

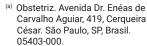
## **Articles**

# Characterization of undergraduate Midwifery programs in South American countries

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The International Confederation of Midwives stablishes standards for the education of these professionals. The aim was to characterise the direct entry midwifery programmes and higher education institutions that offer them in South America. A descriptive-exploratory documental research was done. 75 programmes were identified, offered in universities in Argentina, Brazil, Chile, Ecuador, Paraguay, Peru and Uruguay. All of them demand a test or preparatory course for enrolment. The number of hours varied between 3.322 and 9.000 and the duration is eight to 12 semesters. They are mainly named Midwifery Programme and award the academic degree of licensee or bachelor and the professional title of Obstetriz/Obstetra or Matrona/Matrón. There is great heterogeneity regarding the vision, mission and graduate profile. There is similarity among the syllabuses. The curricular contents emphasise the biological sciences, knowledge applied to Midwifery, practical activities and internships.

Keywords: Midwifery. Education. Curriculum.



#### Introduction

The contribution of midwives<sup>(c)</sup> to the improvement of women's health care is essential. The World Health Organization (WHO), the United Nations Population Fund (UNFPA), and the International Confederation of Midwives (ICM) are some of the international institutions that emphasize the importance of strengthening midwifery services and the need for qualified professionals with fundamental skills in this area<sup>1</sup>. Studies show that the reduction of maternal and neonatal mortality and morbidity, premature births and stillbirths are some of the results that can be improved through the assistance provided by midwives<sup>2</sup>.

Considering the relevance and impact of midwives to the global scenario of women's healthcare, it is essential to know and reflect upon the training of these professionals.

In Brazil, the history regarding the training of midwives is quite complex and intertwined with the history of nursing and medicine. The old courses were gradually changed, until in the 1970s they were fully incorporated into the nursing schools as specialization while the undergraduate courses were extinguished. The obstetric crisis in the early 2000s prompted, among other measures, the resurgence of the undergraduate Midwifery course (or direct entry course), which is common in many European countries as well as an object of growing interest in other countries<sup>3</sup>.

Currently, the professional trained in Brazil is known as an *obstetriz* (for direct entry courses)<sup>(d)</sup> or obstetric nurse (for specialization courses). The term *parteira* or "professional birth assistant" is also a common denomination. Midwife is the denomination in the English language (regardless of the type of course) and will be used along this English version.

The definition widely adopted for this professional is the one provided by the ICM, considering the midwife as:

[...] a person who has successfully completed a midwifery education program that is recognised in the country where it is located and that is based on the ICM Essential Competencies for Basic Midwifery Practice and the framework of the ICM Global Standards for Midwifery Education; who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title 'midwife'; and who demonstrates competency in the practice of midwifery<sup>4</sup>. (p. 1)

Despite the international consensus on the definition of midwives, the study programs, legislation and requirements for the training of these professionals are varied.

Midwives are represented internationally by the ICM, which considers that in order to have a strengthened midwifery profession there are three basic pillars: education, to provide qualified and competent workforce; the regulation of professional activities; the organization of members in a strengthened association. Therefore, the Confederation has developed key documents in these three spheres of action, with the aim of promoting and developing the profession and working to improve women's health at global level<sup>5,6</sup>.

(c) The denomination is used in the female gender because almost all professionals are women.

(d) They are professionals supported by the Law of the Professional Exercise of Nursing and registered in the Regional Council of Nursing.



The essential documents on midwifery education are based on the guiding principles of the ICM and establish basic parameters for the creation and evaluation of midwifery courses, based on global expectations for the education of qualified professionals in the graduate level (direct entry course) as in the specialization for nurses. They represent the minimum quality expected for an Midwifery education program with an emphasis on competency-based education; and they were developed in harmony with the standards for the practice and regulation of Midwifery<sup>7-9</sup>. They are the result of a joint effort, using an evidence-based approach.

In 2014 a "Toolkit for Strengthening Midwifery" was published by the Latin American Center for Perinatology, Women's and Reproductive Health<sup>10</sup>, which is an updated regional version of the compilation and complementation of several documents produced by the ICM.

Although many countries may aim to follow the parameters proposed by the Confederation, these standards can be expanded to include other expectations and reflect specificities of cultural, social and economic conditions, among other factors that may interfere in the way in which the courses are built<sup>8</sup>. These facts indicate that there are differences in the training of midwives in different contexts, even though countries are guided by the same standards and basic recommendations.

Thus, the objective of the study was to characterise the direct entry Midwifery courses and the higher education institutions that offer them in South American countries.

### Methodology

The present research is a descriptive-exploratory study on the training of midwives in South American countries. The data regarding the mission, vision and profile of the graduates of the courses were analysed qualitatively, while the other data were quantified.

It encompassed the courses of Midwifery offered in the South American countries in which the midwives are represented nationally by organizations affiliated to the ICM. Currently, there are seven countries: Argentina, Brazil, Chile, Ecuador, Paraguay, Peru and Uruguay<sup>11</sup>. The remaining South American countries were not included in the study because they are not members of the ICM.

The ICM website provides the names and contacts of the affiliated entities in each country, which allowed initial access to educational institutions that offer Midwifery courses of direct entry.

As part of the strategy to locate the courses, a search was made on the website or web portal of the Ministry of Education in each of the seven countries. Information obtained from the Latin American-based university cooperation network (www. universia.net) was also used, which offers specific portals for higher education, with versions for each of the seven countries sought in this study. The information collected in these portals was used to complement the data found in the aforementioned sources.

The criteria for inclusion of Midwifery courses in the study were: being a higher education course; access by direct entry (without previous training in nursing);



availability of information on course characteristics; offered in a South American country that has a professional association affiliated to the ICM valid during 2017.

An instrument called the Course Sheet was prepared for data collection covering the following information: country; course name; location (city); type of institution (university / other); academic degree and degree title conferred; requirements for admission; type of funding; duration of the course; total hours, theoretical and practical workload split; vision; mission; profile of graduates; curricular structure. The curricular structure consists of the denomination of the modules offered throughout the course.

Initially, the source used to fill out the Course Sheet was the website of the educational institution. In addition to the information on the website, an email was sent to the institution or to the people responsible for the course, requesting their collaboration.

The data were analysed quantitatively, in a descriptive way, using the absolute frequency. For the information about vision, mission and profile of the graduates, a content analysis was performed, extracting the aspects considered relevant in the training of midwives.

Even though the research is document-based, with materials considered public domain, the study was submitted to the Research Ethics Committee of the School of Nursing of the University of São Paulo (resolution number: 2.384.495), due to the fact that professionals linked to the courses participated to complement the information about the courses. The Informed Consent Form was sent by e-mail since all the consultation was done by electronic means.

#### Results

Following, are the data regarding the quantity, location and name of the courses offered, type of institution where they occur, academic degree and degree title conferred, admission requirements and type of funding, course duration, hours, vision, mission, profile of graduates and curricular structure.

The research identified a total number of 75 courses, distributed in Argentina (n=9), Brazil (n=1), Chile (n=20), Ecuador (n=10), Paraguay (n=6), Peru (n=36), Uruguay (n=1) and binational Argentina and Uruguay (n=1). In countries offering two or more courses, is observed a geographical concentration in the metropolitan region of the capital (Buenos Aires, Santiago, Asunción and Lima). All courses are offered in universities.

Regarding the denomination of the course, Midwifery (n = 56) and Midwifery and Childcare (n = 17) predominate. The academic degree conferred is a licentiate (licensed in: Midwifery, n = 41; Midwifery and Childcare, n = 1; Midwifery and Neonatology, n=, Ob-Gyn and Neonatology, n=1; *Matronería*, n=1) or bachelor's degree in: Midwifery, n=25; Midwifery and Childcare, n=2; Sciences with mention in Midwifery, n=1). In some countries, the baccalaureate (or bachelor) refers to an intermediate education between high school and undergraduate.

The professional title of Midwife (*Matrona/Matrón*) is conferred mainly in Chile (also conferred by one course in Paraguay). The title of Midwife (*Obstetriz*) is



conferred in Peru and the Obstetric-Midwife (*Obstetra Partera*) in Uruguay. Midwife (*Obstetriz*) is the professional denomination adopted in Brazil and Ecuador, regardless of gender.

As for the requirements for entry and the type of funding, differences are observed according to the country in which the courses are located.

In Argentina, for admission, is necessary to get approved at an initial course (Common Basic Cycle or Entrance Course). The various courses run in public and free universities and private universities, with costs paid by the student. In Brazil, it is necessary to make the cut in the Entrance Exam or the selection by the Unified Selection System of the Ministry of Education and the course is given in a free public university. In Chile, the selection of students for admission and the offer of scholarships takes place through the University Selection Test (PSU). The various courses may be done in public and private universities; in both, the students pay the fees. In Ecuador, it is necessary to fulfil the requirements of the Levelling and Admissions System. The course is given in a free public university. In Paraguay, approval is required in the Admission Exam and the costs of the course are under the responsibility of the student. The various courses take place in public and private universities; in both, the costs are paid by the students. In Peru, it is necessary to get approved in the Admission Exam. The various courses are given in public and free universities and private universities, and the students must pay fees to cover the costs. In Uruguay, it is necessary to get approved in an initial course (Baccalaurate, Medical Option with Biological orientation or the Baccalaurate of Technological Sports and Recreation) and the course takes place in a free public university.

Regarding the duration of the courses, they vary from 8 to 12 semesters, 10 months being the majority (n = 43) of cases. There is a large variation in the total number of hours of the courses: from 3.322 to 9.000. Of the 21 courses with information on the total workload, five have the total number of hours calculated from the total number of credits of the course multiplied by the average hours allocated to each credit, as established by the respective countries. Among the seven courses that present the theoretical and practical distribution of hours, the Brazilian course has more theoretical than practical hours, the course of the Universidad Católica Los Ángeles Chimbote has the same amount of theoretical and practical hours and in the other five, the volume of practical hours is larger than the theoretical workload.

We also analysed characteristics of the courses referring to the vision (24 texts found) and mission (30 texts found).

The vision appears in the data on three courses in Chile, one in Ecuador, three in Paraguay and 17 in Peru. Most of the statements are generic and broad and may reflect the vision of the university in which the course is taught. The main terms cited that refer to the vision are: excellence; reference; leadership or vanguard (regional, national and international); formal recognition or accreditation; relationship with society. One of the institutions highlights the economic aspect of inclusion as part of the vision.

The following are examples of the course's views:

Being the most inclusive Professional School of Midwifery by offering highquality higher education at affordable costs generating human capital for the common good, contributing to consolidate the intellectual capital of the



organizations in the public and private sectors. Furthermore, producing and disseminating relevant knowledge for the country and the world. (Universidad Católica Los Ángeles de Chimbote, 2017)

To be a leading, highly competitive faculty in the training of high-quality midwifery professionals, recognised nationally and internationally for our ideological pluralism, scientific rigor, social commitment and institutional strengthening. (Universidad Nacional Hermilio Valdizán, 2017)

To be an accredited and reference school in the training of midwives who with their leadership, professionalism and research will contribute to the development of the Peruvian society by generating knowledge, improving the sexual and reproductive health of the population with a high sense of responsibility and social sensitivity, framed in human values. (Universidad Privada Arzobispo Loayza, 2017)

As for the mission, the data encompasses courses from Argentina (n=1), Brazil (n=1), Chile (n=5), Ecuador (n=1), Paraguay (n=4) and Peru (n=18). The main mission is the training of professionals, according to the degree and title conferred by the course. It is highlighted that the training of this kind of human resource is needed to meet the demands of the health system, teaching and research in the area of sexual and reproductive health. Some courses, in addition to the initial undergraduate training, add as part of their mission the continued education of professionals. Several courses refer as their mission the training of professionals for comprehensive health care, directed to the family and community. Others focus their mission on the training of professionals specialised in women, mothers and newborn's care. It is worth to mention a contrast in one of the courses for referring that their mission is

[...] to train human resources to intervene in the area of Health Sciences, performing auxiliary, collaborative and complementary activities to those of the physician, for primary care, prophylaxis, childbirth preparation through evaluation controls, psycho-physical exercise and assistance in labour, birth and childcare. (Universidad Nacional de Villa Mercedes)

In some statements, the mission expands to encompass the training of professionals aiming at social transformation and sustainable development, innovation of care, interdisciplinary work and improvement of the quality of life of the population.

The following are examples of mission statements:

The career of Midwifery and Childcare of the University of Talca aims to train professionals who are distinguished by being competent to provide comprehensive care to newborns, women, their partners and families with a biopsychosocial approach at different levels of care. To provide timely attention according to available evidence and current regulations. The graduates will be prepared to integrate and lead work teams and to adapt to the health demands



of the population at the regional and national level. (Universidad de Talca, 2017)

To graduate highly trained Midwives to work in the field of Neonatal, Reproductive and Sexual Health in the different levels of attention of the National Health System, in the fields of research, teaching, management and extension, with great resolutive capacity and with integration to change, spirit of collaborative service and commitment to people, family and community. (Universidad Nacional De Asunción, 2017)

To train midwifery and childcare professionals competent in comprehensive health care of the mother, newborn - child and throughout the process of sexual and reproductive health of the person, family and community; with vocation for the work, social projection and research spirit; respecting life, the environment, cultivating ethical, humanistic values and promoting creativity that contributes to the solution of health problems. Develop studies of second specialties, diploma courses and courses of high specialization, according to the technological and scientific advances linked to market demands. (Universidad Católica de Santa María, 2017)

In addition, in several texts of the vision and mission, the values of the course may be identified. The values that appear are mainly: ethics; moral principles; human values; ideological pluralism; Andean values; Christian values, O'Higginian thought; inviolability of human life.

Mission statements in general also include information on the profile of the professional. The terms related to the profile are: humanization, commitment and social sensitivity; citizen awareness; critical thinking; autonomy; leadership; entrepreneurship; competitiveness.

The profile and competencies of the graduates are described in the characterization of 57 courses (Argentina = 6, Brazil = 1, Chile = 15, Ecuador = 1, Paraguay = 4, Peru = 28, Uruguay = 1; binational Argentina and Uruguay=1) and 12 courses (Brazil = 1, Chile = 4, Ecuador = 1, Paraguay = 1, Peru = 4, binational Argentina and Uruguay = 1), respectively. This information was not obtained for the remaining courses, since it is not presented on the website of the institutions.

When mentioning the profile of the graduates, the courses refer to the essential characteristics of the professional, their "mark" or distinction. That is, who this professional is. In this sense, most of the courses expect these qualities to be found in their graduates: professional and social responsibility; ethics; respect for life, diversity and others; leadership; efficiency; ability to work as a team; commitment. Other less frequently mentioned qualities are: autonomy, initiative, critical thinking, sensibility and creativity.

Aspects of the professional practice and work settings are also described within the graduates' profile texts. In general, professionals are distinguished by providing assistance to women, pregnant women, mothers, newborns, children, couples, families and communities. This assistance is provided at different levels of care and includes educating, guiding, offering support and care, promoting health and preventing illness,



diagnosing and prescribing. Professional practice also includes management, teaching and research. These activities are in the areas of sexual and reproductive health, gynaecology, midwifery, neonatology and childcare. The work settings mentioned in the public or private sector are: health centres, specialsed institutes and hospitals. Several courses refer to the practice as an independent professional.

In short, the graduates of the courses are described as Midwife or *Matrona* (sometimes referred to also in the masculine gender *Matrón*) with humanistic, scientific, ethical and technological training.

Other examples of graduate profile are as follows:

The Bachelor of Midwifery is a responsible professional working with women in the comprehensive care of the reproductive process, offering support, care and advice necessary during pregnancy, labour, birth and the puerperal period, conducting births under their own responsibility and providing care to the newborn and infant. This care includes preventive measures, promotion of normal birth, detection of complications in the mother and child, access to medical care or other appropriate assistance and the execution of emergency measures. Performs counselling and education on health issues, not only of women but also of family and society. Especially in areas such as preparing couples to be parents, comprehensive child, women's, sexual and reproductive healthcare. (Universidad del Aconcagua, 2017)

The graduate of the career of Midwifery and Childcare of the Bernardo O'Higgins University, is qualified to provide comprehensive healthcare to women throughout their life and to the newborn, from a family and community health perspective; with emphasis on the generation and execution of prevention actions, promotion of sexual and reproductive health of women, family and community. Their professional work evidence critical thinking, teamwork, effective communication, management skills, entrepreneurship and research, and their action is characterised by social commitment, ethical sense and responsibility. They are expected to incorporate continuous learning, search, generation and transfer of new disciplinary and professional knowledge in their professional training. (Universidad de Antofagasta, 2017)

Another item in the course sheet that is used to characterise the courses refers to the curricular structure; it is available in 67 of the 75 courses specifying the names of the modules offered and their distribution over the years or semesters of the course. In total, 3,501 module names were found, resulting in an average of 52.2 modules for the 67 courses. Table 1 shows the most frequent terms (more than 100 repetitions) in the titles of the modules of the curricular structures.



Table 1. Most frequent terms used in the title of modules - South America, 2018

Terms (grouped by knowledge area)	Number of repetitions
Midwifery, Obstetric	534
Internship, Practice, Workshop	229
Research, Methodology, Thesis	192
Anatomy, Physiology, Morphophysiology	179
Neonatology, Paediatrics, Childcare	163
Administration, Management	142
Psychology, Psychoprofilaxis, Mental health	128
Biology, Microbiology, Parasitology	125
Gynaecology	120
Public Health, Epidemiology	113
Sexuality, Sexual Health, Reproductive Health	113
Foreign Language, English	105
Bioethics, Deontology, Ethics, Law, Legal Medicine	101

#### **Discussion**

Knowing the direct-entry Midwifery courses and dimensioning the offer of training of midwives is relevant for the national policies of education and regulation of the professional practice. These findings are also important for professional associations, for those involved in the training of midwives and those interested in the availability of these professionals in the labour market. It may also be useful for those who are interested in entering this career, especially when the offers are scarce as in Brazil, Ecuador and Uruguay. The role of professionals working in women and childbirth care, especially midwives, has been highlighted as fundamental in the construction of high-quality care.

Renfrew et al.<sup>2</sup> refer that the midwife:

[...] has a particular contribution to make to the quality care identified in the framework in regard to education, information and health promotion; assessment, screening, and care planning; and promoting normal processes and preventing complications in the context of respectful care that is tailored to need and works to strengthen women's capabilities. (p. 12)

In a publication on the global state of midwifery, UNFPA, WHO and the ICM, state that midwives qualified and regulated according to international minimum standards, are competent to meet 87% of sexual, reproductive, maternal, neonatal and child health needs. However, these professionals represent only 36% of the workforce in midwifery, and not all countries have professionals dedicated exclusively to the care of women and newborns<sup>1</sup>.

As for the educational institution where the courses are offered and the academic degree they confer, the Latin American Centre for Perinatology, Women's and Reproductive Health<sup>10</sup> considers that:



Midwifery education programs may be accredited or offered at the level of certificate, diploma or degree, depending on local structures of higher education. Whichever level is adopted, it should be ensured that midwives, after completing the program, can be fully integrated into the health system, ideally on the same level as other health professionals in their respective countries. Therefore, an institution with credentials for academic accreditation should be involved in both, curriculum development and provision of midwifery education. (p.108)

All identified courses are offered at universities and most of them confer the academic degree of licentiate and/or bachelors. They all prepare students for professional practice, as recommended, although there are differences regarding accreditation.

There is also diversity among the degree title awarded by the courses, although the graduates fit the international definition of midwives.

With regard to the requirements for admission to the programs, the international recommendations are: age - must have maturity and self-reliance, usually a minimum age of 18 is stablished which is usually when high school has been completed and in some countries when legal majority is reached; education - standards require the student to have completed formal secondary school (usually 12 years in duration); reading, writing, and arithmetic - evidence may be required to assess skills in those areas; good health - to avoid that a student have health conditions that can be transmitted to mothers and newborns during normal delivery of healthcare services is not in conflict with the ethical principles of midwifery<sup>10</sup>.

The results found in the present study are partially congruent with the recommendations, since there is a demand for completion of high school or equivalent, usually happening at the age of 17 or 18, a test or course is required where basic knowledge of reading, writing and mathematics among other subjects, and in some cases, the health conditions of future students is mentioned, such as the requirement of a vaccination card for the admission process, for example.

Regarding course duration, the ICM says that while pre-admission programs and processes may vary, "the competency-based outcomes of midwifery education" (p. 103) should be equivalent. The main focus is that the learning process achieve a set of common competences. It also recognised the need for time variability that accommodates individual needs to achieve these results. The established standard for the duration of the course is at least 3 years in a direct entry program, which is considered to be necessary for the mastery of essential skills. Any time additional to these 3 years has not been established as a general rule and therefore varies according to the location or institution offering the course. Programs must follow the academic conventions and local requirements for issuing diplomas or certificates, as well as consider the specific demands of the region. The results found in this study show a variability of up to 4 semesters in the duration of the programs, although the majority (n=43) takes 5 years, which is 2 years beyond the required minimum<sup>10</sup>.

Besides the duration, another important characteristic of the courses is the workload. Not all are offered full time and among the 21 courses that had information on the total number of hours, there was great variation (between 3,322 and 9,000 hours of duration). It should be said that the way in which these hours are calculated



might be different between institutions - for the total, practical and theoretical hours. In some programs or sites, the workload is stated as number of hours, while in others they are provided in the form of credits completed along the course. These credits can have a flexible amount of hours allocated to them. In Chile, for example, a "Transferable Credit System (STC)" is used where the amount of academic work hours conferred on each credit may vary from 24 to 31 hours<sup>12</sup>.

Only seven courses provided information on the distribution of practical and theoretical hours. Among them, five had a greater number of practical hours. The ICM standards "require a minimum ratio of 40% theory and 50% practice" adding that some educators recommend a proportion of up to 60% practice<sup>10</sup>. Among the results obtained, only the Brazilian course has a lower number of practical hours than theoretical hours. According to Narchi et al. 13, some of the greatest difficulties faced in achieving the minimum of 50% practical training of students encompass: problems in finding services that are open to the model of care recommended by the WHO and adopted by midwives; the need of support from the services and the allocation of a greater number of teachers or clinical tutors; and the opposition and reluctance of other professionals (such as doctors and obstetric nurses) to recognize the need to change the model and accept the creation of another professional category. The authors describe some strategies that are being adopted in an attempt to overcome these obstacles, although they recognize that due to limitations related to administrative aspects of the university and also to the nature of the difficulties, it will be challenging to achieve a change in the short-term. The article ends by highlighting the relevance of strengthening the professional identity of midwives and obstetric nurses and the importance of a work that is harmonic and in partnership between the two professional categories. Brazil still faces the predominance of a medicalised model of care, however it is worth mentioning that the political and social changes of recent years have contributed to the recognition of midwives as well as the process of building partnerships with other professionals, especially nursing professionals. The ICM says that services receiving the students must have midwives or qualified professionals to supervise and evaluate the students during the practical activities<sup>10</sup>. However, in Brazil, unlike in other countries, the follow-up of the students is done exclusively by the teachers or tutors linked to the university and the course without participation of practitioners working at the services<sup>13</sup>.

As for the characteristics of vision, mission and competences, Sidhu<sup>14</sup> presents definitions of the mission concept by several authors who are referenced in the literature on the subject and identifies the presence of four elements as part of the mission: vision, competencies, values and business domain. The author points out that although distinct, the four elements are connected, and says that having a stated mission can lead to better performances.

The concepts of mission, vision and competence come from the business field and are now used by educational institutions as part of strategic planning. Authors such as Colombo et al.<sup>15</sup>, differing from Sidhu, present the vision separately from the mission, although related, and defined as:

Mission is the guiding principle! It is the institution's reason for education in their business - Core Competence. It addresses the social needs it meets, its



essential skills and its focus of action. When defining the mission, the question is: Who are we as an educational institution? Why do we exist? What are the needs we satisfy in society? [...]<sup>15</sup>. (p. 20)

Vision is the explanation of what is visualized for the educational institution in its future. It is the desire and intention of the direction of the company. [...]<sup>15</sup>. (p. 25)

The values or principles are already considered starting points that guide and compose the vision and mission of the company<sup>15</sup>.

Concurring with the literature, the results of this study reflect a close relationship between the concepts of vision, mission, values and competencies, difficult to delimit one from the other independently, and often presented as complementary.

The market focus, inherent to the concepts, is also represented in the results, especially in the statements that refer to excellence, leadership, and human resources training to meet the demands of the health system.

Still regarding the mission, one particular statement highlighted in the results mentions the training of human resources that "perform activities auxiliary, collaborative and complementary to those of the physician". Although it is important to consider the different contexts in which the courses are inserted, the text is in disagreement with the definitions and premises of the ICM, which defends the training of midwives as independent, competent and autonomous professionals, even as part of a multi-professional team<sup>10</sup>.

As for the values described by the courses, ethics and ideological pluralism demonstrate greater proximity to what is recommended by the ICM as a philosophy for the training of midwives. Values that have been described as "Christian" deserve careful consideration, since the Confederation suggests that the education "should promote equal rights regardless of gender, race, religion, age and nationality" (p. 98).

The graduates' profile found in these results highlights the professional and social responsibility; ethics; respect for life, diversity and others; leadership; efficiency; team-work ability; commitment. This set of characteristics is consistent with what is recommended by the Confederation, especially regarding ethics, respect, commitment and ability to work in a team.

With respect to the curricular structure, a similarity between the courses was identified. Table 1, presented in the results, shows the presence of a large proportion of module titles specifically directed to Midwifery. This strong presence of area terms is also found in the curriculum model proposed by the ICM<sup>10</sup>.

The biological sciences are also very evident in the modules of the curricular structures, as exemplified by terms such as anatomy, physiology, neonatology, paediatrics, biology, parasitology, gynaecology, among many others that appear with a large number of repetitions.

Practical activities, internships and workshops have emphasis on curricular structures as well. It is assumed that this result may be related to the Confederation's requirement that the courses have at least 50% practical hours.



#### Conclusion

When analysed under the light of the ICM's international recommendations, the courses identified in the studied countries have varied characteristics, especially in relation to the duration, hours, vision, mission and profile of the graduates. All courses have a minimum duration above the recommended 3 years, frequently 10 semesters. The total workload ranged from 3,322 to 9,000 hours, with a widely heterogeneous distribution between theory and practice.

As for the similarities between the courses, the study highlighted the geographical concentration in metropolitan regions, the offering of the courses in universities, the requirements for admission, the denomination - midwifery -, the degree and the degree title conferred.

Among the limitations of the study are the difficulty to request clarification or digging deeper for information due to the characteristics of a documental research, the use of electronic documents that can be altered or deactivated, the foreign language in most of the documents that allows for translation deviations; and the difficulty in contacting the representatives of courses for complementing the data.

It is of paramount importance to conduct more studies to contribute to a better understanding of the educational landscape of midwives in South America and in the world, in order to foster the qualification and strengthening of this professional category.

#### Authors' contributions

All authors participated actively in all stages of the manuscript preparation.

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