maternity care in different countries
midwife’s contribution
maternity care in different countries
midwife’s contribution
In 2014 the Council of Nurses Associations of Catalonia identified the need to respond to the challenges of midwifery in all the fields of action of the health system in order to make a greater contribution to sexual and reproductive health of women and their families in Catalonia.

In order to turn this vision into reality, the Council undertook the initiative to create the Commission of Midwives, coordinated by Mrs. Isabel Salgado, a midwife committed to the profession and with the necessary leadership skills to be able to take on this responsibility. The objective of the Commission is to bring together professionals who would pool their respective experiences and achievements and work for the future with a view to greater commitment to the development of safe, quality, health-focused and person-centered practices. This meant searching for a vision and shared knowledge both from the perspective of intervention and research; likewise, the aim was to achieve the complicity of all the fields engaged with midwifery: the committees of the four professional associations, the Catalan Association of Midwives and the involvement of experts on training and ethics, as well as the significant contribution of the coordinator of the strategy ‘Natural Care for Normal Childbirth’ of the Ministry of Health of the Government of Catalonia.

As a result of this initiative, progress is being made towards the development of great projects. One of these will allow building up a reference framework for the midwives’ contribution in Catalonia. At the same time, under the leadership of Dr. Ramon Escuriet, the first multicentral study on the impact of midwives’ practice on the results of childbirth care is being carried out, research for shared knowledge and outcomes, as well as a methodology that will facilitate the identification of the best health outcomes and contributions in hospitals both nationwide and internationally. Another project, which has almost been
finalised, will allow for the up-dating of the *Guia d’assistència al part a casa* (‘Homebirth Assistance Guide’), promoted by the Official Nurses Association of Barcelona (COIB), so as to incorporate the latest recommendations and evidence stemming from the latest results published in systematic reviews of the literature, from both a national and international perspective.

Within the framework of these initiatives and thanks to the leadership, competence, commitment and active participation of Dr. Ramon Escuriet in the European project ISCH COST Action IS1405 ‘Building Intrapartum Research Through Health – an interdisciplinary whole system approach to understanding and contextualising physiological labour and birth (BIRTH)’, this year a significant milestone was reached: the organization, with the collaboration of the COIB and the Ministry of Health of the Government of Catalonia, of the international COST Birth Day, which gathered together more than 100 researchers from different disciplines. Following this initiative, the Midwifery Commission organised, in the month of May, an international seminar which enabled debating on the contribution of the midwife to maternal and child health in different countries represented, giving rise to the publication which today I have the honour of presenting.

The different contributions of the representatives of the different countries highlight the resolute attitude of the midwives to regain their historical place in women’s reproductive health, as well as their fundamental role in the success of birth. Non-medicalised childbirth was also defended, while at the same time respecting the legitimacy of being able to choose from other options, and a certain tendency towards specialisation and master degree courses could be made out. Advanced practices and the consolidation, in some countries, of the possibility of prescribing medicine seem to be the trends of the future.

In any case, it is very comforting to observe that midwifery has a strong commitment to respect the new care needs. There is no doubt that this study will contribute towards up-dating, reviewing and, in short, improving training and practice. We should remember we are facing professional practices imbued with commitment, based on the values of the profession, focusing on a dual — humanistic and scientific — vision, and highlighting the importance of providing a response, with competence and sensitivity, to the singularity and values
of the people under our care. Likewise, it is obvious that new concerns and research questions will arise from this publication.

The spirit of this document is to disseminate the content of this study to all health professionals and in particular midwives in Catalonia, who are so particularly interested in the future of their profession, with a firm commitment to professional values and best practices, being always sensitive to people’s needs, to whom they offer an essential key service, imbued with scientific rigour and humanity.

On behalf of the Council of Nurses, I would like to thank all the midwives, both male and female, who, through their dedication, make possible the health and wellbeing of women, the newborn and families. We would also like to extend our gratitude to the members of the Commission: Mrs. Lucía Alcaraz, Anabel Fernández, Margarida Franch, Maria Gasull, Gemma Martínez, Pepi Domínguez, and others who have made this project possible, mentioning in particular the work of Mrs. Isabel Salgado, the coordinator of the Council’s Commission, and of Dr. Ramon Escuriet, who, with their constant work, have been the driving force, with their great enthusiasm and management skills, behind the international seminar and this publication.

Montserrat Teixidor

Dean of the Council of Nurses Associations of Catalonia
(usual December 2015)
prologue
The historical relegation of women in society has had its expression in the subordinate and supporting role of midwifery in some countries. We know that midwifery-led care is associated with a reduction in the use of epidurals, fewer episiotomies or instrumental deliveries, and a decreased risk of fetal death before 24 weeks gestation. In order to make a difference in maternity care, besides knowing the situation and increasing women’s awareness and participation in their maternity care process, health services research should be conducted.

This book analyzes the situation in Belgium, Chile, Ireland, Norway and Spain. More health services research would contribute to the evaluation of existing and proposed policies in different places. And this is where the universities interested in relevant research have a space to share with population and professionals.

Vicente Ortún

*Dean and professor of the School of Economic and Business Sciences. Pompeu Fabra University of Barcelona*
The authors in this report reveal striking similarities between the maternity care systems described. The common thread running through the text is a recognition that falling rates of mortality and morbidity in women and neonates have been accompanied by a rise in the routine use of technocratic interventions in each of the included countries. While, to some degree, this may be a cause and effect relationship, it is also clear that many of the improvements in outcomes for mothers and babies around the world are secondary to sociodemographic changes. Indeed, in common with much of the research literature in this area, the accounts in this report illustrate that the almost universal centralisation of birth into large hospital settings is associated with routinisation of intrapartum interventions, from women and babies with complications who need such treatments to those who are healthy, who do not need them. As a consequence, it is becoming increasingly difficult to sustain the (midwifery) philosophy that pregnancy and birth are normal until proven otherwise, with a consequent dismissal of the value of skilled watching, waiting and supportive caring, again, as noted by some of the authors in this volume. This is despite the fact that the ‘normal until proven otherwise’ has strong evidence of effectiveness, equity, cost-effectiveness, and acceptability, as demonstrated by the recent Lancet Series on Midwifery (2014), and the 2015 update of the Cochrane review on midwife led continuity of care models. Both of these emphasise the need for caring, compassionate approaches that build the confidence, competence and self-efficacy of women, partners, families, and staff.

The concerns and insights that are evident in this volume are therefore strongly in line with both the quantitative and qualitative evidence we have to date on what the risks are of risk-averse maternity care, and, in contrast, on what works for optimal maternity services. Hopefully, it is the first of many accounts of how midwives work around the world, and of how the midwifery philosophy can be enacted by all those working with, caring for, and supporting pregnant women, their babies, and their families.

Soo Downe

Professor of the University of Central Lancashire
Chair of ISCH COST Action IS1405: ‘Building Intrapartum Research Through Health - an interdisciplinary whole system approach to understanding and contextualising physiological labour and birth (BIRTH)’
This seminar was organized as part of the first meeting of the COST Action 1405 seminar held in Barcelona in May 2015. The aim was to share knowledge and experiences on the contribution of midwives in different health systems. The lessons learned from this seminar will be useful for the work that is being developed by the Comission of Midwives of the Council of Nurses Associations of Catalonia and help build a new career development framework for midwives in Catalonia.

Isabel Salgado  
Coordinator of the Comission of Midwives of the Council of Nurses Associations of Catalonia

Ramon Escuriet  
Vice-chair of ISCH COST Action IS1405. ‘Building Intrapartum Research Through Health - an interdisciplinary whole system approach to understanding and contextualising physiological labour and birth (BIRTH)’
presentations
1.1. Introduction

Clearly, the job of midwife has existed for a very long time. All discussions of the history of midwifery will refer to its distant origins. Precisely because of this age, it would seem contradictory that campaigns to make midwifery more visible are required in Spain today, namely because people do not know the functions of this profession.

One of the reasons for this ignorance is the lack of historical studies on the profession. This is due to the fact that the history of medicine has traditionally been written by male doctors, for whom midwives are mere assistants who have not contributed to the ‘great history’, and to the fact that it was one of the professions ‘to which women could aspire’. Therefore, it lost part of its value from a feminist perspective of history, as midwives are not considered a group that transgressed androcentric norms.
In Spain, midwives were the first women who could enrol at the university, although under special conditions. This should be enough of a reason to give them a more important place in written history. Here, we provide a brief overview of changes in the competences of midwives that will help us to understand the lack of knowledge about these professionals today. Some of these competences have disappeared over time, but appear in texts as old as the dialogues between Socrates and Theaetetus by Plato.

1.2. Obstetric and neonatal care

The lack of writings by midwives about their task means that this must be studied through indirect sources or what others have written about them. However, we must consider that these could be biased opinions, either because of gender stereotypes or certain interests. What nobody has ever doubted is the role of midwives in caring for the mother and newborn during childbirth.

References to the newborn care that should be provided by the midwife immediately after birth include bathing, cutting the umbilical cord correctly and realigning the head, as recommended by Bernard de Gordon and subsequently criticized by Josefa Amar y Borbón.

Public letters on births can provide information about how childbirth was attended in the Middle Ages. If they were widows, women in labour may have requested the attendance of a notary at the birth of their child, so that it could be certified. The aim was to avoid problems in claiming the inheritance of a child born after his father had died, or in claiming the widow’s rights, as some women could only enjoy these rights if they had had descendants. In addition, the task of midwives has been recorded in writings about the births of members of royal families in different periods.

At the beginning of the twentieth century, it was still common to attend a birth in the home of the woman in labour. The obligations of the midwife included visiting the pregnant women before the due date to diagnose the pregnancy, instructing the woman about hygiene during pregnancy and puerperium, attending the home birth and visiting the woman daily in her home during at
least the first eight days after puerperium to check the temperature and state of mother and child.

1.3. Gynaecological care, genetic and contraceptive counseling

The gynaecological care provided by midwives over time has varied widely. It has included hymen repair to prevent the scandal of virginity lost before marriage, collaboration in the selection of a partner by providing ancestral genetic counseling, the treatment of various disorders related to the position of the uterus and gynaecological infections. Occasionally, midwives were asked to examine a woman’s genitals to assess whether or not the hymen was broken, normally for legal reasons.

Although gynaecological functions disappeared from curriculums when training became official, some midwives continued to treat ‘uterine problems’. This task did not go unnoticed; doctors wanted to capture this kind of client and reported the midwives as interlopers. Another common task of midwives was to prevent pregnancies and provoke abortions. This task was not without risk, as laws have prescribed harsh punishments for these activities since antiquity.

1.4. Baptism and the role of godmother

One of the traditional functions of midwives was to carry out urgent baptisms for babies that were at risk of dying. This function was considered so important that it was included in curriculums for midwifery studies until 1888, and was explained in great detail in various works. Another related function of midwives was to carry out Caesarean sections after the death of a woman in childbirth, to save the baby’s life or at least baptize it.

Midwives occasionally carried out other activities related to baptism. If the birth was successful, parents may have given the midwife the privilege of taking the newborn from the house to be baptized, acting as the godmothers of the baby. One of the first midwives who studied at the San Carlos Association for
Surgery, Ramona Pascuala Enríquez, was the godmother in 1799 of the child of Teresa Bastante and José Alcázar.

When the obligation of entering all newborns in a register of births, marriages and deaths was introduced in Spain, it was not surprising that the midwife who had attended the birth was responsible for undertaking this procedure. Felipa Ortiz Martínez, a midwife in the town of Paniza in the province of Zaragoza, registered a child named Antonia Iriarte Espinosa, in 1890. Years later, this child would also become a midwife.

1.5. The teaching function

Up to the end of the eighteenth century, a time in which teaching of midwives was established in the Royal Colleges of Surgery, midwives acted as teachers of their own apprentices. This transmission of empirical knowledge was often carried out between women in the same family. In addition to receiving training, the students thus accessed their first clients and inherited the family business. Although the involvement of doctors and surgeons broke the process of transmitting knowledge on childbirth from woman to woman, there are numerous documents that show that matrilineal transmission between women in the same family continued to occur throughout history.

Attempts to become teachers in their own profession were systematically rejected, which is what happened to María Iribarren in 1875 when she put herself forward for appointment as a teacher of midwives. She was rejected, even though no doctors had applied for this position. Apart from a very few exceptions due to political circumstances, midwives could not be teachers of the future students. Any attempt to do this was classified as interloping.

1.6. Midwives as doctors’ assistants

The disappearance of independent practice of midwives was a slow, but inexorable, process. The campaign of damaging the reputation of the figure of midwife began as early as the thirteenth century. The denigration not only con-
Maternity care in different countries

Midwife’s contribution

Continued, but got worse over the following centuries. In regulations made in 1861 on teaching nurses and midwives, the function as doctor’s assistant is clearly described for complicated deliveries: ‘However, as mere assistants to the doctors, they may continue to attend to pregnant women who are giving or have given birth’.

At the end of the nineteenth century, it was accepted that midwives should work independently in small towns and villages, taking over from the traditional birth attendants who worked in them. However, in the cities, it was the doctors who were in charge of attending birth, and the midwives became their assistants.

By the 1930s, this process was complete. Although midwives from this period continued to try to defend and increase their powers, they had internalized this subordination and even disputed with nurses over ‘becoming the only assistant of the doctor’.

1.7. Conclusions

Many of the functions of midwives analysed here were gradually abandoned. The reasons include the increasing interest of doctors in taking responsibility for the sexual and reproductive health of women, and the progressive confinement of midwives in closed institutions. Now, midwives are gradually fighting to recover a place in the history of female reproductive health that we should never have lost.

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The current situation of midwives in Spain

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2.1. Introduction

The current situation of midwives in Spain is passing though turbulent times, in which the traditional competences associated with childbirth are now deemed less important in the professional community, and other competences that were not highly valued in recent decades have begun to gain relevance.

As a result of the fight for recognition of competences, the marea rosa (literally, ‘pink tide’) has arisen in Spain, led by young and not so young midwives who have taken to the streets to increase the visibility of their clinical and social work. These popular movements have coincided with a time of demands and questioning resulting from the recession battering Europe. The lack of job opportunities for the youngest midwives has led to demands for greater presence of obstetric and gynaecological nurses specialized in female sexual and reproductive health in areas that to date have not been covered by them.
Midwifery is a health profession in which, with a scientific, responsible attitude and using the appropriate clinical and technological resources of science at all times, comprehensive care is provided for sexual, reproductive and maternal health of women in the areas of prevention, promotion and care and recovery of health. Tasks include care for the mother, diagnosis, monitoring and care in pregnancy, birth and normal puerperium, as well as care for the newborn up to the 28th day of life. The area in which all of these activities take place is primary care (provided in health centres, the community, the family and home) and specialized care (provided in hospitals and other units that depend on hospitals). In addition, midwives can carry out their profession in the private and public arena, as employees or freelancers. It is in this area that demands are being made to give midwives back the broad field of action that characterizes the profession.

2.2. Midwifery training in Spain

The training of midwives in Spain is based on scientific evidence and on technological and scientific advances in health care systems. Among the training models considered in Article 40 of Directive 2005/36/EC on direct training and specialized postgraduate training, Spain opted in 1992 for midwifery training that would be accredited through an official qualification of specialist. Prior to undertaking the specialized training, students must have obtained a university diploma/degree in Nursing. Subsequently, they must take a specialization in Obstetric-Gynaecological Nursing (midwifery) that involves an internship, and they must have received a positive assessment. The internship system has proved a suitable procedure to ensure that midwives in training gain the skills needed to work in the area of primary and specialized care, through teaching and healthcare activities that are closely linked to health care practice in the centres where their undertake their training period.

The current training programme for midwives in Spain is carried out in multi-professional teaching units of obstetrics and gynaecology that are officially recognized as training centres for midwives and meet the requirements to achieve this recognition. The training takes place over two years, full time, as stated in Article 54.1 b) of Royal Decree 1837/2008 of 8 November, and a minimum of 3,600 hours must be completed.
2.3. Midwifery task force

According to the Informe sobre profesionales de cuidados de enfermería: oferta-necesidad 2010-2025 (‘Report on nursing care professionals: supply-demand 2010-2025’), which was published in 2013, forecasts predicted that there would be 7,204 gynaecological and obstetric nurses in 2015 (31 per 100,000 women); 8,200 in 2020 (35 per 100,000 women) and 9,030 in 2025 (38.66 per 100,000 women). However, current data indicate that there are now 24.2 per 100,000 women, when the current average in OECD countries is 69.8.

In terms of changes in the number of midwives over time, we can see that numbers have remained stable in Spain in the last 20 years. Since 1988, there have been 0.16 midwives for every 1,000 inhabitants. The current data for 2013 indicate that there are 0.18 midwives per 1,000 inhabitants, as shown in Figure 2.1.

According to data provided by the OECD, the total number of active midwives in 2013 in Spain is 8,297 (in the public and private system), which results in a ratio of 0.18 midwives per 100,000 inhabitants and 19.55 midwives per 1,000 births, as shown in Figure 2.2. A comparison with other countries in Figure 2.3 shows that the figures for Spain are considerably lower than the OECD average for 2009, and only above Slovenia and Korea in the number of midwives per 1,000 births.

In terms of the Autonomous Communities, in Spain there are also considerable differences in the ratio of midwives per 100,000 women, ranging from Cantabria, with the highest ratio, to Asturias, Madrid and Andalusia, with the lowest.

The practice of midwifery in Spain is mainly carried out by women, who account for over 92.6% of those in the profession, according to the Spanish National Statistics Institute (INE). This figure does not correspond with the proportion of men in health care management. The area of management requires greater involvement by midwives and, above all, by women in the profession.
**Figure 2.1.** Evolution in the number of midwives per 1,000 inhabitants in Spain

Source: OCDE, 2015.

**Figure 2.2.** Evolution of practicing midwives per 1,000 births in Spain

Source: OCDE, 2015.
In terms of the area of teaching and research, in recent years there has been an increase in the number of studies led by midwives. Until some years ago, to take a doctoral degree in Spain, other pre-EHEA bachelor's degrees needed to be taken that led to third-cycle studies. Now there are an increasing number of midwives who have reached the highest academic recognition by obtaining a doctoral degree from different Spanish universities. This is partly the result of the opportunity to join doctoral programmes, according to Royal Decree 99/2011, of 28 January, on official doctoral studies that enables professionals with midwifery qualifications to access doctoral programmes.

2.4. Conclusion

In conclusion, we could state that midwifery in Spain is undergoing a change to become a broader, more diverse disciplinary area that is far from the traditional relegation of the profession to pregnancy, birth and postpartum care.
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3.1. Introduction

Midwifery training was introduced in Chile on 16 July 1834, with the opening of the College of Obstetrics. The aim was to professionalize childbirth care, which had previously been the responsibility of traditional birth attendants, and thus to reduce the rate of maternal mortality, whose main causes were postpartum haemorrhages and infections. Two years later, in 1836, a group of 16 midwives were the first to graduate and received their certificates. Initially, this training was only available to women. In fact, the first record of a male midwife can be found in the 1920 Census.

Since this first training school opened, 181 years have passed. There are now 21 schools that train male and female midwives throughout the country. Obstetrics is a five-year university course, leading to the academic qualification of bachelor’s degree and the professional qualification of midwife. It is one of
the professions with the highest rate of employability in Chile: 97% in the year of graduation. Currently, there are over 10 thousand midwives in the country: 52.9 per 100,000 women, which is under the Organisation for Economic Co-operation and Development (OECD) average of 69.8 per 100,000 women.

3.2. Midwifery competences

The clinical functions of midwives are carried out at three levels of care: in primary care, midwives are responsible for prenatal check-ups, preconception and contraceptive counseling (family planning), menopause care, ultrasound scanning and sex education in schools; in secondary care, they undertake clinical functions related to ultrasound check-ups as well as administrative tasks involving the coordination of maternal-fetal medical centres, sexually transmitted diseases and gynaecology; finally, in tertiary care, they attend births and work with hospitalized patients in units specialized in maternal-fetal medicine, gynaecology, postpartum care and neonatology. In administration, midwives hold posts of very different types, from managing a hospital and/or a family health centre (primary care) to carrying out auditing tasks for public and private providers and insurers. Finally, midwives today may work in research and teaching at undergraduate and postgraduate level in public and private universities and professional institutions.

3.3. Current situation in Chile

Chile is a country with a current population of 17.8 million inhabitants situated in the extreme south of the South American continent. It is classified as a high-income country, with GDP per capita of US $21,590. However, it has notable levels of inequality; in fact, it is the country with the highest level of income inequality among the members of the OECD. The income of the richest 10% of the population is 26 times higher than that of the poorest 10%.

Maternity-related epidemiological indicators show that the fertility rate is 1.82 children per woman of reproductive age. This is a sub-replacement fertility rate. The percentage of births attended by skilled health professionals in the
1990s reached 99%, and the maternal mortality rate in 2000-2013 was the lowest in the American continent after Canada and Uruguay. It currently stands at 18 per 100,000 live births. Exclusive breastfeeding for six months reached 56% in the last national survey of breastfeeding.

Although there has been an improvement in most perinatal health indicators, there is one situation in Chile that has been difficult to address: the excessive medicalization of childbirth. Currently, 50% of Chileans are born by Caesarean section, which makes Chile one of the countries with the highest numbers of Caesarean sections in the world. Furthermore, over 90% of women have interrupted labour by interventions such as artificial rupture of membranes, synthetic oxytocin and epidural anaesthesia. This situation has been accompanied by a decrease in the attendance of midwives at births, from 52% of the total births in 2000 to 39% at the current time, basically due to the increase in the number of births in the private health system, where births are attended by doctors and the Caesarean rate is above 70% (Figure 3.1).

**Figure 3.1.** Distribution of births by Caesarean section, births attended to in the private health system and births attended to by midwives in Chile
In Chile, a National Protection System for Early Childhood, called *Chile Crece Contigo* (‘Chile Grows with You’), was introduced in 2007. Among other factors, the aim of this system is to promote personalized childbirth and continuous support during labour. However, the implementation of this system is still far from targets. In this context, in its final statement at the National Congress in 2014, the Midwives’ Association of Chile stated that it ‘was committed to reducing any kind of violence towards women, particularly in obstetrics, and to respect the timing of a physiological birth, avoid unnecessary medicalization, and ensure that women receive continuous support during labour’.

### 3.4. Conclusion

Although all stakeholders in Chilean society recognize the contribution of midwives to reducing maternal mortality and improving access to sexual and reproductive health services, it is essential to identify current challenges in midwifery, to understand user satisfaction, and to promote normal birth as a priority.

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4.1. Norway is a safe place to give birth

Norway is situated in the north of Europe. It has a total area of 385,252 km² and a population of 5.1 million inhabitants, with a density of 15.5/km². Its number of births (2014) is 59,979 in 2014, with 47 institutions to give birth (2014).

Norway is a good and safe place to give birth and to be born. We have access to free health care during pregnancy and childbirth. There is well organised, free of charge health care and vaccination programs for all children. Mothers and fathers have maternity leave to take care of the new child. The country is among the healthiest places in the world – with access to clean water, safe and good housing, everybody can have an opportunity to have an education, there are rights for women, for children, for employers.
The maternal mortality rate (death in a woman during pregnancy and within 42 days after birth or abortion) in Norway is 7/100,000 births. That is about four women every year in Norway, and most midwives have never experienced that a mother died. In comparison, the global MMR is 210/100,000 (range 3-1100).

The perinatal mortality rate (stillborn and deaths in the first 7 days) is 4.9/1000 in Norway, and this rate has been almost stable in the last ten years. In comparison, the global PMR is 23 (range 2-45).

It has not always been like this. We can see the decline in perinatal mortality has continued. In 1967, the rate was above 20, and in 2013, we saw the lowest mortality ever recorded; 4.9 babies per 1,000 births. Perinatal mortality in Norway is now so low that we cannot expect further large reductions. This reduction has many different explanations related to health, treatment and factors in the society (Figure 4.1).

Figure 4.1. Perinatal mortality rate (per 100 births)

Source: Medical Birth Registry of Norway 2015.
4.2. Organisation of maternity care

Antenatal care is free and easily accessible for women, including one ultrasound scan. Some women see private consultants during pregnancy to have extra services like scans. There are no private institutions to give birth; they are run by the health authorities and financed over the tax system. Women do not have to pay for food or other things they need during the stay. In some institutions, the partner can stay with the mother in family rooms after the delivery. The partner will have to pay for the stay. Homebirth is an exception. Women have to pay between 450 and 700 euros to midwives, and can claim back 200 euros from the health authorities after birth.

4.3. The principle of differentiated maternity care

We have a principle of differentiated maternity care. This was decided by the Parliament 2001 and again in 2009. The aim is to offer women individual and appropriate care and to avoid medical interventions that have proven little benefit in low-risk labours.

Maternity care is organised at three levels:

- **Bigger obstetric units**: Departments of obstetrics and gynaecology — usually, but not always — with more than 1,500 births annually, providing all birth care services, and with neonatal intensive care unit.
- **Obstetric unit**: Usually in local hospitals — usually, but not always — with at least 400 deliveries annually, with obstetricians and anaesthesiologists on call.
- **Free-standing maternity units**: Usually — but not always — at least 40 births annually, providing birth care for healthy women with expected normal births and also antenatal and postnatal care also for women in their catchment area that give birth in hospital. These units are usually in rural areas, with at least one hour transport to the closest hospital.

There is also differentiation and selection depending on risk levels within obstetric units. Five hospitals with big obstetric clinics have alongside midwife-
ry-led units for low risk women inside the hospital. They are all in the southern part of Norway, which is by far the most populated area. Low-risk women can choose to give birth there or in the obstetric unit. Between 7 and 30% of women in the catchment area give birth in the alongside midwifery-led units. In obstetric units with mixed populations (both low-risk and high risk women), women are selected and classified as low-risk (green) or high-risk (red) upon admission. Low risk women are under the care of midwives only.

Home births are not organised by health authorities and therefore are not a part of the system. The woman herself must find an independent midwife willing to assist at birth. Our health authorities have made national guidelines for planned home births, showing they accept and recognise home births.

4.4. Where do women in Norway give birth?

In 2013, 99.2% of births happened within institutions, and 0.8% were planned and unplanned home births. Half of the women give birth in the six biggest institutions in the Southern part of Norway, which all have more than 3,000 births per year. Five of these institutions have alongside midwifery-led units. There are seven freestanding midwifery-led units in the country. In 2014, a total of 452 women gave birth in the seven units.

4.5. Midwifery in Norway

Midwifery is an autonomous and protected profession. There are approximately 2,700 practising midwives. The education is a two-year postnursing program on master’s level.

4.5.1. Areas of practice

**Antenatal care**

- Midwives are authorised to take lead in the care of pregnant women.
- Pregnant women may choose if they want to see a midwife, a consultant
(‘family doctor’), or a combination for antenatal care, but there are too few midwives to fulfil this intention.

- Women at high risk may see both a midwife and a gynaecologist.

**Intrapartum and postnatal care**

- Labouring women at low risk are cared for by a midwife on all levels.
- Midwives attend all births.
- In the alongside midwifery units (5) and the freestanding midwifery-led units (7) midwives work as the lead profession.
- In the obstetric units midwives work together with doctors when supporting women at high risk.

**Independent midwives**

- The hospital trusts or the municipality employs most midwives. A few work as independent midwives. They have personal contracts with the health authorities to claim money back for services. Some have private practice with antenatal care, home births and family planning clinics.

**4.6. What are the challenges in Norway today**

Although Norway certainly is a safe and good country to give birth, we also face different challenges. For women, and for the midwifery profession, rising intervention rates are a challenge. Medicalised maternity care and more interventions mean that less women are cared for by a midwife only. For the midwifery profession it means that more and more doctors are involved in the care of women and influence practice in a stronger way. In Norway midwives used to have a strong position, especially in the delivery wards. We now see that position threatened because of the escalating influence of the medical profession and because so many women give birth in the big units. We will look at the numbers for Caesarean section and epidural as examples of rising intervention rates.

The rate of Caesarean section in 2014-2015 is 16.5% in Norway, varying between 11% and 25% in different institutions.
The epidural rate is also rising rapidly; in 2014-2015, the rate is 34.5%, varying between 11.5% and 47% in different institutions.

As most women give birth in institutions that have the facilities to offer epidural, many women choose this option. We have legislation saying that a patient has the right to choose their treatment. Many women feel it is their legal right to have an epidural, and lately I have talked to midwives who feel the same. If the women asks for an epidural, she will then have it without a professional assessment or questioning if it is the best for the woman and her labour.
4.7. Conclusion

The conclusion is that medicalised birth is a threat for both women and the midwifery profession.
5.1. Introduction

This chapter provides an overview of being and becoming a midwife in Ireland, and includes an overview of the maternity services, national data on birth outcomes. Information specific to Ireland’s two midwife-led units is provided.

5.2. Maternity care in Ireland

Maternity care is free to all women, regardless of their income, up to 6 weeks postpartum. Options for care within the maternity care system include:

5.2.1. Public health care (free to all women, regardless of income)

- Hospital only care.
- Shared care: care between the woman’s general practitioner (GP) and hospital (doctor or midwife).
• Obstetric-led care: for women with underlying health problems.
• Midwives clinics: for women who, at the time of booking, have no identifiable medical or obstetrical risk factors. This options can include shared care with the woman’s GP. These clinics can be in the maternity hospital or in community/primary care areas.
• Community midwifery service: offered by some but not all maternity hospitals, and includes midwife-led care antenatal care and postnatal care in the woman’s home.

5.2.2. Private health care

Although there are no private maternity hospitals in Ireland, women may choose to:

• Attend an obstetrician privately. Within this option, women have their antenatal care from an obstetrician who, in most circumstances, will be available to attend the birth. The private health insurance covers the maternity hospital postnatal stay, which varies in length depending on mode of birth, and women pay the obstetrician directly.
• Attend a self-employed midwife for home birth. Some maternity hospitals have well established homebirth schemes and offer home birth alongside other options for care, but generally, these are limited. The health service in Ireland, Health Service Executive (HSE), has a payment system in place for women who choose to birth at home with a self-employed community midwife (SECM). To avail of a home birth service, women, and midwives, must fulfil certain eligibility criteria.

5.3. The maternity services in Ireland

There were 20 maternity hospitals in the Republic of Ireland (one private hospital closed in January 2014). Table 1 presents the distribution of births by size of maternity unit.
Table 5.1. Distribution of births by size of maternity hospital/unit

<table>
<thead>
<tr>
<th>Number of births</th>
<th>Number of maternity hospitals/units (n)</th>
<th>Total births (n)</th>
<th>% births (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000-1,999</td>
<td>10</td>
<td>16,680</td>
<td>24.1</td>
</tr>
<tr>
<td>2,000-2,999</td>
<td>3</td>
<td>6,714</td>
<td>9.7</td>
</tr>
<tr>
<td>3,000-3,999</td>
<td>2</td>
<td>6,787</td>
<td>9.8</td>
</tr>
<tr>
<td>4,000-4,999</td>
<td>1</td>
<td>4,621</td>
<td>6.7</td>
</tr>
<tr>
<td>8,000 and over</td>
<td>4</td>
<td>34,303</td>
<td>49.6</td>
</tr>
</tbody>
</table>


There are two midwife-led units (MLUs) in Ireland. These were established in 2004 as part of a randomised controlled trial on consultant-led versus midwife-led care for low obstetric risk women. The establishment of these units, and birth outcomes, is discussed in detail below.

5.4. Midwifery-led units in Ireland

In 2004, a pragmatic two group, multicentre randomised controlled trial was established to prospectively evaluate the effectiveness of midwifery-led care in Ireland. Two MLUs were established within two maternity hospitals, the study sites.

Eligible women aged between 16 and 40 years, healthy, without risk factors for labour and birth, and within 24 completed weeks of pregnancy. The experimental group received midwifery-led care in a midwife-led unit and the control group received standard care in a consultant-led unit.

The results showed that midwifery-led care was as safe as consultant-led care, resulted in less intervention, was viewed by women with greater satisfaction in some aspects of care, and was more cost-effective.
These two MLUs continue to provide midwifery-led care to healthy women with low risk of labour and birth problems, but despite the results and recommendations, no further units have been established since.

5.5. Postpartum care

As mentioned earlier, more than half of all women stay 2 days or less in a maternity hospital postpartum. Community midwifery care services vary considerably throughout Ireland. Some maternity hospitals have dedicated community midwifery teams which provide postnatal care in the community, usually up to 5 days postpartum but, in the main, postnatal care in the community is provided by public health nurses (PHNs), who were, prior to 2005, required to be registered midwives. Since then PHNs are required to complete a module in maternity care as part of the PHNs education programme.

Pathways of progression in practice include specialist and advanced practice. Some midwives choose to specialise in particular areas of practice such as diabetes care, substance addiction, adolescent pregnancy etc., and with further postgraduate education, and with additional post registration education, can register as specialist practitioners. Other midwives, following a programme of education at masters level, may become and register as advanced midwife practitioners.

5.6. Women and mode of birth in Ireland

There were 69,105 births in Ireland in 2013 (69,267 births in 2012), a 3.9% decrease from 2012 and a birth rate of 15.0 per 1,000 population. Almost all of these births took places in one of 19 maternity hospitals and under 0.2% (n = 162) took place at home. The average age of birthing women was 32.1 years: almost one-third (32%) were aged 35 years or older, and 2.0% were aged under 20 years. Thirty-eight percent of births were to primiparous women whose average age was just over 30 years.

Over half of women (54%) who had a singleton birth has a postnatal hospital stay of 2 days or less.
Table 5.2. Percentage distribution of maternities by mode of birth in 2013

<table>
<thead>
<tr>
<th>Mode of Birth</th>
<th>All hospitals/units (n = 69,105) (%)</th>
<th>MLU 1 (n = 727) (%)</th>
<th>MLU 2 (n = 325) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous</td>
<td>55,9</td>
<td>64</td>
<td>72,9</td>
</tr>
<tr>
<td>Breech/forceps</td>
<td>0,3</td>
<td>0,4</td>
<td>0</td>
</tr>
<tr>
<td>Forceps</td>
<td>3,9</td>
<td>17,6</td>
<td>10,2</td>
</tr>
<tr>
<td>Vacuum extraction</td>
<td>10,9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caesarean section</td>
<td>28,9</td>
<td>18</td>
<td>15,4</td>
</tr>
<tr>
<td>Other specified and combined</td>
<td>0</td>
<td></td>
<td>0,3^**</td>
</tr>
<tr>
<td>Missing</td>
<td>1,2†</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MLU: midwife-led unit

* Includes women who were booked for MLU and birthed in CLU; ^ 2014 data; ** Baby born before arrival to MLU; † n = 4.


5.7. Midwife education in Ireland

5.7.1. Undergraduate education

There are two undergraduate midwifery programmes offered in five universities and one Institute of Technology in Ireland. The BSc in midwifery, a 4-year direct entry degree programme, commenced in 2006. There are 140 places offered annually with a proportion reserved for mature entrants i.e., students aged 23 years and over.

The Higher Diploma in Midwifery programme is an 18-month post-Registered General Nurse (RGN) programme. Again, it is offered by all six institutions and
places are limited to 150 per intake of students. During this programme, students are paid employees and receive a salary.

In order to practice, all midwives must be registered with and pay an annual retention fee to the regulatory authority, the Nursing and Midwifery Board of Ireland.

5.7.2. Postgraduate education

A range of postgraduate midwifery education courses are offered by all third level institutions and, amongst others, include masters in Midwifery, Advanced Practice, Leadership, masters by Research and Postgraduate Diploma and Certificate programmes including the Certificate in Health Sciences Education (for those who wish to become midwife lecturers). In addition, midwives can register as medication prescribers following successful completion of a postgraduate certificate education course.

The number of midwives educated to doctoral programmes has increased considerably since 2006 when all midwife registration education programmes transferred to third level institutions.

Other midwifery education programmes, in-service for registered midwives, are offered by the Centre of Midwifery Education in Dublin and centres of Nursing and Midwifery education throughout Ireland.

References


— The Nursing and Midwifery Board of Ireland [Internet]. Dublin: Nursing & Midwifery Board of Ireland 2016; c2016.
— National home birth services [Internet]. Dublin: Health Service Executive; c2013.
6

Midwifery in Belgium

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² President of the Belgian Midwife Association

6.1. Belgium, small country high population density

Belgium is a small country. It is 30,528 km² large and counts three regions: Flanders, Brussels-Capital Region and the Walloon Region. Dutch, French and German are the three national languages spoken. Belgium counts over 11 million inhabitants.

6.2. Giving birth in Belgium

6.2.1. Number of births and organization of maternity care

In 2011 there were 127,839 births. Of them, 67,098 (52.5%) occurred in Flanders, 23,708 (18.5%) in the Brussels-Capital Region and 37,062 (29%) in the Walloon Region. Home births are rather rare in Belgium: in Flanders 592 home births were registered in 2011; this is 0.9% of the deliveries.
The country counts 99 maternity wards from which 55 are located in Flanders, 10 in the Brussels-capital Region and 34 in Wallonia. As in many European countries, we observe a decrease in average length of hospital stay. In the last eight years, we observed a decrease from 5.4 to 4.7 days for a normal vaginal delivery and a decrease from 7.8 to 6.3 days in case of a Caesarean section. The Belgian Health Care Knowledge Centre (KCE) recently finished a study on the organization of postnatal care in Belgium. Its advice is to reform the postnatal care into more integrated maternity care with a length of stay in the hospital of three days followed by home care afterwards.

The main care provider in pregnancy is the obstetrician; women have direct entrance to secondary care providers. Most of the births are attended by an obstetrician although midwives take care of labor.

### 6.2.2. Key figures

In Belgium, in 2011, over 98% of the births are singletons. In Flanders 45.8% were primiparae; this figure was 43.5% in Brussels and 43.9% in the Walloon region. A higher number of conceptions within a fertility treatment could be observed in Flanders (5.8%) compared to Brussels with 4.8% and the Walloon Region with 4.1%.

The number of patients with diabetes was lowest in Flanders (2.9%) while this number was 6.6% in Brussels and Wallonia. The percentage of women with hypertension is 4.7% in Flanders, 4.2% in Brussels and 4.9% in Wallonia. The international trend towards overweight and obesity is also a fact in Belgium. In 2014, 22.6, 22.7, and 21.7% of the women had a BMI of 25-29.9 and 11.4, 10.7 and 14.2% a BMI $\geq$30, in Flanders, Brussels and Wallonia, respectively.

Table 6.1 shows that between 92.1 and 92.8% of the women have a pregnancy duration of 37 weeks or longer. Over 81% of the babies have a normal birth weight ($\geq$2,500 g).

In Belgium we had an induction rate of 23.8% in Flanders, 28.7% in Brussels and 32.5% in Wallonia in 2011. Around 70% of the women have epidural anesthesia in labor; in Wallonia this is nearly 8 in 10 women. The Caesarean
section rate is very similar across the three country parts and is about 20%. The episiotomy rate is highest in Flanders with 53.3%, 27.6% in Brussels and 35.4% in Wallonia.

Table 6.1. Perinatal data for Belgium, 2011

<table>
<thead>
<tr>
<th></th>
<th>Flanders</th>
<th>Brussels</th>
<th>Wallonia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n)</td>
<td>(%)</td>
<td>(n)</td>
</tr>
<tr>
<td><strong>Pregnancy duration</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;28 w</td>
<td></td>
<td></td>
<td>180</td>
</tr>
<tr>
<td>28-31 w</td>
<td>769</td>
<td>1.1</td>
<td>218</td>
</tr>
<tr>
<td>32-36w</td>
<td>4,126</td>
<td>6</td>
<td>1,474</td>
</tr>
<tr>
<td>≥37 w</td>
<td>63,457</td>
<td>92.8</td>
<td>2,293</td>
</tr>
<tr>
<td><strong>Birth weight</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;500g (when more than 22 w)</td>
<td>30</td>
<td>0.1</td>
<td>32</td>
</tr>
<tr>
<td>500-1,499 g</td>
<td>841</td>
<td>1.2</td>
<td>1,277</td>
</tr>
<tr>
<td>1,500-2,499 g</td>
<td>3,856</td>
<td>5.5</td>
<td>1,278</td>
</tr>
<tr>
<td>≥2,500g</td>
<td>64,908</td>
<td>93.3</td>
<td>158</td>
</tr>
<tr>
<td><strong>Mode of birth</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Induction</td>
<td>16,284</td>
<td>23.8</td>
<td>6938</td>
</tr>
<tr>
<td>Epidural</td>
<td>46,862</td>
<td>68.6</td>
<td>17,538</td>
</tr>
<tr>
<td>C- section</td>
<td>13,455</td>
<td>19.7</td>
<td>4,835</td>
</tr>
<tr>
<td>Episiotomy</td>
<td>29,268</td>
<td>53.3</td>
<td>6,658</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boy</td>
<td>35,716</td>
<td>51.3</td>
<td>12,640</td>
</tr>
<tr>
<td>Girl</td>
<td>33,887</td>
<td>48.7</td>
<td>12,058</td>
</tr>
<tr>
<td><strong>Admission to</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N*</td>
<td>8,589</td>
<td>12.3</td>
<td>1,621</td>
</tr>
<tr>
<td>NIC</td>
<td>2,651</td>
<td>3.8</td>
<td>1,284</td>
</tr>
<tr>
<td>Stillborn</td>
<td>328</td>
<td>0.47</td>
<td>227</td>
</tr>
</tbody>
</table>

The mean age of the primiparae giving birth in Flanders is 28.3 years, 29.2 for Brussels and 27.4 in Wallonia. The mean age for multiparae is 31.2, 32.3 and 31.1 respectively. With regard to breastfeeding, 46.4% of the women in Flanders give exclusive breastfeeding at 6 weeks postpartum (14.9% combination of breast- and bottle feeding), at 12 weeks postpartum these numbers reduce to 30% and 15%, at 26 weeks only 6.8% of the mother give exclusive breastfeeding and 14.3% a combination of breast- and bottle feeding.

6.3. Midwives in Belgium

6.3.1. Midwifery education

After secondary high school there is a direct entrance to the midwifery education of three years resulting in a bachelor degree. The midwife is part of the medical profession and is allowed to take care of normal pregnancy, labor and childbirth independently.

6.3.2. Profession of the midwife

There are about 10,000 midwives in Belgium (there is no proper registration). About 60 midwives take care of the out-of-hospital births (about 1% of all births). There are only few midwifery-led care units across the country and just a few hospitals provide entrance to independent midwives. Midwives have an own law (since 2006) and are well insured in Belgium.

Currently midwives in Belgium are working hard on their positioning. There are positive movements towards greater involvement of midwives in the antenatal care provision (often together with an obstetrician) as well as in postnatal care at home. Furthermore, midwives specialist positions e. g. in ultrasound screening, genetic and oncologic counseling within fertility care are implemented. Since 2014 midwives can prescribe medication.

Since 2008 there is a Belgian Midwives Association (BMA) that includes the Flemish, French and Walloon associations, midwives work together and as such have one voice, also on the political level. The BMA defends the interests
of the Belgian midwife with respect for all political and philosophical positions. The BMA protects the specific nature of the profession. Furthermore the BMA contributes actively to the quality of the bachelor training and contributes to the continuing education. The BMA promotes scientific research in the field. Finally, the BMA improves the social status of the independent and salaried midwife and promotes the role and position of the midwife in health and society and carries out all activities related to this, at national and international level.

References


