

## 10 Facts about Foetal Alcohol Harm

by Jonathan Sher

There are, of course, facts about many different aspects of foetal alcohol harm. But, cumulatively, these 10 facts offer a basic picture of what is known at this point. Much more information and detailed explanations are available.

**1. Medical Fact** – No child anywhere in the world, at any time in history, has suffered foetal alcohol harm if the mother -- from the moment of conception until birth -- consumed no alcohol.

**2. Terminology Fact** -- Foetal alcohol harm has been, and continues to be, given different names in different countries by different groups. In part, this is because it is difficult to diagnose. Foetal Alcohol Syndrome (FAS) is the most widely-recognised and agreed clinical diagnosis -- for which there are four internationally-recognised diagnostic criteria. However, researchers and practitioners are largely in agreement that full-blown FAS is only the proverbial 'tip of the iceberg' of the *spectrum* of foetal alcohol harm.

In one way, it is akin to the visual impairment spectrum. Everyone needing corrective eyeglasses is a part of this spectrum, but only a relatively small number are blind. And yet, with the foetal alcohol harm, the spectrum is much less about degree of severity and much more about the difficulty of distinguishing it from other conditions having similar effects. And, of course, some people suffer from both foetal alcohol harm and other problems simultaneously – a reality that makes diagnosis and treatment complex.

**3. Public Health Fact** – Foetal alcohol harm is *potentially 100% preventable* by abstaining from consuming any alcohol during the entire pregnancy. This is good news, as many other birth defects and health problems are not preventable. The basic public health perspective is to eliminate risks whenever possible and prevent harm before it happens, rather than trying to intervene after the damage has already been done.

Nevertheless, it is only 'potentially' 100% preventable because many women who have serious alcohol misuse problems will have great difficulty stopping drinking, even if they fully understand and agree with the value of doing so. For alcoholics, the prevention side may mean a greater emphasis on contraception (i.e. pregnancy prevention), especially given the less than stellar track record of alcoholics overcoming their addiction. The other reason it is not 100% preventable in practical terms arises from the fact that many women – even among those intending not to drink during pregnancy -- are still consuming alcohol in the weeks before they realise that they *are* pregnant. Binge drinking (which is increasingly common across the UK) during the first trimester is particularly harmful.

**4. Biochemical Fact** – Alcohol is a *teratogenic* agent, which means that it can distort the communication between cells and interfere with normal development as a baby grows from conception until birth. Other teratogens include thalidomide, radiation, mercury and such diseases as rubella (German measles), as all of them can thwart normal development and cause birth defects. Alcohol can cause many different ill effects (or none at all) depending upon numerous factors, including the strength and amount of alcohol consumed and what development is underway when the exposure to alcohol occurs. Foetal Alcohol Syndrome (FAS) occurs from teratogenic effects early in the pregnancy when facial features and internal organs (such as the heart) are at a crucial stage in their development. Brain damage from alcohol exposure can occur at any time during the pregnancy.

**5. Obstetrical Fact** – Not *all* women who drink alcohol (even those who drink immoderately) during pregnancy will give birth to babies harmed by foetal alcohol. There are too many factors and influences – for examples, genetics, nutrition, metabolism, other substance misuse or health conditions – to predict with certainty which pregnancies will result in foetal alcohol harm.

There is no test before or during pregnancy that can predict the level of risk or the birth outcome for a particular woman. Alcohol can cause a miscarriage or stillbirth, as well as birth defects. There is no 100% safe time to drink or absolutely safe amount of alcohol. The only *certainty* is that no alcohol from conception until birth *always* results in no foetal alcohol harm.

**6. Neurological Fact** – All foetal alcohol harm – sometimes called Foetal Alcohol Spectrum Disorder (FASD) – includes some degree of currently irreversible damage to the brain and nervous system. That is why Scotland's Chief Medical Officer (Dr Harry Burns) recently wrote that: *Prenatal exposure to alcohol is the leading cause of brain damage and developmental delay amongst children in industrialised countries.* Although invisible, this alcohol-harm eventually shows up in learning disabilities and behavioural problems.

The most common impact is on the brain's so-called 'executive functions' – that is, the ability to: plan, learn from experience and control impulses. The 'hooks' within the brain upon which to hang these executive functions are diminished to some extent and can be largely missing. That is why there are no 'criminal masterminds' suffering from foetal alcohol harm!

**7. Risk Management Fact** – Whether to drink during pregnancy is a decision based, in part, on an individual woman's attitude toward risk. Some people tend to be risk tolerant. They see life, in general, and pregnancy, in particular, as coming with inherent risks; and feel content to behave normally and take their chances.

By contrast, other people are risk averse. They believe that their actions matter in determining how much risk they and their unborn babies will face. Accordingly, they do whatever is within their power to reduce or eliminate risks. These personality traits are hard to change.

But, as was witnessed in the final push toward Scotland's smoking ban, there appears to be a difference in the amount of risk people are willing to take with their own health and how much risk they are willing to accept in relation to their child. In Scotland, drinking alcohol appears to still be seen by many as a personal choice that is no one else's (let alone the government's) business. That may change, however, when drinking during pregnancy is better understood as potentially having a life-long negative impact on the well-being and life chances of the baby.

**8. Treatment Fact** – At this time, there is no cure for foetal alcohol harm and no possibility of simply outgrowing its effects over time. That is because there is no known way of reversing or correcting the brain and nervous system damage that happens when babies are first developing in the womb. It is not a childhood problem; rather, it is a lifelong condition.

It helps some people to think of foetal alcohol harm as being *like* Down's Syndrome (in that it is a birth defect that lasts a lifetime) – but *unlike* Down's Syndrome in that the people suffering from foetal alcohol harm are not immediately identifiable by their physical appearance. While still at an early stage, there are ways being developed to better manage this condition. These primarily are behavioural interventions and supports, not medical, surgical or pharmacological ones.

Beyond helping people to live as best they can with this birth defect, it is important to do everything possible to help women of childbearing age to overcome their alcohol misuse/addiction *before* they become pregnant. The combination of alcohol treatment and contraception is a top priority.

**9. Cultural Fact** – Scotland’s current unhealthy relationship with alcohol has a cultural dimension that has changed from decades past and will inevitably change again in the years ahead. Scottish culture today both engenders and tolerates more excessive drinking by more people (including by both younger people and women) than used to be the case. Since change is a given, the key questions are: “How do we want Scottish culture to become different in relation to alcohol?; and, “How can what we *want* actually be accomplished?.”

**10. Sociological/Gender Fact** – For obvious reasons, women have been and remain the focal point of prevention efforts concerning foetal alcohol harm. Consequently, men have largely – but wrongly – been let off the hook. From using alcohol as a tool of seduction (which means that babies are conceived in an alcohol-steeped environment) to actively encouraging (or coercing) women to drink even after pregnancy is confirmed, men have a significant role in both causing and solving the problem of foetal alcohol harm. Indeed, it is unlikely to be solved without their understanding and active positive engagement before and during pregnancy.

There should be an **11<sup>th</sup>** entry here: **Consequential Fact**. Unfortunately, there is not enough evidence (yet) to back up reasonable suspicions and logical hypotheses about the very serious human, social, economic costs and consequences of foetal alcohol harm. Because foetal alcohol harm remains so far ‘below the radar’ throughout Scotland and the rest of the UK – that is, *not prevented, not identified/diagnosed and not treated* – meaningful data about the impacts of foetal alcohol harm do not exist here and are only at an early stage of development and validation internationally.

Common sense suggests that it is very likely that people who suffer foetal alcohol harm are disproportionately (highly) represented among the learning disabled, convicted criminals, alcoholics/substance abusers, the unemployed and others whose lives have not turned out brilliantly. But, no one has collected comprehensive, credible evidence proving these connections.

Finding out and reporting what’s true about the costs and consequences of living with foetal alcohol harm is important for two reasons. First, it would make the case for prevention much more compelling and politically feasible. And second, it would alter the way in which we view and treat people whose negative behaviour is rooted in significant brain damage, not simply ‘bad attitudes’ or a ‘lack of willpower’.

The 10 facts offered here are nothing more than starting points for further discussion, research, teaching/learning and – most important – ***action to prevent*** foetal alcohol harm.

These facts should also inspire relevant people and organisations to do a much better job of identifying and helping those babies, children, teenagers and adults who already have suffered foetal alcohol harm. As the saying goes, “no one can do everything, but everyone can do something” to make a positive contribution.

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*Note: This primer is a summary of a presentation given at a Children 1<sup>st</sup> conference on alcohol policy.*

*Further information: BMA Board of Science, “Fetal Alcohol Spectrum Disorders: A guide for healthcare professionals”, British Medical Association 2007.*

*See also evidence from the Public Health Agency of Canada:*  
[http://www.phac-aspc.gc.ca/fasd-etcaf/pubs/fs-fi\\_01eng.php](http://www.phac-aspc.gc.ca/fasd-etcaf/pubs/fs-fi_01eng.php)

*Health Evidence Network, World Health Organisation (WHO/Europe):*  
<http://www.euro.who.int/en/what-we-do/data-and-evidence/health-evidence-network-hen/publications/evidence-summaries-of-network-members-reports/is-low-dose-alcohol-exposure-during-pregnancy-harmful>

*US Centers for Disease Control and Prevention:*  
<http://www.cdc.gov/ncbddd/fasd/index.html>

April 2010