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Adherence in Patients With Heart Failure: Challenges and Opportunities to Improve Non-Communicable Diseases Caring

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Purpose: Noncommunicable diseases (NCDs) are responsible for nearly three - fourth of deaths in Thailand with an increasing of the prevalence of premature death among the population. Cardiovascular disease ranks the second cause of premature death in the country. Heart failure is a terminal stage of most cardiovascular disease. To improve patient outcomes, medication adherence is needed. Social determinants of health play key roles in adherence. In low and middle –income countries, such as Thailand, little is known about medication adherence, individuals' social determinants of health and potential challenges and opportunities for the intervention to improve the care. This study aimed to (a) explore the prevalence; (b) identify the predictors of medication adherence in hospitalized Thai patients with heart failure; (c) explain the challenges and opportunities to develop the intervention to improve NCDs outcomes in the country considering the social determinants of health.

Methods: A cross-sectional study explored prevalence and influencing factors of medication adherence in Thai patients with heart failure. The questionnaire from The New South Wales heart failure snapshot study including demographic, past illness history, treatment, frailty, depressive symptom and adherence were translated into Thai language. Participants are aged 18 years and over, were hospitalized with a confirmed diagnosis of heart failure and were able to communicate in Thai language from four tertiary hospitals in Thailand. The medication adherence score were reported and classified into three categories including good, moderate and poor adherence status. One-way ANOVA, Chi-Square and multiple linear regression were used to analyze the data.

Results: Three hundred and thirty-six participants were included in this study. Assessment of medication adherence found 54.3% had good adherence, 27% had moderate adherence and 18.4% had poor adherence. The significant predictors of medication adherence are depressive symptom (95%CI -0.17, -0.11 $p<0.01$), comorbidities (95%CI -0.31, -0.13 $p<0.01$), performance status (95%CI 0.01, 0.02 $p=0.04$), length of stay (95%CI -0.06, -0.01 $p=0.04$) when adjusting for sex, age, living status, income, smoking status, cardiac function and alcohol consumption. The selected model explained 35.2% of variance ($F(4,330) = 46.26$ $p<0.01$). To improve outcomes and adherence, Thailand has opportunities of universal healthcare coverage population and social support and networks and challenges on infrastructure availability, accessibility to healthcare.

Conclusion: During hospitalization, majority of Thai Heart Failure patients had good medical adherence. This adherence is influenced by multiple factors in personal, interpersonal and social levels. The opportunities and challenges of improving NCDs outcome suggested that nurse-led interventions are promise in this setting.

Title:

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Keywords:

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Abstract Summary:

Medication adherence is influenced by multiple factors in personal, interpersonal and social levels. The opportunities and challenges of improving non-communicable disease outcome suggested that nurse-led interventions are promise in the low and middle-income countries.

Content Outline:

1. Introduction

- Prevalence and burden of non-communicable disease (NCDs) and heart failure in Thailand
- Social determinants of health in patients with heart failure related with adherence

2. Body

- Main point#1 Prevalence of medication in Thai patients with heart failure
- Main point#2 Predictors of medication adherence in hospitalized Thai patients with heart failure
- Main point#3 Challenges and opportunities to develop the intervention to improve NCDs outcomes in Thailand

3. Conclusion

- The opportunities and challenges of improving NCDs outcome suggested that nurse-led interventions are promise in low and middle income countries.

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Author Summary: The author is an academic and researcher from Faculty of Nursing, Mahidol University, Thailand. He has experienced in studying social determinants of health and prevalence of non-communicable diseases in low and middle income countries. He is also interested in developing interventions to improve the health outcomes of non-communicable diseases.

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