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# Pregnant persons and birth partners' experiences of shared decision-making during pregnancy and childbirth: An umbrella review

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## ABSTRACT

*Objectives*: This umbrella review aimed to summarize evidence on pregnant persons and/or their birth partners' experiences and expectations of SDM during pregnancy and childbirth.

Methods: We searched eight databases from 2011 to 2023. Quantitative, qualitative and mixed methods systematic reviews were included in this review.

Results: We have identified 26 reviews that report on 622 primary studies involving over 213,000 pregnant persons and 22,000 birth partners, examining a broad range of decision-making scenarios in maternity care. The three-talk model was used to categorise the themes which include communication, weighing options, and making a decision. Multiple reviews have reported that pregnant persons and birth partners have mixed experiences in several decision-making scenarios, with insufficient information and inadequate consideration or answers to their questions being common issues. Pregnant persons and birth partners prefer clear explanations, simple communication, and involvement in decision-making. Exclusion from the decision-making during pregnancy and childbirth may lead to negative experiences, whilst involvement improves satisfaction, reduces distress and fosters empowerment.

*Conclusions*: The review highlights the importance of promoting SDM in maternity care, as it is fundamental to promoting maternal, newborn, and family well-being.

Practice implications: Health systems should redesign antenatal classes and train healthcare providers to enhance communication skills and encourage informed decision-making by pregnant persons and birth partners. Keywords

## 1. Introduction

Shared decision-making (SDM) is a process in which patients, their families or support persons, and healthcare providers (HCPs) collaborate to make decisions about healthcare based on the best available evidence and patients' preferences and values [1]. In the context of maternity care, SDM is recognised as an essential component of high-quality care [2] and has been associated with improved health outcomes and pregnant persons' satisfaction [1]. The SDM can be especially important during pregnancy and childbirth, when multiple decisions need to be made that can have significant consequences for both mother and baby.

In recent years, there has been a growing body of research on SDM in maternity care resulting in the publication of several systematic reviews

that have explored the views, experiences, and expectations of pregnant persons, birth partners, and HCPs related to specific situations in pregnancy and childbirth [3–21]. These reviews have focused on a range of circumstances, such as but not limited to, genetic screening tests, termination of pregnancy, medication use during pregnancy, birthplace, induction of labor (IoL), and mode of birth (MOB).

However, pregnancy and childbirth present multiple situations that require decisions to be made, and it is important to consider pregnant persons' and their birth partners' experiences and expectations of SDM in diverse scenarios during this period. This umbrella review aimed to identify and summarise reviews that investigated pregnant persons' and/or their birth partners' experiences and expectations with SDM in various situations during pregnancy and childbirth, where decisions

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needed to be made.

The research question for this review is:

"What is the extent and nature of pregnant persons and/or their birth partners' experiences and expectations during pregnancy and childbirth with SDM in different situations that require a decision?"

#### 2. Methods

This review was conducted and reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The review protocol was registered on PROSPERO (CRD42021278934).

## 2.1. Search strategy

To identify relevant reviews, a three-phase search strategy defined by the Joanna Briggs Institute (JBI) was utilised [22]. The initial phase involved identifying initial and alternative/synonyms from study titles and abstracts. In the second phase, keywords and subject headings (MeSH) searches were conducted separately in each database and combined using 'OR' and 'AND' operators. The search was conducted on various databases including CINAHL, Medline (via Ovid), PubMed, EMBASE, EMcare, PsychINFO, Maternity & Infant Care, and Google Scholar. In the third phase, a manual search of reference lists of included reviews was conducted. An expert librarian was consulted during the development of the search strategy. Further details of the search strategy can be found in Appendix Table A.1. Publication limitations included English-language papers published from 2011 to September 5, 2021. A follow-up search was conducted in February 2023 for updated reviews.

#### 2.2. Inclusion and exclusion criteria

We included reviews that examined collaboration between pregnant persons/birth partners and HCPs, and discussion of pregnant persons'/birth partners' values, goals, and preferences in the context of pregnancy and childbirth. We defined "birth partner" as the person chosen by the woman to provide emotional and physical support during pregnancy and childbirth. This review included reviews that met the characteristics of a systematic review including a search in at least two databases, a manual search of the reference lists of the included studies, an outline of search terms, and a justification of publication limitations [23]. Scoping and integrative reviews were included if they met the above-mentioned criteria. Both quantitative, qualitative and mixed methods systematic reviews were included in this review.

We excluded primary qualitative, quantitative, or mixed-methods studies, non-systematic reviews, and review protocols. Reviews that examined models, tools or decision aids designed for physician-patient consultation were excluded to maintain the scope and relevance of the review. This review focused on exploring SDM approaches between pregnant persons and/or birth partners with HCPs, rather than examining the effectiveness of the use of models or decision tools. Reviews were also excluded if they focused on SDM in the context of preconception or postnatally, such as experiences with preimplantation genetic testing, an elective single embryo transfer for couples undergoing in vitro fertilisation (IVF) or contraceptive use and infant feeding. We were interested in the SDM specific to pregnancy and saw IVF related to the conception of the child. Couples who had undergone IVF and were required to make decisions related to their pregnancy were still included. Table 1 illustrates the summary of inclusion and exclusion criteria.

## 2.3. Reviews selection

The search results were exported to the Covidence website (Veritas Health Innovation, Melbourne, Australia), where two phases of

Table 1
Inclusion and exclusion criteria.

#### Inclusion criteria

This overview of systematic reviews will **include** published reviews that:

- review the experience of discussion and collaboration between the pregnant people and/ or their birth partners with the healthcare provider
- covered at least one of the following populations: pregnant people and/or their partners
- investigated preferences, attitudes, views, or experiences of shared decision-making in all health-related decisions during pregnancy and childbirth
- conducted in any care settings that provide maternity care during pregnancy and childbirth such as inpatients, outpatients, tertiary care hospitals, or primary healthcare centres
- described the experiences of pregnant people and/or their partners with decisions throughout the experience of stillbirth. For the purposes of this review, stillbirth was defined as the death of a baby in utero at any time from 20 weeks until immediately before birth
- Met the criteria of the AMSTAR tool, meaning that the review used a comprehensive search strategy, searched at least two databases, examined reference lists of the included studies, provided keywords and justified publication restrictions.
- Qualitative, quantitative, or mixed systematic reviews
- The thesis, if it is a systematic review or part of it, is a systematic review.
- Published in peer-reviewed journals
- Published after 2011
- Published in the English language
- Full text available

#### **Exclusion criteria**

This overview of systematic reviews will **exclude** published reviews that:

- addressed pregnant people and/ or their partners who had undergone in vitro fertilization
- examined models, tools, or decision aids designed for physician-patient consultation
- discussed postnatal decisions such as contraceptive use and infant feeding
- reviewed shared decision-making experiences about preimplantation genetic testing (PGT) or an elective single embryo transfer (e-SET) for couples undergoing IVF
- focused on decisions following a neonatal death as well as decisions about premature baby's care in the NICII

- Reviews that provided a broad overview of a research topic with no straightforward methodological approach
- Symposium proceedings, review protocol, text, opinion, commentaries, and editorials
- Primary qualitative, quantitative, and mixed-method studies

screening were conducted. During the first phase, two reviewers (EF & TA) or (KC & TA) independently screened all titles and abstracts to determine eligibility for full-text review. Eligibility criteria were based on the review's objective and were established a priori. The reviewers resolved any disagreements through discussion. In the second phase, two reviewers independently screened full-text articles, while a third resolved conflicts. The team resolved any differences of opinion through review and discussion (TA, EF, KC, and KH).

## 2.4. Data extraction

Two independent reviewers (TA & EF) or (TA & KC) extracted the data of each review using the JBI Data Extraction Form for Systematic Reviews and Research Syntheses [24]. The form extracted author and year, the focus of decision, aim, years covered in the review, the number of studies in the review, number of participants, countries of studies included, type of studies in the review and appraisal instruments used. Table 2 illustrates the summary of the characteristics of included reviews.

## 2.5. Quality assessment of studies

The quality of each review was evaluated using the measurement Tool to Assess systematic Reviews (AMSTAR) [25], which includes 11

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**Table 2** Characteristics of included reviews.

Focus of decisions (Phenomena of interest)	Authors and years	Aim	Type of Review	Participants	Sources searched	Years covered in the review	Number of studies in the review	Type of studies in the review	Countries of studies included	Appraisal instruments used
Birthplace	(Coxon et al., 2017)	To explores influences on women's experiences of birthplace choice, preference and decision-making from the perspectives of women using maternity services	A systematic review	2802 women	CINAHL Plus; EMBASE; Medline; PsycINFO; Science Citation Index (Web of Science Core Collection); Social Sciences Citation Index (Web of Science Core Collection) and ASSIA (ProQuest)	1992–2015	24 studies	Qualitative studies	UK	CASP
	(Yuill et al., 2020)	To describe and interpret the qualitative research on parent's decision-making and informed choice about their pregnancy and birth care	A systematic review	1122 women	EBSCO (Academic Search Complete, CINAHL, Medline, SocIndex, PsycARTICLES), OVID (Embase, Global Health, Maternity and Infant Health Care), Web of Science, Open Grey and EThOs	1999 – 2018	37 studies	Qualitative studies & Mixed methods studies	UK, US, Canada, Australia, New Zealand, Finland, Denmark, the Netherlands and Spain	Rocca- Ihenacho CASP Walsh and Downe
nduction of labour	(Akuamoah- Boateng & Spencer, 2018)	To explore women's experiences and perceptions of induction of labour (IoL) for uncomplicated post-term pregnancy in a bid to provide a woman-centred approach to the care of women with uncomplicated post-term pregnancy	A systematic review	60 women	MEDLINE, CINAHL, and POPLINE K4Health	2004–2015	5 studies	Qualitative studies	Scotland, Australia, UK, Ireland, Canada,	ЈВІ
	(Lou et al., 2019)	To summarize the current qualitative evidence on women's experience of post- term induction of labour (IoL)	A systematic review	277 women	PubMed, Embase, and CINAHL	2004–2018	8 studies	Qualitative studies & Mixed methods studies	UK, Scotland, Australia, the United States, Ireland, and Canada	SRQR
	(Coates et al., 2019)	To explore and synthesise evidence of women's experiences of induction of labour (IoL)	A systematic review	157 women	MEDLINE, PsycINFO, PsychARTICLES, PubMed, CINAHL, EMBASE, Maternity and Infant Care Database, Web of Science, SocIndex, ProQuest database, EtHOS for theses and the reference lists	2010–2018	11 studies	Qualitative studies	UK, Australia, Brasil, USA, and Ireland	CASP
	(Coates, Goodfellow, et al., 2020)	To identify views, preferences and experiences of women and clinicians in relation to induction of labour more broadly, and practices of decision-making specifically	A scoping review	5333 women and clinicians	PubMed, Maternity and Infant Care, CINAHL, EMBASE and the reference lists of articles.	2009–2018	20 studies	Qualitative studies, Quantitative studies & Mixed methods studies	Nigeria, Australia, the United States, England, Scotland, Ireland, Canada, France, Germany, Sweden and the Netherlands	MMAT
	(Roberts et al., 2020)	To explore and synthesise evidence of women's information needs, decision- making and experiences of membrane sweeping to promote spontaneous labour	A systematic review	6 women	MEDLINE, ASSIA, PsycINFO, CINAHL, MIDIRS, ProQuest Dissertations and Theses A&I	2000–2019	1 study	Qualitative studies	United States	JBI ued on next pag

Table 2 (continued)

Focus of decisions (Phenomena of interest)	Authors and years	Aim	Type of Review	Participants	Sources searched	Years covered in the review	Number of studies in the review	Type of studies in the review	Countries of studies included	Appraisal instruments used
Mode of birth (Assisted vaginal birth/ Caesarean birth)	(Coates, Thirukumar, Spear, et al., 2020)	To map the literature in relation to women's mode of birth preferences, and identify underlying reasons for, and factors associated with, these preferences	A scoping review	156,666 women	PubMed, Maternity and Infant Care, MEDLINE, and Web of Science.	2008–2018	65 studies	Qualitative studies & Quantitative studies	Europe, Asia, North America, Africa, Australia, South America, and one study included 8 countries across multiple continents.	MMAT
	(Crossland et al., 2020)	To improve understanding of experiences, barriers and facilitators for assisted vaginal delivery (AVD) use	A systematic review	13816 women, 333 fathers and 2598 Obstetricians and Midwives	CINAHL, MEDLINE, PsycINFO, EMBASE, Global Index Medicus, POPLINE, African Journals Online and LILACS, Open Grey, Open access thesis & dissertations, and Ethos.	1985–2019	42 studies	Qualitative studies, Quantitative studies & Mixed methods studies	UK, Canada, Ireland, USA, Australia, Israel, Sweden, Tanzania, England, Uganda, Finland, Netherlands, Ecuador and Switzerland	Walsh and Downe
	(Coates, Thirukumar, & Henry, 2020a)	To map the literature in relation to shared decision making (SDM) for planned caesarean section (CS), particularly women's experiences in receiving the information they need to make informed decisions, their knowledge of the risks and benefits of CS, the experiences and attitudes of clinicians in relation to SDM, and interventions that support women to make informed decisions	A scoping review	9750 women and 3313 healthcare professionals	PubMed, Maternity and Infant Care, MEDLINE, and Web of Science	2008–2018	34 studies	Qualitative studies, Quantitative studies & Mixed methods studies	Australia, USA, UK, Canada, Sweden, Ireland, Netherlands, Germany, Italy, Taiwan, Trinidad, Turkey, Peru, Pakistan and China	MMAT
	(Coates, Thirukumar, & Henry, 2020b)	To gain insight into women's experiences of and satisfaction with caesarean and to identify factors that contribute to women's poor experiences of care	An integrative review	5693 women	PubMed, Maternity and Infant Care, MEDLINE, Web of Science and the reference lists of articles.	2008–2018	26 studies	Qualitative studies & Quantitative studies	Sweden, Australia, United States, United Kingdom, Canada, Israel, Germany, Japan Belgium, Austria, Iran, Turkey and Nigeria	MMAT
pidural analgesia	(Wada et al., 2018)	Focused on women's decision-making about epidural analgesia for labour pain	A narrative review	1834 women, 938 Anaesthetists, 65 ObGyn and 41 Nurse	PubMed, EMBASE, CINAHL, Scopus	1985–2016	20 studies	Mixed methods studies	USA, UK, Canada, Australia, New Zealand and Ireland.	Non
	(Borrelli et al., 2020)	To investigate childbearing women's views, experiences and decision-making related to epidural analgesia in labour	A systematic review	10,931 women	Cochrane Library, Medline, CINAHL and EMBASE	2000–2018	30 studies	Qualitative studies, Quantitative studies & Mixed methods studies	Australia, Canada, Denmark, Netherlands and Belgium, Israel, Sweden, UK and US.	CASP
antenatal screening	(Dheensa et al., 2013)	To develop a consensus on what is known about men's experiences and involvement in antenatal screening     To second to understand	A systematic review	448 women and 452 men	Assia, CINAHL, Embase, Economic and Social Data Service, Cochrane, ERIC, Medline, National Research Database, PsychInfo, IBSS, BNI, PsychArticles, LILACS,	1994–2011	18 studies	Qualitative studies	USA, UK, Sweden, Iceland, Israel and Netherlands	CASP

(continued on next page)

Table 2 (continued)

5

Focus of decisions (Phenomena of interest)	Authors and years	Aim	Type of Review	Participants	Sources searched	Years covered in the review	Number of studies in the review	Type of studies in the review	Countries of studies included	Appraisal instruments used
		whether screening is an appropriate way to engage uninvolved men in pregnancy			Sociological abstracts, PubMed, Science Direct, Swetswise, SIGLE, Wiley, ZETOC Index to theses, ProQuest Digital Dissertations, Google Scholar, contacting authors, Hand- searching, Authors' research.					
	(Cernat et al., 2019)	This review answers the following research questions: How do women experience informed decision making about noninvasive prenatal tests (NIPT)? How do they use information and negotiate between different aspects of the test to make a decision? What are their preferences for the facilitation of informed choice?	A systematic review	1060 women, 138 Partners, parents, or family members and 686 Clinicians	MEDLINE, CINAHL, and ISI Web of Science Social Sciences Citation Index (SSCI	2007–2017.	30 studies	Qualitative studies & Mixed methods studies	USA, UK, Netherlands, Canada, Multiple locations, China, Finland, Israel and New Zealand	CASP
Antidepressants in pregnancy	(Randall & Briscoe, 2018)	To explain if women are empowered to make decisions around the use of antidepressants in pregnancy.	A narrative review	368 women	CINAHL Complete, Intermid and reference lists	2000–2017	4 studies	Qualitative studies & Mixed methods studies	Canada and USA	CASP
	(Hippman & Balneaves, 2018)	To identify publications on women's SDM regarding antidepressant medication use during pregnancy and to provide an interpretive synthesis of this literature, focusing on women's perspectives of the SDM process	A narrative review	1371 women	PubMed, CINAHL, and PsycINFO	2005-2015	10 studies	Qualitative studies, Quantitative studies & Mixed methods studies	USA, Canada and Denmark	Non
Cardiac disease in pregnancy	(Dawson et al., 2018)	To produce the first qualitative meta-synthesis of the experiences of pregnant women with existing or acquired cardiac disease to inform improved healthcare services	A systematic review	383 women participants	CINAHL Plus, Embase, Ovid MEDLINE, PsycINFO, the Joanna Briggs Institute Evidence-Based Practice Database and Google Scholar	1992–2016	11 studies	Qualitative studies & Mixed methods studies	USA, Australia, Sweden, Canada, Norway and Belgium	CASP
Stillbirth/ extreme prematurity	(Peters et al., 2015)	To promote and inform meaningful and culturally appropriate evidence- informed practice amongst maternity care providers caring for mothers and families who experience stillbirth.	A systematic review	Not mentioned	PubMed, CINAHL, EMBASE, PsycINFO, and selected trial registries and stillbirth related websites	Up to 2014	22 studies	Qualitative studies	Australia, the United States, Sweden, Canada, Taiwan, the United Kingdom, South Africa, Japan, and Norway.	JBI

Table 2 (continued)

performed.

Focus of decisions (Phenomena of interest)	Authors and years	Aim	Type of Review	Participants	Sources searched	Years covered in the review	Number of studies in the review	Type of studies in the review	Countries of studies included	Appraisal instruments used
	(Lisy et al., 2016)	To investigate parents' experiences of care received during and after stillbirth.	A systematic review	295 mothers, 40 fathers and 63 parents	PubMed, CINAHL (EBSCO Host), Embase, PsycINFO, ClinicalTrials.gov, and metaRegister of Controlled Trials (mRCT)	1997–2013	20 studies	Qualitative studies	Sweden, Australia, South Africa, UK, USA, Taiwan, Norway, Canada and Japan	JBI
	(Kharrat et al., 2017)	To explore parental expectations on how HCPs should interact with parents at risk of giving birth to an extremely preterm infant between 22 and 25 weeks of gestation	A systematic review	661 mothers, 65 fathers, 430 couples and 199 healthcare professionals	Medline, CINAHL, PsychInfo, and Embase Additional articles and the references of articles	2002–2016	19 studies	Qualitative studies & Mixed methods studies	Canada, USA, Germany, Australia, Hong Kong, Japan, Malaysia, Taiwan and Singapore	Walsh and Downe
Labour and birth	(Longworth et al., 2015)	To identify and critically review the research literature that has examined fathers♦≥ involvement during labour and birth and their influence on decision making	A narrative review	622 mothers, 1037 fathers, 71 parents and 16 midwives	Social Services Abstract, Sociological Abstracts, ASSIA, CINAHL, Medline, Cochrane Library, AMED, BNI, PsycINFO, Embase, Maternity and Infant care, DH-Data, the Kings Fund Database and hand-searching in reference lists and key midwifery journals	1992–2012	27 studies	Qualitative studies, Quantitative studies & Mixed methods studies	USA, Sweden, UK, Finland, Malawi, Turkey, Netherlands, South Africa, Taiwan, and Germany	CASP
	(Cheng et al., 2019)	To conduct a narrative review of the literature exploring fathers' preferences, perspectives, and involvement in perinatal decision making	A narrative review	Not mentioned + no study characteristics table	PubMed, Ovid, EMBASE, Cochrane library, CINAHL databases and references of systematic reviews	2010–2017	13 articles	Qualitative studies	Each of the identified studies occurred in 1 of 7 developed countries, with nearly half in Scandinavia. Only 1 study was conducted in the United States.	Non
	(Forbes et al., 2021)	To identify: the extent and quality of research performed on the topic of male partner involvement in Birth Preparedness and Complication Readiness (BPCR) in Sub-Saharan Africa; the degree to which populations and geographic areas are represented; how male partner involvement has been conceptualized; how male partners response to obstetric complications has been conceptualised; how the variation in male partners involvement has been measured and if any interventions have been	A scoping review	14,550 women, their male partners and healthcare professional.	EMBASE, Ovid MEDLINE and Maternity and Infant Health	2005–2019	35 studies	Qualitative studies, Quantitative studies & Mixed methods studies	Burkina Faso, Ethiopia, Ghana, Kenya, Malawi, Nigeria, Tanzania, Uganda, Zambia, and Rwanda	Kmet

Abbreviations: SDM, shared decision making; IOL, Induction of labour; MOB, mode of birth; VB, vaginal birth; CS, caesarean section; AVD, assisted vaginal delivery; ObGyn, obstetrics and gynaecology; NIPT, non-invasive prenatal test; BPCR, birth preparedness and complication readiness; CASP, Critical Appraisal Skills Programme: JBI, Joanna Briggs Institute; MMAT, Mixed Method Appraisal Tool; SRQR, Standards for Reporting Qualitative Research; Kmet, Standard quality assessment criteria for evaluating primary research papers from a variety of fields, prepared by Kmet.

questions with four response options: "yes", "no", "can't answer," or "not applicable". Two independent reviewers assessed each review, assigning 1 point for each "yes" response and 0 for other responses. The total score for the 11 questions was calculated for each included review. The team discussed any discrepancies (TA, EF, and KC) until a consensus was reached.

## 2.6. Data analysis and Synthesis

Given the nature of the review question, data were qualitatively synthesised and presented. The data were thematically analysed using the framework developed by Lucas et.al [26], which comprises four steps. Firstly, a systematic search strategy was utilised to gather reviews addressing the review's objective. Secondly, the reviewers independently read each review to identify emerging themes from the experiences and expectations reported by pregnant persons and their birth partners. Thirdly, emergent themes were clustered and sub-themes were derived by two reviewers. Lastly, the main themes and sub-themes of the reviews were synthesised in a table to identify commonly recurring experiences and expectations of SDM during pregnancy and birthing.

To guide the development of the final themes and sub-themes, we used the revised three-talk model [27], as it provided a patient-centred framework for understanding the communication and decision-making processes between pregnant persons, their birth partners, and their HCPs during pregnancy and childbirth. The model comprises team talk, option talk, and decision talk, which form the core elements of SDM. For team talk, pregnant persons, their birth partners, and HCPs work together to recognise that the situation requires a decision [27]. In option talk, the focus is on discussing different choices/options. In decision talk, the goal is to achieve an informed value/preference-based decision by considering what matters most to the pregnant persons and their partners [27]. In three talk model, active listening (paying close attention and responding accurately) and deliberation (thinking carefully about options when facing a decision) are important elements. Any uncertainties regarding the thematic categorisations were resolved through discussion and consensus by the reviewers. Fig. 1 illustrate the Three-Talk Model of Shared Decision Making.

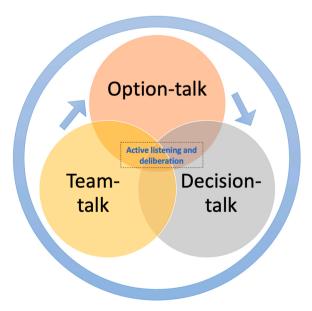


Fig. 1. The Three-Talk Model of Shared Decision Making.

#### 3. Results

#### 3.1. Review selection

The literature search yielded 447 reviews, which were reduced to 294 articles after eliminating duplicates. After screening the titles and abstracts, 253 articles were excluded based on predetermined eligibility criteria. The remaining 41 articles underwent full-text review, and 15 studies were excluded for various reasons, such as not reviewing SDM experience (n = 8) or examination of specific SDM interventions (n = 1), non-English language (n = 2), not following systematic review guidelines (n = 1) or focusing on HCPs (n = 3). Ultimately, 26 reviews were included in this review. Appendix Table A.2 lists the excluded studies. The PRISMA flowchart is shown in Fig. 2.

## 3.2. Quality of the included reviews

We assessed the quality of the 26 reviews using the AMSTAR tool, which includes 11 questions. A total score out of 11 was calculated for each review. Overall, 11 out of the 26 reviews exhibited a priori design, employed duplicate study selection and data extraction (14/26), a comprehensive search strategy (23/26), included the grey literature (13/26), provided a list of included and excluded studies (22/26), assessed the scientific quality of the included studies (21/26), provided the characteristics of the included studies (25/26), used appropriate methods for combining study findings (23/26), and addressed the conflict of interest (13/26). Further details of the quality assessment can be found in Table 3.

## 3.3. Overview of the included reviews

Our review included 26 reviews that met the criteria for systematic reviews, comprising 17 systematic reviews [3-5,7,8,11-21,28], four scoping reviews [29-32], two integrative reviews [33,34], and three narrative reviews [35-37]. In total, the 26 reviews reported 622 primary studies involving 213,572 pregnant persons and 22,505 birth partners, all of which were men. No overlapping studies were included twice among the identified reviews, due to the diversity of decision topics in each review. The reviews included a wide range of decisions in maternity care including labour and childbirth (n = 5) [20,21,32,34,37], IoL (n = 5) [5,7,8,28,29], mode of birth (n = 4) [11,30,31,33], consultations in the circumstance of stillbirth or extreme prematurity (n = 3)[17–19], medication use during pregnancy (n = 2) [35,36], antenatal screening (n = 2) [14,15], place of birth (n = 2) [3,4], pain management (n = 2) [12,13], and care with the cardiac disease in pregnancy (n = 1) [16]. Of the 26 reviews, 24 examined pregnant persons' experiences and expectations, while six focused on birth partners.

The included reviews were predominantly based on studies conducted in high-income countries, with limited representation from lowand middle-income countries, based on World Bank as of September 2021 [38]. These high-income countries included the United Kingdom, Australia, Ireland, USA, Canada, Denmark, Finland, Netherlands, Sweden, Israel, Switzerland, Norway, Iceland, Singapore, and Hong Kong, China. Middle-income economies represented in the studies included Nigeria, Tanzania, Ecuador, Egypt, Turkey, Pakistan, Iran, Russia, Lebanon, Kenya, Malaysia, Ghana, Zambia, Rwanda, Sri Lanka, Brazil, Mexico, Jordan, South Africa, and Thailand. The low-income countries represented were Uganda, Malawi, Burkina Faso, Ethiopia, Nepal, and Syria. It is important to note that some studies were conducted across multiple countries, and may include a mix of high-, middle-, and low-income economies. The reviews were published between 2013 and 2021 and included primary studies published between 1985 and 2019. Further details of the reviews are provided in Table 2.

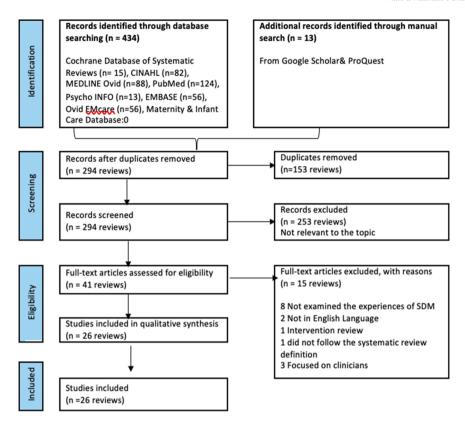


Fig. 2. The PRISMA flowchart.

## 3.4. Experiences of SDM during pregnancy and childbirth

We identified three themes based on the three-talk model [27]: Effective Communication; Weighing the Options; and Making a Decision. Additionally, under each theme, we classified subthemes based on the descriptions provided in the included reviews. Table 4 and Appendix A.3 present a summary of pregnant persons and birth partners' experiences of SDM: these are described in more detail below.

## 3.4.1. Communication

This theme focuses on the broader aspects/overall dynamics of the communication process between pregnant persons, their birth partners, and HCPs. It covers two subthemes "Interaction" and "Building Rapport and Trust".

3.4.1.1. Interaction. Eleven reviews examined pregnant persons' experiences of interacting with HCPs in various decision-making scenarios in maternity care, such as choosing the place of birth, IoL, MOB, epidural analgesia, discussing antidepressant use during pregnancy, and receiving care for cardiac disease during pregnancy [3-5,8,11,16,28,29, 31,33,36]. While a few reviews mentioned mixed experiences with communication, the overall findings were predominantly negative. In a review focused on MOB decision-making, some studies reported that pregnant persons were actively provided with necessary information to make informed choices, while other studies found that pregnant persons had limited control over their decisions and felt pressured towards specific options [31]. Another review revealed that although some pregnant persons had the opportunity to ask questions, they felt unsure about what to ask, leading to a lack of knowledge [11]. Several reviews highlighted that pregnant persons felt unheard and dissatisfied with HCPs who did not consider their opinions or actively listen to them [3,4, 8,16,28,31]. Pregnant persons also mentioned feeling uncomfortable due to HCPs' body language and communication style [5,16,29,33,36], and they often lacked opportunities for discussion, leading to assumptions of compliance [28]. For example, one woman mentioned that HCPs relied heavily on tests and ultrasounds during her pregnancy, neglecting to listen and take her experiences into account [16].

'They didn't seem to care, 'they did not listen to me' and 'did not respect my wish' [16].

Regarding birth partners' experiences with HCPs, a total of three reviews [17,18,20] documented only negative attitudes, whereby the use of ambiguous, medical language, and unclear information, as well as abrupt or blunt communication from providers, exacerbated their distress [17,18]. In one review, fathers were hesitant to ask the HCPs questions and did not actively seek information due to fear that providers might perceive them as coercive in certain situations [20]. Additionally, birth partners perceived a lack of empathy and engagement from HCPs, who failed to provide adequate support and empathetic care [17,18]. For instance, one father recounted his experience of receiving his baby's diagnosis from HCPs:

"He told me that sometimes these things just happen then left the room" [18]

3.4.1.2. Building rapport and trust. Ten reviews have discussed the establishing trust and rapport between pregnant persons and their HCPs [3–5,8,11,16,19,29,30,36]. Trusting their HCPs allowed some pregnant persons to feel comfortable and empowered in making decisions, even in situations where they may have otherwise felt overwhelmed or uncertain [4]. Some pregnant persons reported feeling supported in their preference for a home birth, trusting their midwives to facilitate a safe and successful home birth [3]. However, pregnant persons may have trusted heavily on the obstetrician' expertise and knowledge [11,16,19], which may lead to a lack of self-advocacy. In some cases, pregnant persons may have undergone IoL due to their doctor or midwife's recommendation, without fully questioning or understanding the reasons behind the decision [5,29]. Despite some pregnant persons lack of

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**Table 3**Quality assessments (AMSTAR tool).

Reviewers	1. Was an 'a priori' design provided?	2. Was there duplicate study selection and data extraction?	3. Was a comprehensive literature search performed?	4. Was the status of publication (i.e. grey literature) used as an inclusion criterion?	5. Was a list of studies (included and excluded) provided?	6. Were the characteristics of the included studies provided?	7. Was the scientific quality of the included studies assessed and documented?	8. Was the scientific quality of the included studies used appropriately in formulating conclusions?	9. Were the methods used to combine the findings of studies appropriate?	10. Was the likelihood of publication bias assessed?	11. Was the conflict of interest included?	Total (11 out of 11 questions)
(Akuamoah- Boateng & Spencer, 2018)	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	7
	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	8
(Borrelli et al., 2020)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	9
(Coates, Thirukumar, Spear, et al., 2020)	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	7
(Cernat et al., 2019)	No	Yes	Yes	No	Yes	Yes	No	No	Yes	No	Yes	6
(Cheng et al., 2019)	No	Yes	Yes	Yes	Yes	No	No	No	Yes	No	Yes	6
	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	9
	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	8
	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	6
	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	8
(Coxon et al., 2017)	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	9
(Crossland et al., 2020)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	10
(Dawson et al., 2018)	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	6
	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	8
	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	9
	No	No	No	No	No	Yes	No	No	No	No	Yes	2
(Kane et al., 2019)	No	No	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes	6
(Kharrat et al., 2017)	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	7

Table 3 (continued)

Reviewers	1. Was an 'a priori' design provided?	2. Was there duplicate study selection and data extraction?	3. Was a comprehensive literature search performed?	4. Was the status of publication (i.e. grey literature) used as an inclusion criterion?	5. Was a list of studies (included and excluded) provided?	6. Were the characteristics of the included studies provided?	7. Was the scientific quality of the included studies assessed and documented?	8. Was the scientific quality of the included studies used appropriately in formulating conclusions?	9. Were the methods used to combine the findings of studies appropriate?	10. Was the likelihood of publication bias assessed?	11. Was the conflict of interest included?	Total (11 out of 11 questions)
(Lisy et al., 2016)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	9
(Longworth et al., 2015)	No	No	Yes	No	No	Yes	Yes	No	No	No	Yes	4
(Lou et al., 2019)	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	7
(Peters et al., 2015)	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	No	No	6
(Randall & Briscoe, 2018)	No	No	Yes	No	Yes	Yes	No	No	No	No	No	3
(Roberts et al., 2020)	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	No	7
(Wada et al., 2018)	No	No	No	Yes	No	Yes	No	No	No	No	No	2
(Yuill et al., 2020)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	9
The overall score for the questions individually (out of 26 reviews)	11 out of 26	14 out of 26	23 out of 26	13 out of 26	22 out of 26	25 out of 26	21 out of 26	16 out of 26	23 out of 26	0 out of 26	13 out of 26	

**Table 4**A summary of pregnant persons and men's findings regarding their experiences based on a three-talk model.

Themes	Sub-themes	Pregnant persons' Findings	Men's Findings
Communication	Interaction	Limited control and pressure towards specific options. Uncertainty and lack of knowledge. Feeling unheard and dissatisfied. Discomfort with HCPs' body language and communication style. Lack of opportunities for discussion. Heavy reliance on tests and ultrasounds. Perceived lack of care, listening, and	Negative attitudes and distress due to ambiguous communication. Hesitation to ask questions and seek information. Perceived lack of empathy and engagement from HCPs. Inadequate support and empathetic care. Minimal support and explanation during baby's diagnosis.
	Building rapport and trust	respect.  Reliance on obstetricians' expertise and lack of self-advocacy. Following HCPs' recommendations without questioning. Strong trust in HCPs for decision-making despite lack of knowledge. Perception of HCPs being guided by policies rather than individual	
Weighing Options	Exchange of Information	circumstances  Insufficient information provided by healthcare professionals  Lack of explanation for procedures  Unresponsiveness to questions  Overwhelming amount of information  Unfavourable information given despite expressed wishes  Desire for additional information and discussion  Reliance on online platforms for	Frustration with lack of clear information     Exclusion from discussions     Lack of consideration for opinions     Seeking information online for regained control     Empowerment through online resources
	Discussing the options	support and information  • Mixed experiences when discussing options with HCPs  • Some pregnant people involved in decision-making after receiving risk	Feeling like     passive observers     in decision-     making     Eager to     participate in     discussions

after receiving risk

and benefit

information

Table 4 (continued)

Themes	Sub-themes	Pregnant persons' Findings	Men's Findings
Making a Decision	Engagement in SDM	Empowerment and satisfaction when preferences are respected Feeling limited in choices or ignored during discussions Short consultation time leading to unanswered questions Feeling powerless and affected health and well-being Some pregnant persons felt pressured or persuaded by HCPs and lacked a say in decision-making. Limited time during childbirth led to feelings of resignation. Some positive experiences with HCPs and specific birth plans empowered pregnant person in decision-making.	Not actively involved in decision-making during low-rick pregnancy Fear of being blamed for unwelcome interventions Waiving opinions to avoid conflict  Birth partners had a less active role in low-risk pregnancies, focusing on support. In high-risk pregnancies, birth partners sought greater involvement in decision-making. Birth partners felt excluded from decision-making by HCPs, causing emotional distress

knowledge about their condition, their trust in HCPs was strong [30]. Pregnant persons often followed the guidance of their HCPs without questioning it, believing that medical professionals "know best" [8,36]. A woman commented on her reliance on obstetricians:

"Well, they make it sound like the best thing.I never even would think to question a doctor.like it's their profession and I totally trust them to be telling me to do what is right for the baby." [5]

However, some pregnant persons felt that HCPs were more guided by policies than their individual circumstances [8].

Some reviews have investigated the role of HCPs in building patient rapport, highlighting differences in attitudes towards shared responsibility and relinquishing control [3,8,9,11,30,39]. Healy, et al. [39] reported that HCPs who were confident in sharing power and responsibility with pregnant persons were more likely to resist unnecessary interventions, while those who felt solely responsible for the birth process and were seen as the experts were less likely to do so. Although there were no specific reviews on differences in patient rapport building by HCPs' profession or gender, a review noted varying perspectives among midwives, obstetricians, and family practice physicians regarding SDM with pregnant persons [39]. For instance, Healy, et al. [39] found that while midwives recognised the importance of shared care, it can be challenging in a hospital setting where control is often taken from the woman.

## 3.4.2. Weighing Options

This theme focuses on the process of considering and evaluating alternative options available in a decision-making situation. It involves assessing the advantages and disadvantages, risks and benefits, and gathering relevant information to make an informed choice. Within this theme, two subthemes are highlighted: "Exchange of Information" and "Discussing the Options".

discussions

screening

about prenatal

3.4.2.1. Exchange of Information. The exchange of information between pregnant persons and HCPs during decision-making is crucial. However, twelve reviews have found that pregnant persons received insufficient information to make informed decisions, and their questions were not always given proper consideration or answers [3–5,8,11,15,16,28,29,31,33,36]. One review reported that pregnant persons never received an explanation for procedures such as emergency cesarean sections, and HCPs also were unresponsive whenever they requested details [33]. This lack of information left pregnant persons feeling out of control and unsure about their decisions. In some cases, HCPs provide leaflets, but pregnant persons still seek further information, and they wanted to speak with their HCPs for detailed information [4,5,8,29]. A woman commented on this, saying:

"I could have done with some discussion because things happened that I feel the leaflet mentioned but needed more discussion. things like pain and how bad it was. and that you might not even be in labour." [5]

In other cases, pregnant persons receive excessive information [31], which can also be overwhelming and impede their capacity to contextualise and prioritise information for decision-making [14,15]. Similarly, some pregnant persons mentioned that HCPs provided unfavourable information regarding ultrasound markers despite their wishes not to undergo antenatal testing for Down syndrome [14,19]. A woman commented on this, saying:

"We both felt very angry about being given this information [ultrasound markers], regardless of our wishes, even though we had made it clear we did not want antenatal testing for Down syndrome." [14]

Regarding birth partners' experiences, they expressed frustration about not being given clear information by obstetricians and midwives [14,19,32,37]. Five reviews noted that birth partners were often excluded from the discussions, their opinions were not taken into consideration, and most of the options' information was directed toward the woman [14,19,20,32,37]. This may have led to a feeling of power-lessness and increased anxiety, which in turn may have affected their ability to support their birth partners during pregnancy and childbirth [20,32,37]. Some birth partners took on a more active role by explaining the options to their wives and taking charge of the situation [20]. Overall, the role of a birth partner is multifaceted and can vary depending on the needs and preferences of the woman. A man commented that he supported his wife by acting as a verbal link between her and the HCP, particularly while she was in distress and pain:

"I was mainly focusing on comforting my partner. trying to explain the things she did not understand from what the doctor said. Because she reacted the way she did. I was the one who took the dominant role then." [20]

Several reviews indicated that pregnant persons and birth partners sought information from various sources to enhance their knowledge and decision-making [5,8,14,20]. Online patient communities, books, and input from friends and family were commonly utilised resources. Pregnant persons expressed their reliance on online platforms as a means of support, finding comfort in the knowledge that they were not alone and appreciated the opportunity to share experiences without fear of judgment [16]. One study highlighted how pregnant persons turned to the Internet to gather information but felt ill-prepared for the actual induction process [5]. Similarly, birth partners sought information online when faced with complications, allowing them to regain a sense of control and confidence in their interactions with HCPs [40]. Access to online resources empowered parents to make more informed choices and better prepared them for challenging situations. As one birth partner shared, after receiving unclear information from HCPs, he sought clarity from alternative sources:

"It was difficult, but you dust yourself off, go home, read up your books, read the Internet, you know. and I think you're able to then make informed choices." [20]

3.4.2.2. Discussing the options. Nine reviews have shown mixed experiences of pregnant persons when discussing different options with HCPs during pregnancy or childbirth [3,8,13,15,16,28,29,31,33]. Some pregnant persons were provided with risk and benefit information and subsequently involved in the decision-making [13]. Pregnant persons who were given the opportunity to discuss the options and had their preferences respected felt more empowered, valued and informed, which led to satisfaction with their birth experience [31,33]. In contrast, some reviews found that pregnant persons reported that the discussion with HCPs was centred on what should be done rather than on elucidating the available options [3,28]. Pregnant persons felt as though they do not have a choice or that their options are limited to choosing between two hospitals [3,8]. These reviews stated that pregnant persons reported feeling ignored or like a nuisance when discussing options with HCP [29,33]. Additionally, consultation time was often too short to allow for effective counselling, which left pregnant persons with unanswered questions [3,15,16]. These experiences can leave pregnant persons feeling powerless, and that directly affects their health and well-being [33].

Three reviews have shown that birth partners felt like they were passive observers in the decision-making when discussing their wife's labour and childbirth with HCPs [14,20,37]. A systematic review of 18 primary studies with 452 birth partners examined birth partners' experiences of participating in prenatal screening discussions [14]. The birth partners were eager to participate in the discussions about prenatal screening options because they felt the need to understand their unborn children's genetic well-being [14]. However, some birth partners felt that while they were comfortable offering physical support to their partners during labour, they were not participating in the decision-making [37]. Their fear of being blamed by their partner for encouraging unwelcome interventions may have prompted them to avoid making decisions. They decided to waive their opinions to avoid conflict in their wife's/partner's opinions. These feelings also were exacerbated by the expectation that HCPs will ignore their views [14, 20].

"I told her it was up to her (her wife). I couldn't say no to the doctor. The doctor would have believed her more than me." [14]

## 3.4.3. Making a decision

This theme examines the level of involvement of pregnant persons and their birth partners in the decision-making process, including their active participation, collaboration, and shared responsibility with HCPs. It also explores the outcomes and consequences of SDM. This theme highlights two subthemes "1. Engagement in SDM "&"Impact of SDM on outcomes".

3.4.3.1. Engagement in SDM. Seventeen reviews exploring pregnant persons involvement in SDM during pregnancy and childbirth yielded varying results in many situations, including IoL, MOB, epidural analgesia, prenatal screening, and the use of antidepressants during pregnancy [3,5,7,8,11–13,15,16,19,28–33,35,36]. Some pregnant persons have reported that they were provided with accurate and unbiased information, allowing them able to be involved in the decision-making, and their preferences and values were taken into account [15]. While some pregnant persons reported being involved, more commonly felt that they did not have a say or were pressured into a specific decision. They believed that HCPs were pressuring and persuading them and saw that a decision was made for her, not with her [7,11,15,16,28,35]. For instance, pregnant persons felt they had little control over their decision and that information was biased to persuade them towards a particular

MOB, either attempting vaginal birth after caesarean section (VBAC) or having a repeat caesarean section (CS). Some pregnant persons felt pressure to induce labour that came from midwives [3]. However, some pregnant persons welcomed having little control over the decision [31], and followed the HCPs' advice to have an IoL [29] or AVB [11].

The urgency of the situation during childbirth may also influence the decision-making process, leaving little time for pregnant persons to prepare and absorb the information. Some pregnant persons may feel resigned to the decision, particularly if they perceive that they no longer have a role in decision-making [8,29,33]. However, other reviews have found that pregnant persons may feel more empowered and involved in decision-making during childbirth, particularly if they have had positive experiences with their HCPs during pregnancy or have booked IoL [8, 28], elective CS [11], and pain management plan [12,13].

Seven reviews described birth partners' experiences of their involvement in pregnancy decision-making and the extent of their participation [11,14,20,21,32,34,37]. Some reviews investigated the participation of birth partners in low-risk pregnancies, and others were on high-risk pregnancies that have consequences for the fetus. The findings revealed that in low-risk pregnancies, birth partners tended to be less active in decision-making during antenatal care, labour and childbirth [11,21,32,34,41]. Rather, their primary role centred on supporting their partners, with the degree of their involvement relying heavily on the knowledge of HCPs [20,34]. They generally acknowledge that pregnant persons make the final decision:

"It didn't feel like I had the right to decide, in a way. I felt it's really for [partner] to decide. I just didn't want to be sort of directional, I suppose. And I just felt that I would support [partner] whichever way she decided." [20]

Birth partners in high-risk pregnancies, however, were more likely to seek greater involvement in decision-making [11,14,20,21,32,34,37]. They felt a sense of responsibility toward the pregnancy care and expressed a desire for more participation in the decision-making [14]. The reviews also indicated that birth partners in high-risk pregnancies felt more excluded from SDM by HCPs than their wives/partners [11,14, 20,21,32,34,37]. This lack of involvement caused emotional distress for birth partners, who felt further separated from their unborn child [14]. It was also reported that birth partners felt concerned that their exclusion from decision-making could lead to their wives/partners becoming overburdened and distressed [14,37]. A review stated that midwives have the information necessary to support pregnant persons' in making decisions about fatal health, including determining fetal health, and are responsible for respecting pregnant persons' final decisions rather than birth partners [14]. A man commented on this, saying:

"I wanted to be involved, but she (midwife) made it blatantly obvious that she wanted me out of the room." [14]

3.4.3.2. Impact of SDM on outcomes. The reviews suggested that excluding one or both parents from decision-making during pregnancy and childbirth may lead to adverse outcomes and experiences. Failure to involve parents in discussions, provide clear and understandable information, and include them in decision-making may result in diminished communication, mistrust, dissatisfaction with care, and increased conflict [42]. Research has shown that parents who are excluded from decision-making processes may experience heightened distress during challenging situations such as stillbirth [17,18] or pregnancy complications [32]. In contrast, involving parents in decision-making processes can lead to increased satisfaction with care, reduced distress, improved emotional and psychological support [14,17], and prevent feelings of disrespect [18]. Allowing parents to participate in decision-making processes enables their preferences to be recognised and respected, fostering a sense of empowerment and control [11].

#### 3.5. Expectations of SDM during pregnancy and childbirth

This theme focuses on the expectations of pregnant persons and their birth partners regarding SDM during pregnancy and childbirth. It explores their desires for active involvement, collaborative discussions, consideration of values and preferences, and clear explanations of options and potential outcomes. Table 5 presents a summary of pregnant persons' and birth partners expectations of SDM; these are described in more detail below.

According to seven reviews, pregnant persons' express a strong desire to actively participate in SDM and expect support from HCPs. They value being provided with necessary information, clear explanations, and collaborative discussions [3,11,12,16,17,29,36]. Pregnant persons prefer communication that avoids medical jargon [15,17–19, 37]. and is straightforward, allowing for comparisons of all available options and their potential outcomes [15]. They emphasize the importance of having sufficient time to consider their own views, values, and preferences before making a decision [11,12,16,29]. In addition to financial support, pregnant persons also require physical and emotional support to understand their feelings and to have their birth partners involved in the decision-making process [3].

Similarly, birth partners express a willingness to actively participate in SDM, as evidenced by findings from seven reviews [14,17,18,20,32,34,37]. They desire to be considered equal partners and have their perspectives taken into account, particularly when they have experienced concerns regarding pregnancy [17,18]. Birth partners stress the importance of having access to accurate, non-commercial health information presented in various formats, such as short videos or written materials displayed in waiting rooms, to aid their mental and emotional preparation for consultations with HCPs [14,20,32,37]. One male partner expressed frustration with the current process, stating that involving fathers more would help them feel like an integral part of the decision-making process as a couple [20].

In high-risk situations, pregnant persons and their birth partners prefer to receive empathetic care from their HCPs, along with clear and carefully worded information and instructions [17–20]. They greatly appreciate when HCPs respect their emotional experiences and reactions, making eye contact or providing comforting touch, as it helps reduce stress [11]. Furthermore, pregnant persons and birth partners may become distressed if they are not given enough time to process significant news, such as leaving the room immediately after being informed of the stillbirth of their baby [17].

Table 5
A summary of the of the expectations of pregnant people and their birth partners

## Pregnant people Findings

- Adequate time for decision-making
   Desire active participation, support and collaborative discussions with HCPs
- Clear explanations prior to labour
- Avoidance of medical language
- Straightforward discussions with comparisons of potential outcomes
- Partner's support to understand their feelings and hopes
   Respect for their decisions and
- Respect for their decisions and willingness
- Empathetic and carefully worded information and instructions
- Repetition of information
- Respect for their emotional experiences and reactions

## Birth partners' Findings

- Expect to be treated as equal partners to their wives/partners. Valuing their opinions and views.
- Confidence to ask questions.
- Clear communication without medical jargon.
- Access to accurate and accessible health information.
- Empathetic and respectful treatment.
- Recognition of their emotional experiences

#### 4. Discussion and Conclusion

#### 4.1. Discussion

The umbrella review found that pregnant persons and their birth partners have varying experiences with SDM during pregnancy and childbirth. Although some have positive experiences with communication, information explanation, and decision-making involvement, these instances were mentioned only in a few reviews. Pregnant persons and their birth partners expected to be more involved in the decisions and have enough accurate information, which was easy to understand. However, HCPs often provide insufficient information, lack empathy, or display disinterest, prompting parents to seek out other sources of information such as books, websites, family, and friends. This lack of information can sometimes lead to oversight when HCPs are pressed for time, leaving couples to make decisions without adequate knowledge.

Effective SDM practices during pregnancy and childbirth have several benefits for pregnant persons, their birth partners, and their babies. By actively involving the parents in decision-making, HCPs can promote pregnant persons autonomy and respect for their values and preferences. When both parents have access to accurate and understandable information, they can make informed decisions about their care. This can increase their satisfaction with the birth experience and help to reduce anxiety and stress [43]. Moreover, SDM can foster trust between HCPs and patients, which can promote a positive healthcare environment and enhance the overall well-being of the mother, baby, and family. Additionally, SDM can help HCPs identify and address any concerns or fears that pregnant persons and their birth partners may have, ultimately leading to better outcomes and a healthier birth experience.

However, a lack of participation in SDM can result in negative consequences for both pregnant persons and their birth partners, such as decisional conflicts, unnecessary costs, complaints, legal consequences, and a lack of trust in HCPs [43,44]. A systematic review found that the lack of SDM in decision-making can result in pregnant persons feeling a loss of control, powerlessness, and a lack of confidence in their ability to make decisions, leading to less satisfaction with their birth experience, and an increased likelihood of postpartum depression and post-traumatic stress disorder, and delayed bonding with their babies [45]. While HCPs bear the responsibility of involving pregnant persons and their birth partners in their healthcare, the parents themselves also have a responsibility to actively participate in their own healthcare. This involves asking questions, expressing their preferences, and sharing their concerns.

It is worth noting that HCPs may direct most of their attention toward the pregnant person rather than the birth partner [14,19,20,32, 37], due to a variety of factors, such as lack of time, personal characteristics, or cultural norms [46]. While it is appropriate for HCPs to prioritise the pregnant person's health, they should also recognise the importance of involving birth partners in decision-making and provide opportunities for them to participate. An involved birth partner can provide emotional and physical support to the mother, reduce stress and anxiety, and promote positive childbirth experiences [47]. By participating in SDM, the birth partners can help the mother make informed decisions, advocate for her needs, and act as a liaison with HCPs. Partner involvement can also strengthen the bond between parents, foster collaboration, and enhance their capacity to care for the baby. Healthcare providers can create a non-judgmental environment, encourage partner participation, and provide resources to help partners become more informed and engaged.

## 4.2. Practice implications

Effective participation in decision-making during pregnancy and childbirth can be achieved with the support and assistance of the health system through several methods. Hospital policies can be designed to encourage SDM by providing training classes for HCPs to enhance their communication skills and ability to encourage informed decision-making by pregnant persons and their birth partners [31]. Redesigning antenatal classes to cover topics such as pregnancy health and wellbeing, fetal development, stages of labour, pain management options, breastfeeding, and newborn care, led by experienced obstetricians, can also be beneficial.

In addition to hospital policies, HCPs can adopt an individualised counselling approach to elicit preferences and present options to pregnant persons' and their birth partners. The healthcare providers can structure counselling by providing accurate, clear, and understandable information about the available options, risks, and benefits. They can also encourage open communication, active listening, and respect for the values and preferences of pregnant persons' and their birth partners. A one-hour discussion group of 5–15 parents can be an effective approach to empowering pregnant persons and their birth partners to become actively engaged in decision-making. However, it is worth noting that SDM is not always feasible in emergencies where HCPs make decisions to preserve the health and safety of the mother or baby. In nonemergency situations, efforts should involve pregnant persons and birth partners in decision-making.

## 4.3. Limitations

This review has some limitations that need to be considered. Firstly, only English language reviews were included, potentially excluding relevant reviews in other languages. Secondly, the focus was solely on the experiences of pregnant persons and birth partners and thus did not provide insight into the experiences of HCPs. It is worth noting that some of the reviews solely referenced HCPs without any explicit mention of who they are. Thirdly, the primary studies included in the reviews were mainly conducted in Western nations, limiting the generalisability of the findings to Eastern countries. Additionally, the disparity in sample sizes between genders in the primary studies may reflect that the attention has been on the pregnant persons, and the birth partners' role in SDM in pregnancy and childbirth has not been fully explored. Moreover, it is important to note that while this review explored the experiences of pregnant persons and birth partners, it did not address how pregnant people want their birth partners to be involved in decision-making.

Further research is needed to investigate SDM approaches in the Eastern context, where cultural contexts, values, and health systems may differ. Additionally, exploring the perspectives of HCPs may help identify barriers and facilitators in implementing SDM and improve its adoption in clinical practice. Future studies should explore the perspectives of pregnant people and their birth partners on this matter.

## 5. Conclusion

The umbrella review highlights the pressing need to promote SDM in maternity care settings to improve the decision-making experiences of pregnant persons and their birth partners during pregnancy and child-birth. The lack of information and involvement from HCPs can lead to negative consequences for pregnant person, birth partners, and the childbirth experience. Engaging pregnant persons and birth partners in decision-making is fundamental for maternal, newborn, and family well-being. Designing a health system that is conducive to SDM, can assist HCPs in facilitating SDM in practice. Further research is needed to explore the perspectives of HCPs, examine SDM approaches in Eastern contexts, and identify potential barriers and facilitators to SDM adoption in clinical practice.

## **Ethics statement**

Ethical approval was not required as secondary data were used, and all data were obtained from publicly available sources that ensured the anonymity and confidentiality of the study participants.

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## CRediT authorship contribution statement

Tahani Alruwaili: Data curation, Formal analysis, Methodology, Project administration, Conceptualization, Writing - original draft, Writing - review & editing. Kimberley Crawford: Data curation, Formal analysis, Methodology, Supervision, Conceptualization. Shayesteh Jahanfar: Writing - review & editing. Kerry Hampton: Supervision. Ensieh Fooladi: Data curation, Formal analysis, Methodology, Supervision, Conceptualization.

## **Declaration of Competing Interest**

The authors have no conflicts of interest.

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## Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.pec.2023.107832.

#### References

- [1] Carrotte ER, Hartup ME, Lee-Bates B, Blanchard M. I think that everybody should be involved": What informs experiences of shared decision-making in supporting people living with schizophrenia spectrum disorders?. 2021/07/01/ Patient Educ Couns 2021;vol. 104(7):1583–90. https://doi.org/10.1016/j.pec.2020.11.012.
- [2] Guerrero K, Thomann J, Brandi K. Shared decision making in obstetrics and gynecology. Top Obstet Gynecol 2020;vol. 40(7):1–7. https://doi.org/10.1097/01. Peg. 000066/212 54813 22
- [3] Coxon K, Chisholm A, Malouf R, Rowe R, Hollowell J. What influences birth place preferences, choices and decision-making amongst healthy women with straightforward pregnancies in the UK? A qualitative evidence synthesis using a 'best fit' framework approach. BMC Pregnancy Childbirth 2017;vol. 17:1–15. https://doi.org/10.1186/s12884-017-1279-7.
- [4] Yuill C, McCourt C, Cheyne H, Leister N. Women's experiences of decision-making and informed choice about pregnancy and birth care: a systematic review and meta-synthesis of qualitative research. BMC Pregnancy Childbirth 2020;vol. 20(1): 1–21. https://doi.org/10.1186/s12884-020-03023-6.
- [5] Akuamoah-Boateng J, Spencer R. Woman-centered care: Women's experiences and perceptions of induction of labor for uncomplicated post-term pregnancy: a systematic review of qualitative evidence. Midwifery 2018;vol. 67:46–56. https:// doi.org/10.1016/j.midw.2018.08.018.
- [6] Lou S, et al. Termination of pregnancy following a prenatal diagnosis of Down syndrome: a qualitative study of the decision-making process of pregnant couples. Acta Obstet Et Gynecol Scand 2018;vol. 97(10):1228–36. https://doi.org/10.1111/ aogs.13386.
- [7] Roberts J, Evans K, Spiby H, Evans C, Pallotti P, Eldridge J. Women's information needs, decision-making and experiences of membrane sweeping to promote spontaneous labour (pp. N.PAG-N.PAG) Midwifery 2020;vol. 83. https://doi.org/ 10.1016/j.midw.2019.102626.
- [8] Coates R, Cupples G, Scamell A, McCourt C. Women's experiences of induction of labour: Qualitative systematic review and thematic synthesis. Midwifery 2019;vol. 69:17–28. https://doi.org/10.1016/j.midw.2018.10.013.
- [9] Panda S, Begley C, Daly D. Clinicians' views of factors influencing decision-making for caesarean section: A systematic review and metasynthesis of qualitative, quantitative and mixed methods studies. PLoS One 2018;vol. 13(7):e0200941. https://doi.org/10.1371/journal.pone.0200941.
- [10] Mulchandani R, Power H, Cavallaro F. The influence of individual provider characteristics and attitudes on caesarean section decision-making: a global review. 06/17 J Obstet Gynaecol 2019;vol. 40:1–9. https://doi.org/10.1080/ 01443615.2019.1587603.
- [11] Crossland N, Kingdon C, Balaam M-C, Betrán AP, Downe S. Women's, partners' and healthcare providers' views and experiences of assisted vaginal birth: a systematic mixed methods review. Reprod Health 2020;vol. 17(1):1–30. https://doi.org/ 10.1186/s12978-020-00915-w.
- [12] Wada K, Charland L, Bellingham G. Can women in labor give informed consent to epidural analgesia. 10/01 Bioethics 2018;vol. 33. https://doi.org/10.1111/ bioe.12517.

- [13] Borrelli S, Evans K, Pallotti P, Evans C, Eldridge J, Spiby H. Mixed-methods systematic review: Childbearing women's views, experiences, and decision-making related to epidural analgesia in labour. J Adv Nurs 2020;vol. 76(12):3273–92. https://doi.org/10.1111/jan.14555.
- [14] Dheensa S, Metcalfe A, Williams RA. Men's experiences of antenatal screening: a metasynthesis of the qualitative research. Int J Nurs Stud 2013;vol. 50(1):121–33. https://doi.org/10.1016/j.ijnurstu.2012.05.004.
- [15] Cernat A, De Freitas C, Majid U, Trivedi F, Higgins C, Vanstone M. Facilitating informed choice about non-invasive prenatal testing (NIPT): a systematic review and qualitative meta-synthesis of women's experiences (pp. N.PAG-N.PAG) BMC Pregnancy Childbirth 2019;vol. 19(1). https://doi.org/10.1186/s12884-018-2168
- [16] Dawson A, Krastev Y, Parsonage W, Peek M, Lust K, Sullivan E. Experiences of women with cardiac disease in pregnancy: a systematic review and metasynthesis. 09/01 BMJ Open 2018;vol. 8:e022755. https://doi.org/10.1136/bmjopen-2018-022755
- [17] Peters MDJ, Lisy K, Riitano D, Jordan Z, Aromataris E. Caring for families experiencing stillbirth: evidence-based guidance for maternity care providers. Women Birth 2015;vol. 28(4):272–8. https://doi.org/10.1016/j. wombi.2015.07.003.
- [18] Lisy K, Peters MDJ, Riitano D, Jordan Z, Aromataris E. Provision of meaningful care at diagnosis, birth, and after stillbirth: a qualitative synthesis of parents' experiences. Birth: Issues Perinat Care 2016;vol. 43(1):6–19. https://doi.org/ 10.1111/birt.12217.
- [19] Kharrat A, Moore G, Beckett S, Nicholls S, Sampson M, Daboval T. Antenatal consultations at extreme prematurity: a systematic review of parent communication needs. 12/01 J Pediatr 2017;vol. 196. https://doi.org/10.1016/j. ipeds.2017.10.067.
- [20] Cheng E, McGough H, Edmonds B. Paternal preferences, perspectives, and involvement in perinatal decision making. 03/01 Obstet Gynecol Surv 2019;vol. 74:170–7. https://doi.org/10.1097/OGX.00000000000000650.
- [21] Bohren M, Berger B, Munthe-Kaas H, Tunçalp Ö. Perceptions and experiences of labour companionship: a qualitative evidence synthesis. 03/19 Cochrane Database Syst Rev (Online) 2019;vol. 2019:CD012449. https://doi.org/10.1002/14651858. CD012449.pub2.
- [22] Lizarondo L, et al. Chapter 8: mixed methods systematic reviews. In: Aromataris E, Munn Z, editors. JBI Manual for Evidence Synthesis; 2020. doi: (https://doi. org/10.46658/JBIMES-20-09).
- [23] Shea BJ, et al. AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both. BMJ 2017;vol. 358:j4008. https://doi.org/10.1136/bmj.j4008.
- [24] JBI. "JBI Data Extraction Form for Review for Systematic Reviews and Research Syntheses." (https://wiki.jbi.global/display/MANUAL/Appendix+10.3+JBI+Data +Extraction+Form+for+Review+for+Systematic+Reviews+and+Research+Synt heses) (accessed.
- [25] Shea BJ, et al. AMSTAR is a reliable and valid measurement tool to assess the methodological quality of systematic reviews. 2009/10/01/ J Clin Epidemiol 2009;vol. 62(10):1013–20. https://doi.org/10.1016/j.jclinepi.2008.10.009.
- [26] Lucas PJ, Baird J, Arai L, Law C, Roberts HM. Worked examples of alternative methods for the synthesis of qualitative and quantitative research in systematic reviews. 2007/01/15 BMC Med Res Methodol 2007;vol. 7(1):4. https://doi.org/ 10.1186/1471-2288-7-4.
- [27] Elwyn G, et al. A three-talk model for shared decision making: multistage consultation process. Bmj 2017;vol. 359:j4891. https://doi.org/10.1136/bmj. j4891.
- [28] Lou S, et al. "Women's experiences of postterm induction of labor: a systematic review of qualitative studies,". Birth: Issues Perinat Care 2019;vol. 46(3):400–10. https://doi.org/10.1111/birt.12412.
- [29] Coates D, Goodfellow A, Sinclair L. Induction of labour: experiences of care and decision-making of women and clinicians. Women Birth 2020;vol. 33(1):e1–14. https://doi.org/10.1016/j.wombi.2019.06.002.
- [30] Coates D, Thirukumar P, Spear V, Brown G, Henry A. What are women's mode of birth preferences and why? A systematic scoping review. Women Birth 2020;vol. 33(4):323–33. https://doi.org/10.1016/j.wombi.2019.09.005.
- [31] Coates D, Thirukumar P, Henry A. Making shared decisions in relation to planned caesarean sections: what are we up to. Patient Educ Couns 2020;vol. 103(6): 1176–90. https://doi.org/10.1016/j.pec.2019.12.001.
- [32] Forbes F, Wynter K, Zeleke B, Fisher J. Male partner involvement in birth preparedness, complication readiness and obstetric emergencies in Sub-Saharan Africa: a scoping review. 02/12 BMC Pregnancy Childbirth 2021;vol. 21. https:// doi.org/10.1186/s12884-021-03606-x.
- [33] Coates D, Thirukumar P, Henry A. Women's experiences and satisfaction with having a cesarean birth: an integrative review. Birth: Issues Perinat Care 2020;vol. 47(2):169–82. https://doi.org/10.1111/birt.12478.
- [34] Kane J, Lohan M, Kelly C. Adolescent men's attitudes and decision making in relation to pregnancy and pregnancy outcomes: An integrative review of the literature from 2010 to 2017. J Adolesc 2019;vol. 72:23–31. https://doi.org/ 10.1016/j.adolescence.2018.12.008.
- [35] Randall L, Briscoe L. Are women empowered to make decisions about the use of antidepressants in pregnancy. Br J Midwifery 2018;vol. 26(5):329–35. https://doi. org/10.12968/bjom.2018.26.5.329.
- [36] Hippman C, Balneaves L. Women's decision making about antidepressant use during pregnancy: a narrative review. 08/12 Depress Anxiety 2018;vol. 35. https://doi.org/10.1002/da.22821.

- [37] Longworth MK, Furber C, Kirk S. A narrative review of fathers' involvement during labour and birth and their influence on decision making. 2015/09/01/ Midwifery 2015;vol. 31(9):844–57. https://doi.org/10.1016/j.midw.2015.06.004.
- [38] W. Bank. "World Bank Country and Lending Groups." (https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups) (accessed March, 2023).
- [39] Healy S, Humphreys E, Kennedy C. Midwives' and obstetricians' perceptions of risk and its impact on clinical practice and decision-making in labour: an integrative review. Women birth: J Aust Coll Midwives 2016;vol. 29(2):107–16. https://doi. org/10.1016/j.wombi.2015.08.010.
- [40] Williams RA, Dheensa S, Metcalfe A. Men's involvement in antenatal screening: a qualitative pilot study using e-mail. Midwifery 2011;vol. 27(6):861–6. https://doi. org/10.1016/j.midw.2010.09.004.
- [41] Longworth L, Ratcliffe J, Boulton M. "Investigating women's preferences for intrapartum care: home versus hospital births. Health Soc Care Community 2001; vol. 9(6):404–13. https://doi.org/10.1046/j.1365-2524.2001.00319.x.
- [42] Panda S, et al. Factors influencing decision-making for caesarean section in Sweden - a qualitative study (pp. N.PAG-N.PAG) BMC Pregnancy Childbirth 2018;vol. 18 (1). https://doi.org/10.1186/s12884-018-2007-7.

- [43] Hadizadeh-Talasaz F, Ghoreyshi F, Mohammadzadeh F, Rahmani R. Effect of shared decision making on mode of delivery and decisional conflict and regret in pregnant women with previous cesarean section: a randomized clinical trial. 2021/ 02/17 BMC Pregnancy Childbirth 2021;vol. 21(1):144. https://doi.org/10.1186/ s12884-021-03615-w.
- [44] Elwyn G, Frosch DL, Kobrin S. Implementing shared decision-making: consider all the consequences. 2016/08/08 Implement Sci 2016;vol. 11(1):114. https://doi. org/10.1186/s13012-016-0480-9.
- [45] Grekin R, O'Hara MW. Prevalence and risk factors of postpartum posttraumatic stress disorder: a meta-analysis. Clin Psychol Rev 2014;vol. 34(5):389–401. doi: 10.1016/j.cpr.2014.05.003. info:doi/10.1016/j.cpr.2014.05.003.
- [46] Alsulamy N, Lee A, Thokala P, Alessa T. What influences the implementation of shared decision making: an umbrella review. Patient Educ Couns 2020;vol. 103 (12):2400–7. https://doi.org/10.1016/j.pec.2020.08.009.
- [47] Yargawa J, Leonardi-Bee J. Male involvement and maternal health outcomes: systematic review and meta-analysis. J Epidemiol Community Health 2015;vol. 69 (6):604–12. https://doi.org/10.1136/jech-2014-204784.