SUMMARY OF THE REPORT ALCOHOL AND SOCIETY 2020

Alcohol, pregnancy and infant health – a shared responsibility

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Executive summary

Consequences of alcohol exposure in connection to pregnancy

- Alcohol exposure in pregnancy is the most common cause of preventable cognitive deficits among children in Sweden and globally, affecting an estimated 1% to 5% of live births each year
- The most well-known consequence of parental alcohol exposure is foetal alcohol syndrome (FAS), which includes cognitive deficits, abnormal facial features and deficiencies of the central nervous system and growth
- The incidence of FAS in Sweden has been estimated at 0.1% to 0.3% of all births, or 100-300 cases per year, and for FASD 1% to 3%. The cost of FAS to Swedish society is conservatively estimated at €1.4 billion per year.
- Heavy alcohol use during pregnancy is an established risk factor for multiple adverse outcomes including, spontaneous abortion, stillbirth, premature birth, intrauterine growth retardation, low birth weight and sudden infant death syndrome (SIDS). Even low-to-moderate alcohol exposure during pregnancy increases the risk for some adverse outcomes.
- Even though the brain is the organ most severely impacted by prenatal alcohol exposure, abnormalities within the heart, kidney, liver, gastrointestinal tract, and the endocrine system can also occur.
- The effects of prenatal alcohol exposure on foetal development are stronger than those from tobacco use, use of other psychoactive substances and exposure to other hazards such as lead and radiation.
- Possible causal mechanisms include alcohol-induced brain cell death and damage to the DNA of immature male and female reproductive cells, causing changes which can potentially last for generations.

Postpartum effects

- Alcohol does not increase human milk supply and is associated with early cessation of breastfeeding. Alcohol appears to be a risk factor for SIDS, specifically when parents sleep with the baby.
- Firm evidence on the effects of low alcohol consumption while breast feeding is lacking. But even low levels of ethanol exposure can disrupt infant sleep patterns and reduce maternal milk production. Applying the precautionary principle here would suggest it

safest to avoid alcohol exposure while breastfeeding. However, consumption of 1 standard drink consumed 2 hours prior to breastfeeding is unlikely to result in significant blood alcohol concentrations in a nursing mother.

Alcohol use in the time surrounding pregnancy

- The natural inclination is to perceive alcohol and pregnancy as a problem restricted to pregnancy, and a problem restricted to women. Neither is true. The effects of alcohol on pregnant women and their offspring are related to the alcohol use of both men and non-pregnant women in the general population.
- Over 80% of Swedish women drink alcohol during the year prior to pregnancy and 14% drink at heavy levels. Overall, few women reduce consumption prior to pregnancy recognition.
- Male drinking in the pre-conception period may adversely affect the foetus and possibly subsequent generations through genetic modification of sperm.

Evidence for effective policies

- Policies that restrict the availability, affordability and marketing of alcohol have been shown to effectively reduce heavy drinking (e.g., binge drinking) and alcohol-related harms in the general population. This includes drinking among those of reproductive age and effects on pregnancy and infant health have been demonstrated.
- Evidence of the potential risks of adverse outcomes associated with drinking during pregnancy should be widely promoted to the general population to support informed decision-making by policymakers and consumers. Women who choose to drink during pregnancy should not be stigmatized or reported to authorities by health care providers.
- Guidelines in many high-income countries advocate abstinence from alcohol as the safest course throughout pregnancy.
- There is mixed evidence for effects of low-dose alcohol consumption in pregnancy (i.e., 'moderate' drinking) from a variety of human and animal studies. On balance, however, the evidence for effects of low-dose alcohol consumption in pregnancy suggests that abstinence is the safest choice.

Key recommendations

- Policies which reduce the availability, affordability and marketing of alcohol are needed to sustain a low risk environment for alcohol-related birth abnormalities.
- There is a shared responsibility for society at large and healthcare providers to raise awareness of the risks of prenatal alcohol exposure and provide support to pregnant women and their partners to manage these risks and their consequences.
- Persons planning a pregnancy, women as well as their partners, can improve the probability of a healthy pregnancy outcome by abstaining or minimise alcohol exposure.
- It is safest to abstain from any alcohol consumption during pregnancy. Partners may also choose to abstain from drinking during this period, and if they choose to continue drinking they should do so within low-risk guidelines.
- It is also safest to avoid alcohol exposure while breastfeeding. Those who choose to drink during breastfeeding should limit consumption to 1 standard drink, consumed 2 hours prior to breastfeeding.
- An expert national centre should be established in Sweden charged with developing strategies to reduce prenatal alcohol exposure, monitor prevalence of exposure and provide training in screening and treatment.

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