



Why Alcoholism is **HEREDITARY**

According to the American National Council on Alcoholism and Drug Dependence (NCADD), the most reliable risk indicator for alcoholism is family history. While many people used to believe that alcoholism passed from parents to children was due solely to environmental factors during upbringing – that those around alcohol abuse would grow up to do the same – recent studies have proven that genetics account for up to 60% of the risk factors for developing alcoholism.

In recent years, scientists have been able to locate certain genes that contribute to the susceptibility of alcoholism in a person. What these scientists are actually finding are biological differences in the genetic makeup of addicted persons compared to non-addicted persons. In some diseases, such as sickle cell anemia or cystic fibrosis, the biological difference comes from a single gene and is therefore easy to detect. Most other diseases, however, are considered genetically complex in which several genes play a part in making up the disease – as is the case with alcoholism.

That being said, scientists have been making fast progress over the past decade and have been able to pinpoint several gene factors that contribute to alcoholism. In a study done by the University of Utah, it was found that people addicted to alcohol are more likely to carry the A1 allele of the dopamine receptor gene DRD2, while for people who carry two copies of the ALDH*2 gene, alcoholism is rare.

This does not mean, however, that a child who is born with these gene variations will automatically become an addict. Look at heart disease for example. Chronic heart disease is considered a hereditary disease, and while a child may be born with the genetic variations that could cause heart disease in his future - that child can eat properly, keep up an exercise program and monitor his heart on a regular basis to help ensure that heart disease does not strike. Alcoholism is the same. The genes may be in a person's body, but they don't have to develop into the disease – which brings us back to the old nature vs. nurture debate.

To drive the nature (genetic) point home, scientists have done many twin and adoptive child studies to see whether nature or nurture is a stronger factor in developing alcoholism. According to a report called “The Genetics of Alcohol and Other Drug Dependence” by Danielle M. Dicks, Ph.D., and Arpana Agrawal, Ph.D, several studies on both identical and non-identical twins in families with a history of alcoholism in the parents tipped the scales in favour of nature. Identical twins, who share the exact same gene pool and were subjected to the same environmental upbringing showed a higher level of concordance (similarity) than non-identical twins. The report also claims that children born from one or more alcoholic parents and then adopted in infancy, were 4 times more likely to be alcoholic than those who were born of non-alcoholic parents.

Since genetic tests for alcoholism are not regularly carried out at childbirth, it leaves the main indicator for possible development of alcoholism as family history. However, deciding whether or not your mother or father suffers from alcoholism is often hard to judge from the perspective of the child who quite likely views their own parents' behaviour as normal. Thus, they may not be aware of the possible problems in their future if they consume alcohol.

For many, going out on the weekends with their friends and indulging in alcohol consumption is normal social behaviour. For most of the people in that group, they can binge on the weekend, and remain sober during the week or even several weeks with no problem. For those predisposed to alcoholism, however, it's not so simple. They may only partake in heavy alcohol consumption a handful of times before they feel the slide toward dependence. And once it hits – the corruption of the brain by the alcohol makes it nearly impossible for the drinker to stop and for many – rehab is the only solution.

Coming next week [“Treating Alcoholism in Inpatient Rehab”](#)

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