

Women's experiences of vaginal examinations in labour: a literature review

Abstract

Background/Aims Evidence for vaginal examinations to assess labour progress is inconclusive and indicates some negative psychological impacts for women. Understanding women's perceptions of vaginal examinations is essential to guide future clinical practice. This literature review aimed to explore women's experiences of vaginal examinations in labour.

Methods A comprehensive review of four databases was carried out, searching for publications made between 2012 and 2023. Findings were synthesised using thematic analysis.

Results Eight relevant papers were included. Four themes emerged: frequency of vaginal examinations, true, informed consent, emotional reactions and rapport building and humanisation.

Conclusions Negative experiences were associated with overuse and lack of properly informed consent. Positive experiences linked to continuity in carer. Further research into alternative ways of assessing labour progression to minimise non-clinically indicated vaginal examinations may improve women's labour experience.

Implications for practice There is a need for further education for healthcare professionals on ongoing informed consent, appropriate communication, the necessary frequency of vaginal examinations and avoiding desensitisation. Additional training should be well-established in hospitals to minimise exams when not clinically indicated.

Keywords

Childbirth | Evidence-based practice | Labour | Vaginal examinations | Women's experiences

Vaginal examinations are the most common intervention in labour (Pickles and Herring, 2020), and are historically embedded in maternity care (Downe et al, 2013; Shepherd and Cheyne, 2013; Shabot, 2021). Developed as a quantifiable measure for use in the 1950s alongside a partogram (Friedman, 1956), vaginal examinations are now used routinely by midwives and obstetricians to assess labour progression. They can also be used to confirm commencement of active labour, providing information on cervical dilation, effacement and position and descent of the presenting part of the fetus in the maternal pelvis (Downe et al, 2013; Moncrieff et al, 2022).

Global and national guidance currently recommends offering vaginal examinations at 4-hourly intervals in the active first stage of labour (National Institute of Health and Care Excellence (NICE), 2017; World Health Organization, 2021). However, this is based on limited and dated evidence (Moncrieff et al, 2022). Additionally, overuse of vaginal examinations has been consistently reported (Naughton, 2019; Shabot, 2021; Miller et al, 2022). This may have both a psychological impact on maternal mental health, inhibiting hormones involved in physiological labour progression, and can lead to overdiagnosis of labour dystocia, a delay in the progress of labour (Çalik et al, 2018). This can contribute to a cascade of unnecessary interventions (Downe et al, 2013; Hazen, 2017), potentially resulting in adverse maternal and fetal outcomes (Çalik et al, 2018). Research does not highlight any conclusive improved birth outcomes as a result of vaginal examinations (Downe et al, 2013; Naughton, 2019; Moncrieff et al, 2022). However, as studies have yet to produce high-quality evidence to support another method of assessment of labour progression, there has been minimal change in recent years (Moncrieff et al, 2022).

Enabling women's informed consent, is a central role of the midwife (Nursing and Midwifery Council, 2018; Pickles and Herring, 2020). However, over two decades ago, research highlighted the phenomenon of healthcare professionals seeking acquiescence in place of consent

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when the vaginal examination was unwanted (Ying Lai and Levy 2002; Lewin et al, 2005). If performed without consent, vaginal examinations have been documented in reports on obstetric violence (Perrotte et al, 2020). The '#MeToo' movement is a global campaign centralising empowerment of women and the rejection of sexual violence against females (O'Neil et al, 2018). It closely mirrors the abuse of power seen in unconsented vaginal examinations during childbirth (Hill, 2020). This highlights the societal and cultural relevance of current research in this area.

Despite recent prioritisation of women's rights, there has been minimal research into understanding women's experiences of vaginal examinations in labour (Downe et al, 2013; Shabot, 2021; Moncrieff et al, 2022). The aim of this literature review was to collate what is known about these experiences, raise awareness and identify any gaps in knowledge to prioritise future research or guide policy.

Methods

This systematic literature review was conducted with the aim of understanding women's experiences of vaginal examinations in labour. This approach was deemed appropriate as detailed reporting of the methods ensures high validity and replicability (Aveyard, 2019). Literature reviews play a fundamental role in synthesising research, identifying gaps in knowledge to facilitate future research and providing thematic development (Frederiksen and Phelps, 2017; Paul and Criado, 2020). The literature review was conducted following the steps outlined by Aveyard (2019).

Search strategy

A comprehensive literature search was performed, aided by the 'PEO' search strategy framework (Kahn, 2003), which identifies key concepts, focusing on population, exposure and outcome, as seen in *Table 1*. Relevant synonyms were considered, using medical and lay language to maximise retrieval of relevant literature (Bramer et al, 2018). Additionally, wildcards (#) and truncation (*) accounted for pluralisation and differing spellings (Davies, 2019). The Boolean operator 'OR' was inputted between synonyms; 'AND' was used to combine each PEO concept (*Table 1*).

While the search was conducted to explore experiences, which were likely to elicit mainly qualitative or mixed-methods studies, quantitative studies were not excluded if they fit the inclusion and exclusion criteria (*Table 2*). Research from the last 10 years was included to reflect the paradigm shift in women's empowerment following the global #MeToo movement in 2017 (O'Neil et al, 2018). The search was originally conducted in December 2022 and then repeated in December 2023 prior to publication, to

Table 1. Search terms by PEO framework

Search concepts		Search terms	Boolean operator
Population	Women in labour	Wom#n OR mother* OR primigravida* OR multipa* OR primipa* OR maternal OR intrapartum OR labo#r OR childbirth OR birth OR delivery	AND
Exposure	Vaginal examinations	Vaginal examination* OR vaginal assessment* OR cervical assessment*	AND
Outcome	Women's experience	Experience* OR perception* OR view* OR opinion* OR feeling* OR satisfaction OR attitude*	AND

Source: Kahn (2003)

Table 2. Inclusion and exclusion criteria

Inclusion	Exclusion
Global studies	Duplicated papers
English language	Not available in the English language
Primary research: quantitative, qualitative or mixed methods	Other systematic reviews
Women's experiences	Research that only explores the experiences of partners or other healthcare professionals
Published from 2012 onwards	Published before 2012
Vaginal examinations in labour or to confirm labour commencement	Vaginal examinations antenatally or postnatally

ensure all relevant research was included. No papers were removed at the point of updating the search, to retain the knowledge gained from the initial search. Only papers considering women's experiences were included, because of the directional interest of the research question. No studies were excluded based on geographical location, as although women's experiences may vary because of cultural and societal differences (Çalik et al, 2018), it was thought important to include all experiences collectively. Additionally, papers that considered vaginal examination antenatally or postnatally were excluded, as this review focused on labour care.

Four electronic databases were searched: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Medline, PsychInfo and Excerpta Medica database (EMBASE). Four databases were deemed suitable to acquire sufficient breadth of relevant primary research (Gusenbauer and Haddaway, 2020). The databases used also needed to be available to the author through the university library. Medline and CINAHL were selected

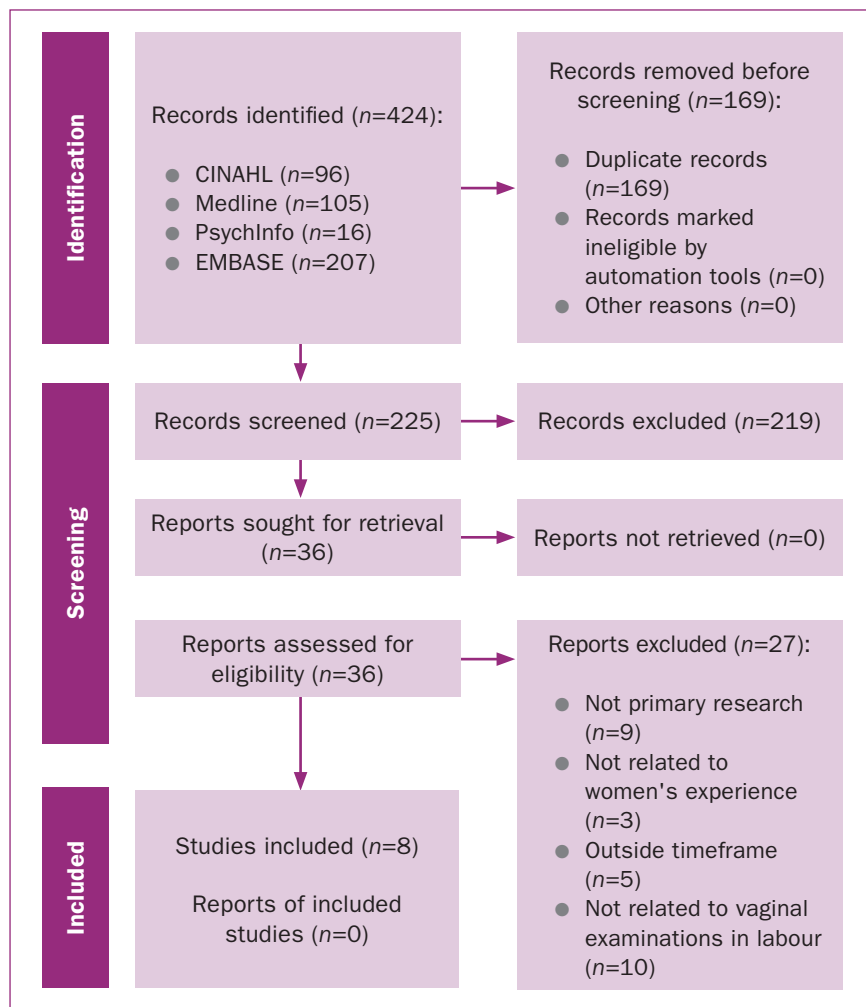


Figure 1. PRISMA diagram, taken from Page et al (2020)

for their large volume of medical- and life science-based research (Bramer et al, 2018; Davies, 2019). EMBASE was used because of its biomedical standing (Davies, 2019), while PsychInfo provided a social science perspective on women's experiences, potentially revealing a deeper understanding of the topic (Frederiksen and Phelps, 2017). The preferred reporting items for systematic reviews and meta-analysis diagram was used to direct and present the identification, screening and selection of papers (Figure 1).

Quality assessment

The studies were appraised using the Critical Appraisal Skills Programme (2018; 2020) tools for qualitative and randomised controlled trial designs and the British Medical Journal (2023) critical appraisal checklist for surveys, which was adapted for the four cross-sectional surveys (Cavaleri et al, 2018). Appraisal tools are essential in literature reviews as they systematically determine rigour and risk of bias (Noyes et al, 2018) to ensure the highest quality evidence is used in guiding clinical practice (Cavaleri et al, 2018).

Overall, the majority of studies met most of the appraisal criteria and were considered mid-high quality (Critical Appraisal Skills Programme, 2018; 2020; BMJ, 2023). No studies were excluded on the basis of the quality appraisal, however the appraisal informed interpretation of the findings, where studies measured the highest quality were considered first and those of lower quality were given less priority in the discussion (Cavaleri et al, 2018). The results of the quality appraisal are shown in Table 3.

Interpreting and synthesising findings

Data from the included studies were mainly qualitative, derived either from interviews or open-ended survey questions, with some quantitative data from closed survey questions and anxiety scales. Qualitative data were analysed first, generating initial codes inductively, before combining them into themes (Clarke and Braun, 2017). Related quantitative data that could explain or contradict the qualitative themes were coded and integrated to develop the themes further. This broadly followed Guest et al's (2012) explanatory sequential approach to integrating qualitative and quantitative data.

In total, 424 papers were retrieved and exported into EndNote, a reference management software. Following the removal of duplicates, 255 records remained. These were screened via title and abstract to determine relevance and a further 219 papers were excluded at this point, in line with the inclusion/exclusion criteria (Table 2). Following full-text review of 36 papers, eight were included in the final review.

Results

The studies included in this review were four cross-sectional surveys from Palestine, the Netherlands, Iran and Australia (Hassan et al, 2012; de Klerk et al, 2018; Dabagh-Fekri et al, 2020; Keedle et al, 2022), three qualitative studies, two from Turkey and one from Brazil (Teskereci et al, 2020; Yildirim and Çitak Bilgin, 2021; Rodrigues et al, 2022), and one randomised controlled trial from Turkey (Seval et al, 2016). The studies are summarised in Table 4.

Four key themes were derived from the data: frequency of vaginal examinations, true, informed consent, emotional reactions and rapport building and humanisation.

Frequency of vaginal examinations

Women reported high frequency of examinations in all but the randomised controlled trial. High frequency was defined as a vaginal examination more than every 2 hours (de Klerk et al, 2018), over five vaginal examinations during labour (Dabagh-Fekri et al, 2020) or by self-reported excess of vaginal examinations by

Table 3. Quality appraisal results

Reference	Quality appraisal
Dabagh-Fekri et al (2020)	High quality. Strengths: clear and focused aim, validated Likert scale, increasing validity and reliability Weaknesses: no qualitative/open responses to explore perceptions in depth, sample of only primiparous women from one hospital
Klerk et al (2018)	High quality. Strengths: Clear and focused aim, open and closed questions, sample included all parities, appropriate data analysis Weaknesses: questionnaire not piloted
Hassan et al (2012)	High quality. Strengths: clear and focused aim, questionnaire piloted, improving validity and reliability Weaknesses: only one public hospital
Keedle et al (2022)	High quality. Strengths: clear and focused aim, large sample size, qualitative responses aid understanding, questionnaire piloted Weaknesses: delivery over internet limited responses from those without access
Rodrigues et al (2022)	Mid quality. Strengths: clear aim, qualitative methodology appropriate, semi-structured interview allowed participants to guide interview Weaknesses: convenience sampling could cause self-selection bias
Seval et al (2016)	Mid quality. Strengths: clear and focused research question, those interpreting results blind to research arms, groups remained similar at start of trial Weaknesses: sample from one hospital only, unable to blind participants or investigators to trial arms
Teskereci et al (2020)	High quality. Strengths: clear aim, qualitative phenomenological methodology appropriate, semi-structured interview allowed participants to guide interview Weaknesses: women only 24 hours postpartum, could have needed time to recover from birth
Yildirim and Bilgin (2021)	Mid quality. Strengths: clear aim, qualitative methodology appropriate, semi-structured interview allowed participants to guide interview, triangulation of methods through observation of behaviour Weaknesses: relationship between researcher and participants not adequately considered

the women (Hassan et al, 2012; Keedle et al, 2022; Rodrigues et al, 2022). Yildirim and Çitak Bilgin (2021) highlighted that women reported vaginal examinations taking place as often as every 10–15 minutes. When describing the context in which their study was conducted, Hassan et al (2012) reported that midwives justified a high frequency of vaginal examinations in response to demand from women. However, only 3% of women who responded to the survey stated that this was true (Hassan et al, 2012).

Four studies suggested that women's experiences of vaginal examinations were influenced by how often they were performed (Hassan et al, 2012; de Klerk et al, 2018; Yildirim and Çitak Bilgin, 2021; Keedle et al, 2022). De Klerk et al (2018) found a significant correlation between the increased number of vaginal examinations and women interpreting negative experience, with the odds increasing by 31% for each

vaginal examination. This exemplifies the importance of reducing unnecessary examinations. Women also perceived that vaginal examinations were often not recognised as an intervention by professionals and instead felt they were being used for educational purposes (Keedle et al, 2022).

True, informed consent

Vaginal examination without consent was a major theme in Keedle et al's (2022) research on obstetric violence during childbirth. Lack of discussion prior to the procedure, failure to stop the vaginal examination following withdrawal of consent and additional unconsented procedures performed, such as manual stretch of the cervix or artificial rupture of the membranes, were highlighted by women as causes to why true informed consent was not received (de Klerk et al, 2018; Keedle et al, 2022). One woman reflected on her experience in line

Table 3. Data extraction table

Reference	Methodology and aims	Design	Sample and setting	Findings
Dabagh-Fekri et al (2020)	Quantitative cross-sectional study exploring Iranian women's perceptions of vaginal examinations during labour	Questionnaire (demographic and obstetric data). Experiences measured by 5-point Likert scale	200 primiparous women in teaching hospital in Tehran, Iran	Two thirds (62.9%) reported negative perception of exams. Significant relationship between perception of exam and perceived duration ($P=0.02$). Comfort with examiner increased perception of exam ($P=0.006$). One-person increase in number of examiners decreased perception of exam by 0.81 ($P=0.031$)
de Klerk et al (2018)	Mixed-methods cross-sectional study investigating women's experience of vaginal examinations during labour	Online survey, closed and open-ended questions	159 postnatal women in the Netherlands	Quantitative: 35.2% reported negative experience during labour, 41.7% examined more often in labour than advised by international guidelines (every 2–4 hours). Birthing at home had significantly less risk of negative experience compared to in hospital (odds ratio: 0.28; 95% confidence interval: 0.11–0.72; $P=0.01$). Number of exams during labour increased odds of negative experience (odds ratio: 1.3; 95% confidence interval: 1.1–1.5; $P<0.01$). Qualitative: exams triggered old trauma and dissociation from body. Quantity of exams felt like an unnecessary violation
Hassan et al (2012)	Mixed-methods cross-sectional study exploring women's feelings and experiences of vaginal examinations during childbirth	Semi-structured questionnaire delivered via face-to-face interviews	176 postnatal women in Palestinian public hospital	Quantitative: 36% received 'potentially high' number of exams during intrapartum care, 41% reported being examined by high number of providers. Exams significantly higher in primiparous than multiparous ($P=0.037$), 82% reported pain during exam. Qualitative: insensitive approaches by providers conducting exams, especially physicians. One case study identified staff inability to use non-latex gloves during exam even after disclosing an allergy. Primiparous women reported lack of awareness about exams and their use in labour
Keedle et al (2022)	Mixed-methods cross-sectional study exploring prevalence and experiences of obstetric violence by women who had a baby in past 5 years	Australian Birth experience study: national survey	8546 women who responded to obstetric violence question and 626 women who provided qualitative response in Australia	Quantitative: demographic trends to higher rates of obstetric violence; younger age range (6% vs 3%), lower income, lower education (13% vs 10%), Aboriginal heritage (3% vs 1%), 48% responded 'yes/maybe' to question. Qualitative: Dehumanisation, powerlessness and violation. Exams second biggest subcategory considering obstetric violence. Negative experiences associated with poor rapport, consent and additional procedures not consented to (sweeping/artificial rupture of membranes). Women given multiple exams by different professionals, which negatively impacted the experience. Healthcare professional did not document extra procedures in notes
Rodrigues et al (2022)	Qualitative study that aimed to understand women's perceptions regarding care received during labour and birth	Semi-structured interviews in private room in hospital. Descriptive exploratory approach	54 women recruited postnatally in hospitals in Rio De Janeiro	Obstetric interventions in birth: a counterpoint to scientific evidence. Humanisation as a necessity in the daily routine of obstetric care in women's voices. Vaginal examination perceived by women as disrespectful intervention if received without dialog and empathy

Table 3. Data extraction table (continued)

Reference	Methodology and aims	Design	Sample and setting	Findings
Seval et al (2016)	Quantitative study investigating association between digital vaginal examination during labour and psychological distress and pain compared to transperineal ultrasound assessment	Randomised control trial. Single blinded	90 multiparous women recruited antenatally in a hospital in Turkey	Pre-admission anxiety levels similar between groups ($P=0.93$ vs $P=0.65$). Pain perception reduced during latent ($P<0.01$) and active ($P=0.03$) stages of labour and in postpartum period ($P=0.02$) for transperineal ultrasound group (statistical significance only found in latent phase). Anxiety levels similar between groups
Teskereci et al (2020)	Qualitative study exploring women's experiences regarding vaginal examinations during labour	In depth, semi-structured interviews. Hermeneutic–phenomenological approach	14 women <24 hours postpartum in public hospital in Turkey	Hard to explain, necessary despite everything, facilitators, barriers, which one: professionalism or gender and humane approach. Pain, aches, embarrassment, fear and anxiety all expressed during exams. Felt exams were necessary in labour but performed too frequently. Women expressed importance of supportive approach by healthcare professional performing exam.
Yildirim and Çitak Bilgin (2021)	Qualitative study to determine experiences and factors related to vaginal examination during labour	Semi-structured interview and observation of women's behaviour during interview	20 women recruited before discharge in two public hospitals in Turkey	Meaning of vaginal examinations, experience and emotional reactions, 8 participants felt lucky to experience same professional during exams, 12 described frequent exams as negative. Negative experiences associated with limited privacy. Shame, fear and embarrassment most common emotion during exams. Most women preferred female healthcare professional

with the '#MeToo' movement, suggesting a cultural shift in women speaking out against sexual assault in childbirth (Keedle et al, 2022). Hassan et al (2012) also confirmed the inadequacy of prior information to achieve true informed consent. By surveying women's understanding as to the necessity of vaginal examinations, Hassan et al (2012) identified that the majority of women (95%) felt that it was required to ensure their baby's safety. This suggested misinformation, or at best misunderstanding, of the rationale for vaginal examinations in labour.

Additionally, de Klerk et al (2018) highlighted that women felt vaginal examinations were not presented as a choice. Keedle et al (2022) reported that women felt a pressure to conform through use of language and emotional blackmail.

Emotional reactions

Women consistently reported that vaginal examinations could be painful, distressing and invasive (Hassan et al, 2012; de Klerk et al, 2018; Dabagh–Fekri et al, 2020; Teskereci et al, 2020; Yildirim and Çitak Bilgin, 2021; Keedle et al, 2022; Rodrigues et al, 2022). The randomised controlled trial also found a non-significant trend towards higher levels of anxiety in participants in the vaginal examination trial arm, compared to the

transperineal ultrasound arm (Seval et al, 2016). De Klerk et al (2018) found that women birthing at home reported a more positive perception of vaginal examinations.

Rapport building and humanisation

Another significant theme across five of the studies was humanisation (Hassan et al, 2012; Dabagh–Fekri et al, 2020; Yildirim and Çitak Bilgin, 2021; Keedle et al, 2022; Rodrigues et al, 2022). When women reported a good relationship with the professional administering the examination, their positive perception of the examination was increased (Dabagh–Fekri et al, 2020). This was supported by Yildirim and Bilgin (2021), where women who had one continuous healthcare provider throughout labour reported a more positive association with vaginal examination.

Hassan et al (2012), Keedle et al (2022) and Rodrigues et al (2022) suggested that negative experiences were associated with automated or impersonal approaches by the examiner. Word choice and use of language were contributory factors to negative perceptions. Additionally, some studies outlined that approach differed depending on the profession and gender of the attending clinician (Hassan et al, 2012; Teskereci et al, 2020; Yildirim and Çitak Bilgin, 2021). Women reported male physicians to

be more insensitive (Hassan et al, 2012; Yildirim and Çitak Bilgin, 2021). The care provided combined obstetric and midwifery-led models in all but the randomised controlled trial, which was solely obstetric-led.

Discussion

This literature review aimed to understand women's experience of vaginal examinations in labour. Vaginal examinations played an integral part in positively or negatively influencing women's experiences of birth. More positive experiences were aligned with continuity of carer, birth at home and a compassionate approach by those delivering care. Lack of informed consent, an impersonal approach and frequency of examinations were associated with increased negative perceptions across women from a range of countries and cultures.

Guidelines in the UK recommend 4-hourly vaginal examinations in labour (NICE, 2017); however, this is based on one randomised controlled trial undertaken in 1996 (Abukhalil et al, 1996). This exemplifies the lack of research to justify offering routine examinations in labour. NICE (2014) recognised this, stating in their evidence summary that there is low-quality research to support the frequency of vaginal examinations in labour. Although they also endorse determining the necessity of vaginal examinations in conjunction with women's wishes, they continue to recommend routine vaginal examinations in clinical practice (NICE, 2017). This is important considering that if used in excess, vaginal examinations can disrupt physiological birth and potentially lead to maternal and neonatal complications (Naughton, 2019). Additionally, considering de Klerk et al's (2018) finding regarding the correlation between increased frequency of vaginal examinations and negative experiences, midwives have a responsibility to limit unnecessary vaginal examinations in labour (Shepherd and Cheyne, 2013). However, the present review and other literature indicate vaginal examinations are often used more frequently than the recommended guidelines (Downe et al, 2013; Moncrieff et al, 2022).

Using vaginal examinations as a teaching aid for junior doctors and student midwives has been theorised as a reason for excessive use of this intervention (Downe et al, 2013; Naughton, 2019; Nelson, 2021). However, there is limited evidence-based information to fully understand why vaginal examinations occur so frequently in clinical practice (Moncrieff et al, 2022). Home births have been suggested to reduce interventions (Hazen, 2017), a theory supported by de Klerk et al (2018). This may extend to a reduction in the frequency of vaginal examination in a home birth setting and explain why women birthing at home had a more positive perception of vaginal examinations in labour (de Klerk et al, 2018). This increased positivity could also be causal to continuity

of carer (Yildirim and Çitak Bilgin, 2021), with fewer healthcare professionals being present at home births. This draws parallels to the plethora of research supporting midwifery-led continuity of care models (Sandall et al, 2016).

The gender and profession of the attending clinician affected women's experience of vaginal examinations, with more negative experiences aligned with male doctors performing the examination (Hassan et al, 2012; Teskereci et al, 2020; Yildirim and Çitak Bilgin, 2021). However, this was not a universal finding, which could suggest cultural or preferential differences between studies (Dabagh-Fekri et al, 2020), potentially limiting the transferability of findings across countries and cultures.

There is a concerning connection between vaginal examinations and lack of true informed consent. A non-consented vaginal examination is a major invasion of human rights (Vedam et al, 2017; Pickles and Herring, 2020) and can lead to significant physical and psychological trauma for women (Nelson, 2021; Shabot, 2021). Nelson (2021) described vaginal examinations as the 'gatekeeper' to accessing maternity care during COVID-19, because of the reformed admission policies. This exemplifies a power dynamic between healthcare professionals and birthing women and highlights the engrained and often unquestioned use of vaginal examinations in childbirth (Hassan et al, 2012; Shabot, 2021). The societal expectation to consent to medical practices is embedded in culture and the image of the 'good girl' ideal where women have to be 'good' and 'submissive' (Crech, 2019) reflects the passivity sometimes expected in regards to women consenting to vaginal examinations in labour. This can lead to coerced consent as a result of fear of opposing societal expectations (Nelson, 2021).

The importance of this research merges with the recent paradigm shift after women's protests against sexual violence, in the #MeToo movement (O'Neil et al, 2018). Women have begun to feel empowered to address deep-rooted issues surrounding vaginal examinations in maternity care, following this global campaign (Keedle et al, 2022). Where vaginal examinations were perhaps previously perceived by women as an unpleasant but necessary part of labour care (Hassan et al, 2012; Shabot, 2021), they are now being questioned on the harm caused if women are coerced or examinations are performed without consent (Hill, 2020; Nelson, 2021). This was mentioned in Keedle et al's (2022) survey, highlighting the significant cultural relevance of these findings and the importance of ensuring true, informed consent during vaginal examinations worldwide (United Nations Commission on the Status of Women, 2016).

Humanisation, defined as the behaviour and attitudes of healthcare professionals before and during

examinations (Curtin et al, 2020), has potentially become more negative as a result of desensitisation to the invasiveness of a vaginal examination. Increasing work demands, prioritising efficiency over individualised care and the overmedicalisation of birth (Curtin et al, 2020; Nelson, 2021) are perhaps contributory factors to this. Ultimately, this has resulted in women feeling their choices are being neglected (Pickles and Herring, 2020; Nelson, 2021) and consequently impacting the autonomy that should be upheld for women during childbirth.

Implications for practice

The findings of this review indicate the need for further education for healthcare professionals about ongoing informed consent that is free from coercion, using appropriate communication, determining the necessary frequency of vaginal examinations and avoiding desensitisation (Curtin et al, 2020). Additional training on true informed consent and alternative or adjunct ways of assessing labour progression, such as maternal physical and behavioural cues (Shabot, 2021; Moncrieff et al, 2022), should be well-established in hospitals, to minimise vaginal examinations when not clinically indicated and stop any that are not consented to.

Future research

There is currently limited high-quality evidence supporting the use of examinations to benefit maternal and neonatal outcomes (Moncrieff et al, 2022). Future research should centre on the development of different methods of measuring labour progression, aiming to reduce or replace vaginal examinations with less invasive methods (Shabot, 2021). In addition, women's experiences should continue to be sought by qualitative means, to gain an in-depth understanding of whether newly acquired interventions and consent practices are meeting women's expectations for a positive and empowering birth experience. Future research should consider the relevance of geographical location and cultural differences on women's perceptions of vaginal examinations in labour, to support culturally relevant practice development and further inform the findings.

Strengths and limitations

This literature review effectively collates research and highlights the importance of further study in this area of maternity care. As this literature review was undertaken as part of an undergraduate midwifery degree, the data extraction and identification of themes was done by a single author, with support from a supervisor, because of the specific academic requirements. Implementing an additional author to identify and compare themes during the initial analysis phase could have increased the reliability and validity of the themes identified.

Key points

- This literature review explored women's experience of vaginal examinations in labour.
- These examinations play an integral part in positively or negatively influencing women's experiences of birth.
- Positive experiences were associated with continuity of care and a compassionate approach by those delivering care.
- Negative experiences were associated with overuse of examinations, healthcare providers' attitudes and perceived lack of compassion and empathy.
- Non-consented examinations have ties with obstetric violence and this is evident across a range of countries and cultures.
- Further education and research is needed to reduce the unnecessary use of vaginal examinations in labour and to obtain properly informed consent when they are used.

Conclusions

It is evident that global reform is needed with regard to vaginal examinations in labour, which, when performed in excess and without true informed consent, negatively impact women's labour experiences. Training to reinforce and update consent practices should be prioritised, as well as facilitating alternate measurements of labour progression. Barriers to implementing changes are likely, considering the widespread and historical use of vaginal examination in labour. However, continuing this research is essential, working in collaboration with women and healthcare professionals to maintain safety while preventing negative experiences and ending obstetric violence. **BJM**

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Abukhalil IH, Kilby MD, Aiken J et al. Can the frequency of vaginal examinations influence the duration of labour? A prospective randomised study. *J Obstet Gynaecol.* 1996;16(1):22–25. <https://doi.org/10.3109/01443619609028375>

Aveyard H. *Doing a literature review in health and social care: a practical guide.* London: McGraw-Hill Education; 2019

Bramer WM, De Jonge GB, Rethlefsen ML, Mast F, Kleijnen

- J. A systematic approach to searching: an efficient and complete method to develop literature searches. *J Med Libr Assoc.* 2018;106(4):531–541. <https://doi.org/10.5195/jmla.2018.283>
- British Medical Journal. Table E: critical appraisal checklist for a questionnaire study. 2023. <https://www.bmj.com/content/suppl/2004/05/27/328.7451.1312.DC1> (accessed 4 September 2024)
- Çalik KY, Karabulutlu Ö, Yavuz C. First do no harm – interventions during labor and maternal satisfaction: a descriptive cross-sectional study. *BMC Pregnancy Childbirth.* 2018;18(1):415. <https://doi.org/10.1186/s12884-018-2054-0>
- Cavaleri R, Bhole S, Arora A. Critical appraisal of quantitative research. In: Liamputtong P (ed). *Handbook of research methods in health social sciences.* Singapore: Springer; 2018
- Clarke V, Braun V. Thematic analysis. *J Posit Psychol.* 2017;12(3):297–298. <https://doi.org/10.1080/17439760.2016.1262613>
- Creech J. The folkloric image of the good girl and its effects on women in the age of the internet. Dissertation submitted to East Carolina University, 2019
- Critical Appraisal Skills Programme. 2018. CASP qualitative studies checklist. https://casp-uk.net/images/checklist/documents/CASP-Qualitative-Studies-Checklist/CASP-Qualitative-Checklist-2018_fillable_form.pdf (accessed 4 September 2024)
- Critical Appraisal Skills Programme. CASP randomised control trial checklist. 2022. <https://casp-uk.net/images/checklist/documents/CASP-Randomised-Controlled-Trial-Checklist/CASP-RCT-Checklist-PDF-Fillable-Form.pdf> (accessed 4 September 2024)
- Curtin M, Savage E, Leahy-Warren P. Humanisation in pregnancy and childbirth: a concept analysis. *J Clin Nurs.* 2020;29(9–10):1744–1757. <https://doi.org/10.1111/jocn.15152>
- Dabagh-Fekri S, Amiri-Farahani L, Amini L, Pezaro S. A survey of Iranian primiparous women's perceptions of vaginal examination during labor. *J Prim Care Community Health.* 2020;11:2150132720940517. <https://doi.org/10.1177/2150132720940517>
- Davies A. Carrying out systematic literature reviews: an introduction. *Br J Nurs.* 2019;28(15):1008–1014. <https://doi.org/10.12968/bjon.2019.28.15.1008>
- de Klerk HW, Boere E, van Lunsen RH, Bakker JJH. Women's experiences with vaginal examinations during labor in the Netherlands. *J Psychosom Obstet Gynaecol.* 2018;39(2):90–95. <https://doi.org/10.1080/0167482X.2017.1291623>
- Downe S, Gyte GML, Dahlen HG, Singata M. Routine vaginal examinations for assessing progress of labour to improve outcomes for women and babies at term. *Cochrane Libr.* 2013;(7):CD010088. <https://doi.org/10.1002/14651858.CD010088.pub2>
- Frederiksen L, Phelps SF. *Literature reviews for education and nursing graduate students.* Minneapolis, MN: Open Textbook Library; 2017
- Friedman EA. Cervimetry: an objective method for the study of cervical dilatation in labor. *Am J Obstet Gynecol.* 1956;71(6):1189–1193. [https://doi.org/10.1016/0002-9378\(56\)90424-0](https://doi.org/10.1016/0002-9378(56)90424-0)
- Guest G, MacQueen KM, Namey EE. Integrating qualitative and quantitative data. In: Guest G, MacQueen KM, Namey EE. *Applied thematic analysis.* Thousand Oaks, CA: SAGE Publications Inc; 2012
- Gusenbauer M, Haddaway NR. Which academic search systems are suitable for systematic reviews or meta-analyses? Evaluating retrieval qualities of Google Scholar, PubMed, and 26 other resources. *Res Synth Methods.* 2020;11(2):181–217. <https://doi.org/10.1002/jrsm.1378>
- Hassan SJ, Sundby J, Husseini A, Bjertness E. The paradox of vaginal examination practice during normal childbirth: Palestinian women's feelings, opinions, knowledge and experiences. *Reprod Health.* 2012;9(1):16. <https://doi.org/10.1186/1742-4755-9-16>
- Hazen H. “The first intervention is leaving home”: reasons for electing an out-of-hospital birth among Minnesotan mothers. *Med Anthropol Q.* 2017;31(4):555–571. <https://doi.org/10.1111/maq.12358>
- Hill M. *Give birth like a feminist: your body, your baby, your choice.* England: HQ; 2020
- Kahn SK. *Systematic reviews to support evidence-based medicine: how to review and apply findings of healthcare research.* England: Royal Society of Medicine Press; 2003
- Keedle H, Keedle W, Dahlen HG. Dehumanized, violated, and powerless: an Australian survey of women's experiences of obstetric violence in the past 5 years. *Violence Against Women.* 2022;:10778012221140138. <https://doi.org/10.1177/10778012221140138>
- Lewin D, Fearon B, Hemmings V, Johnson G. Women's experiences of vaginal examinations in labour. *Midwifery.* 2005;21(3):267–277. <https://doi.org/10.1016/j.midw.2004.10.003>
- Miller YD, Tone J, Talukdar S, Martin E. A direct comparison of patient-reported outcomes and experiences in alternative models of maternity care in Queensland, Australia. *PLoS One.* 2022;17(7):e0271105. <https://doi.org/10.1371/journal.pone.0271105>
- Moncrieff G, Gyte GML, Dahlen HG et al. Routine vaginal examinations compared to other methods for assessing progress of labour to improve outcomes for women and babies at term. *Cochrane Libr.* 2022;2022(3):CD010088. <https://doi.org/10.1002/14651858.CD010088.pub3>
- National Institute for Health and Care Excellence. *Intrapartum care for healthy women and babies: full guidance and supporting evidence.* Manchester, UK: National Institute for Health and Care Excellence; 2014
- National Institute for Health and Care Excellence. *Intrapartum care for healthy women and babies: guidance.* 2017. <https://www.nice.org.uk/guidance/cg190/chapter/Recommendations#second-stage-of-labour> (accessed 4 September 2024)
- Naughton T. To VE or not to VE: the vaginal examination repurposed. *Women Birth.* 2019;32(1):S3–S3. <https://doi.org/10.1016/j.wombi.2019.07.160>
- Nelson A. Vaginal examinations during childbirth: consent, coercion and COVID-19. *Fem Leg Stud.* 2021;29(1):119–131. <https://doi.org/10.1007/s10691-021-09453-7>
- Noyes J, Booth A, Flemming K et al. *Cochrane Qualitative and Implementation Methods Group guidance series—paper 3: methods for assessing methodological limitations, data extraction and synthesis, and confidence in synthesized qualitative findings.* *J Clin Epidemiol.* 2018;97(1):49–58. <https://doi.org/10.1016/j.jclinepi.2017.06.020>

- Nursing and Midwifery Council. The code: professional standards of practise and behaviour for nurses, midwives and nursing associates 2018. <https://www.nmc.org.uk/standards/code/read-the-code-online/> (accessed 11 May 2023)
- O'Neil A, Sojo V, Fileborn B, Scovelle AJ, Milner A. The #MeToo movement: an opportunity in public health? *Lancet*. 2018;391(10140):2587–2589. [https://doi.org/10.1016/S0140-6736\(18\)30991-7](https://doi.org/10.1016/S0140-6736(18)30991-7)
- Page MJ, McKenzie JE, Bossuyt PM et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*. 2021;372(372):n71. <https://doi.org/10.1136/bmj.n71>
- Paul J, Criado AR. The art of writing literature review: what do we know and what do we need to know? *Int Bus Rev*. 2020 Aug;29(4):101717. <https://doi.org/10.1016/j.ibusrev.2020.101717>
- Perrotte V, Chaudhary A, Goodman A. “At least your baby is healthy” obstetric violence or disrespect and abuse in childbirth occurrence worldwide: a literature review. *Open J Obstet Gynecol*. 2020;10(11):1544–1562. <https://doi.org/10.4236/ojog.2020.101110139>
- Pickles C, Herring J. *Womens birthing bodies and the law: unauthorised intimate examinations, power, and vulnerability*. Oxford, UK: Hart Publishing; 2020
- Rodrigues DP, Alves VH, Silva AM et al. Women's perception of labor and birth care: obstacles to humanization. *Rev Bras Enferm*. 2022;75(suppl 2):e20210215. <https://doi.org/10.1590/0034-7167-2021-0215>
- Sandall J, Soltani H, Gates S, Shennan A, Devane D. Midwife-led continuity models versus other models of care for childbearing women. *Cochrane Libr*. 2016;2016(4):CD004667. <https://doi.org/10.1002/14651858.CD004667.pub5>
- Seval MM, Yuce T, Kalafat E et al. Comparison of effects of digital vaginal examination with transperineal ultrasound during labor on pain and anxiety levels: a randomized controlled trial. *Ultrasound Obstet Gynecol*. 2016;48(6):695–700. <https://doi.org/10.1002/uog.15994>
- Shabot SC. Why 'normal' feels so bad: violence and vaginal

CPD reflective questions

- Have you ever overused vaginal examinations in your own practice while caring for a woman in labour?
- Are you aware of alternative methods of assessing labour progress and can you think of a time where you have facilitated their use in your practice?
- Have you considered the impact of a women's history with sexual assault, before a vaginal examination and how this might affect her experience?

- examinations during labour – a (feminist) phenomenology. *Fem Theory*. 2021;22(3):443–463. <https://doi.org/10.1177/1464700120920764>
- Shepherd A, Cheyne H. The frequency and reasons for vaginal examinations in labour. *Women Birth*. 2013;26(1):49–54. <https://doi.org/10.1016/j.wombi.2012.02.001>
- Teskereci G, Yangin H, Akpınar A. Experiences of women regarding vaginal examination during labor: a qualitative study. *Health Care Women Int*. 2020;41(1):75–88. <https://doi.org/10.1080/07399332.2019.1590361>
- United Nations Commission on the Status of Women. Convention on the elimination of all forms of discrimination against women. 2016. <https://www.un.org/womenwatch/daw/cedaw/text/econvention.htm> (accessed 11 May 2023)
- Vedam S, Stoll K, Rubashkin N et al. The Mothers on Respect (MOR) index: measuring quality, safety, and human rights in childbirth. *SSM Popul Health*. 2017;3:201–210. <http://doi.org/10.1016/j.ssmph.2017.01.005>
- World Health Organization. WHO labour care guide. 2021. <https://www.who.int/publications/i/item/9789240017566> (accessed 4 September 2024)
- Yildirim G, Çitak Bilgin N. Women's experiences of vaginal examinations during normal childbirth and affecting factors: a qualitative study. *Anadolu Hemsire Sağlık Bilim Derg*. 2021;24(2):220–230. <https://doi.org/10.17049/ataunihem.856233>
- Ying Lai C, Levy V. Hong Kong Chinese women's experiences of vaginal examinations in labour. *Midwifery*. 2002;18(4):296–303. <https://doi.org/10.1054/midw.2002.0326>



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