

Press Note

Dissemination Workshop on Developing a National Heart Attack Program

Indian Council of Medical Research (ICMR) has organised a 1 day workshop to disseminate the findings of project **"The Tamil Nadu collaborative assertive reperfusion initiative for ST-segment elevation myocardial infarction (TN-STEMI)"** on 18th of January 2017 at National Institute of Pathology, New Delhi. This meeting will be inaugurated by Dr Sowmya Swaminathan, Secretary, DHR and DG, ICMR and addressed by experts from Ministry of Health, leading cardiologist working in STEMI care and the implementing agencies – STEMI India and Tamilnadu Health Systems Project (TNHSP). The meeting is expected to be attended by teams of State Health Secretaries/ State Health Department senior officials and cardiologists from public sector hospitals

India has the highest burden of heart attack patients in the world. STEMI (ST Elevation Myocardial Infarction) is a serious form of heart attack in which a coronary artery is completely blocked and a large part of the heart muscle is unable to receive blood. Patients in India who suffer from heart attack are younger (56.3 years) and have a higher rate (>60.6%) of STEMI than patients in developed countries. It is expected that more than 2 million STEMI occurs every year in India. Since a large number of these patients are poor, they are less likely to get evidence-based treatments and have greater deaths at 30-day of the event. Reducing delays in access to hospital care and ensuring provision of affordable treatments could reduce morbidity and deaths.

"The Tamil Nadu collaborative assertive reperfusion initiative for ST-segment elevation myocardial infarction (TN-STEMI)" was a project to develop Heart Attack Care Pathway and was supported by ICMR. It was implemented in Tamilnadu by STEMI India – a not for profit organization. It had the active participation of the Tamilnadu Health Systems Project (TNHSP) in its implementation.

The year-long project utilized a 'Hub and Spoke' model and linked various public and private hospitals to deliver timely and appropriate care to patients with heart attacks. The Care pathway developed under this project is a unique system for the treatment of heart attack. The western model attempts to transport all patients with heart attacks to a major hospital for cardiac catheterisation and Primary PCI (coronary stenting without using a clot buster drug). However, the lack of trained doctors in remote areas and the distance from specialized heart attack care facilities hampers the process of providing state of art care to heart attack patients in our settings. The STEMI-TN study combines Primary PCI and the Pharmaco-invasive (using clot buster drug and then transporting patients to PCI hospital). This ensures that patients who are in rural areas and small towns can access state-of-art treatment for heart attack, thereby reducing morbidities and mortalities in these patients. The project's was successful due to :

1. Use of an innovative indigenously developed technology, an IT-enabled, cloud-based ECG and monitoring device connecting a consultant cardiologist to paramedics and doctors in remote area for appropriately managing the heart attack patients
2. Availability of the '108' ambulance services linked to this heart attack program for the first time in the country

3. Linking the BPL insurance to this program and thereby ensuring that the poor are also able to also access this program

The model– now known as the ‘STEMI India Model’ – could significantly reduce deaths and improved outcomes in over 2,500 patients with STEMI heart attack. The benefits were more pronounced among the rural poor, an important area of health care need in our country. The project results if up scaled to other states have a huge potential to overcome infrastructure and manpower deficiencies for developing world class system of care for STEMI.

The two largest cardiology and physician scientific bodies in India, The Cardiological Society of India and the Association of Physicians of India, respectively, have joined STEMI India in endorsing this protocol and recommending it is as the ideal model for a national STEMI Programme.

The aim of the meeting is to disseminate the findings of this TN-STEMI study. The participants will discuss ways and means to develop a similar program in their respective states. It is expected that the dissemination meeting will provide the impetus and tools to each state to start a heart attack program in their respective states.