LINKING CULTURAL COMPETENCY TRAINING TO PATIENT CARE OUTCOMES

Presented By:

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Objectives

- Assess and rate research linking CC training to patient outcomes
- Present a framework for future research

Lie DA, Lee-Rey E, Gomez A, Bereknyei S, Braddock CH 3rd. **Does Cultural Competency Training of Health Professionals Improve Patient Outcomes? A Systematic Review and Proposed Algorithm for Future Research.** J Gen Intern Med. 2011 Mar;26(3):317-25

What Do Prior Reviews Show?

- Reviews found for 'all professions, EM, mental health
- Improvement in learner competencies (knowledge)
- Limited quality of studies
- Inadequate validated tools
- No clear evidence for training and direct patient outcomes
- 'More research needed'

Hence conducted systematic review of lit. focusing on patient-centered outcomes

- Brach C, Can cultural competency reduce racial and ethnic health disparities?....Med Care Res Rev 2000
- Anderson et al. Culturally competent healthcare systems.... American Journal of Preventive Medicine, 2003
- **Price et al** A systematic review of the methodological rigor<u>Acad.</u> Med. 2005
- **Hobgood et al**.review of educational models and methods. <u>Acad. Emerg Med. Dec 2006</u>
- **Beach et al**. ..systematic review best evidence... <u>BMC Public Health</u>. <u>2006</u>
- Bhui et al. Cultural competence in mental health care.... BMC Health Serv Res. 2007

Teaching Strategies







From Google Images

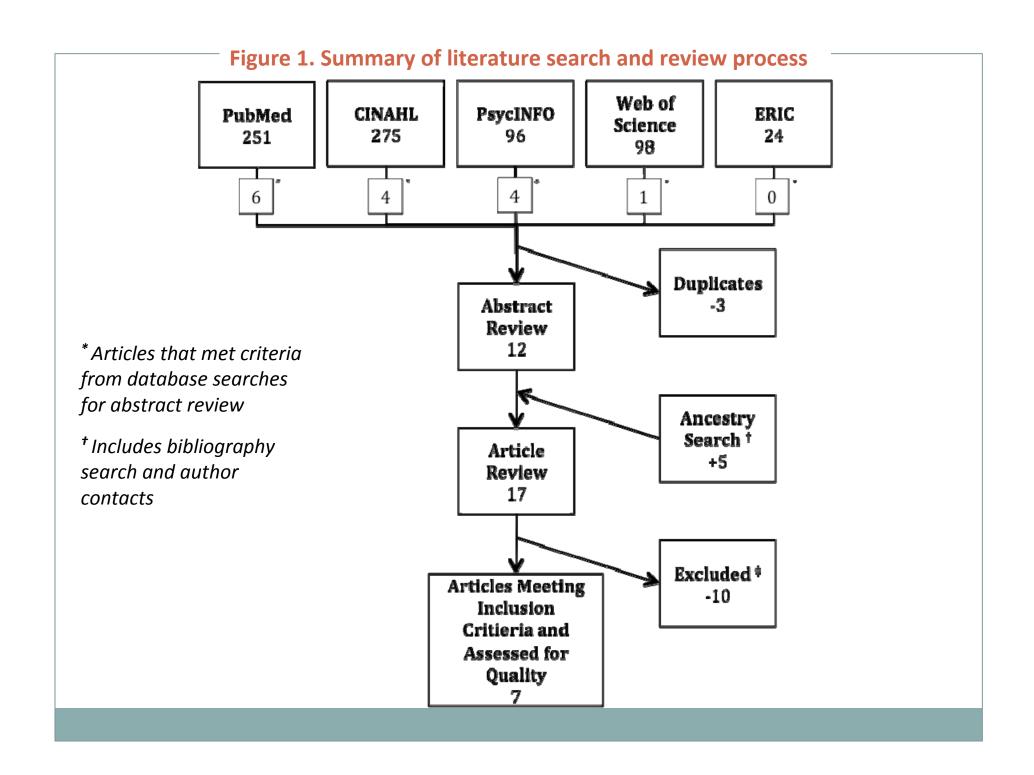
Study Selection Criteria

Inclusion

- Training intervention present for CC
- Original study
- Learners specified
- Patient outcomes specified
- Training effect reported

Exclusion

- Generic communication intervention
- Patient education only
- No outcome measures
- Review only
- Non-English articles



Quality Rating

• STROBE 1

- STrengthening Report on OBservational and Epidemiological Studies, score range 0-40
- MERSQI ²
- Medical Education Research Study Quality Instrument, score range 5-18
- Each article rated by 2 independent raters
- 3 categories of quality (low, mod, high)

¹ STROBE checklist available on PLoS Medicine at http://www.plosmedicine.org/.

² Reed DA, Association between funding and quality of published medical education research. JAMA. 2007

Seven Studies - Summary

- Learners: MDs (3), multiple professions (2),
 mental health (2). N = 8 to 3700
- Design: quasi-randomized (2), cluster-randomized (2), pre/post (3).
- Curriculum: 4 hours to 10 weeks, varied
- Patients: Diabetes, pediatric ED, mental health.
 N = 37 to 3557
- Patient outcomes: Satisfaction, self-efficacy, clinical (HbA1c), provider efficacy

Quality and Effect Size

Quality ratings

Combined STROBE and MERSQI (congruent)

- **Poor (3)**
- Moderate (4)
- High (0)

Effect size (patient)

- Negative effect (0)
- No effect (2)
- 0/+ effect (1)
- + effect (1)
- ++ effect (1)
- Unable to assess (2)

Implications

- Data limited in validity (cause-effect not shown)
- Need additional patient constructs
- Need roadmap for rigorous studies linking training to patient-centered outcomes
- Need multi-institutional studies
- Need (more) validated tools
- More funding for CC education research

Suggested Process for Planning Educational Studies on Patient Outcomes Generate Hypothesis & Determine Study Population

Select Research Design

Experimental Research Design Observational Research Design

Select Measurement

Measure Impact on Training Outcomes

Select Analysis

Analyze Patient Outcomes

Address Validity

Internal Validity

External Validity

Research and Policy

- Which comes first?
- For clinical practice, evidence drives practice guidelines
- For training, policy may precede evidence ('doing the right thing')
- May lead to negative spiral for research funding?



Suggestions?

Questions?
Comments? New initiatives?

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