

## The association between Electronic Health Literacy and Self-care Management in Adults with Type-2 Diabetes

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### ABSTRACT

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**Purpose:** E-health illiteracy has disadvantages including misevaluation of medical information displayed on the internet. Both effective self care management and e-health literacy are important terms in order to control of the chronic diseases. The aim of this study is to determine the relationship between e-health literacy and the self-care management of patients with Type-2 diabetes.

**Materials and Methods:** The type of the study is descriptive. A questionnaire was applied to individuals who have been diagnosed with Type-2 diabetes in the endocrine polyclinic of the internal medicine clinic of a tertiary state hospital in Istanbul, Turkey. The sample size was calculated as 384 by accepting the adequate e-health literacy rate among Type-2 diabetes patients as 50%, the margin of error 5%, and the confidence level as 95%. In addition to sociodemographical questions; our questionnaire contains two scales: Self-Care Management Protection scale and the E-health Literacy Scale. Number (n) and percentage (%) values were used in the expression of descriptive data. Mean, standard

deviation, median and minimum, maximum values were given. For data comparison; Mann-Whitney U test was used for non-normally distributed variables. The Spearman correlation used to measure the linear relation between two numeric variables. Significance level has been accepted as  $p < 0.05$ .

**Results:** Totally 330 patients were included our study by a participation rate of 85.9 %. The mean age of the participants was  $57.74 \pm 13.83$  and 52.4% were female. A positive correlation was observed between scores of e-health literacy scale and self-care management scale ( $r = 0.235$ ,  $p < 0.001$ ) and self-protection subscale of self-care management scale ( $r = 0.345$ ,  $p < 0.001$ ). A negative correlation exists between age and e-health literacy ( $r = -0.419$ ,  $p < 0.001$ ).

**Conclusions:** The results support the claim that individuals with a higher e-health literacy can better able to control their disease through self-management.

**Keywords:** Type-2 diabetes, E-health-literacy, self-care management

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