# Example of nursing research proposal research paper

# Implementing a Diabetic Education Program for Patients and Caregivers

Abstract

Method:

Research question: How does teaming with patients and caregivers to implement a diabetic education program improve adherence and healthcare outcomes?

Overview of the Study

The study will focus on patients and caregivers who help them manage their diabetes (DM) as outpatient in a clinical setting. The target population is adult patients of all age with type 2 diabetes. The population will also include patients with DM patients, with elevated random blood sugar (BS) above 200 mg/dl twice in one week. The intervention being tested is the educational program for patients with diabetes. The group tested will receive usual care, but each patient will be designated a specific caregiver. The patients will also be given specific instructions with interventions to help them understand care strategies for managing DM at home. The patients will be expected to commit to a visit twice a week. Patients will also be followed for one, three and six months to determine any changes in their diabetes.

## Sampling and Procedure for Selection of Participants

The people to be included in the broader study will be DM patients who manage their DM symptoms at home. They will be selected from the broader population by their BS, self-sufficiency in living at home, and other criteria. The inclusion criteria will be compiled of patients who still live at home, and

manage their diabetes with the help from a caregiver. The exclusion criteria will be compiled of patients who have been treated in a hospital or urgent care facility or live in an assisted living facility primary care is administered by staff. The size of the sample should be 10 to 50 participants in the study.

## Operational Definition of Variables

The dependent variables will be formed by the patient's perception of care from the caregiver, the perceived or actual support from the caregiver and the quality of care and education offered by the caregiver to the patient with diabetes. The independent variables will be concluded by the age of the participant, the diabetes status of the patient, and whether the patient lives at home and is utilizing a caregiver to assist in a patient care plan. There will be a close study of the impact of a caregiver on the management of the patient's diabetes. The independent variable is the administration of care, while the dependent variable is the impact the care has on diabetes. In terms of patients that do not receive care, the study will reflect how many days a patient can go without care. The independent variable is the number of days of without care. The dependent variable is the onset of diabetes related illness without receiving care.

## The Operational Definitions

Instruments used in the project are to determine the perceived support by surveying the patients with caregivers, and assist in managing the patient's DM. Caregivers will monitor the patient's blood sugar with a glucose monitor. The data will then be recorded in a blood sugar log. The data reliability of these instruments will be determined by people surveyed; people surveyed

will be screened to determine if the person is diabetic and has a caregiver.

(The survey will be added later to the protocol at the end as an attachment).

## Intervention/Treatment/Educational Program

The educational program will be place to educate the patient and caregivers as a whole. The program intervention will teach and help patients with DM to adhere to treatment and empower them to manage their care plan, to improve their healthcare routine, and to promote better health. Literature provided supports that caregivers need to undergo training to provide the patient with options to manage their DM on a daily basis.

## Data Collection Procedures

Data will be collected by surveying patients with diabetes and questioning whether or not they receive any support for managing their diabetes at home. The subjects will be recruited by inquiring as to whether they are supported at home by their caregivers and how that support affects the care they utilize for managing their diabetes; subjects will also be recruited by the office manager asking the patient if they would be interested and if they say yes they would be added to the list for the NP to talk to them. In addition, the subjects will sign a consent form in order to participate in the study. Data will be collected using a blood sugar log. Each caregiver will fill out a daily log. Each log will have data as follows: Method, Purpose, Advantages Challenges and Resources; each category will apply to the patient daily in order to assess the advantages and disadvantages to in-home management of their diabetes.

## Proposed Data Analysis

The data will be analyzed to answer the research questions regarding how patients with supportive caregivers have higher compliance, better self-efficacy and reduced distress regarding managing the care of their diabetes. The analysis of the caregiver's blood sugar log will involve summarizing the data according to the research questions and exploring similarities and differences occurring among caregiver's experience with their individual patients. Data analysis will begin following an observation and interview. Subsequent interviews and observations will be adapted to focus on information gathered from data collected during the longitudinal study.

## Power Analysis

When proposing the effect size of the group as 10 people, a proposed analysis was taken. This is a sample of the data and analysis that will be conducted once the research is compiled from each caregiver.

## [1] -- Sunday, March 03, 2013 -- 21: 23: 28

t tests - Means: Difference from constant (one sample case)

## Analysis: A priori: Compute required sample size

Input: Tail(s)= One

Effect size d= 10

$\alpha$ err prob= 0. 05

Power (1-$\beta$ err prob)= 0. 95

Output: Noncentrality parameter $\delta$= 14. 1421356

Critical t= 6. 3137515

Df= 1

Total sample size= 2

Actual power= 0. 9730553

## Treatment Fidelity

The treatment fidelity measures the reliability and verity of the clinical intervention evaluated in the study. These include the study design; training of providers; as well as, the delivery, receipt and enactment of the treatment skills. Caregivers will be trained in the best methods to assist the patients with diabetes on ' how' to follow their diabetes management plan. The training will further show caregivers the most effective methods for developing new care strategies in order to manage the patients with DM at home.

## Significance of the Project

The proposed contribution to nursing will be caregivers who consciously offer positive reinforcement and support to their patients with diabetes; also, to aid the patient in becoming much more educated on how to overcome obstacles within diabetes, and how to best comply with the diabetes management plan. The information will change nursing practices by offering interventions, educational programs and training for caregivers to educate their patients as to how to overcome obstacles in relation to their care for diabetes.

The findings will contribute to the literature by providing a roadmap for caregivers who are new to caring for a patient with DM. It will further educate the caregivers and patient on strategies to reduce stress and

increase compliance of the treatment plan. The anticipated benefits the

support provides to the patients, which will help overcome diabetes

disability, will support patients with diabetes at home. Once the caregivers

are educated, as well as the patients, they will both understand the plan of

care and apply it; the hope being adherence will go up and cost will go down.

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