Global evidence-based projects in health and welfare: Opportunities for engagement
#EBSeminar2014
Oxford 3 November 2014
Caroline Struthers, Education Manager, EQUATOR Network
The EQUATOR Network

Enhancing the QUALity and Transparency of health Research
• **EQUATOR Network** is an international initiative set up to improve reliability and value of medical research literature

• **EQUATOR promotes**
  - transparent
  - accurate
  - complete
  - and
  - timely **reporting of health research studies**
Non-reporting: Tamiflu

Conclusion: based on published (Roche-sponsored) research in 2003

*Oseltamivir treatment of influenza illness reduces LRTCs, antibiotic use, and hospitalization in both healthy and “at-risk” adults*
Non-reporting: Tamiflu

Conclusion: based on a review of unpublished data obtained after decade-long efforts of (Cochrane) researchers 2014

Oseltamivir shortens symptoms of influenza by half a day, but there is no good evidence to support claims that it reduces admissions to hospital or complications of influenza.
RETRACTED: Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children

Dr. AJ Wakefield FRCS, SH Murch MB, A Anthony MB, J Linell PhD, DM Casson MRCP, M Malik MRCP, N Berelowitz FRCPsych, AP Dhillion MRCPATH, MA Thompson FRCP, P Harvey FRCP, A Valentine FRCP, SE Davies MRCPATH, JA Walker-Smith FRCP

Summary

Background
We investigated a consecutive series of children with chronic enterocolitis and regressive developmental disorder.

Methods
12 children (mean age 6 years [range 3–10], 11 boys) were referred to a paediatric gastroenterology unit with a history of normal development followed by loss of acquired skills, including language, together with diarrhoea and abdominal pain. Children underwent gastroenterological, neurological, and developmental assessment and review of developmental records. Ileocolonoscopy and biopsy sampling, magnetic resonance imaging (MRI), electroencephalography (EEG), and lumbar punctures were done under sedation. Barium follow-through radiography was done where possible. Biochemical, haematological, and immunological profiles were examined.

Findings
Onset of behavioural symptoms was associated, by the parents, with measles, mumps, and rubella vaccination in eight of the 12 children, with measles infection in one child, and otitis media in another. All 12 children had intestinal abnormalities, ranging from lymphoid nodular hyperplasia to aphthoid ulceration. Histology showed patchy chronic inflammation in the colon in 11 children and reactive ileal lymphoid hyperplasia in seven, but no granulomas. Behavioural disorders included autism (nine), disintegrative psychosis (one), and possible postviral or vaccinal encephalitis (two). There were no focal neurological abnormalities and MRI and EEG tests were normal. Abnormal laboratory results were significantly raised urinary methylmalonic acid compared with age-matched controls (p=0.003), low haemoglobin in four children, and a low serum IGA in four children.

Interpretation
We identified associated gastrointestinal disease and developmental regression in a group of previously normal children, which was generally associated in time with possible environmental triggers.
Why?

- Serious deficiencies in health research literature (but not only health research)

- Reporting guidelines are available but awareness and adherence is low

- Need for a common international platform to educate and empower all those involved in research reporting

- Moral imperative to help decrease the avoidable waste in research
John Ioannidis
(pronounced yo-NEE-dees)
Our favourite Gamechanger

John Ioannidis

It is difficult for me to think of any other single initiative on Research Methodology that has had a similar broad impact on research as EQUATOR.

...an indispensable resource for authors of research papers, editors and peer reviewers for guidance on health research reporting and general issues relating to the responsible conduct and reporting of health research.
How?

• Provides resources to promote good reporting and the implementation of reporting guidelines

• Continues to build strong international networks, collaborations, and partnerships to raise awareness of the importance of responsible reporting

• Developing an Education and Training programme
EQUATOR Website

Enhancing the QUALity and Transparency Of Health Research

The resource centre for good reporting of health research studies

Library for health research reporting

The Library contains a comprehensive search database of reporting guidelines and also links to resources relevant to research reporting.

- Search for reporting guidelines
- Visit the library for more resources

Toolkits

The EQUATOR Network works to improve the reliability and value of medical research literature by promoting transparent and accurate reporting of research studies.

Our Toolkits support different user groups, including:

- Authors
- Editors

Read More

12/08/2014 - Declaration of transparency
A BMJ editorial published by D. Altman and D. Moher, two key leaders of the EQUATOR initiative, proposes that authors of research papers are

27/08/2014

- Montreal Statement on research collaboration is now available in Spanish
Partnerships and collaborations

Enhancing the QUAlity and Transparency Of health Research

Organisations supporting EQUATOR

We encourage you to email us to express your support for transparent and accurate health research reporting and for the EQUATOR Network.

Please join the organisations below who have done so:

- Universities and other organisations
- Editorial groups
- Journals referring to EQUATOR
- Funding organisations referring to EQUATOR
- Other organisations referring to EQUATOR

The Council of Science Editors is dedicated to promoting best practices in scientific publishing and strongly supports the aims of the EQUATOR Network to develop a global organization of stakeholders in health research reporting.

Council of Science Editors

COPE (the Committee on Publication Ethics) recognises the EQUATOR network as a significant contribution to improving the reporting of medical research.

Committee on Publication Ethics

I fully support the aims of the project in trying to improve the quality and reliability of medical publications by promoting the transparent and accurate reporting of health research. I was pleased that we are providing financial support to the project.

I would like to offer you my full support in developing the project and wish you every success in obtaining the further funding that you require for this important work.

Professor Sally C Davies
Chief Medical Officer for England
(Previously Director General of Research and Development, NIHR, UK)

Health Services Research and Policy Group, Department of Primary Care Health Sciences, University of Oxford – letter of support (pdf)

Centre for Reviews and Dissemination, University of York – letter of support (pdf)

Pan American Health Organization – letter of support (pdf)
Introduction to medical research: essential skills

This is an introductory level course for health professionals that provides an overview of key steps and common methods in medical research and its publication.

The course is divided into four modules, delivered as four half-day sessions at the George Pickering Education Centre, John Radcliffe Hospital, Oxford, UK.

1. Research planning: before you start your research project (13 September 2014)
2. Research design and protocol (4 October 2014)
4. Research publication and dissemination (15 November 2014)

Module 1: Research planning: before you start your research project
Presenters: Iveta Simera, Sally Hopewell, Shona Kirtley, Donald Mackay
(click here to access resources from this session)

This module provides the foundation for getting involved in medical research: from the basic underlying principles of good research conduct, to the practicalities of starting to build the literature base underpinning your research project.

By the end of this module participants should have a clearer idea of what medical research involves, what are the key ethical and governance issues, how to turn their research idea into a specific research question, and how to systematically collect and synthesize literature to support further research project design and planning.
Who?

Steering Group
Doug Altman  Centre for Statistics in Medicine, Oxford, UK
Ana Marusic  University of Split, Croatia
David Moher  Ottawa Health Research Institute, Canada
Philippe Ravaud  Centre of Epidemiology, Hotel-Dieu, France
Iveta Simera  Centre for Statistics in Medicine, Oxford, UK

EQUATOR staff
Iveta Simera  (Programme Manager)
Shona Kirtley  (Information Specialist)
Caroline Struthers  (Education Manager)
Angela MacCarthy  (Research Fellow)

The EQUATOR Network is funded by:

[Logos of the funding organizations]
Engagement opportunities

I ❤ equator network
1: Contribute to CONSORT

<table>
<thead>
<tr>
<th>Section/Topic</th>
<th>Item No</th>
<th>Checklist Item</th>
<th>Reported on page No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title and abstract</td>
<td>1a</td>
<td>Identification as a randomised trial in the title</td>
<td></td>
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<tr>
<td></td>
<td>1b</td>
<td>Structured summary of trial design, methods, results, and conclusions (for specific guidance see CONSORT for abstracts)</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>2a</td>
<td>Scientific background and explanation of rationale</td>
<td></td>
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<tr>
<td></td>
<td>2b</td>
<td>Specific objectives or hypotheses</td>
<td></td>
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<tr>
<td>Methods</td>
<td>3a</td>
<td>Description of trial design (such as parallel, factorial) including allocation ratio</td>
<td></td>
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<tr>
<td>Trial design</td>
<td>3b</td>
<td>Important changes to methods after trial commencement (such as eligibility criteria), with reasons</td>
<td></td>
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<tr>
<td>Participants</td>
<td>4a</td>
<td>Eligibility criteria for participants</td>
<td></td>
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<tr>
<td></td>
<td>4b</td>
<td>Settings and locations where the data were collected</td>
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<tr>
<td>Interventions</td>
<td>5</td>
<td>The interventions for each group with sufficient details to allow replication, including how and when they were actually administered</td>
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<tr>
<td>Outcomes</td>
<td>8a</td>
<td>Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed</td>
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<tr>
<td></td>
<td>8b</td>
<td>Any changes to trial outcomes after the trial commenced, with reasons</td>
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<tr>
<td>Sample size</td>
<td>7a</td>
<td>How sample size was determined</td>
<td></td>
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<td></td>
<td>7b</td>
<td>When applicable, explanation of any interim analyses and stopping guidelines</td>
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<tr>
<td>Randomisation:</td>
<td>8a</td>
<td>Method used to generate the random allocation sequence</td>
<td></td>
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<tr>
<td>Sequence</td>
<td>8b</td>
<td>Type of randomisation; details of any restriction (such as blocking and block size)</td>
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<tr>
<td>generation</td>
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<tr>
<td>Allocation</td>
<td>9</td>
<td>Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned</td>
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<tr>
<td>concealment</td>
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<td>mechanism</td>
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<tr>
<td>Implementation</td>
<td>10</td>
<td>Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions</td>
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<tr>
<td>Blinding</td>
<td>11a</td>
<td>If done, who was blinded after assignment to interventions (for example, participants, care providers, those</td>
<td></td>
</tr>
</tbody>
</table>
1: Contribute to CONSORT

Example Documents and Sample Studies

The CONSORT group has been building a library of examples that help to explain how to implement the CONSORT standard in clinical trials reporting. If you look at the Checklist Explorer page, you will see that for each checklist entry, there is an "examples" tab that shows examples of how that particular checklist item has been written up in well-reported trials.

We have collected examples of reporting for all of the CONSORT 2010 checklist items, and for many of the CONSORT extensions. However, we are always looking for examples of good reporting.

You can now get involved in the effort to improve the quality of trial reporting by submitting examples of good reporting for inclusion in the CONSORT Library of Examples. Click here to read more about this initiative.

How to Submit a Reporting Example

We have done everything possible to make submitting a reporting example as simple and transparent as possible. In order to submit an example, you must first register with the CONSORT group website. Then you can submit an example by navigating to the "My Examples" page, and clicking on the "Add Example" button. Here's how to submit an example:
We can make it easier than this
Module 1
Introduction to responsible publication of clinical research and reporting guidelines

1 The importance of good reporting

*Failure to publish an adequate account of a well-designed clinical investigation is a form of scientific misconduct that can lead those caring for patients to make inappropriate treatment decisions.*

Medical research makes prominent headlines because it affects everyone. Even if we are not directly involved in the research as participants, we are all its potential consumers. As patients, we want to be treated according to the best evidence from well-designed and well-conducted research.

However, in order to identify the ‘best’ evidence all research studies need to be published in an accurate, complete, and timely way.

A research article is both the end product of one process, and the raw material for many others.

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**Primary research**
- Design
- Conduct
- Publication

*Informs further research*
- Publication
- Systematic review
- Clinical practice
3 to 103: Please promote us!

- Ask your department to endorse EQUATOR – send a letter of support
- Follow us on Twitter and LinkedIn – join our discussions
- Give a presentation about EQUATOR at your workplace – blog about it
- Tell your librarian about the EQUATOR Librarian network
- Help us with social media – eg. we (really) need a Facebook page...
- Spread the word! Alert colleagues and collaborators to EQUATOR resources
And in return EQUATOR will...

- Post your EQUATOR-related stories, blogs and case-studies on our website
- Raise your profile as an EQUATOR ambassador
- Involve you in future EQUATOR projects
- Be receptive to any ideas to improve research reporting
- Provide networking opportunities and contacts
- Be really nice to you!
What else can you do?

Follow the EQUATOR code!

• Check reporting requirements when planning your research
• When writing up, check the EQUATOR website for any new guidelines
• If you can’t report all items, explain why.
• Provide enough information for your study to be reproducible by others
Talk to us now!

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@EQUATORNetwork