## **Behavior**

#### An inside look at electroshock

In a "before and after" study of the effects of electroshock therapy on the brain, relying for the first time on magnetic resonance imaging (MRI) technology, researchers found no changes in the brain structure of patients who had completed a course of the controversial treatment.

In addition, say psychiatrist C. Edward Coffey and his colleagues at Duke University Medical Center in Durham, N.C., patients with preexisting brain impairments, such as moderate shrinking of tissue causing enlargement of fluid-filled cavities in the brain, showed no worsening of their condition after electroshock, also known as electroconvulsive therapy (ECT).

The researchers examined nine patients with severe depression referred for their first course of ECT. Subjects received five to 11 ECT treatments, administered three times a week. MRI scans, which provide an accurate three-dimensional picture of structures throughout the brain, were taken before and several days after completion of the series of treatments.

Depression was significantly reduced in all but one of the patients after completing ECT, note the researchers in the June American Journal of Psychiatry. The exception was a woman who became markedly disoriented for about five days after treatment ended; she then became somewhat less depressed and was no longer suicidal. The other eight patients did not complain of persistent memory loss for events in the months preceding ECT, a common side effect of the treatment.

ECT critics charge the treatment has caused permanent brain damage in animals, but definitive studies of brain metabolism and tissue changes during and after electroshock have not been done (SN: 6/22/85, p.389). Coffey and his coworkers say the initial MRI findings need to be confirmed in a larger patient sample followed for a longer time after treatment ends. Future studies, they add, should include patients who have previously undergone ECT.

### Smoking out 'dirts' and 'hotshots'

If you want to prevent and reduce cigarette smoking among junior high school students, say two psychologists at the University of Wisconsin in Madison, target the "dirts" and the "hotshots." These unflattering labels refer to adolescent peer groups with a surfeit of smokers.

Peter Mosbach and Howard Leventhal directed interviews of 341 seventh- and eighth-graders in a rural community. The students identified four peer groups at school. "Dirtballs" or "freaks" (shortened to "dirts" by the researchers) were mainly boys who smoked, used other drugs, were poor students and engaged in a variety of problem behaviors. "Hotshots" were popular and academically successful, "jocks" had a strong interest in organized sports, and "regulars" were described as not belonging to any group and typical of junior-high students. These categories closely match those recently identified by other researchers in a big-city junior high school.

Dirts and hotshots made up 15 percent of the sample but accounted for 56 percent of the smokers, report Mosbach and Leventhal in the May Journal of Abnormal Psychology. Smoking is one of several behaviors that attract dirts to one another and helps satisfy a need for risk-taking and excitement, say the researchers. Dirts usually begin smoking before junior high, and are relatively self-confident and unconcerned about smoking's health dangers. Hotshots, on the other hand, are mainly females who seek excitement and achievement but are uncertain of their acceptance by others. Social pressures at school are likely to generate smoking among hotshots, who nevertheless believe that smoking is harmful.

Smoking prevention programs, as well as research into new antismoking strategies in the schools, should focus on dirts and hotshots, assert Mosbach and Leventhal.

# **Science & Society**

### Surveillance among the library stacks

The Washington, D.C.-based National Security Archive filed suit in U.S. District Court last week asking that the FBI respond to its 11-month-old Freedom of Information Act (FOIA) request for information on the FBI's Library Awareness Program. The Archive is a library and nonprofit research group that specializes in defense analyses. According to its executive director, Scott Armstrong, public and university-research librarians have complained that FBI officials have informally asked them to watch for patrons exhibiting "suspicious," "anomalous" or "funny" behavior. He says the FBI's foreign-counterintelligence chief also has expressed concern over library patrons who photocopy large quantities of technical information or steal materials.

The Archive, a member of the American Library Association, filed an FOIA request with the FBI last year on behalf of itself and other research libraries, asking for information on the program's origins, policies and procedures. To date, the FBI has provided none of the requested information, an attorney representing the Archive says.

A new background paper on the FBI's library program has been put together by the Washington, D.C.-based People For the American Way (PFAW), which describes itself as a "constitutional liberties organization." It reports the FBI asked several university librarians for information on foreign patrons—such as the reading habits of users with "East European or Russian-sounding names." A University of Houston librarian was asked to monitor books checked out through its interlibrary loan program because "certain Russians are acquiring economic materials which could benefit them." So far, librarians have reported 20 such FBI requests, says PFAW President Arthur J. Kropp.

Although PFAW is unaware that any library has complied with FBI requests to report on its users, Kropp says his group has probably only heard from librarians who object to such requests. Certainly, he says, other librarians might be complying. Such surveillance could have a chilling effect on library use, he says, especially "if the price of doing research is becoming an espionage suspect in the eyes of the FBI."

### AIDS: Don't ask who's to blame

Because of its initial victims, AIDS has tended to gain the reputation of being restricted to some fairly well-defined groups — most notably homosexual men, Haitians, drug addicts, prostitutes and Africans. However, labeling such groups as "high risk" has led increasingly to their being blamed for the disease, contends public-health researcher Renee Sabatier of the nonprofit Panos Institute in Alexandria, Va., which focuses on issues affecting Third World countries. But in her new study, "Blaming Others: Prejudice, Race and Worldwide AIDS," Sabatier argues that attempting to assign blame — or even inadvertently appearing to do so — can have serious repercussions.

For example, Sabatier notes, the focus of some researchers on AIDS' origins in Africa or the words they use to portray its growing incidence among low-income blacks and Hispanics has led some Africans and American blacks to characterize these scientists as racists. Though the medical/research community largely ignores these reactions, Sabatier says, this can be dangerous. "Bitterness over this racial aspect of AIDS has led some Africans and minority groups to deny that AIDS exists in their communities," she writes, potentially fostering the spread of this disease within those communities. Moreover, she says, new research — even if extremely good — may be ignored, rejected or criticized by many of those who could benefit most from it if they are suspicious of the motives of the scientists who developed the data.

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