

A DESCRIPTIVE STUDY OF DIABETES MELLITUS PATIENTS WITH COMORBID CARDIOVASCULAR DISEASE ENROLLED IN A COMMUNITY LIFETIME MAINTENANCE THERAPEUTIC LIFESTYLE INTERVENTION PROGRAM

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Introduction: Multifactorial therapeutic lifestyle intervention (MTLI) reduces signs/symptoms, fatal and nonfatal cardiac events in diabetes mellitus (DM) patients with comorbid cardiovascular disease (CVD). Better A1c levels, improved lipid profiles, and reductions in depression are among effects proposed to explain these findings. But what clinical profile can be anticipated when such patients present for a lifetime maintenance cardiac rehabilitation program (LMCRP)? Such information could prove valuable in preparing their intervention programs.

Purpose: To describe discrete gender and age engagement profiles of DM patients with comorbid CVD referred by their physicians for a MTLI/LMCRP and prepare this sample for followup outcomes research. CPGs provide detailed guidance for managing single diseases, but may fail to address the demands of complex comorbid illness.

Design: A one-group descriptive study of clinical variables categorized by age and gender in DM patients with comorbid CVD.

Methods: This study consisted of 115 patients (46% female), aged 21 to 80. They were screened with a comprehensive clinical assessment and medical record review. These admissions data were analyzed for descriptive purposes.

Results: Sample (N = 115), Male (n = 62), and Female (53) (SMF) subgroups are obese, with BMIs of 34, 33 and 36, respectively. The metabolic syndrome (MetSyn) is also established. The WHO and American Diabetes Association (ADA) recently recommended a 6.5% HbA1c cut point for DM diagnosis. SMF A1cs of 7.6, 7.5, and 7.7, respectively, confirm DM in our patients. SMF fasting blood glucose (FBG) values of 156, 153, and 161 mg/dl, respectively, (>126) also confirm DM and exceed the 130 mg/dl ADA daily glycemic control recommendation. Patients in the 45-54 age group were least effective in DM management with an A1c of 8.2% compared to a 7.3% average for the other four groups. The highest male age group A1c was 8.7% in the 45-54 year-old (YO) men and lowest in 35-44 YOs (6.7%). The highest female A1c was 8.2% in the 35-44 YO group and lowest in 21-34 YOs (7.0%). The most common risk factors were hyperlipidemia, hypertension, inactivity, obesity, stress, and family history. Lipid profiles appear to have been managed reasonably well, but LDL values exceed the recommended level of < 70 mg/dl with SMF values of 105, 101, and 109 mg/dl, respectively.

Conclusions: Unique gender and age group data were observed in this study. These analyses reveal clinical trends and profiles that can prove helpful for clinicians in managing DM patients with comorbid CVD in a MTLI/LMCRP.