

CORONARY ARTERY DISEASE IN YOUNG PEOPLE

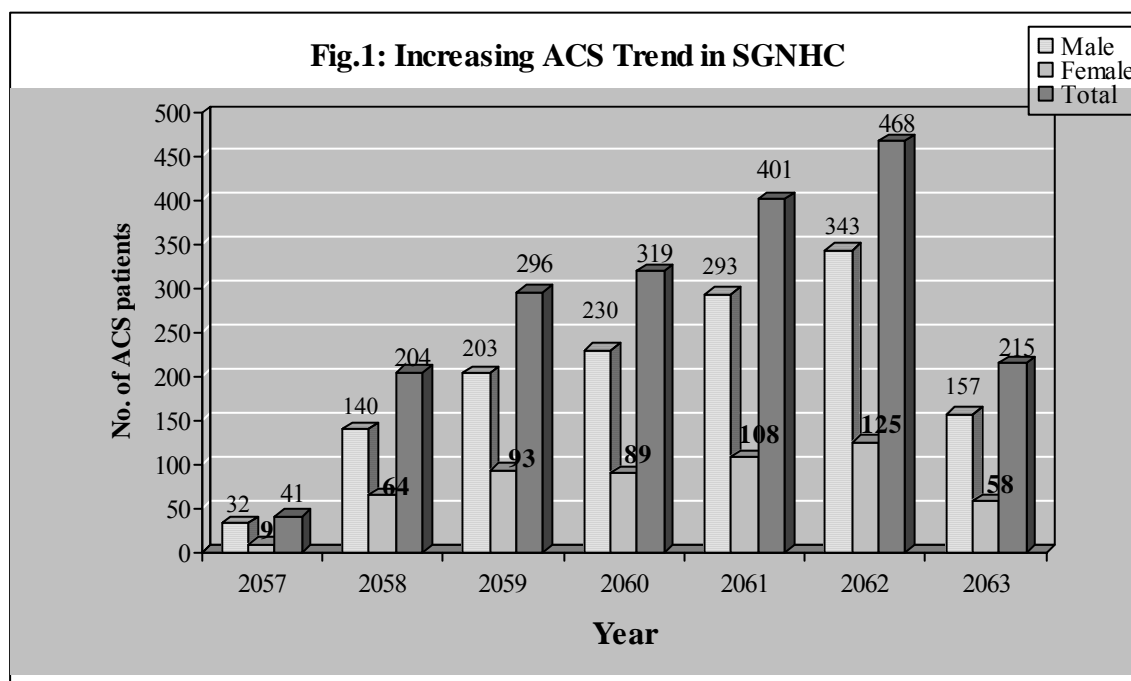
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It has been shown in western population that more and more young people are getting coronary artery disease. The same scenario has been observed in our CCU in the recent years. However, in our country, there is no any formal data regarding this issue. So, we have conducted the retrospective analysis of patients with Acute Coronary Syndrome who were admitted in SGNHC from 9 Jestha 2057 to 20 Bhadra 2063. There were altogether 1944 ACS patients. Male preponderance was clearly seen as 71.9 % (1398) were male and only 28.1 % (546) were female. The mean age was 60 years, male 59 years and female 63 years (Table 1). There was dramatic increment in ACS patients from year 2057 to 2063 (Figure 1). However, there was no significant difference between male female ratio since 2057.

Table1: Demographic features of study population

Total No. of Pts	1944
Male	1398 (71.9%)
Female	546 (28.1%)
Mean age (Yrs)	60.39 ± 12.58
Male	59.31 ± 12.43
Female	63.17 ± 12.55



There was significant decreasing trend in mean age; 61 years in the year 2057 and 58 years in the year 2063, ($p=0.002$), figure 2. Increasing trend of young patients with ACS (<45 years) is seen since 2057, figure 3 ($P=0.004$).

Fig. 2: Decreasing pattern of mean age since 2057

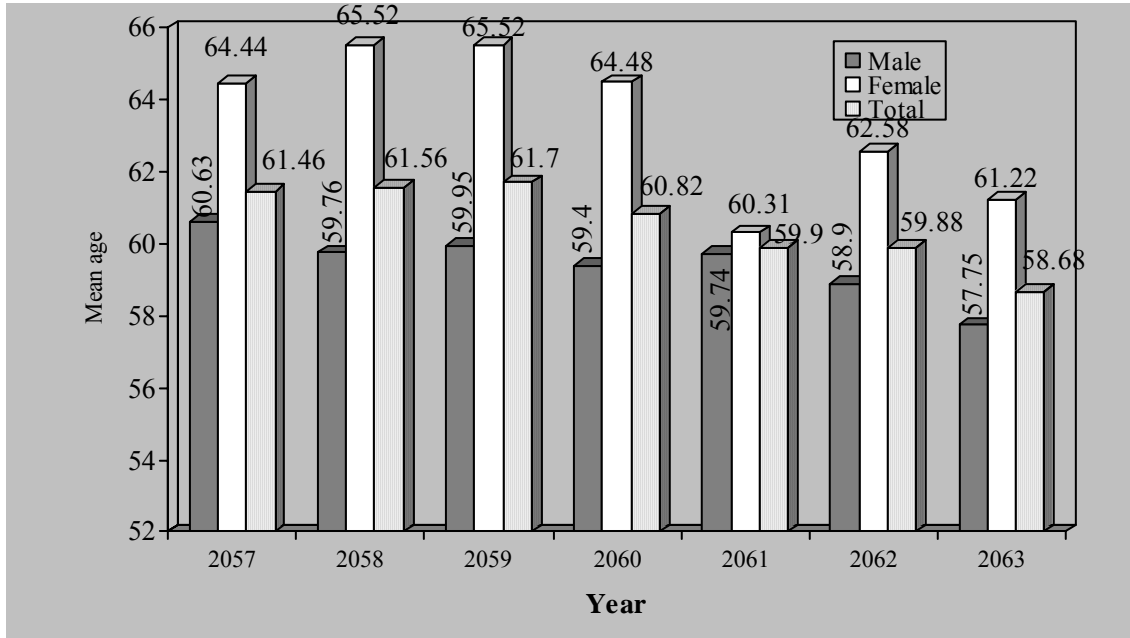
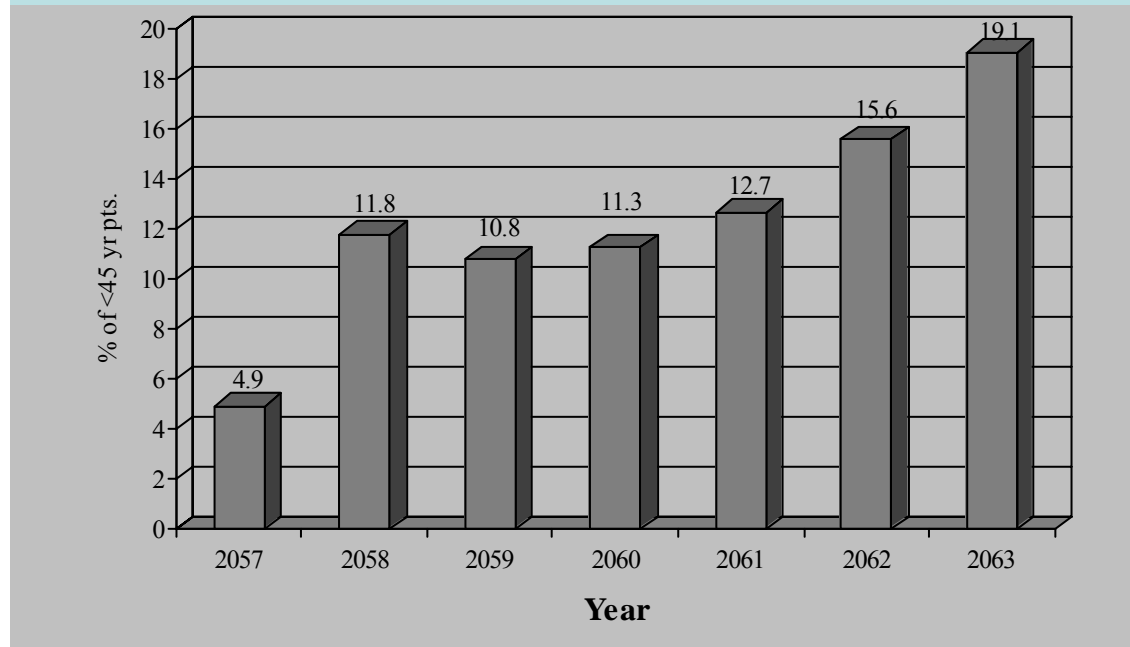


Fig. 3: Increasing Trend of Younger ACS Patients Admitted in SGNHC



Among all the patients admitted in SGNHC, 14% of male and 10% of female were less than 45 years. Thus, according to the current definition of premature CAD, almost 19.5 % of all ACS patients were turned out to be premature CAD.

Table 2: Age wise distribution of ACS patients

	≤45 Yrs (%)	46-55yrs (%)	56-65 yrs	≥66 Yrs (%)	Total
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			(%)		
Male	201 (14)	342 (24)	417 (29)	438 (31)	1398
Female	58 (10)	121 (22)	153 (28)	214 (39)	546
Total	259 (13)	463 (23)	570 (29)	652 (33)	1944

Premature CAD (Male<45 yrs & Female < 55yrs)	19.55%
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The reason behind the increasing number of young CAD is still unclear. The possible explanation might be due to modifiable risk factors, which has not been controlled, especially smoking. Moreover most of the young male ACS patients were heavy smokers. Apart from the traditional risk factors, there might be other non-identified or un-established risk factors in these patients. Further, it should be noted that some younger CAD might have non-atherosclerosis pathology, like Kawasaki disease, embolic event, vasculitis, connective tissue disease etc. Thus detailed diagnostic examinations regarding some risk factors like hsCRP, Lp(a), Homocysteine as well as search for non-atherosclerotic pathology would be helpful in these patients.

ATP III has defined age more than 55 years in male and more than 65 years in female to be a cardiovascular risk factor. But, it has been observed that there are significant proportions of younger people who are vulnerable to coronary artery disease. Therefore, although older people have higher probability of getting CAD, younger people also do bear certain risk. And thereby, the focus of primary prevention should not only be elderly people, but also younger people.