

Thesis Abstract

Master of Science degree in International Health

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Title: A Cross Sectional Study to evaluate and compare the Quality Indicators of Care of Type 2 Diabetic patients from two different clinics at the University Hospital Monterrey, Nuevo Leon, Mexico in 2012.

Statement: In Mexico Diabetes is the leading cause of mortality, it is a serious problem of public health and causes a high economic burden for the society, diabetes, is the leading cause of amputations, blindness and end stage renal disease in Mexico; the costs of diabetes represent 15% of the total expenditure on health.

Assessment of quality in healthcare is of vital importance; by measuring the quality indicators of care we may be able to find gaps in the process of care and take actions and interventions in order to improve and reduce those gaps.

Objective of the study: To evaluate the adherence to the guidelines of diabetes care and management of type 2 diabetic patients from two different clinics in the University Hospital, Monterrey, Nuevo Leon, Mexico in 2012

Methods: An analytical, retrospective, cross sectional study was conducted.

Records of patients encoded as type 2 diabetic, that went for consultation to the endocrinology service and the internal medicine clinic were chosen, a random sample of 230 records was selected for every group. Data about the quality indicators of care, demographic and medical history was extracted. Data was analysed using Epi Info 3.5.3, Student's *t* test was performed to compare numerical variables, Chi-square test was

performed to compare nominal variables, *p*-values are two sided and statistically significant when 0.05 or less.

Results: Compliance of indicators of care for the endocrinology service was of 49.45%, in the internal medicine clinic was 30.58%. Patients from the endocrinology service under control (HbA1C < 7) represent 37% and patients from the internal medicine clinic under control represent 36.1%. Microvascular complications of diabetes were found to have a prevalence around 30% each, but findings suggest that the prevalence of those complications may be higher than what was measured.

Discussion: the compliance of the indicators was higher in the endocrinology service, yet, there was no difference between the two groups in terms of outcomes. Indicators of process measuring number of tests or consultations do not predict outcomes in our study.

Comorbidities play a very significant role in the study population, 40.9% of patients from the endocrinology service and 46% of patients from the internal medicine clinic have hypertension, dyslipidemia and a BMI >25.

Conclusion: Actions should be implemented in the study setting in order to improve the indicators of care with poor measurements, screening for microvascular complications should be scaled up, treatment of comorbidities should be intensified to reduce the risk of complications and a more comprehensive multifactorial treatment should be implemented with the patients and their families.

Key words: Type 2 Diabetes, Quality, Indicator