Adverse Childhood Experiences (ACEs) and their association with health-harming behaviours in the Welsh adult population

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Overview

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- What are Adverse Childhood Experiences (ACEs)?
- Why are we interested in ACEs?
- Model of the impact of ACEs across the life course
- Welsh ACE survey – outline of methodology
- Results:
  - overall prevalence of ACEs in Wales
  - association with health-harming behaviours e.g. Smoking
- Discussion
- Questions and contact details
Introduction

A growing body of research is revealing the long-term impact that ACEs have on individuals’ health and life chances.

To be able to develop effective and prudent response, we need to understand:

- which population groups are most affected by ACEs
- how ACEs affect health and social wellbeing
- the burden ACEs places on public services
What are ACEs?

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).
What are ACEs?

- Verbal abuse
- Physical abuse
- Sexual abuse
- Incarceration
- Domestic violence
- Mental illness
- Alcohol abuse
- Drug abuse
- Parental separation

ACEs and their association with health-harming behaviours in the Welsh adult population
Why are we interested in ACEs?

- Direct impact on a child’s health e.g. physical injury
- Chronic traumatic stress can alter how a child’s brain develops
- Increase in allostatic load
- Normalises behaviours such as violence, assault and abuse
- Psychological problems can leave individuals with low self-esteem and propensity for behaviours offering short-term relief at the expense of longer-term health e.g. smoking, harmful alcohol consumption, poor diets and even early sexual activity
- Increased risk of exposing next generation – ‘cycle of violence’

- Need to understand the prevalence of ACEs in Wales to be able to focus efforts on prevention
ACEs and their association with health-harming behaviours in the Welsh adult population

Model of the impact of ACEs across the life course

1. Early death
2. Disease, disability, social problems, low productivity
3. Adoptions of high risk behaviours, crime
4. Social, emotional and cognitive impairment
5. Disrupted neurodevelopment, allostatic load
6. Adverse Childhood Experiences

1Based on the US Centers for Disease Control and Prevention ‘ACE Pyramid’
Welsh ACE survey 2015 - Methods

• National cross-sectional survey using quota sampling
• Face-to-face interviews with approximately 2,000 Welsh residents aged 18-69 years
• Of those eligible to participate, just under half agreed to take part
• Questions about their current health behaviours and their exposure to ACEs using an internationally validated ACE questionnaire.

• A respondent’s ACE score is based on a count of the number of different types of adverse events they experienced (range 0 to 9). This does not account for reoccurring events or the duration of events.
## Results – Overall prevalence of ACEs

For every 100 adults in Wales, 47 have suffered at least one ACE during their childhood and 14 have suffered 4 or more.

<table>
<thead>
<tr>
<th>0 ACEs</th>
<th>53%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ACE</td>
<td>20%</td>
</tr>
<tr>
<td>2-3 ACEs</td>
<td>13%</td>
</tr>
<tr>
<td>4+ ACEs</td>
<td>14%</td>
</tr>
</tbody>
</table>

In comparison to England, Wales has a higher proportion of adults who have experienced 4 or more ACEs. Overall, 14% of the Welsh adult population are estimated to have experienced 4 or more ACEs, compared to 9% in England.
Results - Association with health-harming behaviours

We analysed the impact of ACEs on a range of health-harming behaviours:

- Heroin or crack cocaine use (lifetime)
- Incarceration (lifetime)
- Violence perpetration (past year)
- Violence victimisation (past year)
- High-risk drinking (current)
- Unintended teenage pregnancy
- Early sex (before the age of 16 years)
- Cannabis use (lifetime)
- Smoking tobacco or e-cigarettes (current)
- Poor diet (current; < 2 fruit & veg portions daily)
Currently smoking tobacco: Percentage and adjusted odds ratio (AOR) by ACE count

\[ p < 0.001. \text{ AORs (adjusted odds ratios) have been adjusted for age, sex, deprivation and ethnicity. 0 ACEs is used as the reference category. 95\% CIs=95\% Confidence Intervals.} \]
Discussion

- Focus on **resilience** is required to build the protection factors which guard individuals within times of adversity
- Wales are pioneering a range of policies and programmes:
  - Building a Brighter Future: Early Years and Childcare Plan 2013-2023
  - Well-being of Future Generations (Wales) Act 2015
- United in Improving Health – co-production and coordination of assets, investment and activity in Wales
- MOU with South Wales Police, and the Police and Crime Commissioner
- Further results will be published later this year
- Future reports will cover the impact of ACEs on chronic ill health, use of health and social care services, premature mortality and mental well-being in Welsh adults.
Useful references

Any questions?

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