GOVERNMENT OF INDIA MINISTRY OF HEALTH AND FAMILY WELFARE DEPARTMENT OF HEALTH RESEARCH

LOK SABHA UNSTARRED QUESTION NO. 1021 TO BE ANSWERED ON 05TH DECEMBER, 2025

INCREASING CASES OF HEART ATTACK AFTER COVID-19

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Will the Minister of **HEALTH AND FAMILY WELFARE** be pleased to state:

- (a) whether it is a fact that there has been a significant increase in the cases of heart attacks, strokes and other serious diseases, especially among the youth, after COVID-19 and if so, the details thereof and if not, the reasons therefor;
- (b) the details of the findings available national/international studies in this regard;
- (c) whether it is a fact that cases of a rare type of blood clots reported in some countries with the Oxford-AstraZeneca vaccine and if so, the details thereof;
- (d) the total number of such cases registered along with the number of deaths recorded in the country;
- (e) the corrective steps taken/proposed to be taken by the Government of India in the vaccination and surveillance systems based on these findings; and
- (f) whether the Government is contemplating to implement any special surveillance program at the national level to reduce the risk of post-COVID heart and myocardial infarction stroke in the country and if so, the details thereof?

ANSWER THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (SHRI PRATAPRAO JADHAV)

(a) and (b): Indian Council of Medical Research (ICMR) has informed that it commissioned two studies through National Institute of Epidemiology (ICMR-NIE) to investigate rising anecdotal reports of sudden unexplained deaths and factors associated with thrombotic events among young adults in India. The first study was conducted among apparently healthy adults aged 18–45 years in India. The multicentric matched case—control study spanned 47 tertiary hospitals across India and recruited 726 cases, including healthy adults with no known comorbidities who died suddenly within 24 hours between 1 October 2021 and 31 March 2023. The study included four matched controls per case by age, gender, and neighbourhood. Trained investigators collected detailed information on recent COVID-19 vaccination (within 42 days), COVID-19 infection and post-COVID conditions, family history of sudden death, smoking, recreational drug use, alcohol

consumption and binge drinking, and vigorous physical activity in the 48 hours preceding death or interview. Key findings of the study are given below –

- i. Receiving one or more doses of the COVID-19 vaccine was found to significantly reduce the risk of unexplained sudden death in young adults, with two doses offering greater protection.
- ii. Previous hospitalization due to COVID-19 was linked to a higher risk of sudden unexplained death by four-fold.
- iii. Other risk factors included a family history of sudden death, binge drinking within 48 hours, and vigorous physical activity shortly before death.

The study clearly shows that COVID-19 vaccines do not cause sudden unexplained deaths; rather, they are protective.

The second study was a multicentric hospital-based matched case—control study in 25 tertiary hospitals across India to determine the association between COVID-19 vaccination, lifestyle, medical risk factors and thrombotic events among young adults. This study included adults aged 18–45 years hospitalized with new arterial or venous thrombotic events, with four hospital controls per case matched by admission date. Among 292 cases (199 myocardial infarctions, 67 ischemic strokes, and 26 venous events) and 1,168 controls, cases were mostly male and aged 31–45 years. The key finding of the study are listed below-

- i. Thrombotic events in young adults were mainly associated with comorbidities, prior thrombotic history, smoking, and previous hospitalization due to COVID-19.
- ii. No definitive association between thrombotic events was observed after one or two doses of CovishieldTM or CovaxinTM.
- iii. In young adults, thrombotic events were driven by traditional risk factors and prior COVID 19 illness.

All India Institute of Medical Sciences (AIIMS) Delhi has informed that, there is evidence that COVID-19 has caused an increase in heart attacks, strokes, and other serious cardiovascular diseases, especially among the youth and children, with risks elevated regardless of prior health status. Studies show COVID-19 infection increases risks of myocarditis, heart failure, arrhythmias, and hypertension, with young people facing long-lasting heart and inflammatory complications more frequently than before the pandemic. This rise in cardiovascular issues is linked to COVID-19's inflammatory effects on blood vessels and the heart, as well as disruptions caused by the pandemic.

(c): AIIMS Delhi has further informed that as per an international scientific report, rare cases of unusual blood clots combined with low levels of blood platelets have been reported following Oxford-AstraZeneca Covid-19 vaccine. These very rare side effects involved blood clots primarily in the brain and abdomen, usually occurring within two weeks of vaccination, mostly in women under 60 years of age. The European Medicines Agency (EMA) stated the overall benefits of the vaccine outweigh these rare risks. EMA's scientific assessment underpins the safe and effective use

of COVID-19 vaccines. The vaccine is effective at preventing COVID-19 and reducing hospitalisations and deaths.

(d) to (f): Adverse Event Following Immunization (AEFI) is any untoward medical occurrence which follows immunization and which does not necessarily have a causal relationship with the vaccine and vaccination. These are reported through the AEFI surveillance system. Adverse Event Following Immunization are monitored through a well-structured & robust AEFI surveillance system. Investigations and causality assessment help in establishing a cause and effect relationship.

National Centre for Disease Control has informed that the, Integrated Disease Surveillance Programme (NCDC-IDSP) is a programme under National Health Mission (NHM) with primary mandate to strengthen & maintain a decentralized laboratory-based IT-enabled disease surveillance system. It has transitioned to a near real-time, GIS-enabled platform – Integrated Health Information Platform (IHIP) since 2021. Programme has been actively involved in the surveillance and monitoring of the COVID-19 pandemic. It plays a role in compiling the Covid data i.e. cases, recovered and deaths which are reported by the States/UTs.
