Should drinking during pregnancy be criminalised to prevent fetal alcohol spectrum disorder?

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The harmful effects of alcohol use during pregnancy have been well documented. Fetal alcohol spectrum disorder (FASD) is the collective term encompassing the various clinical diagnoses that can occur in a child who was exposed to alcohol prenatally. The affected child suffers a range of lifelong primary and secondary disabilities. There is no cure for FASD, but it is preventable if women do not drink during pregnancy. Should women be banned from, and/or punished for drinking during pregnancy for the sake of preventing fetal harm? This article considers the appropriateness of criminalising drinking during pregnancy as a means of preventing fetal harm and consequently FASD in children, and concludes that criminal approaches are unjustified, potentially discriminatory and likely to be ineffective.

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The harmful effects of alcohol use during pregnancy have been well documented.[1-6] Drinking during pregnancy has been correlated with negative pregnancy outcomes including an increase in spontaneous abortion, fetal growth retardation, premature delivery, abruptio placentae and breech presentations.[7] During the first trimester, alcohol can change the way in which cells grow and organise themselves and result in abnormalities of the face, heart, brain, limbs and urogenital system.[3] In the second trimester, it can lead to miscarriage, and in the third trimester, it can impair overall fetal growth.[3] Because the brain continues to grow throughout pregnancy and postpartum, it is most sensitive to alcohol's damaging effects.

Fetal alcohol spectrum disorder (FASD) is a collective term encompassing the various clinical diagnoses that can occur in a child who was exposed to alcohol prenatally.[1-8] Fetal alcohol syndrome (FAS) is the most severe condition on the spectrum of disorders.[1-8] Less severe conditions are partial FAS, alcohol-related neurological defects/neurodevelopment disorder (ARND) and alcohol-related birth defects (ARBD).[1,6,8,9]

Children with FAS are distinguished by a characteristic pattern of features. They display central nervous system (CNS) damage, have distinct dysmorphic facial features and are significantly below average height and weight, or both.[8] Several very specific facial abnormalities, that may be absent or mild in other FASD conditions, are visible in children with FAS. Therefore, the presence of the highly specific FAS facial features confirms a FAS diagnosis (even in the absence of confirmed maternal drinking during pregnancy) and distinguishes it from the other less severe conditions on the FASD spectrum.[3] For example, children diagnosed with partial FAS display all of the key FAS features, but their facial features are less defined than those of children with FAS. Children with ARND display few or none of the FAS facial features and their growth and height may range from normal to minimally deficient, but they display significant CNS damage whereas those diagnosed with ARBD present with a range of congenital abnormalities that are associated with prenatal alcohol exposure but have none of the other key features of FAS.[3] Consequently, a diagnosis of ARBD or ARND can only be made if there is confirmed heavy maternal drinking during pregnancy.[3]

The affected child suffers a range of lifelong primary and secondary disabilities.[8] Primary disabilities are 'the direct cause of organic brain damage due to prenatal alcohol exposure'[10] and create 'problems with communication skills, memory, learning ability, visual and spatial skills, intelligence and motor skills.'[11] Secondary disabilities are those that arise as a consequence of primary disabilities and include 'mental health problems, disrupted schooling experience, trouble with the law, inappropriate sexual behaviour, alcohol and drug abuse, difficulty with independent living, difficulty with employment and problems with parenting.'[3]

There is no cure for FASD. Alcohol's damaging effects on the fetus and consequently the born child are permanent and cause problems that persist throughout an affected individual's life. Surgery can repair some of the physical problems and services can be made available to improve mental and physical development so that affected individuals may lead relatively normal lives, but they remain below average in physical and mental development throughout their lives.[8]

Prevalence of FASD in South Africa

FASD is a major public health issue in both well- and poorly resourced countries where alcohol is widely used.[1,3] Worldwide, it is a leading common preventable cause of mental disability and birth defects.[1,3-5] Although there has been no single national study conducted to determine the prevalence of FASD in South Africa (SA),[4] the Central Drug Authority (CDA) estimates the incidence of FAS in the country to be between 8% and 12%.[12]

Several localised studies conducted in three of the country's provinces found the prevalence of FASD to be among the highest in the world.[2,4-6,13-15] The most widely used international summary prevalence estimate for FAS in the developed world is 1 - 1.5 cases per 1 000 live births.[16,17] However, surveys involving school children

in Gauteng, the Western Cape and Northern Cape found the prevalence of FASD to be considerably higher. As Table 1 indicates, FASD is prevalent in many areas throughout SA. It is not restricted to rural and agricultural areas nor to a specific ethnic group.[4,5]

The financial cost of FASD

The exact fiscal impact of FASD for the country has not been calculated. Where the issue is discussed it seems to be under the general costs of alcohol abuse and birth defects to society. Recent cost calculations estimate the tangible cost of harmful alcohol use to the SA economy to be 'R37.9 billion, or 1.6% of the 2009 GDP.'[18] Together with genetic disorders and other birth defects, the Department of Health (DoH) estimates the costs of FASD to the state to be several billion rand annually.[19] It must, however, be borne in mind that these costs may not include the costs associated with secondary disabilities such as depression, crime, violence and substance abuse.

Prevention through criminalisation

FASD is not a hereditary condition so it cannot be passed onto one's child. It is entirely preventable if women do not drink during pregnancy. The idea that women should be banned from, and/or punished for, drinking during pregnancy as a means to prevent FASD and its associated costs, is controversial, but not entirely uncommon. For example, in the USA, several states have considered or implemented laws aimed at preventing alcohol and drug use during pregnancy, which effectively infringe a woman's rights for the sake of the fetus.[20-22] Some states have approached the problem by focusing on the pregnancy period, whereas others have chosen to intervene only after a child is born.[20] Among the policies proposed or adopted have been ones that allow for:

- the removal of a child into (usually) state custody if a mother tests positive for drug or alcohol use[21]
- mandatory reporting by health professionals and social workers of suspected maternal drug or alcohol use[23]
- others to seek a court order to compel a pregnant woman to undergo treatment[22]
- the inclusion of prenatal drug or alcohol exposure in their definitions of child abuse and neglect[24] or child endangerment.[20]

In the UK, the Court of Appeal recently had to deal with the contentious question of whether drinking excessively during pregnancy should be regarded as a criminal offence. After considering the appeal, which was brought by a local authority who sought to recover compensation from the government-funded Criminal Injuries Compensation Scheme, in order to fund the care of a child with FAS, the court ruled that excessive drinking during pregnancy is not a criminal offence under UK law. Lawyers for the city argued that the mother had committed the crime of grievous bodily harm, but one of the judges explained that the essential ingredient for the crime to be committed is that the harm is inflicted on a person.[25] Under UK law, the fetus cannot have any rights of its own at least until it is born and has a separate existence from the mother.[26,27] Consequently, the Court of Appeal ruled that compensation should not be awarded for the damage done to the child during pregnancy because she was not a legal 'person' while in the womb. So a crime of grievous bodily harm could not have been committed against her, as a fetus is not a 'person.'[25]

Alcohol is not a banned or illegal substance in SA, although its sale, advertising and use are subject to regulation. Anyone aged 18 years and older can purchase alcohol in terms of the Liquor Act 59 of 2003. There are currently no binding regulations on alcohol advertising, sponsorships, sales promotion and product placement;[28] however, the DoH is considering passing legislation in the form of the Control of Marketing of Alcoholic Beverages Bill (2013), which will totally prohibit the advertising and promotion of alcoholic products in the country.[29] In terms of the Regulations to the Foodstuffs, Cosmetics and Disinfectants Act (54 of 1972), container labels for alcoholic beverages must contain at least one of seven health messages or warnings that includes one that reads 'Drinking during pregnancy can be harmful to your unborn baby'.[30] Driving a vehicle with a blood alcohol concentration of 0.05% and higher is criminal,[28] but drinking during pregnancy is not, although there has been a contentious proposal from the Gauteng Provincial Government, in the form of the Gauteng Liquor Bill[31] that sought to prevent pregnant women from acquiring alcohol as a way of addressing concerns about the high rate of alcohol misuse and FASD in the country.[31] In terms of section 53(1) of the bill, a licensee (defined in the bill as person to whom a licence has been issued and who is thereby authorised to conduct a business in terms of the bill), may not sell, supply, or give alcohol to pregnant women. Any person who is guilty of an offence in terms of the bill is liable to a fine not exceeding R100 000 or to imprisonment for a period not exceeding 10 years or to both such fine and imprisonment. Although the provisions are not directly aimed at pregnant women, they do ultimately operate to restrict women's access to an otherwise legal substance for the sake of reducing the harm associated with drinking during pregnancy.

Why drinking during pregnancy should not be criminalised

To use the law as a blunt instrument to get pregnant women to comply with healthy behaviours may initially appear tempting. The benefits of women not drinking during pregnancy are obvious, but there are serious problems with criminalisation, particularly with regard to its underlying view of the status of the fetus and its consequences.

Criminalising pregnant women's behaviour is troubling because it involves intrusions and restrictions of varying duration, degree and risk in a woman's freedom and rights. Proponents of criminalisation typically argue that the rights of pregnant women should be curtailed in some circumstances, either because they believe that the fetus has rights or because of the consequences of permitting women to do entirely as they wish. They may further point out that the harm to the woman is minor compared with the benefits to the child and society. However, there are several reasons that warrant concern about criminalising women's behaviour in an attempt to prevent FASD.

Implication for the maternal-fetal relationship

A particular concern about criminalisation relates to its underlying view of the status of the fetus. Criminalising drinking during pregnancy implies that the fetus has rights which are paramount and superior to those of the woman in whose body it resides and depends on for its existence. This is tantamount to treating women as merely fetal containers because it considers the interests of the fetus to be separate to those of the mother, even though this is not factually the case. Essentially criminalisation conceives the relationship between mother and fetus to be one of adversaries, where their rights are in conflict. If

Table 1. Prevalence of FASD in communities in SA

Province	Site	Participants	Findings
Western Cape	Aurora (West Coast)	Grade 0 – 7 schoolchildren at one school	Of 160 children screened, 78 (49%) were screen-positive, of whom 63 (81%) were clinically assessed for FAS. The overall FAS/PFAS rate among screened learners was 17.5%, with 16 (10%) children having FAS and 12 (7.5%) PFAS.[2]
	Four small towns and their surrounding rural areas	Grade 1 schoolchildren	1 354 children were enrolled into the study. FAS was found to occur in 93 - 128 per 1 000 children, PFAS in 58 - 86, and ARND in 32 - 46 per 1 000 children. In total FASD affects 182 - 259 per 1 000 children or 18 - 26%.[9]
	Wellington	Grade 1 schoolchildren in 13 primary schools	Of 1 147 children, 747 (65.1%) were enrolled in the study. The overall rate of FASD was 135.1 - 207.5/1 000 (or 13.6 - 20.9%). For FAS: 59.3 - 91/1 000 For PFAS: 45.3 - 69.6/1 000 For ARND: 30.5 - 46.8/1 000[1]
		818 Grade 1 schoolchildren	Combined FAS and PFAS prevalence of 68.0 - 89.2/1 000[13]
		857 Grade 1 schoolchildren	FAS prevalence of 65.2 - 74.2/1 000[6]
		Grade 1 schoolchildren	FAS rate of 40.5 - 46.4/1 000[14]
Gauteng	Roodepan	435 Grade 1 schoolchildren	Complete ascertainment of FAS was made in 1 503 (94.7%) of 1 587 eligible children. Overall, FAS was diagnosed in 83 (5.5%) and FASD in 96 (6.4%). Levels of FAS were high in both areas: 26 (6.3%) from Roodepan compared with 57 (5.2%) from Galeshewe.[4]
	Galeshewe	1 152 Grade 1 schoolchildren	
Northern Cape	De Aar	Grade 1 schoolchildren at eight primary schools	Combined FAS and PFAS prevalence of 119/1 000[5]
	Upington	Grade 1 schoolchildren at 15 schools	Combined FAS and PFAS prevalence of 74.4/1 000[5]

fetuses are granted rights, they would have separate claims to life, and abortion (save perhaps to save the woman's life) would be tantamount to murder. Conceiving the relationship in these terms is, however, not an accurate depiction and is counterproductive. In general, most women act in ways that promote fetal health and well-being and they do so, not because they necessarily believe that the fetus has rights, but rather because they have duties towards their children.

Currently, under SA law, the fetus is not a legal person[32,33] and it is up to the pregnant woman to decide whether she wishes to consent to treatment that may affect her fetus or if she wishes to voluntarily engage in harmful behaviour. Any tension between a pregnant woman's rights, e.g. with respect to abortion and consent to medical treatment, will generally have been settled in favour of prioritising the rights of the mother, no matter how unpleasant the results may be for the fetus. The Choice on Termination of Pregnancy Act[34] permits abortion on request by a woman during the first 12 weeks of her pregnancy, for medical reasons or social reasons in the 13th to 20th week of pregnancy and, after the 20th week, to save the life of the woman or to prevent the fetus being born malformed or injured. In the landmark case of the Christian Lawyers' Association of SA v. Minister of Health,[35] the Act was challenged on the basis that it permitted the termination of human life, effectively violating a fetus's right to life. The High Court, however, rejected the challenge on the basis that the word 'everyone', used in section 11 of the Constitution [36] to describe the bearers of the right to life, does not include a fetus. Even the provisions pertaining to child abuse contained in the Children's Act[37] do not seem to extend to the fetus. In terms of the Act, abuse is defined as 'any form of harm or ill-treatment deliberately inflicted on a child', which includes assaulting or deliberately injuring a child, sexually abusing a child or allowing a child to be sexually abused, bullying by another child, a labour practice that exploits a child, or exposing or subjecting a child to behaviour that may harm him or her psychologically or emotionally. The Act defines a child as a person under the age of 18 years of age. This implies that women can currently not be held liable for fetal harm.

Not evidence based

Women most at risk of giving birth to a child with FASD are those who drink heavily or use alcohol in harmful ways during pregnancy.[1,2,4-6] Underlying criminalisation of drinking during pregnancy is the idea that women will weigh the benefits of drinking against the costs of doing so (punishment) and choose abstinence. But this is an unreasonable expectation if the woman is addicted to alcohol, because it assumes two things:

- that it is entirely within her control to choose not to drink
- that she will choose abstinence if she judges the costs to be too high.

Criminal approaches treat what is nowadays widely understood to be a medical condition or disease – addiction – as primarily a moral weakness and/or failing. Furthermore, in the case of women who are addicted to alcohol, there is a strong likelihood that heavy drinking took place before they realised they were pregnant.[4] In which case, criminalisation would do little to prevent harm to the fetus and it would be unreasonable to punish women if they did not know that they were pregnant at the time of their drinking.

Treatment has been found to be a more effective method than criminalisation to reduce and prevent abuse and provide a healthier perinatal environment for children.[38] However, there are reportedly few

public sector alcohol and other drug abuse treatment facilities available in SA.[39] Punishing women for failing to seek treatment that may actually not be available would therefore be unjust. Moreover, prisons are often inadequately equipped to provide for the specialised needs of pregnant women and children,[38] and there are concerns about the mental and emotional effects of children growing up in prisons.

A further concern about criminalisation is that it neglects to acknowledge the limitations of current medical knowledge and predictions of pregnancy outcomes. The relationship between maternal alcohol use and the development of FASD is not fully understood. The relationship is one of correlation rather than one of proven causality. Although FASD is preventable if a pregnant woman does not drink alcohol, much of the data are rendered problematic by several confounding factors,[5,6,13] and there is uncertainty about the precise dose, timing and conditions of exposure to alcohol that result in FASD.

While heavy drinking is an established risk factor,[4-6] less clear is the effect of moderate drinking. Although a body of literature suggests that moderate drinking during pregnancy is not linked to detrimental impacts on mental or behavioural development during early childhood,[40] a systematic review of the effects of low to moderate alcohol use during pregnancy from six studies in five countries did, however, find that it may have an impact on children's cognitive and socio-emotional development.[41]

A myriad personal, social, economic and environmental factors influence a woman's decision to drink and consequently contribute to poor pregnancy outcomes. These include factors such as older age at pregnancy, polydrug use, low socio-economic status, poor nutritional status and genetics.[4-6,10] Given the incomplete understanding of factors underlying pregnancy outcomes in general and the contribution of individual maternal behavioural and socioeconomic factors in particular, it seems unjust to criminalise drinking during pregnancy in the face of such scientific and medical uncertainty.[20]

Consequences for women's access to healthcare and relationships with health professionals

The threat of criminal prosecution can negatively impact on efforts to prevent FASD, in that it can have the effect of undermining efforts to encourage women to seek treatment for alcohol abuse or addiction[38] and prenatal care, which greatly reduces the adverse effects of abuse during pregnancy.[42] Additionally, they may feel compelled to terminate their pregnancy (which is lawful in SA) rather than continue and face criminal prosecution.

If health professionals are required to report to authorities their pregnant patients who drink, this would place them in a policing role, which may have detrimental effects on their relationships with patients. They could lose their treatment function and instead degenerate into a social monitoring function, which will not only compromise a woman's privacy, but also implies that the doctrine of informed, voluntary consent can be encroached in the case of women who drink/drank during pregnancy, thus undermining women's rights and their ability to make their own choices while pregnant.

Potentially unfair and discriminatory

Finally, if drinking during pregnancy is criminalised, what other behaviours can the state forbid and punish for the sake of preventing harm to a fetus? Making one particular form of behaviour during pregnancy into a criminal offence would lay the ground for criminalising a wide range of other behaviours – e.g. improper nutrition,[43] folic acid deficiency[44] or being stressed[45] – that pose risk to the fetus. In this respect, women who drink any alcohol during pregnancy and give birth to a child with FASD could become the subject of criminal sanction. Even if a woman limits her use, but does not completely abstain, she could still be held criminally liable.

But it is not only women whose behaviours impact fetal health and wellbeing, because a man's drinking, smoking and exposure to workplace chemicals has been found to affect his sperm, which can lead to childbirth issues and birth defects.[46,47] It would, therefore, be unfair and discriminatory, hence contrary to the dictates of justice, to single out pregnant women who drink for punishment and not the behaviour of others that pose a risk to the fetus. To avoid charges of unfair discrimination criminal sanctions would have to extend to any person whose behaviour is harmful to the fetus. As such, criminalisation threatens the autonomy and privacy of not only pregnant women, but anyone else whose behaviour is potentially harmful to the fetus.

Components of an ethical state response to prevent FASD

For many people, criminalising pregnant women for behaviours that may result in harm to their fetuses may be satisfying from a moral point of view, but moral outrage and emotion should not be the basis of law, at least in liberal democratic societies. Criminalising pregnant women who abuse and are dependent on alcohol is contrary to the dictates of science and modern medicine that tends to view addiction as a disease over which people have little control. Efforts that create criminal penalties as a mechanism for addressing health problems that pregnant women may face should therefore be rejected.

Criminalisation seems neither justified nor likely to be effective at preventing FASD. There is a strong public interest in promoting the health and welfare of pregnant women and children but these interests are unlikely to be served by criminalising women's behaviour. An ethically appropriate and effective response to FASD prevention requires a coordinated multifaceted approach that does not penalise, but instead aims to assist women and children. This approach should include the following interventions:

- education, early identification and referral of women at risk of having a child with FASD
- provision of appropriate treatment and rehabilitation facilities that cater for the needs of pregnant women
- early diagnosis and therapy for children with FASD
- access to contraception and abortion services.

As with a criminal response, all of the above interventions require resources – human and financial – but the costs of these interventions are likely to be less and be more effective at reducing and preventing FASD. Criminalisation of pregnant women who drink will do little good for mother and child, and is not respectful to women because it treats them merely as a means to an end. Consideration of the mutual interests of the mother and fetus is likely to result in better pregnancy outcomes and is arguably more cost effective than criminalisation. By integrating efforts within existing programmes, limited resources can be used more efficiently, thereby providing additional public health benefits.

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