Effectiveness of home based nursing interventions on selected outcome parameters among asthma patients in selected community

Jayan James

ABSTRACT

Introduction: Asthma is a major global public health burden affecting the lives of nearly 334 million people around the globe. Self management of asthma through patient education is the key in controlling asthma and thereby aid in the reduction of burdens associated with this disease. This study is intended to evaluate the effectiveness of three interrelated home based nursing interventions on five integrated outcome parameters of asthma control. Three home based nursing interventions were asthma action plan, asthma home reference booklet and breathing exercises. The outcome variables measured in this study were uncontrolled days, quality of life, knowledge about asthma, frequency of hospital visits and peak expiratory flow rate.

Objectives: The objectives of the study were to assess and evaluate the selected outcome parameters of patients with asthma before and after home based nursing interventions, to determine association of selected demographic variables with the outcome parameters of patients, and to determine relationship between knowledge about asthma, uncontrolled days and quality of life of patients.

Methodology: An experimental pretest–posttest control design with repeated follow up was adopted in this study. The study was conducted on 107 asthma patients residing at selected randomly assigned panchayats and municipalities of Thodupuzhataluk of Kerala. The theoretical frame work adopted for the study was based on Imogene King’s goal attainment theory. The tools used for the study was asthma exacerbation diary, hospital visit diary, standardised asthma
quality of life questionnaire, structured knowledge questionnaire and peak flow meter. Home based nursing interventions were introduced 60th day after initial visit and post test 1 and post test 2 were done on 120th and 180th day after initial visits.

**Results:** Selected home based nursing interventions were found to be effective in reducing uncontrolled days, hospital visits; and improving knowledge and quality of life of patients, but not found to be effective in improving peak expiratory flow rate. An inverse correlation was found between uncontrolled days and quality of life as well as with knowledge and uncontrolled days.

**Conclusion:** The selected home based nursing interventions were effective in improving knowledge and reducing burden associated with asthma.

**Key words:** Home based nursing interventions, uncontrolled days, hospital visits, quality of life, knowledge about asthma, peak expiratory flow rate, asthma patients