## MALARIA AND NATURAL DISASTERS: EVIDENCE USING GMM APPROACH

Harpaljit Kaur\* Taylor's University

Muzafar Shah Habibullah Universiti Putra Malaysia

Shalini Nagaratnam Universiti Putra Malaysia

## ABSTRACT

Natural disasters not only disrupt accessibility to education, health care, food supplies and clean water, but causes outbreak of diseases. These issues deteriorate the health conditions among the victims of disasters and reduce human capital accumulation that adversely affects the economic development of the country. This paper examines the impact of total disasters and floods on malaria incidences using panel data over the period 2008 to 2014 for 79 countries. For robustness check, we use two measures on each of these natural disasters; the number of occurrences and number of people affected by these disasters. Employing the system Generalized Method of Moment (GMM) model, the findings show that the occurrences and the number of people affected by total disasters and flood, significantly increases cases of malaria. Income and education negatively impact the incidences of malaria whereas urbanization and deforestation increase the rates of malaria cases.

Keywords: Natural disaster; Malaria; GMM.

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## 1. INTRODUCTION

Natural disasters have become one of the mounting risks faced by the world today due to the changes in the global climatic environment (Mach & Mastrandrea, 2014; Mal, Singh, Huggel, & Grover, 2018). It affects millions of people every year and the impact can be disastrous as it brings with them a host of various issues that include humanitarian, environmental, infrastructure and health problems. Many lives are lost and millions of people are made homeless due to the impact of the different types of disasters and its severity, leading to disruption in accessibility to education,