Preventing the intergenerational transmission of ACEs

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ACES in Tulsa, Oklahoma



Two Surveys, Summer 2012

Study	N	Sample	Linked to
OU-Tulsa, School of Community Medicine Clinic Survey	354	Clinic patients, adults	Electronic Medical Record data: • health conditions • medications • history
Family Life and Stress	338	Parents of children aged 6 weeks to 5 enrolled in Tulsa Educare (TEI)	 Tulsa Educare data: Parent interviews Teacher observations and Cortisol sample from children
Total N=	692		

OU-Tulsa 2012 ACEs Studies

SCM IM, FM Clinic patients

354 patients

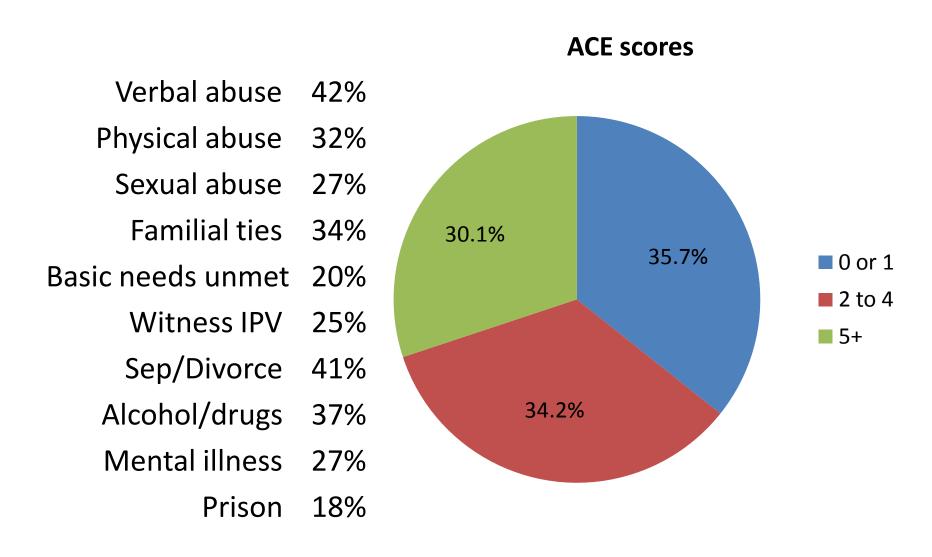
- 75% female
- 36% single, 26% married, 23% divorced/separated
- 24% < high school, 45% high school/GED, 14% tech/trade school
- 57% using SNAP
- 59% white, 20%, Afr-Am, 7% Hispanic, 9% Am Ind, 3% multiethnic
- Age (SD) = 45 (15) years

Tulsa Children's Project

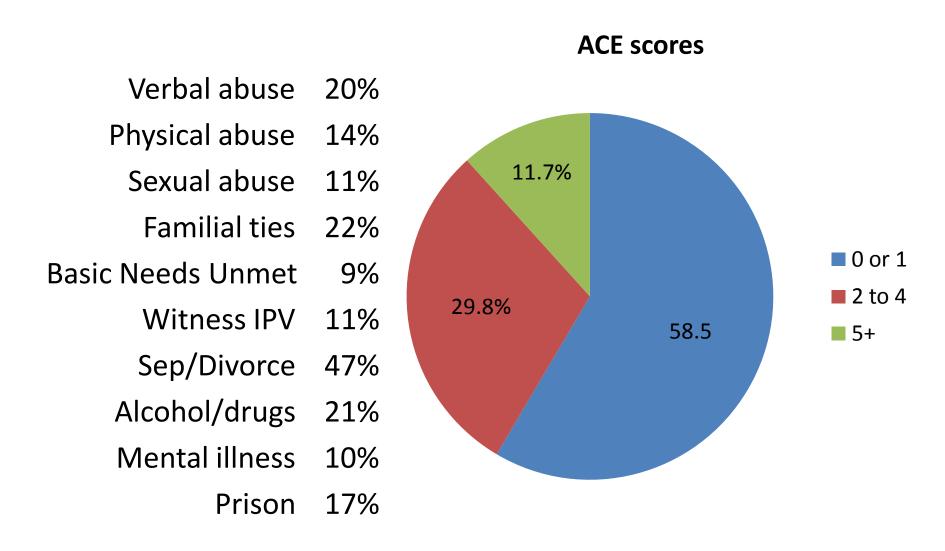
334 parents

- 93% female
- 43% single, 48% married/ LWP,7% divorced/separated
- 28% < high school, 38.2% high school/GED, 13% tech/trade school
- 100% EHS/HS eligible
- 41% Hispanic, 32% Afr-Am, 16% white, 5% Am Ind, 5% Asian, 5% multiethnic
- Age (SD) = 30 (7) years

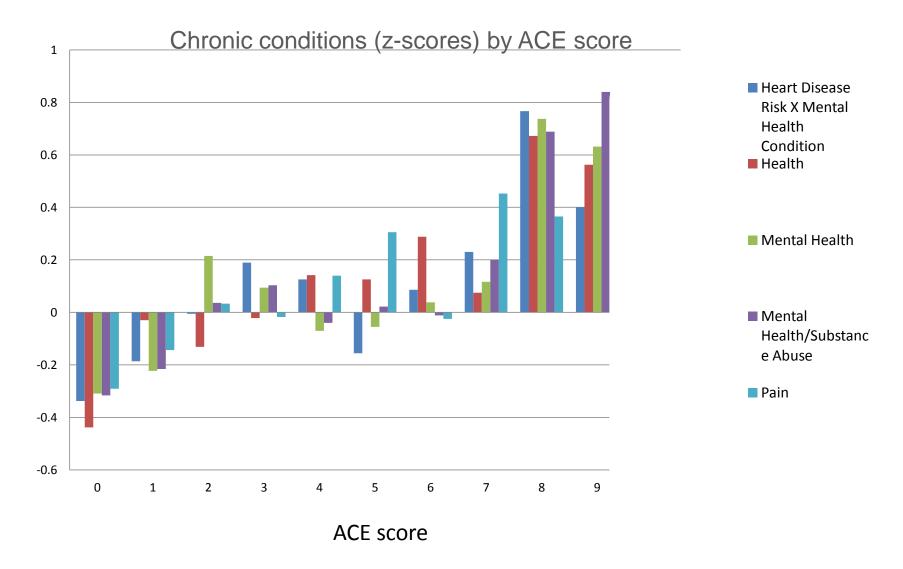
OU-SCM Patients: ACEs



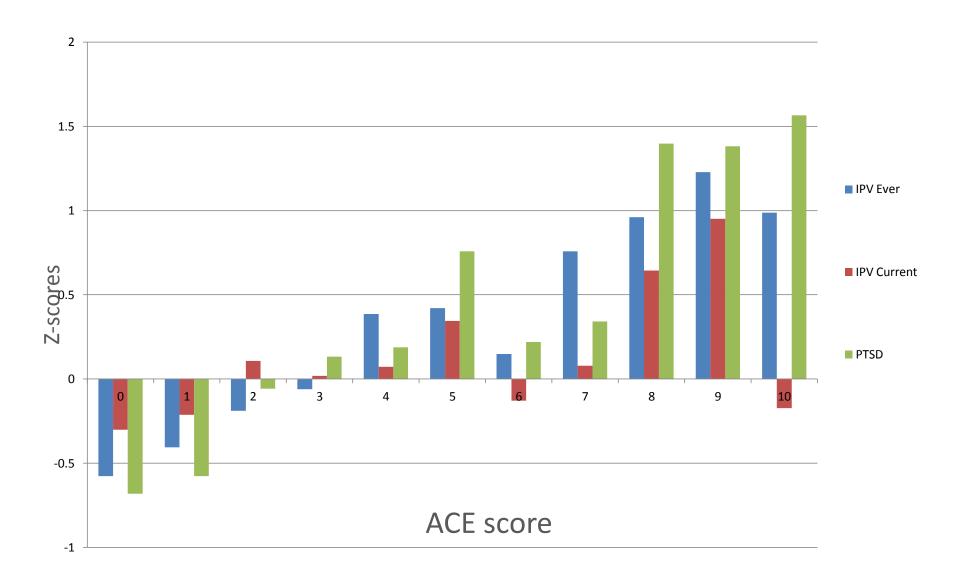
Tulsa Educare Parents: ACEs



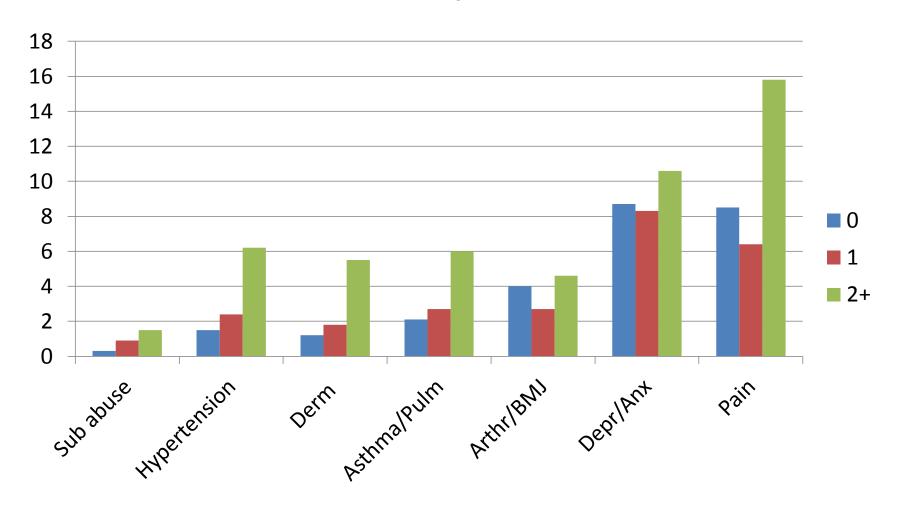
OU-SCM patients: ACEs and health



Clinic patients: IPV and PTSD by ACE score



Tulsa Educare Parents: Health Problems by ACE score



ACEs and Health Care Access

ACE score	N	Health Care Barriers, Mean (SD)
0-1	319	2.29 (1.59)*
2-4	217	3.22 (1.57)*
>4	140	3.84 (1.65)*

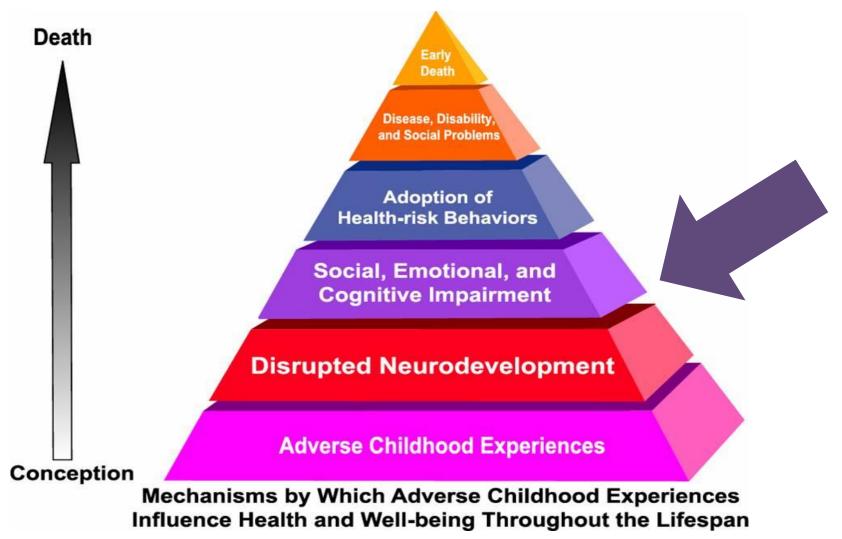
Doctor Regularly as a Child?*	N	ACE
No	234	2.95
Yes	419	2.25
Dentist Regularly as a child?*	N	ACE
Dentist Regularly as a child?* No	N 289	ACE 3.07

^{*} Statistically significant difference

Combined Health Data (n=692)

- A clear and significant pattern in both data sets: higher ACE scores are associated with poor physical and mental health, and a history of poor access to care
- High prevalence of ACEs in both populations
- ACE score related to all major physical and mental health problems, IPV and PTSD
- ACE score predicts number of barriers to health accessing care and regular visits as children

ACEs and the next generation



Felitti V, Anda R et al. Am J Prev Med 1998;14:245-258.

Three Levels of Stress Response

Positive

Brief increases in heart rate, mild elevations in stress hormone levels.

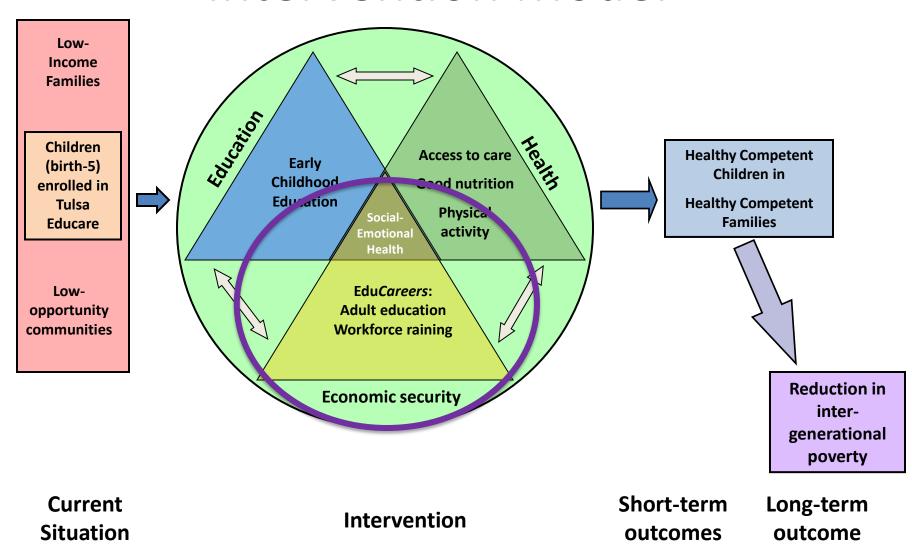
Tolerable

Serious, temporary stress responses, buffered by supportive relationships.

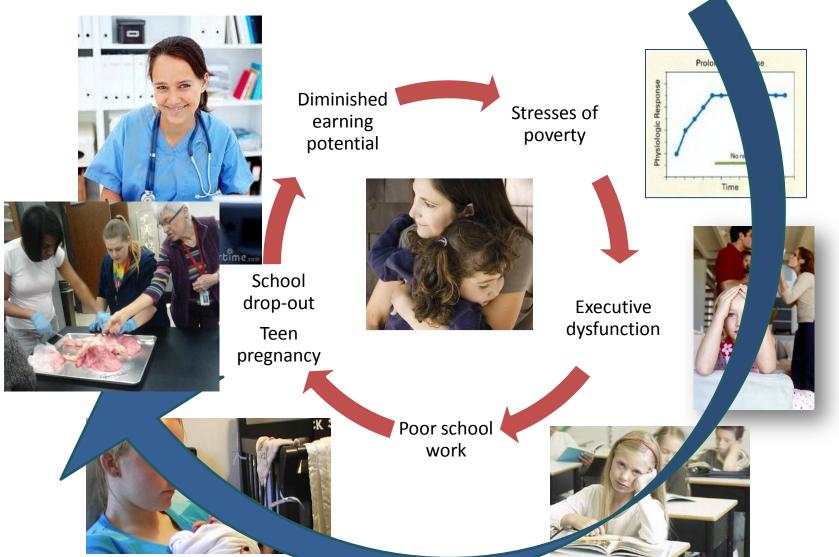
Toxic

Prolonged activation of stress response systems in the absence of protective relationships.

Tulsa Children's Project Intervention Model



The cycle of toxic stress and poverty



Early successes followed by frustration and failures

2010 nursing cohort

- 9 of 9 passed exam for CNA
- 2 completed LPN training (4/13); 2 working, 3 in school, 2 out of program

2011 nursing cohort

- 12 of 12 passed CNA
- 10 failed at least 1 required c lass

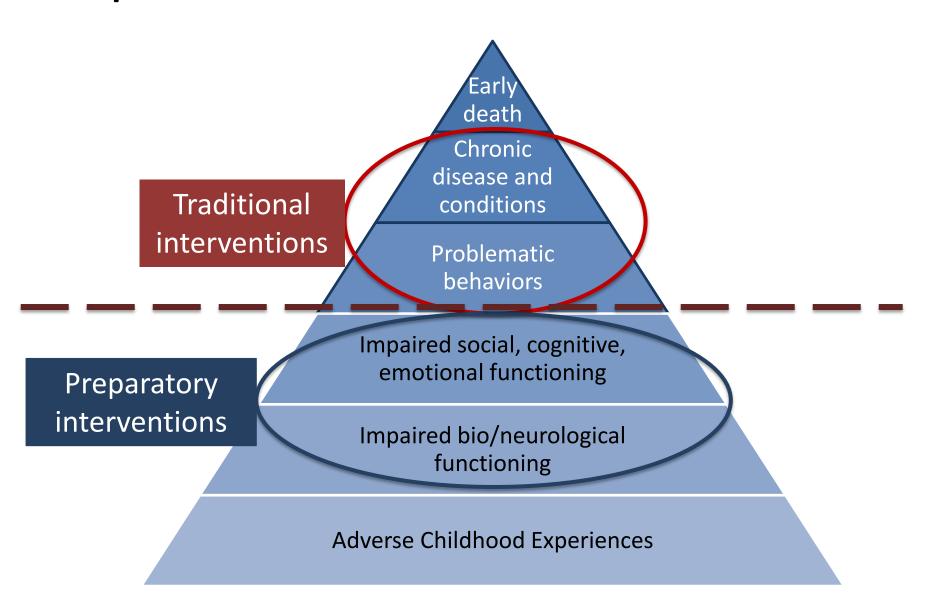
2012 mixed career cohort

- 10 enrolled
- 8 working and in school

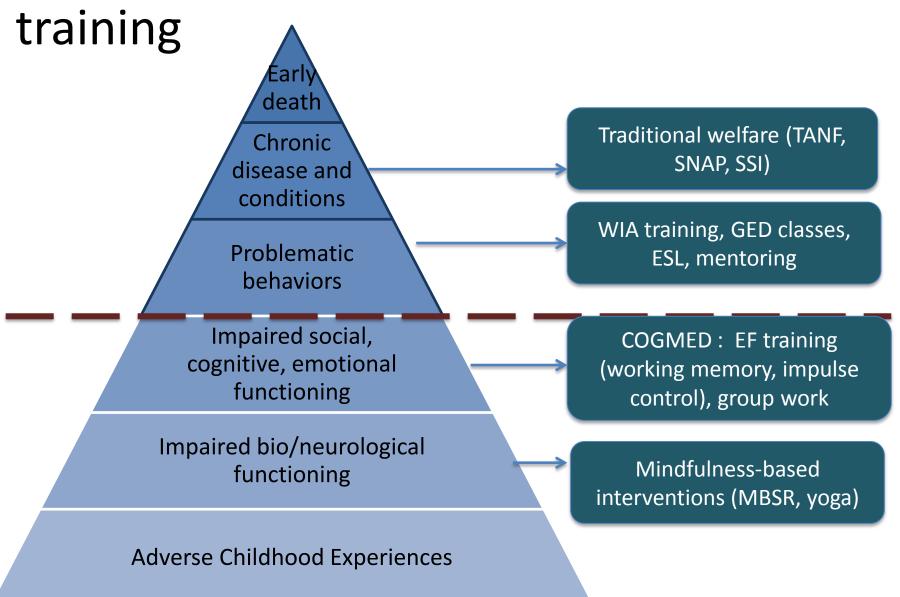




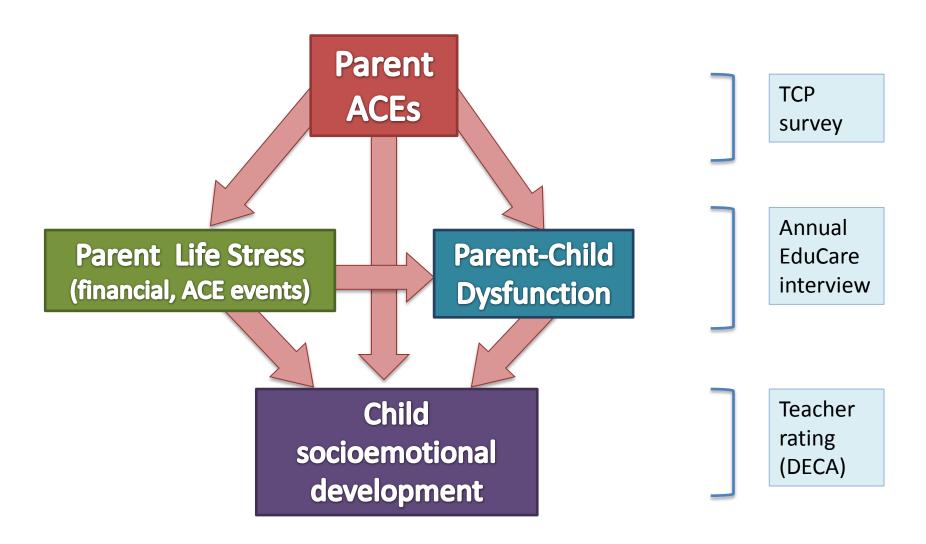
Expand the Focus of Interventions



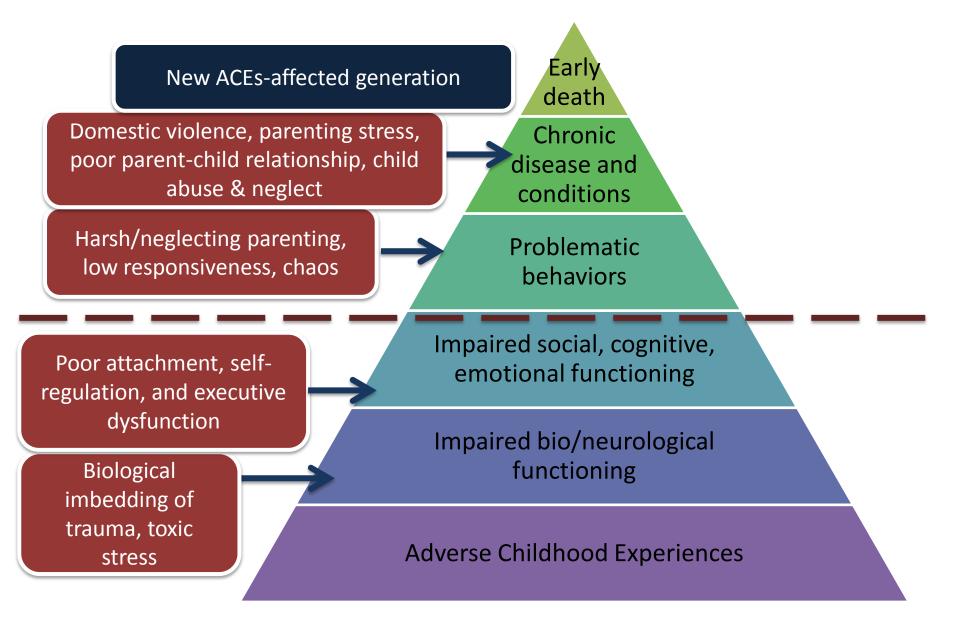
ACEs and adult education/workforce



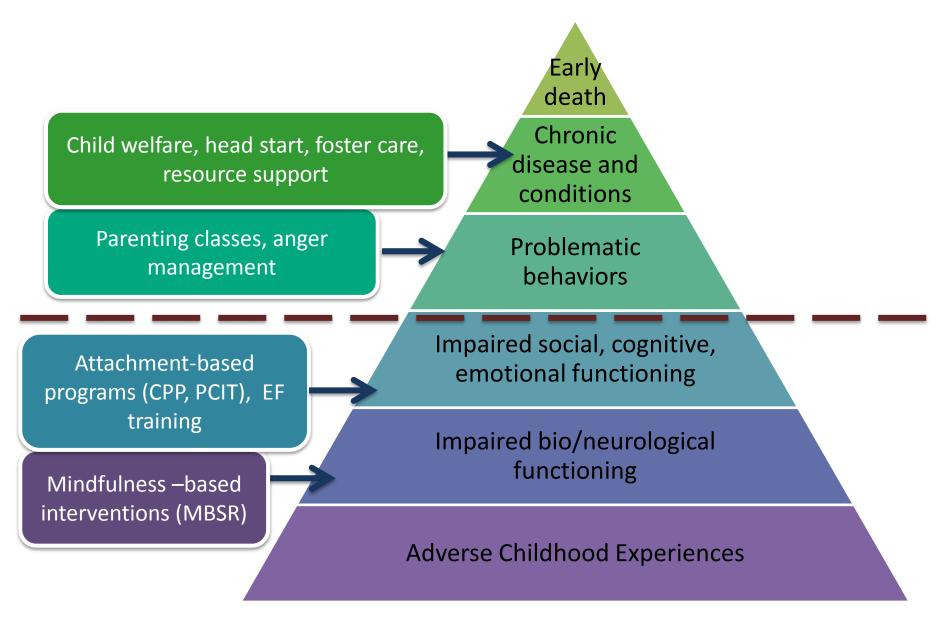
Intergenerational ACEs Model



ACEs, Parenting and Child Outcomes



ACEs, Parenting and Child Outcomes



Collaborators and Funders

Tulsa Children's Project: Ruth
Slocum MSW, Jerry Root MS,
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EduCareer parents: cohorts 1 and 2

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