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PROFESSIONAL
WEBINAR SERIES

WRITING SKILLS

for SUCCESS AND PUBLICATION

Series eBook

WITH ACCESS TO PRIVATE HUB GROUP AND SUPPLEMENTARY COURSES



Forward

Essentials Webinar Series for Student Midwives eBook content

In this All4Maternity Professional Webinar Series: Writing Skills for success and publication, you will find a series of chapters in this e-book, the content of each chapter offers an overview and summary to support the content of each webinar series session.

The Chapters are brought together from a range of The Practising Midwife and The Student Midwife journal articles.

You can capture your learning, after each article to strengthen your professional development and to inform your engagement in the webinars.

Enjoy the content and your additional learning and thank you for joining this exciting webinar!



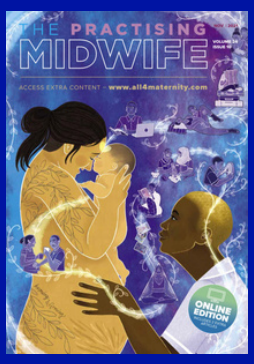
Dr Anna Byrom



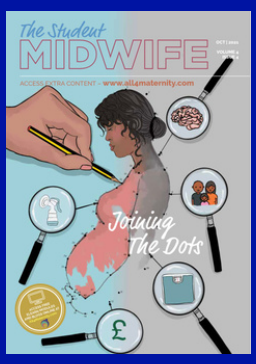
Neesha Ridley (FHEA)



Hannah Tizard (FHEA)







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Ensuring structured and efficient study habits, mental wellbeing to support writing.

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What is a learning outcome and how do I interpret this into my writing?
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PERINATAL MENTAL HEALTH SKILLS: TEACHING AND LEARNING ACTIVITIES FOR MIDWIFERY STUDENTS



SUMMARY

Supporting women with their emotional wellbeing is a core midwifery skill. Midwives have a pivotal role in early intervention and prevention by screening for mental health and psychosocial vulnerabilities, providing women with resources and referring them on to appropriate services as needed. It has been identified that midwives frequently lack the confidence and perceived competence to offer emotional care to women and require ongoing professional development in their knowledge of perinatal mental health, communication and assessment skills, and their attitudes to mental illness.[1]

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PERINATAL MENTAL HEALTH AT THE UNIVERSITY OF TECHNOLOGY SYDNEY

While students have opportunities to develop their practical skills in midwifery such as abdominal palpation and supporting women in labour, there are limited opportunities to practise the assessment and communication skills required to screen for perinatal mental health concerns.[2] These skills include working in partnership with the woman, sharing resources, developing a plan of support and making appropriate referrals as required.

The perinatal mental health subjects for midwifery students at the University of Technology Sydney aim to support students to develop woman-centered skills and confidence in psychosocial screening and to take a strengths-based approach to perinatal mental health care.

ASSESSING STUDENTS' SKILLS IN PERINATAL MENTAL HEALTH

To strengthen and develop the teaching and learning objectives of the subject, students complete two assessments. Assessment One is a referral flowchart based around scores on the Edinburgh Depression Scale (EDS). The EDS is a 10 item self-report measure designed to screen women for symptoms of emotional distress during pregnancy and the postnatal period.[3] Students need to Illustrate the referral systems and community resources available for women with mental health vulnerabilities. The purpose of the flow chart is to provide a resource for their clinical midwifery practice and for students to familiarise themselves with resources and services for women in their community, beyond the hospital. A comprehensive understanding of services and referral pathways can demystify mental health care. Learning about the support services in their own facilities builds their capacity in providing referrals and encourages engagement in what happens to the woman after the psychosocial assessment.

The flowchart complements Assessment Two - the Objective Structured Clinical Examination (OSCE), which was developed to enable students to have a simulated experience of a mental health and psychosocial assessment in the context of the antenatal clinic.

THE PERINATAL MENTAL HEALTH OSCE

Eight clinical scenarios were developed and include postnatal psychosis, depression, anxiety and pregnancy loss. For example:

'Crystal is a 30-year-old woman. G2P1, eighteen weeks pregnant. She had a postnatal psychosis with her first child who is now four years old, Amy. Crystal was hospitalised for a postnatal psychosis in the St John of God Mother and Baby Unit following the birth of her first child. She has had no mental health concerns following this episode. She is working full time as a childcare worker. She has a supportive partner. It has taken Crystal and her partner some time to decide on having another baby as they are worried about the risk of another postnatal psychosis.'

Students are provided with ten minutes' preparation time to review the brief scenario. They are then invited to an interview room and required to interview a woman. They have 20 minutes to administer the EDS and complete the psychosocial assessment. The 'women' are actors, who are third year Bachelor of Midwifery students who had previously performed well in the subject. The interview is observed and assessed by a midwifery academic. Students are assessed on their ability to introduce and explain the rationale for screening to the woman, the sensitivity and reassurance they demonstrate and their capacity to explain to the woman what will happen to her information. The next component of the assessment criteria assesses how the student explains the EDS, administers the tool and engages the woman in discussion about her score. They are then required to ask 12 psychosocial assessment questions and discuss the responses with the woman. Their communication skills and capacity to develop a collaborative plan with the woman are also a component of the marking criteria. Following the interview, students are required to complete a progress note based on their assessment. This is marked later by the subject coordinator. Marking criteria are based around the content and organisation of the progress note.

"Students are assessed on their ability to introduce and explain the rationale for screening to the woman, the sensitivity and reassurance they demonstrate and their capacity to explain to the woman what will happen to her information."





Following these scenarios, a large group discussion enables students to clarify concerns and identify strengths and areas for improvement in their interview techniques.

DEVELOPING THE VIDEOS

Following the pilot OSCE in 2021, feedback was sought from assessors (midwifery staff), actors (third year B Mid students) and students who underwent the OSCE, via focus groups. The data obtained was used to refine the assessment and to develop three interactive audio-visual resources to support in class preparation for the OSCE and clinical practice. Film one demonstrates how to respond to a woman expressing thoughts of self-harm, indicated by a positive score to question ten on the Edinburgh Depression Scale. Film two is an interview with a young first-time mum with adverse childhood experiences. The rationale for this film is to support students to focus on the 'here and now' concerns and the woman's strengths, rather than solely her past adversity. Film three demonstrates an interview in which the midwife shows poor communication skills that impact rapport with the woman and the quality of information ascertained. The same interview is then repeated, in which the midwife utilises therapeutic communication techniques to improve the quality of the interview. Voice overs and on-screen text highlight points for class discussion.

EXAMPLE IN CLASS ACTIVITY

In preparation for the OSCE, students are provided with opportunities to practise their interview skills together, using mock scenarios. Following these scenarios, a large group discussion enables students to clarify concerns and identify strengths and areas for improvement in their interview techniques. A common theme raised in class discussions is knowing what to say and how to respond in more challenging scenarios such as disclosures of thoughts of self-harm. Perinatal suicide is the leading cause of indirect maternal death and midwives are in a key role to be able to assess for suicide risk.[4]

To support learning around suicide risk assessment, students initially watch film one. The film highlights key areas to explore in preliminary risk assessment. This includes the exact nature of the thoughts of self-harm, their frequency, any specific plans, or intent and protective factors. The role and scope of the midwife in the situation of disclosures of self-harm and when and who to refer to is also explored in a large group discussion. Students then watch a short film of a woman who describes her lived experience of self-harm in pregnancy. Incorporating resources that provide insight into the lived experience of women with perinatal mental illness can further support students' knowledge of the various conditions but also shift attitudes and stigma towards mental illness.[5]

Based on the content in this short film, students engage in an activity in which they can practise how to complete a preliminary risk assessment. One student plays the midwife, and one student plays the woman. The student in the role of the midwife administers the EDS and the student in the role of the woman discloses she is having thoughts of self-harm. The 'woman' is provided with a brief script detailing her thoughts of self-harm. She can use these responses for the 'midwife', assuming the midwife asks pertinent questions pertaining to her thoughts of self-harm. Students then swap roles and use a slightly different scenario to practice the skill again. Following the work in pairs a large group discussion is facilitated based on their experiences. Students have the opportunity to debrief about their role as a woman and as a midwife. Through this activity students have opportunity to strengthen and develop woman-centered skills and confidence in addressing situations in which self-harm is disclosed.



CONCLUSION

Student feedback results indicate that the opportunity to practise the skills of interviewing through the various in-class activities has been a positive learning experience. Students have reported the mix of resources, including the videos, have supported them in developing confidence in having conversations about mental health with the women in their care. **TPM**

The videos developed to support students with developing their skills in mental health and psychosocial assessment are available at:

https://midwives.org.au/Web/Web/Professional-Development/Resources.aspx.

If you would like any further information, please contact Kathryn.Solanki@uts.edu.au



REFERENCES

1. Noonan M, Doody O, Jomeen J, Galvin R. Midwives perceptions and experiences of caring for women who experience perinatal mental health problems: An integrative review. Midwifery. 2017;45:56-71. doi.org/10.1016/j.midw.2016.12.010.

2. Fox D, Solanki K, Brown G, et al. Perinatal mental health care: developing skills in midwifery students. Women Birth. 2023;36(2):167-170. doi.org/10.1016/j.wombi.2022.11.005.

3. Cox J, Holden J, Sagovsky R. Detection of postnatal depression. Development of the 10 item Edinburgh Postnatal Depression Scale. Br J Psychiatry. 1987;150:782-786. doi.org/10.1192/bjp.150.6.782.

4. Lau R, McCauley K, Barnfield J, Moss C, Cross W. Attitudes of midwives and maternal child health nurses towards suicide: a cross sectional study. Int J Mental Health Nurs. 2015;24:561-568. doi.org/10.1111/inm.12162.

5. Happell B, Platania-Phung C, Scholz B, et al. Changing attitudes: the impact of expert by experience involvement in mental health nursing education: an international survey study. Int J Mental Health Nurs. 2019;28:480-491. doi.org/10.1111/inm.12551.

Picture 1: **The midwife explaining the EDS to a young woman during the course of the psychosocial assessment (From Film 2)**



Picture 2: **The midwife in the context of a day assessment unit interviewing the woman around her positive response to question 10 on the Edinburgh Depression Scale (From Film 1)**



Chapter summary

Key learning points

HOW CAN MIDWIVES AND EDUCATORS BETTER UNDERSTAND, TEACH AND SUPPORT NEURODIVERGENT STUDENTS?

SUMMARY

In this article, the authors explore the experiences of neurodivergent student midwives, defining neurodiversity and giving a spotlight to neurodivergent voices. In a midwifery climate of high attrition and with a growing number of neurodivergent students entering higher education, this article makes recommendations about how you can better understand, teach and support neurodivergent students in university and clinical placements to make midwifery education more inclusive and sustainable.



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WHAT IS NEURODIVERSITY?

Neurodiversity, a term coined by Judy Singer,[1] simply means diversity of the mind. It is the idea that there are variations in human populations that result in neurodevelopmental differences such as Autism Spectrum Disorder, Attention Deficit Hyperactivity Disorder (ADHD), dyslexia and dyscalculia, among others. The notion that there is a "normal" way of neurocognitive functioning is no more logical than the idea that there is one "correct" gender, race or culture.

The medical model of disability has long categorised neurodevelopmental differences as disorders and deficits. Whilst we recognise that neurodiversity contains huge heterogeneity, the medical model reveals cultural prejudice and leads to oppression for those diagnosed, asserting that neurodivergent people are always impaired by their disabilities. Instead, neurodiversity roots itself in the social model of disability, which asserts that neurodivergent people are disabled by barriers in society.

The social dynamics surrounding neurodiversity can be somewhat compared to the dynamics that manifest around other types of human diversity. This includes unequal social power distribution, job security and accessibility. The social model of neurodiversity often encourages identity-first language such as "autistic person" rather than person-first language such as "a person with dyslexia". As a society, we must recognise the barriers faced by neurodivergent people and dismantle them, ensuring that they are able to live and thrive in environments that embrace their natural neurological dispositions. This is also true for student midwives; although the true numbers of neurodivergent students are unknown, particularly due to underdiagnosis in women and non-disclosure,[2] it is clear from student experience that learning and working conditions are not always optimal.

Students who have disclosed a diagnosis to their universities are entitled to reasonable adjustments. Students report a disparity in their implementation and particularly in practice areas. Often practice facilitators, supervisors and assessors are not aware of the student's needs or if they are made aware, they are unsure of how to support the student. This article aims to give concrete suggestions on how to better support neurodivergent students both in university and in practice.

STUDENT INSIGHTS

Although experiences differ, listening to the voices of neurodivergent student midwives provides a valuable insight into how their differences influence their experiences.

Autism

Sophie Rayner

Autism is a form of neurodiversity typically defined by deficits in social communication and restricted or repetitive behaviours and interests.[3] I don't see my autism as a deficit, but as a difference. Sometimes, that difference enhances my ability as a student midwife and sometimes it limits it. I know being autistic has amazing strengths for my degree: I have hyper-fixations and special interests that mean I learn deeply about certain subjects; I enjoy studying and assignments. I have a unique aptitude for spotting patterns in learning and practice and I am hyper-empathetic. After seriously considering dropping out throughout my first year, I can now appreciate my strengths and passions.

I also struggle, however. Whilst my tutors are aware and supportive, disclosure in placement can be difficult. I often get sensory overload and have meltdowns after shifts. I often 'mask' my autistic behaviours, but this is exhausting. Add to this the constant sensory bombardment in a hospital: buzzers, shouting, different smells, bright lights etc.; sometimes I am pushed over the edge. This is when I can become despondent or 'shut down'. It's difficult for supervisors to understand this or accommodate me when I need to get away. I'm becoming more aware of my cues and warning signs of autistic burnout, and I endeavour to be safe. I'll take a seat to calm down if I need it, but staff can't always comprehend this as a coping skill rather than laziness. I know what I need to help me succeed, but it requires increased awareness and the ability to accommodate my disability.

ADHD

Chelsea Beckford-Procyk

I only received my diagnosis after starting my final year and looking back, I only just made it into 3rd year. It was in 2nd year that I really began to struggle, not only with balancing placement shifts and university assignments, but at home too. On the outside I looked busy, I always had some extra project on the go, but in reality, I was desperately trying to keep my brain engaged. I was finding it so hard to focus on lectures, concentrate on reading, and keep my life organised. I'm a passionate student, but that didn't stop the feeling of boredom or executive dysfunction. I now know that while I loved picking up new things, I also became overwhelmed, just one of the ways ADHD can be such a contradictory condition! Post-diagnosis I have tried to make life more ADHD-friendly; I find I study better in the morning, I need regular breaks, and using technology helps remind me of appointments and deadlines. During clinical practice, I use the whiteboards in the delivery room to keep track of when observations, medications and other tasks are due. I find the postnatal ward a little overwhelming; I have to make sure I make a note of the task at hand instead of immediately dropping everything to answer call bells as this regularly disrupts my train of thought. I would also advise students to contact their lecturing team and ask for any accommodations they may need. Having a learning difference doesn't make you a bad student, with the right support it makes you a more creative one!

STUDENT EXPERIENCES

Student experience is varied. Strengths should be recognised and valued, alongside offering reasonable adjustments in more difficult circumstances. A positive experience is influenced by having a well-adapted environment and strong relationships with practice supervisors and educators. Neurodivergent students benefit from having a designated point of contact and good continuity, often found in a personal tutor.

Students often discover their neurodiversity whilst in higher education. The environment becomes more taxing, and they uncover new areas where they need additional support. Diagnosis as an adult can be a long, expensive and therefore inaccessible process, and universities should develop their services to reflect this. Studies have shown that students can find it difficult to disclose their neurodiversity due to previous bad experiences, feelings of taboo, and a perceived lack of support.[4] In light of the ever-growing number of neurodivergent students accessing higher education,[5] educators and practice supervisors have a duty to ensure inclusive education is accessible for all and that reasonable adjustments are made. This will contribute to supporting student wellbeing and retention.



RECOMMENDATIONS

In university:

- Relevant disability services should be signposted to all students and be accessible, offering support from enrolment.
- Develop a flexible, yet consistent syllabus. Teach using different modalities and offer alternative assessment styles, recognising there are different ways of demonstrating knowledge.
- Make learning objectives and their rationale clear.
- Diversify methods for student participation.
- Repeat key concepts to assist students with processing information.
- Get to know your student's behavioural style and their "normal". Non-participation does not always mean disinterest; processing, formulating questions/answers, anxiety and distress may present similarly.

In practice:

- Communicate clearly and directly: avoid complex euphemisms.
- Provide constructive feedback, with an identifiable structure as to how to improve work; in a private space and in one-to-one sessions.
- Offer planning and stress management tools for practice placement.
- Additional support for documentation, as this can be a complex skill for neurodivergent students to apprehend, particularly when required to multitask.
- Develop disability awareness training and a stable point of contact for students in placement.
- Liaison between university, practice teams and students to disclose the student's needs and plan accommodations.



> *"Educators and practice supervisors must recognise individuality and work in partnership with students to support them."*

CONCLUSION

These recommendations fall within what it means for universities and practice areas to implement reasonable adjustments. Educators and practice supervisors must recognise individuality and work in partnership with students to support them. Often something as simple as having a conversation and establishing a safe space for a student to discuss their needs can lead to increased confidence in the workplace. Failure to do so becomes an issue of equality, diversity and inclusion, and contributes to the attrition of neurodivergent students. The NMC[6] states that midwives should 'support students to help them develop their professional competence and confidence.' Currently, if we listen to neurodivergent students' experiences, the lack of understanding and reasonable adjustments, particularly in practice, prevent them from thriving. **TPM**

REFERENCES

1. Singer J. Odd People In: The Birth of Community Amongst People on the Autism Spectrum: A personal exploration of a New Social Movement based on Neurological Diversity. [Honours thesis]. Sydney: The University of Technology; 1998.

2. Kirby A. Where have all the girls gone? Missed, Misunderstood or Misdiagnosed? FE News. https://www.fenews.co.uk/exclusive/where-have-all-the-girls-gone-missed-misunderstood-or-misdiagnosed/. Published March 2, 2020. Accessed March 30, 2022.

3. Hodges H, Fealko C, Soares N. Autism spectrum disorder: definition, epidemiology, causes, and clinical evaluation. *Transl Pediatr.* 2020;9(1):S55-S65. doi:10.21037/tp.2019.09.09.

4. Cai RY, Richdale AL. Educational experiences and needs of higher education students with autism spectrum disorder. *J Autism Dev Disord.* 2016;46(1)31-41. doi:10.1007/s10803-015-2535-1.

5. Cox BE, Thompson K, Anderson A, et al. College experiences for students with autism spectrum disorder: Personal identity, public disclosure, and institutional support. *J Coll Stud Dev.* 2017;58(1):71-87. doi:10.1353/csd.2017.0004.

6. Nursing and Midwifery Council (NMC). The Code: Professional standards of practice and behaviour for nurses, midwives and nursing associates. London: NMC. Updated October 10, 2018.

Chapter summary

Key learning points

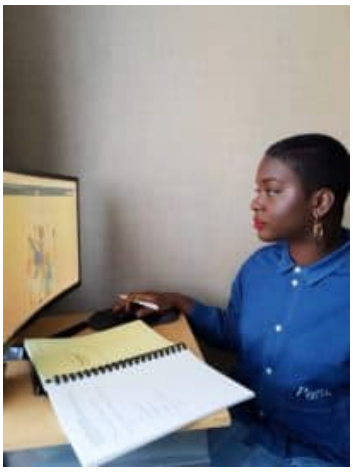


Description

How-to research series: 1. Searching for published evidence

Dr Juliet Rayment Qualitative Research Consultant and Honorary Research Fellow, Centre for Maternal and Child Health Research, City, University of London

Welcome to the first in the new All4Maternity ‘how-to’ research series. For the next 12 months, I’ll be showing you how to access and use research that’s already been published, and show you how you can start to do your own qualitative research. The series aims to be a straightforward and accessible introduction for practitioners with little or no experience; especially for those of you for whom academic work is a long distant memory! To follow along with this series you don’t need lots of research training, experience, subscriptions or passwords. Just the desire to learn from the evidence and to be open to listening to others’ experiences to improve care.



Small qualitative studies, done right, can tell you a lot, and everything in this series will be ‘social distancing friendly’: I’ll be explaining how you can hear people’s stories and learn from them without being face-to-face.

With so many midwives returning to practice at short notice at the moment, many will want to remind themselves of the evidence on best practices. Others might be working in services that are wondering what service users and patients need in this new world.

This series will show you how to ask the questions you want to ask to the right people in the most useful way. Time is short so we’ll keep it simple.

The first two blogs in the series will be all about looking for the evidence that has already been published. This month I’ll give you some tips on searching for articles and next month I’ll show you how to get your hands on them and decide if

they're worth reading. I won't be showing you how to do systematic searches, as you would for a systematic review. There's a handy guide to systematic searching here, if you'd like to find out more. Instead, this blog is about basic searching strategies that are accessible to everyone.

Why bother?

Information is powerful. Perhaps you want to know more about wearing PPE in the community to protect yourself against Covid-19. Or maybe you are supporting a woman to make a decision about her care and you'd like to know more about her options. Your service needs to change its pathways for place of birth in response to the COVID pandemic and you want to make sure what you are considering offering will still provide the safest care.

Let's take place of birth as an example. Your service has chosen to close the midwifery unit and is asking all women to birth on the obstetric unit. You would like to understand the risks and benefits of this proposal, especially for low risk women without symptoms of Covid-19. You have a hunch that asking low-risk women to birth on an obstetric unit gives them additional risks beyond Covid infection, but your colleagues aren't convinced. Time to find some evidence.

Simply Googling is inevitably overwhelming. Searching 'place of birth' gives you 3,400,000,000 hits. 'Safety of place of birth' a mere 631,000,000.

Where else can we get easily accessible, rigorous information?

Using Google Scholar

For a long time, the only way to search for research articles was through academic databases: PubMed, Medline and the like. You needed a university subscription to get very far with those. But now there's Google Scholar. Google Scholar is Google but for research evidence and you can find it at www.scholar.google.co.uk.

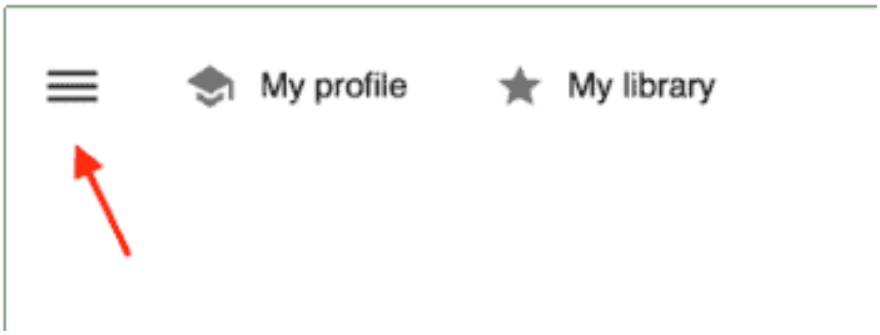
Google scholar only brings up academic journal articles and reports although you can also ask it to search case law.

1. ***Choose your words carefully***

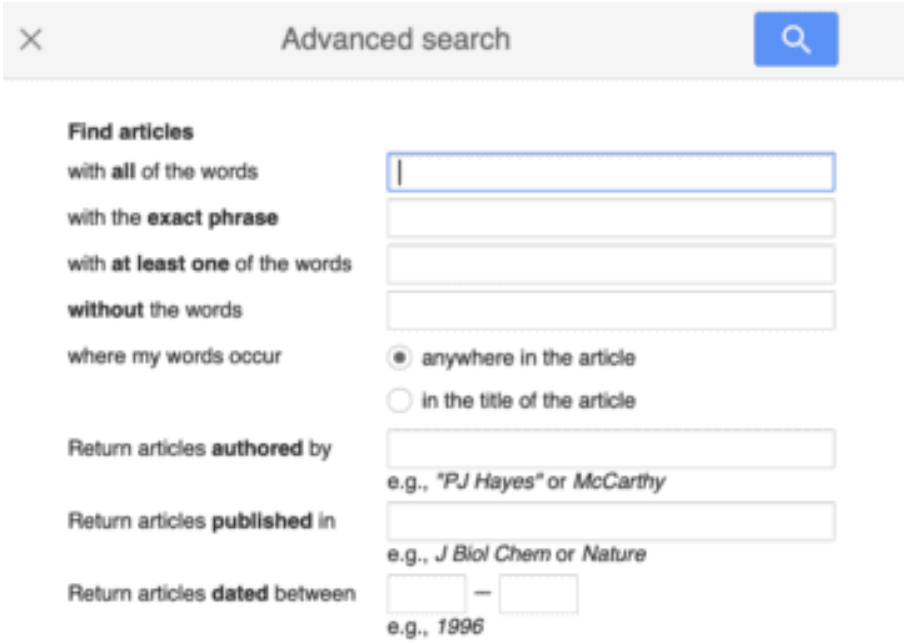
The first thing to get right are the words you use to search. Google is clever enough that if you type in 'Place of birth' you are likely to get lots of articles that are about place of birth, but you will also get articles that are about places, or births that have nothing to do with what you need. There are three helpful tools that you can use to focus down your search results and you can use all of these in the main search box:



Or the 'Advanced search' which you can find by clicking in the very top left corner, here:



Which will bring up a box:

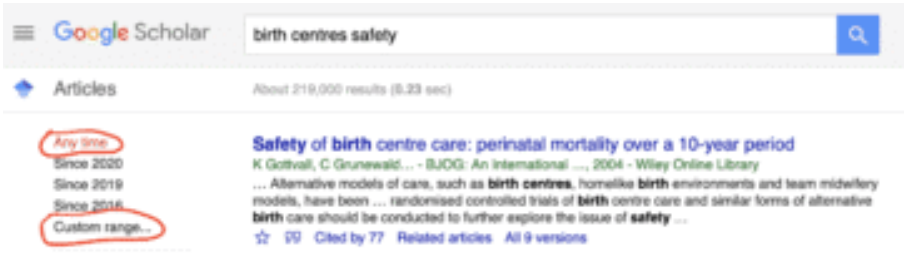


Here are three most useful tools

- **Exact phrases:** in the main search box, put a phrase in “quotation marks” and it will search for these exact words in the text or title of an article. In the Advanced Search just put your search terms in the second field down.
- **AND:** using AND, for example by typing ‘“place of birth” AND choice’ will make sure both of these words or phrases are in an article. In the Advanced Search box, the top field will do this for you.
- If you find that your searches keep coming up with the same irrelevant topic, you can use ‘–’ like a negative sign, in front of a word (with no space) to explicitly exclude certain words from your searches. The Advanced Search box for this is labelled ‘**without** the words’.

2. Make sure it’s still relevant

‘Any time’ on the left hand side of the screen or in the Advanced Search box allows you to select when you’d like your results to go back to. The last four or five years ago will keep it current. Or, alternatively, have a think about any major policy changes around your topic and search from the year they were published using ‘custom range’.



A quick scroll down your search results should show you whether or not your terms are working well enough to get you what you need. If they look promising, great. If not, think of some alternative phrases, eliminate results using the 'without these words' tool, or widen your search by deleting the inverted commas.

3. Check what else is out there

The 'Cited by' tag tells you how many other articles have referenced this one – the higher the citations, the more popular the article. Remember, though, that it doesn't tell you anything about its quality (more on that next month).



If there's a particularly relevant article in your list, looking at who else cited it, by clicking on 'cited by' can be a good way to find other useful papers.

4. Track down the abstract and full text

Once you've identified articles that might be helpful, you need to move out of Google Scholar to get hold of them. For articles that are tagged as 'Full View' on the right hand side of the screen, you will only need to click there to get access to the whole thing. Many of the others are also available by clicking on the link to the publisher's website on the right hand side. Despite a welcome trend towards publishing evidence freely, many publishers will leave you behind a paywall. This can be a frustrating experience if you don't have a password. Next month, I'll be talking about alternative (legal!) ways to get hold of full text articles without an institutional subscription.

Online statistics

Published articles aren't the only evidence that can inform health services. A number of government organisations publish statistics online alongside helpful summaries that can help you get a sense of the bigger picture in which you're working. The Office of National Statistics (ONS) is an obvious place to start for broader, social statistics. They publish all birth and death rates, including trends in maternal age and ethnicity, average family size, conception rates, fertility rates, stillbirth and so on.

For publicly accessible, health orientated statistics, the Public Health England 'Fingertips' data is a fascinating resource of stats on all sorts of health measures that have been already 'cleaned' and sorted for you. Their 'Pregnancy and Birth' section includes routinely collected data on a wide variety of maternal and child health measures that you can explore by region, and you can even generate charts comparing data to spot relationships between different issues. However, this data is only as good as whatever Trusts and CCGs send to PHE and there are significant gaps.

Next month I'll be writing all about getting your hands on the articles you've found and then deciding if you should be

paying attention to them or not. In the meantime, let me know how you've been getting on with using Google Scholar and whether it's giving you what you need. Feedback and suggestions for future posts are very welcome.

Stay well.

Juliet ?



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1. All4Maternity Blog
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1. evidence
2. how-to research
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4. understanding evidence

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Chapter summary

Key learning points

RESEARCH UNWRAPPED

UNDERSTANDING RESEARCH 1. PHILOSOPHY IN MIDWIFERY



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SUMMARY

Understanding Research is a series of articles aimed at dispelling the myths around research theories and practices, and exploring just what is meant by the different terminologies encountered when reading and using research articles. On alternate months we explore different aspects of research to make this knowledge accessible and relevant. It forms part of the Evidence series and aims to help midwives understand, use and engage with research, and consider how research matters to their practice.

As we start out on our Australian journey together it is a great opportunity to learn new skills or revise information that we have stored away in our busy minds. This understanding research series originally published in The Practising Midwife has been updated and revised by Dr Hazel Keedle to ensure it is relevant to our Australian context.

THE BIG WORDS

Research terminology can be off-putting to the practising midwife, but understanding research is a vital part of what we do. Standard 1 of the Midwife Standards of Practice requires midwives to 'support women's wellbeing by providing safe, quality midwifery health care using the best available evidence and resources',[1] so this knowledge is paramount. This article explains what these seemingly complicated words mean and how they apply to midwifery theory and practice knowledge, and it introduces the principles of this research series.

PHILOSOPHY

While car-sharing on the way to work with a consultant midwife friend, we observed thick fog that obscured everything outside the margins of the road we were on. I was in a provocative mood, having attended an amazing conference the day before, where the philosophy of what it means to be a midwife was presented in the most entertaining way. This, and the start of the third-year research module in the next week, reignited my interest in philosophy. I therefore playfully questioned whether the world as we knew it, every day on our commute to work, still existed. Of course we knew it still existed: it was a normal Thursday and not an episode of a science fiction series. This caused us to think about how questioning in this way illuminates the nature of knowledge.

How do we 'know' things? Philosophical questions are supposed to make us think. If there is thick fog and we cannot see the world, how can we know it still exists? The reason we know the world still exists is due to epistemological knowledge. Epistemology is the study of the nature of knowledge. It's more complex than this article can convey, and further references will be offered at the end, but for the time being, think about how you might prove the world still exists, on a foggy day, even if you can't see it. What methods would you use to help prove this and other philosophical questions?

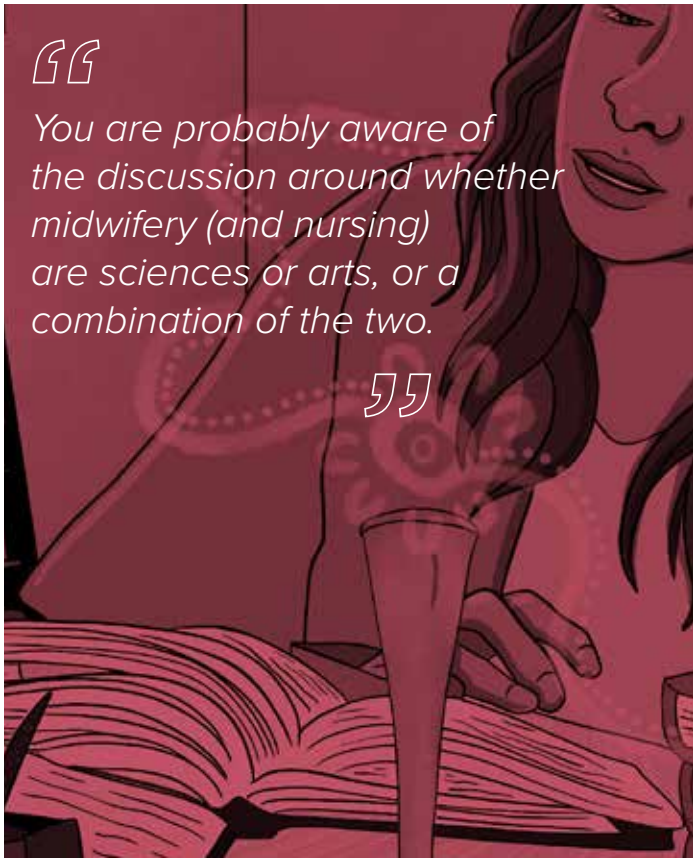
THEORIES

I frequently use theories – which are simply someone's ideas – in class as a midwifery teacher, to explain such questions. One theory I particularly like helps to explain what exists in the human world and how we, as humans (and specifically nurses), acquire knowledge about it. I know nurses are not synonymous with midwives, but I do think there is some relevance of this nursing theory to midwifery knowledge. Carper's (1978) Fundamental Patterns of Knowing in Nursing[2] suggests there is empirical, aesthetic, personal and ethical knowledge. Initially, the first two words might seem daunting but you are probably aware of the discussion around whether midwifery (and nursing) are sciences or arts, or a combination of the two. Yet there is a place for both forms of knowledge, and this is reflected in Carper's theory in the terms 'empirical' and 'aesthetic' knowledge.

EMPIRICAL KNOWLEDGE

Empirical knowledge is most often understood as scientific knowledge. What counts as scientific knowledge can and will be contested in this series (see also Chenery-Morris, 2012[3]). Let us think about midwifery training and what types of scientific knowledge you need to know. I am sure if I asked you to list 'the sciences' you would agree that, of them, biology is necessary for midwifery. However, the current Midwife Accreditation Standards of Practice[4] also expects midwives to understand the social and emotional wellbeing of women. Another term for this might be sociology or psycho-sociological concepts. I think this is scientific knowledge, too, but some people would differentiate between scientific knowledge of the natural world and that of the social. They would say that they are not the same. This may need some explaining, so here goes.

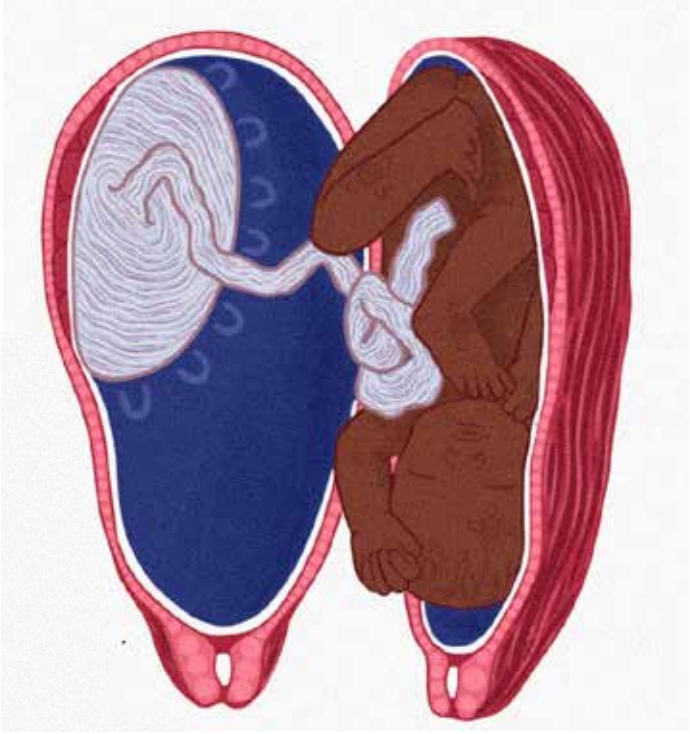
I can remember an experiment from primary school that helped me differentiate between natural and social world sciences. I planted a broadbean seed in soil in a see-through plastic cup, with the seed near the edge so that I could see it grow. We were encouraged to place the cup on the school windowsill and it was watered daily. The amount of water, warmth from the sunlight and amount of sun were largely uniform for all our plants and almost all of them grew, as expected. When planted out in the school garden some weeks later, most of them produced baby broad beans. This experiment demonstrated that the natural world had an order: with the right conditions, a seed would grow into a healthy plant and reproduce.



The social world, however, is different from the natural world. I am sure you can understand why one could not experiment with humans in the same way as the seed. The ingredients seeds need to thrive – soil, light, warmth, water – are all measurable and predictable. With humans, we can all, I expect, give examples of siblings or twins who have grown up in similar environments (houses with the same parents; offered the same food, heat and light; attended the same school; perhaps even had the same teachers), yet the individuals have developed entirely differently. Humans do not conform to the rules of the natural world: the ingredients do not affect individuals in the same ways. The seeds did not have conscious thought and, as such, there are apparently no social relationships in the bean world. The human, social world is different.

One could, then, logically argue that, if humans behave differently from plants, scientists need to study these two worlds from different approaches. The methods will both be scientific, but they will require different methodologies. These will be explored further, but first we need to consider aesthetics, personal knowledge and ethics.

> *"This experiment demonstrated that the natural world had an order: with the right conditions, a seed would grow into a healthy plant and reproduce."*



AESTHETIC KNOWLEDGE

Aesthetic knowledge is the art of midwifery: how something is enacted. I am sure you can all think of examples where the way someone said something made you question what they said. For example, you may ask a colleague for help and, although they say that they don't mind helping you, how they say it tells you something else. This is aesthetic knowledge. You know from the look on their face, the feeling their reaction has on your senses and the way they answer, that they do mind helping. In midwifery, aesthetic knowledge is having an awareness of the whole situation. It is important to be sensitive to the way women react to what you say, and how you respond, to help put them at ease and inform them of their choices in a woman-centred approach; tailoring the care you offer to their unique circumstances. Aesthetic knowledge is related to personal knowledge and ethical knowledge.

PERSONAL KNOWLEDGE

If you know the woman you are caring for, perhaps through a continuity-of-care model or caseload, you may find it easier to offer her care that you know fits with her preferences and what she thinks is important. This is personal care, whereby you can offer choices and information relevant and particular to that person. It relates to knowing yourself, so you can 'walk in their shoes' or imagine what is important to them. You need empathy with the other person's experience to be able to do this.

ETHICAL KNOWLEDGE

Ethical knowledge is that which derives from moral questions. What is the right choice in this situation or what is morally acceptable here? These patterns of knowledge do not operate in isolation, but midwives use them to varying degrees in each situation or setting to inform the decisions and care offered to their client. I offer this long preamble about the use of theories and will return to these again in a theoretical/conceptual frameworks article, but to understand how these elements fit together they needed a brief introduction here.

ONTOLOGY – THE NATURE OF BEING

Before we explore the methodologies, let us consider further what it means to be either a bean or a human. This is ontology, defined as the nature of being. As said above, we have no evidence yet that a bean can think. I presume it does not make meanings from its relationships with other beans; it may have grown in the same pod, but this is seemingly coincidental to their existence. A human, on the other hand, has the capacity to interpret meaning even from a silence or a sigh. With humans, it is not just what is said that conveys meaning, but how something is said that has a potential impact on that interpretation. It is this experience of being – or becoming – or categories of being, such as being a woman, a mother, a midwife, a student midwife, that is studied in ontological philosophy: what does it mean to be any of these



"Does the experience you described to your mother exist more than the experience you shared with your friend, or do both interpretations of the event exist equally?"

things? Of course an individual may be more than one of these categories; they are not mutually exclusive. In fact, in many ways, we cannot separate out being a woman from our other roles, identities or existences. Note also that the experience of being changes over time, and is not a static thing. Being and becoming are processes that change according to experience. Being on a first placement feels very different from returning to the same placement in the final year. You might have a great relationship with a woman in your care and feel you are becoming a midwife. The very next day you do not connect with a different woman and this has a profound effect on your sense of self and being; this nature of being is both individual and contextual. It depends on so many factors.

Let me explain a little further: you attend a fabulous party, conference, clinical shift or teaching session (the event does not really matter); you are really excited by the event and tell your mother, friend, lover and/or lecturer about it. What you tell each person about the event is likely to differ slightly, depending on your relationship with them and your personal knowledge of their interests, and you are therefore more likely to share slightly different perspectives of the same event with different people. This leads to the ontological question: What can be said to exist? Does the experience you described to your mother exist more than the experience you shared with your friend, or do both interpretations of the event exist equally? Is there only one reality of the event or do multiple realities exist? The essence of the stories you tell others is that you enjoyed the event - but how and why you experienced enjoyment may have various meanings for those to whom you describe your experience.

METHODOLOGIES – HOW WE FIND THINGS OUT

The above discussions all lead to the 'methodologies'. If the social world and natural world are experienced differently, there will be different ways – or methodologies – to study or research phenomena. Phenomenon is another complicated word with a simple meaning: it means a fact, situation, event or experience that can be observed and, potentially, studied. The way that the fact, situation or experience is studied or researched will depend on the philosophy, epistemology and ontology of the phenomenon, and how it is interpreted by the researcher. Is the phenomenon a fact that can be measured, or an experience that can be described and explored but not measured? The methodology is dependent upon whether one truth alone is possible or whether there are many realities that can co-exist. It relates to whether the natural or the social world is being studied: for example, whether a new antibiotic needs to be researched, or women's experiences are the focus of the study.

WHY THIS MATTERS

It matters because all of us have a philosophy of how we practice, and a set of beliefs about how the world works. We strive to be the best that we can be, and research can and does help us to do this. It is our tool to improve practice. As midwives, we strive to see the world through the eyes of our clients, and also to be the eyes, for them, on the worlds of science, evidence and medicine. We are the portal and the gateway into research as applied to their experience of childbearing. So this kind of knowledge matters to us and to those we care for.

This series will explain more, in due course, about how research works. In the meantime, keep reading, thinking and applying your personal knowledge and experience to studies you read: decide whether they resonate with your experience or not. Below are some further resources that will be of use in anticipating and interpreting the articles in this series. **TPM**

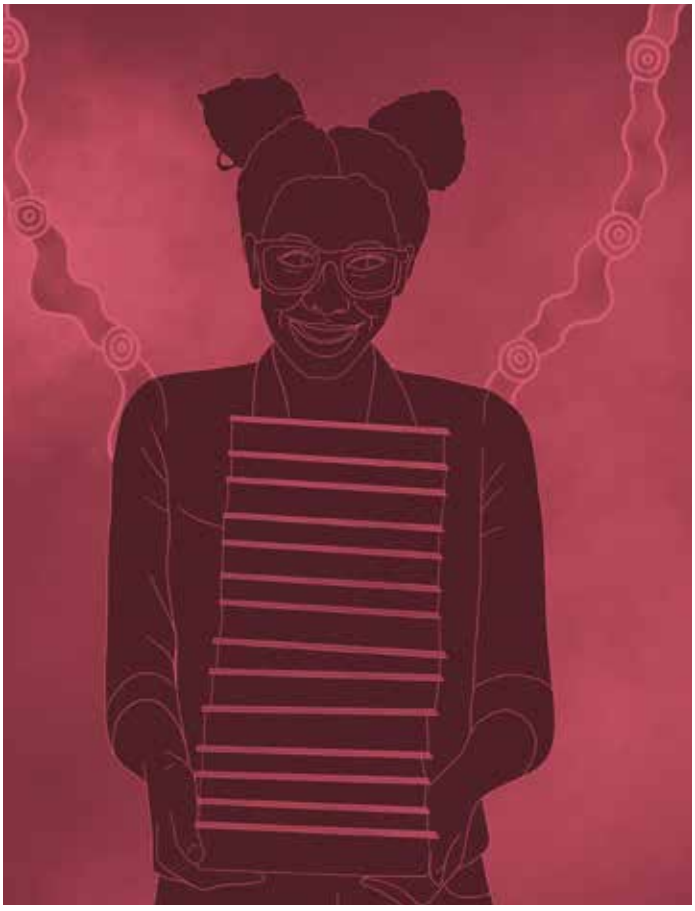
FURTHER RESOURCES

Guiver D. The epistemological foundation of midwife-led care that facilitates normal birth. Evidence-Based Midwifery. 2004;2(1):28-34.

Hunter L. A hermeneutic phenomenological analysis of midwives' ways of knowing during childbirth. Midwifery. 2008;24(4):405-415. doi.org/10.1016/j.midw.2007.06.001.

Walsh D. The ontology of childbirth. Br J Midwifery. 2013;14(10):662. doi.org/10.12968/bjom.2006.14.11.22254.

Walsh D, Evans K. Critical realism: an important theoretical perspective for midwifery research. Midwifery. 2014;30:e1-e6. doi.org/10.1016/j.midw.2013.09.002.





REFERENCES

1. Midwife Standards for Practice. Nursing and Midwifery Board of Australia. 1 October 2018 https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Professional-standards/Midwife-standards-for-practice.aspx. Published October 01, 2018.

2. Carper B. Fundamental Patterns of Knowing in Nursing. Advances in Nursing Science.1978;1(1):13- 23. doi.org/10.1097/00012272-197810000-00004.

3. Chenery-Morris S. Empirics: one way of knowing. Essentially MIDIRS. 2012;3(6):47-49.

4. ANMAC Midwife Accreditation Standards. Australian Nursing & Midwifery Accreditation Council. https://anmac.org.au/sites/default/files/documents/06920_anmac_midwife_std_2021_online_05_fa.pdf. Published 2021.

Chapter summary

Key learning points

UNDERSTANDING RESEARCH

10: ANALYSING QUALITATIVE AND QUANTITATIVE DATA

SUMMARY

Understanding research is a series of articles aimed at dispelling the myths around research theories and practices and exploring just what is meant by the different terminologies encountered when reading and using research articles. On alternate months we explore different aspects of research to make this knowledge accessible and relevant. It forms part of the Evidence series, and aims to help midwives understand, use and engage with research, and consider how research matters to their practice.



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INTRODUCTION

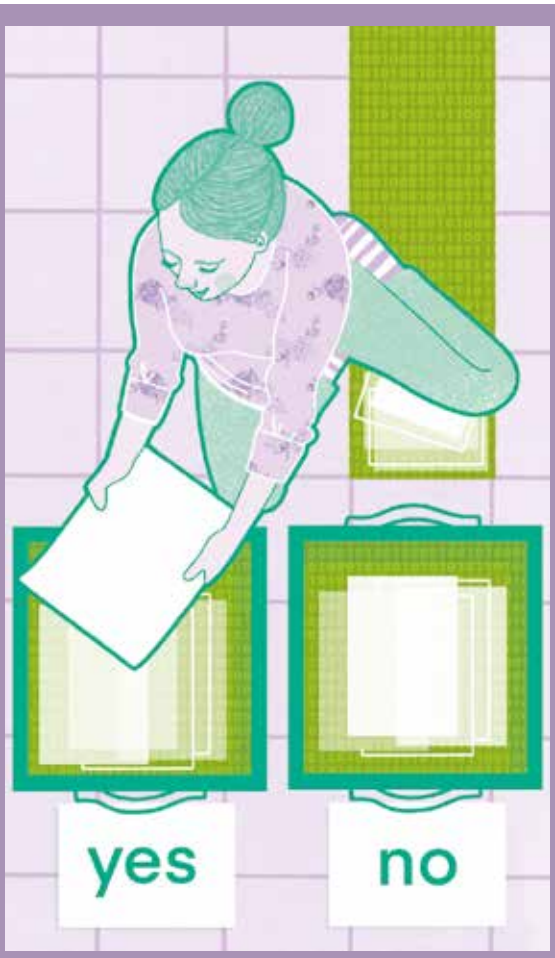
Our previous articles have focused on different elements of the research process including the findings from studies. At times, we have made visible the data analysis strategy, but this has often been limited. This is because we knew this article would cover this. But also, because published research does not always elaborate on how the analysis was undertaken. This is especially so when research is published in journals with a relatively short word count. The guidelines for authors in three commonly used midwifery journals are 2,500 words including references (*The Practising Midwife*), 3,000 words approximately (*British Journal of Midwifery*) and 5,000 words excluding references (*Midwifery*). The journals cater for different audiences, typically but not confined to students, practitioners and academics, respectively. This explains some of the difference in the length and depth of articles. Knowing this may also help you, the reader, to understand that authors tailor how much information they present in the data analysis section. Remember, the length of a published study does not equate to quality. Nevertheless, this article focuses on analysis strategies more explicitly to help you know how researchers make sense of their data and turn the data into findings, discussion and conclusions.

UNDERSTANDING DATA ANALYSIS AND SYNTHESIS

First, we start with the definition of analysis and a related term, synthesis. According to Gomm,[1] analysis is everything that happens after the data has been collected in research to reach conclusions. His definition explores the concept further, and we suggest that these terms can be used for quantitative and qualitative research correspondingly. The terms are analysis as breaking something down into its component parts versus synthesis. The definition of synthesis is drawing together different elements and combining them into a single or set of conclusions.[1] You may be two steps ahead of us here and already trying to work out if you can align these words to the paradigms. You would be right if you thought analysis is both a generic term and one that best describes the process in quantitative research, whereas synthesis is attributed to qualitative research. This idea is supported by Silverman,[2] who states that data analysis is easier in quantitative studies because the data are presented as a set of numbers that 'mean' something. In contrast, qualitative data analysis is like exploring a new place without instructions. Instead, there are many competing ways data can be explored in the qualitative paradigm compared to relatively few in statistical analyses.[2] To re-orientate you to the principles we have previously discussed in our series and a summary of the differences between the data analysis strategies in each paradigm we offer *Table 1.*

***Table 1.* Differences and similarities between quantitative and qualitative data analysis**

QUANTITATIVE	QUALITATIVE
Collecting and analysing data straightforward and linear	Collecting and analysing data labour intensive and iterative
Answers questions such as who, where, how many and what. The relationship between specific variables	Answers how and why questions. There are often multiple interpretations
Clear and formulated processes for data analysis	Process can change and often develops as data analysis progresses
Analysis usually undertaken at the end of the project	Analysis can be undertaken as it is collected. Constant comparison method
Standardised data is collected throughout the project	Data may change during collection as the focus narrows/hones in on a particular phenomenon
Bias towards hypothesis testing	Bias towards inductive methods
Use of computer programmes such as SPSS	Use of computer programmes such as NVivo





Instead of presenting a new research paper and applying our explanation of data analysis to it, we have tabulated the studies we have used within this series. In gathering the research together, we can see how many types of data analysis have been presented and explain the principles rather than the details of each to aid your understanding. *Tables 2 and 4* summarise the qualitative and quantitative analysis strategies. We have added in the journal too. Even the publication in the journal with the shortest word count was still detailed in its description of the analysis.[3] Often, at least two paragraphs were presented that explained what the researchers did. These have been distilled to the main approach. We go on to explain these and the principles.

***Table 2.* Summary of qualitative studies and analysis strategies used in this series**

Series	Qualitative research title	Qualitative analysis strategy	*Journal/publication*
2	Being safe practitioners and safe mothers: a critical ethnography of continuity of care midwifery in Australia.	Data were collected utilising Carspecken's five-stage Framework designed to elicit cultural meanings[4]	*Midwifery*
3	Where do you want to have your baby? Women's narratives of how they choose their birthplace.	A two-phased approach, involving categorical-content analysis as described by Lieblich et al[3]	*British Journal of Midwifery*
4	Midwifery practice during birth: ritual companionship	Analysis of the data consisted of four steps based on phases described by Fraser and Rowe. NVivo software was used to organise the data and assist with the initial identification of themes[5]	*Women and Birth*
4	Free birthing: a case for using interpretative hermeneutic phenomenology in midwifery research for knowledge generation, dissemination and impact	Data analysis was carried out in a number of iterative stages, immersion in the data, interpretative insights developed a synthesis and are represented as interpretative themes. A secondary analysis was carried out to capture the participants' lived experiences[6]	*Journal of Research in Nursing*
4	The Kaleidoscope midwife: A conceptual metaphor illustrating first-time mothers' perspective of a good midwife during childbirth. A grounded theory study	Data analysis followed the phases identified by Strauss and Corbin.(1) open coding;(2) axial coding;(3) selective coding;(4) development of the theory[7]	*Midwifery*
5	The experiences of midwives and women during intrapartum transfer from one-to-one, midwife-led birth environments to obstetric-led units	Data organised and categorised using the software program NVivo 10. Thematic analysis. The guidance from Braun and Clarke. Symbolic interactionism was used as the analytical lens[8]	*Midwifery*
8	A community of practice in a midwifery-led unit. How the culture and environment shape the learning experience of student midwives	Thematic analysis using field notes. Transcripts were read and re-read, with notes made in the margins to identify emerging codes. NVivo 7 was used to support the identification of themes[9]	*Midwifery*
8	A qualitative exploration of how midwives' and obstetricians' perception of risk affects care practices for low-risk women and normal birth	Data were analysed thematically using Yin's five-step process for analysis[10]	*Women and Birth*
8	Midwives' experiences of performing maternal observations and escalating concerns: a focus group study	The analysis followed the hermeneutic spiral method[11]	*International Journal of Qualitative Studies on Health and Wellbeing*
8	Midwives' experiences of performing maternal observations and escalating concerns: a focus group study.	The process of 'open coding' was applied. The analytical framework and codes were applied. At each stage of the process, emerging codes and themes were discussed, reviewed, refined and agreed[12]	*BMC Pregnancy and Childbirth*

This diversity of data analysis strategies, especially in qualitative research, can be explained by Silverman's[2] notion that there are as many qualitative analysis strategies as researchers. As qualitative research is rooted in interpretation and we all have a different world view, you can understand this complexity but be assured there are general principles that are followed.

TRANSCRIPTION

The first step of analysis in any qualitative research is for the data to be transcribed. This involves listening back to the recordings and writing what was said word for word in a word processing document. Who transcribes the data depends on a variety of factors including time, cost, resources and confidentiality. Arguably, a researcher carrying out the process of transcription themselves is beneficial because this is where the analysis process begins, with ideas starting to formulate from the transcription alone. The way in which data is transcribed can vary, with whether a researcher chooses to do this verbatim (meaning word for word), including 'erms' and repeated words, whether pauses and emotions are included such as laughter, or whether just a general overview is given. The style of transcription will link to the data analysis strategy – whether this is content analysis; whether the pauses can be interpreted to demonstrate hesitancy or discourse analysis; and whether the laughter shows that the phenomenon is controversial – for example, from embarrassment rather than humour.

NAMED VERSUS UNNAMED ANALYSIS FRAMEWORKS

Several of the studies followed specific named frameworks or authors such as Carspecken's,[4] Lieblich et al,[3] Fraser and Rowe,[5] Strauss and Corbin,[7] Braun and Clarke[8] and Yin.[10] Many of these studies are by researchers who were undertaking a PhD. This probably increases the likelihood that they have adopted a named approach because the research was for an academic award as well as to advance knowledge. However, the named approach alone does not enhance or detract from the quality of the study. You were introduced to Glaser and Strauss, the founders of Grounded Theory in article four. We explained that they did not agree on how the data should be analysed. Strauss and Corbin then devised a process of open coding, axial coding and selective coding. This is what was used in Borelli, Spiby and Walsh's study[7] and the process of codes were described there. The other names may be unfamiliar but the more you read research, the more likely you are to come across these – for instance, Yin for case study research, and we detail Braun and Clarke[14] below. The researcher may choose not to use the analysis specific to their methodology but instead a more generic approach. Arguably, the rigour of the process could be questioned because they have not followed the methodology through, but the researcher, as always, should justify their choice of method of data analysis. Generic approaches appear to be followed in at least two of the studies[6,12] in *Table 2*. We say 'appear', because it may be that this level of detail was omitted from the publication due to the aforementioned audience or word count.

THEMATIC ANALYSIS

Thematic analysis is one of the most commonly used methods of data analysis within qualitative research and can be seen as the main method in six of the studies above.[5,6,8,12,9,10] Key steps are outlined in *Table 3*. Thematic analysis is flexible in nature and relatively easy to learn. Therefore, it can be useful for novice researchers.[14] It also enables the researcher to recognise similarities and differences across the data and can allow for large amounts of data to be summarised.[14] You can see in *Table 3* that the first stage is familiarising yourself with the data, which involves the transcribing process already discussed.

***Table 3.* Phases of thematic analysis: adapted from Braun and Clarke 2006[14]**

Phase	Description of the process
1. Familiarise yourself with your data	Transcribing data, reading and re-reading, noting initial ideas
2. Generating initial codes	Coding interesting features of the data using a systematic approach, across the entire data set
3. Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme
4. Reviewing themes	Checking if themes work in relation to coded extracts – thematic map of analysis
5. Defining and naming themes	Ongoing analysis to refine specifics of each theme, giving clear definitions and names to each theme
6. Producing the report	The final opportunity for analysis, extracting examples relating back to the analysis of the research question

Step two involves generating the initial codes. This is where the data is read through and words or labels are assigned to summarise participants' quotes. This offers a general meaning – it could be something like 'labour care' or 'continuity'. Data can be analysed and managed manually, where a researcher may print these off and use Post-It notes and highlighters, writing codes in margins, or they may use software. Nvivo is a popular software package used in at least three of the studies.[5,8,9] Once the first transcription is coded, the researcher will then move on to code the next transcriptions. As they do this, they will start to identify potential themes, where they link some of the codes together, covering similar content. Steps four and five then show how data analysis is an iterative process where the researcher will go back and forth, reading the codes and the potential themes, checking that the themes encompass all of the codes and then defining and refining the final themes. Some of the researchers have stated that the process was iterative in their analysis strategy.[6] Sometimes they may use a thematic map of analysis to show how the codes formed into the themes and link (see Reed's website for a conceptual map[15] of her themes).[5] Often, there will be between four and six final

themes identified, each of which may contain subthemes, and these will need naming. The researcher plays an integral role in identifying these themes and therefore interpreting the data, which is part of the reason why the qualitative analysis process is arguably more subjective (we might say more nuanced). In the final stage, when the findings of the thematic analysis are 'written up', the researcher usually includes the key quotations from the transcripts, which portray the meaning of the theme.[13] This increases the credibility of the finding, because the reader can ascertain that the researcher's interpretations match those excerpts taken from the data.

A FEW OTHER COMMONLY USED QUALITATIVE ANALYSIS STRATEGIES

Interpretive phenomenological analysis is a similar method of data analysis to that of thematic analysis. Although this is a phenomenological approach and may be used within phenomenological research, it is not restricted to this alone, and researchers may choose to use this method of data analysis in other qualitative research. The aim of this approach is for the researcher to use their own prior knowledge and ideas to aid interpretation of the data. The researcher will often use the margins of the transcription to code and note their initial analysis, with the overall aim of the themes emerging from the data itself.[13] Discourse analysis will follow a similar format to thematic analysis again, however, within this method, the researcher wants to understand more than just what is said by the participant. They want to recognise the way in which it was said, the language that they used, but also their non-verbal communication, such as their posture, their eye contact and the way they interact with the researcher. For this type of analysis to be possible, it will either require another researcher to be present to take detailed notes about the participant's body language, or a video recording. Lastly, content analysis is another type of thematic analysis that can be used for either quantitative or qualitative research.[13] The difference here is that, rather than identifying the codes or categories from the data, the researcher will instead establish a list of codes and categories that they wish to look for within the data.

QUANTITATIVE DATA ANALYSIS

By contrast, the variety of analysis strategies in quantitative data analysis is limited to predetermined tests. There are whole books on which statistical tests can be undertaken but they fall into two broad categories: descriptive and inferential statistics.[16] Remember, quantitative research aims to generate or test theories or hypotheses. Hypotheses enable the quantitative researcher to make generalisations by analysing the data collected to describe general trends (descriptive statistics) and using the statistical tests to determine whether these are related to the data or happened by chance (inferential statistics).

***Table 4.* Summary of quantitative studies and analysis strategies used in this series**

Series	Research title	Analysis strategy	*Journal/publication*
2	Midwife-led continuity models versus other models of care for childbearing women	Statistical analysis using the Review Manager software. The results were presented as the average treatment effect with 95% confidence intervals, and the estimates of Tau^2 and I^2[2,17]	*Cochrane review*
5	Effecting change in midwives' waterbirth practice behaviours on labour ward: an action research study	One-way ANOVA with post-hoc Tukey tests was chosen to identify statistical differences between the three groups of questionnaires[18]	*Midwifery*
6	Routine induction in late-term pregnancies: follow-up of a Danish induction of labour paradigm	Analyses were performed as **Interrupted Time Series Analysis** (ITSA). Descriptive statistics are presented as absolute numbers and percentages. Data were analysed in STATA/SE V.15.1 software package[19]	*BMJ Open*
6	Improving women's knowledge of prostaglandin induction of labour through the use of information brochures: a quasi-experimental study	SPSS (statistical package social sciences version 17). Demographic data were analysed using **Mann Whitney U** test for ordinal data sets (such as age and gestation) and **Chi-Square test** for categorical data sets (such as marital and employment status) to determine any statistical difference between the non-intervention and intervention groups[20]	*Women and Birth*
7	You and your baby: a national survey of health and care 2018	Survey-weighted descriptive statistics, such as medians and proportions. Where available, prevalence estimates (with 95% confidence intervals (CI)) are compared with estimates from national routine data pertaining to the same period of births (2017). Analyses were undertaken using SPSS[21]	*NPEU Report*
7	Birth NI: a survey of women's experience of maternity care in Northern Ireland.	Simple descriptive statistics (including mean, median and proportions) were computed, and proportions compared using Chi-squared tests, as appropriate. Statistical significance for univariable analyses[22]	*Report*
9	Length of labour in mothers and their daughters: a matched cohort study	Data were analysed with SPSS version 24.0[23]	*European Journal of Obstetrics & Gynecology and Reproductive Biology*

Data can be analysed by counting frequencies, either mean, mode or median.[16] Each of these terms is a specific way of treating the data and it depends on the type of data to know which way it can be quantified. You will see in *Table 4* that several of the surveys counted distribution.[22,21] You will also see that specific tests such as Chi-squared (which tests statistical significance), Mann Whitney U test (for difference or correlation) and one-way ANOVA (to test variance) have been used. You will see that most of the research used software to calculate the statistics, and the majority used SPSS20,[22,21,23] but other software managers such as Review Manager[17] and STATA[19] were also used. Even though we teach midwifery research, we have to read the articles closely and look up tests to understand them because we are not statisticians. Often, the tests are explained in the data analysis paragraphs of the publications. The significance of the data should always be explained in the discussion and conclusion chapter, and in some studies such as the Cochrane reviews[17] there is a plain English summary. So, do not be put off by this part of the research process.

CONCLUSION

The point of understanding the researcher's analysis strategies is to enable the reader to evaluate the quality of the research. The variety illustrated here, and the different terms are ones that you may come across as they are frequently used. We will bring together our discussions on assessing the quality of research in the next and final article as well as disseminating research findings. In the meantime, keep reading and thinking as you come across midwifery research to expand your repertoire and enable you to offer more evidence-informed choices and conversations with women. **TPM**

> *"The researcher plays an integral role in identifying these themes and therefore interpreting the data, which is part of the reason why the qualitative analysis process is arguably more subjective (we might say more nuanced)"*

REFERENCES

1. Gomm R. Key concepts in social research methods. Basingstoke, UK: Palgrave Macmillan; 2009.
2. Silverman D. Interpreting qualitative data a guide to the principles of qualitative research. 4th ed. London: SAGE Publications Ltd; 2011.
3. Woog C. Where do you want to have your baby? Women's narratives of how they choose their birthplace. British Journal of Midwifery. 2017;25(2).
4. Dove S, Muir-Cochrane E. Being safe practitioners and safe mothers: A critical ethnography of continuity of care midwifery in Australia. Midwifery. 2014;30(10):1063-1072.
5. Reed R, Rowe J, Barnes M. Midwifery practice during birth: Ritual companionship. Women and Birth. 2016;29(3):269-278.
6. Feeley C. Freebirthing a case for using interpretative hermeneutic phenomenology in midwifery research for knowledge generation, dissemination and impact. Journal of Research in Nursing. 2019;24(1-2):9-19.
7. Borrelli S, Spiby H, Walsh D. The Kaleidoscope midwife: A conceptual metaphor illustrating first-time mothers' perspective of a good midwife during childbirth. A grounded theory study. Midwifery. 2016;39:103-111.
8. Sosa G, Crozier K, Stockl A. The experiences of midwives and women during intrapartum transfer from one-to-one midwife-led birth environments to obstetric-led units. Midwifery; 2018;65:43-50.
9. Norris S, Murphy F. A community of practice in a midwifery-led unit. How the culture and environment shape the learning experience of student midwives. Midwifery. 2020;86:1-8.
10. Healy S, Humphreys E, Kennedy C. A qualitative exploration of how midwives' and obstetricians' perception of risk affects care practices for low-risk women and normal birth. Women and Birth. 2017;30(5):367-375.
11. Nilsson C. Midwives' care on a labour ward prior to the introduction of a midwifery model of care: a field of tension. International Journal of Qualitative Studies on Health and Wellbeing. 2019;14(1):1-15.
12. Jeffery J et al. Midwives' experiences of performing maternal observations and escalating concerns: a focus group study. BMC Pregnancy and Childbirth. 2017;17(24):1-10.
13. Harvey M, Land L. Research Methods for Nurses and Midwives. Theory and Practice. London: Sage, 2017.
14. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006;3(2):77-101.
15. Reed R. Midwifery practice during birth rites of passage and rites of protection. Midwife thinking. https://midwifethinking.com/2013/08/21/midwifery-practice-during-birth-rites-of-passage-and-rites-of-protection. Published August 21, 2013. Accessed January 31, 2021.
16. Field A. Discovering statistics using IBM SPSS statistics. 4th ed. London: SAGE Publications Ltd; 2012.
17. Sandall J et al. Midwife-led continuity models versus other models of care for childbearing women. London: Cochrane; 2016.
18. Russell K et al. Effecting change in midwives' waterbirth practice behaviours on labour ward: An action research study. Midwifery. 2014;30(3):e96-e101.
19. Rhydahl E, Declercq E, Mette J. Routine Induction in Late-term Pregnancies: Follow-up of a Danish Induction of Labour Paradigm. BMJ Open. 2019;9(12)1-9.
20. Cooper M, Warland J. Improving women's knowledge of prostaglandin induction of labour through the use of information brochures: A quasi-experimental study. Women and Birth. 2011;24(4)156-64.
21. Harrison S Alderdice F Henderson J Quigley MA. You and Your Baby: A national survey of health and care 2018. Oxford: National Perinatal Epidemiological Unit, University of Oxford; 2020.
22. Alderice F et al. Birth NI: A Survey of Women's Experience of Maternity Care in Northern Ireland. Belfast: School of Nursing and Midwifery Queen's University Belfast; 2016.
23. Ebrahimoff M et al. Length of labour in mothers and their daughters: A matched cohort study. European Journal of Obstetrics & Gynecology and Reproductive Biology. 2020;245:77-83.

Chapter summary

Key learning points

RESEARCH UNWRAPPED

UNDERSTANDING RESEARCH

2. THEORETICAL AND CONCEPTUAL FRAMEWORKS AND THEIR APPLICATION TO MIDWIFERY KNOWLEDGE AND RESEARCH

SUMMARY

Understanding Research is a series of articles aimed at dispelling the myths around research theories and practices and exploring just what is meant by the different terminologies encountered when reading and using research articles. On alternate months we explore different aspects of research to make this knowledge accessible and relevant. It forms part of the Evidence Series, and aims to help midwives understand, use and engage with research and consider how research matters to their practice. Originally published in The Practising Midwife September, 2019.



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THE BIG WORDS (PART 2)

In 2009, I took over responsibility for the midwifery research modules at my university. I soon realised that I dreaded the teaching sessions on theoretical and conceptual frameworks. Initially, this dread came from a position of fear. Was my knowledge of these complex ideas sound enough? More importantly, would I be able to make this knowledge accessible to the students? Over time, as my confidence in the concepts and my teaching of them grew, I was apprehensive for another reason: the look of bewilderment on some of the students' faces. Many questioned whether they would ever know enough, others admitted the ideas went above their heads.

As a teacher, I wondered whether or not to keep this content in the module. I knew it was important, but so is building students' confidence in their ability instead of knocking it. This research

topic, more than others, seemed to confuse and unsettle many students. This research knowledge was like learning another language, over and above the midwifery terminology with which the students were becoming conversant. Nevertheless, when students 'got it' they had an epiphany, and this was my reward. As midwives, they would need access to these concepts. Understanding research and its application to practice (whether it is the woman's experience or professional dynamics in the workplace) becomes more likely, not less, with theoretical and conceptual frameworks. First, let's make sure we understand theories and concepts.

WHAT DOES A THEORY DO?

In the first article we introduced theories; here we explain their place in research. They are tools for thinking about midwifery practice. A theory enables midwives to compare women's experiences with knowledge from different disciplines and practice.[1] A good theory is one with explanatory power.[2] This means that theories are sets of interrelated constructs or concepts that help explain relationships between variables. A theory can be thought of as a big idea, or a map of why the world is the way it is. How theories are used is different in quantitative and qualitative approaches.

In natural sciences, which tend to use a quantitative approach, research theories are often seen as guiding truths until proved false by other research. The theory is a proposed explanation for the phenomenon, stating a relationship between variables. This is called the hypothesis. If there is no relationship between the variables, the null hypothesis is proven. Medical research, for example, might theorise that one drug is better than another for a certain condition because body systems react in similar ways. However, as we said in the first article, human behaviour is less predictable. Therefore, in social sciences, theories are more open to alternative interpretations. Qualitative researchers employ theories as a broad explanation, especially where the research is grounded in the notion that everyone's interpretation of reality is socially constructed or dependent on their individual experience. Qualitative research often starts with a theoretical framework and develops new or variations on the theory as its outcome.[3] We will explore an example of what it is that theories do in more detail later in this article, when we examine Dove and Muir-Cochrane (2014).

CONCEPTS EXPLAINED

Theories need their concepts clearly identified and defined, regardless of whether the research is using a quantitative or qualitative approach. Concepts enable researchers to distinguish one experience or event from another. They are the bricks from which theories are built.[2] A concept is a word or phrase that encompasses the essential characteristics or key components of what is being studied. Let's use a well-known midwifery concept to explore this.

> *A conceptual framework can be described as a map of the existing literature or ideas.[5] One of the first steps of any research project is to work with the existing literature on the topic. The literature comprises a field or fields of what is known, and gaps in knowledge.[3]*



THE CONCEPT OF CONTINUITY OF CARE

Can you identify and define the concept of continuity of care? Does it have a shared, relatively closed meaning within the midwifery community, or is it open to interpretation? Examining two research papers on the topic we can compare their definitions. One is the large-scale quantitative research of 17,674 women and babies (Sandall, et al., 2016). The other is a smaller qualitative study of the views of 17 women, eight midwives and one obstetrician (Dove and Muir-Cochrane, 2014).

Midwife-led continuity models provide care from the same midwife or team of midwives during the pregnancy, birth and the early parenting period. These midwives also involve other care providers if they are needed (Sandall, et al., 2016).

For the purposes of this study continuity of care was defined as: a midwife with responsibility for providing antenatal, intrapartum and postnatal care to the women in her caseload and sharing these responsibilities with medical colleagues for women at higher risk.[4]

From the definitions above, it is clear that both studies are defining the concept of continuity of care similarly. The essential characteristics are the midwife, the periods of time – antenatal, intrapartum and postnatal – and the involvement of others, if required. Therefore, we could consider this a closed concept from these two papers' definitions.

Findings or theories generated from the studies are about the same concept, even if the phenomenon is studied from a different standpoint, as these studies are.

Standpoints is another big word that means position or perspective. The standpoint is the position the researcher adopts to research the topic. If the phenomenon has clearly measurable or observable outcomes, a quantitative approach is appropriate. If there are multiple possible interpretations of the phenomena, a qualitative design will be more suitable. When studying possible interpretations about why the world is the way it is, researchers might use, for instance, a feminist standpoint to shed new light on previous assumptions. Feminist researchers would argue that the way women experience the world is not the same as men and therefore the way the research should be constructed needs to acknowledge this standpoint, recognising of course, that all women are unique and there is no common shared feminist perspective.

CONCEPTUAL AND THEORETICAL FRAMEWORKS

Having examined the role of theories and concepts in research, we now need to think about the terms theoretical and conceptual frameworks. These are often used interchangeably. However, strictly speaking, they mean different things.

Conceptual frameworks

A conceptual framework can be described as a map of the existing literature or ideas.[5] One of the first steps of any research project is to work with the existing literature on the topic. The literature comprises a field or fields of what is known, and gaps in knowledge.[3] Conceptual frameworks are often used in quantitative research to provide an overall description of the field, so that data can be collected that cover all of those aspects.[3]

We can see that in their introduction Sandall, et al.[6] have used the existing literature on continuity of care as a map or conceptual framework. The concepts were not based on the authors' pre-conceived ideas but rooted in previous research. They explain that, despite the previous research, there was no single study that compared continuity models with other types of midwifery care to reach solid conclusions as to whether or not it was safer for mothers and babies. Therefore, their study intended to fill this gap in knowledge. The seven primary outcomes that the study measured were: pre-term birth, stillbirth/neonatal death, three modes of birth (spontaneous vaginal, instrumental or caesarean), intact perineum and use of epidural (Sandall, et al., 2016). Data on all seven outcomes were collected and compared with models of midwifery care. You will probably be conversant with the findings of this study, but they are so important to midwifery practice that they are worth repeating here. The benefits of continuity of care models are that women were less likely to have a pre-term birth, stillbirth or neonatal death.[6] Women had a greater chance of spontaneous vaginal birth, and fewer episiotomies, epidurals and instrumental births.[6]

Theoretical frameworks

Theoretical framework is the term used to describe the body of theory which shapes research designs. The theoretical underpinnings of the knowledge base of the phenomenon under study are linked to the literature in the field, to logically show the reader how the research needed to be conducted. In qualitative research, a theory conveys the values of the researcher and provides a signpost for the reader to see how the new ideas have been generated.[5] If we revisit Dove and Muir-Cochrane,[4] we can see

"Theoretical framework is the term used to describe the body of theory which shapes research designs. The theoretical underpinnings of the knowledge base of the phenomenon under study are linked to the literature in the field, to logically show the reader how the research needed to be conducted."

they used the concept of continuity of care and combined this with existing theories to develop a new theory. Their smaller, qualitative study found that the relationship between mothers and midwives in a continuity model was based on mutual trust. The women felt safe and the midwives were able to negotiate safer birthing practices for them. The authors draw on other theories within their findings that relate to identity work, risk and culture. Their interpretation of the role of continuity of care is that it can protect and prepare women and prevent medicalisation of childbirth.[4] The authors' values are conveyed within the article: we can see that they believe in continuity of care and their findings act as a signpost or lens for the reader. Therefore, we suggest that the way that they used the existing literature on continuity of care and linked this to other theories is an example of a theoretical framework.

Both articles used the concept of continuity of care as the basis for their research. However, how they used previous literature and whether this was linked to explicit theories differed. For simplicity, we have suggested that Sandall, et al.[6] used a conceptual framework to research one of the seven pre-determined outcomes, whereas Dove and Muir-Cochrane[4] used a theoretical framework to explore complex interactions between individuals that had multiple potential interpretations. However, as you will know, with research everything can and should be questioned.

On reading the research again, you may have different ideas, and this adds to the initial confusion that students have and why the terms are often used interchangeably.



WHY THIS MATTERS

Research on midwife-led continuity models is fundamentally changing the way midwifery care is offered in the UK and in other countries. The evidence is strong that this model of care is beneficial for women and babies. Theoretical and conceptual frameworks can help clarify what it is about this model of care that accounts for the benefits. Hopefully, this article and the series are helping you understand the power of research and its application to your profession in supporting women and their families positively.

What the midwifery profession does not yet know about continuity of care is the mechanism behind the reduction in fetal loss and neonatal death by 16% – and pre-term births by 24%.[6] To study this important gap in midwifery knowledge one would no doubt use a conceptual or theoretical framework to map the literature and theories in the field. Perhaps you are now inspired and have an idea as to how you could study this.
TPM

REFERENCES

1. Bryar R, Sinclair M. Theory for midwifery practice. 2nd edition. Basingstoke: Bloomsbury Academic; 2011.

2. Risjord M. Nursing knowledge: science, practice and philosophy. Chichester: Wiley-Blackwell; 2009.

3. Somekh B, Lewin C. Theory and methods in social research, 2nd edition. London: Sage Publications Ltd; 2011.

4. Dove S, Muir-Cochrane E. Being safe practitioners and safe mothers: a critical ethnography of continuity of care midwifery in Australia. Midwifery. 2014;30:1063-1072. doi. org/10.1016/j.midw.2013.12.016.

5. Collins CS, Stockton CM. The central role of theory in qualitative research'. Int J Qual Methods. 2018;17:1-10. doi. org/10.1177/1609406918797475.

6. Sandall J, Soltani H, Gates S, Shennan A, Devane D. Midwife-led continuity models versus other models of care for childbearing women. Cochrane Database Sys Rev. 2016;28;4(4). doi.org/10.1002/14651858.CD004667.pub5.



Chapter summary

Key learning points

UNDERSTANDING RESEARCH

11: DISSEMINATING YOUR FINDINGS

AND LINKING YOUR WORK TO THE LARGER BODY OF MIDWIFERY KNOWLEDGE/EVIDENCE



SUMMARY

Understanding research is a series of articles aimed at dispelling the myths around research theories and practices, and exploring just what is meant by the different terminologies encountered when reading and using research articles. On alternate months, we explore different aspects of research to make this knowledge accessible and relevant. It forms part of the Evidence series, and aims to help midwives understand, use and engage with research, and consider how research matters to their practice.

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RECAPPING THE RESEARCH PROCESS

During this research series, we have explored the research process from the beginning, considering the theories of knowledge and philosophy, through to methodologies, methods and analysing data. This final article explores how researchers disseminate their findings, which is the final part of the research process. This is also a very crucial part.

One could argue that there is an ethical imperative to disseminate research once the study is complete (*as diagram 1 indicates*). Researchers should not undertake a study unless there is a gap in knowledge and the research has not already been completed.[1] The gap is known by undertaking a literature review. The notable exception to this is for grounded theory. It is essential that the research is necessary to ensure that researchers are not wasting time or money.[1] Once the research is planned and undertaken (*see diagram*) the findings are shared or disseminated. This enables others to consider whether the research is applicable to their context, which leads to a

greater likelihood that they influence practice. It also ensures the involved stakeholders and policy makers are aware of the findings. Even if findings contradict the initial hypothesis or someone else's research, or are unexpected, it is essential that they are shared. It is through discussion and engagement with a wider range of findings, concepts and ideas that practice changes for the benefit of women and their families. Researchers will need to decide how they wish to disseminate their findings. They may choose one or more ways to share what they have found.

METHODS OF DISSEMINATION

Often the most common way of disseminating findings is that a researcher will write up their research findings for publication.[2] They will need to decide what publication will work best to share their work with an appropriate audience. A researcher may choose to get their research published within an academic journal and will need to consider which journal. This could be through the subject of the journal (i.e whether it lends itself to midwifery or psychology), or perhaps a type of research being qualitative or quantitative.[3] Another factor that may influence the decision of which journal to publish research in, is the impact factor of the journal. Typically, the higher the impact factor, the greater the regard of the journal and therefore the more likely the work will be accessed.[2] However, this can make it more difficult to get the work published within, and researchers must ensure that their submitted work complies with the publisher's guidelines.[2] Sometimes researchers may even choose to publish their work in an Open Access journal to allow the article to be read by anybody without restrictions of access to the journal.[2] When writing for publication, it can be difficult to publish the research in its entirety due to the word counts that the journals will set. Depending on the type of research, this can be difficult to represent all the research in one journal article. You may see that researchers will publish different aspects of the research within different journals. Additionally, referring back to one of the papers we used earlier in the series, Sosa, Crozier and Stockl,[4] published one section of their findings within this article. These are findings from Georgina Sosa's PhD. Sosa's thesis has been published online in its entirety, in addition to the articles, allowing you to see the entire research, which is 411 pages showing the difficulties of publishing the findings in an article alone.[5] Completing a midwifery degree, masters or PhD requires a final dissertation or research to be submitted. Students may not consider that they could publish their dissertation findings. However, many should think about disseminating their hard work to a wider audience and we hope these articles help inspire you to do so.

Chenery-Morris (2021), one of the authors of this research series, has recently had her thesis from her PhD published as a book. The book explores her research into grading student midwives' practice. It shows how the research was conducted in detail, from initially devising the research question, the literature review, through to the methodology, the sampling, gaining ethical approval and the way in which the data was analysed. This allows you to clearly follow the research process that was used. From her findings, she is then able to make recommendations for practice, which she has considered in line with current guidance and practice; this is also an essential part.

Diagram 1 **An ethical imperative to disseminate research once the study is complete**



> *One of the benefits of the personal approach to disseminating research, whether this is via social media, a webinar or conference, is the ability of the audience to ask questions and engage with the methods as well as the findings*

Another common way of disseminating research findings can be presenting at a conference. This can be an oral presentation or a conference poster.[2] Examples of these you may be aware of are the Royal College of Midwives annual conference and the International Confederation of Midwives Triennial conference. There are education conferences and many more. These conferences are filled with speakers sharing the findings of their research. The poster presentations are usually displayed around the venue for you to read during the breaks. These often enable intimate discussions with the researcher and/or the presenter may undertake a short five-minute presentation.[3] Researchers usually submit an abstract, summarising their research, which is subject to a peer-review process, to then be selected to present at the conference.[2]

We referred to a journal article that Feeley[7] published earlier on in this series exploring freebirthing. Within this article, she highlights the importance of dissemination of her research findings explicitly stating it was important to provide voices to those women who freebirth, to raise awareness of the complex nature of decision making in these scenarios to maternity care professionals, as well as to create some evidence-based information, should a woman disclose that she wishes to freebirth.[7] She outlines ways that she has disseminated her research, which include publications of articles,[7] one of these being open access, as well as a creation of a blog. Additionally, she recognises that qualitative research can be critiqued in how likely it is to influence practice.[7] During March and April 2021, she has been holding webinar series to look at how NHS midwives support and facilitate birth outside the guidelines sharing the findings from her PhD. Tickets have been sold online for this virtual event, meaning people nationally and internationally could join these webinars and learn from the findings to support their own practice.

Other methods of dissemination could be through the use of media and, more recently, the increasing use of social media, as well as podcasts, videos or even education materials.[3] One of the benefits of the personal approach to disseminating research, whether this is via social media, a webinar or conference, is the ability of the audience to ask questions and engage with the methods as well as the findings. It is from this discussion that knowledge is understood, shared and sparks others' interest. The process of asking questions about research should happen regardless of the method in which the study is shared. The term often used for questioning research findings that you are probably aware of is 'critiquing the literature'.



CRITIQUING RESEARCH

It is essential that as you read research, you need to be able to assess the quality of the research itself. The aim of critiquing research is to identify the strengths and weaknesses of each study and the way in which it was conducted.[8] You may have noticed that systematic Cochrane reviews, or National Institute for Health and Care Excellence (NICE) guidelines, refer to the quality of the research that informed their overall findings. A way that you can critique research can be through the use of a critical appraisal framework that asks a series of questions to assess the value of the research. An example of these tools is on the Critical Appraisal Skills Programme website,[9] although these can be found in research textbooks, too. Questions these include are whether there was a clear aim relevant to practice, whether the methods were rigorous, and if ethical principles were maintained.[3] We encourage students to use these critical appraisal framework tools when writing their dissertations to consider the quality of the research they collate for their literature reviews. The table below shows some of the words that we may use when evaluating the quality of research in both qualitative and quantitative research.

Table 1 **Evaluation of research terms**

Traditional criteria for evaluating research, usually associated with the quantitative paradigm	**Alternative criteria for qualitative research**
Validity: internal and external	Credibility or authenticity
Generalisability	Transferability
Reliability	Dependability
Replicability	No need to replicate as each interpretation valid and no two researchers will come to the same findings
Objectivity	Confirmability

Although some of these terms noted above can be used interchangeably across qualitative and quantitative research, these are where they are most commonly associated. Quantitative research often aims to be more objective and take a scientific approach and considers the reliability and validity as part of their essential criteria.[8] Reliability considers the consistency of the data collection tool, questioning whether it is measuring what it is supposed to, while validity is slightly more complex and considers whether the tool is really measuring what it is intending to measure.[8] In contrast, qualitative research is thought to have greater subjectivity and instead assesses the overall trustworthiness of the findings, which includes its assessment of all those terms outlined above. Credibility is a key component of this, which is assessing that the findings should represent those experiences of the participants. Steps within the overall research process can increase or decrease the overall quality of the research.

LINKING RESEARCH TO A WIDER BODY OF KNOWLEDGE

When reading the final research report, you will often find a discussion section. This is where the study in question links to the wider body of evidence and it is in this process that rigour is demonstrated. The researcher will recognise how their findings link to other existing research. No research sits alone; it should be situated and it is the rich tapestry of other findings and complex considerations that make research so interesting, especially within the qualitative paradigm. As students, the final module many undertake is a dissertation. The point of any dissertation, whether it is a primary research study or secondary literature review, is to compare and contrast the work of others, so that the researcher situates their work within this wider body of knowledge. Once students and midwives engage with the work of others and disseminate their findings, they really can be said to be shaping practice.



“No research sits alone; it should be situated and it is the rich tapestry of other findings and complex considerations that make research so interesting”

IMPLEMENTING RESEARCH INTO PRACTICE

The Nursing and Midwifery Council (NMC) Code[10] states that a midwife must always practice in line with up-to-date evidence. There is then a term often used that midwives and nurses must adopt: 'evidence-based practice'. This is a term that means that any decision making for providing care should be conducted by healthcare professionals, to ensure that they are using the latest research, that their decisions are appropriate and cost-effective, and will result in positive outcomes.[8] Another essential part of evidence-based practice is that the midwife will take into account the patient views and use their own clinical judgement.[3] Consequently, as new research becomes available, healthcare professionals will need to look at implementing this into practice. This needs to be carefully thought out to ensure it can be implemented effectively. There are a variety of considerations that need to be explored before implementing research findings into practice. These include: whether there is a gatekeeper; what the time costs and money are; the people that it will affect; the people who will need to be involved to implement it; and what needs to be done for it to be successful.[2] All of these issues could lead to potential challenges and barriers to implementation if not considered and planned effectively. With an appropriate strategy, changes can be made in practice and these should be evaluated to check for their effectiveness.

> *"'Evidence-based practice' is a term that means that any decision making for providing care should be conducted by healthcare professionals, to ensure that they are using the latest research, that their decisions are appropriate and cost-effective, and will result in positive outcomes"*

CONCLUSION

A final point that is important to recognise is that, although research will be carried out, there will often be a delay before this research will be implemented in practice. If you consider that first the research may need to be submitted for final work such as a dissertation, a master's project, or a thesis of a PhD, there may be a delay for this to be marked. Or, if the research is carried out in practice, there could be a delay of collecting and analysing the findings. If we consider COVID-19 as an example of this, there is still a lot unknown about this virus where research is being conducted, but not yet on a large enough scale to be able to analyse and publish the findings. Although the next step is for the researcher to disseminate their findings, it may take them a while to prepare this for publication or a presentation, which will be subject to a peer-review process. This means that, again, there is a delay before these findings are even available to a wider audience. Therefore, it is important to remember that there is what can be referred to as a research gap, or research lag, and that the point of dissemination can be even years after the research, and the implementation even longer after this. So, doing research and keeping up to date with research is always an ongoing process and will be forever embedded in the life-long learning of a midwife. And that concludes the series! We hope that you have found this research series useful in helping you to understand research and perhaps even inspired you to complete your own.

REFERENCES

1. Ellis P. Understanding Research for Nursing Students. 4th ed. Los Angeles: Learning Matters; 2018.
2. Harvey M, Land L. Research Methods for Nurses and Midwives Theory and Practice. Los Angeles: Sage; 2018.
3. Moule P, Aveyard H, Goodman M. Nursing Research An Introduction. 3rd ed. Los Angeles: Sage; 2017.
4. Sosa G, Crozier K, Stockl A. The experiences of midwives and women during intrapartum transfer from one-to-one midwife-led birth environments to obstetric-led units. Midwifery. 2018; 65:43-50.
5. Sosa G. Midwifery one-to-one support in labour: Ethnographic study of midwife-led birth environments. [Doctoral thesis]. UK: University of East Anglia; 2017.
6. Chenery-Morris S. Grading Student Midwives' Practice. A Case Study Exploring Relationships, Identity and Authority. Abingdon: Routledge; 2021.
7. Feeley C. Freebirthing a case for using interpretative hermeneutic phenomenology in midwifery research for knowledge generation, dissemination and impact. Journal of Research in Nursing. 2019;24(1-2):9-19.
8. Polit D, Beck C. Essentials of Nursing Research. Appraising Evidence for Nursing Practice. 9th ed. Philadelphia: Wolters Kluwer; 2018.
9. CASP. CASP Checklists. https://casp-uk.net/casp-tools-checklists/. Published 2020. Accessed March 22, 2021.
10. Nursing and Midwifery Council. The Code. Professional Standards of Practice and Behaviour for Nurses, Midwives, and Nursing Associates. https://www.nmc.org.uk/globalassets/sitedocuments/nmc-publications/nmc-code.pdf. Published 2018. Accessed March 22, 2021.

Chapter summary

Key learning points



The future of the midwifery profession holds many exciting opportunities for those looking for new challenges and aspiring to make a difference. Apart from clinical practice, midwives can now enjoy a multitude of career avenues within the profession, which offer alternative pathways to having an impact.

This article explores how academic midwifery practice can instigate wide-ranging transformations and challenge the status quo, via research, evidence, leadership and mentorship. I also outline support and advice to those midwives looking to publish their own work and share evidence-based practice with a global audience.

ACADEMIC MIDWIFERY:

A DIFFERENT PATHWAY TO IMPACT

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MIDWIFERY CAREER OPPORTUNITIES

The future of midwifery is currently under consultation, and midwives across the United Kingdom are being asked what midwifery should look like in 2030. This is an exciting prospect for midwifery because, apart from clinical practice, the future midwife will be encouraged to build a lifelong career in the following areas:

- Education
- Research
- Management
- Leadership
- Policy

With new careers come new opportunities, and midwives may revalidate to renew their registration with the Nursing and Midwifery Council (NMC) in the following areas of practice, in addition to providing direct clinical care:

- Commissioning
- Consultancy
- Education
- Management
- Policy
- Quality assurance
- Inspection
- Research

For midwives looking for a new challenge, opportunity knocks, and midwifery educators will be preparing students to take on these new opportunities, should they so wish. Whilst midwives delivering clinical maternity care focus on one childbearing person and their family at a time, these other areas of practice may allow the midwife to have an impact on a much larger scale. To illustrate this here, I put forward the story of my own professional journey to becoming an academic midwife, coupled with a few such impact stories.

ROCKY BEGINNINGS

I have wanted to become a midwife since the age of four, when my baby brother entered the world. It is not just my profession; I consider it to be a part of who I am. Following the completion of a bachelor's degree, I took direct entry into midwifery practice, and some of my early experiences allowed me to practise in both the Gambia and Ethiopia, as well as in the United Kingdom. Eager to contribute to excellence in maternity services from a senior level, I went on to complete an MSc in Leadership for health and social care, after which I hoped to deliver on innovative projects to enhance the quality and safety of services. However, two newly diagnosed health conditions meant that my future professional career and fitness to practise then became uncertain.

Though these times were turbulent, they allowed me to sit back and reflect on what I really wanted out of my midwifery career and how I could best support excellence in the profession. I have always had a thirst for knowledge and been eager to seek out new challenges. As such, I decided that a PhD in the field of midwife wellbeing and an advanced diploma in global leadership would focus my mind and channel my passions. Once I started to work in these new and like-minded academic circles, I really began to thrive. I am now highly motivated by the changes that academic work can make, on a much broader scale. I am also keen to mentor others motivated to join the world of academic midwifery.

HOW MUCH OF A DIFFERENCE CAN YOU REALLY MAKE IN ACADEMIA?

Midwifery practice is evidence based. Therefore, any new evidence generated and published has the power to influence maternity services worldwide. Part of my job is to identify where the gaps in the evidence and literature lie, and where a difference can be made. This task is made easier by working collaboratively with interdisciplinary teams.

CASE ONE

As active users of social media, myself, Dr Gemma Pearce (a psychologist) and Dr Emma Reinhold (a General Practitioner [GP]) observed that many women with hypermobile Ehlers Danlos

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syndrome were identifying online that childbearing was key in exacerbating their condition. These discussions were accompanied by concerns that maternity staff were ill-equipped to meet their needs. Consequently, my colleagues and I pulled together a review of the evidence, and published care considerations to support the evidence-based decision making of both service users and staff (Pezaro et al 2018a). This article has since been downloaded over 14,000 times. The difference it has made can be evidenced by the collection of over 60 impact stories.

"I gave this to my consultant when I was pregnant earlier in the year. The article was put at the front of my notes, and I think it definitely helped with my care."

"It enabled more sensitive care and a timely and appropriate referral to the pain team. I printed it off to share with colleagues, including student midwives, to learn from."

"I'm showing this to my GP tomorrow. It's the first time since the birth of my daughter, and diagnosis five years ago, that I've felt it possible to consider having the second child I've longed for. I didn't have the knowledge to advocate for proper care, now I do, thanks to new research."

"I think this paper has made a huge difference, as my daughter was able to take this with her into hospital to support her birth plan. She had a major haemorrhage and extensive tearing plus multiple other complications. She was taken very seriously by midwives and obstetricians. Thanks so much"

CASE TWO

Patient and public involvement (PPI) in research is important, as it can provide researchers with insights into what it is like to live with a particular health condition. Such insights can help to make health research more relevant to those who will benefit from it. In developing an online intervention designed to support midwives in work-related psychological distress, myself, Dr Gemma Pearce and a fellow academic midwife, Dr Elizabeth Bailey considered that it may have been useful to include midwives in PPI activities, as they were to be the intended recipients of the intervention proposed. Yet we could not include midwives in these PPI activities, due to them having a professional role in health and social care services. Nevertheless, as midwives were the intended end users and direct beneficiaries of the intervention proposed, we argued that they should not be excluded from PPI activities simply on the basis of them treating patients (Pezaro et al 2018b). This published academic debate was used as a case study to spark deliberations about changing INVOLVE policies about staff being included in PPI activities where they are identified as 'end users'.

Other collaborative research projects, along with reviews of the literature, can also inform key recommendations for employers in maternity services. For example, in working with colleagues from the Royal College of Midwives (RCM) to explore the topic of workplace support for staff experiencing domestic abuse, newly formed recommendations could be published to enable maternity service managers and NHS trusts/boards to more effectively support staff experiencing domestic abuse (Pezaro et al 2018c).

Similarly, quotes from a literature review exploring work-related psychological distress in midwifery populations (Pezaro et al 2015) were used to provide guidance to Heads of Midwifery in an RCM publication on work-related stress (RCM 2016).

Academic midwives can also positively influence the direction of midwifery research, and mentor others, as part of editorial boards – along with key stakeholder and steering groups. I do this via those associated with the Mary Seacole Awards and a variety of academic journals.

HOW CAN I PUBLISH MY OWN WORK?

Many job specifications for leadership and consultant-midwife roles now require applicants to have published academic articles. Additionally, if you are doing something special, then it makes sense to share best practice in an academic article. Moreover, if you are



reviewing the literature for yourself on a certain topic, why not save another midwife the trouble and publish a review of that literature for all to see?

Ten top tips for publishing:

1. Ensure that what you want to publish is unique in some way.
2. Start drafting your work early. Articles generally require many edits and re-writes.
3. If you want to publish your dissertation/final project, prioritise passing your course first.
4. Collaborate with co-authors. Input from others generally strengthens the piece overall.
5. Identify other successful articles and journals for ideas on how to model your own piece for publication.
6. Use author guidelines and checklists to structure your article.
7. Prepare yourself for rejections and resubmissions. This is all part of the journey.
8. Once you publish your work, take opportunities to share it with the wider community.
9. Think about what pathways there might be to promulgate your work and heighten its impact.
10. Identify follow-on research questions. Why stop at answering only one?

I am always keen to act as a co-author to support others in publishing their work. If this is something that you are keen to do, please get in touch via *The Practising Midwife.*

HOW CAN I BECOME AN ACADEMIC MIDWIFE?

As an academic midwife working in a university, I have the privilege of working with many inspiring people. Academic midwifery also affords me the opportunity to inspire and guide students in their quest to achieve great things. However, linking with a university isn't the only way to go. Clinical academic career options are also available via Health Education England (HEE) and through the National Institute for Health Research (NIHR). You may also be able to join a research team associated within other NHS organisations. Opportunities for PhD studentships are usually advertised by universities, and I share as many opportunities as I can via 'The Academic Midwife' Facebook page.

In 2017 I wrote an article for *The Conversation* highlighting seven things that the general public may not know about midwives (Pezaro 2017). It is important to remember that midwives don't just catch babies. There is a world of opportunities out there for the midwifery profession to promote excellence in maternity services. I would encourage all midwives to identify where they themselves can thrive and lift one another up as they rise. I am eternally grateful to the mentors and collaborators who enabled me to flourish. I hope to continue to support others in the same way. **TPM**

> *"Patient and public involvement in research is important, as it can provide researchers with insights into what it is like to live with a particular health condition"*



REFERENCES

Pezaro S (2017). Oh baby: seven things you probably didn't know about midwives, London: The Conversation.

Pezaro S, Clyne W, Turner A et al (2015). 'Midwives overboard! Inside their hearts are breaking, their makeup may be flaking but their smile still stays on'. Women and Birth: Journal of the Australian College of Midwives, 29(3): 59-66.

Pezaro S, Pearce G and Reinhold E (2018a). 'Hypermobile Ehlers-Danlos Syndrome during pregnancy, birth and beyond'. British Journal of Midwifery, 26(4): 217-223.

Pezaro S, Pearce G and Bailey E (2018b). 'Childbearing women's experiences of midwives' workplace distress: patient and public involvement'. British Journal of Midwifery, 26(10): 659-669.

Pezaro, S, Fyle J, Bourke G et al (2018c). Safe places? Workplace support for those experiencing domestic abuse. A survey of midwifery leaders, midwives and maternity support workers, London: RCM.

RCM (2016). Work-related stress. Equality and diversity guidance publication, London: RCM.

Chapter summary

Key learning points


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LEARNING • SHARING • CARING