The impact of Cochrane on research for health

Dr. Giordano Pérez Gaxiola
Sinaloa Pediatric Hospital
Cochrane Mexico

Evidencia confiable.
Decisiones informadas.
Mejor Salud.
Declaration of conflict of interest

• Employee of Sinaloa Pediatric Hospital
• Director Cochrane Mexico and member of Centres’ Directors Executive
• No remuneration by Cochrane
Is it worth it to search for all studies?
Throughout history, we have given recommendations without searching for all the evidence
Carpenter 1965

Compared families that slept their babies either face down or face up

Sleeping face down seemed to increase the risk of sudden infant death syndrome
Seemed?
Results may happen by chance
One study seldom is sufficient
Evidence of harm since late 70’s…
If someone would have done a systematic review...
...more than 50,000 deaths could have been prevented
Is it worth it to search for all studies?
1909

1938 Wales
Spanish Civil War (international brigades)

1941 WWII
“It is surely a great criticism of our profession that we have not organised a critical summary, by speciality and subspeciality, adapted periodically, of all randomised controlled trials” - 1979

Archie Cochrane
1909
1938 Wales
Spanish Civil War (international brigades)
1941 WWII
1979 critic
1988 †
127 patients

Prenatal steroids to prevent death in premature babies
Prenatal glucocorticoids to prevent death in premature babies

<table>
<thead>
<tr>
<th>Year</th>
<th>No.</th>
<th>Steroids</th>
<th>Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td>1070</td>
<td>36</td>
<td>60</td>
</tr>
</tbody>
</table>

Common practice until 90’s
Latest News and Events

Cochrane at the 2018 Medical Library Association (MLA) Meeting
17 April 2018

Featured Review: Vertebroplasty for treating spinal fractures due to
tumour and bone metastases
18 April 2018

Become a Cochrane citizen scientist!

List of countries eligible for free one-click access to the Cochrane Library in 2018

Latest Cochrane evidence

Gabapentin for chronic neuropathic pain in adults

Probiotics for prevention of necrotizing enterocolitis in preterm infants

Amitriptyline for neuropathic pain in adults
> 130 countries

> 37,000 participants

www.cochrane.org
Mission

To promote evidence-informed health decision-making by producing high-quality, relevant, accessible systematic reviews and other synthesized research evidence
Strict conflict of interest policies from the start
“Cochrane is an enterprise that **rivals** the Human **Genome Project** in its potential implications for modern medicine”
— *The Lancet*
Strategy to 2020

Objective 1: Producing evidence
Objective 2: Making our evidence accessible
Objective 3: Advocating for evidence
Objective 4: Building an effective & sustainable organization
Objective 1: Producing evidence
Mission

To promote evidence-informed health decision-making by **producing** high-quality, relevant, accessible **systematic reviews** and other synthesized research evidence.
Lo que comenzó como un esfuerzo individual...
1. Desarrollar una pregunta
2. Planificar los métodos
3. Redactar y publicar el protocolo
4. Desarrollar la búsqueda
5. Realizar la búsqueda
6. Seleccionar los estudios
7. Recopilar los datos
8. Evaluar el riesgo de sesgo
9. Analizar los datos
10. Interpretar los hallazgos
11. Redactar y publicar la revisión
Nuevo ecosistema de las revisiones Cochrane

1. Desarrollar una pregunta
   - Grupos Cochrane de Revisión

2. Planificar los métodos
   - Formación

3. Redactar y publicar el protocolo
   - Redactar
   - Publicar

4. Desarrollar la búsqueda
   - Realizar la búsqueda

5. Realizar la búsqueda
   - Especialistas en información
   - Herramientas de enlace de datos (Linked Data)

6. Seleccionar los estudios
   - Selección
   - Gente Cochrane (Cochrane Crowd)

7. Recopilar los datos
   - Recopilar

8. Evaluar el riesgo de sesgo
   - Evaluación

9. Analizar los datos
   - Analizar

10. Interpretar los hallazgos
    - Intercambio de tareas (Task Exchange)

11. Redactar y publicar la revisión
    - Redactar
    - Publicar

Comunidades: Apoyo en Comunicaciones
Proceso: Apoyo editorial
Mission

To promote evidence-informed health decision-making by producing **high-quality**, relevant, accessible systematic reviews and other synthesized research evidence.

Favours NON-Cochrane reviews

Favours Cochrane reviews
Objective 1: Producing evidence

Objective 2: Making evidence accesible
Mission

To promote evidence-informed health decision-making by producing high-quality, relevant, accessible systematic reviews and other synthesized research evidence.
Factors that influence the provision of intrapartum and postnatal care by skilled birth attendants in low- and middle-income countries: a qualitative evidence synthesis
Susan Munabi-Babigumira, Claire Glenton, Simon Lewin, Atle Fretheim, Harriet Nabudere
17 November 2017

Unconditional cash transfers for reducing poverty and vulnerabilities: effect on use of health services and health outcomes in low- and middle-income countries
Frank Pega, Sue Yan Liu, Stefan Walter, Roman Pahove, Ruhi Saith, Stefan Khachimi
Cochrane Library

7400+ systematic reviews
2500+ protocols

Every second someone runs a search
Every 2 seconds someone reads a summary
Every 3 seconds someone downloads fulltext

*As of October 2017*
Treating BCG-induced disease in children

Carlos A Cuello-García, Giordano Pérez-Gaxiola, Carlos Jiménez Gutiérrez

First published: 31 January 2013

Editorial Group: Cochrane Infectious Diseases Group

DOI: 10.1002/14651858.CD008300.pub2

Abstract

Background

Bacillus Calmette-Guerin (BCG) is a live attenuated vaccine to prevent tuberculosis, routinely administered at birth as part of the World Health Organization global expanded immunisation programme. Given intradermally, it can cause adverse reactions, including local, regional, distant and disseminated manifestations that may cause parental distress. Rarely, it can cause serious illness and even death. Among these patients with immunocompromised conditions, such as the...
Access to fulltext Cochrane Library

Purple: Free | Orange: License | Blue: subscription
Geographic Reach
Top 10 usage of cochrane.org website

- Mexico
- USA
- Spain
- France
- Argentina
- Colombia
- Brazil
- Chile
- UK
- Peru

Q3 2017 vs Q3 2016
No acces to fulltext?

Free special collections
Contact your Cochrane Centre
Special Collections

Special Collections bring together selected Cochrane Reviews and other external sources to provide a useful evidence overview on an important healthcare topic. Some Special Collections are created in conjunction with Evidence Aid, aiming to provide resources for decision-makers involved with disasters and humanitarian emergencies.

Yoga for improving health and well-being
6 November 2017
Free access to reviews

World No Tobacco Day
22 May 2017
Free access to reviews
<table>
<thead>
<tr>
<th>#</th>
<th>Title</th>
<th>Authors</th>
<th>Publication Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>A meta-analysis of re-treatment for intravenous immunoglobulin-resistant Kawasaki disease</td>
<td>Yang X., Liu G., Huang Y., Chen S., Du J., Jin H. Cardiology in the Young. 2015;25(4)(Yang X.; Huang Y.; Du J.; Jin H., <a href="mailto:jinhongfang51@126.com">jinhongfang51@126.com</a>) Department of Pediatrics, Peking University First Hospital, Beijing, China); 1-9.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Kawasaki disease in adults: Observations in France and literature review.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Objective 1: Producing evidence

Objective 2: Making evidence accessible

Objective 3: Advocating for evidence

Review Challenges Tamiflu Efficacy

Fish Oil Fail: Omega-3s May Not Protect Brain Health After All
A meta-analysis finds that taking omega-3 supplements may not do much to preserve memory, but how? By ALEXANDRA SIFFERLIN

ANNALS OF SCIENCE

THE POWER OF NOTHING

Could studying the placebo effect change the way we think about medicine?
BY MICHAEL SPECTER

DECEMBER 12, 2011

SUBSCRIBE | THIS WEEK'S ISSUE | NEWS | CULTURE | POLITICS | BOOKS & FICTION

SHOTS
NPR'S HEALTH BLOG

Chew On This: Some Gum May Ward Off Ear Infections

When young children get ear infections, parents face an unpleasant choice: dose them with antibiotics and pain relief or tough it out.

But certain kinds of chewing gum may help reduce the number of ear infections children get in the first place.

That's chewing gum with xylitol, a new form of sugar sometimes used in gum and candies because it has fewer calories and its sweetness than table sugar, or sucrose.

Giving children xylitol in gum, syrup, and lozenges twice a day reduces the risk of ear infections. Xylitol interferes with bacteria that cause ear infections.

10:23 am
November 11, 2011

12:48 PM

by NANCY SHUTE

Comments (19) | Recommend (8)
Mission

To promote evidence-informed health decision-making by producing high-quality, relevant, accessible systematic reviews and other synthesized research evidence.
Priorities

List of priority reviews since 2015

http://community.cochrane.org/review-production/production-resources/prioritization-list-project
What about the current Cochrane reviews?

**Do they inform policy?**

**Clinical guidelines?**

WHO guidelines

Cochrane reviews are included in 80% WHO clinical practice guidelines
Mexico guidelines

As of 02/2017, at least 1 Cochrane review was included in 40% CENETEC guidelines

Partnerships

World Health Organization

Cochrane has been in official relations with the World Health Organization (WHO) since 2011.

This collaboration includes the right to appoint a representative to participate, without vote, in WHO’s meetings, including at the World Health Assembly, the WHO’s decision-making body, allowing us to make expository statements on WHO health resolutions.

This relationship gives us the opportunity to provide input on the way research evidence is identified, synthesized, assessed and used by WHO. In addition, we provide reliable summaries of health information which can be used to inform recommendations and policies.

It promotes intersectoral collaboration and high-quality research between our two organizations to produce the necessary evidence to ensure policies in all sectors contribute to improving health and health equity.
Guidelines International Network's (G-I-N) mission is to lead, strengthen, and support collaboration in guideline development, adaptation and implementation.

As a major player on the global healthcare quality stage, G-I-N facilitates networking, promotes excellence, and helps our members create high quality clinical practice guidelines that foster safe and effective patient care.

Cochrane and G-I-N formalized a partnership arrangement in 2014, agreeing to work together collaboratively to ensure that evidence is both useful and used by people making decisions about health, from individuals to clinicians to international health policy-makers from all over the world.
Articles relating to medicine are viewed more than 180 million times per month on Wikipedia, yet less than 1 per cent of these have passed a formal peer review process. This opens up a unique opportunity for Cochrane to work with Wikipedia medical editors to transform the quality and content of health evidence available online. The partnership, formalized in 2014, supports the inclusion of relevant evidence within all Wikipedia medical articles, as well as processes to help ensure that medical information included in Wikipedia is of the highest quality and as accurate as possible. Trusted, evidence-based research can help people to make informed decisions about their own health care.

The Wikipedia name, stylized wordmark, and puzzle globe logo are trademarks of the Wikimedia Foundation and are used with the permission of the Wikimedia Foundation. We are not endorsed by or affiliated with the Wikimedia Foundation. The puzzle globe, by Paul Stansifer, David Friedland (User:Nohat), and Philip Metschan, is licensed under CC BY-SA 3.0 (via Wikimedia Commons).
Final messages

Cochrane produces high quality systematic review to make better healthcare decisions

Invitation to guidelines and health policy producers to work with Cochrane so that our reviews are relevant

giordano@cochrane.mx   @giordanopg