Cochrane Drugs and Alcohol Group

Dipartimento di Epidemiologia
ASL RME

QUALITY OF SRs OF THE COCHRANE DRUGS AND ALCOHOL GROUP: CAN WE IMPROVE IT?

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XIV Cochrane Colloquim
Dublin, 23-26 October 2006

BACKGROUND

- Difficulties faced by reviewers in the field: a few RCTs, heterogeneity in comparisons, interventions, outcomes, quality of the studies
- What about quality of published reviews in this specific context?
- In 2003, five year after the "birth" of the group, we critically evaluated the quality of reporting of the SRs published by the CDAG

METHODS

- Critical evaluation of the 17 SRs published by the CDAG up to december 2002:
  - applying the QUOROM Checklist (Lancet 1999;354:1896-00)
  - Modified by:
    - Splitting the main items
    - Adding new items on:
      - Specificity of the objectives of the review
      - Readability and clarity

METHODS

- Identified main weaknesses
- Compared with "similar" CRGs
- Discussed with the Editorial Board
- Developed a template to increase quality of reporting
- Applied the same checklist to the SRs published after the introduction of the template and compared proportion of reviews not meeting each item before and after

THE TEMPLATE

- Written in RevMan following the format of a Cochrane review
- A guide following the methodological hits of the handbook with specific and more practical suggestions with examples for each session of a Cochrane Review to enhance reporting and methodological quality and readability

number of studies for each comparison if more than one
qualitative and quantitaive findings (point estimates and confidence intarvals)X

Reviewers' conclusions

Background

Describe: the clinical problemX

the biological and clinical rationale for the interventionX

the rationale for the review (i.e. no other SR published , other SR published but of bad quality or out of date)

Objectives

Specify: experimental intervention
control intervention
type of participants, disease/condition
primary clinical outcomes
If is possible to decide in it advance, write down, in the punctuation and capitalization style, the comparison foreseen (if more than one)

Criteria for considering studies for this review

Types of studies

specify the study designs that will be included X

Types of participants

Describe the characteristics of participants in a way detailed enough to be useful from a clinical perspective, i.e the reader should be able to verify if he can apply the results to his patients X

Types of interventions

List, under bullets points style, the experimental and the control interventions separately X

Describe the experimental and the control intervention in a way detailed enough to be useful from a clinical perspective, i.e the reader should be able to repeat the experimental intervention in his clinical setting and should be able to understand, from a practical point of view, which is the control intervention.

Types of outcome measures

List, under bullet poins style, the clinical outcomes , dividing them in primary and secondary outcomes.X

Pay attention in not confusing the clinical outcomes and the measures used X

Specify, for each clinical outcome, the measured used
example:
Primary outcomes:
a) abstinence of using cocaine as measured by:

- **urine sample positive for cocaine methabolites**
- **self report data**

Search strategy for identification of studies

Describe:databases searchedX

search strategy for each databaseX

USE OF THE TEMPLATE

- **New protocols and reviews**
  - we give the Template to the author after a new title has been registered
  - we invite authors to use this tool as an instrument which can help in increasing readability, clarity, validity of the review and also the homogeneity between the reviews
  - We highlight items which are prerequisites for the pubblication
- **Update**
  - We invite authors updating the review to follow the template
- **Editorial process**
  - We check adherence to the Template

RESULTS

- Comparison of adherence to the modified QUOROM checklist applied to the 17 SRs published in CLIB 4.2002 and to the 19 reviews published after the introduction of the template (CLIB 4.2004) until 2.2006

RESULTS

ITEM	BEFORE THE TEMPLATE	AFTER THE TEMPLATE	p value
INTRODUCTION			
rationale of the review not explained (previous evidence)	71%	53%	0.428
METHODS			
No search on the specialized registry	35%	0	0.005
no specification of language restriction	35%	11%	0.074

RESULTS

ITEM	BEFORE THE TEMPLATE	AFTER THE TEMPLATE	p value
METHODS			
No indipendent selection of studies for inclusion	53%	21%	0.047
Confusion between clinical outcomes and measures used	47%	10%	0.015
no assessment of publication bias	100%	89%	0.169

RESULTS

VALIDITY ASSESSMENT	BEFORE THE TEMPLATE	AFTER THE TEMPLATE	p value
Validity not assessed	6%	5%	0.934
No reproducible description of the criteria used	94%	10%	0.000
No description of the use of the validity assessment	53%	32%	0.194

RESULTS

ITEM	BEFORE THE TEMPLATE	AFTER THE TEMPLATE	p value
Readability			
each comparison done not defined	100%	47%	0.000
synthetic summary of study characteristics not provided	59%	37%	0.187
synthetic description of the results not provided	82%	37%	0.006

RESULTS

ITEM	BEFORE THE TEMPLATE	AFTER THE TEMPLATE	p value
specificity			
Objectives too broad, more than 2 comparisons	53%	32%	0.194
DISCUSSION			
potential biases of the review not discussed	65%	68%	0.814

CONCLUSIONS (1)

- We observed an improvement in the quality of reporting and in the readability of the reviews
- The use of validity assessment and assessment of publication bias are still poor
- Discussion of the potential review biases did not improve
- Authors considered the template helpful and easy to apply for a new review, helpful but more time consuming for the update
- No Author refused to use it
- It helps the editorial process
- Limited and naive effort but….

IMPLICATIONS FOR PRACTICE

- Keep using the template and complement with new knowledge (i.e. adverse events)
- Offer to the authors information and assistance for the assessment of publication bias
- give practical suggestions for the discussion of the potential biases of the review process
- promote using the results of quality assessment in the review process
  - more stringent inclusion criteria
  - perform a sensitivity analysis

FUTURE IMPLICATION

- Final aim: improve the quality
- How does improvement of quality of reporting reflect better quality
- Identify main quality criteria that need too be improved
- Share with other CRGs ways of dealing with
- Build structured initiatives to improve it
- Wellcome the initiative of putting organized efforts to convene coeds around the quality issue

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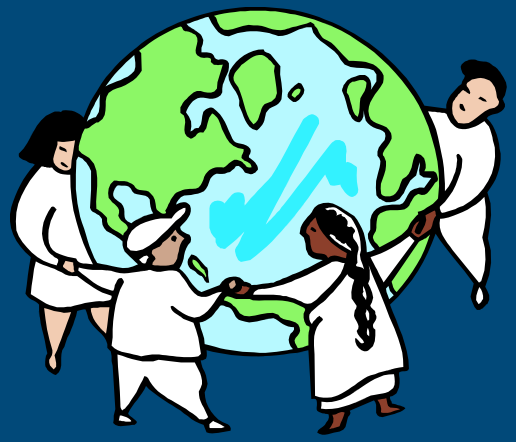
The Authors



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