

**UNIVERSITI TEKNOLOGI MARA**

**IMPACT OF SMOKING CESSATION  
ON HEALTH-RELATED QUALITY OF  
LIFE (HRQOL) AND HOSPITAL  
ADMISSION IN COPD PATIENTS**

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Thesis submitted in fulfilment  
of the requirements for the degree of  
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## AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA (UiTM). It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, UiTM, regulating the conduct of my study and research.

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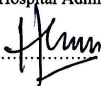
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## ABSTRACT

**Background:** Lack of awareness among ex-smokers on the benefits of sustaining smoking cessation may be the main cause of their smoking relapse. Furthermore improving in medication use could lead to better health even in those who have failed to stop smoking. This study looked into the Health-related Quality of Life (HRQoL) and hospital admission amongst COPD patients. **Methods:** This is retrospective case-control study. It involved the analysis of COPD in patient medical records among those who participated in Respiratory Adherence Therapy Clinic (RMTAC). They were interviewed during their clinic visits to obtain information regarding their smoking history and HRQoL. The HRQoL assessment has 3 domain; mental, functional, and symptoms. They were divided according to their smoking status; ex-smokers (sustained quitters = quit  $\geq 5$  years, quitters = quit  $< 5$  years), and smokers = smoking at least one stick of cigarette/day). **Results:** A total of 117 participants with moderate COPD met the inclusion criteria, who were comprised of ex-smokers (41 sustained quitters, 40 quitters), and 36 smokers. Several features were similar across the groups. Most of them were married elderly men (aged  $> 64$  years) with low-to-middle level of education, who smoked more than 33 cigarettes per day and had high levels of adherence to the medication regimen. The results showed that ex-smokers were 2 times higher compared to smokers in the reduction of symptoms (OR=0.17; 95% CI=0.03-0.59;  $p=0.007$ ) and smokers was expected to 3 times higher than ex-smokers in the frequency of hospital admission (OR=2.99; 95% CI=1.34-6.67;  $p=0.008$ ). Sustained quitters were less respiratory symptoms (cough, phlegm and dyspnea) than smokers (odds ratio 0.02, CI= 0-0.12;  $P<0.001$ ). The hospital admission rate per year was increased in quitters compared to smokers (odds ratio 4.5, CI= 1.91-10.59;  $P<0.005$ ). **Conclusion:** Ex-smokers who had quit smoking more than 5 years had higher ratings of HRQoL and reduced frequency of hospital admission. Thus, this study has proven the benefits of early smoking cessation.

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