

Study by Tulane researcher suggests marijuana can cause infertility in men

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Cannabis has compounds that can affect the male reproductive system, yet prior studies haven't agreed on how that impacts fertility. Photo by Shutterstock.

As more states legalize marijuana, a new study by a Tulane University researcher has a warning for would-be dads. Smoking weed regularly may harm a man's fertility.

Researchers from Tulane and the University of Washington found a connection between low semen volume and damaged sperm among men who smoked marijuana. But the side effects weren't all bad. The study also found that men who smoked marijuana were more likely to have sperm that swam faster.

The findings were published in the journal [*Therapeutic Advances in Urology*](#).

Tulane University

“This is one of the first studies that show a decline in sperm quality in current and past marijuana smokers, compared to non-smokers,” said [Dr. Omer A. Raheem](#), lead author on the study and assistant professor of urology at Tulane University School of Medicine. “This is significant because it adds to the evolving evidence of the potential negative impacts of marijuana on human reproduction.”

Globally, marijuana use has risen by 60 percent over the past decade, and the drug affects more than the mind. Cannabis has compounds that can affect the male reproductive system, yet prior studies haven't agreed on how that impacts fertility.

To better understand the connection, researchers surveyed men undergoing fertility evaluation at a urology clinic in Washington state where recreational marijuana use is legal. They asked patients about their marijuana use and results were compared to a semen analysis.

Of the 409 men in the study, 174 reported marijuana use with 71 (17%) identifying as current smokers and 103 (25%) identifying as past smokers. Compared with non-smokers, current and past users were more than twice as likely to have abnormal sperm development. They were also significantly more likely to have low semen volume.

While both factors make it harder to conceive, at least one side effect of regularly smoking marijuana may help. The study found it could improve sperm motility or how fast they can swim. Sperm motility was more likely to be lower in non-smokers than current and past smokers. Healthy sperm swim at a speed of at least 25 micrometers per second.

More studies are needed to find out whether these impacts are lasting and widespread, Raheem said.

“It's unclear if the sperm changes that take place due to marijuana use are reversible and if there's a specific amount of time required to achieve sperm recovery following the discontinuation of marijuana smoking,” Raheem said. “Much more research and randomized studies are needed to gain a full understanding of the relationship between marijuana and male reproductive health.”