Op-Ed/Editorials - Editorial response to "Some Gene Research Just Isn't Worth the Money"

June 15, 2005

Lance M. Dodes, M.D. Affiliated Faculty

Division on Addictions, Cambridge Health Alliance

A recent *New York Times* opinion piece by Keith Humphreys and Sally Satel (2005) entitled, "Some Gene Research Just Isn't Worth the Money" took the position that genetic research on addiction should be a low priority for federal budget dollars. I could not agree more. The authors' reasoning, however, is flawed. They say that genetic research money should go to conditions not affected by factors like "personal habits or manipulation of the environment," both of which they see as affecting addictive behavior. But addiction is basically not affected by either of these factors.

Genetic research money should go elsewhere because addiction is a psychological, not a genetic condition. Genetic studies on alcoholism (the most studied addiction) indicate clearly that genetic influence at most only increases susceptibility to alcoholism and that only for a minority of cases. No gene for alcoholism has ever been found and the data shows that one will not be found (it would be inconsistent with every study for there to be a "gene for alcoholism"). The role of genetics in alcoholism, and addictions generally, is the kind of secondary influence that one sees in a wide variety of human conditions that are not at heart genetic disorders. The low importance of genetics in alcoholism should have been obvious even without these studies since people regularly shift their addictive focus from drug to non-drug addictions and to other behaviors not usually considered to be addictions (e.g. compulsive cleaning), a shift that would be improbable on a genetic basis. Indeed, there is a large body of evidence that addiction is the consequence of a person's psychology, not his biology.

This psychology has nothing to do with habit or changes in the environment such as raising the tax on alcohol mentioned in the *Times* piece. Overuse of a drug or excessive repetition of a behavior because of external, social factors like cost or being placed in an unusually stressful setting (the Vietnam study cited by the

authors is a good example) is very different from true addictions which are compulsively driven from within. Addictions are in fact psychologically identical to other emotional compulsions (Dodes, 1996). Like them, they are basically unresponsive to manipulations of the environment. As clinicians, we know this all too well from the sad experiences of our patients who continue to repeat their addictive behavior despite suffering awful losses.

The psychology of addiction is an understandable mechanism that, when grasped by people suffering with addictions, can allow them to be free of the problem. (A new way to understand this psychology, as well as a full review of the genetics of addition, can be found in, Dodes 2002) Because addiction is a psychological compulsion like other compulsive behaviors, and not fundamentally a genetic problem, it indeed is not worth having genetic research dollars invested in it.

What do you think? You can address comments to Dr. Lance M. Dodes.

References

Dodes, L. M. (1996). Compulsions and Addiction. Journal of the American Psychoanalytic Association, 44, 815-835.

Dodes, L. M. (2002). The Heart of Addiction: New York: HarperCollins.

Humphreys, K., & Satel, S. (2005, January 18). Some Gene Research Just Isn't Worth the Money. The New York Times, pp. F5.