

NATIVE AMERICAN STRONG BODY INITIATIVE

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Diabetes risk factors have been identified in order to establish the source of differing risks for diabetes among race-ethnic groups, such as Native Americans. Studies are needed of environmental or behavioral factors, such as medical care, lifestyle, and socioeconomic status that may contribute to risk for development and progression of obesity or diabetes and its complications in representative samples of Native Americans. For example, differences in average body weight of Native Americans with, vs those without, type 2 diabetes could help unravel the sequence of events leading to weight gain timing in Native Americans with type 2 diabetes.

A literature search through pubmed.com yielded ~225,000 published articles on diabetes generally, but only 277 publications on diabetes AND Native American or American Indian. While Native Americans are ~1.5% of the US population, only ~0.12% of pubmed.com diabetes publications pertain to Native Americans. This paucity of research indicates a need for information about the effects of, and attitudes toward, diabetes in Native Americans.

Our objective was to increase knowledge about diabetes in order to help other researchers who are studying this topic. To do so, we developed a survey instrument, obtained appropriate approvals, and administered surveys to local Native Americans. Survey questions covered weight, eating habits, exercise, knowledge of diabetes, and other lifestyle factors. More than 300 surveys were administered; results of those analyses are presented.

INTRODUCTION

Very little published information regarding diabetes in Native Americans exists in the science literature. Through a literature search on pubmed.com, 222,305 publications on diabetes alone were found but only 277 publications on diabetes AND Native American or American Indian.

The 277 publications were categorized into 12 categories such as elderly, genetics, amputations, obesity, pregnancy, etc.

METHODS

To obtain personal information from Native Americans, we developed a survey instrument and named it, "Diabetes in Native Americans." It contained 36 questions regarding height, weight, age, sex, education, diabetes, school information, type of food and drinks consumed, exercising patterns, television viewing habits, drinking, and smoking. IRB (Internal Review Board) approval was received from the University of Oklahoma for the survey. Permission was also granted from the Wewoka Indian Health Clinic to administer the surveys to the Native Americans living in central Oklahoma. Two hundred thirty-three surveys were completed.

RESULTS

From the survey, we found that 34% of the Native Americans who said they had diabetes also reported being overweight or obese. Thirty-four percent of those with diabetes smoked and 13.2% with diabetes also consumed alcohol.

In addition, a comparison between Native Americans and the general population was completed. Seventy-six percent of the survey respondents were overweight or obese compared to 58% in the general population. Of those taking the survey, 28% smoked, compared to 23% in the general population. Forty-four percent were physically inactive vs 66% in the general population. In addition, the following differences between Native Americans and the general population were found: alcohol consumption: 27% vs 21%, respectively; reported smoking and were overweight: 21% vs 12% respectively; reported smoking and were physically inactive: 12% vs 16%, respectively; overweight or obese and physically inactive: 34% vs 26%, respectively; smoked and consumed alcohol: 12% vs 9%, respectively.

ACKNOWLEDGMENTS

The author wishes to thank NIH for sponsoring this research program and many thanks to Dr. Donna J. Nelson, my mentor, to Wendy Harrison for allowing me to administer the surveys to Native Americans in central Oklahoma and to Cathy Parker for introducing me to this program.

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