ADVERSE CHILDHOOD EXPERIENCES

An Initial Strategic Direction in the West Midlands Combined Authority Area 2016

1. WHAT ARE THESE ADVERSE CHILDHOOD EXPERIENCES?

Bowlby first described the extent of the initial attachment of an infant to its mother in the 1950s. He developed this work and demonstrated the adverse impact of a disturbance of this attachment. Since then further research has improved the emotional and biological understanding of this. Fellitti (1998) demonstrated the link between Adverse Childhood Experiences and adult illness/disease/early death. In the 1990s this research drove the development of the Solihull Approach, utilising the science of attachment to address behavioural issues of early childhood and parenting. More and more disciplines have demonstrated the impact of traumas in childhood and adolescence on later emotional and physical conditions, although none have drawn this into a coherent framework of prevention and intervention.

The role of multiple Adverse Childhood Experiences in undermining the relationships, behaviours, and wellbeing of children, young people, and adults is profound. It is important we recognise that addressing both the prevention and the consequences of these Adverse Childhood Experiences gives us a seriously exciting opportunity to break the inter-generational cycle of impacts on the health and wellbeing of our parents and children, now and into the future.

2. THE IMPACT OF ADVERSE CHILDHOOD EXPERIENCES

Fellitti identified nine common and important Adverse Childhood Experiences (Table 1). He then demonstrated that the more adverse experiences there were in a person's life, the greater the impact on that individual's physical and emotional health which has been confirmed in the UK by more recent research[i] (Tables 2&3).

Bellis also confirmed (2014) Fellitti's original findings of increased premature mortality in those with multiple Adverse Childhood Experiences (Figure 1) and modelled the impact in Young People (Figure 2).

Table 1: **The Definition of Adverse Childhood Experiences**

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…"

Table 2: **Questions to Define Health Harming Behaviours**

Health Harming Behaviours	Definition
Unintended teenage pregnancy	Did you ever accidentally get pregnant or accidentally get someone else pregnant before you were aged 18 years?
Early sexual initiation	How old were you the first time you had sexual intercourse? (<16 years)
Smoking	In terms of smoking tobacco, which of the following best describes you? (I smoke daily)
Binge drinking	How often do you have 6 or more standard drinks on one occasion (Weekly or daily or almost daily)
Cannabis use	How often, if ever, have you taken the following drugs…cannabis? (any level of use)
Heroin/crack cocaine use	How often, if ever, have you taken the following drugs… heroin/crack cocaine? (Any level of use)
Violence perpetration	How many times have you physically hit someone in the past 12 months? (Any frequency)
Violence victimization	How many times have you been physically hit in the past 12 months? (Any frequency)
Incarceration	How many nights have you ever spent in prison, in jail or in a police station? (Any number of nights)
Poor diet	On a normal day, how many portions of fruit and vegetables (excluding potatoes) would you usually eat (one portion is roughly one handful or a full piece of fruit such as an apple)? (<2 portions)
Low physical activity	Usually, how many days each week do you take part in at least 30 minutes of physical activity that makes you breathe quicker, like walking quickly, cycling, sports or exercise? (<3 days)

Questions on alcohol consumption were drawn from the AUDIT C tool, and participants were provided with information on what constitutes a standard drink (UK = 10 mg of alcohol).

Table 3: **The Impact of Adverse Childhood Experiences on Health Harming Behaviours**

Outcome	All		Adverse Childhood Experience %				χ^2trend	P
	%	n	0	1	2to3	4+		
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

Figure 1:

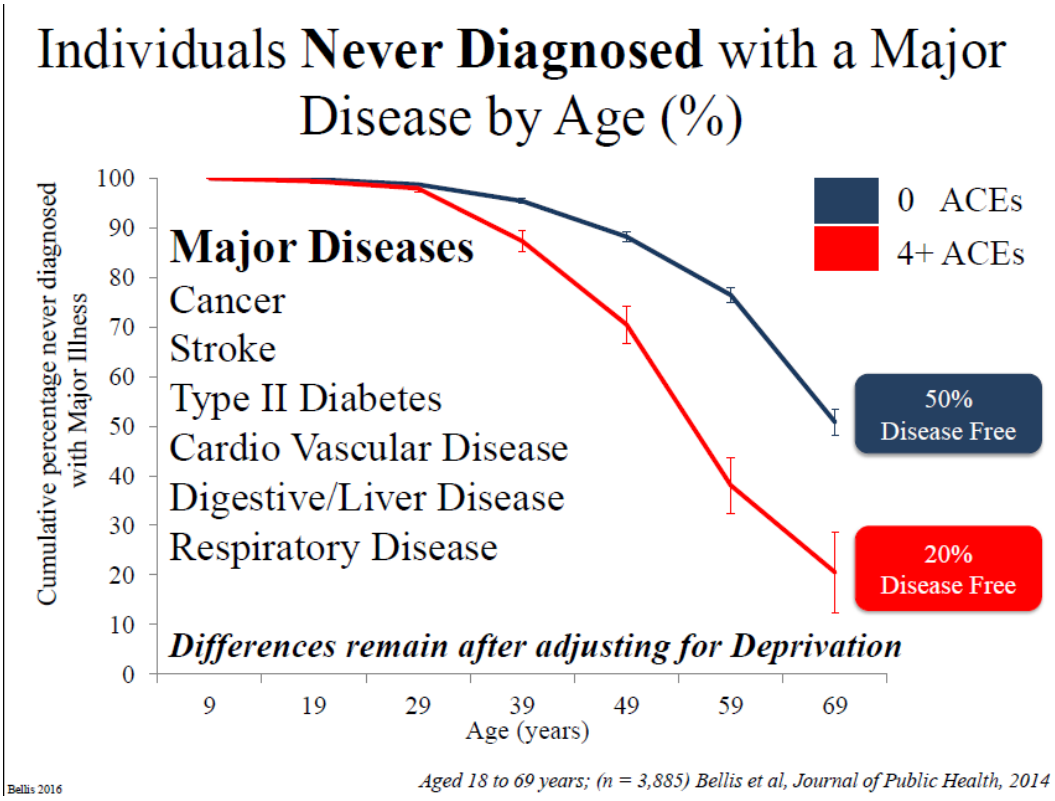
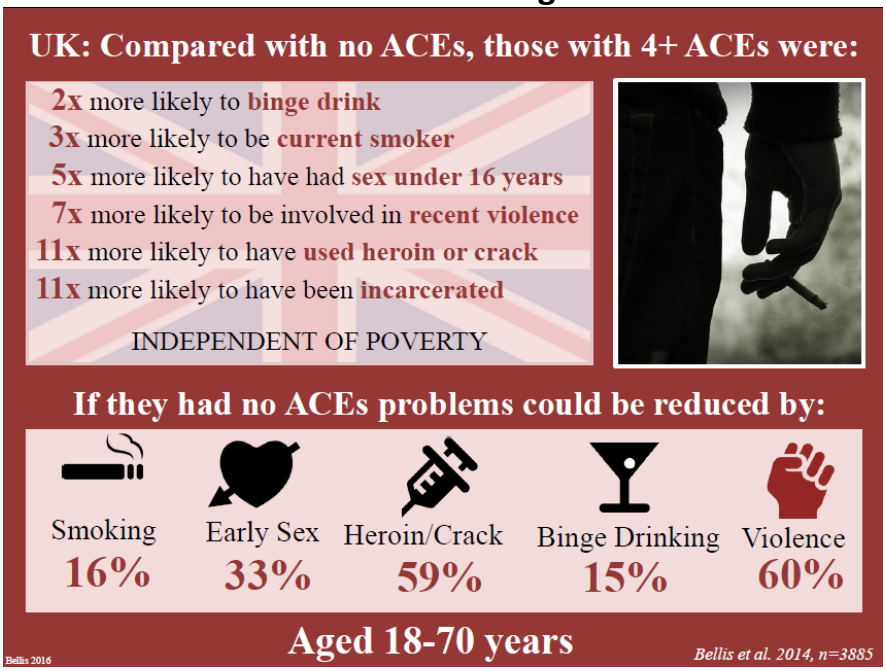


Figure 2: Potential Reductions in Health Harming Outcomes



3. WHAT DIFFERENCE DOES IDENTIFICATION MAKE?

These findings suggest that searching for those Young People and adults with four or more Adverse Childhood Experiences and offering appropriate brief or specialist interventions could reduce the burden of major disease later in life. Fellitti's original work with obese people suggests that identifying the role of Adverse Childhood Experiences in those with established ill health can improve the effectiveness of therapeutic interventions and improve the outcomes for the individuals. There is however no supportive systematic evidence for this yet.

4. HOW SHOULD WE PROCEED?

There is no doubt that the association of multiple Adverse Childhood Experiences and disturbances of emotional health and wellbeing of children, Young People, and young adults is strong. The association with the development of serious physical illness in older adults is also very strong. The key issue is, therefore, how to reduce this impact and break the cycle of intergenerational disadvantage that results.

We cannot intervene, even briefly, if we do not identify those who are affected by their Adverse Childhood Experiences. The identification approach should be linked to the preventative purpose, namely Primary; Secondary; or Tertiary Prevention

a) **Primary preventative approach**:

This approach is intended to reduce the likelihood of these Adverse Childhood Experiences occurring and is often a universal population wide intervention.

There is some evidence that routinely enquiring about Adverse Childhood Experiences in families in the early antenatal period. This provides the

opportunity for parental recognition of the impact that their experiences has on their family relationships and parenting of their soon to be delivered child.

There is also a prima facie case for strengthening parenting by using the evidence based programmes available.

An example of this approach is a whole school approach to developing healthy relationships and provides a window of opportunity to break the cycle of intergenerational impact of these experiences and behaviours. Effective programmes such as PATHS and SEAL in Primary Schools can contribute to this but effective approaches at Secondary School are still under evaluation.

The inclusion of routine enquiry about Adverse Childhood Experiences might have a place in the transition from Primary to Secondary school setting. However the routine enquiry of all students annually has not been evaluated and would require a serious cohort research study which is beyond the scope of local services.

b) **Secondary preventative approach:** This approach identifies the adverse events when they occur, but 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.

   This approach involves identifying groups of families who are causing concern for specific reasons and enquiring of the adults and children about Adverse Childhood Experiences. This affords the opportunity for a brief or specialist intervention to reduce the impact of the Adverse Childhood Experience on the individual adult or children and a subsequent improvement in their individual and family health and wellbeing in the present and future.

c) **Tertiary preventative approach**: This approach involves looking for these experiences in those with established physical and emotional disease that are in contact with specialist services.

   The enquiry would be with a view to addressing the influence of the Adverse Experience on the severity of the condition which already requires specialist help and/or improving the impact of that therapy. There is no evidence from evaluations so far on either of these benefits or whether it would influence recovery/survival times from these conditions.

In Blackburn & Darwen, Lancashire, there is a programme to roll out training for routine enquiry to a number of different service/client settings and an evaluation of the impact of its use is planned. Initial qualitative feedback from the training and initial use is encouraging but formal evaluation of the impact on outcomes will be important.

The most noticeable impact at this early stage occurs in those who respond to the routine enquiry as a brief intervention. The discussion of these experiences leads to

a change in understanding of the impact these experiences are having in their lives and they proceed to make adjustments in their lives. This is particularly noticeable in settings addressing parenting approaches.

The more important question however is: *does identification improve the outcomes for individuals* and at what additional service cost?

5. IS THERE LOCAL INTEREST TO BUILD A WAY FORWARD?

From the evidence so far presented the use of an enquiry tool for Adverse Childhood Experiences in groups of children and adults where there are behaviours or conditions are likely to arise from these experiences could be beneficial. Interest in this approach of identification to improve the outcomes of people in the West Midlands has already emerged.

a) Birmingham Schools

The recently commissioned School Health Advisory Service supports schools in identifying physical and emotional issues which may contribute towards any concerns the school may have. This opens the way for access to more intensive or specialist support and intervention. The assessment currently uses Strengths and Difficulties but the service is keen to consider a tool to routinely enquire about Adverse Childhood Experiences.

The City of Birmingham School is particularly keen to consider this approach in its role as the Pupil Referral Unit.

Birmingham Education Partnership and The Children's Society are developing a support programme for a whole school based approach using the Young Minds Achieving Resilience programme. Discussions have included the role of Adverse Childhood Experiences but no plans to adopt this into the awareness of the school community.

b) West Midlands Police

Work is in hand to enhance the identification of individuals in contact with Police who also have four or more ACEs. The TIPT tool (tool for intervention and prevention triggers) will flag people when they hit their 4th ACE so that we can seek to do some intervention work with partners. This is an IT development using the Police Information System. The intention is to identify those individuals or families who might benefit from additional support of other agencies and reduce the likelihood of future offending or contact.

In Solihull West Midlands Police are working with a group of secondary schools who are keen to become part of a trial to develop Adverse Childhood Experience aware schools. The trial is led by Blackburn and Darwen.

c) **West Midlands Mental Health Prevention Project**

The West Midlands Combined Authority has set a priority on improving the Mental Health of communities and has established a Mental Health Strategy Board. One of its work streams is prevention. The work stream is looking to review the evidence base for prevention and establish some local test beds of evidence based programme approaches. Adverse Childhood Experiences is a theme included in the evidence base and opportunities to support the testing are being looked for.

d) **Troubled Individuals**

The West Midlands Combined Authority are exploring the potential for targeting individuals with complex behavioural needs and who engage multiple specialist services in an uncoordinated manner. There is interest in using a framework based on Adverse Childhood Experiences to identify support packages that are likely to change the outcome for these individuals.

e) **Medically Unexplained Symptoms**

General Practitioners can identify a number of individuals whose symptoms prove difficult to convert to a definable medical condition/illness despite numerous and increasingly complex investigations. Research over the years has suggested there might be emotional drivers but a Primary Care framework based on Adverse Childhood Experiences might help unlock beneficial therapeutic opportunities. Work is developing through the Academic Health Sciences Network.

6 CONCLUSION

This document:

i. sets the context for developing a strategic framework for using Adverse Childhood Experiences to improve the emotional and physical health and Wellbeing of the communities of the West Midlands Combined Authority and beyond;

ii. develops a framework to develop future work; and

iii. identifies the current interest as initial starting points.

11 September 2016

[i] Bellis M, Hughes K, Leckenby N, Perkins C, Lowey H *National Household Survey of Adverse Childhood Experiences and Their Relationship with Resilience to Health Harming Behaviours in England*