ARC Journal of Cardiology
Volume 10, Issue 3, 2025, PP 22-28
ISSN No. (Online) 2455-5991
DOI: https://doi.org/10.20431/2455-5991.1003004
www.arcjournals.org

Clinical Spectrum and In-hospital Mortality of Patients Admitted in Cardiology Department: Experience from a Tertiary Care Hospital, Bangladesh

Dr. Mohammad Sarwar Alam[1*], Dr. Md. Kamal Parvej[2], Dr. Md. Saiful Islam[3], Dr. Sushanta Barua[4], Dr. Shubhrangshu Sarkar[5], Dr. Md Kamal Hosen[6], Dr. AKM Munim Khan[7], Dr. Md. Khalequzzaman[8]

[1]*Associate Professor, Department of Cardiology, National Institute of Cardiovascular Diseases (NICVD), Dhaka, Bangladesh*

[2]*Assistant Registrar, Department of Cardiology, National Institute of Cardiovascular Diseases (NICVD), Dhaka, Bangladesh*

[3]*Associate Professor, Department of Cardiology, Sir Salimullah Medical College Mitford Hospital, Dhaka, Bangladesh*

[4]*Assistant Registrar, Department of Cardiology, National Institute of Cardiovascular Diseases (NICVD), Dhaka, Bangladesh*

[5]*Resident, Department of Cardiology, Sir Salimullah Medical College Mitford Hospital, Dhaka, Bangladesh*

[6]*Resident, Department of Cardiology, Sir Salimullah Medical College Mitford Hospital, Dhaka, Bangladesh*

[7]*Resident, Department of Cardiology, National Institute of Cardiovascular Diseases (NICVD), Dhaka, Bangladesh*

[8]*Professor, Department of Cardiology, National Institute of Cardiovascular Diseases (NICVD), Dhaka, Bangladesh*

Received: 04 November 2025 Accepted: 19 November 2025 Published: 26 November 2025

Corresponding Author:** ***Dr. Mohammad Sarwar Alam, *Associate Professor, Department of Cardiology, National Institute of Cardiovascular Diseases (NICVD), Dhaka, Bangladesh*

Abstract

Background: *Cardiovascular diseases (CVDs) are the leading cause of death worldwide, disproportionately found in low- and middle-income countries such as Bangladesh. There is so far limited hospital-based evidence on the clinical profile and outcomes of cardiology inpatients that is available, but which remains essential for planning health system priorities.*

Aim of the study: *The aim of this study was to assess the clinical spectrum and in-hospital mortality of patients admitted in cardiology department.*

Methods: *This cross-sectional observational study was conducted in the Department of Cardiology, Sir Salimullah Medical College Mitford Hospital, Dhaka, Bangladesh, from July 2023 to June 2024. Total 3,260 patients admitted to the cardiology department during the study period were included in the study.*

Result: *Patients' average age was 57.1 ± 14.7 years, and 54.3% of them were between 50–69 years of age. 65.8% of the patients were men. The highest diagnostic groups were acute coronary syndromes (NSTEMI 27.2%, STEMI 26.7%, unstable angina 11.1%), and heart failure (12.4%). Overall, 6.8% of patients died during hospital stay. Mortality was significantly higher among older patients (p = 0.001), as well as among those with STEMI (10.2%) and heart failure (10.9%). Mortality was not significantly influenced by gender.*

Conclusion: *The study brings to light the predominance of ACS and heart failure in cardiology admissions with high in-hospital mortality, especially in the old and those with STEMI or heart failure. The results illustrate the need for improvement in early diagnosis, prompt management, and resource allocation to prevent unfavorable outcomes in resource-deprived settings.*

Key words: *Clinical Spectrum, In-hospital Mortality, and Cardiology Department.*

1. INTRODUCTION

Cardiovascular diseases (CVDs) remain the most prevalent cause of morbidity and mortality worldwide, with an estimated 17.9 million deaths annually, most of which take place in low- and middle-income countries (LMICs).[1]

The burden has been slowly shifting to these countries due to demographic transition, urbanisation, and an increasing prevalence of traditional risk factors such as hypertension, diabetes, obesity, and smoking.[2] Recent Global Burden of Disease (GBD) analyses document

that South Asia, and Bangladesh, have experienced some of the fastest increases in age-standardised CVD mortality rates, with Bangladesh alone recording an 81% increase in CVD mortality between 1990 and 2019.[1]

In the South Asian context, the cardiovascular health profile is particularly complex. South Asians tend towards earlier onset and more severe atherosclerotic disease compared to many other groups.[3] Ischaemic heart disease, heart failure, and stroke are now among the leading causes of disability-adjusted life years lost in the region.[4] In Bangladesh, the disease burden has been increasing relentlessly where ischaemic heart disease and stroke have persistently been the two foremost causes of death, and hypertension and diabetes have become increasingly prevalent as underlying risk factors.[5] These impose a heavy strain on tertiary cardiology services, which are the referral units for acute coronary syndromes (ACS), decompensated heart failure, and arrhythmias.

Despite the enormous burden, Bangladesh's health system problems limit optimal cardiovascular care. The primary PCI, which is the gold standard for STEMI, is available in only a few tertiary hospitals and is not within the reach of most of the population due to cost and logistic reasons.[6] Hence, thrombolytic therapy remains the most common reperfusion strategy, with delayed presentations also reducing its effectiveness.[7] Pre-hospital delays, due to limited awareness, poor ambulance availability, and referral system inefficiencies, remain rampant and are a significant cause of excess mortality.[8] Mechanical circulatory support and intensive care unit (ICU) beds are also very limited, placing restrictions on the treatment of cardiogenic shock and severe heart failure.[9] These limitations reflect systemic constraints that exacerbate already poor outcomes in high-risk patients.

A number of hospital-based studies in Bangladesh have attempted to quantify admission profiles and in-hospital outcomes. For example, Rafi et al.[10] reported an ACS registry in a tertiary cardiac center, showing high in-hospital mortality among STEMI patients. Akhtar et al.[11] also reported 6.2% in-hospital mortality among STEMI referrals in Dhaka. Nasrin et al.[12] and Rahman[13] have reported results of PCI cohorts with particular interest in complications and survival of specific subgroups. Although revealing, these studies are of limited focus, focusing on ACS or PCI subgroups rather than the big picture of the whole clinical spectrum of cardiology admissions. More significantly, there is very few large-scale systematic reports examining both disease heterogeneity and mortality determinants within heterogeneous diagnostic groups in tertiary cardiology practice in Bangladesh. This represents a major evidence gap regarding understanding of the overall inpatient burden. Addressing this gap is of utmost importance because, the in-hospital clinical profile of cardiology patients is revelatory of evolving disease epidemiology in Bangladesh and identification of in-hospital mortality predictors is vital for triaging high-risk patients and for directing therapy in resource-limited environments. Finally, such data educate global discourse on cardiovascular disease management in LMICs, where health system limitations require context-specific interventions.[14,15] Therefore, the present study attempts to characterize the clinical spectrum of cardiology admissions and quantify in-hospital mortality, identifying clinical and procedural factors contributing to adverse outcomes in a Bangladeshi tertiary care hospital.

1.1. Objectives

To assess the clinical spectrum and in-hospital mortality of patients admitted in cardiology department.

2. Methods And Materials

This cross-sectional observational study was conducted in the Department of Cardiology, Sir Salimullah Medical College Mitford Hospital, Dhaka, Bangladesh, over a 12-month period from July 2023 to June 2024. All patients admitted to the cardiology department during the study period were considered for inclusion, and after applying eligibility criteria and excluding incomplete records, a final sample size of 3,260 patients were analyzed. Data were collected retrospectively from hospital admission registers, patient files, and electronic records, covering demographic characteristics, clinical presentations, diagnoses, and in-hospital outcomes. Cardiovascular conditions were categorized into specific groups such as ST-elevation myocardial infarction (STEMI), non-ST-elevation myocardial infarction (NSTEMI), unstable angina, heart failure, hypertension, valvular heart disease, arrhythmias, congenital heart disease, pericardial disease, and other miscellaneous conditions. In-hospital mortality was defined as all-cause death occurring during

hospitalization, and survival status at discharge was recorded for all patients. Statistical analysis was performed using SPSS version 26.0 (IBM Corp., Armonk, NY, USA).

Statistical analysis was performed using descriptive statistics for baseline characteristics and frequency distributions, while chi-square tests were applied to assess associations between age, gender, clinical features, and mortality outcomes. A p-value <0.05 was considered statistically significant. Ethical approval for the study was obtained from the institutional review board of Sir Salimullah Medical College Mitford Hospital, and a written consent of each patient was taken.

3. RESULTS

As shown in Table I, the age of the participants ranged from 18 to 110 years, with a mean age of 57.1 ± 14.7 years. The majority of patients were in the age group of 50–69 years (54.29%), followed by those aged 30–49 years (25.77%) and 70–89 years (16.13%). Younger patients aged 18–29 years (2.70%) and very elderly patients above 90 years (1.10%) constituted only a small fraction of admissions. Figure 1 demonstrates the gender distribution of the study patients. In this study, males predominated significantly (65.77%) compared to females (34.23%). The clinical spectrum of admitted patients shown in table-II revealed that acute coronary syndromes (ACS) formed the largest share of diagnoses. Non-ST elevation myocardial infarction (NSTEMI) accounted for 27.18% of cases, followed closely by ST elevation myocardial infarction (STEMI) at 26.69%, while unstable angina (UA) was observed in 11.07% of patients. Heart failure was reported in 12.39% of patients. Hypertension as a primary clinical presentation comprised 6.96% of admissions. Less common conditions included valvular heart disease (3.34%), arrhythmia (1.69%), congenital heart disease (1.32%), and pericardial disease (0.43%). A further 8.77% of patients were grouped under miscellaneous or other cardiac conditions.

Table-III highlights the in-hospital outcomes. Overall mortality was recorded at 6.78% (221 patients), while the vast majority (93.22%) survived to discharge.

Table-IV presents that analysis of mortality across age groups showed a statistically significant association (p=0.001). The highest mortality was observed among patients aged 70–89 years, where 10.65% died during hospitalization. In contrast, mortality was lowest among those aged 18–29 years (3.41%) and 30–49 years (4.64%). Patients aged 50–69 years showed an intermediate mortality of 6.81%, while those aged 90 years and above had an 8.33% mortality rate.

Table-V reveals the association between gender distribution and in-hospital outcomes. Mortality among male patients was 7.0%, whereas female patients had a slightly lower mortality rate of 6.36%. But there was to statistically significant difference (p=0.4905).

When clinical features were examined in relation to in-hospital mortality in table-VI, a strong association was noted (p<0.001). Mortality was highest in patients with STEMI (10.23%) and heart failure (10.89%), followed by those with arrhythmias (9.09%). Patients with NSTEMI showed a mortality rate of 6.32%, whereas unstable angina (1.66%) and hypertension (2.64%) were associated with comparatively lower in-hospital deaths. Interestingly, no mortality was recorded among patients with pericardial diseases, while congenital and valvular heart disease carried modest risks (4.65% and 5.50%, respectively). Patients in the "other" category had a mortality rate of 2.41%.

Table-I. *Age distribution of the study patients (N=3260)*

Age (in years)	Number of patients	Percentage (%)
18-29	88	2.70
30-49	840	25.77
50-69	1770	54.29
70-89	526	16.13
90-110	36	1.10
Mean ± SD	57.1 ± 14.7	
Range	18 – 110	

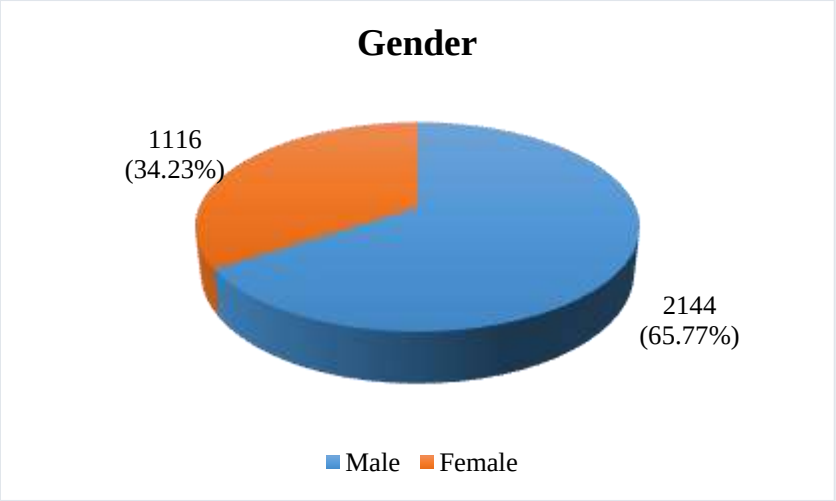

Figure 1. *Gender distribution of the study patients (N=3260)*

Table-II. *Clinical profile of the study patients (N=3260)*

Clinical features	Number of patients	Percentage (%)
Non-ST elevation myocardial infarction	886	27.18
ST elevation myocardial infarction	870	26.69
Heart failure	404	12.39
Unstable angina	361	11.07
Hypertension	227	6.96
Valvular heart disease	109	3.34
Arrhythmia	55	1.69
Congenital heart disease	43	1.32
Pericardial disease	14	0.43
Others	291	8.93

Table-III. *Distribution of in-hospital mortality of the study patients (N=3260)*

In-hospital mortality	Number of patients	Percentage (%)
Dead	221	6.78
Not Dead (Alive)	3039	93.22

Table-IV. *Association between age groups and in-hospital mortality*

Age Group	Alive (n=3039)	Dead (n=221)	Total (N=3260)	P-value
18–29	85 (96.59%)	3 (3.41%)	88 (2.70%)	0.001*
30–49	801 (95.36%)	39 (4.64%)	840 (25.77%)	
50–69	1650 (93.22%)	120 (6.78%)	1770 (54.29%)	
70–89	470 (89.35%)	56 (10.65%)	526 (16.13%)	
90–110	33 (91.67%)	3 (8.33%)	36 (1.10%)	

P-value calculated using chi-square test

*= significant

Table-V. *Association between gender distribution and in-hospital mortality*

Gender	Alive (n=3039)	Dead (n=221)	Total (N=3260)	P-value
Male	1994 (93.00%)	150 (7.00%)	2144 (65.77%)	0.4905
Female	1045 (93.64%)	71 (6.36%)	1116 (34.33)	

P-value calculated using chi-square test

Table-VI. *Association between clinical features and in-hospital mortality*

Clinical Feature	Alive (n=3039)	Dead (n=221)	Total (N=3260)	P-value
Non-ST elevation myocardial infarction	830 (93.68%)	56 (6.32%)	886 (27.18%)	<0.001*
ST elevation myocardial infarction	781 (89.77%)	89 (10.23%)	870 (26.69%)	
Heart failure	360 (89.11%)	44 (10.89%)	404 (12.39%)	
Unstable angina	355 (98.34%)	6 (1.66%)	361 (11.07%)	
Hypertension	221 (97.36%)	6 (2.64%)	227 (6.96%)	

Valvular heart disease	103 (94.50%)	6 (5.50%)	109 (3.34%)	
Arrhythmia	50 (90.91%)	5 (9.09%)	55 (1.69%)	
Congenital heart disease	41 (95.35%)	2 (4.65%)	43 (1.32%)	
Pericardial disease	14 (100.0%)	0 (0.0%)	14 (0.43%)	
Others	284 (97.59%)	7 (2.41%)	291 (8.93%)	

P-value calculated using chi-square test

*= significant

4. DISCUSSION

The present study on the patients who were admitted to the cardiology department of a tertiary hospital in Bangladesh provides a useful insight on the clinical spectrum of admissions and in-hospital outcomes. The mean age of the cohort was 57.1 years, with the majority being between the ages of 50–69 years (54.29%) and followed by middle-aged individuals aged 30–49 years (25.77%). There was a minority proportion of admissions from the very elderly (>90 years old, 1.1%) and from young adults (18–29 years, 2.7%). The age distribution follows similar trends to other South Asian hospital-based studies, which have all consistently described cardiovascular disease to disproportionately affect middle-aged and older adults, both due to rising levels of risk factors and delay of preventive intervention within the region.[16,17] As with the earlier findings, more males than females were in our collection (65.77%), a mirror of gender disparity in disease prevalence, healthcare access, and risk exposure.[18]

On clinical presentation, acute coronary syndromes (ACS) made up the lion's share of admissions, and NSTEMI (27.18%) and STEMI (26.69%) alone contributed over half of all patients. This finding is in line with other Bangladeshi tertiary cardiac center reports where ACS remains the most prevalent presentation among cardiology inpatients.[18] Unstable angina accounted for 11.07% of admissions, followed by heart failure with 12.39%, and hypertension (6.96%) and valvular heart disease (3.34%) respectively. Similar distributions have additionally been noted in South Asian registries in the region, with an emphasis on the common epidemiological transition in low- and middle-income countries, as ischemic heart disease and its complications increasingly dominate the burden of cardiovascular diseases.[19] Our series' rate of heart failure is consistent with a Bangladeshi tertiary cardiac center's retrospective study of Rahman et al.[20], where ischemic cardiomyopathy and ACS were among the principal causes of heart failure, typically with attendant high morbidity and resource use. Less common but noteworthy causes were arrhythmias (1.69%), congenital heart disease (1.32%), and pericardial disease (0.43%), as testimony to the range of cardiac pathologies encountered in a referral center. In-hospital mortality within the present cohort was 6.78%, as is largely comparable with published Bangladesh and other South Asian series. Cader et al.[18], in a tertiary registry of ACS, experienced 6.9% in-hospital mortality, while Prabhakaran et al.[18] experienced 5–10% mortality among ACS patients from across India. Age was a separate predictor of mortality in the current study (p=0.001), and the highest deaths were in the age group of 70–89 years (10.65%). This age gradient in mortality is consistent with the literature that older patients present to the hospital later, with greater comorbidities, and are at higher risk of complications.[21] Unusually, the very old (≥90 years) had a slightly lower rate of death (8.33%) than the 70–89 years group, possibly because of survivor bias or the more selective presentations of very old patients. Gender mortality differences were not statistically significant in our cohort (7.0% in men vs. 6.36% in women, p=0.49). This contrasts with a few registries who have reported higher female mortality after ACS due to late presentation and suboptimal use of reperfusion therapy.[22] Inability to demonstrate material disparity in the current research may be a marker of evolving practice patterns and relatively standardized inpatient provision of care on admission to hospital. On analysis of particular clinical presentations and mortality, there was extensive heterogeneity (p<0.001). STEMI (10.23%) and heart failure (10.89%) had highest mortality, and this was followed by arrhythmias (9.09%). This is in concordance with international and regional literature, where STEMI is the most fatal acute cardiac presentation due to extensive myocardial injury and delayed access to reperfusion.[18,23] Similarly, heart failure admissions are similarly related to high short-term mortality, as reported in Bangladeshi as well as global literature, reflecting the advanced stage of disease and coincidence of ischemic heart disease.[20,24] Our NSTEMI cohort experienced a 6.32% mortality

rate, lower than in STEMI but still clinically significant; Chakma et al.[25] had comparable data, noting that the in-hospital risk was higher for subgroups with elevated uric acid or comorbidities. Unstable angina (1.66%) and hypertension (2.64%), on the other hand, had much lower mortality, as in accordance with their less severe pathophysiology and usually stable hospital course. Notably, no deaths were recorded among patients with pericardial disease, whereas congenital and valvular conditions showed moderate mortality risks (4.65% and 5.5%, respectively). All of these data show that while ischemic syndromes remain the predominant causes of admission and mortality, non-ischemic conditions such as heart failure and arrhythmias also make significant contributions to inpatient burden.

5. Limitations of the Study

In our study, study population was selected from one center in Dhaka city, so may not represent wider population. The study was conducted at a short period of time.

6. Conclusion

The present study highlights the diverse clinical spectrum and notable in-hospital mortality among patients admitted to a tertiary cardiology department in Bangladesh. Acute coronary syndromes and heart failure dominated admissions, with higher mortality observed in older age groups and those with STEMI or heart failure. Male patients predominated, though gender did not significantly influence outcomes. These findings underscore the urgent need for improved early detection, timely interventions, and strengthened hospital resources to reduce mortality and enhance cardiovascular care in resource-limited settings.

References

[1] Islam SM, Uddin R, Das S, Ahmed SI, Zaman SB, Alif SM, Hossen MT, Sarker M, Siopis G, Livingstone KM, Mehlman ML. The burden of diseases and risk factors in Bangladesh, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. The Lancet Global Health. 2023 Dec 1;11(12):e1931-42.

[2] Bowry AD, Lewey J, Dugani SB, Choudhry NK. The burden of cardiovascular disease in low-and middle-income countries: epidemiology and management. Canadian Journal of Cardiology. 2015 Sep 1;31(9):1151-9.

[3] Joseph P, Leong D, McKee M, Anand SS, Schwalm JD, Teo K, Mente A, Yusuf S. Reducing the global burden of cardiovascular disease, part 1: the epidemiology and risk factors. Circulation research. 2017 Sep 1; 121(6):677-94.

[4] Islam AKMM, Majumder AAS. Coronary artery disease in Bangladesh: a review. Indian Heart J. 2013; 65(4):424–35.

[5] Khanam F, Hossain MB, Mistry SK, Afsana K, Rahman M. Prevalence and risk factors of cardiovascular diseases among Bangladeshi adults: findings from a cross-sectional study. Journal of epidemiology and global health. 2019 Sep; 9(3):176-84.

[6] Islam AW, Munwar S, Reza AQ, Bhuiyan AH, Ahmed T, Rahman KA, Ali MA, Alam S, Rahman ZU, Yusuf I, Islam N. Primary Percutaneous Coronary Intervention of ST-segment Elevated Myocardial Infarction-Experiences in a Tertiary Care Hospital. Cardiovascular Journal. 2022 Apr 6; 14(2):111-20.

[7] Mehta RH, Granger CB, Alexander KP, Bossone E, White HD, Sketch MH. Reperfusion strategies for acute myocardial infarction in the elderly: benefits and risks. Journal of the American College of Cardiology. 2005 Feb 15; 45(4):471-8.

[8] Chowdhury IZ, Amin MN, Chowdhury MZ, Rahman SM, Ahmed M, Cader FA. Pre hospital delay and its associated factors in acute myocardial infarction in a developing country. PLoS One. 2021 Nov 24; 16(11):e0259979.

[9] Ansari MI, Umair M, Taimoor L, Memon AU, Abubaker Z, Arif MS, Qamar N, Karim M, Abubaker J. Mechanical ventilation in acute myocardial infarction: Outcomes from a prospective audit at a cardiovascular hospital in Pakistan. PLoS One. 2023 Aug 18; 18(8):e0290399.

[10] Rafi A, Sayeed Z, Sultana P, Aik S, Hossain G. Pre-hospital delay in patients with myocardial infarction: an observational study in a tertiary care hospital of northern Bangladesh. BMC health services research. 2020 Jul 9; 20(1):633.

[11] Akhtar Z, Aleem MA, Ghosh PK, Islam AM, Chowdhury F, MacIntyre CR, Fröbert O. In-hospital and 30-day major adverse cardiac events in patients referred for ST-segment elevation myocardial infarction in Dhaka, Bangladesh. BMC Cardiovascular Disorders. 2021 Feb 10; 21(1):85.

[12] Nasrin S, Islam SI, Cader FA, Haq MM. Outcome of Elderly Population Undergoing Primary PCI in a Tertiary Hospital in Bangladesh. Ibrahim Cardiac Medical Journal. 2020;10(1-2):18-26.

[13] Rahman MA. Complications And In-Hospital Mortality Rates After PCI of Percutaneous Coronary Intervention In St Elevation Myocardial Infraction. International Journal of Dental and Clinical Study. 2020;1(1):01-10.

[14] Shawon MT, Ashrafi SA, Azad AK, Firth SM, Chowdhury H, Mswia RG, Adair T, Riley I, Abouzahr C, Lopez AD. Routine mortality surveillance to identify the cause of death pattern for out-of-hospital adult (aged 12+ years) deaths in Bangladesh: introduction of automated verbal autopsy. BMC public health. 2021 Mar 12;21(1):491.

[15] Hossain MS, Jamil AB, Sarker AC, Haque SS, Ahsan MM, Ali MY, Alam I. In-Hospital Outcome of Patients with ST-T Changes in Non ST Segment Elevation Myocardial Infarction. Bangladesh Heart Journal. 2022 Dec 28;37(2):99-106.

[16] Yusuf S, Rangarajan S, Teo K, Islam S, Li W, Liu L, et al. Cardiovascular risk and events in 17 low-, middle-, and high-income countries. N Engl J Med. 2014;371(9):818–27.

[17] Siegel KR, Patel SA, Ali MK. Non-communicable diseases in South Asia: contemporary perspectives. British medical bulletin. 2014 Sep 1;111(1):31-44.

[18] Cader FA, Haq MM, Nasrin S, Kabir CS. Presentation, management practices and in-hospital outcomes of patients with acute coronary syndrome in a tertiary cardiac centre in Bangladesh. Bangladesh Heart Journal. 2017;32(2):106-13.

[19] Prabhakaran D, Jeemon P, Roy A. Cardiovascular diseases in India: current epidemiology and future directions. Circulation. 2016 Apr 19;133(16):1605-20.

[20] Rahman MT, Ahmed R, Alam R, Hossain MA, Hossain MS, Hossain MA, Goni MN, Rahman MS, Hoque MF, Sarker M. Assessment of Heart Failure Patients in a Tertiary Care Hospital: A Retrospective Study. Bangladesh Heart Journal. 2023 Jul 8;38(1):63-9.

[21] Damman P, Clayton T, Wallentin L, Lagerqvist B, Fox KAA, Hirsch A, et al. Effects of age on long-term outcomes after a routine invasive or selective invasive strategy in patients presenting with non-ST elevation acute coronary syndromes: a collaborative analysis of individual data from the FRISC II – ICTUS – RITA-3 (FIR) trials. Heart. 2012;98(3):207–13.

[22] Mehta LS, Beckie TM, DeVon HA, Grines CL, Krumholz HM, Johnson MN, et al. Acute myocardial infarction in women: a scientific statement from the American Heart Association. Circulation. 2016;133(9):916–47.

[23] O'Gara PT, Kushner FG, Ascheim DD, Casey DE, Chung MK, De Lemos JA, Ettinger SM, Fang JC, Fesmire FM, Franklin BA, Granger CB. 2013 ACCF/AHA guideline for the management of ST-elevation myocardial infarction: executive summary: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. Journal of the American College of Cardiology. 2013 Jan 29;61(4):485-510.

[24] Savarese G, Lund LH. Global public health burden of heart failure. Card Fail Rev. 2017;3(1):7–11.

[25] Chakma PJ, Barua M, Kuryshi SA, Barua B, Roy MS. An Observational Study to Assess Outcome of NSTEMI Patients with Raised Serum Uric Acid Level in a Tertiary Care Hospital of Bangladesh. J Cardiovasc Med Cardiol. 2020;7(2):157-62.

Citation: *Dr. Mohammad Sarwar Alam et al. Clinical Spectrum and In-hospital Mortality of Patients Admitted in Cardiology Department: Experience from a Tertiary Care Hospital, Bangladesh. ARC Journal of Cardiology. 2025; 10(3):22-28. DOI: https://doi.org/10.20431/2455-5991.1003004*