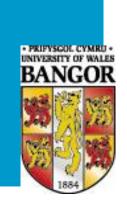
#### ESQUIRE Methods Workshop

# Synthetic Challenges: Case study of a Contraception Review

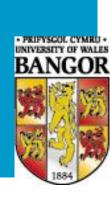
Contraception and women over 40 years of age: mixed-method systematic review

Jane Noyes and Angela Roberts



#### Important clinical/conceptual considerations: Contraception and women over 40 years

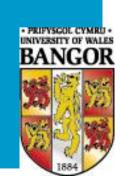
- Ø Clinical question practitioners did not know safe methods to recommend – regional context – public funded healthcare system
- Social context women over 40 years much has changed (either having/wanting late babies/new sexual relationships, or existing sexually active partnership); older women stick to previous methods
- Policy context important but how to 'bound' context so review applicable?
- Ø National or international evidence?
- New contraception methods available (how to limit years of evidence)



#### **Review Objectives**

#### To:

- Explore the views, experiences and needs of women over 40 years in relation to contraceptive choices;
- Ø Determine the facilitators and barriers for women over 40 years to complying with (or not) their chosen contraceptive method, and
- Ø Determine to what extent the contraceptive needs of women over 40 years were made explicit in policy and clinical guidelines.



#### Conceptual clarity

Ø What counts as contraception?

?? Limit to contraception used by females?

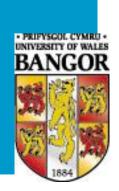
Applicability of national and international evidence?

Consulted with clinicians re local patient profile Looked at sociological theory about cultural origins/influences on choice of contraception



#### Choice of review methodology/design

- Ø At the outset meta ethnography
- Later after scoping evidence mixed method review



☐ 1: <u>Aust N Z J Obstet Gynaecol.</u> 2009 Aug;49(4):429-33.

Contraception and pregnancy then and now: examining the experiences of a cohort of mid-age Australian women.

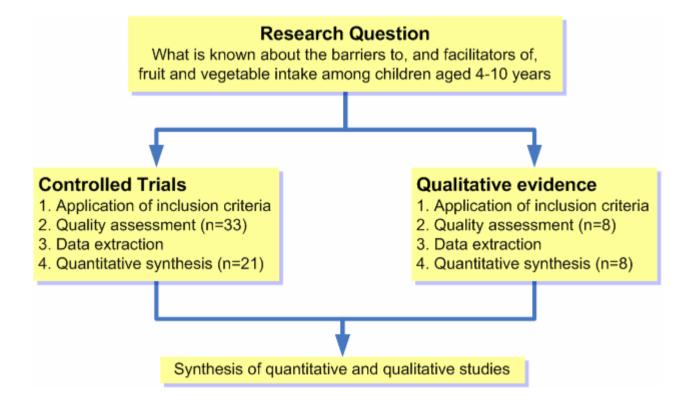
#### Read C, Bateson D, Weisberg E, Estoesta J.

Sydney Centre for Reproductive Health Research, Family Planning NSW, Ashfield, New South Wales, Australia. christiner@fpnsw.org.au

BACKGROUND: More than 50% of women who have an unplanned pregnancy report using a contraceptive method. Since the launch of the pill 50 years ago, a number of cross-sectional surveys have examined contraceptive use in the Australian context. There is, however, little data on contraceptive use and efficacy over a woman's reproductive years. AIM: To determine the pattern of contraceptive use of Australian women over their reproductive lifespan, with particular emphasis on the relationship between contraceptive use and pregnancy. METHOD: One thousand women from the mid-age cohort of the Australian Women's Longitudinal Study were invited to participate in the Family Planning survey by completing a questionnaire about their reproductive histories, RESULTS; Completed questionnaires were received for 812 women. The contraceptive pill was the most commonly ever used contraceptive method at 94% and also the most commonly used method prior to all pregnancies. Contraceptive failure increased with increasing gravidity; 11.4% with the first pregnancy to 23.0% with the fourth pregnancy, while 28.8% of the respondents reported an 'accidental' pregnancy due to stopping contraception for reasons such as concern about long-term effects and media stories, CONCLUSIONS: While surveys indicate that 66-70% of Australian women use a contraceptive method, more than half of unplanned pregnancies apparently occur in women using contraception. The modern Australian woman, in common with her predecessors, still faces significant challenges in her fertility management. This survey provides a longitudinal perspective on contraceptive use in relation to pregnancy and highlights the issue of efficacy of contraceptives in real-life situations.

PMID: 19694702 [PubMed - in process]

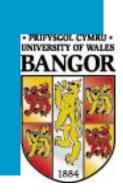
## EPPI Centre approach – Parallel model – 3 syntheses



# Preliminary searching: Scoping is worth investing in....

#### Time to rethink already!:

- Published trials of contraceptive technologies excluded women over 40 years
- Many trials were conducted by pharmaceutical companies – not in the public domain other than news releases to promote product
- Ø Barriers and facilitators to accessing services were frequently measured by surveys (not just qualitative studies)



#### Structured four-phase design (EPPI)

- Phase 1 Review and <u>content analysis</u> of policies and clinical guidelines
- Phase 2 Identification and <u>thematic synthesis</u> of qualitative evidence to determine the views and experiences of women in relation to contraceptive choices and accessing services
- Phase 3 Identification and <u>thematic synthesis of mixed-method</u> evidence to determine the facilitators and barriers to complying with (or not) a contraceptive method
- Phase 4 Overarching synthesis of the evidence obtained from phase 1 to 3



#### Qualitative and quantitative synthesis approaches

### Primarily qualitative and interpretive

Grounded theory
Meta-ethnography
Thematic analysis
Narrative summary

Primarily quantitative and integrative

Content analysis
Bayesian meta-analysis



See Popay et al 'Narrative Synthesis Toolbox

#### Inclusion criteria

- Ø UK national and local policy, clinical guidelines and relevant grey literature;
- World Health Orgainsation (WHO)/European Union (EU) policies applied to the UK;
- Studies which wholly or in part reported evidence concerning women over 40 years;
- Ø All searches based on last 10 years of evidence (current policy and practice)



#### Search strategy

- An individually tailored search strategy for each database for September 1997 to September 2007
- Ø Databases BNI, CINAHL, MedLine, PsychInfo, ASSIA, BMC and Cochrane Central Register of Controlled Trials.
- The internet, Google Scholar and professional networking were used to identify grey literature, such as contraception information for women and clinical guidelines.
- Ø Hand searching and ancestral searching



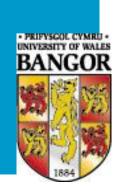
#### What Angela found...... Help!

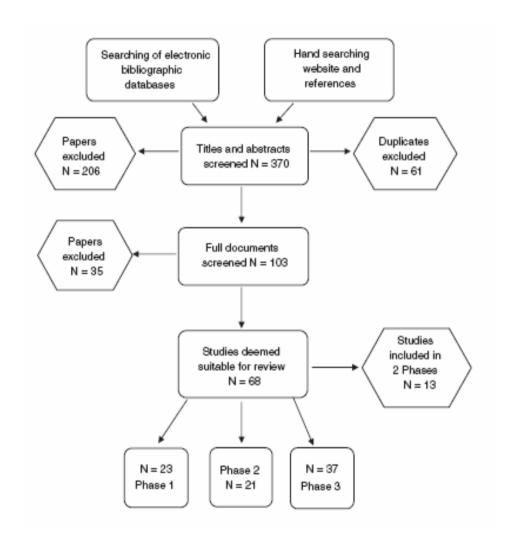
Several papers on contraception and preventing pregnancy in sex workers over 40 years of age....

Met all the inclusion criteria....

Decided to exclude evidence and amend protocol







# Quality appraisal - Not simple in practice – Fatal flaw needed to exclude

Study design Quality appraisal tool used

Qualitative studies CASP (Qualitative)

Quantitative cohort CASP (COHORT)

Observational studies STROBE (Von Elm et al. 2007)

Questionnaire survey Template adapted from CASP tools

Policy, best practice and clinical guidelines No quality appraisal

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# Content analysis Phase 1 – policies and clinical guidelines

- Ø Established social sciences technique
- Requires upfront clear specification of categories
- Categorises data and determines frequencies of the categories
- Questions what do policies and guidelines say about methods of contraception, choice and access to services for women over 40 yrs

Clinical preposition – no/few policies specifically aimed at women over 40 years



# Thematic analysis – Phases 2 and 3 – women's views and barriers/facilitators to access

- Use same methods and processes as primary thematic analysis
- Extract primary data (data extraction form or scan entire results section??)
- Code to build themes or develop theoretical framework with which to code
- Produce maps and charts to display relationships, emerging concepts and develop theory
- Ø Narrative presentation of findings



Table 4 shows the self-reported motives for discontinuing reversible methods or switching from one method to another.

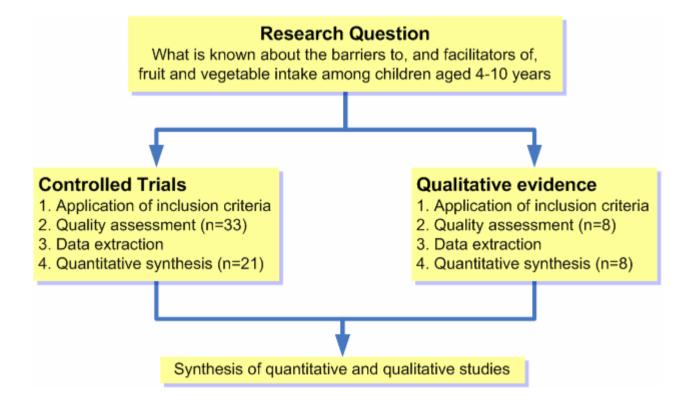
"Health problems" was a common justification for discontinuing hormonal methods. Many women claimed that they stopped using the pill because of side effects such as: colic, nausea, vomiting, headaches, dizziness, stomach aches, cramps, swelling of the stomach, and bleeding in between cycles, as women were accustomed to relate: "I would menstruate all month". Some women claimed that the pill made them lose weight, while others complained they gained. The effects, intensely experienced by the interviewees, quickly led to the discontinuation of the method within the first few months of use. According to them, side effects are related to the quality of service: there is no medical evaluation that would allow women to switch from the contraceptive initially prescribed. In facing the difficulties of adapting to the use (and to the side effects), they prefer to stop using hormonal methods altogether - and generally do not immediately substitute for another type of method.

- Is a motive a metaphor for choice?
- Conceptually 'health problems' and 'side effects careful extraction required to retain context
- Quotes brief and lack context
- Ø EPPI- approach to DE

### Culture and context dependent evidence

In this paper we discuss the causes of non-adherence to reversible contraceptives, especially hormonal methods, among women in rural Santarém in the Brazilian Amazon. The analysis is based on questionnaires with 398 women and visits to health centers. We consider the motives reported by women who: never used contraception; used some method in the past; and who at the time of the survey were using a different method from the ones they used in the past. The results indicate a rejection of hormonal contraception and a preference for female sterilization, an option possibly influenced by the characteristics of health services in the region. The side effects of hormonal contraceptive use reported by part of the interviewees contribute to a generalized fear of the side effects even among women who have never used such methods. To improve women's health services in the Amazon, we recommend further studies of the relationship between reported side effects and available services and prescriptions, as well as an analysis of women's discourse and perceptions.

## EPPI Centre approach – Parallel model – 3 syntheses

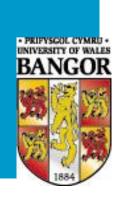


#### Phase 4: Overarching synthesis

Tables of extracted evidence from Phases 1, 2 and 3 were juxtaposed.

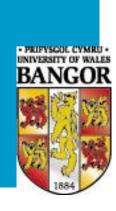
Posed the question:

Are the views, experiences and contraception choices of women over 40 years congruent with existing policies and clinical guidance?



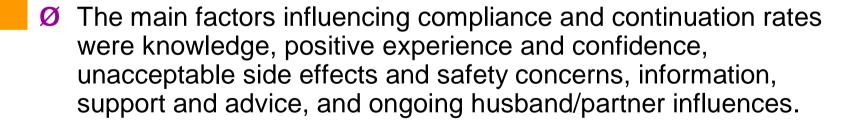
#### What we found...

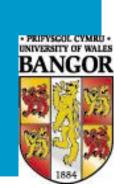
- Failure of knowledge translation and utilisation policies
- Ø Guidelines to inform clinical decision-making were located but did not take account of age-related social factors affecting women's choices or local service availability.
- Women's access to services and contraceptive choices were influenced by educational level, general awareness of available methods, fear of side effects, women's social standing, religious and cultural beliefs, personal control, and confidentiality.
- The main factors influencing compliance and continuation rates were knowledge, positive experience and confidence, unacceptable side effects and safety concerns, information, support and advice, and ongoing husband/partner influences.



#### What we found...

Women's access to services and contraceptive choices were influenced by educational level, general awareness of available methods, fear of side effects, women's social standing, religious and cultural beliefs, personal control, and confidentiality.





#### Reflections on the process...

- Important of clinical expertise (Angela)
- Methodologically challenging
- Surprising findings (failure in knowledge/technology transfer)

