

The Prevalence and Patterns of Cardiometabolic Diseases in Elderly Patients: Effect on Quality of Life

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ABSTRACT

BACKGROUND:

With the escalating burden of ageing populations worldwide including in Egypt, the prevalence of multimorbidity is likely to increase rapidly. Among these chronic diseases, cardiometabolic diseases (CMDs), including hypertension, dyslipidemia, diabetes mellitus (DM), cardiac diseases and stroke, are the main components of multimorbidity. It has been demonstrated that cardiometabolic components are strongly associated with adverse outcomes, such as poor quality of life, high mortality and increased functional limitation.

OBJECTIVES:

We aimed to assess the prevalence and patterns of CMDs and comorbidity (geriatric syndromes (GS) such as cognitive impairment) in a cohort of elderly patients and to assess the effect of these CMDs on function and health related quality of life (HQoL)

METHODS:

The participants were 100 community dwelling adults aged at least 65 years and above presenting to the outpatient clinics of the Main University Hospital of Alexandria or admitted to the Geriatric Medicine ward. The CMDs assessed included hypertension, DM, dyslipidemia, cardiovascular disease (CVD). Demographic data including age, gender, smoking status and duration of disease was collected at baseline. A comprehensive geriatric assessment was performed for all patients including Katz activities of daily living scale, Mini Mental State Examination, Geriatric Depression Scale, and Mini Nutritional Assessment Questionnaire. Laboratory investigations

including fasting blood sugar and 2-hr post-prandial levels, HbA1C, serum cholesterol, triglycerides, HDL-C and LDL, urine analysis, urine albumin creatinine ratio, TSH levels, serum uric acid levels, CBC and CRP were done for all subjects. Health related quality of life (HQoL) was assessed by the EuroQOL-5 Questionnaire.

RESULTS:

The mean age of the participants was 69.86 years, 76% had CMDs. Sixty percent of patients with both hypertension and DM. Over 50% of patients with DM and 20% of patients with hypertension also had CVD. Sixty-eight percent of the CMDs patients had DM. The prevalence rates were 73%, 51% and 21% for one, two, and three CMDs, respectively. The most prevalent comorbid GS were urinary incontinence, depression and falls. Individuals with CMDs were more often males and more likely to be smokers, have a higher body mass index, have a higher prevalence of functional impairment and a lower HQoL score than the non- CMDs individuals.

CONCLUSIONS:

Our findings demonstrate an increased prevalence of cardiometabolic multimorbidity with the various clinical patterns in elderly patients. CMDs together with concomitant GS have a cumulative effect on functioning and HQoL. Considering the high healthcare burden and the various adverse outcomes associated with CMDs in the elderly, developing and implementing comprehensive interventions to identify or prevent both CMDs and functional impairment is crucial.

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