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Biblioteca Biomédica**

**Evaluation of long-term impact  
of a course on  
Evidence-Based Medicine for Librarians**

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# BACKGROUND

- EBM has been introduced within the medical community

# BACKGROUND

- Librarians : 5 year university degree
- Medical Librarians in Chile have formal training in electronic databases

# POPULATION

**24 Medical Librarians:**

- **Public and Private Health System**
- **Ministerio de Salud**
- **Arica to Punta Arenas**

# WORKSHOP OBJECTIVES

**The 24 Librarians would be able to:**

- **Understand the EBM basic concepts**
- **Formulate a precise clinical question with an appropriate search strategy (using Mesh)**
- **Use of electronic databases: Cochrane, Bandolier and Medline**

# **COURSE DESIGN**

**5 Sessions (16 hours)  
hands-on workshop**

# COURSE CONTENTS

**5 Sessions (16 hours) hands-on workshop**

- 1. What is good evidence? Librarian's challenges and a new role.**
- 2. Searching information and medical evidence in Internet: Introduction.**
- 3. Specialized medical database's searching skills I: Cochrane Library, Bandolier**
- 4. Specialized medical database's searching skills II: MEDLINE (Pubmed)**
- 5. Critical appraisal and outcomes**



# EVALUATION

**The participants completed questionnaires:**

- **Before (during the first session)**
- **Immediately after (at the end of the last session)**
- **Two years later (via email)**

# EVALUATION QUESTIONNAIRE

- **Attitude to Evidence Based Medicine**  
(5 point scale)
- **The Use of EBM in clinical practice**  
(5 point scale)
- **Frequency of use of electronic databases:**  
**MEDLINE , Cochrane Library and Bandolier**  
(4 point scale for each database)

# RESULTS

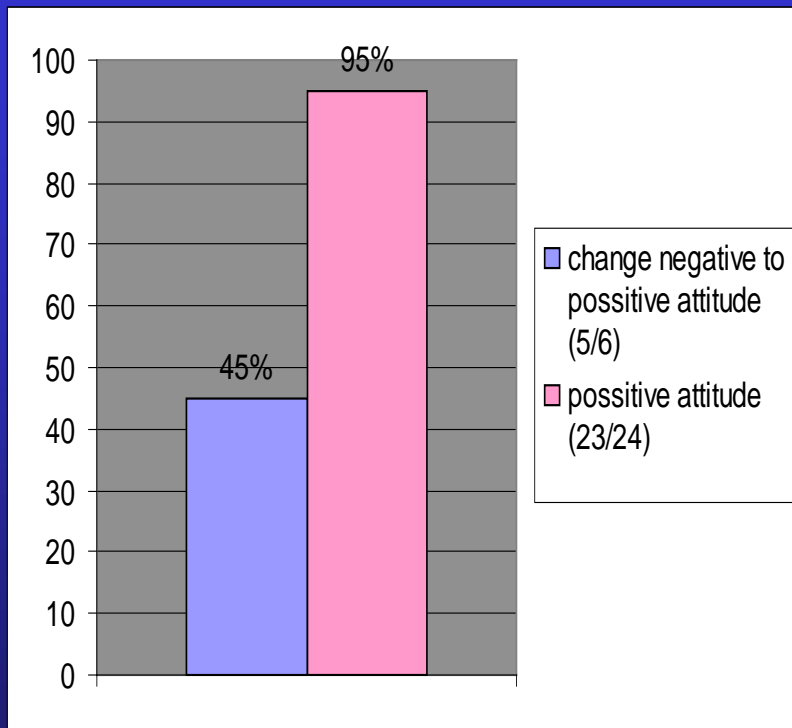
**24 LIBRARIAN ATTENDED THE COURSE  
COMPLETED QUESTIONNAIRES:**

<b>PRE COURSE</b>	<b>24</b>
<b>IMMEDIATELY AFTER</b>	<b>24</b>
<b>TWO YEARS LATER</b>	<b>17 (25%)</b>

# PRECOURSE RESULTS

- 50% had a very positive attitude to EBM and thought EBM was very useful in clinical care.
- 91% stated that they used internet daily
- ONLY 52% used Medline daily
- 43% had NEVER used the Cochrane Library
- 60% had NEVER used Bandolier.

# RESULTS IMMEDIATELY AFTER COURSE



- **45% had a positive change of attitude**
- **Thus 80% (20/24) finished the course with a very positive attitude to EBM**
- **Two students had a negative change of attitude**

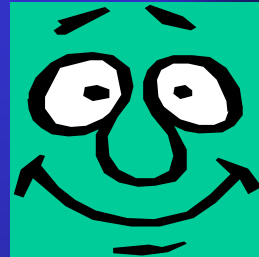
# TWO YEARS LATER

Compared to the pre-course results

- **Change in attitude to EBM**

- \*50% (9/18) had a positive change in attitude

- \*16% (3/18) had a negative change



- **If we use “intention to treat” worst scenario**

- \*54% (13/24) had positive change or maintained a very positive attitude

- \*38% (9/24) may have had /had a negative change in attitude



# TWO YEARS LATER

Compared to the pre-course results

- **Use of databases:**
  - **72% (13/18) had increased their use of Cochrane Library**
  - **16% (3/18) increased the use of Bandolier**



# TWO YEARS LATER

Compared to the pre-course results

**No impact on daily use**

**Slight impact on “never use” Cochrane**

**No impact on use of Bandolier**



	Before	After
Daily Use of Medline	13	12
Daily use of Cochrane	1	2
Never use Cochrane(worst scenario)	16	8
Never use Bandolier (worst scenario)	20	19



# DISCUSSION

- Positive impact in attitude opens the way for future courses
- Poor impact in use of specialized databases:
  - Variability in skills prior to course
  - Difficulty to implement in home environment
    - Free access to Cochrane only in last few months
  - Lack of interest from the health professional users of their libraries

# CONCLUSIONS

## Challenges for the future:

- Selective invitations
- Mixed course for librarians and Health Professionals
- More follow-up and support in “home environment”

# References

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