

3rd Global Summit on **CARDIOLOGY AND CARDIAC SURGERY**

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**Common risk factors for mortality in patients following mitral valve surgery at a tertiary care hospital in Karachi****Zara Shirazi***National Institute of Cardiovascular Diseases, Pakistan*

**Background:** Isolated mitral valve replacement is a routinely performed procedure at our institute due to higher prevalence of rheumatic heart disease in every age category. Hardly any researches are available that dictate the predictors of surgical mortality in isolated mitral valve procedure. The aim of this study was to identify the most prevailing pre-operative factors in patients who had mortality after isolated mitral valve surgery.

**Methodology:** A retrospective observational study of two years was performed from January 2018 to December 2019 at the Adult Cardiac Surgery Department of a tertiary care cardiac center in Karachi, Pakistan. Patients of either gender of age ranging from 16 to 65 years who had mortality within 30 days after isolated mitral valve surgery were included in the study. Variables assessed from records were anemia, New York Heart Association (NYHA) functional classification, prolonged symptoms, poor nutritional status, degree of left ventricular (LV) dysfunction, valve pathology, pulmonary artery hypertension, and cardiac arrhythmias.

**Results:** We report our isolated mitral valve mortality rate of 5.5% (38/697) in the two-year duration. The most commonly encountered pre-operative factors were severe mitral regurgitation and pulmonary artery hypertension, which were observed in 32 (84.2%) and 23 (60.5%) patients, respectively. Other factors that were common to these patients were higher NYHA functional class (class III in 23 [60.5%] and class IV in 9 [23.7%]), prolonged duration of symptoms (20 [52.6%]), and right ventricular dysfunction (moderate in 21 [55.3%] and severe in 7 [18.4%]).

**Conclusions:** The outcome of our study suggests that severe mitral regurgitation, pulmonary artery hypertension, high NYHA functional class, LV dysfunction, and prolonged symptoms were the common predisposing factor in patients with peri-operative mortality after isolated MVR.

**Biography**

Dr. Zara Shirazi is a final year resident of Cardiac Surgery. She is completing her cardiac surgery training from National Institute of Cardiovascular Diseases (NICVD) which is one of the best Cardiac Centres in Pakistan, Karachi, Pakistan. Her training will end in January 2021. She has completed her two years of General Surgery training from K.M.Ruth Pfau Civil Hospital Karachi in the year of 2018 at the age of 26 years. She has done graduation and has taken her MBBS degree in the year 2015 from Dow University Of Health Sciences (DUHS). She has published papers and case reports in reputed journals. She has always taken interest in researches. Her practise focuses on cardiac surgery and works in conjunction with researchers at the national level. Dr Zara hopes her work will continue to bring new innovations in the field of cardiac surgery and encouraging people to have more self-confidence to pursue the things they love and believe.