

**Review Article** 

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# Nursing Care to Patients Living with Diabetes Mellitus

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# Abstract

Objective to verify the effectiveness of nursing interventions based on the Imogene King's Theory of thing Attainment, on improving care for people with diabetes and adherence to treatment.

**Method:** Quasi-experimental, longitudinal, randomized, simple study in a Primary Health Care Unit, in the megacity of Fortaleza, Ceará state, Brazil. The sample comported of 60 people with diabetes, divided into intervention and control groups, whose collection passed from February to August 2013.

**Results:** In the intervention group, a significant adherence of the cases to the pretensions defined in the study was found. In the control, there was enhancement in some aspects of the treatment.

**Conclusion:** With these results, it was possible to conclude the feasibility of using proposition of thing Attainment in the positive aspects for adherence to diabetes treatment and enhancement of quality of life.

**Keywords:** Nursing care utilizing orem's; Self-care Deficit theory; Diabetes mellitus

### Introduction

Diabetes mellitus is taken from the Greek word diabetes, meaning siphon- to pass through and the Latin word mellitus meaning sweet. A review of the history shows that the term" diabetes" was first used by Apollonius of Memphis around 250 to 300 BC [1-2]. Ancient Greek, Indian, and Egyptian societies discovered the sweet nature of urine in this condition, and hence the propagation of the word Diabetes Mellitus came into being. Mering and Minkowski, in 1889, discovered the part of the pancreas in the pathogenesis of diabetes. In 1922 Banting, Best, and Collip purified the hormone insulin from the pancreas of cows at the University of Toronto, leading to the vacuity of an effective treatment for diabetes in 1922. Over the times, exceptional work has taken place, and multiple discoveries, as well as operation strategies, have been created to tackle this growing problem. Unfortunately, even today, diabetes is one of the most common habitual conditions in the country and worldwide. In the US, it remains as the seventh driving cause of passing.

Diabetes mellitus (DM) is a metabolic complaint, involving erroneously elevated blood glucose situations. DM has several orders, including type 1, type 2, maturity- onset diabetes of the young (MODY), gestational diabetes, neonatal diabetes, and secondary causes due to endocrinopathies, steroid use, etc. The main subtypes of DM are Type 1 diabetes mellitus (T1DM) and Type 2 diabetes mellitus (T2DM), which classically affect from imperfect insulin stashing (T1DM) and/ or action (T2DM). T1DM presents in children or adolescents, while T2DM is allowed to affect middle-aged and aged adults who have dragged hyperglycaemia due to poor lifestyle and dietary choices. The pathogenesis for T1DM and T2DM is drastically different, and thus each type has various etiologies, donations, and treatments.

#### Method

#### Ethical aspects

The project was endorsed by the Inquire about Morals Committee of the Universidade do Estado do Ceará. All participants signed the Free and Clarified Consent Term( FCCT) previous to the launch of data collection, esteeming the ethical precepts of exploration with human beings based on Resolution466/12 of the National Health Council( 6).

#### Design, place of study and period

It's aquasi-experimental study, type before and after an intervention. In this study, pretensions based on King's proposition were drawn, based on the problems detected in the nursing consultations for people with diabetes mellitus with a view to better adherence to treatment in a Family Health Strategy team in the megacity of Fortaleza, Ceará state, Brazil.

## Population

Cases who met the following criteria were included in the study being regularly enrolled and followed by the platoon; being 18 times of age or aged, of both relations and having a opinion of diabetes appertained for at least six months. We excluded those with cognitive deficiency and with difficulties that could make the communication and the responses to the instrument unfeasible.

The sample of the present study was obtained through convenience sampling and was composed of 60 people with DM enrolled in the hypertension and diabetes program in that unit. Out of 60 cases, there were two deaths and two deaths due to change of address.

## **Study Protocol**

With all the cases sharing in the exploration, data for the baseline were collected at the first nursing visit for purposes of future comparisons. These data were collected and recorded in a form containing socio demographic information( coitus, age, times of study and family income), family, conventions( opinion time, comorbidities and habitual complications), metabolic control( BMI, abdominal pressure, blood pressure), life, general health perception/ monitoring,

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tone/ body image, time, mortal relations, part and relationship, nutrition and metabolism, eliminations, sleep and rest, fornication and reduplication.

After this discussion, the cases were divided into two groups, which were submitted to three further nursing consultations the intervention group, which passed the nursing discussion based on the proposition of thing Attainment, when, at each discussion, pretensions were drawn based on the problems detected, in agreement with each case attended [3-4]. With each return, the same pretensions were maintained when they couldn't achieve them, and/ or new pretensions were set. As the consultations were personalized not all dyads established the same pretensions, and these were designed according to the requirements of each case. The form used in the consultations also contained the decisions made in the nurses- patient interaction process, jointly established pretensions, posterior evaluations and final evaluation.

Like the intervention group, the control group passed three nursing consultations, and these routine consultations were already developed by the Family Health Strategy nurse. There was also a frame to record the issues identified and their evolution all through the meetings [5-7]. Data were collected collectively during four visits by the experimenter every 45 days. The average term of each visit was forty minutes.

## Data analysis and statistics

For the analysis of blood pressure, capillary glycaemia and BMI data, the parameters proposed by the Brazilian Diabetes Society were followed.

The data were organized in a database in the program Excel for Windows and latterly, transported to the software SPSS interpretation20.0 (Statistical Package for the Social Sciences)  $n^{\circ}$  10101113007, where they were reused for analytical statistical evaluation, the relation and interlacing of the different variables of the data, using non-parametric Chi-square tests and the liability rate, espousing a statistical significance level of 5( p<0.05).

### Discussion

To develop this study, we sought to build on the Imogene King's proposition of thing Attainment. This describes the nature of nursepatient interactions that lead to goal achievement, in which nurses purposefully interact with cases to mutually establish pretensions, explore and agree on ways to achieve them. collective pretensions are based on the identification of problems, changes in health, comprehensions of problems and sharing of information in order to achieve pretensions.

Cases from the intervention group were anatomized independently on the base of the pretensions agreed upon in the nursing consultations based on the Imogene King's proposition of Goal Attainment. Regarding the socio demographic and clinical characterization of the sample, the findings are analogous to those of other studies conducted in Brazil on the frequence of diabetes mellitus [8].

In the interaction process of theory, this is defined as a process of perception and communication between the person and the terrain, and between people, represents a sequence of verbal and nonverbal actions that are meta- acquainted. Each existent brings knowledge, needs, pretensions, prospects, comprehensions and experiences that impact the relations [9].

# Conclusion

The theory proposed by Imogene King for the achievement of goals is doable to be applied in the Family Health Strategy [10], since the patient feelsco-responsible for his treatment, and acts laboriously with decisive power in the possible changes for better adherence to the proposed care. In addition, because it's always accompanied by the same platoon, commerce.

When comparing the results of this interaction based on the proposition employed, it's considered that the ideal was reached, substantially because of the significant adherence to the use of sweetener, to the practice of physical exertion, regular use of drug and food control.

Still as identified in the two study groups, the monitoring with a greater propinquity of time promoted a positive surveillance, since, due to the lesser interaction of both, it was possible to more adapt the strategies of adherence to the proposed treatment with consequent creation of the quality of people with diabetes.

In this perspective, before the results set up, this study is concluded with the confidence that the nursing clinical care appreciatively favours the people, with a view to improving the nursing care directed to them.

#### **Conflict of Interest**

The authors declare no conflict of interest.

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