LETTER TO THE EDITOR

ASCERTAINMENT OF REHOSPITALIZATION IN PATIENTS WITH HEART FAILURE

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Dear Editor-in-Chief

Heart failure (HF), a condition in which the heart is not able to supply enough blood to the vital organs, persists as an increasing global epidemic; indeed, its estimated prevalence is currently more than 37.7 million people worldwide.[1] The risk of heart failure is related to high blood pressure, obesity, and a sedentary lifestyle.[2] These health and behavioural risk factors often lead to poor health outcomes such as heart failure exacerbation and rehospitalization. Rehospitalization is indeed another burden to heart failure patients both emotionally and financially. To develop interventions to minimize rehospitalization, research regarding the factors affecting rehospitalization is an important step. In the conduct of such research, there is a need for efficient strategies for assessing rehospitalization. Therefore, this study aims to review the existing methods used for measuring rehospitalization in patients with heart failure.

We retrieved a total of 696 relevant papers from several literature databases including Scopus, PubMed, CINAHL, and PsycINFO. After the removal of duplicates and subsequent screening of the abstracts or titles, we excluded 684 studies, and finally, 12 studies were included.

The assessment of rehospitalization in patients with heart failure is called outcome ascertainment, which can be implemented using either active, passive, or a combination of both.[3] Inactive ascertainment, the researchers have to measure the rehospitalization by directly contacting the patient or caregiver. Some studies measured the rehospitalization by calling the participant after discharge from the hospital such as every three months depending on the follow-up periods. Moreover, in another study, the researchers called the caregiver to confirm the rehospitalization. The main advantages of this approach are its completeness, accuracy, timeliness, and measurability. However, this method is very labour intensive and time consuming particularly for studies with large sample sizes at varying geographical locations, thereby rendering this method very expensive.[4]

On the other hand, passive ascertainment is a technique in which the researchers receive case reports from one or many different data sources. Several studies measured rehospitalization by examining the medical record after discharge from the hospital. In addition, passive ascertainment can be done through patients' family members, their general practitioners, the admitting hospital, web-based reporting, electronic transfer and digital format, computerized reports, and hard copy reporting forms. The main advantage of this approach is its low cost because fewer surveillance program resources and personnel are required. Although this approach appears to be cost-effective, it poses a risk of compromising case detection and case reporting which could lead to insufficient detail, inaccurate results, and less timely reporting.[5]

In summary, active ascertainment is a method where the researchers actively collect data directly from patients, their physician, and family members, whereas passive ascertainment relies mainly on the medical records provided by the hospital staff. Active ascertainment is more accurate but is more expensive, while passive ascertainment is cheaper but is less reliable. To determine which method is appropriate, it is important to consider the available resources as well as the research objectives. For instance, if the study aims to estimate a general trend from large data collected over a wide geographical location, then passive ascertainment is more attractive. However, if a detailed analysis of a specific factor is needed from a smaller sample size, then active ascertainment is preferable. Nevertheless, a combination of both methods could improve reliability while keeping the overall cost within the budgetary constraints. For instance, several researchers used both approaches to examine to what extent depression is linked to rehospitalization in patients with heart failure.[6–8] Thus, it is recommended that both methods should be employed whenever possible.

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