

## SYSTEMATIC REVIEW OPEN ACCESS

# Pregnant Women's Care Needs During Early Labor—A Scoping Review

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## ABSTRACT

**Introduction:** Pregnant women face the challenge of managing early labor on their own until they feel the need to seek professional support. However, professional support during such a vulnerable stage of labor may sometimes be insufficient. This study aims to understand pregnant women's care needs during early labor in order to improve the quality of care provided at the onset of labor.

**Methods:** A scoping review was conducted following a systematic search strategy in May 2021 and in August 2022 concentrating on pregnant women in early labor with spontaneous onset of labor. A sensitive search strategy was used with five different databases. The articles were screened by two independent researchers. Data were extracted and mapped to answer the research question.

**Results:** 52 articles were included. Major reasons for seeking professional help are to receive reassurance and get advice and information on how to cope with early labor. Furthermore, many women express the need for professional guidance. Several articles demonstrated women's preferences for hospital admission or a continuous care model. While some women want empowerment and empathy from a midwife, others require clear instructions on helpful measures or even clinical interventions within the process.

**Conclusions:** Managing early labor without professional support creates a major challenge for pregnant women and nurtures insecurities and anxiety. Protecting women from unnecessary interventions is a well-intentioned plan, yet a lack of support in early labor may sometimes jeopardize a positive birth experience. New ways need to be elaborated to support women-centred and individualized approaches to providing early labor care.

## 1 | Introduction

Pregnant women face the challenge of managing early labor on their own until they feel the need for professional support [1]. It remains their responsibility to recognize labor onset even though the complexity of early labor is not yet fully understood by professionals themselves [2]. Professional support for women in early labor is often lacking or insufficient [2, 3].

In theory, the first stage of labor is divided into two stages: latent phase of labor, also referred to as early labor, and active first

stage of labor which is often described as established labor [4]. Early labor is frequently related to the time before reaching a cervical dilatation of 3–4 cm [5] or 5–6 cm according to latest evidence [6]. Diverse symptoms such as uncomfortable contractions, watery fluid loss and trouble sleeping often accompany the latent phase [7]. To date, there is no consensus on a clear definition of labor onset. All articles on that subject refer to regular, painful contractions as a clear sign of labor onset, but some describe it as the start of early labor, while others refer to it as the beginning of the active phase [5]. Despite this ambiguity, diagnosing labor onset influences the decision of hospital admission [8].

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While many women experience painful contractions during early labor [5], the admission to hospital care is often postponed until the active phase of labor [9]. Due to the overmedicalization of childbirth in high-income countries [10] it has been observed that women who are hospitalized during early labor often undergo a cascade of unnecessary medical interventions which possibly lead to negative birth outcomes such as unnecessary caesarean birth or admission of the infant to a neonatal intensive care unit [11–13]. Based on this knowledge, several measures such as telephone triage or home visits have been researched to encourage women to stay at home during early labor [9, 14]. Another possible strategy is the use of early labor lounges where women in early labor are already admitted to the hospital, but only transferred to the birth unit during active phase of labor [15]. Yet, limited institutional resources such as staffing, work load of midwives, and education of health care providers regarding diagnosis of labor impact the decision of hospital admission during early labor [16, 17].

There are various coping strategies that help women in managing early labor at home. These include sticking to routine activities, distraction, resting, moving around or alternative pain relief methods [18, 19]. If difficulties in coping with early labor at home arise, women and their partners tend to seek professional support [2]. The possibility of not being admitted to the hospital might threaten women's satisfaction with care [8] and can nurture negative emotions regarding childbirth (such as feeling undersupported). It is necessary to overcome the existing lack of focus on women's individual care needs during early labor [2] to support a women-centred approach within such care. This study therefore aims to understand pregnant women's care needs during early labor from women's and health care providers' views to promote better quality of care.

## 2 | Materials and Methods

We conducted a scoping review according to guidance by the Joanna Briggs Institute [20] using Open Science Framework for registration (<https://osf.io/3sqrw>). This exploratory approach seemed suitable for understanding the broad variety of care needs discussed within the literature and for mapping the existing evidence on the subject [20].

This article is part of the GebStart-study, which aims to develop a tool to enhance the quality of early labor care among primiparous women [21]. The content of the tool is based on evidence regarding symptoms and care needs of early labor. This article focuses on the latter, while the findings on symptoms will be published elsewhere [22].

### 2.1 | Search Strategy

An extensive search strategy was conducted following the PRESS guidelines [23] in May 2021 and was updated in August 2022. The PCC mnemonic was applied using pregnant women as the targeted population, care needs as the concept, and early labor as the context. We searched five different databases for appropriate literature, including PubMed, MIDIRS, PsycINFO, CINAHL database and Web of Science. The selection of these

databases was based on the suitability of content and the wide range of literature available. We aimed to find all relevant articles and therefore we used a sensitive search strategy, meaning that a large variety of synonyms and database related subject headings were applied [24]. Furthermore, the Boolean operators AND, OR and NOT supported a focussed identification of relevant articles. Additionally, more articles were discovered by a manual search in relevant journals and by screening of reference lists. An example of a search string used on PubMed can be found in Appendix S1.

A major characteristic of inclusion was the focus on early labor among pregnant women. Published data on care needs of the whole childbirth process or of another stage of labor were not eligible for inclusion. Therefore, early labor or its synonyms had to be present in the title or the abstract. The targeted populations were either pregnant women or health care providers who described their views on care needs of women in labor.

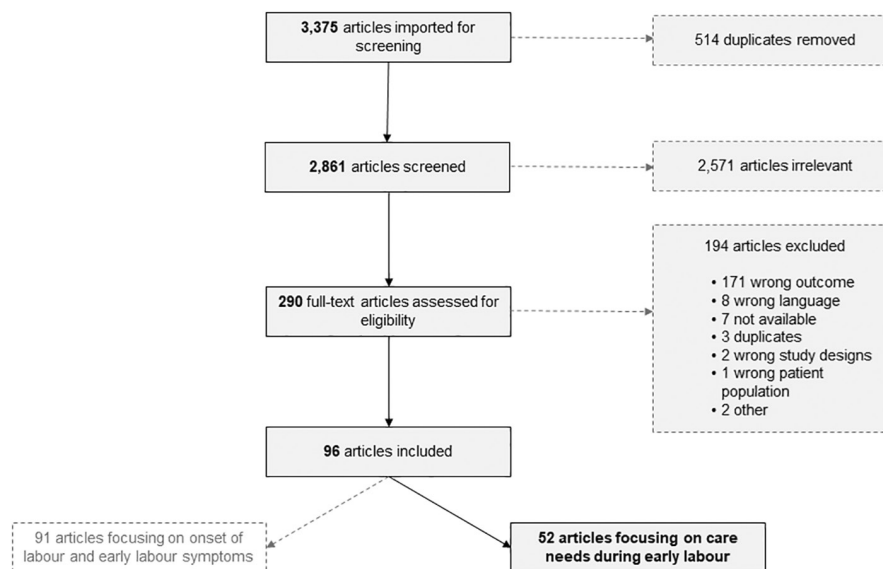
Inclusion was fulfilled if the articles followed any evidence-based background with scientific results, which means that, for example, birth stories or study protocols with no results were not considered. Furthermore, articles were included if they were written in English, German, French, Italian or Spanish because these were the languages the research team was proficient in. There were no restrictions set on publication date or methods used.

### 2.2 | Screening and Selection Process

The screening process followed the steps according to Peters et al. [20]. Articles retrieved from the search process were imported to Zotero reference management software and duplicates were removed. In a second step, the remaining 3375 references were transferred to Covidence—a systematic review management tool that allows several researchers to screen and assess articles independently [25]. The independent evaluation of the data by several researchers helps to reduce potential errors or bias [20]. Two researchers were involved in the screening, selection and data extraction process: ANM, a midwifery researcher with a Master of Science (MSc) degree and SG-B, a midwifery researcher and the project leader of this study, holds a PhD and professor title. As presented in the PRISMA flowchart, after  $n = 514$  additional duplicates were removed, both authors independently screened 2861 titles and abstracts (Figure 1). Joint decisions on relevant articles to include led to independent screening of 290 full texts. Reasons for further exclusion were focus on a topic other than early labor, written in a language that the team could not read, unavailability of the full text, issues with study design, wrong patient population or other reasons. In total, 96 articles were included according to our research question of which 91 articles focussed on early labor symptoms (described elsewhere [22]), and 52 were included in the current publication. Critical appraisal or risk of bias assessment was not performed since this is not recommended when performing a scoping review [20].

### 2.3 | Data Extraction and Analysis

Data from all articles that met the inclusion criteria were entered into an Excel spreadsheet. One researcher extracted



**FIGURE 1** | PRISMA flowchart.

the detailed characteristics of the articles and their results followed by a cross-checking of the data by the second researcher. Each disagreement was discussed until consensus was reached. In the case of further dissent, additional expertise would have been available from the research unit team, but such exchange was not needed. The results of this scoping review are analyzed descriptively with the aim of describing early labor care needs.

### 3 | Results

Data from a total of 52 articles focusing on women's care needs in early labor were extracted during the final screening. The articles were published between 1982 and 2021. With an  $n$  of 26, the most frequent used study design was qualitative [26–41]. Three studies used grounded theory [42–44], three implemented phenomenology [45–47], another one gave details on their epistemological approach [48], one study used a hermeneutic design [49], one study performed a meta synthesis [50], and the study by Shallow [51] employed feminist participatory action research. Nine studies were reviews [4, 52–58], of which one article was a systematic review [59]. An observational study design was used in seven articles [60, 61] including four cross-sectional studies [15, 62–64] and one cohort study [65]. Additionally, two randomized controlled trials [14, 66] and four mixed-methods studies [67–70] were included. Data from two guidelines/committee opinions were also extracted [6, 71]. Further data was retrieved from one book chapter [72] and one discussion paper [73].

A closer look at Table 1 shows that the research was mainly performed in high income countries including Australia, Canada, Denmark, England, Germany, Ireland, Italy, New Zealand, Norway, Scotland, Sweden, Switzerland, Turkey, and the United States (US). Only the review by Beake et al. [59] looked at high and middle income countries. Most of the articles included primiparous and/or multiparous women with a singleton pregnancy at term as their study population. The articles by Burvill et al. [42], Cheyne et al. [31], Eri et al. [33], Hunter and Chern-Hughes

[36], Luisier [63], Shallow [51], Spiby et al. [47], and Wevers and Nash [58] focused on midwives' views on the topic. Jepsen et al. [46] and Nyman et al. [49] investigated the experiences of women and their partners whereas Kennedy et al. [37] also studied policy makers and caregivers in their sample.

A variety of care needs are described in the literature (Table 2). Here these care needs are summarized as: *information and advice, empathy and empowerment, measures and interventions, care models and partner involvement*.

#### 3.1 | Information and Advice

A major early labor care need is for information and advice. Specifically, study participants described needing information on labor processes [27], on managing instructions such as timing for reassessment [68, 71], and on when to go to the hospital [47, 62]. Furthermore, advice was requested on coping strategies and pain management at home [26, 59]. Another major reason that care is sought is the need for reassurance and the knowledge that the situation reflects normality, which promotes the feeling of being safe (Table 2).

#### 3.2 | Measures and Interventions

Other articles concluded that help was needed with managing early labor through position changes [62, 71], oral hydration [71] and pain management via massage or hot baths and showers [71]. Furthermore, the need to access medical assistance is reflected in many ways. This includes the assessment of maternal and fetal wellbeing, confirming labor onset and labor progression, stimulating labor if necessary or supporting resting and offering various pain management possibilities. To meet these needs, measures including medical interventions may be required such as fetal heart tone monitoring, sonograms [28, 62] and vaginal examinations [48, 51, 59, 69]. To stimulate labor or to be able to rest, women request mechanical or pharmacological support

**TABLE 1** | Study characteristics on care needs during early labor.

Reference	Design and setting	Study population	Objective	Care needs/measures
ACOG [71]	Committee opinion		Recommendation on labor interventions to meet clinical safety requirements and the individual woman's preferences	<ul style="list-style-type: none"> <li>• Shared decision making</li> <li>• Create a plan for self-care activities and coping techniques</li> <li>• Agreed timing for reassessment</li> <li>• Alternate unit where women in early labor can rest and be supported                             <ul style="list-style-type: none"> <li>• Education, support</li> <li>• Oral hydration</li> <li>• Positions of comfort</li> </ul> </li> <li>• Nonpharmacologic pain management techniques such as massage or water</li> </ul>
Allen et al. [26]	Qualitative study; Australia	84 women with a singleton pregnancy	Investigation of women's experiences of early labor care in caseload midwifery	<ul style="list-style-type: none"> <li>• Early hospital admission</li> <li>• No traveling while in pain</li> <li>• Support and encouragement</li> <li>• Ability to contact health care professionals 24/7 via mobile                             <ul style="list-style-type: none"> <li>• Helpful advice</li> <li>• Having professional support</li> </ul> </li> <li>• Being encouraged to stay at home during early labor</li> </ul>
Ängeby et al. [27]	Qualitative study based on focus groups and individual interviews; Sweden	16 primiparous women with a prolonged latent phase of labor > 18 h	Investigation of primiparous women's preferences for care during a prolonged latent phase of labor	<ul style="list-style-type: none"> <li>• Welcoming manner not being rejected                             <ul style="list-style-type: none"> <li>• Individually adapted care</li> </ul> </li> <li>• Important information which prepares for reality and coping                             <ul style="list-style-type: none"> <li>• Participation and need for feedback</li> </ul> </li> <li>• Staying nearby the labor ward or admitted for midwifery support</li> </ul>
Austin and Calderon [52]	Literature review		Review parameters for normal and abnormal latent phase labor and discusses triage assessment and management strategies for the patient in latent phase labor	<ul style="list-style-type: none"> <li>• Communication, encouragement, and support</li> <li>• Individualized plan of care, patient involvement</li> <li>• Consider hospital policies, logistic issues such as distance and available transportation                             <ul style="list-style-type: none"> <li>• Therapeutic rest or labor stimulation</li> </ul> </li> <li>• Expectant management at home after assessment of normality                             <ul style="list-style-type: none"> <li>• Emotional support                                     <ul style="list-style-type: none"> <li>• Reassurance to decrease anxiety</li> <li>• Pharmacologic aids specific to symptomatic relief:   <ul style="list-style-type: none"> <li>– Diphenhydramine hydrochloride and acetaminophen as mild sedative and analgesic</li> <li>– Hydroxyzine pamoate (Vistaril) as an antianxiety agent   <ul style="list-style-type: none"> <li>– Secobarbital and pentobarbital as sedative hypnotics   <ul style="list-style-type: none"> <li>– Opium or morphine sulfate for therapeutic rest</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> <li>• Labor augmentation including amniotomy, prostaglandine, oxytocin stimulation</li> </ul> </li></ul>

(Continues)

TABLE 1 | (Continued)

Reference	Design and setting	Study population	Objective	Care needs/measures
Balcik and Ozturk [60]	Prospective, analytical study, educational research hospital in Izmir, Turkey	123 women in latent phase of labor and 68 women in active phase of labor	Investigation of the effects of the time of pregnant women's admission to the labor ward on the labor process and interventions	<ul style="list-style-type: none"> <li>• CTG</li> <li>• Labor stimulation with enema, bladder catheterizations, oxytocin or amniotomy</li> <li>• Antispasmodic drug administration</li> </ul>
Barnett et al. [67]	Mixed-method study; Urban and rural areas in the central belt of Scotland	6 primiparous women with singleton pregnancy, cephalic presentation and at term	Exploration of the factors that influence a woman's decision to go to a maternity unit in latent labor and the impact of being sent home	<ul style="list-style-type: none"> <li>• Reassurance</li> <li>• Get induced</li> <li>• Pain relief</li> </ul>
Beake et al. [59]	Systematic review of qualitative evidence; High- and middle-income countries	primiparous and multiparous women in early labor with term, singleton pregnancies not booked for primary c-section or post-date induction; women's companions and health professionals	Examination of evidence of women's, labor companions' and health professionals' experiences of management of early labor	<ul style="list-style-type: none"> <li>• Vaginal examination to confirm labor onset/labor progress</li> <li>• Clear communication and advice via telephone</li> <li>• Being interested in them</li> <li>• Being taken seriously</li> <li>• Reassurance of normality</li> <li>• Clear instructions</li> <li>• Advice on how to control the pain</li> <li>• Safe place</li> <li>• Being admitted resolving anxiety</li> <li>• Support from partners</li> <li>• Having female relatives around</li> <li>• Information about labor progress</li> <li>• Pain-relieving medications</li> <li>• Freedom to move</li> <li>• Professional support and advice</li> <li>• Medical resources such as monitoring equipment</li> <li>• Need for noise decrease and mood lighting</li> </ul>
Beebe and Humphreys [28]	Qualitative study; Suburban/rural setting, USA	23 nulliparous women	Exploration of the phenomenon of labor prior to hospital admission	
Brennan et al. [15]	Cross-sectional study; Community hospital in the North-eastern United States	67 low-risk, nulliparous women at term with a singleton, vertex fetus	Evaluation of the information received during the prenatal period about early labor the subsequent use of the early labor lounge	
Burvill [41]	Qualitative study using grounded theory, Europe	8 MSc midwifery students and one lecturer	Provision of a woman-centred holistic approach to labor onset diagnosis by developing a midwifery discourse	<ul style="list-style-type: none"> <li>• Reassurance</li> <li>• Confirmation</li> </ul>

(Continues)



TABLE 1 | (Continued)

Reference	Design and setting	Study population	Objective	Care needs/measures
Cappelletti et al. [45]	Qualitative study using an interpretive phenomenological approach; Second-level maternity hospital in northern Italy	15 first-time mothers with spontaneous labor at term of a low-risk pregnancy	Exploration of first-time mothers' experiences of early labor when admitted to hospital or advised to return home after maternity triage assessment	<ul style="list-style-type: none"><li>• Reassurance and understanding of physical changes by health care professionals<ul style="list-style-type: none"><li>• Being cared for</li></ul></li><li>• Need for care because of strong pain and inability in coping at home<ul style="list-style-type: none"><li>• Perception of calmness and security</li><li>• Need for useful and appropriate information<ul style="list-style-type: none"><li>• Calm and quiet environment</li></ul></li><li>• Hospital care as being in a safe place<ul style="list-style-type: none"><li>• Advice on how to cope at home<ul style="list-style-type: none"><li>• Present partner</li><li>• Being free to behave as they wish</li></ul></li></ul></li></ul></li><li>• Handing over the responsibility to health care professionals: from a total release of control to partial participation and active decision-making, giving women a sense of being safe<ul style="list-style-type: none"><li>• Information on what is happening and on normality of the situation<ul style="list-style-type: none"><li>• Support by partners or other companions</li><li>• Frequent telephone contact with the labor ward<ul style="list-style-type: none"><li>• Allowance for admittance</li></ul></li></ul></li></ul></li><li>• Having a partner, a sister or a female friend around<ul style="list-style-type: none"><li>• Confirmation of normality of the situation</li></ul></li></ul>
Carlsson et al. [44]	Qualitative study using grounded theory with a constructivist mode; Southwestern part of Sweden	18 women with uncomplicated pregnancies admitted to hospital within the latent stage of labor	Understanding of how women who seek care at an early stage of labor and their experience of the latent phase of labor	<ul style="list-style-type: none"><li>• Need to be in a safe and thus secure place: childbirth as a medical event: hospital childbirth as a natural event: home</li><li>• Presence of health care professionals giving them security due to competence and knowledge<ul style="list-style-type: none"><li>• Being in the hospital on time</li></ul></li><li>• Home as a private and comfortable environment, gave freedom<ul style="list-style-type: none"><li>• Being supported by friends and family</li></ul></li></ul>
Carlsson et al. [43]	Qualitative study using grounded theory with a constructivist mode; Southwestern part of Sweden	19 first-time mothers with uncomplicated, singleton, full-term pregnancies, and spontaneous onset of labor at home	Understanding of how women, who remain at home until the active phase of labor; experience the period from labor onset before admittance to the labor ward	
Carlsson [29]	Secondary analysis from two previous qualitative studies; Western part of Sweden	37 women who had given birth	Generating a theory based on where a woman chooses to be during the early labor process and increase understanding about how experiences can differ from place to place	

(Continues)

TABLE 1 | (Continued)

Reference	Design and setting	Study population	Objective	Care needs/measures
Cheyne et al. [31]	Qualitative study; North of England	13 midwives working in a maternity unit	Examination of midwives' perceptions of the way in which they diagnose labor	<ul style="list-style-type: none"> <li>• Need for reassurance</li> <li>• Support by partner</li> <li>• Short distance to hospital</li> <li>• Being prepared and informed</li> <li>• Sedation</li> </ul>
Cheyne et al. [30]	Qualitative study, Northern England	21 primiparous and multiparous women who have recently given birth	Determination of the main themes and issues surrounding women's early labor experiences and factors which influence their decision-making processes regarding when to go to hospital	<ul style="list-style-type: none"> <li>• Examination to know everything was ok</li> <li>• Pain relief</li> <li>• Need for reassurance</li> </ul>
Cluett [53]	Journal article			<ul style="list-style-type: none"> <li>• Continuity of care, caseload</li> <li>• Better antenatal preparation</li> <li>• Assessment of other clinical features such as the wellbeing of the woman as well as her general attitude and body language</li> <li>• Advice, reassurance and if appropriate encouragement to stay at home</li> </ul>
Dixon et al. [48]	Qualitative, critical feminist epistemology; Canterbury region of New Zealand	18 women at term who had given birth after spontaneous onset of labor	Examination of the discourses of labor and birth and exploration of women's descriptions and perspective of the experience of spontaneous labor and birth	<ul style="list-style-type: none"> <li>• Being reassured</li> <li>• Receiving information</li> <li>• Being examined vaginally to understand the course of labor</li> <li>• Letting the midwife know, talk to somebody</li> <li>• Getting information</li> <li>• Keep in close contact with the midwife</li> </ul>
Edmonds et al. [32]	Qualitative study; North-eastern part of USA	21 low-risk, primiparous women, at term with a singleton fetus in vertex presentation	Characterization and comparison of decision-making criteria for home or hospital early labor	<ul style="list-style-type: none"> <li>• Reassurance about the normalcy of labor symptoms and foetal well-being</li> <li>• Resolve the uncertainty or wanting to verify their attribution of symptoms</li> <li>• Pain management</li> <li>• Positive support</li> <li>• Information on labor progress</li> </ul>
Eri et al. [34]	Qualitative study, Norwegian University hospital or a primary health-care centre in an urban area	17 women expecting their first baby	Exploration of women's experiences of communication and contact with midwives at the labor ward in the early phase of labor	<ul style="list-style-type: none"> <li>• Knowing if labor has started</li> <li>• Confirmation of baby's condition</li> <li>• Partner or mother need contact to health carer</li> <li>• Being taken seriously, being listened to</li> </ul>

(Continues)

TABLE 1 | (Continued)

Reference	Design and setting	Study population	Objective	Care needs/measures
Eri et al. [33]	Qualitative study, Maternity unit of a university hospital in Norway	18 midwives	Exploration of the priorities and strategies midwives in a labor ward use in their communication with primiparous women who seek contact in the early phase of labor	<ul style="list-style-type: none"><li>Importance of knowing the status of the cervix as early as possible</li><li>Reassurance of normality of the situation<ul style="list-style-type: none"><li>Not to be sent home</li><li>Shared decision-making</li></ul></li></ul>
Eri et al. [50]	Meta-synthesis, High resource countries: USA, UK and Scandinavia	231 women	Integration of findings of individual studies in order to broaden the understanding of first-time mothers' experiences of early labor	<ul style="list-style-type: none"><li>To be prepared for the worst</li><li>Great importance to women to know if everything was normal</li><li>Contact with the birthing unit for confirmation either on the phone or by a visit<ul style="list-style-type: none"><li>Pain relief</li><li>Feeling safe in the hospital</li><li>Caring health professionals; to be seen as an individual; understanding that it hurts really badly; to be taken seriously, feel welcomed, feel believed</li></ul></li><li>See and to be seen by the health care providers when having a contraction<ul style="list-style-type: none"><li>Empathy</li><li>Reassurance</li><li>Building confidence</li></ul></li><li>Pain relief and/or short-term appointments during latent phase<ul style="list-style-type: none"><li>Supportive midwife</li></ul></li></ul>
Faucher and Kennedy [35]	Qualitative study, USA	23 women who experienced spontaneous labor within the last year	This study examined women's perspectives on the potential use of this technology.	
Gaudermack et al. [61]	Quantitative study with one open question, Norway	459 first time mothers at term with one foetus in cephalic position	to determine the impact of prolonged labor on birth experience and a wish for caesarean section in subsequent pregnancies	
Green et al. [68]	Mixed methods, Wales	46 low-risk first-time mothers	to report women's experiences of, and satisfaction with, telephone communications	<ul style="list-style-type: none"><li>Support<ul style="list-style-type: none"><li>Advice about how to control the pain</li><li>Clear instructions about when to phone again</li></ul></li><li>Reassurance</li><li>Confidence</li><li>Friendliness</li><li>Encouragement</li><li>Being treated as an individual and with respect<ul style="list-style-type: none"><li>Feeling safe</li><li>Address anxiety</li></ul></li></ul>

(Continues)



TABLE 1 | (Continued)

Reference	Design and setting	Study population	Objective	Care needs/measures
Greulich and Tarrant [54]	Literature review		Discussion of prelabor and labor characteristics and present management strategies for the latent phase of labor and treatment options for prolonged latent phase	<ul style="list-style-type: none"> <li>• Prolonged latent phase: oxytocin, therapeutic rest, epidural, active management, amniotomy</li> </ul>
Gross [72]	Book chapter			<ul style="list-style-type: none"> <li>• Having time</li> </ul>
Henderson and Redshaw [69]	Mixed methods, England	3099 postpartum women with spontaneous onset of labor, 49% primiparous and 51% multiparous	Exploration of women's experiences of early labor care focusing on sociodemographic differences	<ul style="list-style-type: none"> <li>• Being invited to the hospital before 3 contractions in 10 min lasting 1 min</li> <li>• Being allowed to stay in the hospital instead of being sent home</li> <li>• Not being treated rude and insensitive and made to feel foolish</li> <li>• Staff should consider the travel time               <ul style="list-style-type: none"> <li>• To get appropriate pain relief</li> <li>• Receive consistent information</li> <li>• Vaginal examination</li> </ul> </li> <li>• Sonogram before being sent home</li> <li>• Better pain management</li> <li>• Clear instructions specifically knowing when to come back, prior to being sent home               <ul style="list-style-type: none"> <li>• Help with positions in bed</li> <li>• Ability to walk, drink and eat, take a shower</li> <li>• Follow-up phone call after discharge</li> </ul> </li> <li>• Written instructions about what to do at home to stay comfortable and about when to return to hospital               <ul style="list-style-type: none"> <li>• Pain medication prior to being sent home</li> <li>• Need for reassurance</li> <li>• Support by partner</li> <li>• Examining partner's anxiety</li> <li>• Depends on distance from hospital or transport</li> <li>• Continuity of care (institutional sight)                   <ul style="list-style-type: none"> <li>• Being valued</li> <li>• Therapeutic rest</li> <li>• Doula for one-to-one support</li> </ul> </li> <li>• Alternative and mechanic labor augmentation</li> </ul> </li> </ul>
Hosek et al. [62]	Cross sectional study, large, 968-bed tertiary teaching hospital in USA	100 women in early labor at term, with uncomplicated pregnancy, vertex presentation and intact membranes who were sent home subsequently	Assessment of perceptions of care from woman discharged from an obstetrical triage unit or a labor and delivery unit with a diagnosis of false or latent phase of labor	
Hundley et al. [55]	Chapter/review of studies		Discussion on how maternity care services should be designed and delivered to ensure that women get the optimum advice and care at the beginning of labor	
Hunter and Chern-Hughes [36]	Qualitative study	Four nurse-midwives	Suggestions for coping with prolonged latent phase labor	

(Continues)

TABLE 1 | (Continued)

Reference	Design and setting	Study population	Objective	Care needs/measures
Janssen et al. [73]	Discussion paper			<ul style="list-style-type: none"> <li>• Assurance that labor has started</li> <li>• Being listened to and respected</li> <li>• Receiving clear advice</li> <li>• Labor augmentation</li> <li>• Therapeutic rest</li> <li>• Midwifery support</li> <li>• Support by family and friends</li> </ul>
Janssen and Desmarais [66]	Randomized controlled trial; Hospitals serving obstetrical populations in metropolitan Vancouver, British Columbia, Canada	423 healthy nulliparous women in labor at term with uncomplicated pregnancies	Comparison of experiences with early labor assessment and support at home vs. by telephone	<ul style="list-style-type: none"> <li>• Women appreciated home visits than telephone support</li> </ul>
Jepsen et al. [46]	Phenomenology of practice, Denmark with caseload midwifery	8 couples	Exploration of women's and their partner's experiences of caseload midwifery	<ul style="list-style-type: none"> <li>• Welcoming first contact by phone</li> <li>• Knowing the midwife</li> <li>• Meeting a friend (=the known midwife) at the hospital</li> </ul>
Kennedy et al. [37]	Qualitative study, North-Eastern hospital USA	24 first-time mothers and 79 caregivers and policymakers	Identification of strategies to promote primary vaginal birth and future areas of research	<ul style="list-style-type: none"> <li>• Permission to call again</li> <li>• Being at the hospital</li> <li>• Clear guidelines for returning home</li> <li>• Phone support</li> <li>• Pain relief by medication</li> <li>• Sedation</li> </ul>
Krahl et al. [4]	Literature review		Description of characteristics and process of labor phases	
Larkin et al. [38]	Qualitative descriptive study; Four randomly selected maternity units in the Republic of Ireland	25 women who had experienced labor	Exploration of women's experiences of childbirth	<ul style="list-style-type: none"> <li>• Clear-cut distinction between women being in labor and admitted to hospital or sent home</li> </ul>

(Continues)

TABLE 1 | (Continued)

Reference	Design and setting	Study population	Objective	Care needs/measures
Luisier [63]	Survey; French part of Switzerland	49 midwives working in 4 maternity hospitals	Understanding how professionals can help women in early labor	<ul style="list-style-type: none"> <li>Medication for pain management               <ul style="list-style-type: none"> <li>Tocolysis</li> <li>Homeopathy</li> </ul> </li> <li>Induction of labor</li> <li>Information on latent phase of labor               <ul style="list-style-type: none"> <li>Present midwife                   <ul style="list-style-type: none"> <li>Support</li> </ul> </li> <li>Antenatal preparation</li> <li>Telephone support</li> <li>Having a check-up</li> </ul> </li> </ul>
Marowitz [56]	Literature review, “clinical round”		Understanding if delaying hospital admission meets women's needs	<ul style="list-style-type: none"> <li>Need to have their experience validated by health providers               <ul style="list-style-type: none"> <li>Reassurance of normalcy</li> <li>Practical suggestions for coping and comfort</li> <li>Contact with the midwife</li> </ul> </li> <li>Wide array of comfort measures and pain relief options that can be utilized outside the hospital</li> </ul>
Myhre et al. [39]	Qualitative study; Five clinics in South-Eastern Norway	16 first-time mothers 3–17 weeks after birth	Exploration of women's experience with information, and their information needs in pre-admission early labor	<ul style="list-style-type: none"> <li>Easy access to trustworthy information at the right time</li> <li>Having a feeling that one can call the midwife as often as needed</li> <li>Talking to a friendly and understanding professional who confirmed their thoughts about what was happening               <ul style="list-style-type: none"> <li>Receive proper attention</li> <li>Just wanted help</li> </ul> </li> <li>HAVING the feeling of being allowed to come in the hospital               <ul style="list-style-type: none"> <li>check-ups should be an easily available option</li> <li>Being able to participate in decisions</li> </ul> </li> <li>Being in hospital since home is not a relaxing place</li> </ul>
Nolan et al. [64]	Survey; UK	715 first-time mothers		
Nolan and Smith [40]	Qualitative study; West Midlands, UK	8 women who had given birth	Exploration of women's experiences of staying at home following advice from an obstetric triage unit	<ul style="list-style-type: none"> <li>Need to have their experience of early labor validated by a health professional               <ul style="list-style-type: none"> <li>Let them know what was happening</li> <li>Reassurance</li> <li>To have labor confirmed</li> <li>Not being sent home</li> <li>To have a midwife coming home</li> </ul> </li> </ul>

(Continues)

TABLE 1 | (Continued)

Reference	Design and setting	Study population	Objective	Care needs/measures
Nolan [41]	Qualitative study; University of Worcester	8 women 1 month postpartum	Understanding of why women often go to hospital early in labor	<ul style="list-style-type: none"> <li>• Need for reassurance</li> <li>• Permission to come to the hospital</li> </ul>
Nyman, Downe and Berg [49]	Hermeneutic, reflective lifeworld research approach; Western Sweden	49 mothers and 16 partners	Exploration of the meaning of first-time mothers' and their partners' first encounter with midwives and other maternity care staff when they arrive on a hospital labor ward	<ul style="list-style-type: none"> <li>• Knowing how far labor had progressed <ul style="list-style-type: none"> <li>• Being informed</li> <li>• Being welcomed</li> </ul> </li> <li>• Not to wait too long for</li> <li>• Professional help while being in the labor ward <ul style="list-style-type: none"> <li>• Remain in the room</li> </ul> </li> <li>• Being listened to their needs</li> <li>• Share questions and uncertainties with a midwife <ul style="list-style-type: none"> <li>• Confirm normality</li> <li>• Facilitate capacity to relax</li> </ul> </li> <li>• Permit openness to the essential unpredictability of the childbirth process</li> </ul>
Petersen et al. [65]	Prospective, longitudinal cohort study; 41 participating maternity units in Lower Saxony, Germany	549 nulliparae and 490 multiparae	Assessment of the correlation between women's perception of onset of labor and the frequency and timing of epidural analgesia during labor	<ul style="list-style-type: none"> <li>• Epidural analgesia</li> </ul>
Scrimshaw and Souza [70]	Mixed-methods design; Los Angeles, USA	50 women, who received instructions and 50 who did not receive instructions	Description of a project to provide culturally appropriate instruction on the identification of active labor evaluation of the effectiveness of those instructions	<ul style="list-style-type: none"> <li>• Wanting the doctor to check <ul style="list-style-type: none"> <li>• Pain relief</li> </ul> </li> <li>• To be safe if labor progresses quickly</li> <li>• Safer to wait at the hospital than at home</li> </ul>

(Continues)

TABLE 1 | (Continued)

Reference	Design and setting	Study population	Objective	Care needs/measures
Shallow [51]	Feminist participatory action research, England	72 participants, women and midwives	Exploration of the interactions between women and midwives after labor onset, to determine what factors contributed to or inhibited satisfactory interactions between women and midwives	<ul style="list-style-type: none"> <li>• Vaginal examination</li> <li>• Professional support</li> <li>• Home support</li> <li>• Shared decision-making</li> <li>• Being listened to</li> <li>• Schedule follow-up contact, stay in contact</li> <li>• Advice on transportation</li> <li>• Being allowed to stay in</li> <li>• Trust in mother's and midwife's intuition</li> <li>• No irrelevant information</li> <li>• Antenatal preparation</li> <li>• No negative terminology</li> <li>• Information, advice and reassurance</li> </ul>
Spiby and Renfrew [57]	Literature review			
Spiby et al. [14]	Multi-center, randomized controlled trial with concurrent cost-effectiveness analysis; UK	3514 nulliparous women	Determination of the impact of a policy of offering home visits by compared with standard care	<ul style="list-style-type: none"> <li>• Being informed</li> <li>• Knowing how far it had progressed</li> <li>• Staying in familiar surroundings</li> <li>• Being at home longer</li> <li>• Ensuring continuity of care</li> <li>• Knowing what to expect and when to go to the hospital</li> <li>• More confidence in dealing with early labor</li> <li>• Pain relief with medication</li> </ul>
Spiby et al. [47]	Qualitative design based on interpretive phenomenology; two Maternity Units in the Midlands of England	14 labor ward midwife co-ordinators and labor ward midwives	Exploration of midwives' concerns, experiences and perceptions of the purpose of telephone contacts with women in early labor	<ul style="list-style-type: none"> <li>• Reassurance, not letting the woman be in doubt</li> <li>• Pain relief</li> <li>• Inform women that they could be sent home</li> <li>• Admit women if she had phoned 3 times</li> <li>• Asking for coping strategies</li> </ul>

(Continues)



TABLE 1 | (Continued)

Reference	Design and setting	Study population	Objective	Care needs/measures
Weavers and Nash [58]	Review of services, Royal Berkshire NHS Foundation Trust UK	49 local women and 53 midwives	Provision of an overview of a collaborative service improvement project	<ul style="list-style-type: none"><li>• Consistent, relevant, and appropriate advice and support on the phone<ul style="list-style-type: none"><li>• Advice of coping strategies</li><li>• Assessment</li></ul></li><li>• Calm and friendly telephoner</li><li>• Consistency of information<ul style="list-style-type: none"><li>• Feeling reassured</li></ul></li><li>• Having confidence to remain at home<ul style="list-style-type: none"><li>• Continuity of midwife</li><li>• Quality of advice</li></ul></li><li>• Positive attitude of the midwife</li><li>• Telephone line should not be occupied</li></ul>
WHO [6]	Guideline		Address specific aspects of labor management and the leading causes of maternal and newborn mortality and morbidity in response to the needs of countries	<ul style="list-style-type: none"><li>• Delaying admission to the labor ward only in the context of rigorous research<ul style="list-style-type: none"><li>• No delay of admission to a maternity waiting area</li><li>• No delay of first contact with a health care provider<ul style="list-style-type: none"><li>• No delayed assessment on admission</li><li>• Comprehensive maternal and fetal assessment</li><li>• Support, encouragement and advice</li></ul></li></ul></li><li>• Instructions to walk around or to return home until labor becomes more active</li><li>• Instructions on when to return</li></ul>

TABLE 2 | Care needs during early labor.

	Information and advice	Reassurance	Professional support and empowerment	Hospital admission	Confirmation of labor onset	Contacting a health professional	Pain management	Way to be treated	Fetal and maternal assessment	Care model	Rest	Labor stimulation	Shared decision- making	Antenatal preparation	Staying home	Infrastructure	Taking care of partner
ACOG [71]	•		•				•			•			•	•			
Allen et al. [26]	•		•	•		•									•		
Ángeby et al. [27]	•		•					•		•			•				
Austin and Calderon [52]	•	•	•	•			•		•	•	•	•	•		•		
Barnett et al. [67]		•					•										
Beake et al. [59]	•	•		•	•	•		•									
Beebe and Humphreys [28]	•		•		•		•		•							•	
Balcik and Ozturk [60]									•		•						
Breman et al. [15]												•					
Burvill [41]		•															
Cappelletti et al. [45]	•	•	•	•	•			•			•						
Carlsson et al. [44]	•	•	•	•	•	•							•				
Carlsson et al. [43]		•															
Carlsson [29]			•	•											•		
Cheyne et al. [31]	•	•		•							•						
Cheyne et al. [30]					•		•										
Cluett [53]	•	•	•						•	•				•	•		
Dixon et al. [48]	•	•	•		•	•											
Edmonds et al. [32]		•	•		•		•		•								
Eri et al. [34]					•			•	•								•
Eri et al. [33]		•		•	•			•					•				
Eri et al. [50]		•	•	•		•				•				•			
Faucher and Kennedy [35]		•				•		•									
Gaudernack et al. [6]			•				•										

(Continues)

TABLE 2 | (Continued)

	Information and advice	Reassurance	Professional support and empowerment	Hospital admission	Confirmation of labor onset	Contacting a health professional	Pain management	Way to be treated	Fetal and maternal assessment	Care model	Rest	Labor stimulation	Shared decision-making	Antenatal preparation	Staying home	Infrastructure	Taking care of partner
Green et al. [68]	•	•	•			•		•									
Greulich and Tarrant [54]							•				•						
Gross [72]			•														
Henderson and Redshaw [69]	•			•	•		•	•									
Hosek et al. [62]	•		•			•	•		•							•	
Hundley et al. [55]		•		•				•		•							•
Hunter and Chern-Hughes [36]										•	•	•					
Janssen et al. [73]	•		•		•			•			•	•					
Jansen and Desmarais [66]										•							
Jepsen et al. [46]								•		•							
Kennedy et al. [37]	•			•		•	•										
Krahl et al. [4]											•						
Larkin et al. [38]	•																
Luisier [63]	•		•		•	•	•		•		•	•		•			
Marowitz [56]	•	•			•	•											
Myhre et al. [39]	•		•	•		•		•	•				•				
Nolan et al. [64]			•	•													
Nolan and Smith [40]		•		•	•	•											
Nolan [41]		•		•													
Nyman et al. [49]	•	•	•		•			•			•					•	
Petersen et al. [65]							•										
Scrimshaw and Souza [70]				•			•		•								
Shallow [51]	•			•	•	•		•					•	•			
Spiby and Renfrew [8]	•	•															

(Continues)

TABLE 2 | (Continued)

	Information and advice	Professional support and empowerment	Hospital admission	Confirmation of labor onset	Contacting a health professional	Pain management	Way to be treated	Fetal and maternal assessment	Care model	Rest	Labor stimulation	Shared decision- making	Antenatal preparation	Staying home	Infrastructure	Taking care of partner
Spiby and ELSA team [14]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Spiby et al. [47]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Weavers and Nash [58]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
WHO [6]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

[15, 31, 36, 45, 52, 54, 67, 73]. A closer examination of specific needs related to pain management is required and reflected in 15 articles as seen in Table 2. A request for epidural anesthesia by some women was reported by Greulich and Tarrant [54] and Petersen et al. [65].

3.3 | Care Models

Various articles examined needs related to care models, noting that care during labor should be individually adapted [27, 50] and continuous [14, 53, 55, 58]. Knowing the midwife before labor onset helps support care needs during early labor [46, 53]. In total, 20 articles commented that women prefer to be admitted to the hospital during early labor (Table 2) when they experience the hospital as a safe place [29, 45, 50, 70]. Furthermore, women worry about not arriving on time [29] or having to travel with pain [26]. While at hospital, women would like to be able to move freely [28] and experience a calm environment [45]. According to five articles, encouragement to stay at home during early labor is desired by some women and midwives. When childbirth is considered a healthy, natural event, home is experienced by women as a safe place [29]. Women who stay at home need to be in frequent contact with a midwife either by home visits [14, 73] or via phone [37, 44]. There should be no barriers to contacting a health professional [26, 58].

3.4 | Empathy and Empowerment

Women described contacting a health care provider in early labor because they felt they needed to be monitored professionally. Carlsson et al. [29, 44] explained that due to the competencies and knowledge of health care professionals, many women feel safer in handing over responsibility. When caring for women in early labor, shared decision-making and participation are important [27, 33, 39, 44, 71] as is involving women in the planning of their care [52]. Some articles described the need to feel supported emotionally and encouraged by a professional [26, 52, 68]. During such a vulnerable phase, women wanted health care professionals to have time for them [72] and to communicate clearly with them [52, 59]. Both women and midwives want respectful treatment during early labor. Women fear meeting an insensitive provider [69] or being mistreated [27]. It is important that women experience a feeling of being taken seriously, listened to, respected and valued in early labor as throughout their care [34, 35, 39, 45, 46, 49, 50, 55, 58, 59, 68, 73].

3.5 | Partner Involvement

Finally, Eri et al. [34] and Hundley et al. [55] stated that the partners of birthing women are in need of care. It is essential that their anxiety should also be addressed [55].

4 | Discussion

This is the first scoping review that draws attention to pregnant women's care needs during early labor. Major reasons for seeking professional help are to receive reassurance and get advice

and information on how to cope with early labor. Furthermore, many women express the need for professional guidance. Several articles highlighted women's preference for hospital admission or a continuous care model. While some women want empowerment and empathy from a midwife, others require clear instructions on helpful measures or even clinical interventions during early labor.

The greater the diversity of women experiencing early labor, the larger the variety of their care needs [59]. Women already have a repository of possible measures that can be applied during early labor, some of which are intuitive and others are learned in antenatal classes [19, 28]. In order to apply the knowledge acquired about the management of early labor effectively, ACOG [71] describes the need to help women to develop an antenatal plan for coping techniques during early labor. However, at some point, many women have difficulties in managing early labor without professional support. This creates a challenge especially for first time parents [1] and insecurities and anxiety during early labor [43, 59] are common. The articles described that women need a feeling of security that what they are experiencing is normal, along with reassurance about the child's health [32]. This can, to some extent, only be provided by a healthcare professional as expert opinion was clearly preferred. Clinical observations and possible interventions aid reassurance. This means that women ask for auscultation of the fetal heartbeat [60] or describe the need to hear a midwife explain what to expect as labor progresses [45]. Additionally, women and midwives alike refer to the beginning of labor as "the real thing" after significant cervical dilatation is seen. Vaginal assessment performed by a midwife is therefore regarded as helpful to evaluate the stage of labor [48, 51, 59, 69]. Yet, negative aspects of such examinations have been widely discussed in the literature, since this often contributes to discomfort or even pain for birthing women [48, 59].

The ability to cope with early labor needs to be clearly assessed since anxiety potentially impacts pain intensity negatively [26]. Pain management is preferable in early labor due to several fundamental factors, including the individual's perceived pain intensity [28, 50]. Various possibilities are discussed within the articles. Applying alternative pain management such as hot baths or massages might be helpful for some women in coping with labor pain during early labor. However, others prefer a more invasive pain management method ranging from oral analgesia to regional anesthesia [14, 28, 31, 32, 37, 52, 54, 61, 62, 65, 67, 69–71]. Women do not only seek medical intervention for pain management, but also possibly to promote labor progression or relaxation of contractions by medical tocolysis [4, 15, 31, 36, 45, 49, 52, 54, 67, 73]. Such medicalization is often unnecessary from a clinical point of view, and has already been addressed by Miller et al. [10] with the well-known phrase "too much too soon", which highlights the implications of early medical interventions in Western countries during childbirth. In the context of early labor, it is widely believed that such interventions negatively impact birth outcomes such as operative birth modes or transfer of the neonate to an intensive care unit [9, 13], explaining why midwives often advise women to stay at home for as long as possible [33]. Yet, the health care providers' preference for hospital admission during active phase of labor is often not congruent with the

desires of the laboring women and their partners. Many articles have highlighted that women favor hospital admission during early labor since the hospital is often regarded as a safe place and transport to the hospital when labor is intense is feared [26, 55, 59]. However, Carlsson et al. [29] found that if childbirth is viewed as a natural event, women prefer to stay home and consider their familiar surroundings as the safest space for early labor. Attitudes toward childbirth therefore play a role in assessing which care is needed [26].

Being turned away from hospital admission increases women's anxiety because they must determine when next to call the midwife or other care provider [28], and they fear not being taken seriously [50]. Therefore, many articles investigated the importance of the social interaction between midwife and expectant parents during early labor. Laboring people want to be treated in a welcoming, calm and supportive manner and to meet a friendly and respectful professional as labor begins [27, 34, 35, 39, 45, 46, 49, 50, 55, 58, 59, 68, 69, 73]. To alleviate any concerns about when to call the midwife, it may be beneficial if the women and their accompanying person have already met the midwife or are being cared for by a known midwife, as is the case of midwife-led care models [31, 46]. The existing evidence on the effects of different midwife-led care models is still rare and incomplete [46]. If women are given the option of having constant, recurring contact with a midwife during the onset of labor, they feel more empowered to handle it at home [48]. Moreover, it is easier for midwives to evaluate individual needs if they stay in close contact with the laboring women [31, 47]. According to Allen et al. [26], women feel empowered to cope with early labor at home after the process has been assessed as normal, which can also be supported by home visits [14]. Implementing early labor lounges within the hospital setting are also possible strategies for increasing access professionally supports, such as doulas, during early labor; these approaches promote higher satisfaction with early labor care [15].

## 4.1 | Strength and Limitations

This study focuses solely on care needs during early labor among pregnant women. Considering 52 articles does not only allow an in-depth understanding of the subject, but it is also the first scoping review on the theme. The methodology follows a clear structure with peer-reviewed guidelines for the search strategy. The results of this study foster better understanding of the individual character of women's and their partners' care needs during early labor, and therefore, may contribute to better quality of care in such a vulnerable phase. Additionally, it allows discussion regarding hospitals policies on early labor care.

Nevertheless, this study has some limitations. To achieve a broad approach, we did not limit inclusion to a certain methodology or publication date. For instance, we included articles that focussed on women's views regarding their care needs, but also on midwives' views of what they think women need in early labor. Such articles are susceptible to bias since the midwives' views are only interpretations of what they observe. Occasionally, it also seemed difficult to differentiate between interventions and care needs, meaning that if women, for example, received a back massage, this did not necessarily mean that this was what they



needed. Additionally, integrating reviews and guidelines resulted in studies that had been considered multiple times. For transparency, we solely refer to and count articles rather than studies or number of mentions of a certain aspect.

## 5 | Conclusion

As described, several articles highlighted women's needs for medical support including invasive interventions and the preference of being admitted to the hospital. Various ideas such as midwife-led care or early labor lounges are elaborated on as strategies for better supporting women in early labor. However, the effects of such care models on the outcomes of early labor still need further research [15, 46]. Shared decision making and participation in care planning does not only meet parents' care needs [39], but is also essential to individualized care [2]. Protecting women from unnecessary interventions is a well-intentioned thought, yet may jeopardizes a positive birth experience for some [8]. New ways need to be elaborated to support a women-centred and individualized approach to providing early labor care [9, 21].

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## Ethics Statement

As part of the GebStart study, ethical approval was obtained by the Ethics Committees of Zurich and Ethics Committees of North-western and Central Switzerland (BASEC-Nr. 2021-00687) in July 2021.

## Consent

The authors have nothing to report.

## Conflicts of Interest

The authors declare no conflicts of interest.

## Data Availability Statement

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

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### Supporting Information

Additional supporting information can be found online in the Supporting Information section.