Minutes of the Meeting of Methods Group on Meta-analyses of diagnostic and screening tests. Capetown, 27/10/2000

Agenda

- 1. Opening
- 2. Databases (MEDION, DARE, IFCC)
- 3. Software development
- 4. STARD
- 5. How to handle queries from other entities
- 6. Links to other bodies, eg. IFCC
- 7. Updating the WEB-site
- 8. Bayes Collaboration

Present: Les Irwig (chair), Matthias Egger, Mike Pignone, Daniel Pewsner, Andrea Horvath, Miriam Brazzelli, V. Vlassov, Joseph Lau, Haku Ishida, Masahiro Nishibori, Rob Scholten Riekie de Vet (made notes).

1. Opening:

Les Irwig chaired the meeting as Constatine Gatsonis (methods group chair) and Frank Buntinx (co-chair), both could not be present in Capetown.

Reviews of diagnostic tests within the Cochrane Collaboration

The Steering Committee concluded in Adelaide in 1997 that including diagnostic reviews in the Cochrane Collaboration was not appropriate at that stage. Diagnostic reviews were less developed with respect to methodology and also with respect to quality of the studies. They preferred to focus on strengthening the organisation for RCTs and reconsider inclusion of diagnostic reviews at a later time. It was felt that the group did not want to suggest inclusion at this stage.

2. Databases

Several databases with diagnostic reviews exist.

The MEDION database is located in Maastricht. It consists of reviews, both systematic and narrative. They are not selected on methodological quality. The database also includes methodological papers on diagnostic studies. Up till now the database is not available via internet.

The DARE database includes abstracts of diagnostic reviews. Only reviews that fulfil specific methodological criteria are included. DAR database can be found in the Cochrane Library.

The IFCC database consists of diagnostic reviews in clinical chemistry, also both systematic and narrative reviews, and no selection on methodological quality.

3. Software development

Joseph Lau is still working on "Meta-test" (DOS version). He will try to make a WINDOW version and add some new features. However, he lacks time to do it in short time. The programme is available via Joseph Lau email: [jlau1@lifespan.org]. At present,

for more detailed analyses, separate calculation and graph programmes is the only option.

4. STARD

Les reports about the STARD meeting in Amsterdam (September 16-17, 2000), where **Sta**ndards for **R**eporting on **D**iagnostic Accuracy were made. He showed the list of participants. The aim and focus of the STARD-initiative is to improve the quality of reporting of studies on diagnostic accuracy. The items include both validity items, and items on presentation and applicability. It also will include a flow chart to show which patients were evaluated in which way. The items will soon be circulated within the Methods Group.

5. How to handle queries from other groups

Sometimes queries come from Collaborative Review Groups or other groups doing diagnostic reviews. The Methods Group on Meta-analyses of diagnostic and screening test does

not want to set rules or build a structure for how to handle those queries. So we leave it as is, which means that everybody contributes to or supports these initiatives (if time allows) that are circulated on email .

6. Links

Andrea Horvath of the IFCC tells about the achievements within the IFCC. They are doing systematic reviews and published a paper on the methodology. David Bruns proposed guidelines for reporting and he also participated in the STARD meeting. They want a formal link or relation with the Cochrane Collaboration. We emphasise participation, but the only way of collaboration is via this Method Group and the "srdt" email list. People who want to join the Methods Group have to send an email to srdt-request@cochrane.de or visit http://www.cochrane.de/mailman/listinfo/srdt. Also in Japan diagnostic reviews are performed. They have a structure within the IFCC.

7. Updating the WEB site

Les asks whether somebody is willing to help update the WEB site. At least links should be made to other relevant sites. Among the members present in Capetown there were no volunteers to update the WEB-site.

8. Proposal for a Bayes Collaboration.

Daniel Pewsner and Matthias Egger suggest to start a database with Likelihood Ratio's for diagnostic tests. These LR's should be based on either systematic reviews of sound diagnostic studies. Mike Pignone mentions that he has already a database on the WEB (www.med.unc.edu/medicine/edursrc) which contains a table of likelihood ratio'. It does not contain subgroups yet.

It was thought a good idea to link the initiatives. Mike Pignone and Daniel Pewsner are prepared to take the lead in this. Also the IFCC is eager to participate, and all other persons present at the meeting support this initiative.

The initiative of the Bayes Collaboration was also presented during one of the oral sessions. The reactions varied from positive to rather negative.

- Somebody did not like the name Bayes Collaboration. The work of Bayes is not only applicable to diagnostic studies, as many think, but to the whole Bayesian statistics and decision making. The name is not definitive yet.
- Somebody pointed to the work of De Dombal which showed that it is impossible to make predictions, eg. on the subject on appendicitis, when to operate and when not. However, the goals of the current initiative is not to set cut-points for post-probabilities on when to operate, only to give some LR's.
- Another comment was that the results of one study are not applicable (generalisable) to another population. The problems with this are recognized, but when we start, the setting, populations and other characteristics for which it holds can be described.
- Another comment: start immediately.

Closing: This meeting suggested combining new initiatives in summarising LRs from good individual studies or reviews at a common site, outside the Cochrane Collaboration. Our goal is 100 common LR on the WEB with a couple of years.

Name Address E-mail

Mike Pignone UNC Dept. of Medicine <u>pignone@med.unc.edu</u>

Chapel Hill NC USA

Matthias Egger m.egger@bristol.ac.uk

Daniel Pewsner <u>daniel.pewsner@blvewin.ch</u>

Andrea Rita Horvath Dept. Clinical Chemistry horvat@clab.szote.u-szeged.hu

Univ. Szeged, Med. Sch. P.O. box 482, H-6701 Szeged

Hungary

Miriam Brazzelli Health Services Research Unit

University of Aberdeen <u>m.brazzelli@abdn.ac.uk</u>

Forester Hill, Aberdeen, UK

V. Vlassov Russia <u>vvvla@sgu.ru</u>

Joseph Lau <u>ilau@lifespan.org</u>

Rob Scholten Dutch Cochrane Center <u>r.j.scholten@amc.uva.nl</u>

University of Amsterdam

Riekie de Vet hcw.de vet.emgo@med.v.nl

Haku Ishida Dept. Of Clinical Pathology hishida@med.kawasaki-m.ac.jp

Kawasaki Medical School 577 Matsushima, Kurashiki

701-0211

Masahiro Nishibori Clinical Laboratory <u>mn.mlab@med.tmd.ac.jp</u>

1-5-45, Yushima, Bunkyo-ku Tokyo 113-8519, Japan

Les Irwig <u>lesi@pub.health.usyd.edu.au</u>