

AIIMS study finds no link between Covid vaccination and sudden deaths in young adults

Autopsy-based research shows coronary artery disease remains the leading cause; calls for targeted public health measures

A one-year autopsy-based observational study conducted at the All India Institute of Medical Sciences (AIIMS), Delhi, has found [no evidence of a causal link between COVID-19 vaccination and sudden deaths among young adults](#), reaffirming the safety of COVID-19 vaccines.

The study noted that sudden deaths among young adults remain a significant public health concern and call for targeted interventions. It found that underlying coronary artery disease (CAD) continues to be the leading cause of sudden death in this age group, while respiratory and unexplained deaths require further investigation.

Titled *Burden of Sudden Death in Young Adults: A One-Year Observational Study at a Tertiary Care Centre in India*, the research has been published in the Indian Journal of Medical Research, the flagship journal of the Indian Council of Medical Research (ICMR).

The study examined young among adults aged 18 to 45 years over a one-year period and found no statistically significant association between COVID-19 vaccination status and sudden deaths. Cardiovascular causes accounted for the majority of deaths, followed by respiratory and other non-cardiac conditions. The history of COVID-19 illness and vaccination status was comparable across younger and older age groups.

Conducted by the departments of Pathology and Forensic Medicine and Toxicology at AIIMS between May 2023 and April 2024, the study included cases meeting the definition of sudden death, while excluding trauma, suicide, homicide and drug abuse. Each case underwent verbal autopsy, post-mortem imaging, conventional autopsy and histopathological examination, with the cause of death determined by a multidisciplinary team.

Comparative analysis was performed between sudden death in young adults (18-45) and older adults (46-65). A total of 2,214 cases were received at the forensic mortuary during the study period, in which cases meeting the criteria of sudden death were 18. Among the total sudden deaths, sudden death in young (18-45) accounted for 57.2 per cent (103) and sudden death in old (46-65) accounted for 42.8 per cent (77).

The study pointed out that the higher incidence of young coronary artery disease (CAD)-related deaths observed in the present study is particularly concerning and remains under-documented in the Indian context.

Experts opinion

Dr Sudheer Arava, Professor at AIIMS, New Delhi, asserted that the publication of this study assumes particular significance in light of misleading claims and unverified reports suggesting a connection between COVID-19 vaccination and sudden deaths.

He highlighted that the findings do not support such claims and emphasised that scientific, evidence-based research must guide public understanding and discourse.

Health experts reiterated that sudden deaths in young individuals, while tragic, are often related to underlying, sometimes undiagnosed medical conditions, especially cardiovascular diseases, and require focused public health interventions such as early screening, lifestyle modification, and timely medical care.

Dr. Arava added, “Citizens are advised to rely on credible scientific sources and avoid misinformation that may undermine public confidence in proven public health interventions.” The cross-sectional study was conducted at the departments of Pathology and Forensic Medicine and Toxicology, AIIMS, Delhi, from May 2023 to April 2024, and cases meeting the definition of sudden death were included, excluding trauma, suicide, homicide, and drug abuse.

The study cohort included 94 cases of sudden death in young and 68 cases of sudden death in old; the rest (18) were excluded due to extensive autolytic changes. The mean age of young cases was 33.6 years with a male-to-female ratio of 4.5:1, the study stated.

A study from Kerala also reported a substantial burden of CAD-related mortality in the younger population, which may be attributed to changes in work-life, stress, and dietary habits.

In older individuals, CAD is still the single most common cause of sudden death all over the world. Pneumonia and disseminated tuberculosis were the leading respiratory-related causes.

“Despite numerous advancements in diagnostics and therapeutics of tuberculosis, it still remains the common cause of mortality in developing countries, emphasising the persistent gap between disease control efforts and ground-level outcomes,” the study highlighted.

News Source:

<https://www.thehindu.com/sci-tech/health/aiims-study-finds-no-link-between-covid-vaccination-and-sudden-deaths-in-young-adults/article70395676.ece>