

THE IMPACT OF DIABETES ON FLATHEAD RESERVATION NATIVE AMERICANS

Diabetes is one of the most prevalent diseases among Native Americans throughout the United States. About 15 percent of Native Americans who receive Indian Health Services today have been diagnosed with diabetes. Late-stage complications of diabetes include coronary artery disease, loss of renal function, increased instance of stroke, diabetic retinopathy, and peripheral vascular disease. The personal, family, economic, and social impacts of these complications are enormous.

The objective of this study was to research ways of reducing long-term complications of diabetes in Native Americans. Interviewing patients, involvement with healthcare providers, discussions with tribal healthcare decision makers, and researching diabetes were among the methods used. Data was gathered by reviewing medical records of Native American diabetic patients. Patient chart parameters to be studied included hemoglobin A1c, blood pressure, weight control, home blood glucose monitoring, meal plans, renal panels, lipid panels, eye exams, exercise plans, and foot care. Improved patient education, glycemic control, and other modalities that enhance diabetic care, may assist in reducing late-stage complications.

INTRODUCTION

The Flathead Indian Reservation is made up of three tribes, the Salish, Kootenai, and Pend d'Oreilles. Located in western Montana, the Flathead Indian Reservation covers an area of 2,050 square miles and the tribes comprise approximately 6,800 enrolled tribal members, although only about 3,700 live on or near the reservation. The prevalence of diabetes on the Flathead Indian Reservation is 6%, or 617 diagnosed in 2004. This number increased from 542 people in 2003. Reduction of late-stage complications of diabetes in Native Americans on the Flathead Reservation is the aim of this project. The hypothesis is that if patient education, glycemic control, and methods of diabetic treatment improve, end-stage difficulties will be reduced.

METHODS

Analyzing charts of Native Americans with diabetes was one source of data for this research. The elements reviewed on the charts were patient foot care, home glucose monitoring, exercise plans, meal plans, weight control, renal panels, eye exams, hemoglobin A1C, lipid panels, and blood sugar. Interviews and discussions with health care providers such as doctors and nutritionists were conducted. Interviews with diabetic Native Americans were also conducted. Pamphlets, books, and electronic publications discussing diabetes were also reviewed.

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RESULTS

From reviewing 15 patient charts from the Western Montana Medical Clinic, many different results were found (Figure 1). Only 20% of the patients had annual foot exams and, although 40% of the patients have annual eye exams, there is still room for improvement. Twenty-seven percent of the patients did not know if their blood sugar was in a normal range. More than 50% of patients had cholesterol levels less than 200; yet, only 33% had LDL levels less than 100. Overall triglyceride levels were good, but improvement can still be made because of the chance of coronary heart disease. While many doctors encouraged eating healthy and exercising, very few patients (less than 35%) had specific meal and exercise plans.

CONCLUSION

By analyzing the patient charts, it is evident that diabetes control is not at an optimal level for this population. Several interventions could be used to improve diabetes control and include: a consistent tracking system; health communication tools designed for the population; and regional healthcare centers.

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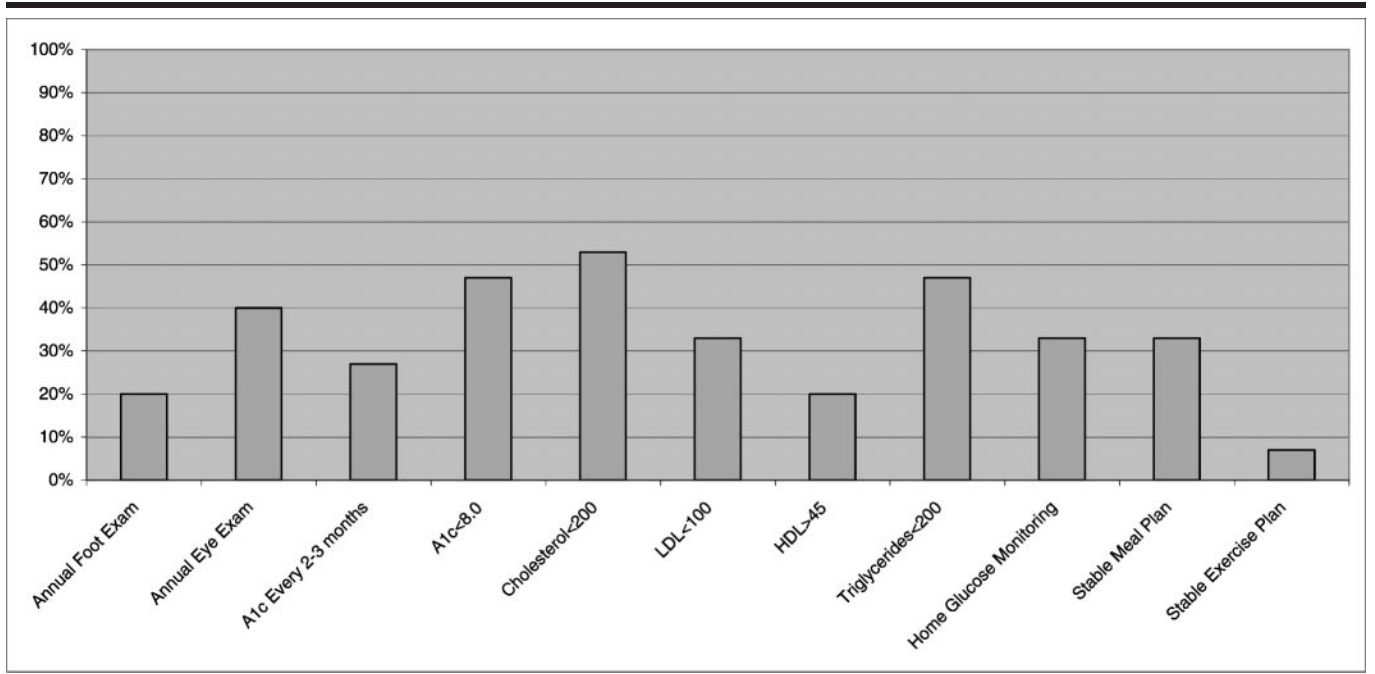


Fig 1. Prevalence of recorded diabetes-related monitoring indices in clinic charts