LINKING CULTURAL COMPETENCY TRAINING TO PATIENT CARE OUTCOMES

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Objectives

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

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 .... *Acad. Med. 2005*
- **Hobgoood et al.** ....review of educational models and methods. *Acad. Emerg Med. Dec 2006*
- **Beach et al.** ..systematic review best evidence... *BMC Public Health. 2006*
- **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
Figure 1. Summary of literature search and review process

* Articles that met criteria from database searches for abstract review

† Includes bibliography search and author contacts
Quality Rating

- **STROBE**
  - STRengthening Report on OBservational and Epidemiological Studies, score range 0-40

- **MERSQI**
  - Medical Education Research Study Quality Instrument, score range 5-18

- Each article rated by 2 independent raters

- 3 categories of quality (low, mod, high)

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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

Select Analysis

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?
Patient-Centered Care
Suggestions?

Questions?
Comments? New initiatives?

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