

SAAER 2017 Abstract

Understanding the Relationship between Food Insecurity and Disability:

Is There a Link?

Seungyeon Cho¹, Ariun Ishdorj², and Christian Gregory³

Introduction

In the US, about 13 percent (16 million households) of households were food insecure in 2015 (Coleman-Jensen, Rabbitt, Gregory and Singh, 2016). Certain demographic and economic factors, such as poverty, family structure, employment, education and others, are associated with food insecurity. Recent research has highlighted the importance of disability in understanding food insecurity. About 34 percent of households with a member who is not in labor force because of disability are food insecure compared to 12 percent for those with no disabled persons in the household. Households with a disabled member make up 32 percent of all food insecure households, despite making up about 16 percent of the population (Coleman-Jensen and Nord, 2013).

There are several important unanswered policy questions in this area of research, one of which is the definition of disability itself. Definitions of disability to date have used binary indicators for whether or not someone has impairment (hearing, vision, mental, physical and others), but have generally not looked at ways to refine and strengthen the understanding of the severity of disability and how that affects food insecurity. Another important question is the disability of other household members. As a primary income earner, working-age household head's disability might lead to increased food insecurity. Similarly, working-age spouse/partner's disability can also be linked to food insecurity since spouses generally take more responsibilities for food related household affairs (Kemmer, 1999). Disability status of child/children might affect food insecurity since households with child/children with disabilities would incur additional loss of income due to reduced work hours, giving up employment to take care of disabled child/children, as well as additional medical expenses and cost of equipment. Lastly, multiplicity of disability, i.e. whether or not someone has multiple disabilities, can be strongly associated with food insecurity. This research examines the above mentioned areas of inquiry.

Methodology

Based on the USDA food security module, four ordered food security measures were created with a value of one indicating 'very low food insecure', 2 = 'low food insecure', 3 = 'marginal food secure', and 4 = 'high food secure'. Descriptive statistics of households with and without members with disabilities, severity and types of household head's disability and multiplicity of

¹ 4th year Ph.D. student, Department of Agricultural Economics, Texas A&M University

² Associate Professor, Department of Agricultural Economics, Texas A&M University

³ Economist, Economic Research Service, USDA

household members' disability by food security status were calculated. Discrete choice models with ordered latent dependent variable were estimated and marginal effects were calculated. Information about disability (types and severity) and socio-demographic characteristics of households were captured by sets of covariates.

Description of data

This study makes use of pooled cross-sectional data from the National Health Interview Survey (NHIS) from 2011 through 2015. This data provides several advantages for the purposes of this study. First, it contains several measures of disability – including work disability, functional limitation, and limitation in activities of daily living as well as Kessler index of psychological wellness. Second, information about household head's types and severity of disability is provided. Third, as a household survey, the NHIS contains data on all members of the each surveyed household, making it possible to examine households with multiple persons with disability, as well as overall household health and structure. Combined 5 years of data resulted in a sample of 46,191 households.

Preliminary findings and Potential for initiating discussion

This study adds to the existing literature in understanding food insecurity and how disability of household members is related to it. Although certain socio-economic and demographic characteristics are helpful in explaining food security, we found a strong connection between food insecurity and disability. This is consistent with findings of the existing literature (Huang et al., 2010; Coleman-Jensen and Nord, 2013) that households with a working-age head with disability are vulnerable to food insecurity and economic matters are also highly related with it.

Our preliminary results indicate that about 60% of households in our sample with very low food security had at least one disabled individual living with them. Compared to households with no disabled individuals, households with a spouse/partner as well as child/children with disability were more likely to have lower food security. Vision, hearing, physical, and cognitive disabilities of the household heads were related to higher likelihood of food insecurity and the severity of these disabilities had even stronger effect. Compared to the presence of a spouse/partner and child/children with disability, household heads' disability had the most significant impact on food insecurity.

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