

ΠΑΝΕΠΙΣΤΗΜΙΟ ΔΥΤΙΚΗΣ ΑΤΤΙΚΗΣ ΣΧΟΛΗ Σ.Ε.Υ.Π ΤΜΗΜΑ ΜΑΙΕΥΤΙΚΗΣ ΤΙΤΛΟΣ ΠΡΟΓΡΑΜΜΑΤΟΣ ΜΕΤΑΠΤΥΧΙΑΚΩΝ ΣΠΟΥΔΩΝ: ΠΡΟΗΓΜΕΝΗ ΚΑΙ ΤΕΚΜΗΡΙΩΜΕΝΗ ΜΑΙΕΥΤΙΚΗ ΦΡΟΝΤΙΔΑ

Μεταπτυχιακή Διπλωματική Εργασία

Tίτλος εργασίας Gendered barriers to midwife career advancement in the workplace: A systematic literature review.

Συγγραφέας ΡΕΑ ΜΠΕΛΑΝΤΕΡΗ ΑΜ: 20038

Επιβλέπουσα: ΒΙΚΤΩΡΙΑ ΒΙΒΙΛΑΚΗ

Αθήνα, Μάρτιος 2022



UNIVERSITY OF WEST ATTICA SCHOOL OF HEALTH AND CARE SCIENCES DEPARTMENT OF MIDWIFERY TITLE OF POSTGRADUATE PROGRAM: MASTER OF SCIENCE IN ADVANCED AND EVIDENCE BASED MIDWIFERY CARE

Diploma Thesis

Gendered barriers to midwife career advancement in the workplace: A systematic literature review.

Student name and surname: REA BELANTERI Registration Number: 20038

Supervisor name and surname: VICTORIA VIVILAKI

Athens, MARCH 2022



ΠΑΝΕΠΙΣΤΗΜΙΟ ΔΥΤΙΚΗΣ ΑΤΤΙΚΗΣ ΣΧΟΛΗ ΣΕΥΠ ΤΜΗΜΑ ΜΑΙΕΥΤΙΚΗΣ ΤΙΤΛΟΣ ΠΡΟΓΡΑΜΜΑΤΟΣ ΜΕΤΑΠΤΥΧΙΑΚΩΝ ΣΠΟΥΔΩΝ: ΗΡΟΗΓΜΕΝΗ ΚΑΙ ΤΕΚΜΗΡΙΩΜΕΝΗ ΜΑΙΕΥΤΙΚΗ ΦΡΟΝΤΙΔΑ

Tίτλος εργασίας Gendered barriers to midwife career advancement in the workplace: A systematic literature review.

Μέλη Εξεταστικής Επιτροπής συμπεριλαμβανομένου και του Εισηγητή

Η μεταπτυχιακή διπλωματική εργασία εξετάστηκε επιτυχώς από την κάτωθι Εξεταστική Επιτροπή:

A/α	ΟΝΟΜΑ ΕΠΩΝΥΜΟ	ΒΑΘΜΙΔΑ/ΙΔΙΟΤΗΤΑ	ΨΗΦΙΑΚΗ ΥΠΟΓΡΑΦΗ
1	ΒΙΚΤΩΡΙΑ ΒΙΒΙΛΑΚΗ	Επιβλέπουσα καθηγήτρια	
2	КЛЕАNΘН Гоуроуnтн	Μέλος επιτροπής	
3	ΜΑΡΙΑ ΗΛΙΑΔΟΥ	Μέλος επιτροπής	

ΔΗΛΩΣΗ ΣΥΓΓΡΑΦΕΑ ΜΕΤΑΠΤΥΧΙΑΚΗΣ ΕΡΓΑΣΙΑΣ

Η κάτωθι υπογεγραμμένη Ρέα Μπελαντέρη του Αντωνίου, με αριθμό μητρώου 20038 φοιτήτρια του Προγράμματος Μεταπτυχιακών Σπουδών «Προηγμένη και Τεκμηριωμένη Μαιευτική Φροντίδα του Τμήματος Μαιευτικής της Σχολής Σ.Ε.Υ.Π του Πανεπιστημίου Δυτικής Αττικής, δηλώνω ότι:

«Είμαι συγγραφέας αυτής της μεταπτυχιακής εργασίας και ότι κάθε βοήθεια την οποία είχα για την προετοιμασία της, είναι πλήρως αναγνωρισμένη και αναφέρεται στην εργασία. Επίσης, οι όποιες πηγές από τις οποίες έκανα χρήση δεδομένων, ιδεών ή λέξεων, είτε ακριβώς είτε παραφρασμένες, αναφέρονται στο σύνολό τους, με πλήρη αναφορά στους συγγραφείς, τον εκδοτικό οίκο ή το περιοδικό, συμπεριλαμβανομένων και των πηγών που ενδεχομένως χρησιμοποιήθηκαν από το διαδίκτυο. Επίσης, βεβαιώνω ότι αυτή η εργασία έχει συγγραφεί από μένα αποκλειστικά και αποτελεί προϊόν πνευματικής

Παράβαση της ανωτέρω ακαδημαϊκής μου ευθύνης αποτελεί ουσιώδη λόγο για την ανάκληση του πτυχίου μου».

Επιθυμώ την απαγόρευση πρόσβασης στο πλήρες κείμενο της εργασίας μου μέχρι και ένα έτος μετά την απόκτηση του τίτλου του μεταπτυχιακού προγράμματος και έπειτα από αίτηση μου στη Βιβλιοθήκη και έγκριση του επιβλέποντα καθηγητή.

Ο/Η Δηλών/ούσα

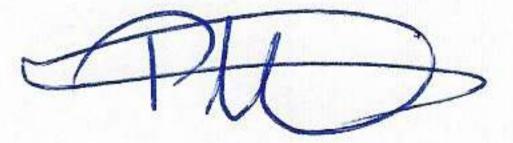


Table of Contents

Abstract 1			
Introduction			
Method 4			
Design 4			
Study process			
Inclusion/exclusion criteria			
Results 8			
Discussion			
Limitations 18			
Conclusions			
Ethics approval			
Funding			
Acknowledgments			
Conflict of Interest			
References			

Abstract

Women cover the 99% of midwife positions whereas even after their entrance in male professions like medicine they are still in second line. Midwifery is one of the first in which doctors got involved, setting aside midwives as nonqualified. Even if midwife care has been recognized for its importance there are obstacles in equal opportunities in career and education.

Objectives

The objective of the study is to examine evidenced gendered barriers in equal opportunities in career and education for midwives.

Methods

This is a systematic literature review.

Results

Worldwide there is no mutual definition and understanding on midwifery. Barriers identified in midwife career development include low salary in contrast with overwhelming job, medicalization of labour and disrespect by medical staff, as well as gaps in legal and regulatory support. Different theories of birth management and male domination in medicine and politics and strong medical lobbies prohibit midwives from full practice. Meanwhile, educational limitations and supervisor's support are also of importance for those desiring professional scale up.

Conclusion

There are gendered barriers on midwife career development. However, there is also combination of professional discrimination. The deep understanding of midwife role and the benefits their full practice can offer to the society together with suitable changes in regulations can be the root for equal opportunities and better working conditions. There is a need for further studies on the social aspect of midwives interprofessional relationships and how their rights can be respected and given in line with the full spectrum of their role.

Introduction

Midwifery is mainly a female job (Siberry, 2021) with a coverage of 99.9% of the positions (Cornish, 2018). Within the communities, first midwives were women of the neighbourhood who used to attend other female neighbours for assistance when giving birth (Kaufman, 1998). Their empirical knowledge and the familiar to them body made them essential for the perinatal care (Biggs, 1983). However, they were not educated and were characterized as non-qualified by physicians (Biggs, 1983) whose profession was male-dominated and the midwifery was one of the first in which they got involved since the 18th century and started transforming it from a natural to a medical process until after the second world war when it became totally medicalised (Panagiotopoulou, 2015). So many years later, same attitudes are expressed no matter the midwife high level of education. Even after the entrance of women in what so called male professions, they continue being in second line (Siberry, 2021).

The importance of the maternity care over the delivery of high quality perinatal services has been proved extensively and globally. Nowadays, well trained and licensed midwives, having received higher education acquire the capabilities and skills to contribute significantly to the high quality of care provided to mothers and newborns (Renfrew et al 2014, WHO 2016 and Mattison et al, 2020). It has, also, been recognised by governments the importance of the continuity of care provided by midwives (Cummins et al, 2015), whereas countries such as UK, Netherlands and Australia are changing or have already changed to midwife led care units (Hollins Martin et al, 2020). However, in different countries we see midwives assuming different roles (Vermeulen et al, 2021). Expanded or limited to several sectors (i.e., antenatal care and obstetrical sonography, family planning etc). Career and educational opportunities for midwives depend largely on the level of support provided by health systems and legislation, as well as on the operationalization of the multidisciplinary approach in each country. Medicalization of perinatal care displaced midwives from their main role (Prosen & Krajnc, 2019), although their participation in childbirth optimizes maternal and newborn outcome as Cross (2014) describes.

Meanwhile, the lack of midwives worldwide remains persistent and growing, regardless of the social and economic status of the country. WHO (2020) predicted that by 2030 the world will be in need of 9 million midwives.

According to Eurostat (2020) reports, midwives and nurses reach 1,1% of workforce in Bulgaria, 1,2% in Latvia and Luxembourg, 1,3% Estonia, Cyprus and Hungary, 1,4% Greece as well as in Poland, 1,5% in Spain and 1,8% in Italy while in Norway they reach 4,3%; hence, Greece is ranked 4th in terms of midwives employment at health professionals level. According to OECD back in 2017 gynaecologists and obstetricians in Greece were counting 3.399 (0,316/1000 citizens) and 3.464 (0,32/1000 citizens) in 2019, whereas active midwives counted only 2808 (0,26/1000 citizens) (loannou et al, 2021) and 2.854 (almost 0,27/1000 citizens) respectively. This is almost half the European average of 0,40 midwives/1000 citizens (loannou et al, 2021).

As the number of active midwives is extremely low, inevitably there is not adequate number of midwives to claim higher positions.

Ensuring and strengthening the role of the midwives in primary care is a challenge as there are still gaps in the provision of professional independence and structural measures depend on the local coordination and the will to support midwifery activities, even though community midwifery plays a key role in public health (Biro, 2011).

Munich Declaration, 2000, guided the EU governments to review the role of the midwives in the community and to offer educational, financial support as well as to include them in health policy decision making and to let them *"work to their full potential"* (Keighley, 2009). Before that, Council Directive 80/155/EEC (European Union Law, http://data.europa.eu/eli/dir/1980/155/oj) ensured the right to free labour movement of midwives within European Union by establishing common educational goals. Even though midwifery education in Europe has to meet specific commitments, the working environment is not enabling registered midwives to have the whole scope of practise and reveal their potentials.

Greece is one amongst several European countries, both member states or not, encountering the above mentioned adversities. Vermeulen et al (2019) conducted a survey in 30 European countries showing that despite the alignment with European directives many midwives were found in a nonmidwifery led care unit, with obstetricians holding the main role and power in these facilities. Furthermore, it is worth noting that in Belgium, midwives are restricted from their profession rights as births at hospitals have been medicalised, too (Vermeulen et al, 2021). Medway et al (2021) also described barriers to midwifery practice in Australia, such as within the medication or diagnostic test prescription context. On the same note, Winkelmann, et al (2020) stated that health professions including midwifery lack in preference, due to the working conditions and the bad salaries, resulting in an increased personnel gap.

Due to the poor attention that has been paid so far by the scholarship, the objective of this systematic review is to examine the evidence in regards of potential gender based barriers hindering midwives from equal opportunities to practice and advance their career. Therefore, the main research question of this study is to explore the gender based barriers to midwife carrier advancement in the workplace.

The following supporting sub-questions will be explored as well:

1. What are the midwives work condition in Greece?

2. Are midwives struggling to operate to their full practice?

3. What are the potential gendered barriers hindering midwives to advance their career?

4. Could the sub-optimal professional identity and practice of midwives be explained by the double discrimination (gender and professional) against midwives?

The study's objective is to draw evidenced insights on the lack of equal opportunities for practice and career advancement for midwives. In addition, the expected findings may inform the policy, practice and education for optimization of the current status quo. The gained knowledge may also contribute to future research in the field of midwifery care in Greece and, on a broader note, in European Union.

Method

Design

The study follows a systematic literature review approach. The specific method was deemed appropriate as it is considered one of the most accurate research

methods to filter systematically a large number of studies, to bring together results on specific questions (Liberati et al 2009 & Sriganesh, 2016) and to provide answers to themes that wouldn't come out from other kind of studies (Page et al, 2021). Furthermore, there is a fertile ground for systematic literature review in the midwifery field considering the poor attention given to the topic so far and we used thematic analysis to present the results and discuss our data. The main research question was explored using the PICO (Patient or Population, Intervention, Comparison, Outcome) framework for research.

Study process

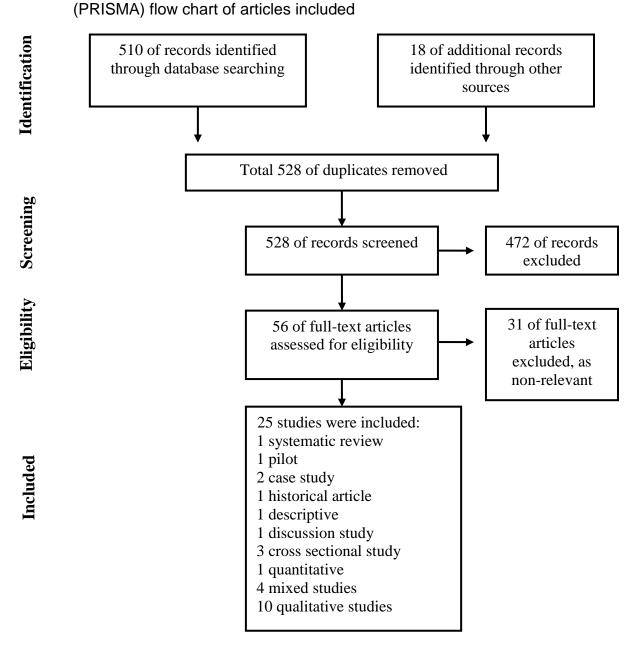
A search strategy was developed and tested (Fig 1) using the tool PICO in our main research question (P: population, I: intervention, C: comparator, O: outcome). The appropriate operators, "OR", "AND" were used to combine the following keywords in PICO: barriers, obstacles, midwi* career, midwi* job, midwi* work, midwi* rights, advancement, development, opportunit*. The symbol asterix was used to include all words deriving from the same word (Sriganesh,2016), while no other filters (ex. publication year) were used, except for only English and Greek bibliography A PRISMA flow diagram (Preferred Reporting Items for Systematic reviews and Meta-Analyses (Fig 2) represents the search process on how many studies were initially been found and how many of them were finally suitable for our study. With PRISMA we are looking for the accuracy of our systematic review (Liberati et al, 2009, Moher et a, 2009). The systematic four-step search, conducted in October 2021, employed PubMed.gov database.

In addition to the electronic database search, a citation search as well as a search of the similar articles proposed, were performed. Also, worldwide recognized organizations or institutes' sites where visited, like WHO and EUROSTAT, as well as national sites like the Greek Ministry of Health.

Fig 1: Search Strategy

	AND		AND	
Barriers		Midwife career		Advancement
barriers OR obstacles		midwi* career OR midwi* job OR midwi* rights OR midwi* work		advancement OR development OR opporunit*

FIG 2: . Preferred Reporting Items for Systematic Reviews and Meta-Analysis



7

Inclusion/exclusion criteria

Only full text articles published in peer-reviewed journals were included, from 1995 to 2021 in global range. Only English and Greek documents were accepted. All studies describing the evidence in regards of potential gender based barriers hindering midwives from equal opportunities to practice and advance their career were included. Both relevant quantitative and qualitative studies were eligible for review.

Studies including other female health professionals were excluded. Searches of the bibliographic databases were undertaken initially from 8th October 2021 to 28th November 2021. Studies were selected for inclusion following a two-stage process. Within the first screening stage each study had the title and abstract screened by one independent reviewer (Belanteri R.) and studies were excluded if they did not meet the eligibility criteria. Full text manuscripts of the selected studies were then retrieved. The final inclusion or exclusion decisions on examination of the full text manuscripts was done. The reasons for study exclusion were reported in the PRISMA flow diagram, see Fig 2.

Results

A sup up of the results is in Table 1 where the authors, method of study and each findings are written.

In many of the articles included, a common concern was underlined. There is no mutual definition or understanding on midwifery, worldwide (Booth et al, 2006, Renfrew et al 2014, WHO 2016 & Mattison 2020). For instance, a study in Belgium in 2016 reflected the unawareness of women of a midwife's role in pregnancy, as they could not connect her title directly as the main provider of maternity care (Vermeulen et al, 2016). The same result came from a more recent study of Vermeulen et al (2021), as well as the barriers on midwifery full practice in non-midwifery led units, position evolution and the important role of connected midwife associations.

According to Vermeulen et al (2019) improvement in education is happening in Europe but a primary linkage on a midwife's role is still present. To protect the title and rights of a midwife, Vermeulen concludes to the suggestion of having a common plan on the role of midwives in all Europe respecting their education level. Educational and practice differences between countries could be a barrier for migrant professionals, like midwives, to scale up in hierarchy. Javanmard et al (2020) explain through their study in Australia that those people need support for better integration in the new system. In that way they would be able to be independent, confident for their skills and free of any kind of job inequality. The rest of the results are separated into themes, according to the type of barrier found.

Themes

1. Salary

After a global survey and a following workshop organized by WHO (2016) together with the International Confederation of Midwives (ICM) and the White Ribbon Alliance (WRA), the findings were interesting as almost similar concerns where shared between midwives coming from low, middle or high income communities. Many of the midwives taking part in the global survey were coming from Europe since that they had also easiest access to the survey shared electronically. Between the problems shared, low salary was mentioned a lot. The same complain came from Mattison et al (2020) systematic review on political and health system factors on midwife role, Munro et al (2013) who connected the finding with the difficulty on interprofessional relationships as we see further down and Bogren et al (2018) in a Bangladesh study on midwifery care. Bad payment could be a reason of midwives refusing to take on additional professional duties (Fealy et al, 2015), midwife migration or even of leaving the profession (McCool et al, 2013). A European study done by Winkelmann et all (2020) concerning employment within regions of European countries brought same results. Even though the data collected were not for midwives only but there was a common category including both nurses and midwives and results were taken only from 8 countries in contrast with data collected for doctors that were more available, the result gives the opportunity to further study due to its interest. Results showed that at least in those countries, midwives practice more in rural than urban areas in comparison with doctors who work more in urban cities and the reason of that could be the decreased income for midwives and the expensive life in urban cities. In total within the years, until 2017, Winkelmann(2020) explained that there was an increase in hired staff generally,

with doctors being in the first line and nurses and midwives to follow but in a much slower rhythm and numbers, whereas doctors were shown more in urban hospitals and the others in rural hospitals.

2. Disrespect by medical staff/ Medicalization of childbirth

Good collaboration with other health workers is found to be a fundamental element for midwives to practice their profession, as a case study in Canada showed (Behruzi et al,2017), in contrast when there is lack of autonomy and recognition by the medical community (Bogren et al, 2018) and no space for midwives to full practice in non-midwifery led units (Vermeulen et al, 2021).

A gap between midwife and obstetrician theory about birth management, affecting their cooperation, was identified by Cummins et al (2016), who underlined Reymant's et al (2015) notice, that midwifery care models work better when there is a good collaboration with managers and physicians. In Cummins study (2016), about midwife led care in Australia, the age and experience might not need to be within exclusion criteria for a midwife to build her career and to be trustful, whilst three components could also play a role in career initiation and development: *Personal attributes* as midwife students, *the bigger picture* that midwives get when they start working together with other health professionals and finally, *evaluation* of their work experience, *planning* for the future and then *acting* (Barry et al, 2013).That is an outcome of interprofessional relationships, too.

It is important for midwives who want to be autonomous, to work in their full capacity and scale up in skills, to be motivated and have supportive managers, (Hollins Martin et al, 2020). Independence at work seemed to be embraced by the participants in Hollins Martin study (2020). However, they did had concerns on the support they would receive from colleagues and managers so their family life not being affected.

As mentioned above, collaboration between different health care providers offers a more holistic and quality approach to maternity care. Additionally, it permits care providers, like midwives to practice, claim their rights at work and take action together with obstetricians. Nevertheless, a qualitative study in a rural area of Canada by Munro et al (2013) pointed out existing barriers in a type of multidisciplinary care approach. Obstacles identified include payment inequalities and lose of clients from physicians side, lack of trust between the health care providers even "*hostility*" due to the believes on home births. The different approach of care and the confusion on role distinction, as described before, was also mentioned as well as the lack of an established pathway of introducing new midwives and other health professionals to a new rural area and the type of services provided. Pathways that can eliminate misunderstandings and duplication on the care each worker provides.

Medicalization of childbirth is also described as a component on midwife role affect (Mattison et al (2020) and it, often, makes collaboration between midwives and obstetrician difficult. Disrespect from the medical staff is well described between midwives from different socio-economic level as well as lack of leadership opportunities (WHO, 2016).

Being able to bring positive changes in workplace is a privilege for those desiring an advancement to their work. In America, McCool et al (2013) conducted a pilot survey where possible reasons of leaving midwifery were explored. The majority of the participants answered that sometimes are able to suggest changes, having their supervisors or other health professionals on their side and manage to bring changes on evidence-based practice but it is interesting that the most serious obstacles in that, came from the obstetricians and other staff, showing gaps in appreciation, collaboration and equality.

3. Gaps in legal and regulatory support/ Lack of strong associations

Amongst countries, legislation can still prohibit the evolvement of a midwife no matter the education level but also not considering the benefit and the support national health systems could get from that. For example, Greek midwives who work in the public sector, lately gain the right to prescription but the independent midwives not or midwives may have a master in technology in midwifery, including ultrasound and cardiotocography classes but still there is no legislation supporting them on actually doing basic ultrasounds after a certain cycle of courses in contrast with UK and Norway, for instance, where midwives, can be authorised as midwife sonographers following national protocols and pathways.

Governmental lack of support and unstable living condition in home countries could even drive midwives to quit their profession or to migrate(McCool et al,

2013), while lack of legal and regulatory support is also important barrier for midwives to practice (WHO, 2016). Meanwhile, barriers in education and paid job for women impacts women's job choices (Mattison et al, 2020)

Interest groups could either assist or hinder midwifery profession by being involved in governmental decision taken (Mattison et al 2020, Vermeulen et al, 2021), while speaking out and showing the necessity of leadership (association of medical doctors vs association of midwives) (Vermeulen et al, 2021).

Nonetheless, considering the health system aspect, gaps in legislation prohibits midwives to work to their full potentiality when the badged offered to them is also questionable as well as where they work, what is the correspondence midwives/population and under which conditions they work (Mattison et al, 2020).

4. Overwhelming job

Lack of personnel (Katsikitis et al, 2013, McCool et al, 2013) and workload are part of the factors defining the working conditions and it can create frustration and put barriers in skill development and decision taken (McCool et al, 2013, Fealy et al, 2015). Migration of midwives has driven those staying behind to fatigue due to the lack of staff and possibly in thoughts of abandoning the profession whereas migrating midwives might face adaptational challenges and missed job opportunities in their new working place, as mentioned previously, too (McCool 2013).

Booth et al (2006) shared similar concerns with Renfrew (2014), WHO (2016) and Mattison (2020), about role confusion among midwives and nurses as well as the wide responsibilities and workload burden, that do not allow them to explore all the potentials of their profession. Midwives mentioned lack of support and proper focal points in workplace as well as suitable equipment and space (for instance offices, IT).

Fealy et al (2015) conducted an Irish survey where personal believes on additional professional duties on prescribing where examined. Findings were interested, as the idea of it was satisfying and the support needed seemed to be available for participants but a lot of reluctance was also expressed. However, the younger the participant was, the more barriers would identify. Barriers presented were both personal attitudes / beliefs and procedural /

motivational gaps. Lack of choices within the workplace and guidelines, unwillingness to take on extra tasks that other professionals used to do as there was no provision of better payment and the additional working time as well as the possibility of negative impact on law aspect.

5. Educational limitations

A cross sectional survey with French midwives (Goyet et al, 2018) showed that only half of them had experienced the publication process and very few of them had already a PhD, in times that the International Confederation of Midwives suggests refreshed evidenced based practice with focus on midwife researchers. The reason of the low numbers was the lack of knowledge on research and paper process, no free time or even the English language that is mostly used for publication worldwide. The last was also mentioned as a reason for health professionals not to have at least access to articles to gain the new knowledge from existing research, and upgrade their skills, putting an extra barrier to the development of their work.

A mixed study by Trusson et al (2019) showed important findings on education and clinical academic career in East Midlands of England. Career advancement in research is something not usually expected for health professional like midwives than doctors and depends mostly on the person to be motivated itself, while funding is an essential element and supportive managers, willing to allow study time is crucial for employees. Lack of personnel, however, could, may not allow that, as mentioned already in a study in 2013 by Katsikitis et al, too, together with the concern that there would be no flexibility at all in working time for studying or even to have to step back from their field for study time.

Additionally, the non-recognition of research compare to the clinical job or the *'cliff-edge'* that follows has been mentioned as some would return to their clinical jobs losing the chance of new skills recognition or without even completing their PhD, while others would be directed only to research programs leaving aside their clinical position (Trusson et al,2019).

To the studies above, Avery et al (2021) come to agree on the findings. In their study 33,3% of the participants declared unavailability of positions in research programs, when about 28% lack of employer support and 26,7% mentioned lack of funding and continuation of research activity.

Reading a paper written by Hicks in 1995, research studies had lately started to be presented more and more to midwives, to enhance their work. At that time midwives seemed insecure in conducting research themselves and had the belief that they belong only to the clinical side rather than the academic, unable possibly to bring their findings to the field or having the necessary time for study and being offered the support needed by supervisors, decision-makers and doctors. Surprisingly, twenty six years later, at least some of the obstacles in research access and completement seem to be still the same.

A resent multimethod study by Trusson et al (2021) in East Midlands of England showed similar results on academic career. Even though only five midwives out of a total of 67 paramedical and other health staff, participated in that study together with 73 medical clinical academics, the findings come in line with previous papers. Not expected for those health workers to undergo a PhD, unequal funding as well as access to PhD, reduction in salaries and inequalities in contrast with doctors if working time changes are needed for studying or even no flexibility on working and studying time. That could even result in stepping out from the clinical job until PhD is completed but also could lead the person to previous working position instead of a better one, even with an academic backroad. The pathways seem to be incomplete for those desiring an evolution in their careers but from the other side it is also a fact that there are not enough positions for those with an academic backroad to be absorbed in. It is interesting to note that there was a balance in numbers of female and male medical clinical academics but not for paramedics and other health workers, the majority of whom were females.

Similar concerns for midwives in other places of the world are mentioned in different studies. In Tanzania, there is lack of chance and funding in continuity of professional education (Tanaka et al, 2015), as well as in Bangladesh where educational barriers in midwifery care, also, exist (Bogren et al, 2018).

Opportunities in midwifery does not only reflect on the chance of being promoted or manage full practice with no restrictions but also the chance of being hired at first place as well as the place of work. Meanwhile, most of the universities for doctors are concentrated in large cities whereas midwife universities could be in smaller once (Winkelmann et al, 2020). However, that could lead to missed educational or career opportunities that are based in nonrural areas for midwives who due to reduced income and away from the big cities are unable to follow. From the other side, lack of job positions and low income could lead to migration as mentioned before, while many find in migration the way to educational opportunities (McCool et al, 2013).

Discussion

This systematic literature review found barriers that are gender based.

The multiple roles that modern women have resulted in gender based inequalities in health care profession. Prejudice upon their roles and extreme fatigue levels drive to inability chasing career opportunities. Income differences among them and men are also present (Newman, 2011 & Sexton, 2014 & Kalaitzi 2017). Difficulties in managing family and working responsibilities and limits in negotiating working time as well as absence of focal points hinder women's efforts to scale up (Kalaitzi, 2017).

Siberry (2021) underlined the stereotype that women turn to caring professions while Dahle (2012) described the term "semi-professions" for jobs like midwifery since women are the basic providers of care. It seemed that caring jobs were not much taken into consideration, labelling women as second class professionals. Nowadays, such a stereotype is still perpetuated.

Low salary seems to be the basic barrier which impacts many sides of career advancement and practice. Still in some counties paid job for women seem hard to be found while education is not offered. In other countries bad payments led midwives to job migration, engorging the existing gap in staff, while Siberry (2021) agreed that some decide to leave the profession. ICM chief executive has, also, mentioned in an interview in February 2022 (equaltimes.org) that salary inequalities, barriers in work advancement and decisions taken are still gender driven results.

Midwives often work in difficult working places and regions, in understaffed and simultaneously overwhelmed units while having too many responsibilities and inadequate salary in contrast with that of a physician. Comparing those difficulties with the salary received, Gallant (2016) highlighted the finding of an independent study: Midwives should be paid the 91% of a doctor's remuneration. The obstacles above lead to fatigue and hinder midwives from focusing on actions for their advancement and continuing education. Often a

turn to research and application for PhD were hard, since that the already low salary could be further decreased. Midwives seem to be banned from such a career advancement when there is no flexibility at working time and study time given and the only way to get flexible working time is to be paid less. In addition, education funding was found limited for midwives. According to the findings though, physicians were not affected neither in payment nor in limitation on academic career by their managers. To emphasize the gender aspect, in Trusson study (2021)on academic career, it is worth to mention that female and male medical clinical academics were in numerical balance in contrast with paramedics, the majority of whom were females, showing again the prevalence of females in paramedic than medical jobs.

Gender inequalities are rooted in health structures (Siberry, 2021). Discrimination of midwives by doctors in bringing changes in the working place, disrespect towards their abilities in midwifery practice and antagonistic approach in the presence of strong medical lobbies, led to medicalization of perinatal care. WHO (2016), identified 20-30% gender inequalities and even different forms of harassment against midwives (verbal, sexual etc), especially in African communities.

Midwifery associations need to get stronger to manage affecting governmental decisions, when politics is also a male predominant area, yet and still affects with gender based inequalities midwifery (Mattison et al, 2020). Political decisions are shown on badged given to each profession, which was found low for midwifery, resulting in poor equipment, education funding, hiring staff. Siberry (2021) gave the example of Ontario Midwife College which was rejected to be funded after 25 years, despite the existed midwife gap while worldwide the correspondence of midwifes/population is low and the hiring rhythm is still slower than the doctors', and present staff is unwilling and unable to take over more tasks, at least without no positive impact on their payment.

From the results, a secondary, but not less of importance, finding is revealed. Professional discrimination is reflected as a residue of the times that empirical midwives were set aside as non-educated professionals (Kaufman, 1998). At the sight of a physician's status midwives got forgotten. Still, there is prejudice on what a midwife is capable for. Doctors question midwife theory on birth management (Cummins et al, 2016) and give limited attention to potential changes in the work environment proposed by them (McCool et al 2013). Meanwhile the high status medical lobbies are respected the most within the political circles (Vermeulen et al, 2021) giving no space to midwives to practice to their full capacity. Medical staff interfere the most in midwifery practice in some cases, not only in prenatal care but even in postnatal matters like breastfeeding.

As midwives are not expected to go for further educational improvement or academic career than the doctors (Trusson et al, 2019) this is also a sign of discrimination in professional level. Also the fact that health systems are more flexible towards doctors for their academic career and educational advancement (Trusson et al, 2021) is an added proof of the claim above.

As it is understood gender and professional discrimination in midwifery is very close and both stand together.

In a nutshell, this study explored the gendered barriers experienced by midwives to their career advancement, taking into consideration the urgency of the identified problem and the poor attention has been receiving so far by the scholarship. The objective of the study was to gain deeper understanding on the lack of equal opportunities for midwives for practice and career development. It might help to optimize the current situation but also lead the further research within counties of the European Union.

In our research we concluded that there are very few studies including only midwives as a target group of research, whereas there were more findings for those including midwives and other health professionals.

Midwifery has been described in different ways and either in extended or shortened way. Depending on each country's legislation, social, political, economic status, the jurisdiction on midwife tasks varies greatly, resulting in the lack of consistency and clear expectations. This approach by itself creates more confusion for the audience (citizens and health workers) to understand the differences for each job position / description and to lead us to suitable decisions for possible improvements in midwives' work (in national, EU, even global level). but also in their interprofessional relationships with other health workers.

Sates need to do the first step in deeply understanding the midwives value and the benefit that a community could have if they get supported to full practice and equal working conditions. Midwives with same educational level should be given same professional rights with no gaps. Midwives need to be embraced by equal job opportunities in the private and public sector and fair payment, whereas social norms connect those elements with professionalism and capability. Furthermore, it is crucial for all health actors to understand the differences between their and the midwives' role in sexual and reproductive health, in order to eliminate the negativity towards them. The nature of the profession is not showing possible inferiority but different working field that has nothing to do with their gender. This approach is not starting while being an adult but from the childhood with proper sexual education, suitable daily images / experiences and then it continues in universities by nourishing students with the respect towards different professions.

Limitations

The limitation of our study is the lack of enough literature on midwives only. The merging of nurses and midwives into one group does not serve optimally the aims and purposes of this study. On these grounds, the sources had to be limited as it was not clear finally for whom were the results found (nurses or midwives) and mostly the term nurses was used. That fact by itself indicates the problems on midwives' profession definitions and area of action. However, this limitation is our strength, too pointing out the urged need for further research focusing on midwives only; furthermore, it underlines the need to build on awareness of midwives profession at both health care providers and citizens levels.

Conclusions

This study showed the difficult working conditions that midwives experience in Greece but not only. Understaffed units, overwhelming job, low salary and difficulties to collaborate with medical staff, syntheses the working environment. For those reasons midwives, generally, struggle to operate to full practice. They face gander based obstacles to advance their career and to claim continuing education. Last but not least, another observation is the added professional discrimination upon the gender based one that can also explain the difficulties midwives face in their career pathway. The above findings seem

to concern many counties in European Union but also globally. Countries like Greece need to make much more efforts for changes than others, but still there are common concerns no matter the geographical era.

The deep understanding of midwife role and the benefits their full practice can offer to the society together with suitable changes in regulations can be the root for equal opportunities and better working conditions. Additionally, the clarity of midwife job description to the public can reinforce their status. Equal opportunities based on their professional rights and fair payment in public and private sector can contribute to build community's trust and erase any false belief on their capability.

Except for the authorities and the public, medics need also to overcome outdated gendered based and professional believes about midwives. This starts within the community as a citizen but it should reinforced in universities. They need to come in contact with midwifery from the sight of a midwife. To be taught to overcome the doctor's status, a superior feeling and the antagonist profile that has been built throughout the years.

Over and above, it is essential to highlight the need for further studies on the social aspect of midwives interprofessional relationships and how their rights can be respected and given in line with the full spectrum of their role.

Ethics approval

This is a systematic literature review. No ethical approval is required.

Funding

As a systematic review and part of a master degree, this study did not require funding.

Acknowledgments

We are grateful for the support that we received for the paper to be completed, from K. Gourounti, associate professor and M. Iliadou, assistant professor in University of West Attica, Greece.

Conflict of Interest

No conflict of interest

	Table 1: Gendered barriers to midwife career advancement in literature review. Summary of included studies.			
	Study	Method	Barriers in midwife career advancement	
1.	Renfrew et al ,2014	Mixed	1. No mutual definition on midwifery worldwide	
2.	WHO, 2016	Qualitative	 No mutual definition on midwifery worldwide Low salaries No leadership opportunities Disrespect by senior medical staff Gender inequalities Harassment Gaps in legal and regulatory support Unsafe living conditions 	
3.	Mattison et al, 2020	Systematic review	 No mutual definition on midwifery worldwide Gender inequality Payment inequality lack of strong midwifery associations with voice Social barriers)limited education, no permission to paid jobs for women Medicalization of childbirth 	
4.	Vermeulen et al, 2016	Descriptive study	1. Women unawareness of midwife role	
5.	Vermeulen et al, 2021	Discussion paper	 Women unawareness of midwife role Non midwifery led units Connected and strong midwife associations 	
6.	Javanmard et al, 2020	Qualitative	1. Educational and practice differences between countries as barrier of evolvement for migrant midwives	
7.	Behruzi et al, 2017.	Case Study	1. Collaboration of midwives and other health workers	
8.	Reymant et al, 2015	Case study	1. Collaboration of midwives and managers and physicians	
9.	Cummins et al, 2016	Qualitative	 Collaboration gap between midwife and obstetrician theory 	
10.	Barry et al, 2013	Qualitative	 Components in career initiation and development 1. Personal attributes 2. The bigger picture in practice 3. Evaluation of work experience, future plans and action. 	
11.	Hollins Martin et al, 2020	Qualitative	Autonomy1. Not working in full capacity and not scaling up in skills	

			 Lack of motivation and supportive managers Overwhelming work
12.	Munro, et al,	Qualitative	S. Overwhenning work Multidisciplinary care
12.	2013	Quantative	1. Payment inequalities
	2013		 Antagonistic approach by physicians
			 Antagonistic approach by physicians Lack of trust in midwives on home births
			 Lack of trust in industries on none bituis Different approach of care between physicians
			an midwives
			5. Confusion on role distinction
			6. No established pathways of introducing new
			staff and services provided
13.	Trusson et al	Mixed	1. Lack of funding for research
15.	2019	MIXeu	 Lack of funding for research Midwives not expected in research career
	2013		position.
			3. Supportive managers allowing study time.
			4. Lack of personnel to cover gaps
			5. No recognition of research work
			6. No better job opportunities after research done
			7. No opportunities to combine research and
			clinical career
			8. Unable to complete PhD
14.	Katsikitis et	Qualitative	1. Lack of personnel to cover studying time
	al, 2013		2. No flexibility at workplace for study time
15.	Avery et al	Cross	1. No available positions in research programs
	2021	sectional	2. Lack of employer support in research
			3. Lack of funding and continuation of research
			activity.
16.	C.Hicks,	Analytic	1. Lack of self confidence in doing research
	1995	study	2. False Beliefs: belonging only in clinical
			positions, unable to bring findings to the field,
			no time for studying and support by managers,
17		Opolitations	decision-makers and other health staff
17.	Trusson et al	Qualitative	Academic career
	2021		 Midwives not expected to start on a PhD Unequal funding
			 Onequal runding Unequal access to PhD
			 Onequal access to PhD Reduction in salaries if study time is needed or
			no flexibility at work in contrast with doctors
			5. Possibly stepping out from clinical job for the
			PhD period
			6. Possibly returning back to same level instead
			of an advanced position after a PhD
			7. Incomplete pathways for evolution
			8. Not enough positions for everyone
18.	Booth et al,	Mixed	Exploring potentials of the profession
	2006		1. Role confusion between midwives and nurses
			2. Workload/ Responsibilities
			3. Lack of support
			4. Coordinational gaps (focal points)

			5. Lack of equipment like IT
19.	McCool et al, 2013	Pilot study	 To bring changes in workplace/ leaving the job: Negative attitude by obstetricians and other staff (gaps in cooperation, equality, cooperation) Lack of time and resources Lack of governmental support Midwives migrating in other counties result in staff gaps leading to fatigue, thoughts of leaving the profession. Reasons leading midwives to migration: bad payments, workload, unstable conditions in country, educational chances
20.	S.Goyet et al, 2018	Cross sectional	 Lack of knowledge on research and publication No free time for research/PhD Language barrier for publication process or for access to articles to refresh the knowledge
21.	Vermeulen et al, 2019	Mixed	 Not common definition of midwife role in Europe
22.	Tanaka N. et al, 2015	Qualitative	Continuity of Professional Education: 1. Lack of chances and funding
23.	Bogren and Erladsson, 2018	Qualitative	 Unequal payment Educational barriers Lack of autonomy No recognition by medical community
24.	Fealy et al, 2015	Quantitative	 Personal attitudes/ beliefs and procedural/motivational gaps in extra duties 1. Lack of choices within the workplace 2. Lack of guidelines 3. No provision to increase salaries 4. Not willing for extra tasks of others 5. Increased working time 6. Possible negative legal impact
25.	Winkelmann et al, 2020	Cross sectional	 Work opportunities 1. Low salary, high working demand and expensive life in urban cities 2. Employment difficulties that led to job migration

References

- Παναγιωτοπούλου Π. (2015). Ο κοινωνικός ρόλος των μαιών τον 20ο αιώνα: από της πρακτικές μαίες στην ιατρικοποίηση του τοκετού. <u>https://amitos.library.uop.gr/xmlui/handle/123456789/3066</u>
- Avery, M., Westwood, G., & Richardson, A. (2021). Enablers and barriers to progressing a clinical academic career in nursing, midwifery and allied health professions: A cross-sectional survey. *Journal of clinical nursing*, 10.1111/jocn.15673. Advance online publication. <u>https://doi.org/10.1111/jocn.15673</u>
- Barry, M. J., Hauck, Y. L., O'Donoghue, T., & Clarke, S. (2013). Newly-graduated midwives transcending barriers: a grounded theory study. *Midwifery*, 29(12), 1352–1357. <u>https://doi.org/10.1016/j.midw.2012.12.016</u>
- Behruzi, R., Klam, S., Dehertog, M., Jimenez, V., & Hatem, M. (2017). Understanding factors affecting collaboration between midwives and other health care professionals in a birth center and its affiliated Quebec hospital: a case study. BMC pregnancy and childbirth, 17(1), 200. <u>https://doi.org/10.1186/s12884-017-1381-x</u>
- Biggs, Lesley C. 1983. "The Case of the Missing Midwives: A History of Midwifery in Ontario from 1795-1900." Ontario History 75(1):21-35.
- Biro M. A. (2011). What has public health got to do with midwifery? Midwives' role in securing better health outcomes for mothers and babies. Women and birth *: journal of the Australian College of Midwives*, 24(1), 17–23. <u>https://doi.org/10.1016/j.wombi.2010.06.001</u>
- Bogren, M., Erlandsson, K., Members of the Midwifery Faculty Master's degree holders in Sexual and Reproductive Health and Rights, & Byrskog, U. (2018). What prevents midwifery quality care in Bangladesh? A focus group enquiry with midwifery students. *BMC health services research*, *18*(1), 639. <u>https://doi.org/10.1186/s12913-018-3447-5</u>
- Booth, J., Hutchison, C., Beech, C., & Robertson, K. (2006). New nursing roles: the experience of Scotland's consultant

nurse/midwives. *Journal of nursing management*, *14*(2), 83–89. https://doi.org/10.1111/j.1365-2934.2006.00595.x

- Cornish, Mary. 2018. "Briefing for Release of AOM V. MOHLTC HRTO Decision." Retrieved August 27, 2019 <u>https://www.ontariomidwives.ca/sites/default/files/HRTO%20Midwifery</u> %20vs%20MO HLTC%20overview.pdf
- 10. Cross G. S. (2014). "A midwife at every confinement": Midwifery and Medicalized Childbirth in Ontario and Britain, 1920-1950. Canadian bulletin of medical history = Bulletin canadien d'histoire de la medecine, 31(2), 139–159. https://doi.org/10.3138/cbmh.31.2.139 https://pubmed.ncbi.nlm.nih.gov/28155345/
- 11. Cummins AM, Denney-Wilson E, Homer CS. The experiences of new graduate midwives working in midwifery continuity of care models in Australia. Midwifery. 2015 Apr;31(4):438-44. doi: 10.1016/j.midw.2014.12.013. Epub 2015 Jan 7. PMID: 25640822. https://pubmed.ncbi.nlm.nih.gov/25640822/
- Cummins, A. M., Denney-Wilson, E., & Homer, C. S. (2016). The challenge of employing and managing new graduate midwives in midwifery group practices in hospitals. *Journal of nursing management*, 24(5), 614–623. <u>https://doi.org/10.1111/jonm.12364</u>
- 13. Dahle, Rannveig. 2012. "Social Work: A History of Gender and Class in the Profession." Ephemera: Theory and Politics in Organization 19(1):309-326.
- 14. Fealy, G.M., Rohde, D., Casey, M., Brady, A.-M., Hegarty, J., Kennedy, C., McNamara, M., O'Reilly, P. and Prizeman, G. (2015), Facilitators and barriers in expanding scope of practice: findings from a national survey of Irish nurses and midwives. *J Clin Nurs*, 24: 3615-3626. <u>https://doi.org/10.1111/jocn.12980</u>
- 15. Gallant, Jacques. 2016. "Ontario Midwives Allege Gender-Based Pay Gap, Compared to Doctors." Toronto Star, May 31. Retrieved January 17, 2021 https://www.thestar.com/news/gta/2016/05/31/ontariomidwives-allege-gender-basedpay-gap-compared-to-doctors.html
- 16. Goyet S., Sauvegrain P., Schantz C., Morin C. (2018). State of midwifery research in France. *Midwifery*, 64, 101-109. <u>https://doi.org/10.1016/j.midw.2018.06.021</u>

- Hicks C. (1995). A factor analytic study of midwives' attitudes to research. *Midwifery*, *11*(1), 11–17. <u>https://doi.org/10.1016/0266-6138(95)90052-7</u>
- Hollins Martin, C. J., MacArthur, J., Martin, C. R., & McInnes, R. J. (2020). Midwives' views of changing to a Continuity of Midwifery Care (CMC) model in Scotland: A baseline survey. *Women and birth : journal of the Australian College of Midwives*, 33(5), e409–e419. <u>https://doi.org/10.1016/j.wombi.2019.08.005</u>
- Ioannou A., Chaita S. (2021)The role of nurses and midwifes in Primary Health Care. Greek reality in the European context. Scientific Chronicles; 26(1): 102-114
- 20. Javanmard, M., Steen, M., Vernon, R., & Cooper, M. (2020). Transition experiences of internationally qualified midwives practising midwifery in Australia. Women and birth : journal of the Australian College of Midwives, 33(3), e234–e244. <u>https://doi.org/10.1016/j.wombi.2019.05.002</u>
- 21. Stavroula Kalaitzi, Katarzyna Czabanowska, Sally Fowler-Davis, Helmut Brand, (2017) "Women leadership barriers in healthcare, academia and business", Equality, Diversity and Inclusion: An International Journal, Vol. 36 Issue: 5, pp.457-474, <u>https://doi.org/10.1108/EDI-03-2017-0058</u>
- Katsikitis, M., McAllister, M., Sharman, R., Raith, L., Faithfull-Byrne, A., & Priaulx, R. (2013). Continuing professional development in nursing in Australia: current awareness, practice and future directions. *Contemporary nurse*, *45*(1), 33–45. https://doi.org/10.5172/conu.2013.45.1.33
- 23. Kaufman, Karyn J. 1998. "A History of Ontario Midwifery." Journal of Obstetrics and Gynecology Canada 20(10):976-981. <u>https://doi.org/10.1016/S0849-5831(98)80058-X</u>
- 24. Keighley, T., European Union Standards for Nursing and Midwifery: Information for Accession Countries Second edition .WHO 2009, <u>https://bit.ly/3Fxd5Kb</u>, 1/10/2021
- 25. Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P., Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D.

(2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. *Journal of clinical epidemiology*, 62(10), e1–e34. <u>https://doi.org/10.1016/j.jclinepi.2009.06.006</u>

- 26. Mattison, C. A., Lavis, J. N., Wilson, M. G., Hutton, E. K., & Dion, M. L. (2020). A critical interpretive synthesis of the roles of midwives in health systems. Health research policy and systems, 18(1), 77. <u>https://doi.org/10.1186/s12961-020-00590-0</u>,17/10/2021
- 27. McCool, W., Guidera, M., Reale, B., Smith, A., & Koucoi, J. (2013). Professional issues related to obstacles to midwifery practice in the Americas: a pilot survey. *Midwifery*, 29(8), 838–844. <u>https://doi.org/10.1016/j.midw.2012.08.007</u>
- 28. Medway, P., Sweet, L., & Müller, A. (2021). Barriers and enablers for midwives to use the Nursing and Midwifery Board of Australia's Endorsement for scheduled medicines for midwives. Women and birth : journal of the Australian College of Midwives, 34(1), e57–e66. <u>https://doi.org/10.1016/j.wombi.2020.06.001</u>
- 29. Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009) Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. <u>https://doi.org/10.1371/journal.pmed.1000097</u>
- Munro, S., Kornelsen, J., & Grzybowski, S. (2013). Models of maternity care in rural environments: barriers and attributes of interprofessional collaboration with midwives. *Midwifery*, 29(6), 646– 652. <u>https://doi.org/10.1016/j.midw.2012.06.004</u>
- 31. Newman, P. (2011), Releasing Potential: Women Doctors and Clinical Leadership, National Health Service, London.
- 32. Page, M.J., McKenzie, J.E., Bossuyt, P.M. et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. Syst Rev 10, 89 (2021). <u>https://doi.org/10.1186/s13643-021-01626-4</u>
- 33. Prosen, M., & Krajnc, M. T. (2019). Perspectives and experiences of healthcare professionals regarding the medicalisation of pregnancy and childbirth. Women and birth : journal of the Australian College of

Midwives, *3*2(2), e173–e181. https://doi.org/10.1016/j.wombi.2018.06.018

- 34. Renfrew MJ, McFadden A, Bastos MH, Campbell J, Channon AA, Cheung NF, Silva DR, Downe S, Kennedy HP, Malata A, McCormick F, Wick L, Declercq E. Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. Lancet. 2014 Sep 20;384(9948):1129-45. doi: 10.1016/S0140-6736(14)60789-3. Epub 2014 Jun 22. Erratum in: Lancet. 2014 Sep 20;384(9948):1098. PMID: 24965816. https://bit.ly/3n38B5r
- 35. Rayment J., McCourt C., Rance S. & Sandall J. (2015) What makes alongside midwifery-led units work? Lessons from a national research project. The Practising Midwife 18 (6), 31–33.
- 36. Sexton, J.B., Sharek, P.J., Thomas, E.J., Gould, J.B., Nisbet, C.C., Amspoker, A.B. and Profit, J. (2014), "Exposure to leadership walkrounds in neonatal intensive care units is associated with a better patient safety culture and less caregiver burnout", BMJ Quality & Safety, Vol. 23 No. 10, pp. 814-822. <u>https://doi.org/10.1136/bmjqs-2013-002042</u>
- 37. Sriganesh, K., Shanthanna, H., & Busse, J. W. (2016). A brief overview of systematic reviews and meta-analyses. Indian journal of anaesthesia, 60(9), 689–694. <u>https://doi.org/10.4103/0019-</u> <u>5049.190628</u>
- 38. Tanaka, N., Horiuchi, S., Shimpuku, Y., & Leshabari, S. (2015). Career development expectations and challenges of midwives in Urban Tanzania: a preliminary study. *BMC nursing*, *14*, 27. https://doi.org/10.1186/s12912-015-0081-y
- 39. Trusson, D., Rowley, E., & Barratt, J. (2021). Multimethods study comparing the experiences of medical clinical academics with nurses, midwives and allied health professionals pursuing a clinical academic career. *BMJ open*, *11*(4), e043270. <u>https://doi.org/10.1136/bmjopen-2020-043270</u>
- 40. Trusson, D., Rowley, E., & Bramley, L. (2019). A mixed-methods study of challenges and benefits of clinical academic careers for nurses,

midwives and allied health professionals. BMJ open, 9(10), e030595. https://doi.org/10.1136/bmjopen-2019-030595

- Vermeulen, J., Luyben, A., Buyl, R., Debonnet, S., Castiaux, G., Niset, A., Muyldermans, J., Fleming, V., & Fobelets, M. (2021). The state of professionalisation of midwifery in Belgium: A discussion paper. Women and birth : journal of the Australian College of Midwives, 34(1), 7–13. <u>https://doi.org/10.1016/j.wombi.2020.09.012</u>
- 42. Vermeulen, J., Luyben, A., O'Connell, R., Gillen, P., Escuriet, R., & Fleming, V. (2019). Failure or progress?: The current state of the professionalisation of midwifery in Europe. *European journal of midwifery*, *3*, 22. <u>https://doi.org/10.18332/ejm/115038</u>
- 43. J. Vermeulen, E. Swinnen, F. D'haenens, R. Buyl, K. Beeckman (2016). Women's preferences and knowledge about the legal competences of midwives in Brussels, Belgium. A descriptive observational study. *Midwifery*, 40, pp. 177-186. <u>https://doi.org/10.1016/j.midw.2016.07.002</u>
- 44. WHO, 2016. Midwives voices, midwives realities. Findings from a global consultation on providing quality midwifery care I. <u>https://bit.ly/3Asrjs3</u>, 3/10/2021
- 45. Winkelmann, J., Muench, U. & Maier, C.B. Time trends in the regional distribution of physicians, nurses and midwives in Europe. *BMC Health Serv Res* 20, 937 (2020). <u>https://doi.org/10.1186/s12913-020-05760-y</u>
- 46.<u>https://ec.europa.eu/eurostat/web/products-eurostat-news/-/edn-</u> 20200512-1, 10/10/2021
- 47.<u>https://www.who.int/news-room/fact-sheets/detail/nursing-and-</u> midwifery
- 48. Council Directive 80/155/EEC of 21 January 1980 concerning the coordination of provisions laid down by Law, Regulation or Administrative Action relating to the taking up and pursuit of the activities of midwives, <u>http://data.europa.eu/eli/dir/1980/155/oj</u>
- 49.<u>https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_rs_prs</u> <u>ns&lang=en</u>
- 50. Jozwiak G. Why is there a global shortage of midwives and what needs to be done about it? Equaltimes.org (2 Feb. 2022). article