



1 September 2016

The BMJ Press Release

High alcohol intake associated with slightly decreased female fertility

But total abstinence may not be necessary to improve conception rates

Women who drink 14 or more servings of alcohol a week are slightly more likely to have reduced fertility, suggests a study published by **The BMJ** today.

Low to moderate intake of alcohol, defined as one to seven servings a week, seemed to have no effect on women's fertility, nor did the type of alcohol beverage consumed.

But the authors still recommend for couples to abstain from alcohol during their fertile window until a pregnancy is ruled out, because the fetus may be particularly vulnerable to alcohol during the first few weeks after conception.

In developed countries, up to 24% of couples experience infertility, defined as time to pregnancy of 12 months or more.

Official guidelines in several countries, including the UK, USA and Denmark, recommend that women trying to become pregnant should abstain from alcohol consumption. But the extent to which alcohol intake affects female fertility is unclear.

So a group of Danish researchers carried out a large prospective cohort study to examine the association between pre-conception alcohol consumption and time to pregnancy.

In total, 6,120 female Danish residents, aged 21-45 years, were included in the study.

They were all in a stable relationship with a male partner, trying to conceive and not receiving fertility treatment, between June 2007-January 2016.

The study assessed overall alcohol consumption as well as intake of specific types of alcoholic beverages, including beer, wine, and spirits.

Alcohol consumption was self reported as beer (330 mL bottles), red or white wine (120 mL glasses), dessert wine (50 mL glasses), and spirits (20 mL), and was categorized in standard servings per week (none, 1-3, 4-7, 8-13, and 14/more).

Each female participant completed bimonthly questionnaires for 12 months, or until conception occurred, on alcohol use, pregnancy status, menstrual cycles, frequency of intercourse, and smoking.

In women who drank 14 or more servings of alcohol a week, there were 37 pregnancies in 307 cycles, compared with 1381 pregnancies in 8054 cycles in women who did not drink.

While the sample size was large, only 1.2% of women drank more than 14 servings of alcohol a week, so the estimate for this high level of exposure is imprecise, caution the authors.

This is an observational study, so no firm conclusions can be made about cause and effect.

The study did not distinguish between regular and binge drinking, which is important because alcohol can affect the menstrual cycle. And the male partner's alcohol intake was also not taken into account, which is known to affect sperm quality.

In a linked editorial, Annie Britton from University College London, says that the results “offer some reassurances” to couples trying to get pregnant and suggests that “total abstinence may not be necessary to maximise conception rates” because “if alcohol is consumed moderately, it seems that this may not affect fertility.”

“However, it would be wise to avoid binge drinking, both for the potential disruption to menstrual cycles and also for the potential harm to a baby during early pregnancy. If a couple are experiencing difficulty in conceiving, it makes sense for both partners to cut down on their alcohol intake,” she concludes.

[Ends]

Note to Editors:

Research: Alcohol consumption and fecundability: prospective Danish cohort study

<http://www.bmj.com/content/354/bmj.i4262>

Editorial: Alcohol consumption for women trying to conceive

<http://www.bmj.com/content/354/bmj.i4540>

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