Do Remittances Alleviate Negative Impacts of Natural Disaster on Mental Health? A Case of the 2015 Nepal Earthquake

Abstract

This paper aimed to quantify the contributions of remittances to mental health wellness of those who suffered from a destructive natural disaster. Sound mental health is an essential factor of individual's quality of life after exposure to major natural disasters. Impacts of natural disasters on mental health, therefore, have been an important research topic in epidemiology, psychology, and social sciences. The existing studies, however, do not include detailed information about asset holdings and objective anthropometric measures prior to natural disasters.

Migration and remittances have been a popular research topic in social sciences. An important puzzle about migration is that migration of adult family members for making remittances often impairs physical and mental health of those who stay behind in the origin countries: ranging from children to elders. This puzzle suggests that absence of an adult family members for migration sometimes entails larger negative impacts to the left-behind members than the positive impacts of additional financial resources as remittances.

This paper tries to contribute to these two strands of literature by addressing the impacts of remittances on mental health of those who suffer from a natural disaster. For this purpose, we constructed and utilized a unique data set of the 348 individuals who were hit by the 2015 earthquake (EQ) in Nepal. An advantage to work on the case of Nepal is that the country has been known for large emigration for making remittances.

Our regression results revealed that the remittances alleviated the depression severity with the 5% level of statistical significance, but not PTSD severity. In contrast to the remittance variables, the damages on house buildings were positively associated with both PTSD and depression severities.

These findings imply an asymmetric impacts of household financial resources on the post-disaster mental health wellness. On one hand, loss of important private assets negatively affects both PTSD and depression, while assurance of annual income stream through remittances stems the development of depression, not PTSD. The asset holding itself, measured by the area of irrigated farm land which were in most cases not affected by the 2015 EQ, seemed to be negatively associated with mental health problems.