UNIVERSITI TEKNOLOGI MARA

ASSESSMENT OF COPD KNOWLEDGE AMONG COPD PATIENTS ATTENDING SCHEDULED FOLLOW-UP APPOINTMENT AT CHEST CLINIC, HOSPITAL MELAKA

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ABSTRACT

Inadequate chronic obstructive pulmonary disease (COPD) knowledge among COPD patients may hinder them to achieve desired therapeutic outcomes, leading to poor quality of life. The main aims of this study were to assess the validity and reliability of the Malaysian version of Bristol COPD Knowledge Questionnaire (M-BCKQ), determine the score and level of knowledge of COPD among COPD patients, determine the differences and investigate the relationships of socio-demographic and medical data variables with level and score of COPD knowledge. This cross-sectional study recruited COPD patients (>40 years old) for pilot (n = 20) and main studies (n = 110) using purposive sampling method. The study was conducted at the Chest Clinic, Hospital Melaka, Melaka, Malaysia. The M-BCKQ instrument was found to be valid and reliable by both Modern Test Theory (MTT) and Classical Test Theory (CTT). Construct analysis including PTMEA Corr, infit / outfit mean square values, and infit / outfit ZSTD, item reliability and person reliability, demonstrated that all items possessed good reliability and item constructs fit the Rasch measurement model (RMM). The study instrument also showed good psychometric properties when evaluated using CTT covering reliability (internal consistency and test re-test reliability). The enrolled COPD patients possessed borderline poor-moderate level of COPD knowledge. There were significant mean differences between COPD knowledge score and status of having or not having medical insurance, frequency of exercise in a week, frequency of clinic visit due to COPD exacerbation (government), frequency of clinic visit for COPD exacerbation (private), frequency of intubated for COPD, vaccination against influenza, vaccination against pneumococcal, CAT score, and history of childhood respiratory disease. Significant association were found between level of COPD knowledge and history of COPD in the family, frequency of clinic visit for COPD exacerbation (government), vaccination against influenza and CAT score. There were significant positive low correlations between COPD knowledge score and number of family members in respondent's house (including respondent), frequency of private clinic visit for COPD exacerbation (2013 / 2014), frequency of intubated for COPD (2012 / 2013), and number of own COPD medication (inhaler). The multiple linear regression analyses reported that frequency of clinic visit due to COPD exacerbation (government) was the only significant predictor that possessed negative relationship with COPD knowledge score. For multinomial logistic regression, only frequency of clinic visit (private) due to COPD exacerbation significantly predicted M-BCKQ model score. For the summary multinomial logistic regression between independent variables and COPD knowledge level, only ethnicity was the significant predictor for COPD knowledge. The findings of ANCOVA suggested that frequency of hospitalisation due to exacerbation of COPD had significant effect on COPD knowledge score. Using discriminant analysis, ethnicity, history of COPD in the family, frequency of clinic visit due to COPD exacerbation (government) and vaccination against influenza were the predictors best discriminate between 2 groups of poor and moderate level of COPD knowledge. The present study supported the fact that numerous factors catering socio-demographic and medical are capable in influencing COPD knowledge among COPD patients.

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