



Abstract

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PI Title:

Project Title: Cardiovascular Risks in Adolescents with Diabetes

Abstract: *Cardiovascular disease (CV) is a leading cause of morbidity and mortality in the United States. An increase of two to four times in the risk of heart disease is reported in persons with diabetes, regardless of whether they have type 1 or type 2 diabetes. In spite of the magnitude of this problem, few investigators have explored the effects of diabetes diagnosed during youth on the development of cardiovascular disease. The limited research that is available does suggest that cardiovascular risks, such as lipids and lipoproteins, are elevated for youth with type 1 diabetes compared with nondiabetic counterparts. Additionally, a decrease in heart rate variability has been documented for adolescents with type 1 diabetes, although no data were found regarding adolescents with type 2 diabetes. Greater numbers of adolescents are being diagnosed with type 2 diabetes, particularly in minority populations, secondary to sedentary lifestyle behaviors, obesity, and increased dietary fat consumption. The intent of this proposal is to describe differences in adolescents with type 1 and type 2 diabetes pertaining to cardiovascular risks, personal factors, and behavioral factors. In addition, we will examine relationships among these three sets of variables and determine how sociodemographic components influence each set of variables. A descriptive correlational design with a sample of 100 adolescents with type 1 diabetes and 100 adolescents with type 2 diabetes will be used to investigate cardiovascular risks, as well as predisposing factors such as exercise beliefs, level of physical activity, dietary practices, self-competence, and body mass index. Sociodemographic variables such as race, gender, socioeconomic status, family structure and history will be included. Determining variations in cardiovascular risks and predisposing factors for youth with type 1 versus type 2 diabetes is essential prior to designing interventions that promote positive health outcomes, ultimately control*

escalating costs for diabetes care, and minimize adverse effects on health status and well being. This investigation is particularly relevant given the limited research on cardiovascular risks in adolescents with type 2 diabetes.

Thesaurus Terms:

adolescence (12-18), cardiovascular disorder, disease /disorder proneness /risk, health behavior, insulin dependent diabetes mellitus, noninsulin dependent diabetes mellitus body composition, body physical activity, dietary lipid, gender difference, life style, nursing intervention, racial /ethnic difference, self concept, socioeconomics behavioral /social science research tag, clinical research, human subject, nutrition related tag

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