

Midwifery and Obstetrics - March 2025



Figure 1 NHS Lanarkshire Logo

Figure 2 NHS Tayside Logo

1st Edition

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We are not specialists in your domain, please remain critical and use your professional knowledge to assess the validity of sources recommended here. We are very happy to receive feedback, our details can be found at the end of this document.

The following 19 articles were found using The Knowledge Network. For training opportunities on finding/using and assessing literature, please contact your local library service.

Note: The information selected for this Current Awareness Bulletin was assessed and selected by a librarian. Google Gemini 2.0, a Large Language Model, was used to provide clearer and more concise abstracts for the research articles. If you would like to know more about that process than please get in touch.

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General resources/news

DHSC has launched a series of campaign resources to encourage maternal vaccinations in collaboration with NHS England. They are NHS branded and can be used in Scotland: You can find the resources here (requires an account to download):

Department of Health and Social Care (England, 2025) [Maternal vaccinations \(RSV, pertussis and flu\) | Campaigns | Campaign Resource Centre](#) (Last Accessed 04/03/2025)

SIGN (Healthcare Improvement Scotland, 2024) updated their guideline for [management of diabetes in pregnancy](#). (Last Accessed 04/03/2025)

The UKHSA provides a regular update for the 'routine immunisation schedule'. The most recent update can be found here:

UK Health Security Agency (2025) *Complete routine immunisation schedule from 1 January 2025*. Available at: <https://www.gov.uk/government/publications/the-complete-routine-immunisation-schedule/the-complete-routine-immunisation-schedule-from-february-2022> (Last Accessed 04/03/2025)

Research articles (With abstract)

1. **Alhulaibi, W., et al. (2025)** '[A Systematic Review to Explore Antenatal Care from the Perspectives of Women with Intellectual Disabilities and Midwives](#).' *British Journal of Learning Disabilities* 53(1), 87–102.

"This systematic review examined the experiences of pregnant women with intellectual disabilities and the midwives who provide their antenatal care, synthesizing data from eight studies (2012-2022). Women reported challenges regarding pregnancy disclosure, participation in care decisions, and anxieties surrounding child custody. Midwives expressed feelings of unpreparedness and identified a need for enhanced training in specialized care and communication. Both groups emphasized the importance of accessible information and improved educational resources. The findings highlight a disparity between the needs of pregnant women with intellectual disabilities and the current preparedness of midwifery professionals, indicating a need for targeted interventions to improve antenatal care delivery."

2. **Beck, S., et al. (2025)** '[Development of the Team Evaluation and Assessment Measure Quality Improvement \(TEAM-QI\) and Proof-of-Concept Testing in Maternity Teams](#).' *Nursing & Health Sciences* 27(1), e70049

"This study adapted an oncology team quality improvement program for broader clinical application, focusing on maternity care. Employing a complex adaptive systems framework, the research involved: (1) stakeholder consultations, a rapid review of existing interventions, and mapping program content to established team effectiveness

models; (2) feasibility and acceptability testing of a team questionnaire within four maternity teams. Stakeholder consultations emphasized non-punitive, continuous team assessment and comparative performance analysis across teams. Program content aligned with key components of team effectiveness. The questionnaire demonstrated acceptable internal consistency (Cronbach's $\alpha = 0.79-0.92$). Participants reported benefits in identifying improvement priorities (76.9%). While preliminary proof of concept was established, further large-scale evaluation across diverse clinical settings is recommended."

3. **Bunyan, C., and Wareing, M. (2025) [Practice supervision in the maternity setting](#). 1st edn. pp. 139–151. United Kingdom: Routledge**

"This chapter provides guidance for midwives and maternity care professionals, with relevant sections applicable to broader healthcare practitioners, on effective student/apprentice supervision. Aligning with NMC standards, it emphasizes the role of clinicians in fostering student development and ensuring future excellence in patient care. Through reflective practice, scenario analysis, and discussion of supportive strategies, this chapter aims to equip clinicians with the tools to guide student learning and contribute to the development of competent healthcare professionals."

4. **Chenery-Morris, S., and Divers, J. (2025) ['Is the Midwifery Profession Academic enough?'](#) *British Journal of Midwifery* 33(1), 38–44**

"This is the final article in a series of six inspired by themes arising from the Royal College of Midwives' state of midwifery education report. The series has explored the current landscape and challenges in educating the future midwifery workforce, particularly those that relate to the higher education workforce itself. This article considers the academic level of the midwifery profession. The decreasing number of midwifery professors in higher education was noted in the Royal College of Midwives' report. This article explores how relatively recent regulatory changes may have decreased opportunities for registered midwives to advance their academic qualifications and contribute to the professional knowledge base. It also examines how midwives can be better supported to undertake additional academic qualifications and research, whether they work in practice or higher education."

5. **Chung, Y., et al. (2025) ['The Association between Periconceptual Maternal Dietary Patterns and Miscarriage Risk in Women with Recurrent Miscarriages: A Multicentre Cohort Study.'](#) *BJOG : An International Journal of Obstetrics and Gynaecology* 132(4), 504–517.**

"This prospective, multicenter cohort study (n=1035) investigated the association between periconceptual maternal diet and miscarriage risk in women with recurrent miscarriages. Dietary data from a 10-item Food Frequency Questionnaire were analyzed using multivariable Poisson regression for individual food categories and ordinal

principal component analysis (PCA) for whole diet patterns. Results indicated that higher consumption of fruits (RR 0.66, 95% CI 0.51-0.85, $p=0.001$) and nuts (RR 0.73, 95% CI 0.54-0.98, $p=0.039$) was associated with a reduced risk of miscarriage. Conversely, high red meat intake showed a potential increased risk (RR 1.86, 95% CI 1.10-3.16, $p=0.022$). Associations with other food groups were inconclusive. PCA identified three dietary patterns, but no significant relationship with miscarriage risk was observed. The study concludes that a maternal diet rich in fruits and nuts is associated with a decreased risk of miscarriage in women with recurrent pregnancy loss."

6. **Didier-Mathon, H., et al. (2025) 'Risk Factors for Complete Uterine Rupture in Patients with Trial of Labor After Cesarean Delivery.' *Acta Obstetrica Et Gynecologica Scandinavica* 104(2), 380–388**

"This 16-year retrospective multicenter case-control study ($n=48,124$) evaluated uterine rupture incidence and risk factors in women attempting vaginal birth after caesarean (VBAC). Among a population with a 65.8% VBAC attempt rate and 0.63% uterine rupture frequency, prior vaginal delivery was associated with a reduced risk of rupture, while labour induction increased the risk. In spontaneous labour, a low Bishop score (<6), cervical dilatation arrest, and oxytocin augmentation were identified as risk factors. In induced labour, no specific factors were significantly associated. These findings emphasize the importance of meticulous labour management, especially in women undergoing VBAC, and highlight the differential risk profiles between spontaneous and induced labour."

7. **Fain, A. C., et al. (2025) 'Trait Mindfulness in Early Pregnancy and Adverse Perinatal Outcomes: A Prospective Cohort Study.' *BMC Pregnancy and Childbirth* 25(1), 64–7.**

"This secondary analysis of a prospective cohort study ($n=281$) investigated the association between trait mindfulness, assessed using the Mindfulness and Attentive Awareness Scale, and adverse pregnancy outcomes in nulliparous women. Adjusting for covariates, participants in the second and third quartiles of trait mindfulness demonstrated significantly lower rates of unplanned cesarean delivery (CD) compared to the fourth quartile (aOR Q2 0.42, 95% CI 0.20-0.87; aOR Q3 0.23, 95% CI 0.10-0.51). No significant associations were observed between trait mindfulness quartiles and gestational diabetes, hypertensive disorders of pregnancy, or a composite neonatal morbidity outcome. These findings suggest that moderate levels of trait mindfulness may be associated with reduced CD rates in nulliparous individuals. The study highlights the potential importance of active mindfulness practice, rather than solely trait mindfulness levels, in influencing perinatal outcomes."

8. **Humphreys, A., and Ranganathan, M. (2025) '[A Qualitative Exploration of Midwives' and Ambulance Clinicians' Experiences Working Together.](#)' *British Journal of Midwifery* 33(2), 92–100.**

"This study explored the views and experiences of midwives and ambulance clinicians regarding pre-hospital emergency maternity teamwork. Utilizing focus groups and in-depth interviews with 30 London-based clinicians, thematic analysis, informed by grounded theory, identified key factors influencing team effectiveness. Three overarching themes emerged: the significance of the patient environment, achieving a shared mental model, and interpersonal dynamics. Challenges included conflicting priorities and role ambiguity, while civility and multidisciplinary training facilitated effective collaboration. The findings highlight the need for enhanced interprofessional understanding and collaboration between acute and ambulance trusts, emphasizing multidisciplinary training and leadership that acknowledges diverse professional roles to improve patient safety in pre-hospital maternity emergencies."

9. **Jauniaux, E., et al. (2025) '[The Placenta and Umbilical Cord in Prenatal Care: Unseen, Overlooked and Misunderstood.](#)' *BJOG : An International Journal of Obstetrics and Gynaecology* 132(1), 12–14.**

"Anomalies of the placenta and umbilical cord can be readily screened for antenatally during the 20-week detailed fetal ultrasound examination. Prenatal diagnosis of these anomalies is crucial for preventing perinatal morbidity and mortality in both mothers and infants. However, a review of available obstetric ultrasound courses and training programs revealed a lack of dedicated sessions on placental and umbilical cord examination, whether online or hands-on. Furthermore, this topic receives only cursory mention in obstetric sonographer and Maternal-Fetal Medicine (MFM) subspecialty training. To mitigate the adverse impact of these anomalies on pregnancy outcomes, it is essential to integrate comprehensive training on placental and umbilical cord assessment into MFM and obstetric sonographer curricula. Standardized reporting protocols, including the use of transvaginal sonography (TVS), should also be implemented for these conditions."

10. **Johnson, S., et al. (2025) '[Biopsychosocial Approaches for the Management of Female Chronic Pelvic Pain: A Systematic Review.](#)' *BJOG : An International Journal of Obstetrics and Gynaecology* 132(3), 266–277.**

"This systematic review examined biopsychosocial interventions for chronic pelvic pain (CPP) to inform guideline implementation. A comprehensive search of seven databases identified 14 RCTs (n=871) evaluating Acceptance Commitment Therapy (ACT), Cognitive Behavioral Therapy (CBT), mindfulness-based approaches, and physiotherapy-based interventions. Pain science education (PSE) and engagement in valued activities were common components. All studies reported improvements in pain

reduction and emotional functioning, though heterogeneity in outcome measures precluded direct efficacy comparisons. Six studies exhibited high risk of bias. Results suggest that CBT and ACT-based interventions effectively reduce pain and improve psychological outcomes in CPP. The importance of PSE and activity engagement was highlighted. Future trials should address outcome heterogeneity for improved comparative effectiveness."

11. Jones, R. P. (2025) '[Capacity Planning \(Capital, Staff and Costs\) of Inpatient Maternity Services: Pitfalls for the Unwary.](#)' *International Journal of Environmental Research and Public Health* 22(1), 87.

"This study examines inpatient resource planning for maternity services, focusing on bed capacity, staffing, and costs from a patient-centered perspective. It addresses the challenges of predicting birth rates and length of stay trends, and the implications for discharge planning. Utilizing the Erlang B equation, the paper analyzes optimal bed occupancy and turn-away rates, revealing significant variability in maternity units. It explores the limitations of community-based schemes due to economies of scale, and critiques the common misconception that reducing length of stay invariably reduces costs. The study highlights the 'fixed costs dilemma,' where a substantial portion of maternity costs are attributed from hospital overheads, beyond departmental control. Furthermore, it demonstrates how premature discharge, driven by turn-away, can shift costs to pediatric and neonatal departments through readmissions. The paper provides examples from the English NHS illustrating the potential for misdirected policy to create unintended consequences in maternity care resource allocation."

12. Liu, D., et al. (2025) '[The Effect of Physical Activity on Sleep Disorders in Pregnant People: A Meta-Analysis of Randomized Controlled Trials.](#)' *BMC Pregnancy and Childbirth* 25(1), 139–14.

"This meta-analysis (18 studies, n=1541) evaluated the impact of physical activity (PA) interventions on sleep disorders in pregnant individuals. A systematic review of seven databases identified randomized controlled trials comparing PA interventions to control conditions. Meta-analysis using a random-effects model demonstrated a significant reduction in sleep disorders with PA interventions (SMD -1.48, 95% CI -2.06 to -0.90, $p < 0.00001$). Subgroup analyses revealed that intervention characteristics (duration, delivery method, activity type) and participant characteristics (complications) influenced treatment effect. These findings support the efficacy of PA interventions for improving sleep in pregnancy and highlight the importance of tailoring interventions to individual needs."

13. Maniaci, A., et al. (2025) '[The Interplay between Sleep Apnea and Postpartum Depression.](#)' *Neurology International* 17(2), 20.

The complicated association between sleep apnea and postpartum depression (PPD), two diseases that can have a major influence on a mother's health and well-being, is examined in this thorough review. An increasing number of people are realizing that sleep apnea, which is defined by repeated bouts of upper airway obstruction during sleep, may be a risk factor for PPD. The literature currently available on the frequency, common risk factors, and possible processes relating these two disorders is summarized in this study. We investigate the potential roles that sleep apnea-related hormone fluctuations, intermittent hypoxia, and fragmented sleep may play in the onset or aggravation of PPD. We also talk about the difficulties in identifying sleep apnea in the postpartum phase and how it can affect childcare and mother-infant attachment. The evaluation assesses the effectiveness of existing screening techniques, available treatments, and how well they manage both illnesses at the same time. Lastly, we identify research gaps and suggest future lines of inquiry to enhance maternal health outcomes.

14. Medford, E., et al. (2025) '[The CASPAR Study Protocol. can Cervical Stiffness Predict Successful Vaginal Delivery After Induction of Labour? a Feasibility, Cohort Study.](#)' *PloS One* 20(1), e0311324.

"This feasibility study, CASPAR (NCT05981469), investigates the potential of the Pregnoia System, an objective cervical stiffness measurement device, to predict vaginal birth following induction of labor (IOL) in primiparous women. Current IOL practices utilize the subjective and limited Bishop's Score (BS), resulting in a high rate of cesarean sections. CASPAR will assess cervical stiffness using the Pregnoia System's Cervical Stiffness Index (CSI) prior to IOL and compare its predictive accuracy to the BS. Participant questionnaires will evaluate the acceptability of the device. This study aims to determine the feasibility of integrating the Pregnoia System into clinical practice for pre-induction cervical assessment and IOL outcome prediction. Recruitment rates and device acceptability will inform the design of a larger powered study. This research seeks to provide novel data for improving IOL prediction and transforming clinical practice."

15. Moscelli, G., et al. (2025) '[Staff Engagement, Co-workers' Complementarity and Employee Retention: Evidence from English NHS Hospitals.](#)' *Economica*, Vol. 92 Issue 365, pp. 42–83, 2025.

"This study examines the impact of non-pecuniary job factors on employee retention within English NHS hospitals, utilizing a comprehensive employee-level panel dataset. Employing dynamic panel data models and quantile regressions, the research investigates the roles of staff engagement and co-worker retention. Findings

demonstrate that increased nurse engagement significantly enhances nurse retention, with a spillover effect impacting doctor retention, particularly through the retention of experienced nurses. Managerial practices fostering effective communication, staff involvement, and responsive feedback mechanisms are positively associated with staff engagement. Notably, older nurse engagement is particularly sensitive to managerial support for health and wellbeing."

16. Nicholson, M. (2025) '[A Reflection on Masculinities and Maternity.](#)' *British Journal of Midwifery* 33(1), 45–49.

Midwives should provide family-centred care that extends to the partner, but evidence shows that feelings of exclusion, disempowerment and a perpetuation of unhelpful gender stereotypes are often experienced by partners. Despite this, there is limited research surrounding masculinities and maternity services. This reflection explores how engaging with a men's health charity challenged my perceptions on the role between masculinities and maternity services. Two analyses will be outlined, first exploring the reductive views of masculinities common in societal discourse, and second how maternity service provision interacts with these. This reflection interrogates approaches to practice through a lens that views toxic tropes of masculinities as products of societal conditions in order to explore the possibility of engaging with these in midwifery practice.

17. Warhurst, K., et al. (2025) '[Theory-Informed Refinement and Tailored Implementation of a Quality Improvement Program in Maternity Care to Reduce Unwarranted Clinical Variation Across a Health Service Network.](#)' *BMC Health Services Research* 25(1), 142–13.

"This study describes the development and implementation of PICNIC, a program designed to address unwarranted clinical variation within a multi-site maternity network. Employing a theory-informed approach, integrating implementation science and quality improvement methodologies, PICNIC utilized clinician-performed process auditing and evidence-based implementation strategies. The program engaged approximately 300 clinicians across five sites over four years, addressing 18 audit topics. Implementation strategies were mapped to the Behaviour Change Taxonomy and ERIC compilation. Results indicate that PICNIC facilitated clinician co-designed system-level improvements, enhancing evidence-based care delivery and potentially improving outcomes. This research demonstrates the feasibility of integrating implementation science and quality improvement to engage clinicians in reducing clinical variation and promoting behavior change. The replicability of this model across other disciplines and hospital networks warrants further investigation."

18. Weiß, D., et al. (2025) '[Radiation Exposure and Estimated Risk of Radiation-Induced Cancer from Thoracic and Abdominal Radiographs in 1307 Neonates](#).' *European Radiology* 35(1), 297–308.

"This retrospective study (n=3843) examined radiation exposure and potential cancer risk in neonates undergoing X-ray examinations. Among 1307 patients (34%) receiving X-rays, a negative correlation was observed between birth weight and the number of examinations. Mean cumulative dose area product (DAP) was 5.9 mGy*cm², and mean cumulative effective dose (ED) was 23.7 µSv. Premature infants, particularly those with birth weights <1000g, exhibited the highest cumulative ED and DAP (p<0.001). Thoracic/abdominal examinations contributed to the highest radiation exposure, especially in neonates <500g (p<0.001). While a correlation exists between immaturity and radiation exposure, overall exposure was minimal, with a decreasing trend in X-ray frequency. The study concludes that radiation risk is minimal for very low birth weight infants and negligible for others, supporting the continued use of conventional X-ray imaging in neonatal care."

19. Wood, C. M., et al. (2025) '[Enhancing Maternity Healthcare Workers' Wellbeing using Insider Participatory Action Research](#).' *BMC Health Services Research* 25(1), 188–16.

"This study employed Insider Participatory Action Research (IPAR) and positive psychology to enhance healthcare worker (HCW) wellbeing within a UK NHS labor ward. Through diverse qualitative methods (questionnaires, interviews, action groups), the research identified emotional, professional, and physical nourishment as key sources of workplace wellbeing. The IPAR process fostered a more compassionate and inclusive culture, improving morale and atmosphere. Observed changes included enhanced collegial support, improved teamwork, and proactive interventions for HCW and patient welfare. Participants attributed these improvements to the researcher's accessibility, increased wellbeing awareness, and strengthened relationships. The HEARS wellbeing intervention model (HCW-driven, Everyone-involved, Ask, Responses, Steps) was developed to guide similar initiatives. This study demonstrates the efficacy of IPAR in promoting HCW wellbeing and proposes the HEARS model and Colleague Support Volunteers as actionable strategies for improving wellbeing and retention in healthcare settings."

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