ABSTRACT

Heart failure (HF) is a chronic disease of great clinical and economic significance for both the healthcare system and patients themselves. The costs of treatment (direct costs) appear to be the most frequently addressed topic in the economic research on HF, however less is known about productivity losses (indirect costs) and the public finance attributable to the disease. The aim of this study was to estimate the total cost both direct (medical and non-medical) and indirect costs related to heart failure disease and to discover the cost components incurred in heart failure from the result of a systematic review.

A systematic search was performed between 2011 to 2021 that reported the cost of illness related to heart failure disease. Databases in the research include PubMed, Google Scholar, Scopus, and Science Direct to identify all relevant COI studies from nine countries used English language.

Four out of eleven studies estimated all type of costs, direct medical, direct non-medical, indirect costs. Another four studies only reported direct medical costs in their article. One study estimated both direct medical and indirect costs. The remaining two studies, one article estimated both direct medical and non-medical costs, the other one estimated indirect cost. The total annual costs per patient for direct medical cost ranged from $14.86 for Malaysia to $513.55 million for Spain. As for direct non-medical cost, the total annual costs per patient between $66.3 for South Korea and $14,755,729 for Spain. The total annual costs per patient for indirect cost ranged from $226.1 to $531.07 million. 90% of the study measured hospital admission, medication, and laboratory test. The rest cost components physician and outpatient visits are considered 82% in the study. Direct non-medical costs measured 45.5% transport and 36.4% caregiver. 36.4% studies measured productivity loss due to indirect costs of HF

Cost components that dominated cost of illness in heart failure is hospital admission, medication, and laboratory test, 90% of the articles measured these main cost components for direct medical costs. Direct non-medical costs measured 45.5% transport and 36.4% studies measured productivity loss for indirect costs.

Keywords : Cost of Illness, Heart Failure, Direct costs, Indirect costs