

# The Academization of Midwifery in the Context of the Amendment of the German Midwifery Law: Current Developments and Challenges

## Die Akademisierung des Hebammenberufes im Kontext der Novellierung des Hebammengesetzes: aktuelle Entwicklungen und Herausforderungen



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### ABSTRACT

Germany faces the challenge of enforcing the academization of midwifery training in the upcoming months in order to comply with Directive 2013/55/EU. This paper outlines the related developments and challenges. At the moment, midwifery training in Germany is still predominantly carried out in technical colleges. In 2019, less than 20% of midwifery training places were college-based. The current standard training is a dual training system which combines vocational training with academic-based courses, but this approach will no longer be feasible once the EU directive has been fully implemented. Although the existing draft legislation completely transfers midwifery training to institutions of higher education, various aspects of this concept have remained vague and do not take account of the laws on higher education in the individual federal states. Moreover, if midwifery training is to be provided by both universities and colleges, this will lead to quite different levels of academization within a relatively small professional group. The concept that universities offer primary qualifications comes closest to the required quality standards for professional, science-based, practical and evidence-based midwifery training.

### ZUSAMMENFASSUNG

Vor dem Hintergrund der Richtlinie 2013/55/EU steht auch Deutschland vor der Herausforderung, in den nächsten Monaten die Akademisierung des Hebammenberufes durchzusetzen. Ziel der vorliegenden Arbeit ist es, die damit verbundenen Entwicklungen und Herausforderungen zu skizzieren. Aktuell findet die Hebammenausbildung in Deutschland noch überwiegend an Fachschulen statt. Weniger als 20% der Ausbildungsplätze sind 2019 an Hochschulen verortet. Aktuell dominieren dual-ausbildungsintegrierende Studiengänge, die mit der Umsetzung der EU-Richtlinie so nicht mehr durch-

geführt werden können. Der vorliegende Gesetzentwurf beinhaltet zwar die vollständige Überführung des Hebammenberufes an Hochschulen, bleibt jedoch in der Konzeption in einigen Punkten unkonkret und ohne Bezug zum Hochschulrecht auf Länderebene. Zudem bedeutet die Verortung an Universitäten und Fachhochschulen eine unterschiedliche Ausformung der Akademisierung innerhalb der relativ kleinen

Berufsgruppe der Hebammen. Gerade die Konzeption primärqualifizierender Angebote an Universitäten ist besonders geeignet, dem geforderten Qualitätsanspruch an eine fachliche und wissenschaftsbasierte, sich im eigenen praktischen Handeln selbst reflektierende und evidenzbasierte Hebammenkunde gerecht zu werden.

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## Introduction

### Problem and relevance

In Germany, midwifery training and the profession of midwife is poised to undergo a deep-seated transformation as heralded by the current proposed amendment to the German Midwifery Law [1]. The cornerstones for the proposed changes to future midwife training qualifications were laid down in Directive 2013/55/EU of the European Parliament [2]. As the goal is to ensure freedom of movement within Europe, one of the new entry requirements for starting midwifery training is 12 years of formal education. The new German legislation aims for a complete academization of midwifery training by January 18, 2020 as this will bring training in Germany in line with training in other EU countries [2, 3]. This aim is rather at odds with the academization goals of the care professions themselves; the German Science Council has proposed that initially only 20% of current training places should be academic training places. In Germany, college-based training will continue to be available in this field for work for some time to come [4]. Complete academization would mean that midwifery training would change from being a skilled occupation where training is college-based to being an academic profession with training carried out at university. This implies that in future, both the theoretical and the practical components of the qualification would become more science-based with a greater degree of analytical reflection. According to the German Qualifications Framework, college degrees are classified as level 4 whereas Bachelor degrees are classified as level 6 [5]. The rationale behind the proposed academization of the midwifery profession and the switch to university-based training is that this takes account of midwives' increasingly complex and continually expanding scope of duties [6] and provides them with additional skills [7]. Just one year before the Directive must be completely transposed into national law, it is still not clear when complete academization can be achieved in Germany. Midwifery training in Germany continues to be largely college-based.

### Objective

This paper presents the current status of the academization of midwifery training in the context of German national law and the Model Clause. Current developments and challenges created by the ongoing process of academization and the draft amendment of the German Midwifery Law are described here.

## Overview

### Status of academization in 2019

In contrast to other European states where Directive 2013/55/EU has already been implemented in full, in Germany in 2019 the majority of midwives still train in vocational training colleges. This means that the professional qualifications of persons currently training to become a midwife at one of the 62 German schools of midwifery [8] will no longer be recognized throughout the EU and that these persons will therefore not be able to benefit from the free movement of peoples promoted by the Bologna Process. Article 43 of the Directive states that EU member states will only recognize the qualifications of applicants with an entry requirement of 10 years of general education if the applicant began their midwifery training before 18 January 2016 [2]. As shown in ► **Table 1**, currently there are 16 midwifery degree courses in Germany where students can either obtain an academic degree (Bachelor of Science) in parallel to their vocational training or can obtain a Bachelor's degree *after* completing their vocational training. Two further degree courses were identified, which expected to start in the autumn of 2020, subject to regulatory approval (as per: March 2019). Thus, one year before Directive 2013/55/EU enters into force, only about 20% out of a total of just under 2800 midwifery training places in Germany are based at institutions of higher education. The current versions of the German Midwifery Law (*Hebammengesetz*, HebG) and the German Midwifery Training and Examination Regulations (*Hebammenausbildungs- und Prüfungsverordnung*, HebAPrV) constitute additional barriers to a further academization of midwifery, as both of these bodies of regulations explicitly consider the job of midwife to be an occupation that requires vocational rather than academic training. Because this approach requires trainees to complete 3000 hours of practical training and because of a number of explicitly formulated requirements which cannot easily be incorporated into modular training systems, it is more difficult to set up academic degree courses [9, 10]. This applies even more so to the model degree courses which are attempting to integrate their training contents into the structures of university-based teaching. The initial draft of new midwifery training regulations was only completed in March 2019.

### Type of qualification offered by current degree courses

The degree courses currently on offer in Germany range from dual education/integrated vocational training degrees, on-the-job degrees and dual primary qualification degrees, although the major-

► **Table 1** Type of qualification and college places of the midwifery degree courses which currently exist in Germany.

Type of qualification	Location: cooperation partner(s)	Degree program, ECTS	College places/year, specific features
Dual education/ integrated vocational training (trainees receive vocational training pay) (cooperation between tertiary institution and school of midwifery – external partners offering practical training)	Berlin: Evangelische Hochschule Berlin, School for Healthcare Professions Berlin GmbH, St. Joseph Hospital Berlin Tempelhof and other hospitals in Berlin	B. Sc. Midwifery 240 ECTS	<ul style="list-style-type: none"> <li>20 places</li> <li>8 semesters for a dual degree (= academic degree + vocational certificate)</li> <li>Part-time degree possible</li> <li>Start in 5th semester as an on-the-job degree possible</li> </ul>
	Bremen: University of Applied Sciences Bremen, cooperation partner(s) unknown	No information currently available	<ul style="list-style-type: none"> <li>No information currently available</li> <li>Expected start: October 2020</li> </ul>
	Hamburg: Hochschule 21, Education Center for Healthcare Professions (BZG) of the Asklepios Clinics Hamburg GmbH; UKE Academy, regional hospitals in the vicinity	B. Sc. Midwife 180 ECTS	<ul style="list-style-type: none"> <li>Not published*</li> <li>8 semesters for a dual degree (= academic degree + vocational certificate)</li> <li>Monthly tuition fees</li> </ul>
	Heidenheim/Ulm: DHBW Heidenheim, Academy for Healthcare Professions Ulm, University Hospital Ulm and teaching hospitals	B. Sc. Applied Science of Midwifery 210 ECTS	<ul style="list-style-type: none"> <li>18 places</li> <li>8 semesters for a dual degree (= academic degree + vocational certificate)</li> </ul>
	Jena: Ernst Abbe University of Applied Sciences Jena, various hospitals in Thuringia	B. Sc. Obstetrics/ Midwifery 240 ECTS	<ul style="list-style-type: none"> <li>Not published*</li> <li>8 semesters for a dual degree (= academic degree + vocational certificate)</li> </ul>
	Karlsruhe: DHBW Karlsruhe, Karlsruhe School of Midwifery, regional hospitals in the vicinity	B. Sc. Applied Science of Midwifery 210 ECTS	<ul style="list-style-type: none"> <li>30 places</li> <li>8 semesters for a dual degree (= academic degree + vocational certificate)</li> </ul>
	Ludwigshafen: University of Applied Sciences Ludwigshafen am Rhein, midwifery schools in Heidelberg, Lahr, Saarbrücken, Speyer and their associated hospitals	B. Sc. Midwifery 180 ECTS	<ul style="list-style-type: none"> <li>Not published*</li> <li>7 semesters for a dual degree (= academic degree + vocational certificate)</li> <li>Shorter on-the-job degree possible</li> </ul>
	Lübeck: Lübeck University, UKSH Academy not-for-profit GmbH (school of midwifery), hospitals all over Germany (including in Kiel, Lübeck, Husum, Itzehoe)	B. Sc. Midwifery Science	<ul style="list-style-type: none"> <li>35 places</li> <li>8 semesters for a dual degree (= academic degree + vocational certificate)</li> </ul>
	Mainz: Catholic University of Applied Sciences Mainz, various schools of midwifery and hospitals in the Rhein-Main area	B. Sc. Health & Care, main focus Midwifery 210 ECTS	<ul style="list-style-type: none"> <li>Not published*</li> <li>7 semesters for a dual degree (= academic degree + vocational certificate)</li> <li>Shorter on-the-job degree possible</li> </ul>
	Munich: Catholic University of Applied Sciences, cooperation partners unknown	B. Sc. Midwifery 210 ECTS	<ul style="list-style-type: none"> <li>25 places</li> <li>7 semesters for a dual degree (= academic degree + vocational certificate)</li> <li>Expected start: Oct. 2020</li> </ul>
	Osnabrück: Osnabrück University of Applied Sciences, midwifery schools all over Germany, partners offering practical training all over Germany	B. Sc. Midwifery 180 ECTS	<ul style="list-style-type: none"> <li>35 places</li> <li>6 semesters for a dual degree (= academic degree + vocational certificate)</li> <li>Shorter on-the-job degree possible</li> </ul>
	Stuttgart: DHBW Stuttgart, midwifery schools in Stuttgart, Winnenden, Heilbronn, hospitals in the vicinity	B. Sc. Applied Science of Midwifery – Midwifery 210 ECTS	<ul style="list-style-type: none"> <li>30 places</li> <li>8 semesters for a dual degree (= academic degree + vocational certificate)</li> </ul>

Continued next page

► **Table 1** Type of qualification and university places of the midwifery degree courses which currently exist in Germany. (Continued)

Type of qualification	Location: cooperation partner(s)	Degree program, ECTS	University places/year, specific features
On-the-job model (no vocational training pay; tuition fees possible) (only university-based)	Dresden: DIU Dresden International University	B. Sc. Midwifery 180 ECTS	<ul style="list-style-type: none"> <li>Not published*</li> <li>10 semesters <i>after</i> previously completing 3 years of training or during training</li> </ul>
	Stuttgart/Horb: DHBW Stuttgart (Campus Horb)	B. Sc. Applied Science of Midwifery – expanded practical midwifery 210 ECTS	<ul style="list-style-type: none"> <li>30 places</li> <li>6 semesters <i>after</i> previously completing 3 years of training</li> </ul>
	Cologne: Catholic University of Applied Sciences North Rhine-Westphalia	B. Sc. Midwifery 180 ECTS	<ul style="list-style-type: none"> <li>30 places</li> <li>6 semesters <i>after</i> previously completing 3 years of training</li> </ul>
Dual primary qualification (no vocational training pay) (cooperation between university and external partners offering practical training)	Bochum: Bochum University of Applied Sciences	B. Sc. Midwifery 210 ECTS	<ul style="list-style-type: none"> <li>30 places</li> <li>8 semesters for a dual degree (= academic degree + vocational certificate)</li> </ul>
	Fulda: Fulda University of Applied Sciences, various regional hospitals are partners offering practical training	B. Sc. Midwifery 210 ECTS	<ul style="list-style-type: none"> <li>30 places</li> <li>8 semesters for a dual degree (= academic degree + vocational certificate)</li> <li>Shorter on-the-job degree possible</li> </ul>
Dual primary qualification (no vocational training pay) (cooperation between university and internal partners offering practical training)	Tübingen: Eberhard Karls University of Tübingen and Tübingen University Hospital	B. Sc. Midwifery Science 210 ECTS	<ul style="list-style-type: none"> <li>30 places</li> <li>7 semesters for a dual degree (academic degree and vocational certificate); practical training is modular and at an academic standard</li> </ul>

\* The number of available places on these degree courses depends on the number of clinical training places.  
ECTS = European Credit Transfer and Accumulation System

ity are dual education/integrated vocational training degrees (► **Table 1**). The latter are easiest to implement within the framework of existing statutory regulations.

With *dual education/integrated vocational training courses*, students attend a regular school of midwifery and complete the mandatory hours of practical training on the premises of the respective cooperation partner. They are also enrolled at a university of applied sciences which awards the overall ECTS points (ECTS = European Credit Transfer and Accumulation System) for the theoretical and practical components of training and additionally requires the student to attend specific academic modules with ECTS points and complete a Bachelor thesis [11, 12].

With *on-the-job degrees*, students have a choice of obtaining a degree either by attending specific college classes or obtaining their qualifications by distance learning. These courses are available to students who have already completed their training at a school of midwifery. While this model offers a good opportunity for midwives who have already qualified to obtain further qualifications and get a bachelor degree through second-chance education, the model is less attractive for future high-school graduates.

They would first need to complete 3 years' training at a school of midwifery followed by a further 6 semesters, during which they would be required to attend certain weeks in person, and they would need to do all of this in parallel to their regular work (as well as possibly paying tuition fees).

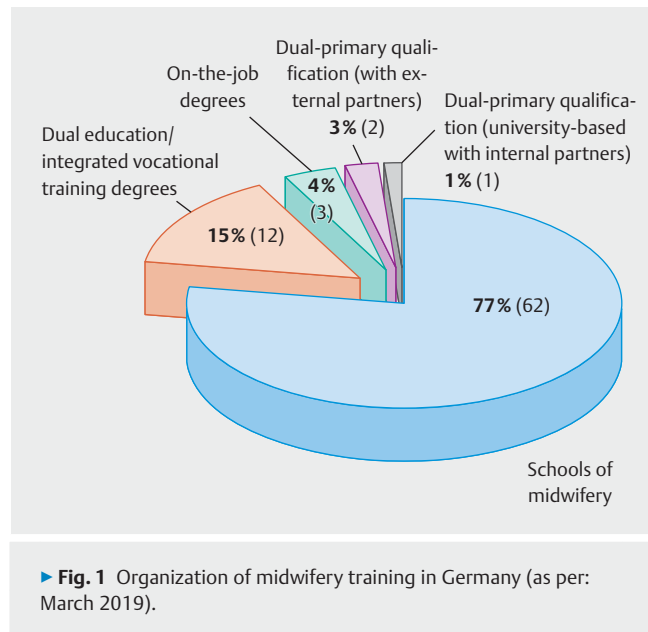
Finally, *dual primary qualifying degree courses* teach all of the professional skills required by the HebG and HebAPrV as well as the relevant academic (university-based) competences [11, 12]. Universities and colleges can either collaborate with external partners who will offer the required hours of practical training or with their associated university hospitals and offer all required modules without an external partner. Offering primary qualifying training at university is currently made more difficult by the legal requirements in the existing Midwifery Law which state that theoretical education must be obtained from a school of midwifery. At present therefore, the three existing degrees with primary qualification (Bochum University of Applied Sciences and Fulda University of Applied Sciences (who work together with external partners to offer dual practical training) and Tübingen University (which has its own university hospital) are covered by the Model

Clause which allows federal states in Germany since 2009 to deviate from the requirement that education offered at state-approved schools must comply with the state-approved training and education regulations, and permitting them to do so “for a limited period of time” in order to “test educational and training programs which might help to further develop” a specific profession “while taking account of the profession’s specific requirements” [9, 13].

When the degree courses are compared with the respective locations where training is still predominantly provided by colleges it becomes obvious that 9 months before Directive 2013/55/EU is implemented, training at 77% of all locations is still carried out in schools of midwifery (► Fig. 1). 15% of training places are in dual education/integrated vocational training courses and just 4% of training places are in primary qualifying degree courses.

### Amendment of the German Midwifery Law

An amendment of the German Midwifery Law planned for 2020 will transpose the provisions of Directive 2013/55/EU into national law. The current draft of the amended law dated March 2019 implements the academization. In future, all students will be required to complete a tertiary institution’s degree course to obtain the professional title of “midwife” (a previously accepted term “male midwife” will be deleted) and this will replace vocational training in colleges: “The midwifery university-based degree course teaches the professional and personal skills required to work independently and comprehensively as a midwife in hospital and on an outpatient basis” [14]. In the draft law, the number of required practical hours have been appreciably reduced from the current figure of 3000 hours to 2100 hours, with more time given over to curriculum-based teaching. Moreover, the draft envisions module-based theoretical and practical teaching, although the state examination required to obtain the official title of midwife may be a module-based exam carried out over the last two semesters. The necessary revision of the state study and examination regulations is still being drafted by the Federal Ministry of Health [14]. Important is that the law draft considers dual degree courses on universities as well as on universities of applied sciences. At the same time, the draft emphasizes that all theoretical classes are the responsibility of tertiary institutions and that from 2030 the cooperating hospitals will be responsible for organizing the practical guidance and training. But the faculty offering the degree course will also bear the overall responsibility for both the theoretical and the practical training. The schools of midwifery have been offered the opportunity to cooperate in the area of practical training until 2030 as this should allow their existing staff sufficient time to obtain additional qualifications themselves. Not every tertiary institution has an affiliated university hospital, which is why “dual degrees” may require some colleges to look for one or more external partners to provide the practical modules [14, 15]. But there will no longer be a legal basis for the *dual education/integrated vocational training* model, which currently makes up the majority of existing degree courses (cf. ► Table 1), as with this type of training (in accordance with the still valid Midwifery Law without having recourse to the Model Clause) the schools of midwifery are also responsible for part of the theoretical training. The planned change in the legislation means that this will no longer be



► Fig. 1 Organization of midwifery training in Germany (as per: March 2019).

possible [14]. According to the draft law, persons applying to study midwifery must either have completed high school or completed a three-year nursing training course at a technical college, which currently does not require students to have completed 12 years of general education [14]. Although it is possible that this is an attempt to mitigate against the lack of trained midwives by offering the option of an alternative entry to the profession of midwife, it directly contradicts the regulations of Directive 2013/55/EU which state that the only eligibility criterion for starting midwifery training is 12 years of general education [2]. Moreover, this points to the creation of an incipiently dualistic academic system with a parallel system of regular universities and universities of applied sciences, as a general school-leaving certificate obtained after twelve years of education or a qualification recognized as its equivalent is required to be admitted to study at any university. The draft legislation also requires improvement in other areas; thus, it suggests that students could be paid a vocational training allowance. This would run counter to specific provisions in the state laws on universities and colleges of numerous federal states which assert a different legal status for students compared to apprentices or employees. Representatives of the umbrella organizations united in the National Association of Health Insurance Companies (GKV) have indicated that they would classify vocational training pay offered in the context of degree courses (which are regulated by the individual federal states) as an extraneous non-system benefit and would currently refuse to finance such payments. The proposals can only be implemented in the context of dual education/integrated vocational training degrees. However, once the new training regulations have been implemented, there will be no legal basis for such degrees as in future, the existing schools of midwifery will no longer be permitted to contribute to curriculum teaching [14].

## Primary qualification as the silver bullet

The long overdue amendment of the Midwifery Law will make it easier to push the concept of primary qualifying degree courses (with or without an external partner for practical training). This model is already in widespread use in the EU [16, 17]. The reform will phase out dual education/integrated vocational training degrees. Part of the theoretical training in dual education/integrated vocational training degrees is provided by schools of midwifery, and it has been found that they largely only offer *additional* academic skills, meaning that students are less likely to be required to consistently consider the theoretical and scientific implications of their professional actions. But this is precisely one of the important goals of academic midwifery training in many of the countries bordering Germany, where this approach has been implemented for several years [16–20]. The German Science Council has recommended that midwifery degree courses should be designed as primary qualifying degrees, not least because in addition to fostering their practical skills it will also encourage the development of academic skills. The Science Council therefore suggests that midwifery degree courses should primarily be set up at universities (if they have a medical faculty) as this will facilitate interprofessional training in medicine and ensure that the degrees will have high academic standards [4]. The German Science Council is of the opinion that medical faculties are therefore best suited to comply with the regulations of Directive 2013/55/EU, as the Directive also requires students to be given extensive evidence-based teaching in general medicine, pharmacology and perinatal medicine and how they affect obstetric issues [2]. Given that issues of pregnancy, parturition, puerperium and neonatal care are becoming ever more complex, it is becoming increasingly important that midwives working in Germany have far-ranging, specialized, practical and scientific knowledge and skills [21]. The impact of the new skill levels of academically trained midwives on neonatal mortality and method of delivery, to name just two examples, will need to be investigated in detail. To date, there has been no significant reduction in the rate of cesarean sections following the complete academization of the midwifery profession in individual EU member states, which is why the relevant statements in the draft legislation are only hypotheses and should be understood and identified as such. This once again demonstrates the fundamental importance of scientific evidence in the process of academization as it provides the basis for practical action and teaching. In future, there will be an increased emphasis on the quality of both medical training and university-based midwifery training, with comparative indicators used to monitor the quality of midwifery and obstetric medicine [22].

Both the regulations of Directive 2013/55/EU and the recommendations of the German Science Council highlight the necessity of developing evidence-based concepts for midwife-led obstetric care [14]. They can be taught at university centers combining midwifery research with medical research in the fields of obstetrics and perinatology, as such centers foster the teaching and development of the requisite competences [4]. Moreover, medical faculties can ensure that students of medicine and students of midwifery are made aware early on that in future, the two professions must work together across the disciplines to overcome the challenges they may face when caring for women and their in-

fant during pregnancy and parturition and in puerperium. While (academically trained) midwives bear the responsibility for the physiological processes, physicians are responsible for dealing with pathological events. But both professions need to have an extensive knowledge of the other specialty, particularly as theoretical differentiation is extremely challenging in practice and may be the subject of controversial disputes. Allowing physicians to provide medical care without a good understanding of physiological pregnancy, birth and puerperium would be as inexpedient as midwives offering care without a good understanding of pathological events and their prognoses, the importance of intercurrent illnesses, and psychosocial factors and their impact. Both professions must be allowed to train in those areas of the other discipline which focus on pregnancy and birth. A science-based decision when the course of pregnancy is expected to be physiological and when it is expected to be pathological can and must be made by practitioners of both professions working together and using comparable evidence-based knowledge. This already needs to be taken into account as part of interprofessional skills training during academic training and amounts to a paradigm shift [23–26].

In October 2018, Tübingen University and Tübingen University Hospital rose to the challenges described above and established the first university-based bachelor degree on midwifery science in Germany, created as a primary qualifying degree. Already in the first semester students are taught to continually consider the scientific implications of their actions (also with regard to their practical skills) and develop the relevant skills using a longitudinal approach. ► **Table 2** shows the key elements of the path taken in Tübingen to transform the discipline of midwifery/science of midwifery into an evidence-based specialist discipline and profession [27]. The degree course is taught by the faculty of medicine and aims to deal with the increased challenges in obstetrics by offering interprofessional teaching as recommended by the German Science Council to ensure that midwifery training will be strongly linked to the medical training given to students wanting to become physicians [28, 29]. The practical study phases are entirely modular and have been incorporated into the study area “Midwifery duties in theory and practice”.

As the aim is the full academization of midwifery training, this degree course can help to train specialist midwives who will be taught scientific skills to allow them to deal with the challenges of midwifery work in general practice and ensure that medical interventions will be science-based. The degree course aims to meet the need for well-qualified experts, scientists and leaders with excellent practical skills who are able to work both in hospitals and in an outpatient setting. The degree course covers the full range of typical midwifery work and additionally offers comprehensive scientific and practical training at a university level while also teaching the necessary basic skills to enable students to work as a midwife as well as carrying out academic work in the field of midwifery and the health sciences [30].

► **Table 2** Curriculum of the primary qualifying B.Sc. Science of Midwifery degree course in Tübingen.

Module	1st sem.	2nd sem.	3rd sem.	4th sem.	5th sem.	6th sem.	7th sem.	Σ (ECTS)
Healthcare and welfare systems in the context of the practice and science of midwifery <sup>1</sup>	3							3
Health science/midwifery science thinking and methodological skills <sup>1</sup>	3					3	6	12
Social, conversational, communication and observational skills <sup>3</sup>	3						3	6
Basic principles of physiology and anatomy <sup>2</sup>	3							3
Microbiology and hygiene <sup>2</sup>	3							3
Midwifery duties and care: self-perception and basics <sup>4</sup>	15							15
General medical competences, emergency medicine, vital functions <sup>2</sup>		6						6
Scientific basics <sup>2</sup>		3						3
Prevention and health promotion <sup>1</sup>		3						3
Care and management during puerperium and lactation <sup>4</sup>		18						18
Obstetric skills, gynecology and female health <sup>2</sup>			6		6			12
Management of pregnancy <sup>4</sup>			12					12
Birth attendance and care <sup>4</sup>			12					12
Psychosocial, ethical and legal aspects of midwifery <sup>3</sup>				6				6
The neonate <sup>4</sup>				12				12
Care of women in puerperium <sup>4</sup>				12				12
Relationships/family, bonding, female health, health literacy <sup>3</sup>					3			3
Monitoring pathological/abnormal birth <sup>4</sup>					6			6
Surgical care of pregnant women and of women giving birth <sup>4</sup>					9			9
Pathological and abnormal course of pregnancy <sup>4</sup>					9			9
Child development disorders and diseases <sup>4</sup>						6		6
Interventions in standard and complex situations <sup>4</sup>						18		18
Professional skill colloquium <sup>1</sup>						3		3
Midwifery in the German healthcare system, quality concepts, economics <sup>1</sup>							3	3
Evidence and clinical decision-making <sup>1</sup>							3	3
Applied science of midwifery (1 out of 4 choice of modules) <sup>1</sup>							3	3
Bachelor thesis <sup>1</sup>							12	12
<b>Total</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>210</b>
<b>Practical study phases</b>								
Conservative and surgical care <sup>4</sup>	+	+						
Puerperium <sup>4</sup>		+		+				
Neonatal unit <sup>4</sup>		+		+				
Delivery room <sup>4</sup>	+		+	+	+	+		
Pediatric hospital <sup>4</sup>						+		
Outpatient care/external <sup>4</sup>						+	+	
Delivery room and surgery <sup>4</sup>					+			
Peripartum care <sup>4</sup>			+	+	+	+		

<sup>1</sup> Study area "Midwifery science skills"

<sup>2</sup> Study area "Theoretical medicine and the natural sciences"

<sup>3</sup> Study area "Health and social sciences"

<sup>4</sup> Study area "Midwifery duties in theory and practice"

ECTS = European Credit Transfer and Accumulation System

## Conclusions

The draft of the new Midwifery Law strongly promotes the full academization of the midwifery profession. However, the specifications and modifications of the draft legislation need to be more clear-cut to ensure that they comply with Directive 2013/55/EU and for new study courses to be implemented quickly. This step was taken very late, and the suggested timeline for implementing the EU directive is very short. Moreover, the overall financing proposed in the draft legislation has not yet been settled at either the federal or the Länder level. The current draft law is not yet capable of dealing with the many challenges in obstetrics by offering a coherent approach because, although the recommendations of the German Science Council with regard to quality and excellence have been implicitly referenced, no quality criteria and (it should be noted) no effective measures for quality control have yet been explicitly defined. Even though the new draft Midwifery Law promises that the profession of midwife will become entirely academized, the law remains vague with regard to how this will be realized concretely. This has made it more difficult for universities and universities of applied sciences to develop and establish skills-based degree courses. What is needed both at the level of curriculum concepts and for the organization of practical training is the creation of operationalized guidelines for Germany, which would support the development and implementation of midwifery science degrees. If the draft legislation is introduced, the majority of the degree courses currently available in Germany will lose their accreditation because they are dual education/integrated vocational training courses. The curriculum teaching currently provided by schools of midwifery will have to be entirely taken on by universities and universities of applied sciences. Because of the provisions of the *currently effective* Midwifery Law, primary qualifying midwifery science degree courses are extremely rare in Germany in contrast to other European countries. The delayed implementation of academization coupled with weaknesses in the current legislation and the deficiencies of the proposed draft legislation suggest that we need to think about the lasting threat posed to the high quality of obstetrics in Germany. Numerous schools of midwifery are already no longer able to fill vacant teaching staff posts, as interested teachers – insofar as their qualifications permit it – tend to want to work in academic-based degree courses. The German Society of Gynecology and Obstetrics and the Professional Association of Gynecologists fear that this may intensify the already appreciable lack of midwives, quite apart from any discussion on suitable conditions of work. An assessment report by the federal government before the final amendment of the law would be very useful. The development of degree courses by individual federal states needs to be coordinated across all of Germany. The regulations of the federal states suggest that, here too, the process of academization is likely to be delayed.

The current draft of the Midwifery Law promotes the academization of midwives – a small group of professionals – at differing academic levels. A discussion is needed about whether such a development is desirable. It would be inconceivable if this were medical training provided to nascent physicians. Because of the limited links to medical research centers, hospitals and medical faculties which would be needed to promote a science-based ca-

capacity for reflection and interprofessional competence in obstetrics and obstetric medicine, universities of applied science are not well suited to adequately address the challenges arising from the regulations on quality and excellence. In contrast to other groups of health professionals, midwives are expected to be able to carry out their defined duties to support physiological pregnancies, assist at physiological births and support mother and child during puerperium *independently*, i.e. without medical advice from a physician. Because of the overlap in medical competences, it is important to remember that a 7-semester bachelor degree cannot be equated one-to-one with a 12-semester medical degree and a further 5 years of medical specialist training. The academization of the profession of midwife does not just highlight the need to set up more primary qualifying bachelor degree courses but suggests that designing Master's degree courses should also be considered in the context of the Bologna system as this could offer additional professional perspectives [31]. High-quality science-based obstetrical training which also covers other areas of high-performance medicine must enable future midwives to make evidence-based and analytically reflected decisions and develop further in their field. The legislature will need to make more concrete proposals, and professional organizations and advocacy groups will need to come off the fence and clearly state their positions if they wish to encourage the redevelopment of the profession in such a way that it reflects the guiding principles on which the EU directive is based. This is the only way to achieve the overall objective of creating a new academic midwifery training system and thereby continuing to improve the care offered to mothers, infants and their families.

## Update (14.11.2019)

In contrast to ► **Table 1**, 35 places are currently available per year instead of 20 for first-year students in the training-integrating degree programme in Lübeck.

## Conflict of Interest

The authors state that they have no conflict of interest.

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