For HIV Patients, Smoking is 10 Times More Life-Threatening than Virus Itself

By Erik Lief — September 18, 2017

Chalk up another horrific distinction for the ills of cigarette smoking.

For people who are HIV-positive and smoke, there's a greater risk of dying from lung cancer than from HIV or AIDS itself. Not just slightly greater risk; for those adhering to their antiretroviral therapy smokers have a 10-time greater risk of mortality from cancer than from the virus.

That's the primary conclusion of a new study conducted by researchers at Massachusetts General Hospital, published today in *JAMA Internal Medicine*.

The National Institutes of Health-funded research also suggests that in this instance lung-cancer prevention – specifically, trying to quit – actually take priority over the treatment of HIV and AIDS, or Acquired Immunodeficiency Syndrome, the last stage of HIV infection.

"Smoking cessation should be a priority in the care of people living with HIV," the authors wrote in their study, "Lung Cancer Mortality Associated With Smoking and Smoking Cessation Among People Living With HIV in the United States."

"Smoking and HIV are a particularly bad combination when it comes to lung cancer," states lead researcher Krishna Reddy, MD, of the Division of Pulmonary and Critical Care Medicine at Mass General. "Smoking rates are extraordinarily high among people with HIV, and both smoking and HIV increase the risk of lung cancer."
While 15 percent of adults are smokers [4], according to the Centers for Disease Control, regarding People Living With Human immunodeficiency virus, "over 40% of PLWH in the United States smoke cigarettes."

In addition, in a statement from Mass General, researchers reported the following findings from their microsimulation model–based analysis:

- Nearly 25 percent of people who adhere well to anti-HIV medications but continue to smoke will die from lung cancer
- Heavy smokers are at even higher risk for lung cancer: 28.9%
- Among smokers who quit at age 40, only about 6 percent will die of lung cancer
- People with HIV who take antiviral medicines but who also smoke are from 6 to 13 times more likely to die from lung cancer than from HIV/AIDS "depending on sex and smoking intensity," according to the study

The authors wrote that by using model projections, of the "approximately 644,200 PLWH aged 20 to 64 in care in the United States, 59,900 (9.3%) are expected to die from lung cancer if smoking habits do not change." Meanwhile, the CDC reports [5] that at the end of 2014 – "the most recent year for which this information is available" – there were roughly 1.1 million PLWH.

It's worth noting that while both the dangers (as well as the relative dangers) of tobacco use continue to become more apparent, these findings wouldn't be so stunning had it not been for the remarkable achievements in drug discovery and development over the last few decades. Being able to contain HIV and AIDS – once considered a certain death sentence – is a medical success story that should never be undervalued.