PHARMACOECONOMIC ANALYSIS & PRESCRIBING PATTERN OF CARDIOVASCULAR DRUGS OVER IN-PATIENTS OF A TERTIARY CARE HOSPITAL OF INDIA

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ABSTRACT

AIM: To assess the Prescribing pattern and Pharmacoeconomic consideration of cardiovascular agents in cardiac disease patients.

OBJECTIVE: To assess and report the prescribing pattern of cardiovascular drugs, pharmacoeconomic study of cardiovascular agents in cardiac disease patients, improving the quality of life of patient by reducing the frequency of drug related problems.

MATERIAL AND METHODS: A Prospective observational study was carried out in cardiology outpatient department. All the patient satisfying the inclusion criteria are screened regarding prescribing pattern and pharmacoeconomic of the cardiovascular agents. Cost effectiveness of different individual class of cardiovascular drugs were assessed and documented.

RESULTS: The demographic details and treatment data of 128 patients was collected specifically in designed proforma. The average age of study population was found to be 50-70 years were found to be more susceptible to cardiovascular diseases and majority of them are males 42.8%. Majority of patients are diagnosed with Hypertension (n=76), followed Severe Left ventricular dysfunction (n=36), followed by Coronary Artery Disease (n=19). Diuretics are majorly prescribed drugs 52%, followed by β-blockers 37%, followed by cardiac glycosides 21%, Anti-platelets 19%. Cost effectiveness of different class of cardiovascular drugs were assessed individually. In Diuretics (Metalozone), β-blockers (Metoprolol succinate), Anti-aniginals (Nitroglycerine), Anti-platelet agents (Clopidogrel + Aspirin), Cardiac glycosides (digoxin) are cost effective in their individual class.

CONCLUSION: It was observed that co-morbidities were the main cause for cardiovascular diseases and their complications. By controlling the co-morbid conditions there could be substantial decline in the cardiovascular diseases and their complications. Each class of

drugs categorized and cost effectiveness of each class was estimated based on the quality adjusted life year. Thus by choosing cost effective drugs can decrease the economic burden on patients and for other cardiac emergencies, related coverage by health insurance is also recommended.

KEY WORDS: Cardiovascular diseases, prescribing pattern, Pharmacoeconomic consideration, cost effectiveness, Quality Adjusted Life Year.

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