

The SPIDER search tool

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My background



- Midwife 2006
 - Research Midwife 2009
 - Master of Clinical Research 2010
 - PhD commenced 2012
- *So how did I come to design a search strategy tool?????*

Qualitative meta-synthesis

“systematic review of qualitative research”

(Booth 2001)

- Highly useful in the ‘caring’ professions
- Patients views and experiences
- Make the patient experience better

www.nhshealthequality.org

“There is growing consensus that the needs, preferences and experiences of patients should be taken into account in the development and evaluation of new health technologies or service delivery models. ... ***One way is through identifying and bringing together (synthesising) the relevant research evidence from a variety of individual qualitative studies.***”

(NHS, 2010)

Question ...

Has anyone had difficulty searching
for qualitative research?

What sort of issues have you had?

The challenge of qualitative literature systematic searching

- Database searching: indexing remains an issue
- Clarity of the article title; usually 'creative'
 - E.g. "baby" and "bathwater" in Google Scholar
 - 32, 400 hits, including drug treatment of obesity, the role of urban villages in housing rural immigrants in China, job stress research, employment disputes
- PICO is not an optimal search strategy for qualitative research (comparison not a qualitative concept, intervention/outcome need manipulation)
- Authors need to be confident they have found ALL relevant articles : standardised method

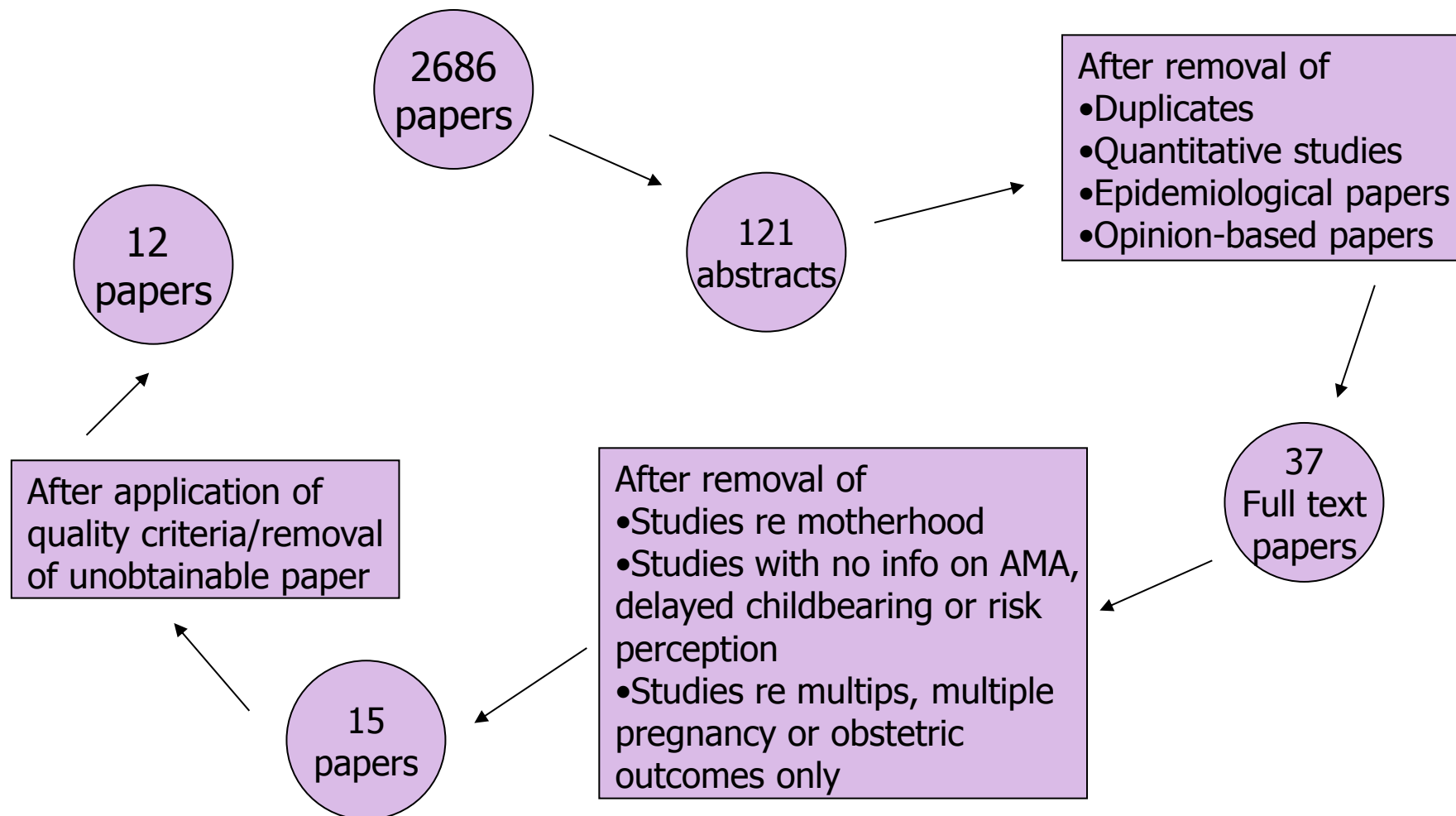
My experience

- Meta-synthesis of women's experiences of delayed childbearing
- Used an interpretation of PICO (P: population, I: intervention and Co: context; Booth, 2008)
- When the search was combined with the search term 'qualitative' many relevant papers removed!
- Berry picking techniques used (Bates, 1989)
- Time consuming process
- Colleague had similar experience

Search Strategy

- Inclusion Criteria – childless, primigravid or primiparous. Singleton pregnancy
- Not confined to any geographical area/start date
- Databases – Cinahl, Medline, PsycInfo, Embase, ASSIA, MIDIRS, BNI, National Research Register
- Keywords – ‘advanced maternal age’, ‘delayed childbearing’, ‘first birth after 35’, ‘perception of risk’, ‘nulliparous’, ‘primiparous’, ‘qualitative’

Search Results

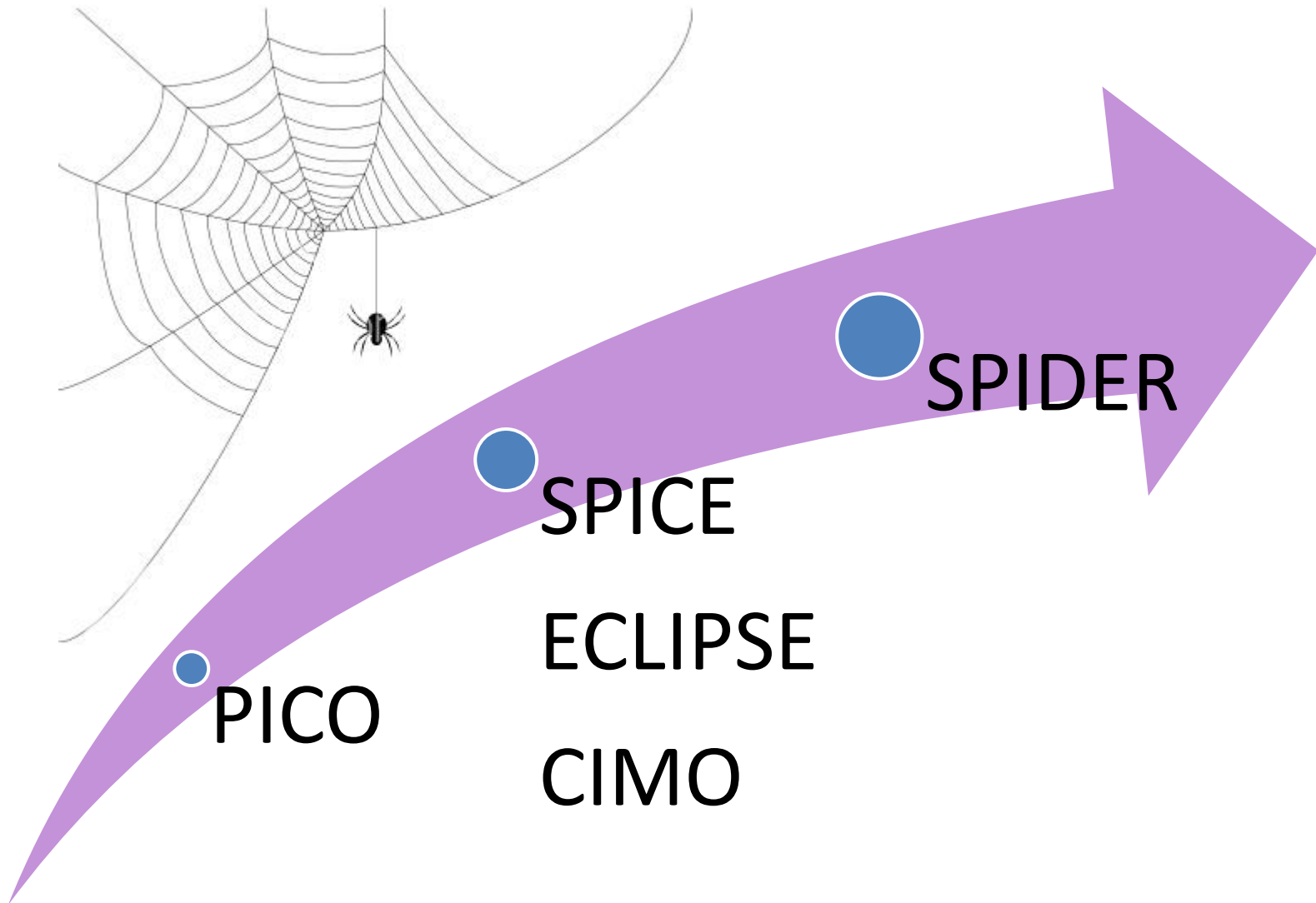


Question ...

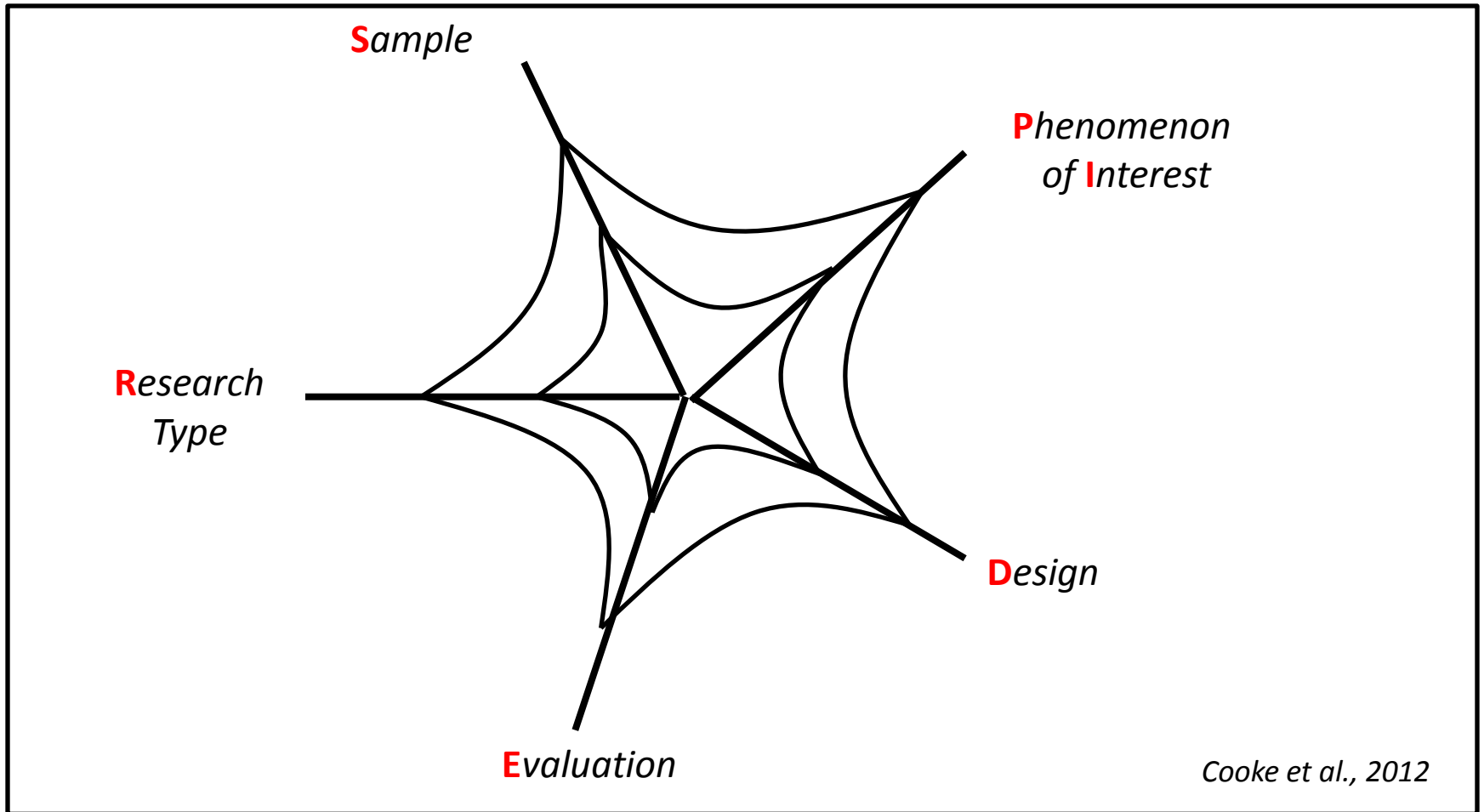
Do you use PICO?

What search strategy tools would you currently use to search for qualitative research?

Do they provide confidence in retrieval?

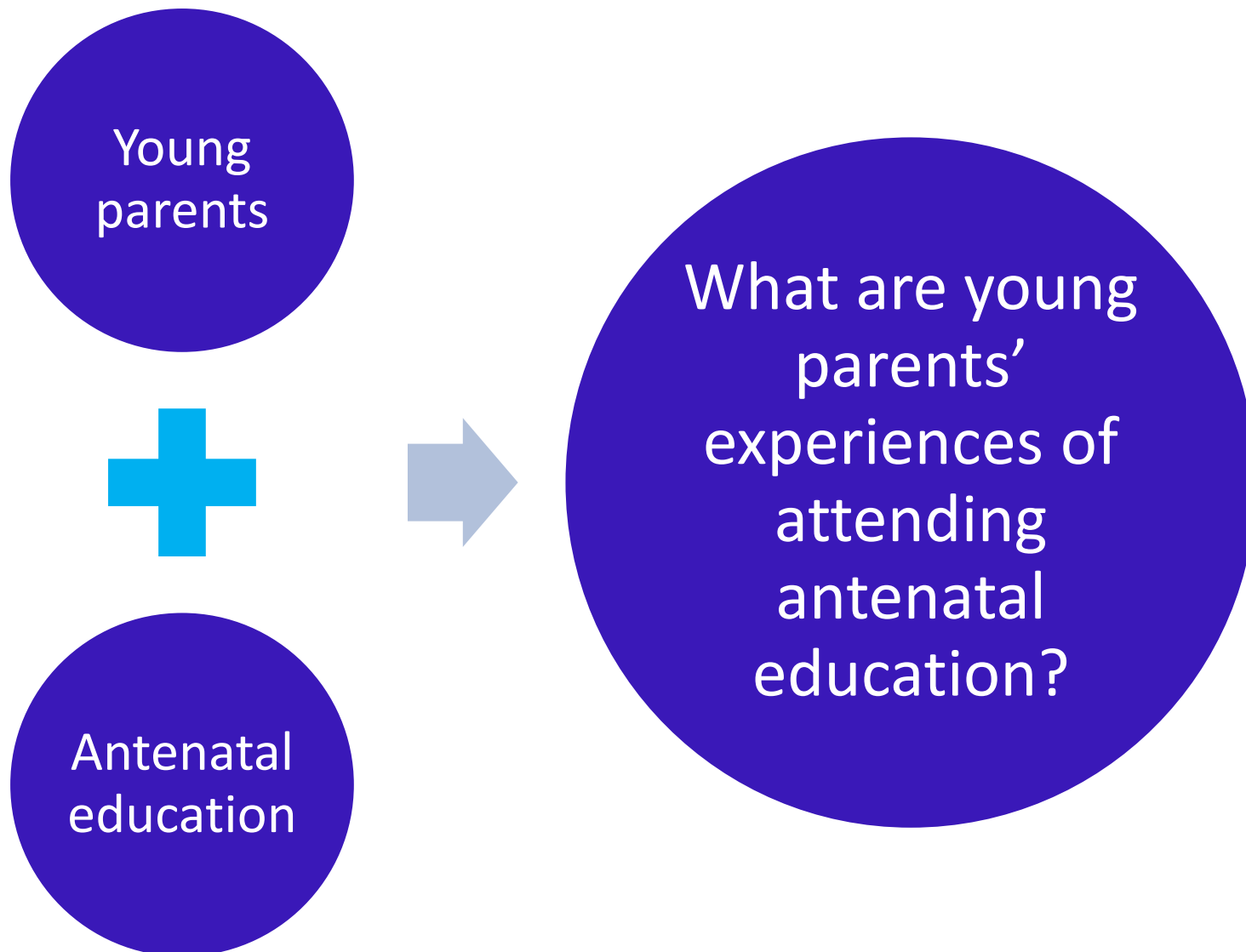


SPIDER: spinning a web for retrieval





We needed to test it ...
... so we needed a research question



PICO

What are young parents' experiences of attending antenatal education?

P	young OR teen* OR parent* OR mother* OR father*
I	antenatal OR prenatal OR pregnancy OR birth OR class* OR education OR workshop*
C	
O	view* OR experience* OR opinion* OR attitude* OR perce* OR belie* OR feel* OR know* OR understand*

P AND I AND O

SPIDER

What are young parents' experiences of attending antenatal education?

S (P)	young OR teen* OR parent* OR mother* OR father*
P of I (I)	antenatal OR prenatal OR pregnancy OR birth OR class* OR education OR workshop*
D	questionnaire* OR survey* OR interview* OR focus group* OR case stud* OR observ*
E (O)	view* OR experience* OR opinion* OR attitude* OR perce* OR belie* OR feel* OR know* OR understand*
R	qualitative OR mixed method*

[S AND P of I] AND [(D OR E) AND R]

PICO vs. SPIDER

What are young parents' experiences of attending antenatal education?

	PICO SEARCH		SPIDER SEARCH	
Database	Found	Included	Found	Included
CINAHL	953	11 (1%: title/abstract) 3 (full text)	176	8 (5%:title/abstract) 2 (full text)
EMBASE	870	15 (2%: title/abstract) 1 (full text)	74	7 (9%: title/abstract) 1 (full text)
MEDLINE	998	14 (1%: title/abstract) 1 (full text)	96	10 (10%: title/abstract) 1 (full text)



We were disappointed ...

Beyond PICO: The SPIDER Tool for Qualitative Evidence Synthesis

5 relevant articles overall – PICO found 4/5, SPIDER found 3/5

(missing 2 papers in SPIDER had no ref to 'qualitative' in title, abstract or keywords)



... but the SPIDER had an antidote

Beyond PICO: The SPIDER Tool for Qualitative Evidence Synthesis

- PICO more 'hits' overall (2821) than SPIDER (346), and more irrelevant 'hits'
- **5/5 articles found with SPIDER when 'OR R' used instead of 'AND R'**, however the number of hits increased, to similar quantity as PICO (e.g. CINAHL: 176 to 1093)
- PICO did not find the 5th paper

Implications

- Have started to use SPIDER with 'OR R'
- It remains a time consuming process but no more time than before and more confidence in the results
- With further testing and refinement with regard to sensitivity and specificity, it may be possible to replace PICO with SPIDER in the future
- SPIDER has the potential to be suitable for ALL research types

In Summary

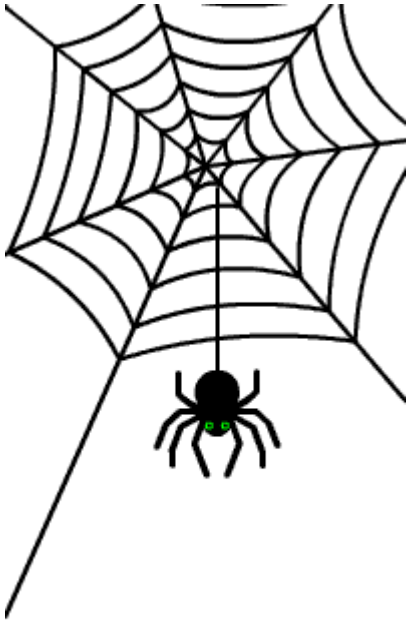
To conclude:

- Promising method for qualitative and mixed method search strategies
- May eventually replace PICO as search tool for all research designs
- Requires further testing and refining
- Study has highlighted again the need for good quality indexing:
 - Retrospective nature of literature searching = no solution in near future
 - Authors need to provide clarity for indexers

SPIDER: How can we help?

S	
P of I	
D	questionnaire* OR survey* OR interview* OR focus group* OR case stud* OR observ*
E	view* OR experience* OR opinion* OR attitude* OR perce* OR belie* OR feel* OR know* OR understand*
R	qualitative OR mixed method*

[S AND P of I] AND [(D OR E) **AND** R]



Thank you

Any questions?



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Reference List

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- Cooke, A Mills, TA & Lavender, T (2010) 'Informed and uninformed decision making' – Women's reasoning, experiences and perceptions with regard to advanced maternal age and delayed childbearing: A meta-synthesis. *International Journal of Nursing Studies*, 47, 1317-1329.
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