IIT-Hyderabad proposes 'Ambu Bags' to offset surge in demand for ventilators

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HYDERABAD: As the Central and State governments brace themselves to fight Covid-19 by readying thousands of ventilators across the country to deal with critical cases, IIT Hyderabad Director Prof BS Murty on Monday suggested that 'bag valve mask' can be used as an alternative to meet any surge in demand for ventilators. IIT-H has already developed a design of the bag valve mask.

In a media release on Monday, Prof Murty said that while conventional ventilators are expensive, hard to produce and not portable, the 'bag valve masks' are inexpensive, easy to use and portable small devices, that can be used to deliver breathing support in emergency situations. These are also known as 'Ambu Bags', and can be manufactured for less than Rs 5,000 which is one-hundredth the cost of a conventional machine.

However, Prof Murty added caveats that these bags need to be tested first for their effectiveness and durability. The present Ambu Bag designs are untested, uncertified and need to be tested for their continuous and faultless 24x7 operation for at least one month.

Prof V Eswaran, Department of Mechanical and Aerospace Engineering, IIT-H, said, "We are proposing that the Centre constitute a highly empowered taskforce, which will carry out tasks needed to start production of these low-cost ventilators, within a maximum time-frame of two months. The production rate thereafter would need to be of several lakh units per week."

The professors pointed out that assuming a low six per cent infection rate, if COVID-19 advancement continues in the Indian population of 1.3 billion, it would mean that around 80 million would get affected. Of these, at least five per cent (four million patients) would require ventilators.

Source: The New Indian Express

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