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Introduction

- Diabetes mellitus (DM) patients have always had a higher risk of cardiovascular disease (CVD) complications than those without diabetes.
- Those with DM have a 2-4-fold increased risk of dying from coronary artery disease. Several studies of diabetic patients have shown a significant reduction in cardiovascular morbidity and mortality when these patients closely control their glycemia and the main cardiovascular risk factors, such as hypertension and dyslipidemia.

Methods

- A retrospective study that used outpatient data from King Fahad Medical City (KFMC) and Prince Salman Hospital (PSH) from 2008 to 2012.
- Exploratory analyses of the data were done to produce summary statistics.
- Continuous variables were summarized with descriptive statistics.
- A cross tab association analysis of demographic, clinical and metabolic features of KFMC vs. PSH was conducted using a Chi-Square analysis.

Discussion

- This study provides useful baseline data about whether diabetes patients reach the ADA's optimal target controls of T2DM management in two different diabetes centers, one a tertiary healthcare setting (KFMC) and the other a secondary hospital in Riyadh (PSH).
- There was a high prevalence of CVD risk factors among patients with diabetes in urban KSA, and a large proportion of these risk factors were not well controlled.
- The results of this study reveal that a strategic in-depth study and assessment of the management of care and control of T2DM are needed to achieve further improvements.

Conclusion

The quality of care and management provided to T2DM patients in two health centers appears to be far from reaching international evidence-based goals. The percentage of patients with poor glycemic, blood pressure, and lipid control was high. This implies that these centers need to make major efforts to improve these services in order to reduce the gap between the optimal levels of risk factor control and what the current reality reflects.

Recommendations

- Review current T2DM management program.
- Create a National Diabetes Committee.
- Develop a public awareness program.
- Increase the level of physical activity in the Kingdom

Table 1: Summary of data regarding DM in KSA from 1982-2010

Year	Prevalence	Study type
1982	2.5%	A study of 1,385 male participants in the Al-Kharj area using the WHO criteria for screening.
1999	6%	A study of 14,660 participants in a screening survey in five different regions.
2000	21.9%	A community-based study.
2004	24%	A community-based study with 17,232 participants.
2009	30%	A cross-sectional study of 6,024 patients attending a primary care clinic.
2010	34.7%	A cohort study in Riyadh.

Results

- 422 patients were included; 50.24% were women (n = 212), and the average age was 52 years (n=422).
- From KFMC, there were 228 (54.03%), and 64% (n=146) were women, while from PSH, 34% (n=66) were women.

Figure 1. Prevalence of the Cardiovascular Risks

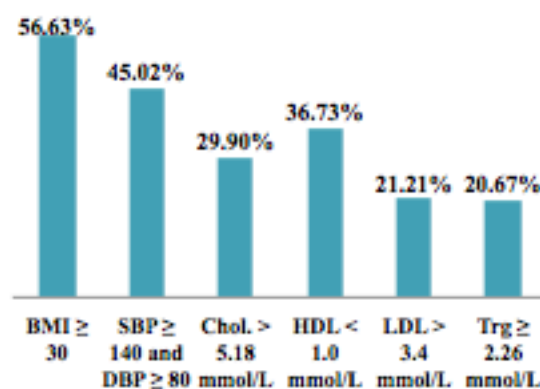
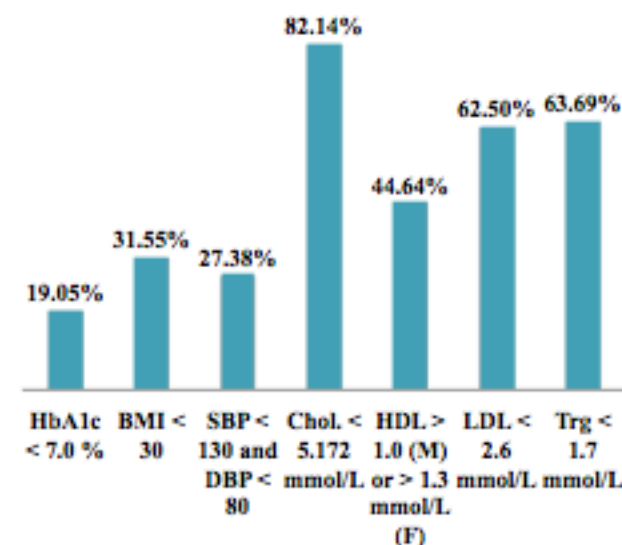


Figure 2. Patients with Optimal Control Level Using the ADA Guidelines



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Objectives

- To determine the prevalence of CVD risk factors among people with type 2 diabetes mellitus (T2DM) attending two different hospitals in Riyadh, Saudi Arabia, from 2008 -2012.
- To determine the percentage of patients achieving the recommended optimal control levels of multiple CVD risks based on the American Diabetes Association (ADA) guidelines.