

## ***ABSTRACT***

*Smoking behavior is a serious health threat and a fiscal burden for the health insurance system in Indonesia. This study aims to analyze the impact of ownership of subsidized public health insurance (BPJS-PBI) on the probability of an individual becoming a smoker. The focus of this study is to examine whether the elimination of financial burden through full premium subsidies triggers adverse changes in health behavior.*

*This study uses microdata from the March 2023 National Socioeconomic Survey (Susenas) with a total of 624,025 observations representing the national population. To ensure causal validity and address selection bias, the quasi-experimental Propensity Score Matching (PSM) method is employed. This procedure is carried out by matching the characteristics of BPJS-PBI participants and a control group consisting of individuals with paid health insurance (non-PBI BPJS, private insurance, and company insurance).*

*The estimation results of the Average Treatment Effect on the Treated (ATT) parameter show that BPJS-PBI ownership causally increases the probability of smoking by 5.63% compared with having paid insurance. This finding is statistically significant ( $t\text{-stat}=22.60$ ) and is consistently supported by various robustness tests. Theoretically, the results confirm the presence of Ex-Ante Moral Hazard (EAMH) and Expected Utility Theory (EUT), in which the reduction in medical risk costs weakens individuals' incentives to undertake preventive health efforts. Policy recommendations emphasize the use of propensity scores to identify high-risk PBI groups for targeted health literacy interventions, as well as large-scale impact evaluation to maintain the fiscal sustainability of JKN from the burden of claims related to smoking-related diseases. In addition, BPJS Kesehatan should redesign the benefit package by integrating smoking cessation counseling services and nicotine replacement therapy as mandatory components at Primary Health Care Facilities (FKTP) in order to systematically balance moral hazard effects.*

**Keywords:** *BPJS-PBI, Propensity Score Matching, Smoking, Ex-Ante Moral Hazard, Susenas 2023*