# 13-30 – 14:15 Focusing the Question

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## Importance of a focused question

 "The review question should specify the types of population (participants), types of interventions (and comparisons), and the types of outcomes that are of interest... These components of the question, with the additional specification of types of study that will be included, form the basis of the pre-specified eligibility criteria for the review". (Cochrane Handbook)

## Revisiting PICO....

| Р | Patient/Population - What people or patient group do I want information on?                |
|---|--------------------------------------------------------------------------------------------|
| I | Intervention – What is the intervention (treatment, cause, prognostic factor) of interest? |
| С | Comparison – What is the main alternative to compare with the intervention (if necessary)? |
| 0 | Outcomes - What do I hope to accomplish? What could this exposure affect?                  |

## Sounds simple but.....

- In Qualitative Evidence Syntheses (SRs) question formulation may be Product/ Outcome of review process rather than starting point
  - E.g. May help to define which outcomes are considered important by patients
  - E.g. May help to define components of a complex intervention such as advice, information, counselling

## Contextual factors may influence effectiveness

Р

- Perceptions of health issues
- Social and cultural beliefs
- Accessibility factors
- Acceptability of intervention
- Mode of delivery

C

- Perceptions of treatment options
- Preferences of treatment options
- O
- Acceptable/ important outcomes

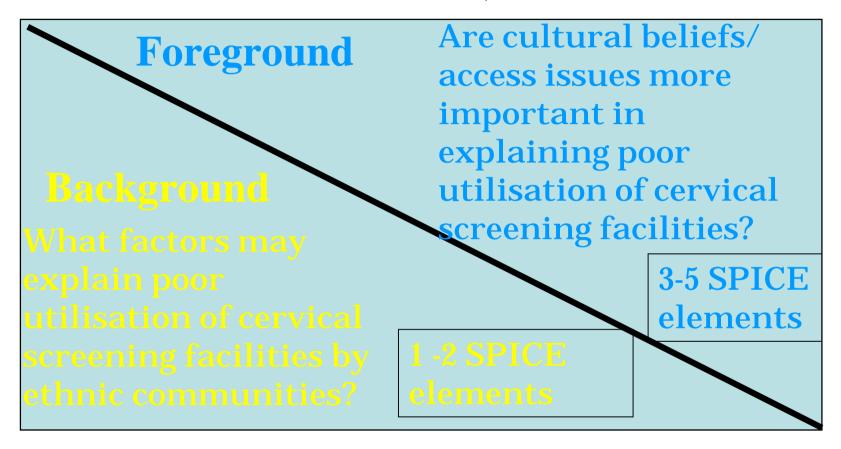
For patients
For providers
For policymakers
For the general
public

These factors are usually explored through qualitative research

### Two alternative approaches

- A priori specification of question using PICO (Patient-Intervention-Comparison-Outcome) format. E.g. for Cochrane Review where qualitative research studies will meet inclusion criteria of review
- More "grounded theory" type approach.
   E.g. Qualitative research may inform understanding of experience of disease; perception of treatment etcetera

#### 1. Formulate a Question



Source: McKibbon A, Hunt D, Richardson WS et al. Finding the evidence. In: User's guide to the medical literature. 2002; 13-15

## Example 1

- Group Cognitive Behavioural Therapy for Postnatal Depression (Qualitative research studying Process and Outcome of Group CBT in PND) OR
- Experience of ANY type of Group for those with PND (To "unpick" Intervention)
- Which features of PND are most suited to Group CBT approaches? (To "unpick" Patient/Condition)

## Example 2

- Chemoprevention for Colorectal Cancer (Qualitative research studying Attitudes to Vitamins and Supplements in Colorectal Cancer Populations) OR
- Attitudes to Vitamins and Supplements (for preventing Cancer) in a GENERAL POPULATION
- Attitudes to Vitamins and Supplements (for preventing Cancer) in ANY AT RISK POPULATION

## Two "philosophies"

- To inform (supplement) Effectiveness Review
  - By using qualitative data from included trials and/or
  - By identifying qualitative studies (sibling studies) alongside included trials and/or
  - By identifying "similar" qualitative studies that examine intervention (PICO)
- To enhance (complement) Effectiveness Review
  - By finding "related" qualitative studies about Patient,
     Intervention or both (P, I, or PI)

## Why is this important?

- If QES informs effectiveness review we may:
  - Either, conduct single set of searches for any type of research study that meets our PICO (and then sift into Qual and Quan)
  - Or, conduct parallel searches using study filters to retrieve Quan then study filters to retrieve Qual)
- However if QES enhances effectiveness review we may:
  - Conduct broader more iterative exploratory search for relevant materials

## Implications for searching

- If seeking to inform Effectiveness Review aim is to perform comprehensive search for qualitative research, followed by purposive search for sibling studies
- If seeking to enhance Effectiveness
   Review aim is to select an appropriate
   sampling strategy (Purposive,
   Theoretical etcetera)

## Relates to three main purposes of review

- Aggregative what do findings show when we add qualitative studies together? E.g. NARRATIVE SYNTHESIS; JOANNA BRIGGS APPROACH
- Interpretative what new insights can we gain from analysing/reanalysing qualitative data? E.g. META-ETHNOGRAPHY; GROUNDED THEORY
  - [Hybrid what do documents say, what do they mean? E.g. CONTENT ANALYSIS; THEMATIC ANALYSIS;]
- Integrative what insights do we gain by bringing quantitative and qualitative studies together? E.g. CRITICAL INTERPRETIVE SYNTHESIS; EPPI-CENTRE APPROACH

## Developing the review question

- The protocol must state in detail the questions or hypotheses that will be pursued in the review. Questions should be specific regarding, for example, the consumers, setting, interventions or phenomena and outcomes to be investigated.
- For effectiveness questions, the PICO framework is recommended (Population, Intervention, Comparison and Outcomes); for other questions, the SPICE framework (Setting, Perspective, Intervention/phenomena of Interest, Comparison, Evaluation) is recommended. [Joanna Briggs Institute Website]

# A structure for formulated questions

Cochrane Reviews use PATIENT-INTERVENTION-COMPARISON-OUTCOME (PICO) structure

Within qualitative evidence syntheses the following may be more appropriate:

**S**ETTING

**P**ERSPECTIVE

INTERVENTION/INTEREST

**COMPARISON** 

**E**VALUATION

### Let us consider SPICE

| S | Setting – Where? In what context?            |
|---|----------------------------------------------|
| Р | Perspective – For who?                       |
| I | Intervention (Phenomenon of Interest)— What? |
| С | Comparison – What else?                      |
| E | Evaluation – How well? What result?          |

## An example of SPICE

| Setting                                             | Community health services          |
|-----------------------------------------------------|------------------------------------|
| Perspective                                         | Caregivers of people with dementia |
| Intervention<br>(Phenomenon<br>of <i>Interest</i> ) | Reminiscence therapy               |
| Comparison                                          | None                               |
| Evaluation                                          | Attitudes, coping skills           |

## A further example of SPICE

| S | Setting – Awaiting Surgery                                                      |
|---|---------------------------------------------------------------------------------|
| Р | Perspective – Patients                                                          |
| I | Intervention (Phenomenon of Interest) – Coronary<br>Artery Bypass Graft Surgery |
| С | Comparison – None                                                               |
| E | Evaluation – Uncertainty and Anxiety                                            |

## Try one!

 What is the impact of childhood cancer on their parents in terms of their quality of life in the home?



#### Exercise

Use SPICE framework to formulate your own research question

## Worked Example

(Malpass et al 2009 "Medication career" or "moral career"? The two sides of managing antidepressants: Social Science & Medicine)

# Formulating the research question (Malpass et al 2009)

- "To identify the parameters of the synthesis, aided by a modified version of the SPICE (Setting Perspective Intervention Comparison Evaluation) tool (<u>Booth, 2003</u>) we searched for qualitative literature on patients' views of antidepressants for depression (see <u>Table 1</u>)".
- "We used scoping exercises to refine our search terms. The final set of SPICE(S) terms used in the search strategy is shown in <u>Table 1</u>. The final guiding definition for the meta-ethnography was 'published qualitative papers whose main focus is patients' views of antidepressants for depression".

## SPICE in Practice

| Setting      | Depression                   |
|--------------|------------------------------|
| Perspective  | Patient View                 |
| Intervention | Antidepressants              |
| Comparison   | GP and Patient views         |
| Evaluation   | Antidepressant use over time |

## Next Steps

| <b>S</b> etting | Depression; Depressive disorder; Depress\$.tw                                                                                                                                                      |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Perspective     | Attitude to health; Patient satisfaction; Patient\$ adj3 view\$; Patient care; Patient Compliance; Patient acceptance of health care; Patient participation; Treatment refusal; Patient preference |
| Intervention    | Antidepressive agents; Antidepress\$.tw                                                                                                                                                            |
| Comparison      | Physician—patient relations Communication;<br>Decision-making; Consultation.tw.                                                                                                                    |
| Evaluation      | [Use/Utilization]                                                                                                                                                                                  |

## Next Steps - 2

#### Qualitative

Qualitative research; Qualitative.tw.; Qualitative adj research; Grounded adj theory; Ethnograph\$; Qualitative adj studies; Interview\$; Focus groups; Nursing research.tw.; nursing research/or nursing evaluation research/or exp nursing methodology research/ Field studies; Ethnonursing research; Field studies.tw.; Fieldwork.tw.

## Summary

- Focusing a Question can provide:
  - Clarity on Scope of Question
  - Mechanism for Communicating Question
  - Starting point for Development of Search Strategy
  - Initial Inclusion/Exclusion Criteria
- However it may (alternatively) be beneficial to start from an "open" question to explore aspects of Perspective/Intervention/ Phenomenon of Interest
- Choice may depend upon whether or not your review is complementary to an Effectiveness Review

### References

- Booth, A (2003) Chapter 6: "Formulating research questions". In: A. Booth and A. Brice, Editors, Evidence based practice: A handbook for information professionals, Facet, London (2003).
- Malpass A, Shaw A, Sharp D, Walter F, Feder G, Ridd M, Kessler D (2009). "Medication career" or "moral career"? The two sides of managing antidepressants: a meta-ethnography of patients' experience of antidepressants. Soc Sci Med. 68(1):154-68