100 years of serving our nation's children and families

Evidence Based Practice and Practice Based Evidence – Is It One or the Other?

Centennial Topical Webinar Series

July 17, 2012



Lisbeth Schorr





Need All the Evidence We Can Get

We who seek to improve outcomes for children need all the evidence we can get

- To continuously make interventions more effective
- To guide the selection and design of interventions to implement or scale up
- To demonstrate that the work is improving lives





An Inclusive Evidence Base: The New Gold Standard

from

Experimental
Evaluations

from
NonExperimental
Evaluations

from
Other
Research

from
Practice
and
Experience

Draw on and synthesize evidence from all these sources:

- to continuously make interventions more effective
- to guide the selection and design of interventions to implement or scale up
- to demonstrate that the work is improving lives and neighborhoods





Using Multiple Methods

The evidence we need can come from:

- experimental evaluations (RCTs)
- non-experimental evaluations
- other research
- practice and experience





Matching Methods to Purpose

PURPOSE		SOURCES of EVID	ENCE and METHO	DS
	STANDARDIZED INTERV. WITH CLEAR CAUSAL RELATION TO OUTCOME	COMPLEX, EVOLVING , PLACE-BASED INTERVENTIONS	RESEARCH ON DEVELOPMENT, PROTECTIVE AND RISK FACTORS	PRACTICE AND EXPERIENCE
Inform resource allocation; selection of intervention to implement, scale up	Use experimental methods, including RCTs, to obtain proof of impact	Assess progress against results to establish probability that change resulted from intervention	Use theories of change to illuminate relation of actions and outcomes	-
Inform efforts to improve quality, achieve greater impact	Analyze RCTs for cross-program effectiveness factors	Use formative, developmental evaluations to describe actions	Draw on research to identify opportunities for improvement and adaptation	Draw on practice and experience to identify opportunities for improvement and adaptation
Inform intervention design when known interventions not achieving outcomes	Examine this evidence for principles, practices that could inform creation of new interventions	Examine this evidence for principles, practices that could inform creation of new interventions	Draw on research to act on greatest unsolved problems and promising solutions	Draw on practice and experience to act on greatest unsolved problems and promising solutions
Guide quality of implementation	Analyze for cross- program keys to quality implementation	Analyze for cross- program keys to quality implementation	Draw on research to improve implementation	Draw on practice and experience to improve implementation





Agreement on Measurable Results is Essential

Examples of results in current use

- fewer children in large residential centers,
- fewer children in out-of-state placements,
- fewer child removals with no immediate effect on child safety,
- fewer children returning to DCF custody after having been reunited with family
- fewer children in more than three placements
- more children living with relatives or significant family friends as foster parents
- fewer high school dropouts
- fewer pregnant or parenting teens





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Dr. Puneet Sahota





Perspectives

- American Indian/Alaska Native communities have recently faced challenges with evidence-based practice
- Practice-based evidence offered as an alternative
- Youth suicide prevention review project
- Case examples





Definitions

- Evidence based practice
 - Using "best available evidence"
 - Randomized clinical trials as gold standard
- Practice based evidence
 - Real-life practices as basis for inductively developing evidence
- Culturally based interventions
 - Grounded in tradition, "anecdotal evidence"





Definitions (citations)

Evidence-based practice: The Institute of Medicine (IOM) defines evidence-based practice as "the integration of best research evidence with clinical expertise and patient values." (Institute of Medicine (IOM), <u>Crossing the Quality Chasm: A New Health System for the 21st Century</u> (Washington, D.C.: National Academies Press, 2001)).

American Psychological Association (APA) defines evidence-based practice in psychology as: "the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences." (APA Presidential Task Force on Evidence-Based Practice, "Evidence-Based Practice in Psychology," <u>American Psychologist</u> 61, no. 4 (2006))

The APA Presidential Task Force on evidence-based practice further writes, "Evidence derived from clinically relevant research on psychological practices should be based on systematic reviews, reasonable effect sizes, statistical and clinical significance, and a body of supporting evidence. The validity of conclusions from research on interventions is based on a general progression from clinical observation through systematic reviews of randomized clinical trials." (APA Presidential Task Force on Evidence-Based Practice, "Evidence-Based Practice in Psychology," <u>American Psychologist</u> 61, no. 4 (2006)).

Practice-based evidence: A "practice-based evidence" approach would use "systems science," which seeks to take into account all the complicated variables that affect real-life health care practice (Lawrence Green, "Public Health Asks of Systems Science: To Advance Our Evidence-Based Practice, Can You Help Us Get More Practice-Based Evidence?" <u>American Journal of Public Health</u> 96, no. 3 (2006): 406–9.). This approach involves inductively develop evidence based on routine health care practices used on the ground, rather than deductively developing hypotheses and testing them in clinical trials.

Definition of "culturally-based practices": "those that are grounded in tradition and supported by 'anecdotal evidence.'" (U.S. Department of Health and Human Services (DHHS), <u>To Live To See the Great Day That Dawns: Preventing Suicide by American Indian and Alaska Native Youth and Young Adults</u>, DHHS Publication SMA (10)-4480, CMHS-NSPL-0196 (Rockville, Md.: Center for Mental Health Services, Substance Abuse, and Mental Health Services Administration, 2010, http://www.sprc.org/library/Suicide Prevention Guide.pdf)).

For more information, please feel free to contact Puneet at puneet.sahota@yahoo.com.





Challenges

- Historical trauma
- Community values of benefit to all
- Limited resources for evaluation
- Locally-developed approaches
- Fidelity of program adaptations





Evaluation Strategies

- Expanding definition of "evidence"
 - Change over time
 - Quantitative data
 - Qualitative data
- Consortia for evaluation
 - Help with generalizability for local programs
- Intermediate outcomes
 - Short-term, cost-effective to measure





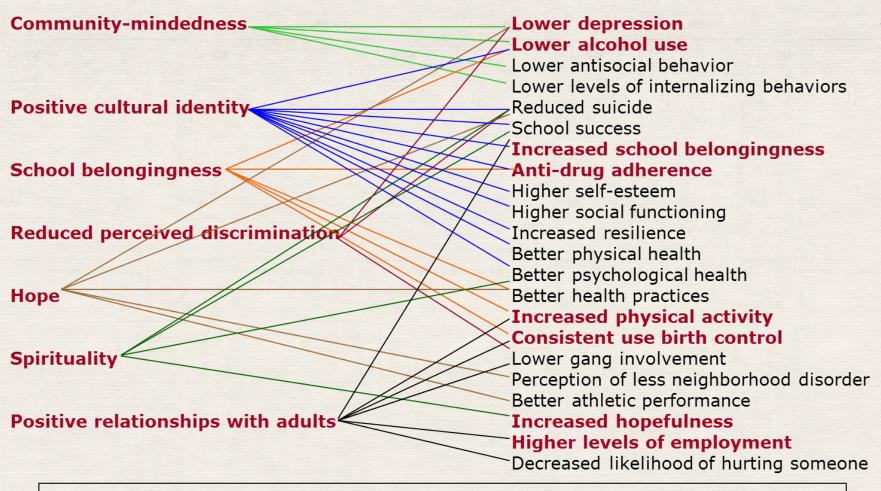
Case Example

- Practice-Based Evidence: Building Effectiveness from the Ground Up
- Developed strategies for documenting the effectiveness of services at Native American Youth and Family Center (NAYA) in Portland, OR
- Community-defined measures of success
- Community based participatory research





Relationship of NAYA-identified outcomes to existing evidence



Outcomes in red are NAYA-identified outcomes; all items in right column are outcomes from the research literature.





Acknowledgments

- Sarah Kastelic
- Terry Cross
- National Indian Child Welfare Association
- Key informants in suicide prevention study





Dr. Lawrence Palinkas





Presentation Aims

- Answer the question by drawing from 3 separate studies to examine the following
 - Approach to evidence and practice
 - Importance of research evidence
 - Use of evidence-based practices





Mixed Methods Study of a Statewide EBP Implementation

- PI: Gregory Aarons
- Co-Is: Mark Chaffin, Deborah Hecht, Jane Silovsky, Lawrence Palinkas
 - Funded by National Institute of Mental Health (R01MH072961)





Study Objectives

- Identify factors that impede or facilitate the real-world implementation of SafeCare® (SC), an EBP intended to reduce child abuse and neglect in child welfareinvolved families.
- Examine the impact of implementation on organizations and staff.
- Examine the effect of organizational factors on working alliance and client outcomes.





Methods

- One-on-One Interviews
 - Participants:
 - Clinical case managers (n=15)
 - Structure: Semi-structured using interview guide
 - Issues
 - Knowledge, attitudes and behavior (use) of the SC model
 - Fidelity to or adaptation of the SC model in practice
 - Factors that facilitated or impeded use of SC
 - Likelihood of using SC at completion of study





EBP Agent – End User Interactions

- Access to resources
 - Propagators provide short-term funding for services and personnel
 - Clinicians provide access to study participants.
- Exchange of knowledge
 - Propagators provided a global evidence-based approach to services found to be effective with other populations in other settings, thereby enhancing its generalizability to the target populations of the two projects.
 - Clinicians provided a local practice-based knowledge of the specific needs of clients in the research sites as well as experience addressing these needs through long-established treatment strategies.

Palinkas LA, Aarons GA, Chorpita BF, Hoagwood K, Landsyerk J, Weisz JR, and the Research Network on Youth Mental Health. Cultural exchange and the implementation of evidence-based practice: Two case studies. Research on Social Work Practice, 2009; 19: 602-612.





Innovation and the Use of Research Evidence in Public Youth-Serving Systems

- PI: Lawrence A. Palinkas, Ph.D.
 - University of Southern California
- Co-PI: Patricia Chamberlain, Ph.D.
 - Oregon Social Learning Center
- Co-PI: C. Hendricks Brown, Ph.D.
 - University of Miami
- Funded by the William T. Grant Foundation No. 10648





Study Objectives

Phase I

- <u>Aim 1</u>. Understand and measure the use of research evidence by decision makers of public youth-serving agencies.
- Aim 2. Identify factors that predict the use of research evidence.

Phase II

- <u>Aim 1</u>. Prospectively identify factors that predict the use of research evidence.
- Aim 2. Prospectively determine whether use of research evidence predicts stage of EBP implementation.





Methods

Qualitative

- Focus group with Southern California child welfare directors (n = 8)
- Semi-structured interviews with probation officers (n = 10) and mental health dept directors (n = 8)
- Participant observation of 4 CDT meetings

Quantitative

- Development of instruments to measure use of research evidence and cultural exchanges among key stakeholders
- Data collected from 164 systems leaders and staff (38,5% Child Welfare) participating in a RCT of an implementation strategy for scaling up MTFC (Cal-40 Study) using new survey instruments
- Matching with data collected from Cal-40 Study





Results

	Administrators Staff (n = 130) (n = 11)			
	Mean	SD	Mean	SD
Access research evidence	2.87	0.48	2.45	0.63*
Evaluate evidence validity, reliability and relevance	3.74	0.43	3.33	0.94*
Use evidence	3.26	0.44	2.99	0.34
Ignore evidence	3.17	0.37	2.92	0.21

^{*} p < 0.01





Child STEPS Clinic Treatment Project Dissemination and Implementation Study

- PI: John Weisz, Ph.D.
 - DIS PI: Lawrence A. Palinkas, Ph.D.
- Co-Is: MacArthur Research Network on Youth Mental Health
 - Funded by the John D. and Catherine T. MacArthur Foundation





CTP Study Objectives

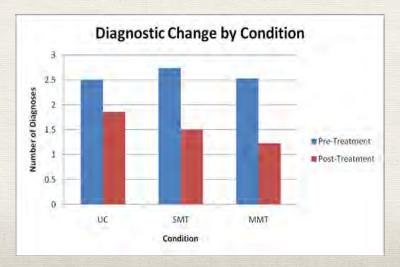
- Compare effectiveness of 3 approaches to treating depression, anxiety, and conduct disorders in 8-13 yr olds
 - Usual Clinical Care
 - Standard Manual Treatment (SMT)
 - Modular Manual Treatment (MMT)
 - Why modular?
 - 1. Single disorder cases are rare; comorbidity is common
 - 2. Children don't stay put; problems shift during episode of care
 - 3. Clinicians dislike rigidity & single focus; may not be sustainable
 - Modular mirrors what clinicians do with EBTs in practice, BUT provides structure and logic for decision-making





Coefficient Estimates for Group by Log-day for Overall Scores (Youth + Parent-report Random Effects Analyses; N=174 for Each Analysis) and Diagnostic change from pre- to post-treatment by study condition

Rater	SMT vs UC			N	MMT vs UC		
	Interaction	p-value	ES	Interaction ¹	p-value	ES ²	
Brief Problem Checklist Internalizing Score	0.014	.852	.04	-0.179	.014	.51	
Brief Problem Checklist Externalizing Score	0.059	.424	.17	-0.164	.023	.48	
Brief Problem Checklist Total Score	0.070	.569	.12	-0.346	.004	.59	
Mean Severity Rating on Top Three Problems	-0.043	.578	.12	-0.226	.003	.62	



(Source: Weisz et al., 2012)





DIS Study Objectives

- Conduct a process and implementation evaluation of SMT and MMT in the Clinic Treatment Project.
- Identify characteristics of community-based mental health clinics that facilitate or impede the dissemination and implementation of evidence-based practice.





DIS Data Collection

- Participant observation at training sessions and clinics, key informant interviews.
- Semi-structured interviews with clinicians, clinical directors/managers, and CTP clinical supervisors.
- Member checking focus groups with therapists and clinical supervisors.





Why was MMT so successful?

Therapists supported its use

- They liked the structure
- They found it useful (process)
- They believed it works (outcomes)

They came to like it after trying it

- Initial skepticism about lack of efficacy and concerns about a lack of control over treatment were dispelled.
- Improved morale because they were learning something new.

MMT was more consistent with therapist priorities.

- Gave them greater flexibility to pick modules and techniques based on unique needs of client.
- Did not interfere with the therapeutic alliance.
- All therapists, including those in SMT condition, plan to use protocols in the future, but more selectively than in CTP.





Why was MMT so successful?

- MMT allowed for more exchanges between therapists and researchers.
 - Association with investigators was viewed by therapists and clinic directors as a benefit to participating in the CTP.
 - Everyone loved the training and supervision and many thought the supervision was the best part.
 - MMT allowed for more <u>accommodation and negotiation</u> than SMT.
 - Both therapists and supervisors felt that MMT approach gave them more "license" to negotiate/exchange.





Cultural Exchange

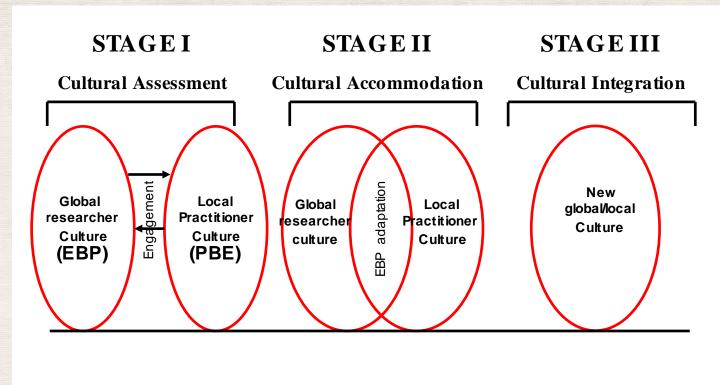
- A theory and a method for conducting translational research and facilitating research translation.
- A transaction and transformation of knowledge, attitudes and practices (KAP) of individuals or groups representing different cultural systems
 - Global culture of Evidence-Based Practice
 - Local culture of Practice-Based Evidence
- A process and product of debate and compromise

(Palinkas, Allred & Landsverk, 2005)





Cultural Exchange in Research Translation





Collaboration

Compromise





- Approach
 - Evidence-Based Practice offers a global approach to services delivery that can be transferred from one setting to another.
 - Practice-Based Evidence offers a local approach to services delivery that is specific to a setting and its population.





Evidence

- Systems leaders acknowledge importance of evidence obtained through rigorous procedures (e.g., RCTs)
- Line staff acknowledge importance of evidence obtained through personal experience (their own or people they know)





Use

- Evidence-Based Practice offers structure, professional identity, consistency, and measureable outcomes to services delivery.
- Practice-Based Evidence offers control, familiarity, and adaptability to services delivery.
- Modular approaches like the one used in the CTP may offer the best of both worlds.





- So is it one or the other?
- According to the following definition, the answer is not one or the other but **both**

"Evidenced-based medicine is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research."

Sackett, D.L., Rosenberg, W.M., Muir Gray, J.A., Haynes, R.B., & Richardson W.S. (1996). Evidenced-based medicine: What it is and what it isn't. *British Medical Journal*, 312, 71-72.

 Having both may require a transformation of the organizational cultures of researchers and practitioners





Thank you!

Questions?

For more information, please contact me at palinkas@usc.edu





Discussion





For more information

(including a copy of today's slides and a webinar recording)

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