Abstract: **P301**

**Reduced ischemic time of acute coronary syndrome patients with Indonesia telecardiology network: insights and challenges from a three year single center experience in West Jakarta**

**Authors:**
AP Sunjaya¹, AF Sunjaya¹, A Priyana², ¹Tarumanagara University, Faculty of Medicine - Jakarta - Indonesia, ²Tarumanagara University-Cengkareng General Hospital, Department of Cardiology - Jakarta - Indonesia,

**Topic(s):**
e-Cardiology - Other

**Citation:**

**Background**

Acute Coronary Syndrome (ACS) is the leading cause of morbidity and mortality globally and in Indonesia. Reduced time to reperfusion is crucial in slowing cardiac myocardium necrosis and improving prognosis in ACS patients. Previous studies in Indonesia have shown an inefficient transfer time for ACS patients. The use of telecardiology shows great potential to bridge this inefficiency and the Indonesian STEMI network (iSTEMI) was hence introduced in 2010.

**Purpose**

This study aims to evaluate the insights and challenges faced by iSTEMI telecardiology network over the past 3 years based on a single center experience in West Jakarta.

**Methods**

Data was obtained from the West Jakarta iSTEMI Network database acquired from the Department of Cardiology, General Hospital from the period of 30th June 2014 to 30th June 2017.

**Results**

A total of 2,017 ACS patients were admitted into the emergency department of the participating health centers during the period. Cengkareng General Hospital was the leading referral center with regards to the cases managed over the 3 periods, handling almost 50% of all cases in the region. Nine hundred and eighty-six ACS patients (48.9%) was subsequently diagnosed as STEMI, 85% of them were directly diagnosed by a cardiologist in the network of which, 437 (44.3%) of them were referred for reperfusion. While door to device time has slightly increased over the years from 104 minutes in year one to 115 minutes in the third year, door to needle time has also reduced to an almost equal extent from 80 minutes in year one to 75 minutes in the third year. Overall, over the three years patient ischemic time had reduced from a median of 330 minutes to 275 minutes, which was lower compared to the 416 minutes average ischemic time of the National Central Cardiovascular Center.

**Conclusion**

This study has shown a reduction in ischemic time in ACS patients through the use of a telecardiology network. Further development of telecardiology networks in Indonesia is therefore recommended to improve the quality of ACS care and save lives.

<table>
<thead>
<tr>
<th>Variable</th>
<th>1st Year (N=147)</th>
<th>2nd Year (N=159)</th>
<th>3rd Year (N=95)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onset - FMC</td>
<td>120 (25-640)</td>
<td>150 (21-710)</td>
<td>150 (15-700)</td>
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<tr>
<td>Transfer Time</td>
<td>155 (40-480)</td>
<td>120 (21-450)</td>
<td>105 (60-615)</td>
</tr>
</tbody>
</table>

FMC - first medical contact
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<td>Door to Needle</td>
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<td>27-325</td>
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