Chapter 8

General discussion

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The research described in this thesis has allowed us to develop new perspectives on standardisation, harmonisation, and variation of postgraduate medical education (PGME). Since the terms ‘standardisation’ and ‘harmonisation’ are used interchangeably in the literature,1-4 we felt the need to define both concepts more distinctively. Therefore, we use the term ‘educational alignment’ as an overarching principle. We consider educational alignment of PGME in Europe to be a process through which European countries align their training from a pan-European perspective, to create a commonly shared understanding of training, and potentially more homogenous training. Both standardisation and harmonisation are examples of educational alignment, however they do differ from each other. Further in this section of the thesis, we will provide our perspective on the distinction between standardisation and harmonisation and, more importantly, what kind of implications this has for practice.

We researched the development of the European curriculum in Obstetrics and Gynaecology (OBGYN) as a learning case of educational alignment.5 We have gained understanding of problems that educational alignment addresses, how curriculum development of PGME can be organised and achieved, and what elements are important to consider during a process of educational alignment.

In this chapter we describe how we have integrated the findings of our research and we present new perspectives on educational alignment. Also, we provide recommendations on what to consider in such a process.

We start by laying out the theoretical framework that we use throughout this chapter, because it offers a lens for the interpretation of our findings and our recommendations.

Theoretical framework

Our research has encouraged us to reconsider the concept of European harmonisation of PGME. How this concept has evolved throughout our research is best illustrated by referring to the article by Martimianakis and Hafferty from 2013.6 In this article, the authors recognise three discourses of global medical competency in the medical education literature, which we will explain more, before integrating them with our findings. Martimianakis and Hafferty’s first discourse regards ‘the universal global physician’, which assumes that medical competence and medical practice transcend geographical and cultural borders and globalisation has led to one universal global health context.6 Also, it assumes that globalisation is an inevitable process that we should adapt to through standardisation of practices, because standardisation assures quality of medical practice and medical training. This discourse’s stance is that scientific evidence has proven that professional norms, values,
attitudes, and skills are internationally transferable. Because these constructs of medical education are considered generally applicable, they can be embedded in standards of medical education. Standards are structured, detailed, prescriptive and validated internationally. For the purpose of our research regarding European harmonisation of OBGYN training, we adapted this perspective to the ‘universal European gynaecologist’. Relating this perspective to our research context of European educational alignment, it assumes there is a need for detailed standardisation of training to ensure quality of training, which relies on transcultural, or pan-European, transferability of competencies.

The second discourse regards ‘the culturally versed global physician’, which assumes that medical competence and medical practice can only be considered in relation to cultural differences. Therefore, acceptance and, even more so, an understanding of diversity are considered vital. Also, it assumes that globalisation has led to pluralisation of local health contexts, rather than the creation of one universal global health context. This perspective argues that agreeing on universal global competencies cannot be achieved (yet). Research around this perspective explores ethical dilemmas created by cross-cultural differences. We adapted this perspective to the ‘culturally versed European gynaecologist’ in relation to our research. It assumes there is a need for understanding of and responding to diversity, which relies on the omnipresent relation between medical competence and cultural diversity.

Martimianakis and Hafferty’s third discourse regards ‘the global physician advocate’. This final discourse addresses marginalisation of specific health sectors and demographic groups, which is beyond the scope of our research. Although we recognise the relevance of all three discourses for future developments, we only focused on the first two discourses with regard to European educational alignment.

The lens of the universal European gynaecologist and the culturally versed European gynaecologist helped us to specify our findings into a new perspective on educational alignment. We lay out this perspective by elaborating on two main recommendations for the future of educational alignment. The first is a recommendation for interpretation of the concepts of harmonisation and standardisation. Our message is: ‘Harmonisation ≠ standardisation’. We explain how our research has helped us to how to interpret both concepts more distinctively, where standardisation aligns more with the lens of the universal European gynaecologist and harmonisation aligns more with the lens of the culturally versed European gynaecologist. The second recommendation regards a message for future educational alignment, being to ‘Encourage local translation of aligned curriculum’.

Harmonisation ≠ standardisation

The starting point of our exploration of European alignment of PGME was the argumentation of the need for a harmonised European curriculum in OBGYN. From the beginning of our research, we referred to the process of educational alignment as harmonisation. However, it appeared that in practice we could not discriminate harmonisation from standardisation. We explored the need for harmonisation and aimed to explain its objectives as assurance of quality of training in Chapter 2. We posed that harmonisation of OBGYN training could enhance mobility of medical specialists and trainees throughout Europe. Also, we argued that collaboration and exchange of best practices
between hospitals could be stimulated by harmonisation of PGME. This starting point is in concordance with the perspective of the universal European gynaecologist.

We moved on along the same line, although we described the difference between standardisation and harmonisation more distinctively. To understand to which level harmonisation of training could be achieved, we explored variation of training in OBGYN in Europe in Chapter 3. Through our research we learned that training methods in caesarean section training are quite similar throughout Europe. However, we also learned that conceptions of PGME varied. Our results specifically showed that trainees conceived of ‘independence’ in their performance of caesarean section differently in different countries. We suggested that these diverging conceptions are affected by cultural norms and values. Literature has taught us that, across the world, varying conceptions of competence, medical professionalism and communication exist as well.\textsuperscript{13-18} We compared this to the existing literature and found that transferability of medical education concepts (e.g. professionalism and communication) seemed limited.\textsuperscript{13-18} Probably, cultural variation is not limited to national borders, but also exists between regions, local contexts, religions, ethnic groups, or social groups.\textsuperscript{6} This can be understood as having implications for the extent to which harmonisation can be achieved. Harmonisation aims to find common grounds of training, however, if medical education concepts are diverging, common grounds are more challenging to find.

To give substance to common grounds of training, we aimed to define the medical expertise outcomes of the European OBGYN curriculum. We initiated a consensus procedure amongst European OBGYN specialists and trainees to establish medical expertise outcomes that were considered most relevant. This is described in Chapter 4. Despite great diversity in backgrounds of participating OBGYN specialists and trainees in the consensus procedure, consensus was reached on the required medical expertise outcomes of the European OBGYN curriculum. However, the process of the consensus procedure taught us that both standardisation as well as harmonisation of medical expertise outcomes occurred, although this occurred interchangeably. Also, the outcomes of the consensus procedure taught us that local incidence of specific procedures and local standards of practice affect training locally more strongly than was expected at first, and that they are in line with contemporary debates in the field of OBGYN. Although consensus was reached, this study also showed on which elements there was debate and to reach consensus was not easy. Due to local habits and needs, some elements of a European curriculum may be variously executable in different contexts and this may even change over time. More importantly, this process of alignment of medical expertise outcomes showed that some outcomes were standardised easily, while for other outcomes more negotiation was required, which led to harmonisation.

These gained insights stimulated us to further explore the concepts of standardisation and contextualisation in the process of educational alignment, which is described in Chapter 5. In medical education, processes of standardisation with allowances for contextual variation may cause tensions.\textsuperscript{19-21} A better understanding of potential tensions in educational alignment and a better understanding of how these tensions are negotiated was deemed necessary to understand and address potential challenges in the process.\textsuperscript{22} Acknowledging the importance of both standardisation as well as of contextualisation, and specifying where and how they cause tensions in the development of the European OBGYN curriculum, has allowed us to discover ways to deal with these tensions.

The findings of our research have allowed us to develop a new perspective on educational alignment, and on standardisation and harmonisation of PGME. As we can conclude from our findings,
standardisation connects to the **universal European gynaecologist** perspective and harmonisation connects to the **culturally versed European gynaecologist** perspective. Development in our understanding of the two concepts shows the importance of creating clarity in how standardisation and harmonisation are interpreted, to create clarity in the reasons for educational alignment and its required end goals. Therefore, we provide the following recommendation for interpretation of alignment, standardisation and harmonisation of medical education.

As we see it now, educational alignment is the overarching term to be used, rather than the term harmonisation, which was used as the overarching term previously. A process of educational alignment, involves making agreements on the degree of uniformity of the education, and ensuring that these agreements can be implemented. We argue that educational alignment entails a spectrum of levels of alignment. In our research, we have identified four different levels: Standardisation, harmonisation, and professional freedom. Placing them on a visual spectrum results in an image such as depicted in figure 1. This spectrum is not necessarily exhaustive, however it provides a more comprehensive understanding of standardisation and harmonisation, than has been provided in the literature so far.

![Figure 1: Spectrum of levels of educational alignment](image)

To align education, uniformity is not necessarily required. Rather, educational alignment entails importance of standardisation as well as variation to some extent. However, each level of educational alignment, require specific strategies for curriculum development. In our perspective, standardisation means striving for uniformity in a curriculum, as well as the enactment of training. To achieve uniformity, the curriculum needs to consist of standards that prescribe the uniform situation in detail. At the centre of the spectrum, harmonisation entails aiming for commonly shared principles of training, and making sure different curricula share comparable content, methods and assessment in vital areas. To achieve commonly shared principles, while allowing for some level of diversity, a curriculum needs to consist of guiding principles with room for local adjustment. Professional freedom signifies institutional and/or individual autonomy for a curriculum, as well as institutional or individual autonomy in enactment of training, which leads to diversity without comparable components between curricula. In a process of educational alignment, elements for which professional freedom is allowed or even encouraged can be agreed upon between stakeholders.

Most importantly, educational alignment requires a common agreement on what level is applied, for which element of training. Some elements of training may require standardisation, while other elements may require more institutional variation. The level of alignment can be specified into a written curriculum. Subsequently, following implementation of a curriculum, enactment of a curriculum is affected by contextualisation. Therefore, in any level of educational alignment, tensions between standardisation and contextualisation can be experienced. In our research we explored the phase of curriculum development, thus not enactment of the curriculum after implementation. However, from our findings in **Chapter 5**, we concluded that curriculum developers already considered possibilities for enactment and implementation of the European OBGYN curriculum, during curriculum development.
development. Thus, consideration of the levels of educational alignment, apply both to curriculum development, as well as enactment.

The spectrum of educational alignment also allows for consideration of both the universal European gynaecologist as well as the culturally versed European gynaecologist.

Recommendation for interpretation: harmonisation ≠ standardisation

Educational alignment can be achieved through different levels, ranging from standardisation, to harmonisation, to professional freedom. Both harmonisation and standardisation of PGME are considered alignment of PGME for multiple contexts. Educational alignment entails the phase of curriculum development, as well as the phase of enactment of training following implementation of a curriculum.

Standardisation means striving for uniformity in a curriculum, as well as the enactment of training.

Harmonisation means striving for commonly shared principles of training, and contextual autonomy in enactment of training.

In any process of educational alignment, translating a curriculum to a unique practice, i.e. contextualisation, will cause tensions. Understanding how to deal with these tensions allows for better understanding of how educational alignment can be achieved.

Encourage local translation of aligned curriculum

In Chapter 5, we concluded that development of a European curriculum may have different effects, and even unintended effects on different contexts. We discovered that not all contexts perceive the European OBGYN curriculum the same; countries perceived the European OBGYN curriculum as a confirmation of the quality of a country’s current curriculum, or as a benchmark to improve specific elements of a country’s current curriculum, or as a high aim for thorough reform and extensive improvement of a country’s current curriculum. This may unintentionally lead to increase of inequity of PGME, which gives rise to ethical dilemmas with regard to the purpose of development and implementation of a European curriculum.

Based on these findings it is necessary to explore and consider potential unintended consequences of educational alignment, as we still have too little knowledge on the effects on local contexts in the long term. In a similar vein, Hodges encourages us to reflect on ethical considerations when pursuing international standardisation of medical education, which include the alignment with local social responsibility, inequities in healthcare, resource planning, equal participation of all partners and potential cultural or economic dominance of one of the partners. This aligns with the perspective of the culturally versed European gynaecologist, as it calls for exploration of ethical dilemmas that are created by cross-cultural differences.
In the literature concerning globalisation of medical education, that goes beyond Europe, and mostly concerns Western versus non-Western countries, Gosselin et al. explain that, in response to threats of cultural homogenisation, polarisation of non-Western medical education may occur. They found that polarisation can be a response of cultural resistance to the universal applicability of the Western paradigm in non-Western medical education. They call for equitable, context-sensitive and locally-driven approaches to globalisation of medical education. Integrating these global perspectives to educational alignment in Europe, we recommend that context-sensitive and locally-driven approaches are necessary to reduce the risks of unintended consequences of educational alignment.

In Chapter 5 we also described that curriculum developers experienced inconsistencies between educational principles of the European OBGYN curriculum and the reality of training in their country. For instance, in some countries, making progressive independence of trainees more explicit through official documentation scared trainees and supervisors. Although informally, trainees were able to practice independently, formalising independence could limit the independence that trainees are granted in day-to-day training, out of fear for legal consequences. Again, this is an example of how the aim to standardise assessment of training does not seem to comply well with the contextual factors of local training. This requires that the aligned curriculum is translated into a local curriculum, to ensure that the curriculum fits into the local practices of training.

Therefore, we suggested that a two-level approach of curriculum development may be necessary to ensure local interpretation and execution of the European OBGYN curriculum. The European OBGYN curriculum describes educational outcomes and strategies for all countries involved. In addition, countries or institutions develop local curricula that describe how the European curriculum is interpreted and executed in local contexts. This allows for regional, local, and institutional variation, determined by professional freedom. To allow contexts to develop local curricula, flexibility of the European curriculum should be negotiated. We propose that in educational alignment, it is necessary to allow for professional freedom, adaptation and flexibility of the aligned curriculum.

In Chapter 6, we further explored how to involve local contexts in educational alignment more, in two different ways. In this study, we focused on the development of a generic competency framework, as part of the European OBGYN curriculum. Primarily, we aimed to design the generic competency framework in such a way, that enactment of the curriculum allows professional freedom. We supported the strategy for design of the generic competency framework with change management literature to understand the importance of allowing room for re-invention and creative adaptation at the institutional and individual level. Change management literature taught us that guiding rather than prescriptive curricula allow room for re-invention and creative adaptation of the competency framework by medical professionals.

Secondly, we aimed to design a generic competency framework that answers to the needs of the local context, by involving OBGYN specialists, OBGYN trainees, patients, nurses, midwives, hospital board members and educationalists in the entire process of development of the competency framework. The involvement of all stakeholders was considered very valuable in this process and their collaboration resulted in a learning process that was beneficial to all, in which shared perspectives were encouraged. All stakeholders stressed that it is important for future OBGYN specialist to acquire skills to answer to the personal needs of patients in every patient encounter. For mobile OBGYN trainees and specialists in Europe, this means striving for adaptability to different situations, under different cultural influence, to deliver personalised care. We should therefore aim to teach trainees
how to adapt to local concerns. Understanding and respecting cultural diversity is essential and is in line with the perspective of the culturally versed European gynaecologist. These findings lead us back to our considerations of Chapter 3, where we found potential cultural diversity in conception of educational concepts. The question remains how we can ensure our trainees to develop this adaptability, in other words, how they can become the versatile medical specialist who can respond to the needs of every patient.

**Recommendation for educational alignment:**

**Encourage local translation of aligned curriculum**

In educational alignment it is essential to carefully consider the needs of local contexts, to explore unintended effects of alignment, to explore ethical dilemmas in alignment and to ensure local implementation. This can be achieved by reaching out to different contexts, to understand what flexibility they need, and to negotiate this flexibility and integrate it in the process of alignment. Local contexts should be allowed room for re-invention and creative adaptation of a curriculum, to enhance implementation and enactment. Therefore, in educational alignment, local contexts should be encouraged to develop a local translation of an aligned curriculum, that meets the needs of the local context’s daily practice.

**Strengths and limitations of the research**

In this thesis, different scientific methods were applied to explore European alignment of OBGYN training. A strength of the thesis, is that we have integrated the perspectives of many different stakeholders of OBGYN training across Europe. The qualitative methods that were used in Chapters 3, 5 and 6 provided in-depth insights into stakeholders’ perceptions of, and experiences with, variation and alignment of OBGYN training. A limitation to Chapter 4 was that the perspective of only OBGYN specialists, OBGYN trainees and educationalists were integrated. Involving different stakeholders was very valuable to our research, because it offered multi-perspectives on educational alignment that helped to describe and address challenges more specifically and in more breadth.

The research in this thesis was conducted as part of the EBCOG-PACT project that was aimed to develop a European OBGYN curriculum. The European Board and College of Obstetrics and Gynaecology (EBCOG) and the European Network of Trainees in Obstetrics and Gynaecology (ENTOG) were used as platforms for selection of participants, because of their wide representation of OBGYN specialists and OBGYN trainees in the great geographical area of Europe. Presumably, these potential participants, shared a positive perspective on European collaboration, and potentially on educational alignment too. For some studies, this was purposive (Chapter 4, 5 and 6). However, for future research, it could be interesting to involve participants who may not have positive presumptions towards European collaboration and/or educational alignment.

In general, no comparisons between European countries regarding training quality, training practices and OBGYN curricula were made. Thus no implications for specific countries can be made.
Several researchers of the studies presented in this thesis were also involved in the development of the European OBGYN curriculum from the beginning. Our involvement in this project have probably affected how the research has been conducted and interpreted, for instance by our positions, beliefs and values regarding European educational alignment. Our involvement in EBCOG-PACT has enabled access to most of the participants of the studies in Chapter 3, 4, 5 and 6. Also, it allowed us to understand the processes that were going on during the development of the curriculum better, because we collaborated closely with other curriculum developers. As a researcher, it can be valuable to be involved in a project that research is conducted through, to align aims of research and methods of data collection to practical implications, to yield findings that are useful in practice. However, we used some strategies to be aware of how our preconceptions could affect our research. We discussed this in the research team repeatedly. Also, reflecting on the research and our position in the research with researchers who were not involved in the project was valuable to gain a more critical perspective on educational alignment in general, and the approaches op the project in specific. Also, we described how researchers’ perspectives on the subject have changed over time. For future research, it could be interesting to involve researchers with different preconceptions of educational alignment. For instance, qualitative researchers with educational backgrounds, or social backgrounds, or public administration backgrounds, to further explore transnational educational alignment and its implications from different perspectives.

Practical implications

Reflecting on our research and relating them to the new perspective on educational alignment that we have provided, we present two major practical implications for processes of transnational alignment of education. Primarily, we presented different levels of educational alignment in a spectrum. We recommend that these levels are understood, and their purposes and implicated strategies are explored and considered for educational alignment. Secondly, we recommend that parties involved in educational alignment together determine for which elements of education, which level of alignment is required. An aligned curriculum may therefore consist of some elements that require standardisation, while other elements require harmonisation, or more professional freedom. By taking into account the possible levels of alignment and their implicated strategies for curriculum development, challenges in educational alignment may be dealt with more easily. The presented spectrum may help specification and thus eventually help in the process of educational alignment.

Future research

After having reflected on our research, there is a few questions that remain unanswered, which we suggest to be addressed in future research.

At the European level, we wonder what the true effects of educational alignment will be and how it may impact training in different contexts. In addition, we must ask ourselves what the necessary outcomes of educational alignment should be, and how we will know whether these outcomes are reached, or whether undesired outcomes are reached. Also, we suggest to gain more understanding of how much educational concepts are culturally affected, and thus how much they are
considered transferable transculturally.\textsuperscript{18, 33} This accounts for factors of national culture, but also for factors of regional, organisational, and local cultures. For instance, by researching how specific educational concepts are perceived in different regions and what norms and values may affect these perceptions. We suggest there is a need for more consideration of social study approaches, such as cultural anthropology, to present theories to address this issue further.

At the national and the local level of Europe, we encourage stakeholders to reflect on where they see room for negotiation of flexibility with regard to a European curriculum. Inherently, this encourages the question: How European do you want to be? How can room for re-invention and creative adaptation be ensured, or will implementation of a harmonised curriculum only be achieved through top-down change management styles. What characteristics of the context determine its capability of handling guidance instead of prescription. Because the way that contexts deal with rules, may be culturally determined.

At the personal level, we wonder how to encourage mobile medical doctors to immerse themselves in local cultural diversity and work as an adaptable and versatile professional.

**Concluding remarks**

The final question that remains unanswered is the foundation of all: is European educational alignment an illusion? We have not been able to provide you an answer.

We can conclude that educational alignment should not be seen as a task that can be accomplished, rather it should be seen as an evolving and ongoing process that requires continuous reflection. As the contexts evolve, so should the negotiation of flexibility for the educational alignment. In addition, one should continuously reflect on the suitability and feasibility of the different levels of educational alignment.

**References**


