

**McGrath Re, Yahia, M, "Preliminary Data on Seasonally
Related Alcohol Dependence," Department of Psychology,
Fairleigh Dickinson University, Teaneck, N.J. 07666.
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Study done with Ken Blum, PhD.**

The Department of Experimental Pharmacology at the Southwest Foundation for Research and Education in San Antonio, Texas, subjected laboratory rats to various types of stress in an attempt to induce them to drink alcohol.

"The rats clearly preferred plain water except on weekends when they went on real alcoholic binges. This was perplexing at first but it was noted that the automatic time switch on the lights was out of order and the rats were being left in continuous darkness over weekends. Another second study kept group of laboratory **rats in total darkness without subjecting them to any anxiety stress. Their preference switched to alcohol and water instead of plain water.** In Science, July 30, 1973, Dr. Irving Geller, Chairman of the Department, refers to this as '**darkness-induced drinking phenomenon.**' He relates it to the work reported in 1963 by Nobel Prize winner Dr. Julius Axelrod, who found that the rat pineal gland produced more melatonin during the dark nighttime period than when it was light.

Dr. Geller then gave injections of pineal melatonin to rats kept on a regular light-dark cycle and not subjected to any anxiety. The injections alone turned these rats into alcoholics. Dr. Geller stated that "it is only through such animal studies that one can hope to attain a clearer understanding and perhaps an ultimate treatment or cure, or both, for alcoholism in humans."

BACKGROUND: The purpose of the study was to examine whether some individuals who report alcohol dependence consistently deteriorate during the fall and winter months. We also explored whether this deterioration could be attributed to seasonal affective disorder.

METHOD: Veterans Administration inpatients were administered a screening questionnaire concerning seasonal patterns in alcohol use and other variables. Those who suggested a fall-winter pattern were interviewed.

RESULTS: Six individuals were identified who met criteria for seasonal alcohol dependence (based on DSM-III-R criteria for seasonal depression). Two case summaries are provided.

CONCLUSION: Evaluation for seasonal affective disorder may be warranted in alcoholic patients. In such cases, light therapy may prove a useful adjunct to conventional treatment.