Adverse Childhood Experiences – Public Health Masterclass.

Jacqui Reid-Blackwood, Public Health Programme Manager.
Public Health England
Setting the context

- Explore “What are adverse childhood experiences”.
- Why do adverse childhood experiences matter?
- Draw from evidence base (USA and UK)
- Consider the impact of adversity/trauma
- What can we do about them. – Resilience and Routine Enquiry.
A Chronic Public Health Disaster
Diet and obesity

• In the 1980s Felitti discovered that patients successfully losing weight in a local Weight Programme were the most likely to drop out.

• Found that overeating and obesity were often being used unconsciously as protective solutions to unrecognized problems dating back to childhood.
Questions to define health harming behaviours – The ACEs Score Calculator

<table>
<thead>
<tr>
<th>Adverse Childhood Experiences</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental separation</td>
<td>Were your parents ever separated or divorced?</td>
</tr>
<tr>
<td>Domestic violence</td>
<td>How often did your parents or adults in your home ever slap, hit, kick, punch, or beat each other up?</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>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</td>
</tr>
<tr>
<td>Verbal abuse</td>
<td>How often did a parent or adult in your home ever swear at you, insult you, or put you down?</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>How often did anyone at least 5 years older than you (including adults) ever touch you sexually?</td>
</tr>
<tr>
<td></td>
<td>How often did anyone at least 5 years older than you (including adults) try to make you touch them sexually?</td>
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<tr>
<td></td>
<td>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)?</td>
</tr>
<tr>
<td>Mental illness</td>
<td>Did you live with anyone who was depressed, mentally ill, or suicidal?</td>
</tr>
<tr>
<td>Alcohol abuse</td>
<td>Did you live with anyone who was a problem drinker or alcoholic?</td>
</tr>
<tr>
<td>Drug abuse</td>
<td>Did you live with anyone who used illegal street drugs or who abused prescription medications?</td>
</tr>
<tr>
<td>Incarceration</td>
<td>Did you live with anyone who served time or was sentenced to serve time in a prison or young offenders' institution?</td>
</tr>
</tbody>
</table>

All ACE questions were preceded by the statement “While you were growing up, before the age of 18...”
## Adverse Childhood Experiences Are Common

**Household dysfunction:**
- 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

ACE Score and Teen Sexual Behaviors

- Intercourse by Age 15
- Teen Pregnancy
- Teen Paternity

ACE Score
0 1 2 3 4 or more

Percent With Health Problem (%)
The ACE Score and the Prevalence of Attempted Suicide

ACE Score

Percent attempted (%)
The ACE Score and a Lifetime History of Depression

- Women
- Men

Percent depressed (%)

ACE Score

0 1 2 3 >=4
ACE Score and the Risk of Being a Victim of Domestic Violence

Women

Men

Risk of Victimization (%) vs. ACE Score

0 1 2 3 4 >5 0 1 2 3 4 >5
ACE Score and Drug Abuse

ACE Score
- 0
- 1
- 2
- 3
- 4
- >=5

Percent With Health Problem (%)

Ever had a drug problem

Ever addicted to drugs

Ever injected drugs

0 2 4 6 8 10 12 14

Presentation title - edit in Header and Footer
The Adverse Childhood Experiences (ACE) Study

Summary of Findings:

- Adverse Childhood Experiences (ACEs) are very common

- ACEs are strong predictors of health risks and disease from adolescence to adulthood

- This combination of findings makes ACEs one of the leading, if not the leading determinant of the health and social well-being of our nation
The impact of ACEs on health harming behaviours – National household Survey and relationship to resilience – *Bellis*, et al. 2014

<table>
<thead>
<tr>
<th>Outcome</th>
<th>All %</th>
<th>n</th>
<th>Adverse Childhood Experience</th>
<th>%</th>
<th>(\chi^2) trend</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td>2to3</td>
<td>4+</td>
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<tr>
<td><strong>Sexual Behavior</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Unintended teenage pregnancy (&lt;18 years)</td>
<td>5.5</td>
<td>3836</td>
<td>2.9</td>
<td>5.6</td>
<td>8.3</td>
<td>17</td>
</tr>
<tr>
<td>Early sexual initiation (&lt;16 years)</td>
<td>16.8</td>
<td>3374</td>
<td>10</td>
<td>19.4</td>
<td>23</td>
<td>37.8</td>
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<tr>
<td><strong>Substance use</strong></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Smoking (current)</td>
<td>22.7</td>
<td>3885</td>
<td>17.7</td>
<td>21.8</td>
<td>28.3</td>
<td>46.4</td>
</tr>
<tr>
<td>Binge drinking (current)</td>
<td>11.3</td>
<td>3885</td>
<td>9.3</td>
<td>13.2</td>
<td>12.6</td>
<td>16.7</td>
</tr>
<tr>
<td>Cannabis use (lifetime)</td>
<td>19.5</td>
<td>3878</td>
<td>12.2</td>
<td>21.5</td>
<td>27</td>
<td>47.7</td>
</tr>
<tr>
<td>Heroin or crack cocaine use (lifetime)</td>
<td>2.2</td>
<td>3882</td>
<td>0.9</td>
<td>1.5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td><strong>Violence and criminal justice</strong></td>
<td></td>
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<tr>
<td>Violence victimization (past year)</td>
<td>5.3</td>
<td>3883</td>
<td>2.4</td>
<td>4.2</td>
<td>10.7</td>
<td>16.1</td>
</tr>
<tr>
<td>Violence perpetration (past year)</td>
<td>4.4</td>
<td>3884</td>
<td>2</td>
<td>3.6</td>
<td>8.7</td>
<td>13.9</td>
</tr>
<tr>
<td>Incarceration (lifetime)</td>
<td>7.1</td>
<td>3879</td>
<td>3.1</td>
<td>8.1</td>
<td>10.2</td>
<td>24.5</td>
</tr>
<tr>
<td><strong>Diet, weight and exercise</strong></td>
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</tr>
<tr>
<td>Poor diet (current)</td>
<td>15.6</td>
<td>3879</td>
<td>13.3</td>
<td>15.9</td>
<td>18.3</td>
<td>25.1</td>
</tr>
<tr>
<td>Low physical exercise (current)</td>
<td>43</td>
<td>3881</td>
<td>44.1</td>
<td>41.4</td>
<td>41.2</td>
<td>42.7</td>
</tr>
</tbody>
</table>
Health and wellbeing behaviours - The impact of ACEs on health harming behaviours – National household Survey and relationship to resilience

UK study suggests those with 4 ACEs + are:

2x more likely to have a poor diet \(^2\)

3x more likely to smoke \(^1\)

5x more likely to have had sex under 16 years \(^1\)

6x more likely to have been pregnant

or got someone accidently pregnant Under 18 \(^2\)

National household Survey and relationship to resilience – Bellis, et al. 2014
Social and community impact

UK study suggests those with 4 ACEs + are:

2x more likely to **binge drink**

7x more likely to be involved in **recent violence**

11x more likely to have been **incarcerated**

11x more likely to have used **heroin or crack**

*National household Survey and relationship to resilience – Bellis, et al. 2014*
Indicators Never Diagnosed with a Major Disease by Age (%)

Major Diseases
- Cancer
- Stroke
- Type II Diabetes
- Cardio Vascular Disease
- Digestive/Liver Disease
- Respiratory Disease

Cumulative percentage never diagnosed with Major Illness

Differences remain after adjusting for Deprivation

Aged 18 to 69 years; (n = 3,885) Bellis et al, Journal of Public Health, 2014
Impact on services

People with 4+ ACES compared with those with no ACES

Health care:-
• 2.1 x more likely to have visited their GP in the last 12 months\(^1\)
• 2.2 x more likely to have visited A&E in the last 12 months\(^1\)
• 2.3 x more likely to have more than ten teeth removed\(^1\)
• 2.5 x more likely to have stayed a night in hospital\(^1\)
• 6.6 x more likely to have been diagnosed with an STD\(^1\)

Social Care:-
• 64% of those in contact with substance misuse services had 4+ ACE\(^2\)
• 50% of homeless people had 4+ ACES\(^2\)

Opportunities

Preventing ACEs in future generations could reduce levels of:

- Early sex (before age 16) by 33%
- Unintended teen pregnancy by 38%
- Smoking (current) by 16%
- Binge drinking (current) by 15%
- Cannabis use (lifetime) by 33%
- Heroin/crack use (lifetime) by 59%
- Violence victimisation (past year) by 51%
- Violence perpetration (past year) by 52%
- Incarceration (lifetime) by 53%
- Poor diet (current; <2 fruit & veg portions daily) by 14%

What can we do about ACEs?

Working across the life-course
**Things to consider**

a) **Primary preventative approach**: ensuring all children grow up in nurturing homes with stable and supportive family relationships – best start in life principles (reducing the likelihood of Adverse Childhood Experiences occurring, building resilience, supporting parents).

b) **Secondary preventative approach**: identifying adverse events when they occur, at the earliest opportunity, in order to reduce the impact these experiences have on children and young people. This could also reduce the likelihood of multiple experiences occurring.

c) **Tertiary preventative approach**: identifying ACEs in those with established physical and emotional disease/ problems and ensuring their needs are met, including opportunity for therapeutic and practical support.
Early intervention

Examples of interventions

- Perinatal mental health
- Early years and family support
- Bullying interventions
- Mindfulness
- Mental Health First Aid
- Connect 5 Training
- Counselling
- Early intervention for self-harm

Green Paper on children’s mental health due this winter
Mitigation for those with ACEs

You're Welcome
Young people's health services

Introduction to Adverse Childhood Experiences
‘ACES aware’ approach in schools

• Whole school/college interventions – “Paper Tigers”
• Creation an environment where teachers who lead by example
• Reinforcement of positive behaviour
• Asking “What happened v what’s wrong with you”
• De-escalation of problematic behaviour
• Whole school policy to embrace ACES
ACEs in Challenging High Schools – Secondary Prevention Example from Washington State Family Policy Council US

**ACEs**

- 1/3 of class had 4+ ACEs
- Best predictor of health, attendance, behaviour
- Educational success related more to ACEs than income

**Change**

- Public Health and others inform staff about impacts of ACEs
- Enquiry – Why?
- Competency – resilience and developmental skills
- Attachment – caregivers relationships
- Self-regulation – control/share emotional experience
- Outcomes: 75%↓ fights, 83%↓ suspensions and ↑graduations
Developing resilience


Having **access to a trusted adult** in childhood, supportive friends and being engaged in community activities, such as sports, reduced the risks of developing mental illness; even in those who experienced high levels of ACEs.

Overall having supportive friends, opportunities for community participation, people to look up to and other **sources of resilience** in childhood more than halved current mental illness in adults with four or more ACEs from 29 per cent to 14 per cent, and ever having felt suicidal or self-harmed from 39 per cent to 17 per cent.

Participation in sports both as a child and adult was a further source of **resilience** to mental illness, with being in current treatment for mental illness reducing from 23 per cent in adults that did not regularly participate in sports to 12 per cent in those that did.
The case for routine enquiry

Waiting to be told doesn’t work...

Victims of childhood abuse have been found to wait from between nine to sixteen years before disclosing trauma with many never disclosing (Frenken & Van Stolk, 1990; Anderson, Martin, Mullen, Romans & Herbison, 1993; Read, McGregor, Coggan & Thomas, 2006)

Read and Fraser (1998) found that 82% of psychiatric inpatients disclosed trauma when they were asked, compared to only 8% volunteering their disclosure without being asked

Felitti & Anda (2014) report a 35% reduction in doctor’s office visits and 11% reduction in ER visits in a cohort of 140,000 patients asked about ACEs as part of standard medical assessment in the Kaiser Health Plan
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
Key findings of the REACTh model

- Practitioners were not aware of the impact of adversity on later life outcomes.
- REACTh helped to equip practitioners with the knowledge and skills to conduct routine enquiry with service users.
- The model is feasible and acceptable to staff and service users.
- There was no significant increases in service need following practice change.
- The REACTh approach was the catalyst for increased frequency of disclosures, better therapeutic alliance and more targeted interventions.
- Practitioners considered the impact of ACEs in relation to their lives and that of their children.
In a child’s words

Access video here:  http://www.aces.me.uk/in-wales/
Summary:
‘Sufficient evidence is already available for local areas to prioritise and invest in ACE preventing interventions. Too often our focus is on addressing the consequences of ACEs rather than preventing them in the first instance.’

Bellis et al, 2014
Table Top Exercise

1. What local programmes do we have in our area that align with ACE?

2. What would a focused ACE approach offer our local area?

3. What added value would routine enquiry give us? Do we have the tools or information to deliver it?
Contact Details:
Jacqui.reid-blackwood@phe.gov.uk
Tel: 0121 232.9428
Mobile: 07920 086 127