

# Dependence of the Geriatric Depression on Nutritional Status and Anthropometric Indices in Elderly Population

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## Abstract

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### Objective

Malnutrition and depression are highly prevalent in the elderly and can lead to unfavorable outcomes. The aims of the current study were to determine the association between malnutrition and depression and also to find any correlation of depression with some anthropometric indices in free living elderly.

### Method

In this cross-sectional study, 337 elderly subjects (193 females) were selected using cluster sampling. Depressive symptoms and nutritional status were determined by the Geriatric Depression Scale (GDS) and the Mini-Nutritional Assessment (MNA) scores questionnaires, respectively. Anthropometric indices were measured all in standard situations. Chi squared test and t-test were used when necessary. Pearson correlation coefficients were calculated for linear relations between variables.

### Results

Of all the total subjects, 43.62% were depressed; and of whom, 48.01% were malnourished or at risk of malnutrition. GDS had a significant negative dependence with the MNA for the entire sample ( $r=-0.58$ ,  $p < 0.0001$ ). However, there was no significant correlation between age and GDS or MNA scores. Moreover, the mean GDS scores differed significantly between men and women ( $p < 0.05$ ), and women were more depressed than men (27.9% vs. 15%, respectively). The elderly subjects living in urban areas were more depressed than those living in rural areas (39.46% vs. 3.85% respectively).

### Conclusion

The results of the present study revealed a high prevalence of depression and malnutrition among old subjects. Moreover, depression was associated with worsening of nutritional status. The mechanism of this association needs further study.

**Keywords:** Depression, geriatric, anthropometric indices, elderly, care and nutrition