# Adverse Childhood Experiences

Liz Altay

# **Adverse Childhood Experiences**

An adverse childhood experience (ACE)
describes a traumatic experience in a person's
life occurring before the age of 18.

The Ten Adverse Childhood Experiences						
Child	Parents / household					
<ul> <li>Physical abuse</li> <li>Sexual abuse</li> <li>Emotional abuse</li> <li>Physical neglect</li> <li>Emotional neglect</li> </ul>	<ul> <li>Mother treated violently</li> <li>Household substance misuse</li> <li>Household mental illness</li> <li>Parental separation or divorce</li> <li>Incarcerated household member</li> </ul>					

 Robust evidence base linking ACEs to severe negative health and social outcomes across the life course



# Questions to define health harming behaviours – The ACEs Score Calculator

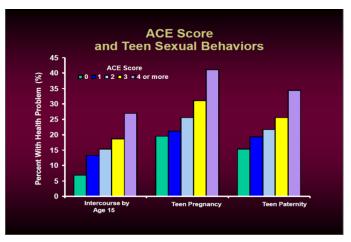
Adverse Childhood Experiences	Definition				
Parental separation	Were your parents ever separated or divorced?				
Domestic violence	How often did your parents or adults in your home ever slap, hit, kick, punch, or beat each other up?				
Physical abuse	How often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? This does not include gentle smacking for punishment				
Verbal abuse	How often did a parent or adult in your home ever swear at you, insult you, or put you down?				
Sexual abuse	How often did anyone at least 5 years older than you (including adults) ever touch you sexually?				
	How often did anyone at least 5 years older than you (including adults) try to make you touch them sexually?				
	How often did anyone at least 5 years older than you (including adults) force you to have any type of sexual intercourse (oral, anal, or vaginal)?				
Mental illness	Did you live with anyone who was depressed, mentally ill, or suicidal?				
Alcohol abuse	Did you live with anyone who was a problem drinker or alcoholic?				
Drug abuse	Did you live with anyone who used illegal street drugs or who abused prescription medications?				
Incarceration	Did you live with anyone who served time or was sentenced to serve time in a prison or young offenders' institution?				

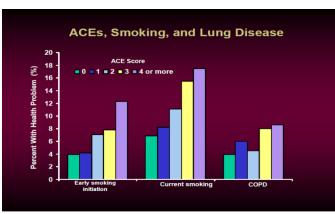
All ACE questions were preceded by the statement "While you were growing up, before the age of 18..."

# **ACEs study USA**

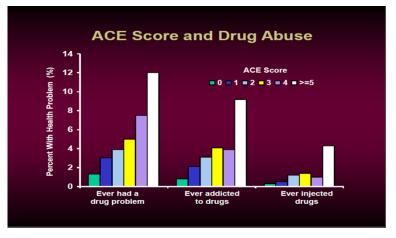
Adverse Childhood Experi	ences Are Common
Household dysfunction:	checs Are common
riouseriola aystatiction.	
Substance abuse	27%
Parental sep/divorce	23%
Mental illness	17%
Battered mother	13%
Criminal behavior	6%
Abuse:	
Psychological	11%
Physical	28%
Sexual	21%
Neglect:	
Emotional	15%
Physical	10%

# **ACEs study USA**



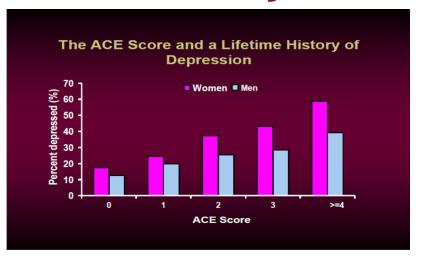


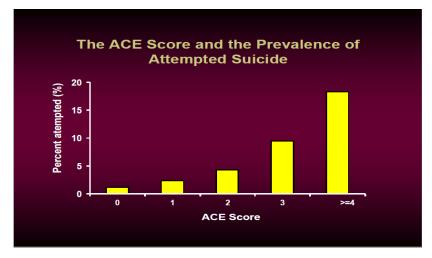






### **ACEs study USA**

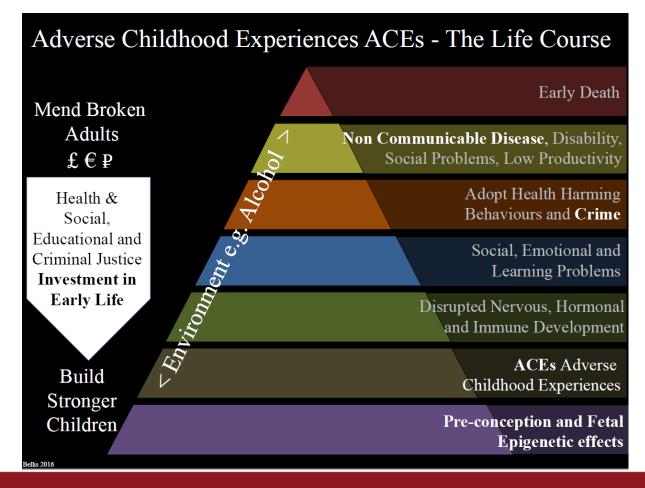








### **ACEs - the Life Course**



# **ACEs Study - UK**

Outcome All		Ш	Adverse Childhood Experience %				v <sup>2</sup> trand	Р		
	%	n	0	1	2to3	4+	χ²trend			
Sexual Behavior										
Unintended teenage pregnancy (<18 years)	5.5	3836	2.9	5.6	8.3	17	106.097	<0.001		
Early sexual initiation (<16 years)	16.8	3374	10	19.4	23	37.8	164.629	<0.001		
Substance use										
Smoking (current)	22.7	3885	17.7	21.8	28.3	46.4	127.022	<0.001		
Binge drinking (current)	11.3	3885	9.3	13.2	12.6	16.7	18.579	<0.001		
Cannabis use (lifetime)	19.5	3878	12.2	21.5	27	47.7	241.57	<0.001		
Heroin or crack cocaine use (lifetime)	2.2	3882	0.9	1.5	4	9	84.106	<0.001		
Violence and criminal justice										
Violence victimization (past year)	5.3	3883	2.4	4.2	10.7	16.1	137.578	<0.001		
Violence perpetration (past year)	4.4	3884	2	3.6	8.7	13.9	119.609	<0.001		
Incarceration (lifetime)	7.1	3879	3.1	8.1	10.2	24.5	182.58	<0.001		
Diet, weight and exercise										
Poor diet (current)	15.6	3879	13.3	15.9	18.3	25.1	31.679	<0.001		
Low physical exercise (current)	43	3881	44.1	41.4	41.2	42.7	1.434	0.231		

### **ACEs Study - UK**

### **UK:** Compared with no ACEs, those with 4+ ACEs were:

2x more likely to binge drink

3x more likely to be current smoker

5x more likely to have had sex under 16 years

7x more likely to be involved in recent violence

11x more likely to have used heroin or crack

11x more likely to have been incarcerated

INDEPENDENT OF POVERTY



### If they had no ACEs problems could be reduced by:



Smoking 16%



Early Sex 33%



Heroin/Crack **59%** 

Binge Drinking Violence

15%



**60%** 

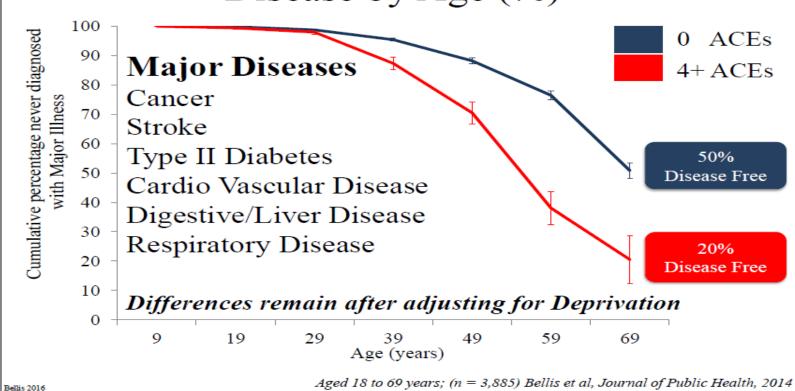
Aged 18-70 years

Bellis et al. 2014, n=3885



### **ACEs Study - UK**

Individuals **Never Diagnosed** with a Major Disease by Age (%)



### **ACEs study -Hertfordshire, Luton & Northamptonshire**

#### How many adults have suffered each ACE?

#### CHILD MALTREATMENT







#### CHILDHOOD HOUSEHOLD INCLUDED



separation 18%



Domestic violence 16%



illness 11%



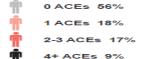
Alcohol abuse 11%



4%



For every 100 adults 44 have suffered at least one ACE during their childhood and 9 have suffered 4 or more







on population adjusted prevalence in adults aged 18-69 years

#### Compared with people with no ACEs, those with 4+ ACEs are:

2 times more currently binge drink or have a poor diet

current smoker

likely to have under 16 vears old or to have smoked cannabis

4 times more had or caused unintended pregnancy

likely to have of violence in or ever been incarcerated

10 times to have been a perpetrator the last year

#### Preventing ACEs in future generations could reduce levels of:



Early sex (before age 16) by 36%



Heroin/crack use (lifetime) 54%



Unintended teen pregnancy by 44%



(lifetime) 50%



by 25%



perpetration (past year) 61%



Binge drinking (current) by 22%



victimisation (past year) 56%



Cannabis use (lifetime) by 45%



Poor diet (current; <2 fruit & veg portions daily) 14%





### **Adverse Childhood Experiences (ACEs) in Wales**

ACEs are stressful experiences occurring during childhood that directly harm a child (e.g. sexual or physical abuse) or affect the environment in which they live (e.g. growing up in a house with domestic violence).

How many adults in Wales have been exposed to each ACE?

#### **CHILD MALTREATMENT**







Sexual abuse Physical abuse 17%

CHILDHOOD HOUSEHOLD INCLUDED













Parental separation

Domestic violence 16%

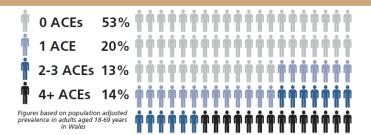
Mental illness 14%

Alcohol abuse 14%

Drug use 5%

Incarceration

For every 100 adults in Wales 47 have suffered at least one ACE during



their childhood and 14 have suffered 4 or more.

### ACEs increase individuals' risks of developing health-harming behaviours

#### Compared with people with no ACEs, those with 4+ ACEs are:

- 4 times more likely to be a high-risk drinker
- 6 times more likely to have had or caused unintended teenage pregnancy
- 6 times more likely to smoke e-cigarettes or tobacco
- 6 times more likely to have had sex under the age of 16 years
- 11 times more likely to have smoked cannabis
- 14 times more likely to have been a victim of violence over the last 12 months
- 15 times more likely to have committed violence against another person in the last 12 months
- 16 times more likely to have used crack cocaine or heroin
- 20 times more likely to have been incarcerated at any point in their lifetime

#### Preventing ACEs in future generations could reduce levels of:













Heroin/crack cocaine use (lifetime)

by 66%

(lifetime) by 65%

Violence perpetration (past year) by 60%

Violence victimisation (past year) by 57%

Cannabis use (lifetime) by 42%



Unintended teen pregnancy by 41%



High-risk drinking (current) by 35%



Early sex (before age 16) by 31%



Smoking tobacco or e-dgarettes (current) by 24%



Poor diet (current; <2 fruit & veg portions daily) by 16%

# Systematic Review (2017)

- 4+ ACEs increased risk all health outcomes
- Weak association: inactivity, obesity & diabetes
- Moderate: smoking, alcohol, cancer, heart disease, respiratory disease
- Strong: sexual risk taking, mental health, problematic alcohol use
- Strongest: drug use & violence
- Outcomes for multiple ACEs represent ACE risks for next generation-
  - Violence, mental illness & substance use

### What should we do?



# What can Be Done About ACES?

These wide-ranging health and social consequences underscore the importance of preventing ACEs before they happen. **Safe, stable, and nurturing relationships and environments** (SSNREs) can have a positive impact on a broad range of health problems and on the development of skills that will help children reach their full potential. Strategies that address the needs of children and their families include:

Voluntary home visiting programs can help families by strengthening maternal parenting practices, the quality of the child's home environment, and children's development. Example: Nurse-Family Partnership



Home visiting to pregnant women and families with newborns



Parenting training programs



Intimate partner violence





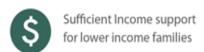
Parent support programs for teens and teen pregnancy prevention programs



Mental illness and substance abuse treatment



High quality



### Routine Enquiry about Adversity in Childhood

- 10 years before individual discloses. May ask 1 or 2 ACEs
- Don't ask: risk repeating interventions that don't address issue
- Chronic Diseases & behaviours: determined decades earlier, in childhood

Public Health – Commissioned LCFT to train front line staff





### How can we respond?

- Primary Prevention
  - Prevent ACEs occurring
  - Ensuring best start in life, supporting parents, building resilience
- Secondary Prevention
  - Identify adverse events as/when they occur to reduce impact (trauma informed approach)
- Tertiary Prevention
  - Enquiry to identify past ACEs in those with established physical or emotional problems/illness & provide support or therapeutic care to enable change