When the Thrill Is Gone

Does Cannabis Consumption Cause Opioid Use?

They took the needle when the thrill of marijuana was gone.

Harry Anslinger, 1951
HEROIN ADDICTS MOUNT
U.S., Canada and Britain Report
‘Graduation’ From Marijuana

LAKE Success, Dec. 2—The United States, Canada and
Britain today reported a sharp in-
crease in dope addicts—victims
who have “graduated” from mari-
juana to heroin.

‘NORMAL’ CHILDREN
YIELD TO NARCOTICS
Path From Which Teen-Agers
Slip Into Addiction Is Called
Short, Easy and Deceptive

By CHARLES GREITNER
The path along which many
teenagers slip into narcotic addic-
tion is short, easy and deceptive.

Specious Marijuana Defense

Arguing that the constitutional guarantee of no
unreasonable search permits him to use marijuana and to
smoke it, a man in Detroit today in an attempt to get a
(Continued)

Whether Dr. Levy denies the serious nature
of his offense or for the purpose to declare that
the spectacles and quality of his specific defense
are ‘specious’ proceeds no as use marijuana as marijuana.
Is Marijuana a Gateway to Opioids?

- Marijuana use is clearly associated with use of other illegal drugs.
- Does marijuana use cause the use of other drugs?
- If so, in what sense?
- Can the association be explained by factors that independently predispose people to use both kinds of drugs?

Heroin Use Is Much Less Common Than Marijuana Use
Study of 1,200 New Yorkers

• 95% of subjects who had used illegal drugs other than marijuana used marijuana first.
• Marijuana users were 5 times as likely to report using other illegal drugs.
• The association between cannabis consumption and use of other illegal drugs is stronger among people who use marijuana early and often.


Marijuana and Opioids

• NSDUH analysis: Young men and women who had used marijuana were 2.5 times as likely to report illegal use of prescription opioids.
• NESARC analysis: After adjustment, cannabis users were 2.6 times as likely to subsequently report nonmedical use of prescription opioids.


An underlying “drug use propensity” can explain why...

• People generally use marijuana before other illegal drugs.
• People who use marijuana are more likely than those who don’t to try other illegal drugs.
• The more frequently people use marijuana, the more likely they are to try other illegal drugs.

New Zealand Study

Table 1: Cannabis use rates (%), confidence intervals for testing levels of cannabis use risk of other illicit drug use from individual males.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Less than monthly</th>
<th>At least monthly</th>
<th>At least weekly</th>
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</tbody>
</table>


Twin Studies

- Australian twins: Subjects who used marijuana before turning 17 were 2.3 times as likely as their co-twins to subsequently use opioids.
- American twins: Subjects who used marijuana before turning 18 were 2.7 times as likely as their co-twins to subsequently use opioids.
- Dutch twins: Subjects who used marijuana before turning 18 were 16.5 times as likely as their co-twins to subsequently use "hard drugs."


Rat Studies

- Rats treated with THC as adolescents show "heightened opiate sensitivity" as adults.
- Similar effects can be obtained with nicotine.
- Morphine heightens sensitivity to THC as well as the reverse.

Gateway Variations

- NHSDA analysis: The likelihood of progressing from marijuana to other illegal drugs was 9% for people born in 1940, 39% for those born in the early 1960s, 24% for those born in the early 1970s, and 6% for those born in the late 1970s.

- WHO World Mental Health Surveys: The progression rate varies across countries; in some countries, people rarely use cannabis before other illegal drugs.


Medical marijuana laws are associated with...

- reductions in high-risk opioid use
- reductions in opioid-related hospitalizations
- reductions in treatment admissions for opioid use disorder
- reductions in the percentage of fatally injured drivers who test positive for opioids
- reductions in opioid prescriptions covered by Medicare and Medicaid


Does Medical Marijuana Reduce Opioid-Related Deaths?

- Between 1999 and 2010, medical marijuana laws were associated with a 25% reduction in opioid-related deaths.

- A subsequent analysis found that medical and recreational legalization were associated with higher opioid-related death rates between 2010 and 2016, but it misclassified the legal regimes of several states.

- A 2018 study found merely having a medical marijuana law was associated with lower opioid-related death rates until 2010; thereafter, “legally protected and operational dispensaries” were.

What About Recreational Legalization?

- Legalization in Colorado was associated with a small short-term reduction in opioid-related deaths.
- During the first three years after legalization in Washington, there were 638 fewer opioid-related deaths than would have been expected.


National Trends in Marijuana and Opioid Use

<table>
<thead>
<tr>
<th>Year</th>
<th>Marijuana Use</th>
<th>Opioid Use</th>
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<tbody>
<tr>
<td>1972</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>1973</td>
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<tr>
<td>1977</td>
<td>0</td>
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</table>

“Marijuana and pot do not dictate whether other drugs will be used.”

“There is no evidence that marijuana serves as a stepping stone on the basis of its particular physiological effect.”

“Data do not provide compelling evidence that cannabis is harmfully associated with the initiation of other drugs of abuse.”