



## PP05 : Research Article

### Food Insecurity Prevalence among Hemodialysis Patients in Pahang, Malaysia

Sarah Muneera Karami<sup>1</sup>, Nor Azwani Mohd Shukri<sup>1</sup>, Wan Azdie Mohd Abu Bakar<sup>1</sup>,  
Norhasmah Sulaiman<sup>2</sup>, Roselawati Mat Ya<sup>3\*</sup>

<sup>1</sup> Department of Nutrition Sciences, Kulliyah of Allied Health Sciences, International Islamic University Malaysia, 25200 Kuantan, Pahang, Malaysia

<sup>2</sup> Department of Nutrition, Faculty of Medicine & Health Sciences, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia

<sup>3</sup> Department of Community Medicine, Kulliyah of Medicine, International Islamic University Malaysia, 25200 Kuantan, Pahang, Malaysia

#### ABSTRACT

Food insecurity involves the lack of physical and economic access to sufficient, safe, and nutritious food that meets an individual's dietary needs. End-stage renal disease (ESRD) patients undergoing hemodialysis should follow specific dietary guidelines, but food insecurity can hinder their compliance. This cross-sectional study aimed to identify the food insecurity prevalence and its determinants among hemodialysis patients in the Kuantan, Pekan, and Jengka districts of Pahang, Malaysia. A total of 287 adults aged 22 to 81 years who had been on regular hemodialysis treatment for at least three months prior to the study were involved. The food security status was determined using the Malay Food Insecurity Experience Scale. The determinants of food insecurity were assessed using validated, interviewer-administered questionnaires on demographic and socioeconomic background, physical and economic access to food, disease/treatment-related factors, and dietary factors. The data were statistically analyzed using the Fisher Exact test and one-way ANOVA test. Based on the food security status, about one-third of the hemodialysis patients were categorized as food insecure, where 16.4%, 9.4%, and 5.6% were mildly food insecure, moderately food insecure, and severely food insecure, respectively. Significant associations were found between food security status and age ( $p=0.013$ ), marital status ( $p=0.021$ ), monthly income ( $p=0.027$ ), number of shops available ( $p=0.021$ ), and affordability to buy food ( $p<0.001$ ). This study found a remarkable prevalence of food insecurity among hemodialysis patients in Pahang, Malaysia. Their food security status was associated with certain demographic and socioeconomic factors, as well as physical and economic access to food.

**Key words:** determinants, end-stage renal disease, food insecurity, hemodialysis, Malay Food Insecurity Experience Scale

\* Correspondence: [rosematya@iium.edu.my](mailto:rosematya@iium.edu.my)