding of this research was that participants had markedly different perspectives on what defines an international programme and what it aims to achieve. Some believed the mere presence of international students made a curriculum international, while others considered all current medical education international. The programme aims participants described roughly fell into two categories: (1) to educate 'global physicians': a distinct group of future doctors with specific qualifications that made them fit for international practice; or (2) to educate 'universal professionals': high-level graduates who, regardless of their origin or destination, were fit for future practice anywhere. When the aim was to educate global physicians, there was an explicit focus on differentiation in the international programme and, consequently, there was a clear distinction between the international curriculum on the one hand and the parallel curriculum in the local language on the other.

> *We want to add and (…) spot all the international relevant topics and where to integrate them (…). To say at the end, you're really prepared for an- To be a doctor with an international background and not a doctor for [a local] patient. [Participant07]*

When medicine was understood to be a universal profession, the programme's focus was clearly on keeping all education content equal for all students.

> *International, in my point of view it means that if someone gets their diploma general medicine [here], they can go to anywhere in the world. The human body is the same (…) Everyone in each language must be trained the same way, must have the same knowledge. [Participant10]*

However, this definition or aim was not always clear to all teachers and students, nor was it consistent with the institutional aims, which complicated curriculum design strategies.

The global physician perspective: Adding an international flavour

The main curriculum strategy employed by participants using 'a global physician' to characterize their perceived graduate profile was to add an international flavour to pre-existing curriculum materials. These additions mainly concerned specific learning activities such as extra topics to be discussed in seminars or specific assignments for the international programme. In the curriculum materials, we

found themes such as global epidemiology, health systems varieties and socio-economic determinants of health. Examples included a table showing the distribution of stroke risk factors for women of different ethnic backgrounds or extra assignments, such as the one below belonging to a case study on mood regulation:

> *Discuss cross-cultural differences in the prevalence and conceptual models of depression. Are there different views on causes, manifestations, perception, and treatment of depression? What are the consequences of these differences in terms of treatment-seeking behaviour and stigma? [Document22]*

Notably, while most participants explained 'global' in 'global physician' as 'any place international', upon closer inspection of the interviews and documents this qualifier often referred to 'low- and middle-income' or 'tropical' settings. Many of the specific curriculum additions addressed knowledge and skills needed in resource-constrained settings with high infectious disease rates, for example.

This strategy to add international elements, however, was challenging for participants. Many curriculum designers felt that, in order to raise awareness of the differences in disease patterns, health systems or cultures that students could meet when practising in another country, they needed to incorporate specific features of potential practice locations. As the following quote demonstrates, it was not feasible to fit in the particularities of all potential destinations:

> *Of course you don't know where they will go then. It is impossible to [include] hundreds of settings. And if you happen to show the settings that aren't the ones, will it be of use to them? That's what the question is, really. You wish you could somehow equip them, so to speak, so they are able to make this transition themselves. (…) But how to do that, that's a really good question. [Participant03]*

Several participants added that it was difficult to meet all the different student expectations of the 'global physician' concept. Some students expected to be prepared for humanitarian work, others for global policy-making and yet others *'just wanted English' [Participant09]*.

The universal professional perspective: Being globally relevant

The approach to curriculum design taken by participants who perceived medicine as a universal profession was essentially to make the curriculum globally competitive. They mainly did so by benchmarking their programmes against other education and healthcare systems or through quality assurance. For instance, curriculum designers aligned their course content with recent versions of the United States Medical Licensing Exam (USMLE) or with entrance requirements applicable in their students' destination countries, used global frameworks for medical education and invited foreign authorities to assess the curriculum:

> *[Foreign medical schools] recognize [our] students' capability, recognize students' training or students' education so that (…) they are at par with [their] locally trained students. So when the medical schools overseas look at this, it is a very important aspect and we've been able to maintain this year after year. So that is the important thing. [Participant19]*

Another way to become globally relevant, as some participants described, was to strongly emphasize skills and professionalism, following the shift of focus from knowledge to skills and attitudes they saw in the US, UK and Australia:

> *Clinical skills have been given very much importance here and while practising clinical skills, students automatically become professionals. Professionalism automatically comes, isn't it? I mean these components I told which is universal for all medical doctors'. [Participant19]*

This group of curriculum designers too, however, felt it was challenging to balance the different requirements of potential future work contexts. Although they believed it would not harm students if they learned about the needs of a country they would eventually not go to, they were concerned that the curriculum would become overcrowded with additional objectives and activities. This problem was solved, in part, by the view that a curriculum's responsibility should be limited to teaching students basic knowledge and generic skills. Participants trusted students to develop further based on the local context where they would eventually work in. Hence, as one participant indicated, the aim of delivering 'lifelong learners'.

> *As long as you cover the basic important areas, the student will be able to learn more. Because what we want is for the students to be able to… they must have the basic things and certain things they need to tweak when they have to be in that country. [Participant26]*

In this connection, we observed that participants of both perspectives shared a similar goal, which was to incorporate the competency of adaptability in the curriculum. This need to prepare students in international programmes for the transfer to another location of practice that almost all participants mentioned was considered supplementary to the traditional set of learning outcomes for medical students.

> *We also put that competency alongside: you have to be adaptable, is our wish, that is the extra competency. Because all knowledge might be correct, but you shouldn't be able to apply that in one context only. [Participant02]*

Participants noted that achieving this was challenging. One strategy that participants discussed was to as much as possible expose students to different situations, aiming to train the adaptability competency like a skill. Examples of such different situations included exposure to patients from different cultural backgrounds (at home or abroad), to public, private and community based health care, and to different teaching and assessment methods – followed by reflective sessions or reports.

Discussion

This study explored the challenges international medical curriculum designers faced when balancing local and global relevance and the strategies they used to overcome these. Participants in our case study of three different programmes described two potential graduate profiles: a global physician specifically fit for international practice, and a universal professional or an overall high-level graduate who is fit for practice anywhere. The ways in which curriculum designers set the requirements for global medical practice and considered future local work contexts varied in accordance with each perspective.

Considering Leask's work on and definition of curriculum internationalization (Leask, 2015; Leask & Bridge, 2013), our study underlines the variety of interpretations of curriculum internationalization across institutes and individuals. Although it was beyond the scope of this study to explore the origin of these variations, it is possible that national historical and political factors influence the appearance of curriculum internationalization, as Stütz and colleagues demonstrated to be the case in Germany and Australia (Stütz et al., 2014). Our study further illustrates how these interpretations affect curriculum

design choices and, ultimately, graduate profiles.

Characteristic of the 'universal professional' perspective was a strong sense of global applicability of the curriculum, rather than pursuing an internationalized curriculum: any current curriculum that was 'up to global standards' could prepare a doctor for practice anywhere. This thinking is in line with for example the Institute for International Medical Education (IIME)'s efforts to establish a set of globally applicable standards for student performance(Stern et al., 2005) and the World Federation for Medical Education (WFME)'s initiative to ensure that accrediting agencies are at an internationally accepted standard (Karle, 2007). The concept of a universal professional was also identified as the most established vision of global medical competency in a large discourse analysis of the topic (Martimianakis & Hafferty, 2013).

Standardization of approaches and outcomes in medical education has also received criticism and raises questions about power dynamics in medical education globally (Bleakley et al., 2011). It is argued that the 'global' standards for medical education are largely derived from norms and traditions in Western countries that dominate medical education research and development, thereby potentially suppressing local needs and cultural values (Bleakley et al., 2008, 2011; Hodges et al., 2009). Several studies have suggested alternative responses to the globalization of medical education in non-Western settings, such as more hybrid models that allow for cross-cultural exchange and adaptation or contextualization of educational content or methods (Bates et al., 2019; Gosselin et al., 2016), sometimes referred to as 'glocalization' (Ho et al., 2017). These alternative approaches might not fit one-to-one to international medical programmes because of the variety in destinations, yet, considering the risks of standardization when designing international curricula might increase awareness of local values and potential inequities among future universal professionals. We encourage further research into the question of how global standards can be adapted to fit a diverse set of future work contexts.

Participants who shared the 'global physician' perspective, on the other hand, considered curriculum internationalization a goal in itself, to produce a special kind of medical graduate: one with additional skills and competencies to be able to practise globally. Yet, what this global practice exactly entailed was unclear to many designers who held this perspective, although they often took it to mean work in humanitarian or tropical contexts, rather than truly globally. The few previous publications about similar international medical programmes also

describe offering students extra global health-related education to prepare them 'for practice anywhere', while concentrating on resource-constrained settings (Margolis, 2013; Teichholtz et al., 2015). This view is also found in the literature on 'global health education', which often refers to overseas electives in low- and middle-income countries (Battat et al., 2010; Liu et al., 2015).

This narrow interpretation of global health has recently received criticism from scholars in the field who, moreover, question the ethical implications of electives in low-income settings (Adams et al., 2016; Khan et al., 2017; Peluso et al., 2017). They call for a broader and more balanced approach to global health education, where global health refers to health equity for all people worldwide (Koplan et al., 2009) and where students can develop their global health competencies in vulnerable communities closer to home, for example (Khan et al., 2017; Peluso et al., 2017). If international medical programmes aim to educate truly global physicians, they may benefit from a similar broadened way of thinking, starting by clearly defining their interpretation of the global physician for curriculum designers and current and prospective students.

The two perspectives in this study affected curricular choices that differed mainly on the level of teaching content. Participants across perspectives emphasized including the competency of adaptability in the curriculum to prepare students for international practice. This idea resonates with studies analysing transitions in medical education – both in international contexts (Koehn & Swick, 2006; Sockalingam et al., 2014) as well as in early career transitions generally (Cutrer et al., 2017; Murdoch-Eaton & Whittle, 2012). In a rapidly changing world where globalization and artificial intelligence are only two of many developments to consider in curriculum design, adaptability could be a valuable competency for all future doctors, regardless their location of study or practice. Participants in this study mentioned a few approaches to teach this competency. Exploring additional strategies and their effect could be subject of further study.

Limitations

This study was purposively designed to include three geographically and curriculum structure-wise diverse institutes to ensure a broad range of perspectives on the topic under scrutiny. This selection did not include all potential appearances of international medical education that currently exist globally, meaning we may have missed relevant additional perspectives or strategies in international curriculum design. We therefore invite future studies to expand the case study

approach to include schools within and across different countries and programme characteristics. We mainly focused on pre-clinical curriculum design, as in two of the institutes students did most of their clinical placements abroad. As a result, the data on programme design in the clinical phase of international medical education is limited. Also, we based our results mainly on designers' perspectives, which we triangulated with curriculum documents to limit bias. It would be of value to study the perspectives of other stakeholders too, such as the students and graduates from these programmes, as these could provide insights into the perceived alignment between curriculum and career requirements.

Conclusion

International medical programmes are on the rise around the world, educating a new generation of future doctors that could practise globally – in current curricula depicted as universal professionals or as distinct global physicians. Being explicit about the selected graduate profile not only helps teachers in their curriculum design choices, it also helps managing prospective students' expectations. International standardization of educational content and methods to achieve universal professionalism promotes degree comparability, but contextualization or 'glocalization' should be considered to secure awareness of cultural differences and values in local healthcare contexts. Adding global health content and skills can serve to prepare distinct global physicians, but curriculum designers should adopt a broad and equitable interpretation of global health that goes beyond tropical medicine. It remains challenging to prepare students to be adaptable to the requirements of a rapidly changing future local healthcare context.

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Chapter 3

‘Being international is always a good thing’: A multi-centre interview study on ethics in international medical education

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Abstract

Context Internationalization in medical education raises ethical concerns over, for instance, its for-profit orientation, the potential erosion of cultural diversity and the possibility that standardized education may not meet the needs of patients everywhere. These concerns fit into a broader debate on social responsibility in higher education. This study aims to explore how academic staff in international medical education experience and act upon the ethical concerns that pertain to their programmes. By adding their perspectives to the debate, this study helps us understand how theory-based ethical concerns are reflected in practice.

Methods We conducted a multicentre instrumental case study across three international medical programmes, all of which were characterised by an international student intake, an internationalized curriculum and international partnerships, and all of which used English as the medium of instruction. We conducted 24 semi-structured interviews with purposively sampled curriculum directors and teaching staff. Participants shared their personal experiences and responded to ethical concerns expressed in the literature. Our multidisciplinary team performed a template analysis of the data based on theoretical frameworks of ethics and social responsibility.

Results Participants primarily experienced the internationalization of their institutions and programmes as having a positive impact on students, the university and the future global society. However, they did face several ethical dilemmas. The first of these involved the possibility that marketization through international recruitment and the application of substantial tuition fees might widen access to medical education, but might allow weaker students to enter medical schools. The second concern referred to the homogenization of education methods and content, which offers opportunities to expose students to best practices, but may also pose a risk to education quality. The third issue referred to the experience that although student diversity helped to promote intercultural learning, it also jeopardised student well-being.

Conclusions In the eyes of teaching staff in international medical education, internationalization can benefit education quality and society, but poses ethical dilemmas through the forces of marketization, homogenization and diversification. The findings reflect a tension between the views of scholars and those of practitioners. The critical perspective found in academic debates is largely missing in practice, and theoretical frameworks on ethics possibly overlook the benefits of international education. To facilitate ethical decision making, we propose that scholars and practitioners globally try to learn from each other.

Introduction

Internationalization efforts in higher education have raised several ethical questions and concerns (Pashby & de Oliveira Andreotti, 2016). Examples of such internationalization practices common in medical education are international electives and global health education (Battat et al., 2010). Other more substantial developments include the establishment of cross-border curricular partnerships (Waterval et al., 2015) and the rapidly growing phenomenon of international medical programmes with curricula that specifically prepare international students for global medical practice (Brouwer et al., 2017). Although such developments are increasingly prevalent and are considered beneficial in terms of the sharing of international curriculum content, exposure to different health care systems and the addition of diversity into the student learning environment (Bennett et al., 2013; Harden, 2006), they have frequently been criticized in academic debates on ethical grounds. The term 'ethical' refers to 'principles of what is morally right and wrong' (Cambridge English Dictionary) for individuals and society, a concept that is complex on several levels: what is 'right' reflects values and opinions that may differ between individuals, and what is right for one stakeholder may not always be right for all.

Three ethical concerns continue to surface in debates on internationalization. The first is that, as a consequence of globalization, higher education is increasingly perceived as a commodity rather than as a public good (Tilak, 2008). Indeed, financial arguments are an important rationale for the internationalization of higher education (Altbach & Knight, 2007), as the high tuition fees required of international students illustrate (Enslin & Hedge, 2008). Critics argue that when education relies on market forces, the quality of education and the interests of society that universities traditionally serve will be compromised (Natale & Doran, 2012; Tilak, 2008). The second concern is that internationalization may erode cultural diversity as a result of unequal power relations that lead to cultural hegemony (Ilieva et al., 2014). Current global standards for education are largely derived from the norms and traditions of Western countries (Bleakley et al., 2011; Gosselin et al., 2016). Consequently, critics have questioned the suitability of using Western teaching methods and English as a language of instruction across all contexts (Hughes, 2008; Ryan, 2011). Thirdly, critics fear that standardized curricula, which are often an implicit or explicit objective of internationalization efforts (Gosselin et al., 2016; Stern et al., 2005), fail to address the specific, local needs of patients in the countries hosting the students and subsequently the

graduates. They question whether a 'standard' medical graduate can practise successfully anywhere (Bleakley et al., 2011; Hodges et al., 2009). These concerns explain the call for more appropriate curricula in international medical education (Celletti et al., 2011; Miller et al., 2011), which reflects ongoing efforts in many medical schools towards social accountability (Boelen, 2018; Ventres et al., 2018).

These and other ethical concerns are commonly found in scientific as well as in public debates (Quinn, 2018). In this discourse, however, the perspective of teaching staff on what is morally right in the internationalization of medical education has received little attention, despite the fact that they are key players whose decisions in their daily practice affect individuals and society. Although previous studies have confirmed that teachers recognize the importance of social accountability (Preston et al., 2016; Reddy et al., 2013), they have not explored whether and how teachers in international medical education are confronted with and act upon ethical concerns and dilemmas when organising, designing and implementing education. Therefore, in order to grasp the complexity of this debate and to obtain a comprehensive picture of the issues it concerns, it is imperative that we include teachers' perspectives.

The ethics of the internationalization of medical education fit into a broader societal and academic debate on sustainability and social responsibility in higher education. The need to help teaching staff and others make decisions about the ethical dilemmas they may face led to the introduction of two frameworks: the Education for Sustainable Development (ESD) framework, and the University Social Responsibility (USR) framework. The former was developed in the 1970s and has been promoted since through United Nations platforms such as the United Nations Educational, Scientific and Cultural Organization (UNESCO), currently in the context of the sustainable development goals (UNESCO, 2017). Focusing on the environment, society and economy, the ESD framework encourages the avoidance of harmful education practices including commercialization, and values diversity and reciprocity in cross-border collaborations (UNESCO, 2017). The USR framework arose in Latin America in response to the concept of corporate social responsibility (CSR) in commercial fields (Vasilescu et al., 2010). It suggests that being socially responsible goes beyond 'doing good' and promotes the strategic planning of universities' impact on their internal organization, the design and delivery of education, the broader research agenda and societal development (Vallaeys, 2014).

In this study, we have combined the principles of these frameworks with a dictionary definition of ethics (Cambridge English Dictionary) to operationalize the ethical internationalization of medical education as 'making choices at the levels of organization, education, research and society that are sustainable and morally right for individuals and society.' Our goal was to study if and how teachers experience the ethical dilemmas reported in the literature in order to understand their relevance to daily education practice. To this end, we explored the perspectives and experiences of programme directors and teachers of international medical programmes in three countries. Our research question was: How do academic staff in international medical education experience and act upon the ethical concerns surrounding their programmes?

Methods

This study was part of a larger, multicentre, instrumental case study into the phenomenon of international medical programmes. In an earlier paper, we presented the challenges and strategies in curriculum design for these programmes (Brouwer et al., 2020). The present study focused on the ethical dilemmas that confront the staff of international medical programmes.

Research setting

We conducted this study in three universities in Hungary, Malaysia and the Netherlands, respectively, that offer international medical programmes. We chose these programmes because of the multidimensionality of their internationalization policies: they all had an international student intake, an internationalized curriculum and international partnerships, and used English as the medium of instruction. After an online search and document analysis (Brouwer et al., 2017), we purposively selected these schools from over 200 medical schools with international programmes globally, employing maximum variation sampling in geographic location, programme age, student nationality, curriculum structure and teaching methods (Table 1).

Institution	Programme start date	Student intake / year	Student nationality	Curriculum structure, language and teaching methods
University of Pécs, Pécs, Hungary	1984	180	No Hungarian; 50% European, 50% other	6-year MD programme in English (patient contact in Hungarian) in parallel with Hungarian programme; lecture- and subject-based
International Medical University, Kuala Lumpur, Malaysia	1993	2 × 100	c. 70% Malaysian, 30% other (mostly Southeast Asian)	First 2.5 years in Malaysia, then either transfer to partner medical school abroad for MD degree (UK, Australia, Ireland, Canada) or stay in Malaysia for MBBS track; mixed teaching methods, integrated
Maastricht University, Maastricht, the Netherlands	2009	60	c. 30% Dutch, 30% European, 30% Middle Eastern, 10% other	3-year BSc programme in English in parallel with Dutch programme, followed by 3-year MSc in English abroad or in Dutch in the Netherlands; problem-based learning, integrated

Table 1. Overview of participating institutions and characteristics of their international medical programmes

Participants and sampling

We recruited participants from amongst academic staff involved in the development and delivery of curriculum materials for the international medical programmes in their respective institutions. We purposively sampled key informants amongst curriculum coordinators and lecturers, ensuring diversity in years of experience, disciplinary background and views of the programme (supportive/opposing). Local co-researchers invited potential candidates to participate by email. Altogether, 45 staff members were invited across the three institutions, of whom 34 agreed to participate in an interview. Those who did not accept cited international travel as the reason, except one person who opted out without stating a reason. Because of logistics (a short time frame during which the first author (EB) visited each site to conduct face to face interviews), not all of the potential interviewees who had agreed to take part were scheduled for interviews. In total, 24 key informants, with 2-26 years of experience, participated in this study. Of these, 17 participants combined teaching with curriculum design and seven had curriculum leadership roles.

Data collection

One researcher (EB) conducted face to face, semi-structured interviews with all participants and was assisted by a local co-researcher in the contexts with which she was not familiar. We chose interviews as they allowed us to explore participants' personal experiences, as well as to probe into more theoretical themes. As part of the larger case study, the interview guide included questions not only about ethical concerns, but also about interviewees' experiences with the programme's vision and challenges in curriculum design and implementation. The interviews then continued with questions about the interviewee's perspective on the moral rightness of international education in general ('Do you think this type of international medical education is a good thing? Why?') and on whether they encountered any ethical concerns or discussions in their work, amongst colleagues, students or others. Thereafter, the researcher asked participants to respond to a number of potential ethical concerns raised in the literature. The list of probes referred to: relevance to local communities globally; education quality; student well-being; social accountability, and the homogenization of education. Interviews lasted between 45 and 75 minutes and were audiotaped and transcribed verbatim.

Data analysis

For this study we performed a template analysis as it allowed us to define themes in advance, based on our theoretical framework (King). Our template included a priori themes drawn from the literature and the ESD and USR frameworks that, together with our definition of ethical internationalization, served as lenses through which we considered the data. The template took further shape during the coding process. Two researchers (EB and a research assistant at each of the three institutions) fully and independently coded the first three interviews in each setting and together discussed ethical issues and related themes that emerged. They then modified and discussed the template until they agreed on the level of detail and relevance of the themes. During further coding, the team met several times to reach agreement on data interpretation, additional themes and possible relationships amongst them. The final template took shape when 16 interviews had been coded and was applied to the remaining eight interviews before further interpretation led to the comprehensive results presented below. As a method of member checking, we obtained feedback from participants on the summaries of data interpretation per institution, which did not lead to adjustments.

Research team and reflexivity

The research team varied in terms of geographic and disciplinary perspectives. EB, JF and ED are education researchers and teach in various international programmes at Maastricht University. EB is a medical doctor, JF has a background in the social sciences and ED works in education sciences. KS, who has a background in linguistics, works at the University of Pécs as alumni coordinator and researcher. VDN was trained in biochemistry and education sciences and is currently the dean for teaching and learning at the International Medical University. Throughout the study, the team members have been aware that their backgrounds shaped their assumptions and the research itself. To help balance all these perspectives, all team members (EB, JF, KS, VND and ED) provided continuous input.

Ethical approval

We obtained ethical approval at all institutions. All participants gave informed consent and were able to withdraw from the study at any time. Participants did not receive any financial compensation for participation, but were given a small token of gratitude. The study did not include personal data. However, to avoid the possibility that any information might be traced back to a participant, their names were coded by the primary researcher to protect their identity and integrity.

Results

During the interviews, participants described various experiences in their daily practice that made them consider the sustainability or 'moral rightness' of international medical education in terms of its organization, teaching, research and societal impact. From our analysis, it became clear that participants generally disagreed with the ethical concerns voiced in the literature and embraced internationalization efforts with positivity. Although participants did not articulate them as such, during data interpretation we did identify a number of ethical concerns or dilemmas that confronted them. We will first describe participants' general perspective and then present the three most important of the dilemmas that stood out. This perspective and the three dilemmas were identified in each of the three research contexts. A summary of the main dilemmas is presented in Table 2.

Ethical concern	Homogenization of teaching methods and content	Marketization of medical school access	Diversification of student population
Main positive narrative	Offers exposure to best practices in education and health care	Widens access for students from countries with limited medical school capacity	Opportunity for intercultural learning
Ethical dilemma	Education quality and teacher autonomy at risk as curriculum choices are guided by foreign regulatory bodies	Back door into medical education for students who were not selected in their home country	Student well-being at risk from stereotyping and discrimination by teaching staff

Table 2. Three main ethical dilemmas identified in our dataset

Internationalization: The morally right response to the changing world

The main narrative on ethics in our data was one of positivity: participants generally did not consider ethics or sustainability to be major sources of concern. More specifically, they did not feel that internationalization in medical education had any negative effects and nor did they recognize the concerns found in the literature when probed. Instead, they stressed that their programmes had a positive impact on students, the university and society as a whole:

> *I think it is, on the whole, it is very positive. For several reasons. As I told you earlier, I'm convinced that this has improved the level of our teaching. Being international is always a good thing. (Participant [P] 14)*

Moreover, participants across all contexts considered internationalization crucial in current and future medical education and to represent the right strategic and ethical choice in response to a globalising world:

> *The doctor of the future may work in [one country], but will always be dealing with a mixed patient population, because of travels, because of open borders, because of the changing economic situation. So we must educate the doctor of the future to have an open, international perspective. (P02)*
>
> *You know, internationalization cannot be avoided and was never avoided in the history. (P15)*

Hence, participants regarded internationalization as an ethical goal in itself because it served institutions, students, future patients and science.

Homogenization: Exposure to best practices or compromising educational quality?

In addition, the trend towards 'homogenization' by which teaching methods and content are adapted to global or 'Western' models was generally embraced with positivity, as most participants considered this an important strategy in international curriculum design. When probed, they did not recognize the potentially harmful consequences of the homogenization of education voiced in scientific and online debates. Rather, they described such adaptations as representing a logical and good development in a globalising world, exposing students to the best education content and practices currently available:

> *We were looking carefully at the 'big-bang' assessments across the world … What I usually do is to look at the recent questions which are coming out and then gauge the trend, what are they looking at? Because the students are being trained for two reasons. Number one: definitely for the practice and they need to be a good practitioner. And number two is … : they are going to be global players. So they need to actually face different countries and different [types of] medical examination, licensing exams et cetera [and be] willing to be prepared in those [areas] as well. (P25)*

Some teachers even argued that the homogenization of education was beneficial for patient communities globally because internationally trained doctors may be more aware of cultural and personal differences and able to spread 'good practices.' For instance, the participant below discusses patient-centredness in communication as such a good practice:

> *So we try to keep [our teaching] as Western as we can so we read a lot [of] the books that we get and we have a lot of influence, I guess, from [foreign] medical schools who gave us ideas on how we should do it the right way. And of course that made us reflect on our own practices locally, how we've taken for granted the way we communicate … with our own patients … So I guess for me as a teacher now, we want to make this better and we borrow, not borrow, I guess we're following where we think good practices are and we take them. I hope it continues. (P22)*

Upon closer inspection of the data, however, we noticed that participants did experience certain negative consequences of education homogenization, such as in student-patient and student-staff interactions in the English language:

> *I can tell from my own experience that the quality of the discussions … falls far, far, far short of what it is in [native language] … So that is painful. (P07)*

Additionally, several teachers mentioned that cross-border power relations influenced choices regarding education content or organization, such as the development of additional skills courses to satisfy the expectations of foreign regulatory bodies. Because the quality of education or teacher autonomy seemed to be at risk, we conceptualized these remarks as indicating potential ethical problems in our analysis, although participants described these situations as logistic challenges rather than as ethical concerns.

In summary, participants essentially perceived homogenization as providing opportunities for alignment with global developments that had mainly positive effects on education, students and societies.

Marketization: Widening access or opening a back door to medical education?

Concerns were more pronounced when it came to marketization. Participants suspected or confirmed that financial arguments were a major reason behind the start of their international programmes. They experienced a tension around access and recruitment: although international education appeared to offer opportunities to train students from countries that have insufficient medical school capacity or quality, which some respondents considered a moral responsibility, participants also observed that weaker students who had not been selected in their own countries acquired places on their programmes:

> *Medical education … requires specialized centres and although there are a lot of universities all around … there are a lot of countries, regions that cannot provide or teach as many doctors as they [should]. So I think, I was just thinking of the economic market aspect of this question. To learn abroad, if I think it's a good idea, well, yes. (P13)*

> *Despite the interviews sometimes we take dummies or people who don't really want to study, they just want to get out of their country and live a better life, free from their parents and restrictions and so on. (P14)*

Moreover, in the context of ever-decreasing government provision of finance for higher education, some considered the income raised by the international medical programme to be crucial to the financial sustainability of the university as a whole, and hence felt this contributed to the public function of the institution by enabling all faculties and programmes to survive. For these reasons, participants experienced the marketization of education as an ethical dilemma: they feared that it might provide a back door into medical education with potentially harmful consequences for graduate quality, but also valued the opportunity to widen access and offer financial sustainability.

Diversification: Intercultural learning or student well-being at risk?

Many participants mentioned how they were required to design or deliver education for an increasingly diverse student population. The examples they gave to explain the diversity encountered in the classroom might be considered as stereotyping: 'Students from country X never ask questions' and 'Students from country Y always cheat.' We therefore flagged these experiences as representing ethical issues, although participants did not describe them as such. Only two participants, however, explicitly expressed this as a potential ethical concern because they feared discriminating when dealing with diversity in class or when designing education, such as when informing students about examination expectations:

> *However, what I see now, a problem, that when we give too much information, or when we give detailed information, [to] a very mixed population of our international programme, you may [inadvertently] select with this kind of information … some populations which understand that and then others will feel that they are actually ignored. Because they just don't understand that kind of communication. (P10)*

Another concern raised by several participants was that foreign students struggled to adapt to their new environment and teaching methods, which made them wonder whether their institutions did enough to meet these students' needs:

> *The students too, who do break down many barriers, although we don't always see that, it's what they did. […] You really do notice that they have made great strides considering where they came from. That's not always acknowledged or still not enough. That causes some friction. (P03)*

Other participants, by contrast, shared the opinion that students should be responsible for their own adaptation:

> *First point, you are [here] now. Get it? [Our] rules you need to follow. (P09)*

It could be argued that such assumptions impair student well-being. Nevertheless, the majority of interviewees believed that the increased diversity of the student population was an asset to education quality and should be pursued because it allowed students to exchange experiences based on their diverse backgrounds:

> *But do not underestimate that you have an international student group, so they can exchange a lot between them. If you are open to that, if you instruct your tutor to [encourage] that. […] So that alone will bring about change and international insights. (P02)*

To recap, although participants perceived student diversity as beneficial to the quality of education, they also described a risk to student well-being, albeit not always consciously.

Discussion

This study contributes to our understanding of academic staff's perspectives on ethical concerns in the internationalization of medical education and their related experiences in daily teaching practice. Teaching staff in international medical education generally embraced internationalization with positivity, considering it an ethical strategy in response to a changing world. They did not recognize most of the ethical concerns about internationalization raised in the literature, although further analysis and interpretation of our interview data did point to the presence of three main ethical dilemmas. First, staff considered the marketization of education as a potential strategy to widen access to medical education, but also believed it could pose a threat to physician and education quality by allowing weaker students to enter medical school. Second, they mainly perceived the homogenization and global standardization of education methods and content as representing an opportunity to expose students and patients to best practices in education and health care, although some believed this might compromise education quality. Third, increased student diversity was regarded as helping to promote intercultural learning, but was also seen as potentially jeopardising student well-being.

Considering this relatively optimistic view, the findings of this study reflect a tension between the views of scholars and those of practitioners. Based on this observation, we suggest that each party might learn from the other. Scholars, for instance, could gain by embracing two of Stier's ideologies of internationalization in higher education that we see reflected in our findings (Stier, 2004). The first ideology, 'idealism', is premised on the assumption that internationalization is a means of creating a more democratic, fair and equal world (Stier, 2004). Our participants, too, fully endorsed this potential and initially rejected any concerns. It is precisely this idealistic perspective that is being disputed in academic debates. The second ideology, 'educationalism', presupposes that the focus of internationalization should be the individual learner, who experiences personal growth through exposure to new perspectives (Stier, 2004). Again, we see traces of this ideology reflected in our participants, who believed that internationalization afforded students the opportunity to learn by exposing them to best global practices and to cultural diversity. Scholars might revise their existing theoretical frameworks by redirecting attention towards the opportunities offered by internationalization, especially to learners. The World Health Organization's social accountability framework (Boelen et al., 2012) represents an excellent example because it highlights the role of medical education in training doctors to become advocates of individual, public and global health (Boelen, 2018; Sandhu, 2014). If critics try to find common ground by connecting with the practical reality, their ideas may be better received in practice.

In a similar fashion, practitioners can learn from the education literature. The fact that teaching staff generally saw no reason for ethics-related concern in their education practice does not mean such concerns are not real. Teachers must realize that their perspectives on internationalization may be too enthusiastic or idealistic, potentially stifling real concerns. If they become aware of the ethical dilemmas voiced by critics and existing in their daily practice, they can initiate curricular strategies to minimize the potentially harmful effects on education quality, students and patients. For instance, specific training in language and culture for both staff and students before clinical exposure creates learning opportunities and improves student-patient communication (Mikkonen et al., 2016). Likewise, the application of mentoring programmes specifically designed for international students might help them to integrate into and adapt to their new learning environment (Arthur, 2017). However, the issue of how to reach the staff who can use these theoretical frameworks and critics' suggestions in practice

remains challenging. We therefore welcome further research into how best to achieve such awareness and to balance ideologies.

Finally, there are lessons for both scholars and teachers about the complexity of the concept of 'ethical.' The dilemmas reported by the teachers in our study reflect tensions between levels of impact of ethical considerations. For example, what is good for the university as an organization (e.g., high tuition fees) may be disadvantageous to individual students (e.g., a barrier to access) or society (e.g., weaker students acquire access). Similar dilemmas were identified in a study on ethical issues in international branch campuses, in which home and host country stakeholders reported conflicting interests and different ethical norms across borders (Wilkins, 2017). International diversity thus further complicates the concept of ethics: when the interests of stakeholders in one country conflict with those in other countries, what, then, is the ethical choice (Stein, 2016)? Although existing theoretical frameworks may help to identify these levels of impact, they do not readily offer a direction towards ethical choices. At the same time, staff in practice may not be fully aware of the complexity of the dilemmas they face. More practical guidelines for sustainability and social responsibility in higher education could facilitate ethical decision making. For example, the ESD toolkit includes pragmatic exercises on helping teaching communities to develop sustainability goals, on reorienting education to address sustainability and on managing change (McKeown & Rosalyn, 2006). Applications in management (Lambrechts et al., 2013), teacher (Falkenberg & Babiuk, 2014) and chemistry (Burmeister et al., 2012) education have been published but, to our knowledge, have not yet been described in the health professions.

Limitations

This study included three diverse institutions and we purposively sampled participants with supporting and opposing views, ensuring a broad range of perspectives. Although we reached saturation within each institution, we do not claim to have included all potential perspectives related to the research question. The findings may not be limited to schools with international education programmes and therefore we invite future researchers to extend the scope of our study to different countries and programmes. Including perspectives from students, as well as representatives of education and health care institutions that receive graduates, would also add valuable insights and provide a more comprehensive picture of ethical internationalization. The authors' own involvement in international

education may have guided data analysis and interpretation. We actively sought to be neutral and critical towards the positive discourse in our data.

Conclusions

In the eyes of teaching staff in international medical education, internationalization can benefit both the quality of education and society, but also poses ethical dilemmas through the forces of marketization, homogenization and diversification. Making ethical decisions on the organization, design and delivery of education is challenging because interests may conflict and norms and values may differ amongst stakeholders, especially in an international context. The critical perspective found in academic debates is largely missing in practice, whereas theoretical frameworks on ethics possibly overlook the benefits of international education. If scholars and practitioners globally manage to join forces, they may come one step closer to making ethical decisions on the internationalization of education.

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Chapter 4

Early career experiences of international medical programme graduates: An international, longitudinal, mixed-methods study

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Abstract

Introduction Increasingly medical students pursue medical education abroad. Graduates from International Medical Programmes (IMPs) practice globally, yet how to prepare students for an unknown international environment is complex. Following IMP graduates throughout their early careers, this study offers insights into gaps in current undergraduate education.

Methods In this international, longitudinal, mixed-methods study, 188 graduates from seven IMPs completed baseline surveys on career choice and job preparedness. Forty-two participants completed follow-up until three years after graduation. Nine graduates participated in semi-structured interviews on individual experiences and the evolution of their perspectives. The multiphase, sequential design allowed data collected at baseline to inform further data collection instruments.

Results Two typical student profiles emerged. The first depicts a student who, despite the challenges of studying abroad, pursues a medical degree 'anyhow', with a common aim of practicing in their home country. The other deliberately selects an IMP while envisaging an international career. Two years after graduation, the majority (>70%) of our participants were practicing in a country other than their country of training. They reported challenges around licensing, the job application process and health system familiarization. Participants' experiences point towards potential curriculum adaptations to facilitate cross-border transitions, including career guidance, networking and entrance exam preparation.

Discussion IMP graduates lack support in practical aspects of career orientation and international exposure. Most IMPs essentially prepare their graduates for a career elsewhere. Gaps and challenges that IMP graduates experience in this cross-border career transition entail a responsibility for preparation and guidance that is currently lacking in IMP curricula.

Introduction

In the past decade, increasing numbers of students have pursued medical education outside their home country (OECD, 2019). European, Asian and Caribbean universities may offer an attractive alternative for students to numerus clausus policies and high tuition fees at home (OECD, 2019; Rizwan et al., 2018). Over two hundred so-called International Medical Programmes (IMPs) in these regions offer English language medical education, frequently through translated versions of pre-existing curricula in the local language (Brouwer et al., 2017; Mayberry, 2013; Yang et al., 2016).

IMPs are a response to increasing global standardization of medical school accreditation (Karle et al., 2008; Tackett, 2019) and regional agreements on recognition of qualifications (Council of the European Union, 2005; OECD, 2019), allowing IMP graduates to end up in many different locations of practice. Exact numbers are unknown, but case studies suggest that most graduates leave the country where they studied upon completing the IMP (OECD, 2019).

This transition, whether to a graduate's home country or onwards to a third country, is not without challenges. Scholarly work on International Medical Graduates (IMGs, physicians working in a country other than their country of training), highlights the adaptation difficulties these graduates face when entering a new healthcare context, especially around language, intercultural communication and health system familiarization (Michalski et al., 2017; Sockalingam et al., 2014; Zaidi et al., 2020). The IMG literature focuses on experiences in the post-graduate work context. Yet, it is essential to also consider the undergraduate context that precedes cross-border transitions, and to explore how these programmes can best prepare their candidates for future international work.

Against this background, the challenges of curriculum design for IMPs become apparent. It is questionable whether a merely translated local curriculum best meets the specific needs of the diverse student group in IMPs (Hodges et al., 2009). Yet, identifying training needs and learning objectives for this particular student population is highly challenging. Insights from research on curriculum internationalization (Leask, 2015), global health competency frameworks (Battat et al., 2010; Brown, 2015) and global citizenship education (Hanson, 2008; Kraska et al., 2018) provide relevant suggestions for curriculum adaptations like intercultural communication and healthcare system comparison to prepare students for a globalized world. Yet, how such adaptations relate to graduate experiences is unknown.

The IMP context thus offers a unique opportunity to fill the gap between earlier research in the post-graduate IMG context and undergraduate curriculum internationalization. Studying the experiences of IMP graduates can give valuable insights in career preparedness and highlight gaps in their current undergraduate education. Previous research has shown that following these experiences longitudinally through their early career gives the most reliable information on career choice and curriculum evaluation (Cronin et al., 2020; Tuononen et al., 2019). Better insight into graduates' perceived obstacles and early career experiences will inform curriculum design decisions to help prepare students best for the transition to international clinical practice.

This longitudinal mixed-method study aimed to explore the alignment of IMPs to early career requirements as experienced by recent IMP graduates. The research questions were: (1) What are the career choices (location, specialty) made by IMP graduates and what are the motivations behind these choices? (2) What (international) job requirements do they encounter? (3) How do they evaluate the IMP curriculum's success in preparing them for the job market?

Methods

Design

We conducted a longitudinal mixed-methods study, employing surveys and semi-structured interviews at four data collection moments spanning 2017–2020. The study takes a pragmatic approach to provide a more complete understanding of the research problem from multiple perspectives (Creswell, 2013). The longitudinal design helped us observe and understand changes in career preference and curriculum evaluation over time. This study was first approved by the Ethical Review Board of the Netherlands Association for Medical Education (ref. no. 00837). We then sought and obtained further ethical approval at each participating institution where required, according to local regulations.

Setting

Seven International Medical Programmes in Europe and Asia agreed to invite their 2017 and 2018 graduates for this study (see Table 1). We defined an IMP as a programme (1) that actively recruits international students and (2) that offers a separate programme in parallel to a 'regular' local curriculum. The main teaching activities in these programmes occur in English, as opposed to the regular programme in the national language.

University	Country	Start date IMP	Cohort size	Private or Public	Curriculum characteristics
Gadjah Mada University	Indonesia	2002	80	Public	5Y / I / PBL
Jagiellonian University	Poland	1994	60	Private	4Y / D / L
Maastricht University	The Netherlands	2009	60	Both	6Y / I / PBL
Riga Stradins University	Latvia	2010	200	Public	6Y / D / L
University of Pavia	Italy	2009	100	Public	6Y / D / L
University of Pécs	Hungary	1985	150	Private	6Y / D / L
Zhejiang University	China	2004	80	Public	6Y / D / L

Table 1. Overview and characteristics of participating universities. Abbreviations: Y, Duration in years; D, Discipline Based; I, Integrated; L, Lecture Based; PBL, Problem Based Learning

Sampling and recruitment

We employed a three-step sampling procedure, aimed at maximum variation in institutional characteristics and participating graduates' background. First, we recruited the institutions. In a previous study, we assembled a list of over 200 medical programmes that fit the IMP definition and compiled a subset of 50 that offered extensive information online giving insight in programme duration, teaching format, size, public/private, age, and admission criteria (Brouwer et al., 2017). Of these 50 institutions, we selected 20 that varied with regard to these elements and emailed their alumni offices or education research departments. Ten did not reply, three declined participation, and seven institutions agreed to participate.

Second, we invited survey participants. In five of the seven institutions, a local coordinator emailed all graduating IMP students in 2017 and 2018. The email included a link to our online survey hosted by Qualtrics (Provo, UT/Seattle, WA). We sent the invitations within three months of graduation, with two reminders after two and four weeks. Two institutions only approached their 2018 cohort as ethical clearance was not achieved in time for earlier participation. In total, 188

graduates with 30 different nationalities participated in our baseline survey, of whom 42 completed all follow-up questionnaires.

Third, we recruited interview candidates. After the first follow-up questionnaire (t1), we emailed all respondents (n=47) inviting them to participate in online interviews to elaborate on their experiences. Nine graduates participated, of whom eight completed the full follow-up.

Data collection

Survey

Our surveys were explorative, including multiple-choice and open-ended questions. We leveraged literature on international competencies, employability, and adaptation difficulties of IMGs to inform survey construction (Brown, 2015; Gerstel et al., 2013; Prince, 2005; Shah et al., 2004; Sockalingam et al., 2014). The baseline survey collected demographics, education information, as well as career preferences and experienced job preparedness. In the follow-up questionnaires, we asked about participants' country of residence, employment status, experienced job requirements and their views on curriculum evaluation. Both baseline and follow-up surveys included questions around curriculum evaluation of the international medical programme. We piloted the surveys with 25 graduates from two institutions who had graduated in 2016. This allowed for adjusting ambiguous questions and incorporating feedback on question clarity. Baseline and follow-up surveys are included as annex A and B.

There were four data collection moments in total. We invited the t0 respondents for follow-up at six months after the baseline study (t1), then again a year later (t2) and two years later (t3, 2017 cohort only). Table 2 presents details on the data collection timeline and response rates.

Interviews

We conducted a series of semi-structured interviews with nine participants to elaborate on the themes addressed in the survey and to get in-depth insight into individual experiences and their evolution. Interviews took place two (2018 cohort) or three times (2017 cohort) at one-year intervals, after the t1, t2 and t3 surveys. In total, 20 interviews took place with nine graduates. EB and TvR conducted the interviews online in English (n=7) and Dutch (n=2). Interviews were audio recorded and transcribed verbatim, lasting between 26 and 49 minutes. The interview guides are included as annex C and D.

	Invitations	Responses T0 (graduation)	Responses T1	Responses T2	Responses T3
Cohort 1 (graduation 2017; 5 institutions)					
Timeline		April - September 2017	March - April 2018 (+ 6-12 months)	March - April 2019 (+ 1 year)	March - April 2020 (+ 1 year)
Responses	484	72	17	18	15
Cohort 2 (graduation 2018; 7 institutions)					
Timeline		April - September 2018	March - April 2019 (+ 6-12 months)	March - April 2020 (+1 year)	
Responses	614	116	30	27	-
Total Responses & Response rate	**1098**	**188 (17.1%)**	**47 (25%)**	**45 (23.9%)**	**15 (20.8%)**

Table 2. Timeline and response rate data collection

Data analysis

Our mixed-method study had a sequential design and data analysis took place alongside the different data collection moments. We analysed the datasets separately and then used the qualitative data to explain and elaborate on the quantitative findings.

We performed summary statistics of the quantitative survey data in Excel 2010 to describe the main demographic data and survey responses.

For the qualitative data from the surveys' open-ended questions and the interviews, we performed Template Analysis (King). The initial template included a priori themes around study choice motivation, career preparedness and curriculum evaluation, drawn from the literature. Data analysis started after all t1 interviews took place and continued iteratively throughout the further study phases. EB and TvR independently coded three interviews first, then discussed codes and emerging themes and, in line with the Template Analysis method, modified the template accordingly before continuing analysis. The full research team met frequently during this process to reach agreement on data interpretation, additional themes and possible relationships between them until consensus was reached. We then applied the final template to the surveys' open-ended questions

and final interview round. We observed two distinct patterns when clustering the themes during our analysis of the interviews, which we described as two student profiles. We then reviewed the survey questions where participants elaborated on their study motivations and career ambitions to gauge the spread of these profiles across our cohorts. We obtained feedback from the interview participants on a summary of data interpretation as a member check, which led to clarification and nuances of comments in two cases.

Research team and reflexivity

The research team is based at Maastricht University in the Netherlands, one of the participating institutions. All authors are primarily education researchers, with backgrounds in medicine (EB), public administration (TvR), social sciences (JF) and educational sciences (ED). Three of us (EB, JF, ED) also teach or have taught in the Maastricht International Medical Programme, which not only inspired the study, but also shaped our assumptions and the research itself. We therefore valued the outsider's perspective that TvR brought to the team. The first author (EB) kept a reflexivity journal throughout the study, and during data analysis we explicitly sought for and reported those findings that were not in line with our initial assumptions.

Results

Our analysis of the career motivations and considerations that participants described, revealed two distinct profiles of students in IMPs, presented below as a 'tale of two graduates'. Next, we present curriculum suggestions, based on the transition challenges, job requirements and curriculum experience that participants discussed. The analysis of the open-ended survey questions and the longitudinal interview series leads in the presentation of our results. Table 3 presents demographic data, information on the participants' career choices and curriculum evaluation. Additional quantitative data is integrated in our presentation of the findings.

Student profiles in IMPs

We identified two student profiles during our analysis, presented as the stories of 'Anthony', who pursued his medical studies 'anyhow', and 'Isabel', who was explicitly looking for international benefits. Among the 99 (57%) participants that elaborated on their study motivations and career ambitions, 46% fit Anthony's profile, and 34% Isabel's. The other 19% mentioned, for example, programme duration or reputation as their main motivation. The stories reveal motivations for joining an IMP, career goals, and also highlight the main transition difficulties graduates experienced in their early careers.

Anthony Anyhow

Anthony grew up in country X and always wanted to become a doctor. Unfortunately, the competition for medical school in X was high. Anthony refused to let this block his dream and started exploring alternatives. He learned about the concept of "International Medical Programmes". Anxious, but excited, he applied for an English programme of good reputation in country Y because "(t)he tuition fee was lower than other universities and the school didn't require the applicant to perform an [entrance] test" [Survey participant #10, t0]. Studying medicine was hard work, and doing so in an unfamiliar country in his second language made it even more challenging. After six years of perseverance he graduated and achieved his goal of becoming a doctor.

Anthony moved back to his home country, hoping to find a junior doctor position. Getting his license was not as easy as expected, though. His foreign qualifications were not easily transferred and he had to take additional exams. Job applications were tough, as future employers were unconvinced of the quality of this unfamiliar international education. He felt his "chances of getting into super competitive residencies afterwards [were] considerably lower" [Interview candidate #8, t1] because of having studied in the IMP.

At last, he found a job in a hospital near his hometown. The first year came with many new challenges, as is true for any young doctor – however, Anthony felt disadvantaged because he had less clinical experience than his peers who had studied medicine in X and felt unfamiliar with the healthcare system.

Participant Characteristics	At T0 (n=188)*		At T2 (n=45)*	
Female	59%			
Mean age at T0	26			
Residence location post-graduation	**At T0**		**At T2**	
Returned to home country	41.7%		40.9%	
Stayed in country of their IMP	24.3%		2.3%	
Studied IMP in home country and stayed	26.2%		22.7%	
Moved to 3rd country	7.7%		31.8%	
Unknown	-		2.3%	
Career choice	**At T0**		**At T2**	
Patient care	76.9%		78.7%	
Research	7.4%		4.2%	
Further degree study	8.3%		8.5%	
Other/don't know	7.4%		4.2%	
Specialty choice	**At T0**		**At T2**	
Clinical sub-specialty	93.5%		97.3%	
Tropical medicine / International health	4.6%		2.7%	
Don't know	1.9%		-	
	At T0	**At T1**	**At T2**	**At T3**
On a scale from 1-10, 1 meaning not well at all and 10 meaning extremely well, how well do you think your international medical programme has prepared you for your career?	6.41	6.65	7.11	7.39
International career	**Do you envision yourself to have an international career? (T0)**		**Do you envision yourself to have an international career? (T2)**	
Yes	57.4%		61.4%	
No	8.3%		38.6%	
Maybe	34.3%		-	

Table 3 (left page). Participant characteristics, career choice and location, curriculum evaluation and perception of international career at graduation and 2 years after graduation from an International Medical Programme (IMP). * Not all participants filled out all survey items. We report percentages of the group that filled out the item of interest.

> [The IMP] was a lot of theory, so I really got the theory part but yeah (…) We do meet patients but it's not like, it's not the same as when you work by yourself as a doctor. (…) I mean I can only compare myself to the doctors I have met now when I work and I feel like the doctors that are educated [locally], they have more practical skills. [Interview candidate #7, t1]

He does not regret his choice though, and with the years his confidence has grown. Two years after graduation, he feels a part of the X healthcare system and having studied abroad feels like an adventure long ago, nice yet tough, that ultimately helped him achieve his dream.

Isabel International Benefits

Isabel always dreamed of becoming a doctor. She grew up in country W, with a strong interest in travelling. She could picture herself practicing abroad. When learning about "International Medical Programmes" she was immediately interested. This sounded like the ideal combination of medical education with studying in a foreign language and the additional benefit of meeting people from all over the world.

Isabel explored different IMP options in both her home country and abroad, and chose one in country Z, because she "want[ed] to have a whole new experience and develop [her]self in a new environment" [Survey participant #182, t0].

Studying medicine was hard work, and the student diversity indeed offered many options for intercultural learning. She graduated with many options in her mind. A career in a lower income country? Moving back to W? Or maybe staying in Z – as she had learned to appreciate the country, the language and the people.

> I always thought I would end up somewhere in South America (…) and then Tanzania happened so Africa kind of got me. And I'm now planning on visiting some more places. Could be anywhere actually." [Interview candidate #1, t1]

Isabel felt the IMP was a strong asset on her CV. However, logistic challenges eventually limited her options. It was difficult to determine exactly what was needed to get a medical license in other countries, and it was costly and time consuming to prepare all exams and paperwork. Eventually, she moved back to W for specialty training, with all the additional experiences in her pocket. The first months were challenging, for sure, catching up with the local healthcare system and brushing up on her mother tongue.

> I was super worried in the beginning that (…) I would be lost and everything. But in the end it didn't [turn out that way], like the first weeks of course were hard, but they were super nice and helped me to learn." [Interview candidate #6, t2]

A few years into her specialty programme, Isabel speaks fondly of her IMP experience and, sometimes, still dreams about future practice abroad.

IMP curriculum suggestions

Analysing the participants' experienced job requirements and their evaluation of the IMP curriculum's success in preparing them for the job market, we identified two sets of curriculum suggestions for IMPs: specific international knowledge and skills, and guidance around international career preparation.

Knowledge & skills

Graduates across the institutions generally agreed that their curriculum had prepared them well in terms of medical knowledge and clinical skills and responded in an increasingly positive way over time to the question "On a scale from 1–10, how well do you think your IMP has prepared you for your career?" (Table 3). Interested in potential curriculum adaptations, we specifically looked into the reasons that respondents gave for a low mark to that question, and into the final survey item: "Based on your current experiences, do you have any other suggestions to change the medical curriculum at your institute to better fit the requirements of international students and their future careers?"

The most frequently discussed issues were clinical exposure and language. In some institutions, graduates felt they had little clinical experience overall, and many elaborated on the quality of clinical education during rotations heavily depending on patient interaction. Graduates agreed it was crucial to learn the local language in the pre-clinical years, as was common in some but not all of the IMPs in this study.

> *The education I received focused more on theory and not on practical knowledge. (…) Language barriers prevented me from gaining enough knowledge about how to communicate with the patient and be comfortable with my role as a doctor. I feel completely unprepared and I think will end up spending the first months of my career in fear. [Survey participant #173, t0]*

We were particularly interested in international and intercultural competencies graduates needed in their early careers. However, these questions did not prompt elaborate responses in the survey nor interviews. Contrary to our expectations, a small minority (<5%, see Table 3) considered and eventually pursued a career in global or international health. And while 61% considered their career to be international (at t2), this was largely explained as using international literature, and to a lesser extent as collaborating with foreign co-workers.

Graduates flagged our pre-defined international competencies such as global epidemiology, understanding of health systems and intercultural communication as 'important' to their current jobs. However, only few mentioned these topics in their suggestions for IMP curricula.

> *And then I would indeed mainly focus on, yes, expectations within different cultures. And what kind of position a doctor has in society. And also keep an eye on what are taboos in certain societies. [Interview candidate #2, t1]*

Generally, when graduates mentioned lacking specific knowledge or skills compared to their peers, they acknowledged that no curriculum can cover all locally required knowledge of all potential destinations and accepted that it was their own responsibility to bridge these gaps.

International transition guidance

Almost half (49.4%) of respondents, like both Isabel and Anthony, crossed borders directly after graduation to either their home country or a new destination. Two years later, this number had increased to 73% and essentially only those native to the study country remained (Table 3). The migrating group reported specific challenges and suggested curriculum elements that would have helped them to smooth the international transitions. Concise suggestions were written in the surveys, and as five of our interview candidates also experienced this international transition, we further discussed potential curriculum interventions during the follow-up interviews.

Reflecting on her final years in the IMP, Isabel mentioned that she had felt lost and left alone in finding out about her career options and preferences.

> All the information about this [cross-border] transfer I found by myself. There was only some information about the USMLE and about moving to the UK – but only informally because of the background of certain professors. [Interview candidate #11, t2]

She would have liked her university to provide international career events, including how to find information on licensing examinations and degree registration. Isabel also suggested IMPs to make better use of their diverse alumni networks. This already happened informally, mainly through social media, but she thought that "if the alumni connection [would be] strengthened not just by the student council body but also by the school itself, (…) that could be very fruitful" [Interview candidate #8, t2]. Isabel also suggested inviting international speakers from a broad range of countries and specialties to offer inspiration and insight in international careers.

Anthony always knew that he would move back to his home country. He thought the IMP could have better supported his preparation for remigration, for example, by allowing curricular time to prepare for his licensing exam. Ideally, the teaching staff would have been available to assist in this process.

> I have seen [IMPs] that help their students by building up their CVs with international courses (…) or even motivate and help their students to do the USMLE exams. In general, these colleges also prepare their students for what's after their graduation internationally. [Survey participant #187, t0]

Anthony also wished he'd had the opportunity to do placements in his home country. This would not only have helped him in career orientation, but also in networking to increase his success rate in job applications.

> The schools should probably ramp-up their effort and their support for people getting electives and to encourage it because if people are going to end up in [countries], they need to train there and have a chance to acclimate themselves before they even apply. [Interview candidate #8, t2]

In summary, graduates did not report a lack of specific academic content, but their experiences mainly point towards curriculum adaptation on support levels and international transition guidance.

Discussion

Following IMP graduates from seven different universities into their early international careers, we identified two typical student profiles and a need for better international transition guidance.

The identification of these two profiles in part aligns with our earlier work around IMPs. In three different institutions, we studied curricula and interviewed teachers about their curriculum design experiences (Brouwer et al., 2020). We found that staff perceived IMPs as either intending to deliver a 'universal professional' who could practice anywhere, or to prepare special 'global physicians' for international or global health career paths. Each of these perspectives was associated with specific curriculum design challenges. What did not emerge from that study, however, was a recognition that the IMP student population consists of both 'Anthonys' and 'Isabels'. This finding adds an important insight and further complexity to IMP curriculum design as these profiles represent different interests. We recommend careful exploration of incoming students' intentions and expectations to further inform curriculum design in practice as well as at a scholarly level.

Some challenges that our participants experienced during the transition into their early career match those of any new doctor shortly after graduation. For example, the experienced lack of clinical skills and sudden high responsibility are commonly reported (Cameron et al., 2014; Yardley et al., 2018). Furthermore, our findings on challenges specific for cross-border transitions align with research on International Medical Graduates, for example, regarding familiarization with health systems, administration, hierarchies and language (Michalski et al., 2017; Rashid-Doubell et al., 2019; Sockalingam et al., 2014). However, where previous studies focused on remediation and interventions at the postgraduate level in the destination countries (Kehoe et al., 2016; Lineberry et al., 2015; Pilotto et al., 2007), our study adds the undergraduate perspective, where guidance, networking and entrance exam preparation could all facilitate cross-border transitions. We encourage further research on the design and effect of such pre-transition interventions.

Our study also contributes to our understanding of curriculum internationalization. Defined as "incorporating intercultural, international and global dimensions into higher education curricula", this process aims to better prepare university graduates for a globalized, interconnected world (Leask, 2015). Previous work has largely focused on incorporating these dimensions into the content of curricula,

addressing, for example, global disease burden and immigrant health, cultural competence or mobility programmes such as electives in low resource settings (Leask & Bridge, 2013; Stütz et al., 2014). Remarkably, the graduates in this study, who clearly operate in a globalized, interconnected world, hardly mentioned these themes when invited to share ideas for curriculum adaptations. We do learn from them that career guidance and international transition orientation are particularly valued and thus such support elements should not be neglected in programme design, whether in IMPs or in other programmes that wish to internationalize their curriculum.

This study is, to our knowledge, unique in the diversity of both institutions and participants, its mixed-methods approach and three-year longitudinal follow-up. The study limitations are inherent to this design: organizing recruitment through different local procedures was challenging with a relatively low response rate as a result. Also, as with many longitudinal studies, the loss to follow-up, especially between the first and second data collection point, was substantial. A self-selection bias, leading to a sample of participants, particularly among the interview candidates, who share a more positive perspective on IMPs, is plausible. We therefore purposely monitored the more critical and deviant voices throughout the follow-up and analysis. The authors are all from one of the participating institutions and therefore may have missed certain nuances of the other institutional contexts.

Conclusion

IMP graduates generally regard their curriculum content effective in terms of career preparation. However, they miss support in practical aspects of international career orientation and preparation. Most IMPs essentially prepare their graduates for a career elsewhere. This entails a responsibility for cross-border transition guidance that is currently lacking.

Besides posing challenges to curriculum design, globalization offers a range of opportunities that medical schools with and without IMPs insufficiently embrace. Sharing international graduates' stories, for example, through strong alumni networks, is only one approach. There is a world to win.

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Annex A – Baseline Questionnaire

#	question	answer format
A - General information		
1	What is your gender?	Male/female
2	What is your year of birth?	Drop-down menu
3	What is your current country of residence?	Drop-down menu; single answer
4	What is your country of origin?	Drop-down menu; single answer
5a	What is your country of citizenship?	Drop-down menu; single answer
5b	If you currently have multiple citizenships, please select:	Drop-down menu; multiple answer; N/A as option
6	In which country did you obtain your secondary school degree?	Drop-down menu; single answer
7	In which institute will or did you obtain your medical degree?	MCQ with all participating institutes; & 'other, please specify'
8a	Did you at any point switch or transfer to a different medical school during your medical studies?	Yes/No
8b	If yes, in of after what year did you switch?	Year 1/2/3/4/5/6
8c	If yes, where did you start off your medical studies?	Open
9	What is your (expected) graduation date?	Month, Year
10	What was your most important argument to choose this programme at this institute for your medical studies?	Open-ended
11	What was the most important reason that you did not decide to study a standard medical programme in your home country?	Open-ended

B – Career choice		
12	In what sector do you plan to work/study after graduation?	Patient care (incl residency training)
		Further degree study; other than medical specialty training (incl MSc programmes)
		Research; including PhD training
		Governmental organization
		Non-governmental organization
		Higher education & teaching
		Private sector (including pharmaceutical companies; consultancy agencies)
		Self-employment, please specify
		Don't know yet
		Other, please specify
13	In what field or medical discipline do you want to work or study after graduation?	Internal medicine or subspecialties
		Surgery or surgical subspecialties
		Emergency medicine
		Family medicine or primary health care
		Obstetrics & Gynaecology
		Paediatrics
		Psychiatry
		Public Health
		Tropical Medicine or International Health
		Other; please specify
14a	What is your preferred country for work or study after graduation?	Drop-down menu; single answer
14b	If applicable; in which other country or countries do you consider to apply for work or study after graduation?	Drop-down menu; multiple answer; N/A as option
15a	Do you envision yourself to have an international career?	Yes/no
15b	If yes, please explain briefly how you imagine an international career	Open-ended

C – Curriculum evaluation		
16a	How well do you think your medical programme has prepared you for your career?	Scale 1-10
16b	Please explain briefly	Open-ended
17	Based on your current experiences; how would you change the medical curriculum at your institute to better fit the requirements of international students and their future careers?	Open-ended
18	Do you have any further remarks about this survey or about your experiences as a recent graduate from an internationalized medical programme?	Open-ended

Annex B – Follow-up Questionnaire

#	question	answer format
A - Career choice		
1	What is your current employment status?	Paid employment (including specialty training & PhD training)
		Self-employed
		Further degree study other than medical specialty training (incl MSc programmes)
		Unemployed
		Other, please specify
2	In what country do you currently reside?	Drop-down menu; single answer
	[IF 'further degree study' in Q1; answer Q3-5]	
3	What is the name of your study programme, institute & country?	Open-ended
4	What is your expected graduation date for this programme?	Month, year
5	Why did you choose to obtain this degree?	Open-ended
	[IF 'paid employment' or 'self-employed' in Q1; answer Q6-8]	
6	In what sector do currently work?	Patient care (incl residency training)
		Research; including PhD training
		Governmental organization
		Non-governmental organization
		Higher education & teaching
		Private sector (including pharmaceutical companies; consultancy agencies)
		Don't know yet
		Other, please specify

7	In what field or medical discipline is your current position?	Internal medicine or subspecialties
		Surgery or surgical subspecialties
		Emergency medicine
		Family medicine or primary health care
		Obstetrics & Gynaecology
		Paediatrics
		Psychiatry
		Public Health
		Tropical Medicine or International Health
		Other; please specify …..
8a	Does your current job involve any	*"Rubric"*:
	– international travel	0/1/2-3/>3 times per year
	– communication with colleagues from different nationalities	daily/weekly/monthly/sometimes, but not every month/never
	– communication with patients from different nationalities	daily/weekly/monthly/sometimes, but not every month/never
	– international themes in the content of your work?	daily/weekly/monthly/sometimes, but not every month/never
8b	If yes any of the above, please explain briefly the nature of the international elements that you encounter in your work	Open-ended
	[for all]	
9	Did you take any additional courses or training since graduation, including any that were mandatory or offered by your employer?	Yes/No
10	If yes, what course(s) did you take and why?	Open-ended
B - Job requirements & Curriculum alignment		
11a	How well do you think your medical programme has prepared you for your career?	Scale 1-10
11b	Please explain briefly	Open-ended

12a	Do you experience any specific benefits of having studied in an international programme?	Yes/No
12b	Please explain briefly	Open-ended
13a	Do you experience any disadvantages because of having studied in an international programme?	Yes/No
13b	Please explain briefly	Open-ended
14	How challenging do you perceive adaptation to your current work situation in terms of	
	• Balancing professional and personal life • Social adjustment • Isolation from family • Communication with the interprofessional team • Communication with patients • Local language and slang • Local healthcare system • Local hospital system and structure • Using evidence-based medicine • Medical documentation • Specialty specific clinical knowledge and skills	4 pt likert • Very challenging • Somewhat challenging • Somewhat easy • Very easy • Not applicable

15a	How important is each of the following skills and abilities to your current job or study?	
	• Intercultural communication • Foreign language skills (other than your native language) • Global disease epidemiology (other than the epidemiology in the country where you trained) • Understanding of a health care system different than the one in the country where you trained • Understanding of immigrant health • Social determinants of health • International collaboration • Adapting diagnostic & therapeutic decisions to the level of (technological or financial) resource availability	4 pt likert • Not important • A little important • Important • Essential
15b	Looking back to your medical degree programme, did you receive training that helped you develop the following skills and abilities? *Same list as above*	• Effective training provided • Training provided, but was NOT effective • No training, but training would have been helpful • No training, and training is not necessary
16	Based on your current experiences; how would you change the medical curriculum at your institute to better fit the requirements of international students and their future careers?	Open-ended
17	Do you have any further remarks about this survey or about your experiences as a recent graduate from an internationalized medical programme?	Open-ended

Annex C – Interview guide T1

Main topics & questions	Probes / follow-up questions
Programme choice & evaluation	
Why did you choose to study programme X?	Positive choice • Travel/study abroad • International programme • Quality • Career perspective • Language Negative choice • Not selected • Quality at home • Not first choice • Financial restrictions No choice (scholarship)
Did programme X fulfil your expectations?	Examples of surprisingly positive or negative experiences
Career choice	
What do you currently do and why did you choose it?	Would you have chosen differently after a 'regular' programme?
How well did programme X prepare you for your current job? What aspect of your current job were you least prepared for?	Consider • Medical expertise • Communication • Health systems • Cultural adaptation • Collaboration Discuss examples of situations that he/she felt unprepared for. Would that have been different after a 'regular' programme?
Do you envision yourself to have an international career?	What does that mean to you? Consider • International patients • International colleagues • International travel • International 'content'
Does your current job require any 'international skills'?	How well prepared do you feel for those?

Curriculum alignment	
Do you think there were any gaps in the international programme, things that you should have been taught to prepare well for your current position?	Or for your future career? Consider • Medical expertise • Clinical skills/experience • International exam preparation • Global health topics • Travel/exchange opportunities Discuss examples of situations where these gaps were apparent
Did you take any additional training since graduation?	What kind of training? Would that be useful/necessary to include in undergraduate education? For regular/international students?
Do you experience any benefits of having studied in an international programme?	Could include • Language skills • Degree value/reputation • Health system knowledge • Intercultural skills • Being open to others Note examples of beneficial situations, e.g. • Successful job application • Patient cases • Other work situations
And are there any disadvantages because of that?	Could include • Preference for local graduates • Lack of knowledge/experience (health system; disease pattern; logistics) • Language barrier in studying limits learning • Racism & prejudice Note examples of adverse events • Discrimination • Patient cases • Hospital logistics

Closure
Is there anything else you would like to share?
Would you be willing to take part in a follow-up interview after the next questionnaire round?
Are you willing to check a summary of the interviews for accuracy/agreement/comments?

Annex D – Interview guide T2&3

Main topics & questions	Probes / follow-up questions
Career choice	
What do you currently do and where?	*If changed since previous interview:* Why did you choose this job/study/…?
How well do you feel your IMP prepared you for your current job requirements? What aspect of your current job were you least prepared for?	Consider • Medical expertise • Communication • Health systems • Cultural adaptation • Collaboration Discuss examples of situations that he/she felt unprepared for. Would that have been different after a 'regular' programme?
Does your current job require any 'international skills'?	How well prepared do you feel for those? Consider • International patients • International colleagues • International travel • International 'content'
What are your plans for the future? Have your career choices been influenced by having studied in an international programme?	Do you envision yourself to have an international career? What does that mean to you?
General reflection	
Looking back now, would you make the same choice for an international programme?	Which considerations would that choice have? Would you advice others to study in an international programme?
Curriculum alignment	

Based on your recent work experience, do you think there were any gaps in the international programme, things that you should have been taught to prepare well for your current position?	Or for your future career? Consider • Medical expertise • Clinical skills/experience • International exam preparation • Global health topics • Travel/exchange opportunities Discuss examples of situations where these gaps were apparent
Do you have any suggestions for additional curriculum content in international medical programmes (compared to 'regular' programmes)?	Consider • Medical expertise • Clinical skills/experience • International exam preparation • Global health topics • Travel/exchange opportunities
Did you, since the previous interview, experience any benefits of having studied in an international programme?	Could include • Language skills • Degree value/reputation • Health system knowledge • Intercultural skills • Being open to others Note examples of beneficial situations, e.g. • Successful job application • Patient cases • Other work situations

And were there any disadvantages because of that?	Could include • Preference for local graduates • Lack of knowledge/experience (health system; disease pattern; logistics) • Language barrier in studying limits learning • Racism & prejudice Note examples of adverse events • Discrimination • Patient cases • Hospital logistics
Closure	
Is there anything else you would like to share?	
Are you willing to check a summary of the interviews for accuracy/agreement/comments?	

Chapter 5

Discursive (mis)alignments in internationalization: The case of International Medical Programmes

Submitted as
Brouwer, E.E., Frambach, J.M., Driessen, E.W. & Martimianakis, M.A (Tina). Discursive (mis)alignments in internationalization: The case of International Medical Programmes.

Abstract

International Medical Programmes (IMPs) form a distinctive modality in medical education, with diverse student populations, English as a language of instruction and 'globalized' curricula. A lack of common understanding of IMPs' purposes causes tensions and triggers critiques.

We use a discourse analysis approach to explore the different ways in which the purposes of IMPs are constructed and how these discourses interact. The research situates in two IMPs, in the Netherlands and in Hungary. Key-informant interviews, policy documents and scholarly literature form the archive.

The analysis indicates that IMPs are constructed discursively around three distinct narratives and associated practices: serving the institutions that host them, serving the (global) public interest, and serving individual students. Co-existence and misalignments of these three discourses cause conflicting practices and confusion among stakeholders.

This study illustrates how medical schools create tensions for learners and staff who must navigate conflicting expectations related to higher education internationalization.

Introduction

Internationalization in higher education takes many forms and what we mean when we say 'internationalization' is not commonly understood. Recent studies of language in higher education policy and research have looked at how the concept of internationalization is given meaning. They argue that potential negative effects and ethical compromises get little attention in some rationalizations for engaging in international work (Buckner & Stein, 2019; Tight, 2021). In this study, we build on these findings, and focus on a particular internationalization modality in medical education, to understand how 'giving meaning' to internationalization plays out in practice.

In medical education, internationalization most commonly takes shape in international clinical placements and global health elective courses (Battat et al., 2010). Increasingly, other modalities emerge such as curriculum internationalization (Stütz et al., 2014) and cross-border curriculum partnerships (Waterval et al., 2015). The modality that we here discuss as International Medical Programmes (IMPs) is unique in combining several internationalization approaches. IMPs are characterized by diverse student populations as a result of active international recruitment; by curricula adapted to the diverse destination healthcare systems of their graduates; by collaborations with partner universities and governments; and by using English as the language of instruction (Brouwer et al., 2020). These programmes occur at universities across the world (Eckhert, 2010; Margolis et al., 2004; Yang et al., 2016). Over 200 IMPs exist globally with most located in the Caribbean, Eastern Europe and Asia (Brouwer et al., 2017).

The IMPs' global popularity contrasts with the limited attention they receive in the scientific literature. Where the programmes are discussed, diverging perspectives on their characteristics and purpose emerge. First, the terminology used for these programmes catches the eye: 'International Medical Programmes' (Gibbs et al., 2021; Yamada et al., 2013), 'English parallel courses' (Mayberry, 2013), 'English stream programmes' (Hodges et al., 2009; Yang et al., 2016), and 'offshore medical schools' (Eckhert, 2010; Halperin & Goldberg, 2016; Morgan et al., 2017). All these different terms refer to the same type of medical education. This varying terminology suggests different perspectives on what characterizes these programmes; e.g. the English language "in a non-English speaking country" (Mayberry, 2013)) or the location "outside of the United States" (Eckhert, 2010). This is problematic because ambiguity on what IMPs are and what they mean blurs further debates about them.

In particular, we note a debate surfacing around the value and desirability of IMPs. Scholars have argued that IMPs clearly have value for universities in terms of international collaboration and cultural diversity, as well as economic benefits (Altbach & Knight, 2007; Knight & De Wit, 2018). Moreover, IMPs have been found to offer an opportunity for students who cannot or choose not to study medicine in their home country (OECD, 2019). Notably, with more than 70% of their graduates practicing abroad, IMPs essentially prepare their students for a career elsewhere (Brouwer et al., 2022). Scholars have critiqued this perceived commercial model and the applicability of IMP curricula to other health care systems (Hodges et al., 2009). It has been argued that doctors who practice abroad face many cultural, regulatory and health care context specific challenges (Khan et al., 2015; Lineberry et al., 2015). These benefits and drawbacks concern different stakeholders at individual, institutional and (inter)national health care system level, with a different importance and purpose for each. Yet, how the purpose and value of IMPs is constructed at these different levels is not well understood.

The co-existence of different perspectives at different levels is also potentially problematic in education practice. In our own previous empirical work around IMPs, we observed diverging viewpoints regarding the desired graduate profile of IMPs. Some stakeholders believed IMPs should deliver 'global physicians': special doctors equipped with distinct international competencies, ready to practice in diverse local contexts. Others saw IMPs as programmes that deliver 'universal professionals': overall high-level graduates fit for future practice anywhere. Faced with these different viewpoints around the purpose of the programmes, staff reported challenges in curriculum design decisions and in dealing with diverse student expectations (Brouwer et al., 2020). In addition, misalignment is plausible between for example students' expectations of a universally applicable degree and the curriculum context of one country; or between a programme's outcomes and the labour market or health care system needs across borders; or between (inter) national policies and practices around accreditation and licencing.

The nature, scope and implications of these discursive misalignments are, to our knowledge, not well researched. Awareness of the co-existence of different discourses around the purpose of IMPs can increase our understanding of some of the problems and controversies around IMPs. This understanding in turn might inform education practices as well as policymaking. Exploring these discourses thus contributes to our understanding of globalization and internationalization in medical and higher education.

Research objectives

In this project, we document the effects of different discourses used to justify the purpose of International Medical Programmes. We applied tenets of Foucauldian discourse analysis to explore the implications of the co-existence of the different discourses for medical education practice, specifically on the activities of students, teaching staff, and the articulation of institutional visions and (inter)national regulatory processes. The research questions guiding this work are: How is the purpose of International Medical Programmes discursively constructed at the (inter)national regulatory, institutional and individual level? And what are the implications of the co-existence of these discourses for the different stakeholders?

Methods

Study design

In this study, we used a Foucauldian discourse analysis approach to explore our research questions.

By using texts as the object of research, a Foucauldian discourse analysis documents how particular institutionalized ideas (discourses) construct different versions of the social world (Hodges et al., 2008; Hodges et al., 2014; Kuper et al., 2013).

Our approach involved identifying the different ways in which the purpose of International Medical Programmes is constructed, discussed and practiced; identifying the characteristic statements of these discourses; and describing how these discourses shape possibilities for actors caught up in their operations. Our design entailed exploring the different discourses, with a focus on how these ideas interact, complement each other, or conflict in the activities of actors caught up in the operations of these discourses.

Research context and data collection

This study situated in two specific International Medical Programmes at Pécs University (Hungary) and Maastricht University (the Netherlands). These contexts were part of earlier case studies researching curriculum design in IMPs (Brouwer et al., 2020). Both met our definition of International Medical Programme: characterized by active international recruitment; curriculum internationalization; international partnerships; and the use of English as instruction language. Variety in age of the IMP and diversity in teaching methodologies (see (Brouwer et al., 2020) for more selection details) ensured a broad perspective of the phenomenon under study.

For the study presented here, we first performed a secondary analysis of interview transcripts from our previous work, which consisted of 17 semi-structured interviews with staff and recent graduates from the two IMPs, conducted between 2018 and 2020 (Brouwer et al., 2020; Brouwer et al., 2022). Our analysis focused on identifying the discourses that participants draw upon to rationalize the purpose of, and practices associated with IMPs. Additionally, we further build the archive with policy documents. This sampling decision was made after preliminary analysis of the interview transcripts indicated that policy frameworks impacted decision making of actors. We searched for policy documents that discuss IMPs or relevant internationalization policies, published by both researched institutions, national associations, accreditation agencies and governments. Identification of relevant documents occurred through online searches and through suggestions from interview participants and research assistants during the case study project. This part of the archive formed the primary texts (Kuper et al., 2013) for this study.

Then, we included relevant medical education scholarly literature and public domain texts relevant to the global context. These secondary texts (Kuper et al., 2013) served to appreciate the discursive interactions around IMPs in their wider international contexts. For this part of the archive, we conducted a focussed search, limited to documents that helped to contextualize or verify the findings from the initial analysis.

In summary, our archive consisted of:

- Previously conducted key-informant interviews
    - Programme directors and teaching staff from 2 IMPs (14)
    - Recent graduates from 2 IMPs (3)
- Policy documents relevant to the two contexts
    - National policy documents (2)
    - Institutional documents (7)
    - Web texts (2)
- Peer-reviewed scholarly literature (8)
- Public domain texts relevant to the global context (1)

Please note that this manuscript's references include only those articles that are quoted. The complete document overview is available from the first author upon request.

Data analysis

The collection and analysis of the data occurred concurrently, as "one cannot build an archive without engaging in analytical work" (Martimianakis & Hafferty, 2013).

Our data analysis approach was based on and in line with other recent studies that employed discourse analysis methodology to study phenomena relevant to medical education (Haddara & Lingard, 2013; Martimianakis & Hafferty, 2013; Whitehead et al., 2014) and consisted of the following steps (based on Kuper et al., 2013):

1. Familiarization with the data, including collecting factual information about the texts
2. Identify mentions, definitions or discussions of IMPs, and noting who is using the statements, in what context and for what purpose
3. Iterative analysis of patterns, links and interactions between the identified discourses through re-reading the texts and discussions in the research team
4. Description of the effects and implications of the co-existence of dominant discourses on IMPs

Ethical considerations

The key informant interviews that underwent a secondary analysis were conducted with ethical approval of the Ethical Review Board of the Netherlands Association for Medical Education (ref no. 00 929) and the Regional Ethics Committee of the University of Pécs (ref no. 6746). 'Balancing the interests of the institutional, local, national and global contexts' was an explicit sub-objective stated in the proposal and participant information for these studies, which covers the current research question and justified re-use of these data for this study.

For the document part of the study, involving scientific publications and publicly available policy documents and media articles, no ethical approval was required.

Results

We identified three main discourses in our archive. We first present the characteristic statements and practices of each. Next, we describe the implications of the co-existence of different discourses around the purpose of IMPs and how this shapes tensions and consequences for individuals.

International Medical Programmes in the service of institution interests (I)

This first discourse can be described as "IMPs exist to benefit institutions' finances and reputation". We found this idea to be reproduced in various ways in our archive through policies, practices, and perspectives of actors.

The discourse of institutional interests is legitimated by policy developments in higher education, e.g. decreases in government funding for public institutions. As a result, institutions are being stimulated to develop innovative activities that increase private funding acquirement, including creating degrees that allow for international student recruitment against often high tuition fees. By creating an International Medical Programme, universities thus respond to shifting policies and market needs. Indeed, in the case of our two study contexts, the circumstances that created this opportunity included an offer by foreign governments to pay for training medical students.

While this perspective of the institutional benefit was not explicitly present in formal institutional documentation, we found clear examples of practices that emerge and are made possible by this discourse, e.g. the higher tuition fees for students in the IMP, and lucrative scholarship contracts with foreign governments.

> *"And one of the arguments was of course, because from 2007 we accepted Saudi students, who came to the Netherlands on a scholarship, and yes, I think already when this agreement with the Saudi government took place (…) that people started thinking about making an international track in the programme." [Programme Director, Maastricht, discussing the reasons to start the IMP]*

Individual staff members and students in both study contexts did often quote finances or profit making as a primary purpose of initiating the International Medical Programme. In one institution, teachers explained how the full university depended financially on the profits made through the international programme in the medical school.

> *"It's money, money and money (...) But in this structure, still the medical faculty, the medical school, is the one that is the financial engine of this whole [institution]." [Teacher, Pécs, responding to "What would you say is the vision of having these international programmes, why are they there?"]*

International benchmarking appeared as another benefit for the institution. Staff in both study contexts quoted this purpose. Specific elements of benchmarking that are validated by this discourse include formal international accreditation procedures such as following the World Federation for Medical Education guidelines for accreditation (WFME, 2005), as well as collecting informal evidence of graduates successfully practicing in other health care contexts. The presence of an IMP and its successful benchmarking function as publicity, which was considered beneficial for the institution's reputation.

> *"The university I think. We already had the name of being an international university, but now we have a medical training programme with an international track, it gives a more international reputation." [Teacher, Maastricht, responding to 'Who benefits most of an IMP?']*

The universities hosting the IMPs have a central role in reproducing this discourse, which can be seen in institutional policies and practices around student recruitment. The discourse is for example reflected in one institution's communication and marketing materials, where benchmarking is being referred to as a selling point:

> *"The curriculum of the general medicine course in Pécs is designed to form a foundation upon which the future physician can build his or her medical knowledge in a continuously evolving profession. (…) All European Union countries and several other countries (Norway, USA, Canada, Israel etc.) recognize the diploma issued by the Medical School." [Excerpt from a website with information for prospective students, Pécs]*

In summary, this first discourse shows that the purpose of IMPs is frequently constructed around serving the institution by ensuring revenue and boosting reputation.

International Medical Programmes in the service of public interests (II)

A second main discourse in our data can be described as "IMPs exist to contribute to the global society at large through health care and education". In this discourse, it is not the university as an institution but the outside world, more precisely the education and health care systems, that form the main beneficiaries of IMPs. Specifically, our archive included discussions on contributions of IMPs to a country's academic climate and to the global health care workforce.

Throughout the first two decades of this century, internationalization of higher education was actively promoted as a means to improve the quality of education and research and develop the 'knowledge economy'.

> *"To ensure a spot in the top 5 of knowledge economies, the [Dutch] knowledge institutions aspire to push the Netherlands as a 'global brand'. (…) Internationalization is a necessary movement for further development of the Netherlands as a knowledge economy; for strengthening the innovation and competitive power. Active participation in global knowledge networks is inevitable to continue acting as a leader in teaching, developing and applying knowledge" [Excerpt from a joint vision document on internationalization by all Dutch higher education institutions] (VSNU and Vereniging Hogescholen, 2014)*

In line with these policies, English as a second language of instruction started to appear across higher education institutions, operating as a discursive mechanism for attracting international students. In addition, internationally oriented degrees, including International Medical Programmes, emerged.

For medical education specifically, developments in the global health care context are being referred to as core outcomes by those who promote this discourse.

First, individuals (staff as well as students) and institutions refer to the universal applicability of IMP degrees across borders as a way to contribute to the healthcare workforce globally. For some, IMPs contribute to solving shortages of training places elsewhere and should therefore be encouraged.

> *"If we concentrate on medical education, this is a kind of task that requires specialised centres and although there are a lot of universities all around, in general it seems so that there are a lot of countries, regions that cannot provide or teach as many doctors as they [need]." [Teacher, Pécs, discussing the desirability of international medical education]*

Policies and practices around global standardization of medical school accreditation support this perspective (Karle, 2007; Tackett, 2019).

Secondly, many refer to globalization as a justification for International Medical Programmes. Staff and students describe IMPs as part of the necessary and logical response to the changing scope and nature of medicine with increased international movement of patients, diseases and health care workers. This discourse creates the conditions for innovative and internationalized educational programmes and is reflected in for example this excerpt of a policy document at one of the participating institutions.

> *"Future proof health care education should thus leave from the starting point that the environment in which the future health care worker will work, will not have a stable local or national character. In fact, health care is very much internationally framed and subject to fast changes. A changing world in which striving for content based excellence should go hand in hand with aspects around interculturalization, Europeanization, internationalization and globalization. To these aspects, the [university hospital] should pay ample attention, within the different curricula and also in the hospital." [Advice formulated in a policy document aiming to 'develop a plan for integrated internationalization policy at the Medical Faculty', 2013, Maastricht]*

Summarizing, the purpose of IMPs is also constructed around serving the public interest and constructively responding to globalization.

International Medical Programmes in the service of individual interests (III)

In our archive, the purpose of IMPs was thirdly constructed around individual benefits: "IMPs exist to offer students opportunities" to migrate to obtain education and consequently to be prepared to practice globally. Policies including the Bologna process in the EU as well as recognition of degrees across borders support this discourse.

A perspective expressed across our archive is that graduating from an IMP enables the student a freedom of choice to pursue a career wherever they want, whether in their country of origin, the country of studying or a third country.

> *"Almost everything is possible, that you have the chance to also work abroad. (…) For me, the big question when I started my studies was,*

will I forever be bound to the Netherlands, if I study here? And that was explicitly not the case, and they communicated that clearly." [Graduate, Maastricht, discussing the reasons she applied for the programme]

Several countries have set up specific 'welcome (back) programmes' for returning foreign trained doctors, a practice that further illustrates the materiality of this discourse.

"International medical graduates (IMGs) can either select to take a proficiency test to become licensed to practice in Sweden or to take a 1-2-year complimentary medical education (CME) to qualify for internship. Both paths test the participant for proficiency according to the national Swedish standards for becoming a licensed physician." (Hultin et al., 2019)

This discourse of individual benefit to the student is also employed in institutional marketing material, for example on the website of one of our researched contexts:

"Would you like to study medicine in an international context? Are you interested in the multicultural aspects of medicine? Or would you like to work abroad eventually? If so, you can also follow the English-language, international version of the Dutch bachelor's in Medicine." [Excerpt from as website with information for prospective students, Maastricht]

Furthermore, in line with the idea that a 'globally focused' medical education curriculum is beneficial for society, we found that both staff and students in IMPs believed that international exposure during medical education was beneficial to students, that it would make them better practitioners.

Thus, this third discourse highlights IMPs as valuable opportunities for learners to obtain a medical degree abroad.

Implications of the co-existence of different orientations to the purpose of IMPs

Our analysis next focused on examples of co-existence of discourses in our archive. Many individuals indicated that there are multiple purposes for having an IMP and the three discourses we identified were present in data from each institution, often expressed by the same individuals or within single documents.

Sometimes this co-existence was complementary. For example, teaching staff discussed the practice of developing and implementing meaningful curriculum elements to fulfil a goal of preparing future doctors to be responsive to globalization.

This practice fits within all discourses, as it is perceived as increasing education quality, which is beneficial to institutions, society and individual students.

> *"And actually, it's also beneficial (…) from the point of view of the quality of teaching. During accepting foreigners in our programmes, these entirely changed the way of teaching." [Teacher, Pécs, responding to "What is the vision of the English programme? Why is it there?"]*

Also, a perceived strengthened 'knowledge economy position' as referred to in the quoted vision document (VSNU and Vereniging Hogescholen, 2014) on internationalization in higher education is advantageous for institutions as well as society.

However, we also identified **misalignments** of the discourses, resulting in tensions, dilemmas, conflicting behaviours and unmet expectations among individuals.

One common practice where conflicts manifest is in curriculum development. Teaching staff engaging with the public interest discourse put effort in adjusting curriculum content to better fit the needs of health care systems globally. While they believed this effort supported individual student needs and improved education quality, to them, it clashed with the institutional interest discourse in which a 'simply' translated curriculum was sufficient to reach the institutional goals. Some teachers experienced a pressure to fulfil the high expectations created by the marketing materials, while the challenges in education practice such as language barriers between staff and students were downplayed. A lack of clear direction from the institution further fuelled this dilemma, as one teacher expressed:

> *"And my role was to lead the change (…) to a more international content. And that was not further described. Also not what was meant with 'international' or 'international health' or 'global health' or 'public health' or you name it." [Teacher, Maastricht, leader of the curriculum internationalization team]*

A related problematic consequence expressed as 'conflicting interest' was found in the language of the programmes. Teaching in English supports the institutional benefit of being able to recruit international students – yet it was, by staff and students, at times experienced as detrimental to education quality, because of limited language skills by teachers or students. Some even argued that studying medicine in a student's non-native language is undesirable.

> *"This is a strong conviction of mine, against all English language education by non-native speakers, I'm talking not only about teachers but also about students. For my discipline, where it is essential that you think [critically] (…) To do that when you're not speaking your mother tongue, (…) that is very very difficult." [Teacher, Maastricht, describing their experience with teaching international students]*

The students' perspectives highlighted a misalignment between the institutional and individual interest discourse. The expectations raised by the institutional marketing material were not always met. One student clearly experienced a difference in how the institution advertised 'international' and the actual experience of the (limited) diversity in her cohort:

> *"That word international they've stressed a lot. So I expected to meet a lot of international people (…) I didn't realize that it would be European; German, Belgian, Dutch - and Saudi… that was our mix at the time." [Graduate, Maastricht, discussing the reasons she applied for the programme]*

To some, the co-existence of the institutional interest discourse, especially around financial gains, and the public interest discourse is problematic. Related, high tuition fees are beneficial to institutions but have negative financial implications for individual students. And finally, there is a plausible misalignment between the interests of the international students and that of individual patients and health care systems. Patients in the healthcare context around the IMP institution might not feel comfortable contributing to education in English – and the patients in the healthcare system where the graduate ends up practicing might be attended by a doctor who is not optimally prepared for that context.

In summary, while the three discourses are widespread among different stakeholders, their concurrent presence promotes conflicting practices. Conflicts are made possible because institutions do not explicitly choose a discourse, thus allowing for confusion among individuals.

Discussion

This study set out to explore the nature and scope of discursive misalignments in International Medical Programmes, and their implications for stakeholders at different levels.

The findings of this project shed light on the challenges that staff working in IMPs experience around curriculum design choices (Brouwer et al., 2020). This study disclosed that not only multiple discourses co-exist, they also represent conflicting interests. Caught up in the 'individual interest discourse', staff would engage in providing additional opportunities for students in IMPs, for example through adjusting education material to accommodate the needs of the international student group, while adding specific global health teaching fits the 'public interest discourse'. Yet, these curriculum alterations would present a clash with the 'institutional interest discourse', where financial interests prevail and parallel curricula should materialize without extra costs.

A root cause of the staff's experienced challenges is the lack of an explicit choice for one discourse by the institution. Not choosing explicitly, enables institutions to simultaneously engage in lucrative contracts with international partners, to benefit from IMPs as revenue making programmes, and to take advantage of IMPs' reputation of 'future proof medical education' that prepares graduates for a globalizing world. However, this lack of clarity confuses staff and students by creating unclear or wrong expectations.

It is noteworthy that while we found examples of co-existence of discourses among individuals and within institutions, the national policy documents on higher education internationalization that we included in our archive, did mention International Medical Programmes specifically. We see that the idea of 'international' thus remains conceptually vague across the levels that we studied, which was also found by Buckner and Stein (2019) in their study of conceptualizations of internationalization. Does the 'international' in 'International Medical Programme' refer to nationalities in the student population, to the language or to the programme's content? And does 'international' mean 'global' or 'abroad'? Buckner & Stein warn against defining international as "foreign" as that may merely reinforce inequalities (Buckner & Stein, 2019). Our study illustrates the importance of their call for continuous assessment of the impact of internationalization efforts.

Our study hopefully contributes to better understanding the debates around the value and desirability of International Medical Programmes by making explicit the conflicting interests underpinning the common rationales for pursuing IMPs.

Three sets of critiques address each of the discourses that we identified in our archive. First, IMPs have been critically described as "arrangements to 'export' students who can then be 're-imported' as trained physicians" (Hodges et al., 2009). For instance, Norway depends on IMPs for up to 40% of its physicians' undergraduate education and 25% of US doctors is trained abroad (OECD, 2019), reinforcing the need for these programmes. Yet, how well medical curricula apply across different healthcare systems has been questioned (Bleakley et al., 2008; Hodges et al., 2009) and calls for contextualization of medical education appear increasingly (Bates et al., 2019). This critique illustrates the 'public interest discourse' as it portrays the healthcare system in the student's home country as the main beneficiary of IMPs, while highlighting the potential risks for this same system.

Another common critical frame is that IMPs are "an opportunity for students who will otherwise "miss out" on medical education due to the compe[ti]tiveness of American and Canadian medical schools" (Morgan et al., 2017). In a previous project, we found that IMPs are indeed a popular choice for those who cannot or choose not to study medicine in their home country (Brouwer et al., 2022). Yet, these students not only benefit; many face significant intercultural challenges (Michalski et al., 2017) or even rather hostile rhetoric from other doctors and the public (Ho et al., 2015) upon graduation and returning to their home country. This critique thus addresses the 'individual interest discourse', emphasizing that there are limitations to this individual benefit.

And finally, IMPs have been portrayed as "for-profit, private educational enterprises" (Morgan et al., 2017) that are "attracti[ve] for universities in need of external sources of revenue" (Mayberry, 2013). These critiques to the 'institutional interest discourse' are in line with criticism of the privatization of higher education.

Our study also inspires reflection on some recent societal developments and on how discourses around IMPs might shift as a result. In particular, the Covid-19 pandemic has severely disrupted higher education practice causing a huge drop in international student mobility. Moreover, the quick uptake of online learning opportunities allows for 'international experiences' without travel (Cordova et al., 2021; Koris et al., 2021). It is unclear what this means for International Medical Programmes and for schools that rely heavily on IMP tuition fees. While beyond

the limitations of our archive, we imagine a future shift in the discourse away from the 'institutional interest discourse', possibly towards IMPs as accessible to the elite few only.

Strengths and limitations

This study adds a discourse lens to a scarcely researched phenomenon in medical education. By combining text with a secondary analysis of empirical data, the study offers an authentic illustration of the consequences and controversies of diverging internationalization discourses in higher education. The study focused on two particular IMP contexts and while they were selected because of their varying teaching approaches, the study results may not cover the full spectrum of IMPs and therefore not the full spectrum of IMP discourses. The archive was limited to recent interview texts and documentation, and thus does not allow for a comprehensive genealogy of each discourse.

Conclusion

The purpose of International Medical Programmes is discursively constructed around serving the institutions that host them, around serving the (global) public interest, and around serving individual students. Co-existence and misalignments of these three discourses cause conflicting practices and confusion, especially for staff and students in the programmes.

At the level of the institution or programme management, articulating a clear and explicit meaning to internationalization may reduce uncertainties, and reinforce realistic expectations of what constitutes a good outcome.

Current and imminent societal developments are likely to cause a shift in perspectives around internationalization in higher and medical education. A discourse lens can be useful to follow these developments and to assess the consequences of shifting discourses for the future of IMPs.

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Chapter 6

Solutionism across borders: Sorting out problems, solutions and stakeholders in medical education internationalization

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Internationalization in medical education is a broad term with multiple appearances and is not seldom presented as a goal in itself. In global university rankings, internationalization is often a key pillar, driving efforts to recruit more international faculty and students, and initiate more international collaborations. Yet, what problems does internationalization fix in medical education? Or does it perhaps create more problems than it solves? This special issue on solutionism encourages us to question the status quo and carefully analyse the complexity of problems to ensure beneficial and appropriate outcomes of proposed interventions. We take up this challenge reflecting on themes around internationalization in medical education.

Two papers in this issue (Nisbet et al., 2020; Rowland et al., 2020) inspired us to consider internationalization in terms of the problems and solutions it addresses and creates. Rowland et al (Rowland et al., 2020) apply the so-called 'garbage can model' to the context of patient engagement modalities in health professions education. The model, based in organizational sciences, presents a way to conceptually sort the relationship between problems, solutions and stakeholders. Organizational decision-making, according to this model, is 'not entirely rational, but instead a messy process of problems, solutions, and stakeholders situated together in a particular decision-making space' (ie the garbage can) (Rowland et al., 2020). One of the model's assumptions is that the way problems and solutions are linked together is often assumed, rather than made explicit—a pattern that we recognize in the context of internationalization in medical education.

Rowland and colleagues list multiple patient engagement modalities that are routinely implemented without fully understanding which problem they address and how. The authors describe how this can unintentionally create new problems for stakeholders involved. Similarly, internationalization efforts in medical schools around the world take many shapes, including student exchange programmes (often referred to as 'global health education'), curriculum internationalization, cross-border partnerships in research and education, or international student recruitment in dedicated international medical programmes. These and other responses to a globalising world could be considered solutions to challenges and problems, as well as opportunities, that globalization creates. However, the alignment between, on the one hand, the challenges and opportunities of globalization, and, by contrast, the internationalization modalities or solutions that are being applied, is not always evident.

When attempting to explicitly link solutions to problems as the garbage can model promotes, unintended issues become clear. For example, international exchanges enable exposure to different disease patterns and hence could be argued to provide a solution to the diversification of medicine as a result of globalization. However, global health electives also give rise to a number of ethical and equity issues with potential damaging effects on host institutions' communities in low- or middle-income countries (Khan et al., 2017). Another example concerns institutions that engage in cross-border curriculum partnerships for academic or economic benefits, without fully questioning what it brings to their students and faculty in light of the complexities of implementing a curriculum across institutions. Notwithstanding many successful and well-designed partnerships, some have notoriously dissolved for multiple reasons, affecting their stakeholders in the process (Waterval, 2018). These examples urge us to stop and pause before implementing an internationalization modality, and to question the connection between problem, solution, and potential new problems.

Additionally, a question that arises from the garbage can model with particular relevance for the internationalization context is: Whose problems are being solved? The issue of stakeholders also is central in the paper by Nisbet et al (Nisbet et al., 2020), who use Cultural Historical Activity Theory (CHAT) to shed a new perspective on clinical placement scarcity. Using CHAT, studying the subjects or actors that engage together in an activity and their (shared) objectives is central to a deepened understanding of problems and helps to develop nuanced responses. Nisbet and colleagues point out how, in their clinical context, the students' activity of education and the health professionals' activity of patient care were perceived as competing, contributing to an experienced scarcity of clinical placements. In a collaborative research project, they reconnected these activities by identifying shared objectives, which inspired a redesign of service delivery utilising student placements.

When applying some of the questions that CHAT raises to the issue of clinical placements in a context of international electives, we also encounter potentially competing interests among different actors. The incoming elective student intends to see and learn, the host institution might benefit financially or experience placement scarcity, while patients and supervising clinicians might feel pressured to cross a language barrier. These stakeholders could be regarded as subjects in disrupted activity systems with seemingly competing objectives.

To reconnect their activities they might engage, through 'cycles of expansive learning' (Nisbet et al., 2020), in the (re)design of international electives as a beneficial internationalization modality for all. This CHAT-based approach could be similarly inspiring for other modalities that involve multiple stakeholders on different levels and in different contexts, such as institutional partnerships and international medical programmes.

Both Rowland and colleagues and Nisbet and colleagues address the risk of transferring solutions across contexts and advocate for detailed local analysis. This issue is very tangible in medical education internationalization, where for example curriculum elements and teaching methods are routinely applied across borders, sometimes literally copied from elsewhere (Gosselin et al., 2016). In this context, it is interesting to consider two distinct ideological perspectives that have been found to underpin internationalization efforts in medical education (Brouwer et al., 2020; Martimianakis & Hafferty, 2013). The perspective of medicine as a universal profession entails the idea that the medical profession is essentially identical across the world and a good doctor in one place is a good doctor anywhere. This 'universalist' view not only enables mobility of physicians and students, but also facilitates for example standardization of education, assessment and accreditation. In the other perspective, the medical profession is regarded as highly context-dependent and requirements for good medical practice are influenced by national or local culture, language, health system characteristics and health beliefs. In this 'contextualist' view, internationalization is necessary in medical education because of changing disease patterns and global migration that both diversify local health care contexts. It thus encourages curriculum internationalization and international elective placements.

The two perspectives are often presented as views that see problems differently and offer different solutions to globalization challenges (Gosselin et al., 2016). Yet, we recognize that the tensions between standardization and contextualization will always remain, and what matters is how we navigate these tensions (Bates et al., 2019). Following Rowland and colleagues, therefore, we endorse the idea of moving from 'problems to be solved' to 'polarities to be navigated' and we encourage critical reflection on the complexities of internationalization modalities in medical education.

Sorting out the problems, solutions and stakeholders in the international garbage can, and looking for shared objectives of international activity systems may help this navigation. This process may be more complicated in international contexts, as stakeholders may have different ideas about how to conduct such analysis, and decisions in one place may influence education or health care contexts across borders. Perhaps determining a sorting strategy with all stakeholders involved could be a first step.

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Chapter 7

Discussion

The previous five chapters have each shed light on the phenomenon of International Medical Programmes from different angles. In this Discussion chapter, I will bring these angles together to address the overarching Research Question of the thesis:

> *How do choices around the aims, vision and content of IMPs play out in the curriculum and for the actors involved?*

In the following paragraphs, I will address the aims, vision and content, respectively, and discuss how the findings of my studies relate and contribute to academic and public debates. In this reflection, I will include implications of my findings for education practice and my ideas for further research directions. Finally, the chapter includes a discussion of the overall strengths and limitations of the thesis, followed by some final thoughts.

On the aims of IMPs: Reflections on universalism and contextual diversity

The thesis main research question first addressed choices that institutions make around the aims of International Medical Programmes. In particular, what does the IMP aim to achieve for its graduates? What are the requirements for professional global practice?

Different interpretations of the aim and different choices in response to these questions, result in a heterogeneous landscape of International Medical Programmes which has consequences for students, staff and future work places. The findings of the studies in this thesis reflect ongoing debates on standardization and contextualization in medical education and inspire new research enquiries.

Findings: Anthony, Isabel and universal versus specialised expertise

A first important finding of the research is the understanding that there are (at least) two distinct student profiles in International Medical Programmes with different curriculum needs and expectations.

The case study project with staff interviews and curriculum document analysis across three International Medical Programmes (Chapter 2), resulted in identifying two approaches to curriculum design that reflected two main notions of IMP outcomes or graduate profiles. The first main curriculum approach involved the adding on and integration of global health topics, intercultural communication,

and international electives (in)to the curriculum. This approach suggested that an IMP would result in graduating as a global physician - a distinct type of medical doctor, with special expertise in global health and international medicine. The other curriculum approach involved translation into English and alignment of the IMP curriculum with a standard and accredited local or national curriculum. This approach suggested that IMPs deliver universal professionals that are fit for practice in any health care context globally.

In Chapter 4, based on a series of questionnaires and interviews with recent IMP graduates, I presented Anthony and Isabel who served as representatives of these profiles and confirmed their existence from the learner's perspective. Isabel deliberately selects an IMP for its international benefits, envisaging an international career as a global physician. Meanwhile, Anthony pursues a medical degree 'anyhow', despite the challenges of studying abroad, with an aim of practicing in his home country and who thus requires a generic, universally applicable degree.

Anthony and Isabel thus represent two sets of assumptions on what an IMP aims to achieve, and on what the international professional practice of an IMP graduate demands. In Anthony's perspective of a 'universal professional', being a doctor is the same everywhere, and for him it would be best if all medical curricula would have a similar structure with comparable outcomes and a standardized final exam that would give him access to any health care system. Isabel regards the world differently. She is interested in the variety in health care systems, language, cultures and disease patterns globally and she seeks a curriculum that prepares her to recognize differences and teaches her how to navigate them. To her, being a 'global physician' entails continuous adaptation to the realities of the different local contexts where she might work.

Consequently, Anthony and Isabel, as illustrations of the 'universal practitioner' and 'global physician' profiles, also symbolize a broader debate in medical education – that of global standardization versus local contextualization.

Reflections: Global or local, standardized or contextualized

Responses to globalization in medical education, as in other areas of society, reflect a certain tension between global and local interests. They include efforts towards global standardization of education, for example through harmonization of competency frameworks (Frank & Danoff, 2007), curriculum structures (Patrício & Harden, 2010), curriculum content (van der Aa et al., 2019) and

accreditation processes (Weisz & Nannestad, 2021). Standardization aims to enhance comparability, mobility and quality of medical education across borders. At the same time, there is a movement towards more differentiation and contextualization of education, for example through adapting curriculum content to local contexts (Miller et al., 2011), and through selecting students from and training them in the local areas where they are needed most (Celletti et al., 2011).

Tensions between standardization and contextualization arise in different areas of medical education and have been described in, for example, selection procedures and accreditation processes. Standardising assessment criteria for medical school applicants through entrance exams increases the fairness and reliability of application procedures, but it may constrain the diversity of the student population in medical schools (Larkins et al., 2015). Global standard setting for institutional accreditation may enhance comparability of quality, but it could lead to overlooking local cultural values and country-specific societal health needs (Ho et al., 2017).

The studies in Chapter 2 and Chapter 4 on the student and graduate profiles and their curriculum needs in International Medical Programmes add another example of an area in medical education where this tension between standardization and contextualization is visible. An issue where this tension surfaced was addressed in Chapter 3 of this thesis. Teaching staff in different IMPs discussed the global standardization of education methods as an opportunity to expose students to best practices in education. They aimed for alignment of the IMP curriculum with education or assessment standards in students' destination countries. However, alignment with many potential destination contexts could imply conflicting needs and curriculum overcrowding.

Implications: Towards a new aim

How to balance the global and local interests is thus challenging in different areas of medical education, and it has been a subject of research in itself. Suggestions to approach this challenge include embracing the tension between standardization and contextual diversity by framing it as creative and helpful to allow education systems and standards to flexibly respond to shifting environments (Bates et al., 2019). In some cases, 'glocalization' has been proposed as an approach to adapt global education frameworks (Chou et al., 2021) or curricula (Giuliani et al., 2021) to local needs. Glocalization has been used to describe "the process of interaction between global standards and local educational systems, preserving

the meaningful contributions of the communities in different contexts and cultures" (Patel & Lynch, 2013).

Could 'glocalization' be an appropriate approach to the balancing act for IMPs, too? In reference to the survey data in Chapter 4, it is here key to recall that IMPs attract students from both profiles and that the student populations in IMPs are thus more heterogeneous than the staff perceived. This adds an interesting insight to the standardization versus contextualization dichotomy; namely that a dichotomy is not an appropriate term. IMPs should not choose between a global standardization and a local contextualization approach, but have to find ways to address the interests of all.

Arguably, regarding universalism and contextualization as opposites is rather fruitless. Whether standardization and striving for universalism is 'good' or 'bad' may be debatable, diversity across local contexts is an actual, non-negotiable reality. Diversity exists across and within country borders, increasingly so as a result of globalization. It exists within a single consultation room throughout a random day. Striving for standardization in medical education ignores these realities and, as such, could even be harmful to the situations involved. In this perspective, balancing global and local needs or interests is without meaning, because local interests are global interests and vice versa, as ultimately they constitute health equity globally, which concerns all of us (Prideaux, 2019).

A truly 'universally applicable' medical degree, then, prepares students for recognizing and dealing with differences. Glocalization, or contextualization of international medical programmes to all potential local contexts may not be feasible, but focusing on adaptability to flexibly respond to shifting environments is. Educational approaches that foster the development of adaptive expertise include providing students with opportunities to struggle and discover, deliberate design of learning environments that provide variability of experience, and maximizing variation in teaching approaches (Cutrer et al., 2017; Mylopoulos et al., 2018). Globally sensitive medical education, including IMPs, would benefit from further research into if and how such educational approaches also support the development of adaptability in the area of (international) contextual diversity. Such research may also contribute to addressing established research gaps in adaptive expertise research: the development of educational interventions and better understanding the conceptualization of adaptive expertise across cultures (Kua et al., 2021). In IMPs specifically, research could explore how to engage all groups of Anthonys, Isabels and their diverse teachers and leaders in embracing a new aim for IMPs beyond the dichotomy.

On the vision of IMPs: Reflections on higher education internationalization & social accountability

Secondly, the main research question of this thesis addressed the vision of IMPs. Why do medical schools engage in International Medical Programmes? What are the rationales for doing so and who benefits from this education model? Which considerations, implicitly or explicitly, inform these choices? The studies in this thesis sketch a picture of diverging perspectives around the 'why' of IMPs and of a lack of a clearly stated vision in most participating institutions. The findings inspire reflections on recent developments in academia and society: the debates on desirability of higher education internationalization and the increasing importance of social responsibility.

Findings: Purposes & rationales – benefits for society, institutions and individuals

Staff and students who participated in the studies in Chapters 2 and 4 of this thesis voiced different ideas on the reasons their institutions engaged in IMPs. Some speculated that it was 'all for the money', others saw it as an interesting academic opportunity, and many felt there was no particular explanation given by the institution.

The aim of the study in Chapter 5 was to further examine these ideas and to explore the purposes of IMPs through a discourse lens. I found that an institutional vision for IMPs is rarely made explicit, and I identified and described three distinct narratives that implicitly co-exist: IMPs as serving individual students, as serving the institutions that host them, and as serving the (global) public interest. Individual students benefit from the opportunity to study abroad and obtain a medical degree. Institutions that host IMPs benefit financially through tuition fees and IMPs are seen as a reputation booster for universities. And internationalization is, by many, seen as beneficial for society in terms of education quality improvement, and the public benefits from the healthcare workforce that graduates from IMPs become part of. A key finding in Chapter 5, however, was the lack of explicit choices by the institutions' management around the vision for the International Medical Programmes, causing confusion and frustration among staff and students.

As addressed in Chapter 3, most staff involved in IMPs indeed mainly discussed the programmes in very positive terms and they stressed the beneficial impact of these programmes on students, the university and society. Only upon prompting,

they did express some examples of situations where not all actors benefited, for example in the context of weaker students accessing medical education 'through the back door' which may be beneficial for the individual but not necessarily to society.

The generally positive attitude towards internationalization among IMP staff, and especially the discourse around societal interests, are interesting to reflect upon in light of recent public and political debates on higher education internationalization, for example in the Netherlands.

Reflections: Societal concerns & social accountability

Over the past 20 years, the Netherlands has seen a consistent increase in enrolment of international students across higher education programmes, including medical education, especially in the two faculties with an International Medical Programme. Since 2018 however, public criticism towards internationalization has raised, particularly about recruiting international students in higher education. Strong concerns are being voiced about the overcrowding of universities (Fang & van Liempt, 2020), about worsening educational quality as a result of 'Englishization' (Wilkinson & Gabriëls, 2021) and about the potential risks for Dutch culture and society in general (van Donselaar et al., 2022). These critiques cannot be considered in isolation from a broader political expansion of nationalism ideologies (Wende & Douglass, 2021) and from criticism to higher education marketization as addressed in Chapter 1.

An underlying issue here may be that internationalization has become regarded as a goal in itself. As I argued in Chapter 6, attracting international students and other internationalization modalities including hosting English language programmes do not necessarily align with the challenges that globalization poses to higher and medical education. Thus, the why question gains additional relevance: if the rationales and vision for internationalization are clearly articulated they may offer more appropriate arguments in public and political debates around the desirability of internationalization practices.

Here it is relevant to address two other recent developments in higher education globally: the growing focus on global and local social responsibility and accountability in medical education, and, in higher education generally, on global citizenship education. Social accountability implies that "[medical schools] attend

to (1) improving the performance of individual practitioners and health systems through interventions that promote the health of all the public (…) and (2) assessing the systemic impact of these interventions" (Boelen et al., 2012; Ventres et al., 2018). Global citizenship education (GCE) can be described as an approach to equip students to cope with the change and uncertainty that characterizes globalization and involves the development of attributes such as awareness, responsibility, cross-cultural empathy and participation (Goren & Yemini, 2017; Kraska et al., 2018). Three dimensions of global citizenship were distinguished in a recent concept note on the topic that may guide implementation of GCE at Maastricht University: global literacy, social responsibility and transformational engagement (Fonteijn, 2019).

How could universities that host IMPs employ these concepts in their vision building for medical education internationalization?

Implications: Towards a new vision

Reflecting on the themes described here, a suggestion surfaces that may provide a renewed answer to the 'why question' of international engagement and of offering an International Medical Programme. Explicitly engaging in social accountability and global citizenship education may form a topical, urgent and convincing rationale for IMPs. Internationalization would then not be a goal in itself, but a means to achieve understanding and improvement of issues of health equity in local and global communities surrounding a medical school. Embracing and employing the diversity of the international student population offers opportunities for teaching and learning as well as social involvement. This vision would also emphasize the complementarity of the individual, institutional, and societal interests of IMPs, as well as provide a potentially powerful answer to public and political criticism.

Further research projects rooted in, for example, participatory action research, could aim to develop this vision further and explore its relevance and implications for IMPs and the actors involved. In participatory research, staff, students and community participants engage as co-creators and co-investigators in development and evaluation of education.

On the content of IMPs: Reflections on global health education

Lastly, the overall research question addressed the content and modalities of curriculum internationalization and the choices that IMPs make herein. How do these schools decide on the curriculum for the international students? Which choices do they make regarding the teaching content and modalities, and which arguments have they considered in these decisions? The studies in this thesis approached these questions from different angles, including staff and student perspectives and curriculum documents from three IMPs. The findings inspire reflection on potential shortcomings of global health education, culminating in a call to decolonize international medical education.

Findings: Curriculum practices and missing support

The studies in Chapter 2 and 4, and the mapping project that preceded these studies (Brouwer et al., 2017), found several strategies toward designing the content of the IMP curriculum. In summary, these strategies and practices include four main approaches.

First, the translation of the existing locally used medical curriculum into English. This was in all participating institutions the first step, along with, sometimes, language training for lecturers. The next steps or approaches linked to the dominant perception of the intended graduate profile as described above. The second approach that emerged fits within the idea of a 'global physician' and best suits Isabel's profile. It includes adding 'international topics' to existing teaching material, in the form of additional learning objectives, group work activities, lectures or projects. Examples of such additional topics included epidemiology of global diseases, health system comparisons, tropical infectious diseases and (international) public health policy. These topics were often integrated in the core curriculum activities, or (to a lesser extent) added as optional activities or electives. The other approaches linked to the 'universal professional' profile and to Anthony's needs. As a third approach, teachers and institutions that leaned towards this perspective, described the importance of benchmarking the curriculum with global educational developments in general and certain assessments in particular. The United States Medical Licensing Exam (USMLE) was often mentioned as a key reference. Teachers studied recent USMLE exams to be up to date with current topics and requirements, and then adapted their IMP curriculum accordingly.

Fourthly, and related to the benchmarking approach, curricula were sometimes adjusted to align with specific health care system requirements in the destination countries of students. Resulting from direct consultation with representatives of receiving health care systems or governments, some IMPs incorporated a particular skill training or added a 'pre-departure' course for specific destinations.

The studies in Chapters 2 and 4 also highlighted some issues that are currently overlooked in IMP curricula. Recent graduates in Chapter 4 in particular flagged a number of themes that they considered important but missing, especially around support to prepare them for their international career transitions. They specifically mentioned career guidance and orientation to help understand the possibilities and impossibilities of their degree. Furthermore, they suggested to offer support in preparing for foreign licensing exams, and to include opportunities to gain work experience in and facilitate understanding of different health care systems, for example through electives in countries of interest. Another potential concern was raised in Chapter 3, where the data analysis revealed a number of stereotyping comments by teaching staff about international students, which may pose a risk to student wellbeing and intercultural learning opportunities.

The findings inspire reflection on potential shortcomings of global health education. In the global health education and curriculum internationalization literature, potential risks and downsides of well-intended curriculum practices receive increasing attention, in particular concerns are voiced on equity and neo-colonialism. How do these concerns and risks relate to the findings of this thesis and what do they imply for IMPs?

Reflections: Decolonization of global health education

How global health and internationalization can best be integrated in medical education curricula is subject of ongoing debate. Global health teaching typically refers to clinical rotations for students from high income countries to low- or middle-income countries, or to (often elective) subjects on health system comparison or the global burden of disease (Battat et al., 2010; Rowson et al., 2012). Curriculum internationalization is a broader concept, addressing "incorporation of international, intercultural and/or global dimensions into the content of the curriculum as well as the learning outcomes, assessment tasks, teaching methods and support services of a program of study" (Leask, 2015).

In both areas, issues of equity and neo-colonialism are considered underrepresented in current teaching (Eichbaum et al., 2021; Jones, 2022; Stein, 2017). Critiques

address for example the institutional partnerships that facilitate clinical rotations for rarely being equitable in terms of student flows from low income to high income countries (Adams et al., 2016). Collaborative research in global health is often rooted in and coordinated by institutions in high-income countries (Mogaka et al., 2021). Global health teaching modules, including preparatory courses for clinical rotations abroad, are criticized for lacking to address the historical legacies of colonialism that underpin partnerships and education (Bleakley et al., 2008; Eichbaum et al., 2021).

These critiques may pertain to the context of IMPs as well, where the applicability of curricula and degrees across borders and power dynamics around scholarship agreements have been questioned (Hodges et al., 2009). Reflecting on the specific curriculum practices identified in our studies, one might question whether adding 'international topics' or 'global health' – especially when international is operationalized as 'tropical', and 'global' health as 'low- and middle-income country' health – is a mere reinforcement of a western or neo-colonial view on the world, known as 'othering' (Zanting et al., 2020). Benchmarking with 'global' standards, or using English as a language of instruction in the first place, may be considered supporting dominant paradigms while posing a threat to cultural and other minority perspectives in health and education.

Clearly, these questions not only address the IMP content, they very much relate to the aims and the vision as well. Choices that IMP administrators and teaching staff make around universality, contextualization, standardization and social accountability may all be considered in this light. Indeed, some of these themes were addressed in the interviews for this thesis and described as ethical dilemmas in Chapter 3. For example, while aligning education approaches and teaching methods to 'Western teaching' came up as a way to stay 'up to date' and to offer students innovative education, some teachers described this 'homogenization' as a risk for education quality.

Implications: Towards new content for IMPs?

Discussing these themes here does not result in a conclusive prescription for IMP curriculum design. Rather, it may inspire further thinking and reflexivity in education practices and could be considered as an invitation to all actors in IMPs to address issues of equity and strive for decolonization in decision making processes – whether concerning the aims, vision or content of IMPs. Regarding the content, important elements to consider based on the reflections above,

include embracing diversity in the education content and teaching approaches, striving for equitable international partnerships, and teaching about health equity.

The strategies and experienced needs described as findings in this thesis may further help curriculum designers in current and future IMPs to guide their international curriculum development. The findings also add a practical case example to the body of literature on curriculum internationalization and global health education. Yet, many questions remain that may inspire further research on curriculum design. How to design education in ways that better support transitions to international careers? How to align education content with the suggested approaches to IMP aims and vision, addressing adaptability and social accountability? And how can decolonization efforts best be considered in curriculum design? As suggested above, a participatory approach to research, that includes students, recent graduates, teachers and employers from diverse backgrounds in the design and research process may suitably guide further IMP curriculum development.

Strengths & limitations

This thesis results from a substantial empirical dataset based on input from over two hundred individuals collected through surveys and interviews, and analysis of almost 150 documents. The design stands out for its global approach with data collected from eight different institutions in eight countries, and participants with over thirty nationalities. The studies include multiple perspectives, methods and methodologies that one reviewer characterized as 'an almost 360-degree vision of this emerging challenge'. The longitudinal study in Chapter 4 was challenging in terms of participant recruitment and follow-up, but gave a rewarding insight in the development of early career choices and considerations of a diverse group of graduates, with relevance beyond the IMP context. The studies were performed and written by a core team of three researchers who monitored overall alignment and coherence. Co-authors from different national, linguistic, cultural and professional backgrounds strengthened this team in different compositions for the individual studies, ensuring a fresh and truly international perspective to the international research theme.

The work must also be considered in light of certain limitations. As addressed in the Reflexivity section of Chapter 1, the thesis reflects a personal development process of myself as a researcher. As a consequence, the research philosophies

underpinning the studies vary from rather pragmatic post-positivist approaches in Chapter 4, to more constructivist approaches in Chapter 2 and 3, to a critical approach in Chapter 5. While this philosophical variety illustrates how science may shed light on a certain phenomenon from different perspectives, a more experienced researcher might have chosen an approach more consciously.

Furthermore, the diversity in research contexts, participants and in the research team, despite all efforts, was limited to those institutions and individuals that volunteered to join the project. It is possible that certain perspectives, particularly from those with views opposing IMPs or with negative experiences, may have been overlooked. As a result, the suitability of the findings from and implications of these studies to other IMP contexts globally should be considered cautiously. To encourage such consideration, we have provided ample details of the researched contexts and participants' backgrounds where possible.

One specific context that was not included in the research, is the Caribbean region where many medical schools offer medical education to international students. These schools differ fundamentally from the IMPs that participated in this research, as they specifically target the North American health care system, rather than 'any' destination, and they do not exist in parallel to regular, 'local' programmes. Yet, there are many similarities as well and further research to assess the applicability of the findings of this thesis in that particular context would be worthwhile.

Finally, an important aspect that received little attention in the studies, is the clinical phase of medical education, including the perspective of patients who are attended to by international students. Future research in that context could add valuable perspectives to the themes addressed in this thesis.

Epilogue

In this thesis, I set out to explore choices around the aims, vision and content of IMPs, and the implications of those choices for curricula, staff, students and graduates. I found that understanding IMPs' student populations, their career ambitions and preferred future work locations helps to paint the picture of graduate profiles, which translates into programme aims. I also found that a lack of a clear understanding of these profiles and, related, a lack of a clear vision on international medical education in many IMP practices, leaves room for ambiguity among staff, students and (future) employers. Choices around content, as a result, did not follow from a shared vision but from ad-hoc decisions and individual teachers' initiatives and ideas.

Globalization is regarded as unalterable, but internationalization involves many choices. Making these choices more consciously and explicitly than is being done until now in IMPs, will improve education quality, staff and students' experiences and institutions' positions. Here, I have suggested that this choice process could include embracing diversity and adaptability rather than balancing standardization and contextualization, and I proposed global citizenship and social accountability as frameworks to further guide vision building for international medical education. I argued that further thinking and research in medical education internationalization should involve efforts towards decolonization of education and research.

The world, 2026

5 years later. The journey continues. Working for Maastricht University's School of Health professions Education (SHE), I aim to build bridges. In my role as director of SHE Collaborates, our international capacity building project team, I envision equitable partnerships that benefit education, research and patient care. I contribute to socially accountable medical education content at home and abroad in different teaching roles with some preference for all things international. Together with the SHE Globalization and Diversity Special Interest Group, I conduct and supervise research through which we learn how we can make use of our differences in ways that improve health professions education and practice for all involved.

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Impact

This short chapter serves to reflect on the impact of the research described in this thesis on science and society. It starts with a summary of the main research objectives and results. Next, I will discuss the research' main contributions to science as well as the potential relevance to societal developments. The third part is a description of the main target groups that may have an interest in the themes of this thesis. The chapter closes with a brief overview of ways in which these target groups may be informed about the research results, so that the knowledge gained can be used in the future.

Research

In this research, I delved into International Medical Programmes (IMPs): medical schools that teach international groups of students, in English, and prepare them for a medical career anywhere in the world. I was interested to learn how globalization affects medical education. More specifically, the research aimed to better understand the choices that IMPs make around the aims, vision and content of such programmes, or, as the title of this thesis reads, to understand the what, why and how of International Medical Programmes. I interviewed staff, students and graduates and studied curriculum documents at eight different medical schools. Altogether, these data helped to learn how educational choices, including the lack of making choices, play out in practice.

The research showed that students have different ambitions and expectations when they decide to study medicine at an IMP. Some want and like the extra international content and challenges, while others 'just' want a medical degree that gives them a license to practice. Medical schools have different, and often very implicit, rationales and ambitions for their IMPs. Financial, altruistic and academic reasons to offer medical education to international students co-exist. These ambitions do not always match and align well in practice. As a result, it remains challenging to build a strong and matching curriculum for the students in these programmes.

Relevance

This thesis adds real world data and examples from a global variety of contexts and individuals to a, thus far largely theoretical and academic, debate. It connects the two academic domains medical education research and higher education internationalization research. One particular contribution was the coining of the term "International Medical Programme", which was defined and established in

the early publications of this thesis and has since been picked up and used by others as well (Chan et al., 2022; Gradiski et al., 2022).

Methodologically, the research stands out for a very international approach with many participating institutions and individuals from different countries and backgrounds. The work includes a longitudinal project, which adds an extra perspective and allows for understanding the development of views and perspectives over time. The introduction of Anthony and Isabel as two representatives of student profiles, and the presentation of their perspectives as two prose stories in a scientific paper, was considered quite innovative by editors and reviewers.

While there is no direct social impact of this research, it does offer insights about and suggestions for dealing with globalization in higher education. It thereby may contribute to social and public debates around higher education internationalization, student and health professionals' cross-border mobility, language and diversity in education and health care, and the social responsibility of universities.

Target group

The research results are relevant to prospective medical students who are considering their preferred location of study and who may identify as an Anthony or an Isabel. It speaks to current medical students in IMPs as well as in regular medical programmes who seek guidance in career orientation 'off the beaten track'. Graduates of IMPs may find recognition of their specific hurdles and challenges in finding their early career paths.

Teaching staff in IMPs and in medical education generally, who are interested in making their teaching globally relevant or who (have to) deal with curriculum internationalization may find inspiration in the study results and encounter issues to consider in curriculum design in the thesis' Discussion chapter.

And finally, institutional policy makers and administrators in medical education who decide on internationalization vision, strategy and ambitions may be interested to read and discuss the findings of this thesis to make well informed decisions.

Activities

Research findings find their way to these target groups through different routes. Four of the five chapters in this thesis have been published in peer-reviewed journals and the fifth one has been submitted for publication. The articles are available to everybody through the journals' open access policies. I presented the findings at national and international medical education conferences including the NVMO (Dutch Organization for Medical Education), AMEE (Association of Medical Education in Europe), and The Network / TUFH (Towards Unity for Health) meetings between 2017 and 2022.

My growing expertise in the area of international health professions education and collaboration is being recognized nationally and internationally as shown by my membership of the mid-term review panel for the international physiotherapy programme at the Amsterdam University of Applied Sciences and the AMEE panel for the ASPIRE Award for International Collaboration.

The findings have also already found their way to current education for medical students at Maastricht University, where I presented about the challenges and opportunities of international practice in a clinical student symposium and spoke about internationalization and diversity education at a career orientation event.

Ongoing informal communication with co-authors and research assistants across the participating research contexts, as well as with some of the participants in Chapters 2 and 4, forms an informal way to stay informed on perspectives beyond the studies and to share further research findings.

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Summary

Globalization influences the training of medical doctors in different ways. Medical schools adapt the content of curricula to better prepare students for their diversifying future work context, and increasing numbers of students travel abroad for, or as part of, their education. In **Chapter 1**, I introduce some of the main concepts and controversies in higher education internationalization, including institutions' main rationales for engaging in internationalization and their challenges in international curriculum design. I present International Medical Programmes (IMPs) as the main topic of this thesis, defined as distinct medical programmes, characterized by active international student recruitment, English as the language of instruction and an internationalized curriculum. These programmes offer a unique environment to see the consequences of globalization in medical education in action. The overarching research question guiding this exploration is:

> *How do choices around the aims, vision and content of IMPs play out in the curriculum and for the actors involved?*

This question marked the departure of a journey along eight medical schools in eight countries and more than two hundred individuals who shared their perspectives. The results are presented and discussed in the following chapters.

In **Chapter 2**, I first address the aims of International Medical Programmes. Preparing students for a medical career in an unknown international location is challenging as well as controversial. Curriculum designers must balance specific local healthcare requirements with the global health competencies doctors need in our globalized world. By investigating the challenges and strategies that IMP teachers experience in curriculum design, this first study aims to contribute insights to the debate on local versus global medical education. I conducted a multi-centre instrumental case study across three universities with an IMP in the Netherlands, Hungary and Malaysia. The study involved 26 semi-structured interviews with key curriculum designers who were recruited through purposive sampling. Additionally, I performed a curriculum document analysis. Data were thematically analysed within a multidisciplinary and international research team. In the interviews, participants described two profiles of IMP graduates: 'a global physician', equipped with specific competencies for international practice, and 'a universal professional', an overall high-level graduate fit for future practice anywhere. These perspectives posed different curriculum design challenges, most notably a balancing act between standardization and contextualization. In this chapter, I conclude that IMPs teach us how we can rethink graduate profiles in

a globalising world. Preparing students to be adaptable to the requirements of a rapidly changing future local healthcare context is challenging but crucial.

Chapter 3 zooms in on ethical dilemmas around the vision and content of IMPs. Internationalization in medical education raises ethical concerns, for instance over its for-profit orientation and the potential erosion of cultural diversity. These concerns fit into a broader debate on social responsibility in higher education. This study aims to explore how academic staff in IMPs experience and act upon these ethical concerns. I further analysed 24 of the interviews with curriculum directors and teaching staff that were conducted as part of the case study project in Chapter 2. Participants shared their personal experiences and responded to ethical concerns expressed in the literature. The multidisciplinary research team performed a template analysis of the data based on theoretical frameworks of ethics and social responsibility. Participants primarily experienced internationalization as having a positive impact on students, the university and the future global society. Yet, they did face several ethical dilemmas. First, marketization through international recruitment against substantial tuition fees could widen access to medical education, but may allow weaker students to enter medical schools. Second, homogenization of educational methods and content offered an opportunity to expose students to best practices, but also posed a risk to educational quality. And third, student diversity helped promote intercultural learning, but also jeopardized student well-being. I discuss that the findings reflect a tension between scholars' and practitioners' views. The critical perspective found in academic debates is largely missing in practice, while theoretical frameworks on ethics possibly overlook the benefits of international education.

In **Chapter 4**, the perspective shifts to the IMP students' and alumni's view on the aims and content of IMPs. IMP graduates practice globally, yet, as the previous Chapters indicate, how to prepare students for an unknown international environment is complex. Following IMP graduates throughout their early careers, this study aims to offer insights into gaps in current undergraduate education. In this international, longitudinal, mixed-methods study, 188 graduates from seven IMPs completed baseline surveys on career choice and job preparedness. Forty-two participants completed follow-up until three years after graduation and nine participated in a series of semi-structured interviews. During the analysis, two typical student profiles emerged. The first depicts a student who, despite the challenges of studying abroad, pursues a medical degree 'anyhow', with a common

aim of practicing in their home country. The other deliberately selects an IMP while envisaging an international career. Two years after graduation, the majority (>70%) of our participants were practicing in a country other than their country of training. They reported challenges around licensing, the job application process and health system familiarization. Participants' experiences point towards potential curriculum adaptations to facilitate cross-border transitions, including career guidance, networking and entrance exam preparation. In conclusion, most IMPs essentially prepare their graduates for a career elsewhere. Gaps and challenges that IMP graduates experience in this cross-border career transition entail a responsibility for preparation and guidance that is currently lacking in IMP curricula.

While completing the previous studies, diverging perspectives around the vision of IMPs emerged that I did not completely grasp. **Chapter 5** results from a discourse analysis project to better understand perspectives on IMPs' purpose, value and desirability and to explore the implications of these diverging perspectives. A lack of common understanding of IMPs' purposes causes tensions and triggers critiques. In this chapter, I use a discourse analysis approach to explore the different ways in which the purposes of IMPs are constructed and how these discourses interact. The research situates in two of the participating IMPs, in the Netherlands and in Hungary. The key-informant interviews from Chapter 2 and 3, supplemented with policy documents, public domain texts and scholarly literature, form the archive. The data collection occurred concurrently with an iterative analysis of patterns, links and interactions between the identified discourses. The analysis indicates that IMPs are constructed discursively around three distinct narratives and associated practices: serving the institutions that host them, serving the (global) public interest, and serving individual students. Co-existence and misalignments of these three discourses cause conflicting practices and confusion among stakeholders. This study illustrates how medical schools create tensions for learners and staff who must navigate conflicting expectations related to higher education internationalization.

Chapter 6 covers a conceptual reflection on problems and solutions in medical education internationalization, addressing issues relating to aims and vision of internationalization. I present internationalization as a delicate act that is not seldom presented as a goal in itself. I argue that the alignment between, on the one hand, the challenges and opportunities of globalization, and, by contrast,

the internationalization modalities or solutions that are being applied in medical schools, is not always evident. Referring to an organizational decision-making model on problems, solutions and stakeholders, I question whose problems are actually being solved in medical education internationalization. The chapter furthermore discusses some of the tensions in transferring education across international contexts, addressing issues of contextualization and standardization.

Finally, in the general discussion presented in **Chapter 7**, the main results of the individual studies are summarized and synthesized. The chapter answers the main research question and reflects on the findings in relation to broader academic and public debates. The main conclusions include that understanding IMPs' student populations, their career ambitions and preferred future work locations helps to paint the picture of graduate profiles, which translates into programme aims. A lack of a clear understanding of these profiles and, related, a lack of a clear vision on international medical education in many IMP practices, leaves room for ambiguity among staff, students and (future) employers. Choices around content, as a result, do not follow from a shared vision but from ad-hoc decisions and individual teachers' initiatives and ideas. The chapter ends with some thoughts on directions for further thinking and research. I argue that making these choices around internationalization more consciously and explicitly than is being done until now in IMPs, will improve education quality, staff and students' experiences and institutions' positions. This choice process could include embracing diversity and adaptability rather than balancing standardization and contextualization, and implementing global citizenship and social accountability as frameworks to further guide vision building for international medical education. I finally propose that further thinking and research in medical education internationalization should involve efforts towards decolonization of education and research.

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Lieve Roel. Lieve Manuel. Lieve Ruben. Ik ben zo ontzettend blij met jullie.

Biography

Emmaline Elisabeth Brouwer was born on August 7, 1983 in Haarlem, the Netherlands, where a creative global traveler (her father), a linguistic & organizational talent (her mother) and a loving and somewhat contrarian brother offered a solid foundation for her future. After completing secondary education in 2001, she started her professional journey that first resulted in a Diploma in Italian Language & Culture, obtained from the Università per Stranieri di Perugia, Italy, in 2002. She studied Medicine at Maastricht University between 2002 and 2009, where her interests in internationalization and medical education sparked and developed.

Emmaline pursued these interests in the years following graduation – first working as a clinician at the Harbour Hospital & Institute for Tropical Diseases in Rotterdam in the department of Internal Medicine. She then obtained an MSc in Public Health from the London School of Hygiene and Tropical Medicine in London, United Kingdom, in 2011, and wrote her MSc thesis during an internship at the World Health Organization's Alliance for Health Policy and Systems Research in Geneva, Switzerland.

In 2012, she rejoined Maastricht University as a Project Manager for SHE Collaborates, the School of Health professions Education's team for international collaborations in educational capacity building. She has since worked as a project manager and educational consultant in Africa, Asia, Europe and the Middle East. She developed her teaching skills as a tutor, mentor and supervisor for Dutch and international students in Medicine and Health Professions Education, including some years as a clinical skills teacher in the faculty's Skillslab department.

Since 2016, she has worked as an Assistant Professor at the School of Health professions Education and the Department of Educational Development and Research, combining her project management and education roles with building the research projects and skills that resulted in this PhD thesis. Between 2018 and 2021, she lived and worked in Lisbon, Portugal, where she and her husband welcomed their two sons.

Starting January 1, 2023, Emmaline will join the SHE Management Team as Director of SHE Collaborates, leading a team of ten project managers working globally. She looks forward to further pursuing her research interests and ambitions in health professions education internationalization in this role.

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