

Report Title: Recent research* shows a strong link between Parental Alcoholism and the increased risk of Psychiatric Disorders in their offspring (when they are adults).

(* See reference below for Morgan et al in the *Alcoholism: Clinical & Experimental Research Journal*, Oct 2010)

Several research papers have shown that the offspring of individuals with alcoholism are at increased risk for psychiatric illness. Previous findings include increased risk of **drug and alcohol dependence** (Chassin et al., 1999; Christoffersen and Soothill, 2003; Schuckit et al., 2000), and **numerous psychosocial disadvantages (e.g. increased odds of being involved in violence, premature death, family separation, and unemployment** (Christoffersen and Soothill, 2003)). Furthermore, there is substantial evidence that familial alcoholism is associated with (but perhaps not independently responsible for) **increased risk of mood and anxiety disorders** (Merikangas et al., 1998; Preuss et al., 2002).

However, **the effects of gender of the parent on this risk are not well known**. A recent study (Morgan et al., 2010) tested the hypothesis that **“the gender of the parent with alcoholism and the gender of offspring affect the association between parental alcoholism and offspring psychiatric illness”**. For this study psychiatric disorders were sorted into two recognised groups called Axis I type disorders (of any mood, anxiety disorder or substance use disorder) and Axis II type disorders (any paranoia, schizophrenia or avoidant, antisocial or compulsive-obsessive disorder).

The researchers analysed the United States National Epidemiological Survey on Alcohol and Related Conditions (NESARC) data to examine the gender-specific prevalence of Axis I type and of Axis II type disorders in 23,006 male and 17,368 female respondents (18 years or older) with and without a history of paternal or maternal alcoholism.

What did the researchers find in overall results from the interviews with the participants?

Consistent with earlier findings in this field of research, the data obtained through interviewing the participants in this study showed that **maternal or paternal alcoholism was associated with a higher prevalence of every disorder examined**, regardless of the gender of the offspring.

Compared with the participants in the research whose parents had no paternal or maternal alcoholism, Axis I type disorders (of any mood, anxiety disorder or substance use disorder) were on average:

- 73% higher for participants who reported maternal alcoholism or abuse of alcohol
- 63% higher for participants whose fathers displayed alcoholism or alcohol abuse.

Axis II type disorders (any paranoia, schizophrenia or avoidant, antisocial or compulsive-obsessive disorder) were on average:

- 138% higher for participants whose mothers had displayed alcoholism or alcohol abuse
- 103% higher for participants who reported paternal alcoholism or abuse of alcohol.

What did the researchers find specific to the gender of the participants being interviewed?

Gender-related differences in the prevalence of the psychiatric disorders were evident in nearly all examined disorders and the relationship between parental alcoholism and different types of psychiatric disorders in the offspring was significantly different in their prevalence in men and women. These differences included stronger associations where:

- alcohol abuse without dependence was most evident in **female offspring of men with alcoholism**
- mania, nicotine dependence, alcohol abuse, and schizoid personality disorder were most evident in **female offspring of women with alcoholism**
- mania was most evident in **male offspring of men with alcoholism**; and
- panic disorder was most evident in **male offspring of women with alcoholism**.

Interactions between gender and parental alcoholism were specific to certain disorders but varied in their effects, and **in general female children of women with alcoholism** appear at greatest risk for adult psychopathology (in particular showing stronger associations with mania, nicotine dependence, alcohol abuse, and schizoid personality disorder in 32.3% of cases compared to only 13.6% in female participants of the study whose mothers did not display any alcoholism or alcohol abuse behaviours).

This research does not distinguish between psychological, environmental or genetic effects relating to parental alcoholism nor on the age of onset of alcohol abuse by the parent and more research will be needed to explain the findings with regard to these factors.

Compiled by **Derek Steenholdt - Research Officer**

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