Heavy pot use in teen years may predict later-life disability

By Shereen Lehman August 20, 2014

NEW YORK (Reuters Health) - A long-term study of Swedish men finds that those who smoked marijuana at age 18, especially the heaviest users, were more likely to end up on the nation’s disability rolls by age 59.

It’s unclear whether the pot use in adolescence may have led to more severe substance abuse or was an early sign of psychiatric or social factors that contributed to later disability, the researchers caution.

“There is reason to believe that the associations found in our study develop over a long period of time and are intertwined with problems in the labor market, in the social security system, and with the individual,” said study leader Anna-Karin Danielsson of the Karolinska Institute in Stockholm.

Marijuana is one of the most commonly used illicit drugs in the world, with 77 million Europeans reporting having tried it in a recent study.

Pot use in the U.S. has been on the rise since 2007, possibly due in part to a perception of diminishing risks. Colorado and Washington became the first states to legalize the possession and use of recreational marijuana by adults in 2012.

Nonetheless, studies continue to link cannabis with a variety of psychiatric and health problems as well as adverse social consequences, Danielsson said. The research is limited, though, by short follow-up times and small study samples, she told Reuters Health in an email.

“With our unique Swedish cohort of men comprising 98 percent of the male population at baseline and a 39-year long follow-up time, we had the opportunity to expand on existing knowledge,” Danielsson said.

She and her colleagues analyzed data from a large study that included almost 50,000 men born between 1949 and 1951 and conscripted into compulsory military service in 1969 and 1970.

When the men entered the military, they were asked about their drug, tobacco and alcohol use, as well as questions about their family and social backgrounds, school performance, behavior, psychological issues and general health.

Danielsson’s team was specifically interested in the frequency of marijuana use at age 18, when the men were conscripted. The young men were grouped according to how often they had ever used pot at that point: never, 1-10 times, 11-50 times or more than 50 times.
Next, the study team looked at data from the Swedish national social insurance agency, the education registry and labor market statistics to see how many were granted disability pensions through 2008.

About 9 percent of the teens reported having used marijuana when they entered the military, and 1.5 percent said they had used it more than 50 times.

The researchers found that men who used marijuana more than 50 times before the age of 18 were 30 percent more likely to go on disability sometime between the ages of 40 and 59.

A similar pattern was seen for young men who used pot less frequently, with the chance of being on disability in middle age rising with increasing pot use at age 18.

However, when the study team adjusted for other factors, including socioeconomic background, other substance use by age 18, psychiatric diagnoses and other health problems, the link remained statistically significant – meaning it could not have been due to chance – only for the heaviest users who had smoked pot more than 50 times as young men.

That group already had a number of problems in their teens, the researchers note in the journal Drug and Alcohol Dependence. Of the 654 heaviest pot users at age 18, 80 percent also reported using other drugs, 47 percent reported risky alcohol use and 55 percent had a psychiatric diagnosis.

Danielsson said that smoking marijuana at a young age may increase the risk of negative social consequences later on in life, and that prior studies have shown frequent marijuana use increases the risk of using other illicit drugs.

“It may be the case that adolescent cannabis use may lead to a series of negative life events such as, for example, subsequent illicit drug use, illness (e.g., dependence) and associated disability pensions,” she said.

The study cannot prove that pot use in the teen years caused the men to end up on disability later in life, the researchers acknowledge. They don’t know how much marijuana the men used after they entered the military or many other details of their lives after age 18.

Despite the study's limitations, the findings highlight the need for further studies on marijuana and other illicit drug use in relation to possible health and social consequences, the study authors conclude.