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Komentar

Seeking the difference between starting and established PCI center

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The study by Juwana et al[1] is looking for primary PCI results that were conducted in a starting PCI center. The authors thought that as PCI results depend on center experience then it is mandatory to study how good it is when performed in a new or starting PCI center. The question arise is whether primary PCI results would really be differed? If it is so, what make it difference? Some variables need to be elaborated in this regard that mainly comprised of operator, paramedics, tools and devices.

Though a study by Politi et al[2] suggest that expertise and experience of the whole professional team, rather than just of the individual operator, play a major role of PCI outcome, most of studies indicate the operator experience is the main issue.[3-6] It is why that ACC/AHA guideline strictly stated that only operator who has sufficient experience i.e. 75 PCI per year allowed to do primary PCI.[7] In addition, it is recognized that there are limitations in the application of the risk-adjustment methodology in the evaluation of rare events and of low-volume operators, and that there might be substantial variations in the volume–outcome relationship. For operators that do not meet a threshold of 75 cases per year measured in 2-year intervals, it is recommended that a case-by-case review, case selection, and prior experience including the total number of cases in a lifetime career be included in their evaluation. They could also partner with higher volume operators to perform cases together to gain further experience.[7] In term of PCI outcomes, Cinere Hospital has done a good job by presentation of experienced consultant cardiologist from Zwolle, Netherland. It is clearly demonstrated that proctorship is the key of success. And this study again showed that experienced operator, which is Netherland Cardiologist, rather than hospital volume mainly play role for excellent PCI outcomes. Srinivas et al clearly stated that during primary PCI, physician experience significantly modifies the hospital volume-outcome relationship. Therefore, policymakers need to consider physician experience when developing strategies to improve access to primary PCI.[8]

Others than personnel issues, this study reveal some interesting findings. First of all is mean time between onset of chest pain and admission which was 369 ± 388 minutes and mean time between admission and balloon inflation which was 258 minutes. External factors such as financial support, traffic and ambulance facility might be major obstacle resulted in delay of hospital admission, however hospital internal factors mainly as the cause of door to balloon delay. Recent study conducted by other hospital in the same city found median door to balloon of 98 minutes.[9] Special fast track procedure for STEMI patient, cardiology resident as front-liner at emergency room and dedicated 24 hours catheterization laboratory team may contribute to its excellent door to balloon time. Second thing is that subjects in this

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study are not simple cases. More than 10% of cases experienced Killip class 4 at admission and 33% of all cases are multivessel disease. However, subgroup analysis could not be done as sample size is under power for those purposes. On the basis of those data we know that complex cases is not rare during primary PCI in Jakarta which warrant all hospital with PCI facility need to be equipped appropriately to overcome such complex cases.

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