

# ASSOCIATION BETWEEN ADHERENCE TO TREATMENT MANAGEMENT AND THE QUALITY OF LIFE OF THE ELDERLY WITH DIABETES MELLITUS

Hari Peni Julianti<sup>1)</sup>, Aras Utami<sup>1)</sup>, Trilaksana Nugroho<sup>2)</sup>

<sup>1)</sup>Department of Public Health-Preventive Medicine,  
Faculty of Medicine, Universitas Diponegoro

<sup>2)</sup>Department of Ophthalmology, Faculty of Medicine,  
Universitas Diponegoro

## ABSTRACT

**Background:** Diabetes melitus (DM) is a worldwide public health problem and the fourth largest contributor of disease burden in Indonesia. Diabetes mellitus and adherence to treatment management may affect the quality of life of the affected elderly. This study aimed to estimate the associations of adherence to exercise, diet, and treatment, respectively, with the quality of life of the elderly with diabetes mellitus.

**Subjects and Method:** A cross-sectional study was carried out at Puskesmas (Community Health Center) Rowosari, Semarang. The study site is an Interprofessional Education (IPE) field lab operated by Faculty of Medicine, Universitas Diponegoro. Target population was the elderly with diabetes mellitus diagnosis. A random sample of 62 older patients with diabetes mellitus visiting Puskesmas Rowosari was selected for this study. The dependent variable was quality of life. The independent variables were adherence to exercise, diet, and treatment. Dietary pattern was measured by 3 day food recall. Quality of life was measured by Short Form-36. The other data were collected by questionnaire. The data were analyzed by Chi Square with Prevalence Ratio (PR) as the measure of association.

**Results:** Bivariate analysis showed that quality of life improved with adherence to exercise (PR=8.67; 95%CI=2.09 to 35.89; p=0.001), adherence to diet (PR=6.39; 95%CI=1.32 to 30.92; p=0.012) and adherence to treatment (PR=28.75; 95%CI=5.85 to 141.33; p<0.001), respectively, among the elderly with diabetes mellitus.

**Conclusion:** Adherence to exercise, diet, and treatment, improves the quality of life of the elderly with diabetes mellitus.

**Keywords:** diabetes mellitus, quality of life, treatment management, elderly

### Correspondence:

Aras Utami. Department of Public Health-Preventive Medicine, Faculty of Medicine, Universitas Diponegoro, Semarang, Central Java.

Email: aras.utami@gmail.com. Mobile: 081225273747.