



The Effectiveness of Diabetic Gymnastic Program Evaluation in Imron Medika Primary Clinic Using CIPP (Context, Input, Process, Product)

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Abstract

Diabetes Gymnastic program is a system organized by a clinic in implementing Social Insurance Administration Organization for Health (thereafter called *BPJS Kesehatan*) and proactive approach conducted in integrated manner by involving patients developing some diseases, one of which is type-2 diabetes mellitus, to achieve the optimum quality of life with efficient and effective healthcare service.

CIPP (*Context, Input, Process, Product*) evaluation consisted of *Context*, a basis of evaluation aiming to provide reasons in setting out the objective. *Input* is an evaluation aiming to provide information to determine how to use three available components including human resource, infrastructure, cost, and procedure. *Process* is an implementation of activity planned in the field and *Product* is to measure the success and to interpret the achievement of program's objective specified.

This research aimed to find out and to describe the background of program creation, program benefit, program development procedure, patient admission, infrastructure feasibility, costing/funding, implementation, monitoring, progress and output of diabetes gymnastic program in Imron Medika Primary Clinic.

The study was evaluative qualitative research using descriptive method with CIPP model. This research attempted to describe the reality existing concerning a condition found objectively. Basically this study discussed the concept of diabetes gymnastic program implemented in Imron Medika Primary Clinic. Techniques of collecting data used in this study were interview, observation, questionnaire and documentation. The procedure taken in analyzing the data of research included: (1) data collection, (2) data reduction, (3) data display, and (4) conclusion drawing/verification. Data validation was carried out using source triangulation technique. Sampling technique employed was purposive sampling one.

From the result of research, it can be seen that all aspects have been implemented well, but there is still some problem in input aspect related to the program development procedure not consistent with the specified one. In addition, there is still a debate in input aspect due to different ratings from the data sources leading to less comfort to some certain parties. What is still doubted in process aspect is the program progress that could not have been assessed entirely because the program is still too premature to be assessed from health point of view.

Keywords: Evaluation; CIPP Model; Diabetes Gymnastic Program

Introduction

Nabyl (2012) states that disease problem often encountered is diabetes hazardous to its patient's body when it is not treated well, as it can result in complication. IDF recently estimates 382 millions people living with diabetes in the world in 2013. This figure will putatively increase to 592 millions in 2035. It is estimated that out of 382 millions people, 175 millions have not been diagnosed, thereby threatened to progress into complication unconsciously and without prevention (infodatin-diabetes).

Generally, nearly 80% of diabetes mellitus prevalence is type-2 DM. it mans that unhealthy lifestyle primarily triggers the increased prevalence of DM. When observed closely, populations with obesity or overweight has larger risk of being affected with DM than those without obesity (Department of Health, 2009).

Uncontrolled diabetes refers to glucose level exceeding the targeted limit and results in direct short term (dehydration, weight loss, blurred vision, hunger) and long term effects (micro- and macrovascular disorder) (Mikail, 2012). Some complaints can be found in diabetic patients. The suspicion of diabetes mellitus should be thought containing the following classical complaints of diabetes mellitus (Gustaviani, 2007; Perkeni, 2011):

1. Classical complaint of diabetes mellitus includes polyuria, polydipsia, polyphagia, and unexplainable weight loss.
2. Other complaints include: lethargy, numbness, blurred vision, and erectile dysfunction in men, and pruritus vulvae in women.

In addition to the ever increasing number of diabetic patients, another thing to be alerted in diabetes mellitus is complication risk likely occurring in uncontrolled diabetes mellitus. One of government's attempts of coping with diabetes mellitus problem is to hold community welfare improving program through some programs organized in hospital aiming to control, to prevent, and to reduce diabetes disease recurrence and to motivate the diabetic patients related to diabetes-secondary/complication disease.

Diabetes mellitus can be prevented with 4 pillars of diabetes mellitus control consisting of education, diet, physical exercise, compliance with medication aiming to enable the diabetic patients to live longer, due to their well-maintained quality of life (Perkeni, 2011). Overweight is one of risk factors leading to the sedentary lifestyle-related diseases, such as coronary artery disease, stroke, hypertension, and diabetes. In the attempt of keeping the human resource healthy and fit, sport or physical exercises becomes an alternative to diabetic patient and can lower blood glucose level within 24 hours after practice. Even it is beneficial to prevent the increase in post-meal blood glucose level in patients with type-2 DM. Body muscles will keep the blood glucose level normal. It will also make body's natural insulin work well and will result in advantages some hour after physical exercise.

Through diabetic gymnastic, type-2 DM patients are trained to do physical exercise, to make the blood flowing smoothly and to stimulate nerve, and to lower the level of three hormones that can reduce depression.

Imron Medika primary clinic applies Diabetes Gymnastic Program to control diabetes disease in the form of rhythmic gymnastic sport, regular and measurable aerobic gymnastic. The program has run from 2017-today intended to patients showing the disease they develop.

Complication in type-2 diabetes mellitus patients can be hazardous to its patients' body when it is not treated well. Diabetes mellitus can result in such complication as renal, diabetic retinopathy, diabetes

mellitus ulcus, and hypertension complication hazardous to body. One attempt of controlling the type-2 diabetes mellitus patient's quality of life is to do sport or physical exercise. Sport impacts on the improved sensitivity of insulin thereby can control blood glucose.

Doing sport or physical exercises routinely is very important. Gymnastic becomes an alternative to lowering blood glucose level. Gymnastic makes the muscles active, so that although there is an increase in glucose need, there is no increase in insulin level. It is because there is an increase in body insulin receptor's sensitivity and in body insulin volume during physical exercise. The increase in blood flow during physical exercise leads many capillary nets to open thereby making insulin receptor more active.

Diabetes gymnastic program is intended to DM patients aiming to improve health quality to DM patients. Diabetes Gymnastic Program is an important part of diabetes mellitus management. Imron Medika Primary Clinic implements Diabetes Gymnastic Program to DM patients. Departing from this, the appropriate diabetes gymnastic program to diabetes patients should be known. Diabetes gymnastic program has been implemented several times but its implementation effectiveness has not been evaluated yet.

Method

This study was an evaluative qualitative research attempting to describe the existing reality concerning the condition found objectively using CIPP model. Basically, this article discusses the effectiveness of the evaluation on diabetes gymnastic program concept implemented in Imron Medika Primary Clinic. Techniques of collecting data used in this study were interview, observation, questionnaire, and documentation. The procedure of non-statistic qualitative analysis conducted in this research included: (1) Data Collection, (2) Data Reduction, (3) Data Display, and (4) Conclusion Drawing/verification. Data validation was conducted using triangulation source technique. The sampling technique employed was purposive sampling one.

Result and Discussion

To obtain data of *Context, Input, Process, and Product* aspect, the author interviewed clinicians, distributed questionnaire to patients and supporting officers, and made documentation related to patients' medical record and other data.

1. Evaluation on the Context of Diabetes Gymnastic Program in Imron Medika Primary Clinic

a. Background of Diabetes Gymnastic Program Development

Considering the result of interview and document study, it can be seen that diabetes gymnastic program was developed from PROLANIS (*Chronic Disease Management Program*) Club that has been organized by BPJS, so this program is indeed held once a month, involving education and gymnastic.

b. Benefit of Diabetes Gymnastic Program

Considering the result of research, it can be explained that the presence of diabetes gymnastic program helps patients lower or maintain their body weight. It is because people with type-2 diabetes are risky of developing obesity. In addition, during physical exercise, body needs extra energy. It enables muscle to absorb glucose thereby helping lower the blood glucose level.

2. Evaluation on the Input of Diabetes Gymnastic Program in Imron Medika Primary Clinic

a. Patients' Acceptance to Diabetes Gymnastics Program

In the program planning, there are some criteria to be met for the patients to participate in the program: patients should develop diabetes and be registered in BPJS as the members of PROLANIS that can follow the program once a month and should be in stable condition, meaning that they are referred back by the hospital.

b. The feasibility of Diabetes Gymnastic Program Infrastructure

The infrastructure of sub program has not been adequate yet, for example, there has been no wide yard to implement the gymnastic, so that it is implemented before the Clinic, in the edge of highway constituting the primary road and open space for the driver, so that the audio speaker yielded is less maximal as it is concomitant with the noise resulting from people driving on the street. If it is located inside the clinic, the audio yielded will be heard clearly by the patients (gymnastic participants) but the indoor setting is narrower than the front yard. The infrastructure has not been available 100% despite the duly implementation of gymnastic.

c. Diabetes Gymnastic Program Funding

This program implementation funding has been assumed by BPJS from the dues paid by Prolanis members either independently or *askes* (health insurance) for Civil Servants. Then, the fund budget can be used for providing costume and consumption. However, there is also a distinctive cost imposed to be the participants, i.e. the dues to be used for holding tour agenda for the participants.

3. Evaluation on the Process of Diabetes Gymnastic Program in Imron Medika Primary Clinic

a. The implementation of Diabetes Gymnastic Program

Diabetes gymnastic program is held once a month with education in the first stage, followed with happy gymnastic for elders with low impact rhythm in less than 60-minute duration, and then taking a rest.

b. Monitoring of Diabetes Gymnastic Program

The monitoring of blood glucose level is a stage in the management of patients with DM in addition to diet, activity, and drug. Medication compliance is patients' compliance with medication and obedience to all advices and instructions given by health workers. Monitoring is conducted during the diabetes gymnastic program, education and fast blood glucose level examination are conducted as well to monitor the patients' health, and to examine HBA1c level once in 6 (six) months.

c. The progress of Diabetes Gymnastic Program

The primary target of a program is to improve the quality of program. It includes the improvement of patients' quality of health, management, and education patients. Clinician serves as facilitator and 100% patients are expected to be present in the monitoring program; if some patients cannot be present, they should obligatorily notify their absence, and if they cannot be present for 3 successive months, they should be monitored as well, and if they do not have their condition controlled within 6 (six) months, they will be excluded.

4. Evaluation on the Product of Diabetes Gymnastic Program in Imron Medika Primary Clinic

From thee result of research, it can be seen that all aspects have been implemented well, despite some problems in input aspect related to the incompatibility of program procedure to the specified one. In addition, there is still a debate in input aspect due to different ratings from the data sources leading to less comfort to some certain parties. What is still doubted in process aspect is the program progress that could

not have been assessed entirely because the program is still too premature to be assessed from health point of view.

Conclusion

Overall, entire diabetes gymnastic program in Imron Medika primary clinic should be maintained and improved in its organization quality. Diabetes gymnastic program now becomes a solution to diabetic patients to get attention and support related to their disease management.

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