



Systematic Review of Fatigue Management among Parturients

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Learning objectives

The learner will be able to...

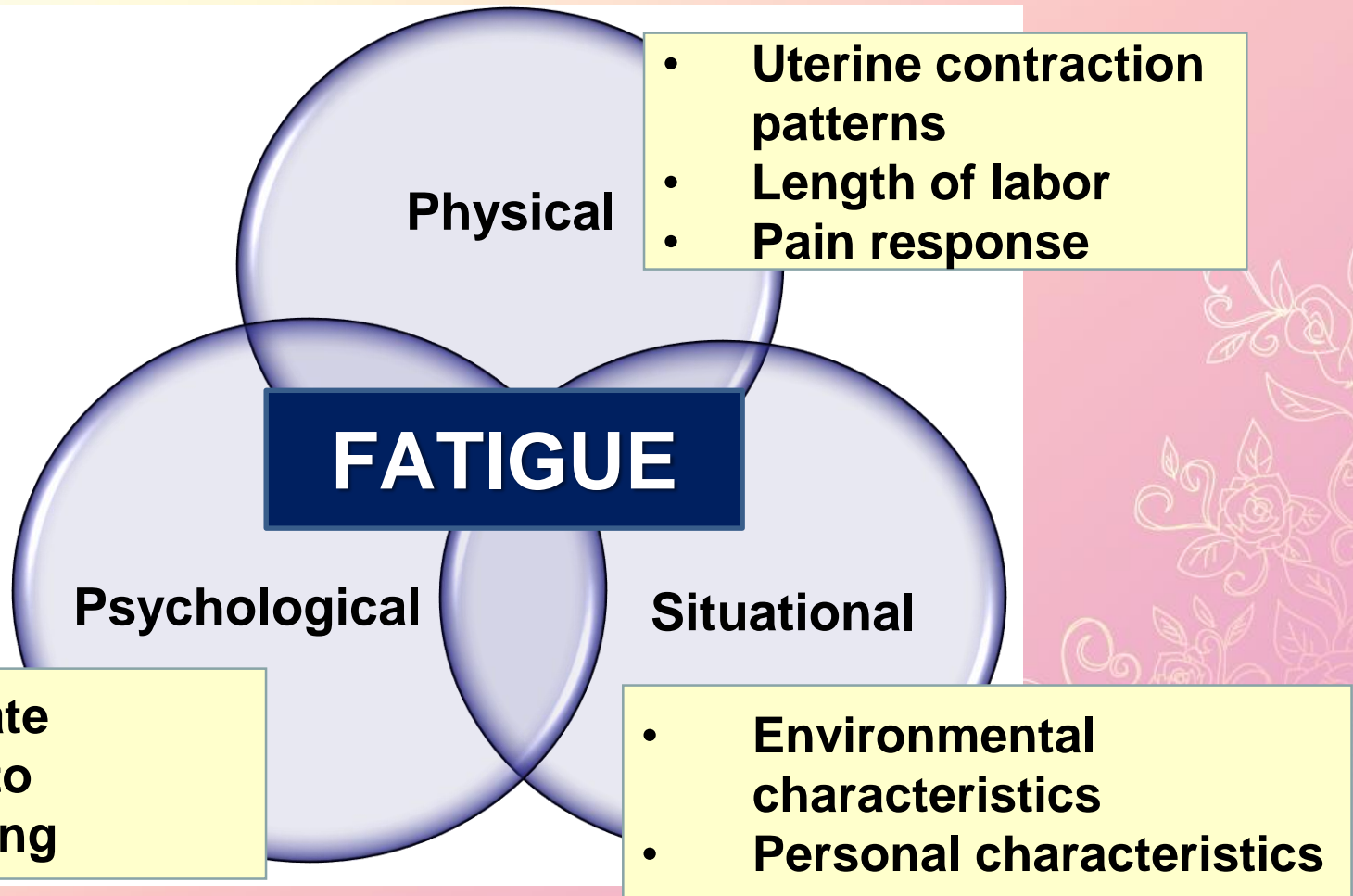
- know about the methods of fatigue management among parturients, which was systemically reviewed between 1998 to 2014
- discuss methods of fatigue management that have been applied in their countries

Expanded content outline

- ❖ **Background**
- ❖ **Objective** of this study
- ❖ **Systematic Review Process** (JBI)
- ❖ **Methodology** of this study
- ❖ **Instrument used** for selection
- ❖ **Data analysis**
- ❖ **Results** of the study
- ❖ **Recommendations**

Background

3 factors of Pugh & Milligan's framework (1993)



Background



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GOAL



Systematic Review

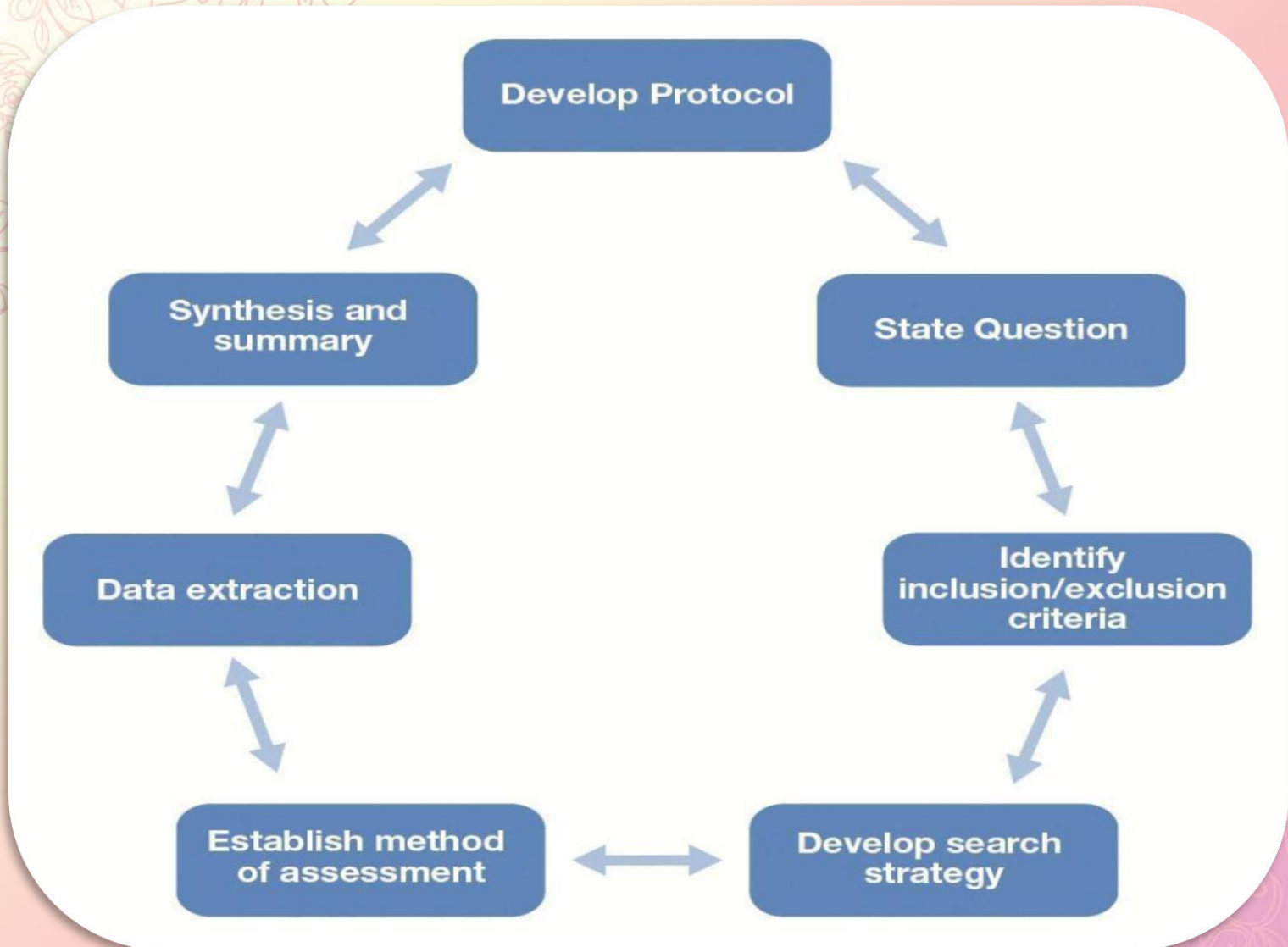
Fatigue management during parturition found:

- **Various interventions implemented**
 - compared methods of pushing
- **SR and Meta-analysis of fatigue management were not found.**
(Cochrane & JBI database/Protocol)

The objective of this study...

- **To present a scoping review of the literature related to fatigue management during the entire process of labor**

Systematic Review Process (JBI)



Population and Sample

**Published and unpublished qualitative research
in English and Thai between 1998 and 2013
(RCTs/quasi-experimental research)**

Inclusion criteria

P - participant = Parturients

I - intervention = Fatigue management

C - comparison/comparator = Control group

O - outcome = Fatigue



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Better evidence. Better outcomes.

Searching strategies used

Computerized searching in available and relevant medical and nursing database

- CINAHL, PubMed, Science Direct, Wiley online library, MIDIRS, Academic Search Elite, ProQuest Medical library, Springer Link, Blackwell synergy, Cochrane systematic reviews database, SIGLE, Google Scholar, etc.

Hand searching

Direct-contact with primary researchers/ experts

References/bibliography

Searching keywords used

- **Population---**parturient, intrapartum women, etc.
- **Intervention---**fatigue management, pushing, bearing down, etc.
- **Outcome---**intrapartum fatigue, early postpartum fatigue, maternal fatigue, etc.

Methods of the review used



Inclusion Criteria Form



Critical Appraisal Form

Randomized control/ Pseudo-randomized trial



Data Extraction Form

Data analysis

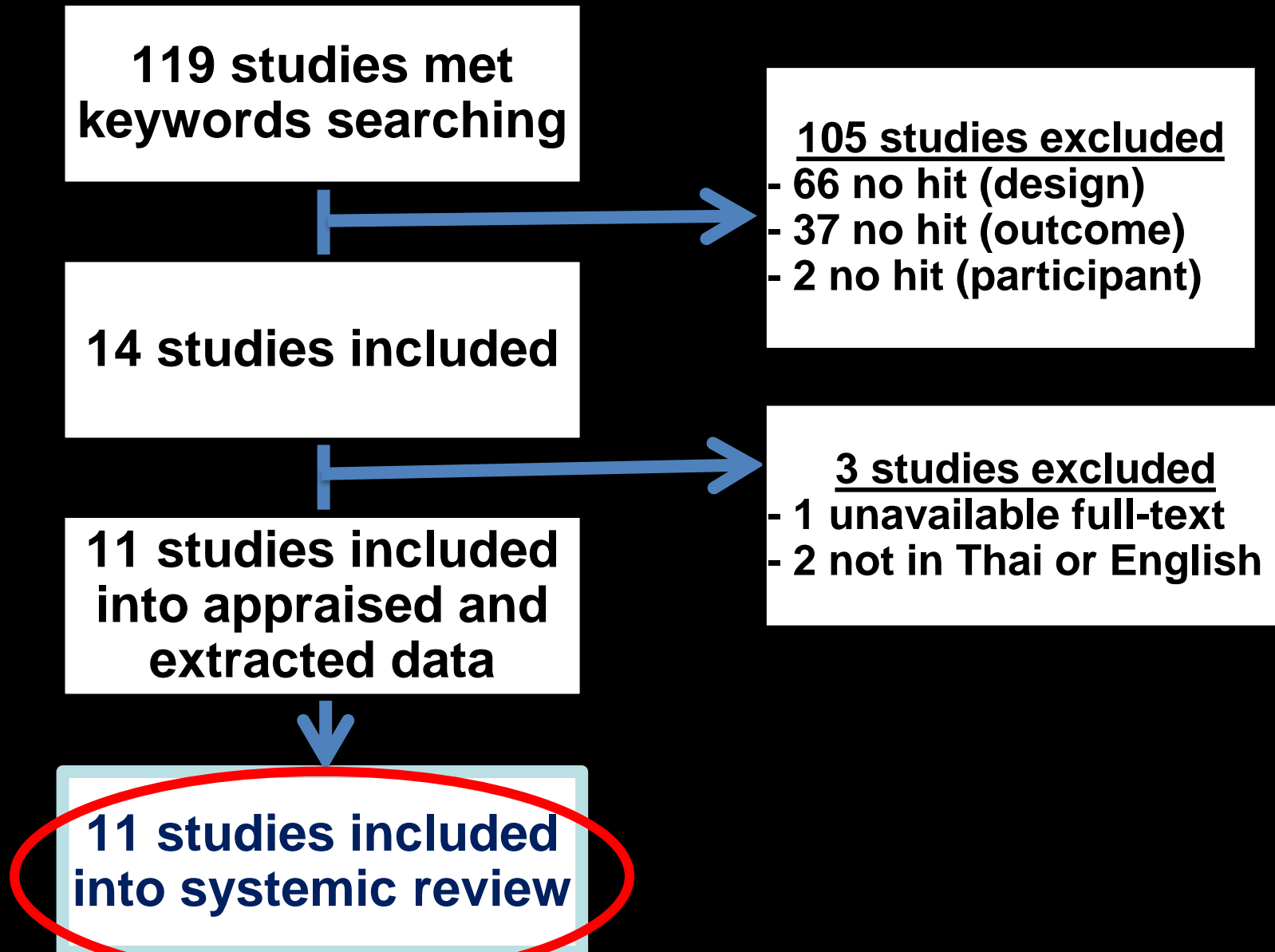
JBI Levels of Evidence (JBI, 2014)

Descriptive statistics

Narrative summary



Description of the study



Methodological quality

- **72.7%** were **RCTs**.
- **90.9%** papers were published in **journals**.
- **72.7%** were studied **outside Thailand**.
- **45.5 %** published **in 2010 – 2013**.
- **81.8%** had a **large sample size**. ($n \geq 30$)
- Half of participants were **primigavida**.
(54.5%)
- Most of fatigue management was **pushing**.
(81.8%)

Summary reviewed

**3 methods of fatigue management:
proven to reduce intrapartum fatigue**

Pushing methods

Fatigue management program
(nursing support + positioning + pushing)

Music therapy

1) Pushing techniques

Delayed pushing

3 papers
1 sig vs. 2 not sig

Start pushing when cervix was fully dilated and fetal head descended into perineal stage (Long, 2006)

Feel fully urge to push uncontrollably (Roberts & Woolley, 1996)

Similar to delayed pushing (choose preferably pushing position)

Spontaneous pushing

6 papers
4 sig vs. 2 not sig

Prevent Valsalva maneuver (avoid excessive pushing)

2 techniques of pushing

Shorten length of labor contributing to decrease **FATIGUE**

Avoid compression of inferior vena cava

Prevent fatigue and reduced rate of instrumental deliveries
(Roberts & Hanson, 2007)

2) Fatigue Management Program

- **nursing support → to reduce causes and symptoms of fatigue**
- **Positioning**
- **Pushing**

Music therapy

(Fulton, 2005)

**Relaxed--distraction from pain
during 1st stage of labor**

**NOTE: Resulted from 1 study
(RCT with small sample size)**

**Reduced
psychological fatigue**

**Can be rest at 1st
stage (save energy)**

Reduced the level of perceived labor pain

Reduced physiological fatigue

Pain decreased & fatigue prevented

Implications for practice

These were proven to reduce fatigue in terms of **physiological factors**

- **Delayed and spontaneous pushing techniques**
- **Fatigue management program**

Music therapy was proven to reduce fatigue in terms of **physiological and psychological factors**

Implications for research

Solid information gained from SR Meta-analysis needed

- To conduct **experimental research (esp. RCTs, Quasi-)** with **large sample size** using standardized fatigue assessment tool in the same time of measurement
- To **replicate research conducting music therapy** needed during the entire process of labor

Thank you for your kind attention



ANY
questions?