Should non-randomised studies be included in reviews of interventions for vulnerable groups: a case study from domestic violence research

#### Jean Ramsay, Gene Feder (reviewers) Barts and The London, UK and Geraldine Macdonald (group editor) Cochrane Developmental, Psychosocial and Learning Problems Group





# introduction

- debate about the place of non-randomised intervention studies (NRS) in systematic reviews
- this tends to focus on the evaluation of complex interventions at system level
- Cochrane review groups have varying policies on including NRS
- the policy of our Cochrane review group is that NRS should only be included if randomised trials are ethically inappropriate or technically impossible

#### our view about inclusion of NRS

our starting position as DV reviewers

- well-designed NRS are a legitimate source of evidence for evaluation of interventions
  - potentially greater external validity
  - more feasible
- wariness by DV researchers about RCTs means few such studies conducted

# aim and objectives

- clarification of the debate about the inclusion of NRS in domestic violence research
- objectives
  - to summarise our debate with the editor of CDPLG on inclusion of NRS
  - to compare conclusions of a systematic review of advocacy interventions for women experiencing DV, including or excluding NRS

#### between a rock and a hard place

DV practitioners and researchers: NRS

DV reviewers Cochrane review group: RCTs

# perceived ethical implications

- RCTs not ethical when recruited women are vulnerable and at serious risk of further abuse
  - randomisation perpetuates the abused woman's lack of power over her life and day-to-day decisions
  - random allocation to a control group is unacceptable when women are in dire need and require immediate help

# perceived logistical implications

- recruitment difficulties linked to control groups
- contamination problems when clinicians or DV specialists care for both intervention and control groups
  - cluster randomisation is a solution but can present further problems
    - » increased sample size
    - » increased cost
- assumptions of RCTs about standardisation and adequate follow-up difficult to achieve

### response of CDPLG: ethical issues

- perceived ethical problems arising from having a control group rather than randomisation
  being in a control group ≠ no care
- is it ethical to assume an intervention is going to be beneficial and not harmful?
- increasing relevance by broadening study design criteria is meaningless if the studies are so biased that they come to erroneous conclusions

= unethical!

#### response of CDPLG: other issues

- logistical difficulties may be true, but "difficult" does not mean impossible, as evidenced by existing RCTs in this area
  - if RCTS for a specific DV intervention are not possible in all settings then separate reviews are needed
- other Cochrane groups may include both RCTs and NRS but this does not make it valid to do so

# our decision on including NRS

- for the Cochrane review, limited the included study designs to RCTs only
- for UK Department of Health review, all studies that included some form of control data:
  - RCTs
  - matched group studies
  - `before and after' studies

# advocacy review findings

- nine studies fulfilled the wider review inclusion criteria (4 RCTs, 2 matched group NRS, and 3 `before and after' NRS)
- RCTs and NRS were similar in relation to
  - settings (health, legal, community)
  - demography of women participants
- quality of study design and execution
  - RCTs and matched groups NRS were similar
  - all `before and after' studies rated poor

# review findings

- numerous different outcomes measured therefore difficult to compare RCT versus NRS
- only outcome common to most studies was `further abuse'
- effect sizes only available or calculable for 2 of the NRS
  - but still not comparable

# a soft place to land?

- clear that many of the logistical difficulties of conducting RCTs in this field can be overcome
- cluster randomisation removes the pressure from individual participants
- much of the resistance to RCTs by DV researchers is based on conflation of the implications of randomisation with the ethical challenge of control groups

### challenges for DV researchers

- health care policy is increasingly based on less biased evidence and resources are allocated accordingly
- DV researchers and activists need a consensus on a minimum level of acceptable care for women allocated to control groups
- "normal care" is probably unethical
- "acceptable care" will include components that do not have a strong evidence base
- need to articulate questions about the additional effect of interventions



- continuing dilemma about individual randomisation and we believe that NRS are a valid alternative (specific to vulnerable groups/participants)
- generic debate about *complementing* RCT's with well-designed NRS to improve external validity of evidence
  - other review groups have set an important precedent in including other controlled study designs



need continuing Cochrane-wide debate on whether non-randomised studies should be included in reviews of interventions .....