Factors predicting readmission among coronary artery disease

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Introduction

Readmission in the hospital is a drain on the health care system and recognized as a maker of quality of care and a significant contributor to rising health care cost. Despite the fact that readmission is a marker of quality of care, prior studies have found that readmission rates vary between 15 % and 30% respectively, within 30 to 60 days post-discharge and between 25 % and 50 % within 6 months after the first hospitalization as well as increasing 80% within one year and account for approximately 70% of the health care cost.

Various reasons are given for readmission, such as other medical health problems, nonadherence to health recommendations such as medication adherence, diet, fluid restriction, emotional or mental factors such as pain, anxiety, depression, substance abuse and cognitive disorder, environment, and inadequate discharge planning.

Purpose : was to examine the predictive ability between selected factors and readmission among Thai coronary artery disease patients.
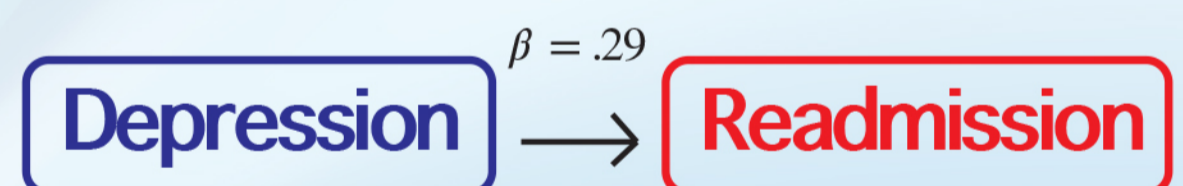
Methods

A descriptive – correlational study was conducted to examine whether the potential factors can predict readmission among coronary artery disease. A total 77 patient with heart failure and myocardial infarction were recruited from all regions of Thailand. The participants who met the inclusion criteria were aproached and requested to participate in the study, creating a purposive sample.

All research instruments used showed adequate validity and reliability. Preliminary data analysis was analyzed using descriptive statistic and multiple regression

Results

The overall regression model shown Multiple R (.465) and R^2 (.216), followed by the adjusted R^2 (.161) and the standard error of estimate (1.946). Five factors were correlated with readmission (R^2 =0.216), explaining 21.6% of the variance of the criterion variables. The overall F ratio for this analysis was 3.919 (df=5,71, p=0.003).

Thus, the independent variables as a group were significantly correlated with the dependent variable, readmission. The coefficient for depression was significant beyond the .05 level which is consistent with other literature. Co-mobility, symptom severity, social support, and quality of life were not significant.

$$\boxed{\text{Depression}} \xrightarrow{\beta = .29} \boxed{\text{Readmission}}$$

Conclusion

The preliminary analysis examined the predictive ability between selected factors and readmission and found that only one predictor- depression explained readmission among Thai with coronary artery disease patients. However, the influence of depression on readmission in this preliminary data analysis was consistent with previous studies.