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Research Article

**ANALYSIS OF ORGANIZING AND DELIVERING DIABETES  
EDUCATION AND SELF-CARE SUPPORT IN PAKISTAN****Dr Talia Ahmed<sup>1</sup>, Dr Mishqat ul Misbah<sup>2</sup>, Dr Sobia Nawaz<sup>3</sup>**<sup>1</sup>Rawalpindi Medical University, Rawalpindi., <sup>2,3</sup>Bahawal Victoria hospital Bahawalpur.**Article Received:** October 2020    **Accepted:** November 2020    **Published:** December 2020**Abstract:**

**Introduction:** Diabetes mellitus is known as being an acute disease that is really a leading public disease. It impacts around two to five percent in the adult populace within evolved nations.

**Aims and objectives:** The basic aim of the study is to analyze the organizing and delivering diabetes education and self-care support in Pakistan.

**Material and methods:** This randomized controlled study was conducted in Rawalpindi Medical University, Rawalpindi during July 2019 to December 2019. Patients had been qualified to take part if they had a medical diagnosis of type 2 diabetes, had gone to a minimum of one observe-up examination and had been in a position to render informed permission. The average age in the patients had been more than forty years and all except for one patient had been educated. Patients with type 2 diabetes, who also frequently went to the centre for medication and observe up, had been provided registration within the research. Eighty patients confirmed to take part and had been randomly allocated to either the intervention or reduce group in accordance with their particular allocated number.

**Results:** Typically there were no considerable variations in age, gender, education level, BMI (body mass index), diabetes period, or treatment type in between patients with the intervention and the control groups. Patients had been requested their physical exercise practices, particularly they had been requested either or perhaps not they did stretching, walked routinely, swam, or cycled. All individuals in both groups responded that they recognized physical exercise to generally be 'walking'.

**Conclusion:** Even though follow-up happened exclusively two weeks after the training program, there were some enhancements in understanding, self-revealed self-management attitude and a considerable difference in diabetes self-efficacy between the intervention and control groups.

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**INTRODUCTION:**

Diabetes mellitus is known as being an acute disease that is really a leading public disease. It impacts around two to five percent in the adult populace within evolved nations. The frequency of type 2 diabetes is expected increase more than a decade, as well as the realities, unveiled that 425 million individuals have diabetes within the whole world at the moment and even more than thirty-nine million people within the MENA Region; through 2045 this would increase to 67 million. There are 7.474.000 cases of diabetes within Pakistan in 2017 [1].

Diabetes education remains an important element of diabetes administration ever since the 1930s that is progressively well known as an essential part of acute disease administration. The aims of educating individuals with type2 diabetes have always been to enhance metabolic reduce; counter acute risks; enhance the standard of life through directing the attitude of patients and generate variations within knowledge, mindset, and attitude essential to preserve or enhance health [2]. Research indicates patients who also informed regarding their particular disease together with its medication; tend to generally be more inclined to prosper within managing their particular disease [3]. For instance, hypoglycemia is a type of in the most typical issues individuals with diabetes require to deal with; the administration that varies in accordance with medication and medications. Self-supervising blood glucose might apply to counter hypoglycaemic or hyperglycaemic episodes in order to recognize the influence of way of life and medication variations on glucose levels [4]. Having said that, many individuals with type 2 diabetes require to reduce weight. So diet requires to generally be individualized [5].

Self-administration for individuals with acute health issues is extensively well known as being an essential part of medication. The patient is liable for the daily administration of their particular disease. In order to thoroughly self-organize their particular disease, people might get the essential knowledge, skill, and self-confidence and take part within particular behaviors incorporating testing blood glucose and emotional administration [6]. Self-confidence or self-efficacy alludes to the individual's notion within his or her capability to execute the attitude.

**Objectives:**

The basic aim of the study is to analyze the organizing and delivering diabetes education and self-care support in Pakistan.

**MATERIAL AND METHODS:**

This randomized controlled study was conducted in Rawalpindi Medical University, Rawalpindi during July 2019 to December 2019. Patients had been qualified to take part if they had a medical diagnosis of type 2 diabetes, had gone to a minimum of one observe-up examination and had been in a position to render informed permission. The average age in the patients had been more than forty years and all except for one patient had been educated. Patients with type 2 diabetes, who also frequently went to the center for medication and observe up, had been provided registration within the research. Eighty patients confirmed to take part and had been randomly allocated to either the intervention or reduce group in accordance with their particular allocated number. The patients who also confirmed to take part had been provided enrollment numbers. To figure out the intervention and reduce groups, the phrase 'intervention' and 'control' had been developed on various piece of paper and having 'intervention' being driven whilst the first randomization. To specify the patients in the intervention as well as the reduce group, the numbers '1' and '2' had been developed on a various piece of paper and number '1' had been driven first, so patients with odd enrolment numbers had been allocated to the intervention group. They had been forty patients within each group. To examine the knowledge test, it had been implemented to ten patients and in accordance with the outcomes no variations had been established except for a place of living in the patients had been excluded. Pilot research respondents had been omitted from the major research.

**Statistical analysis:**

Data had been organized utilizing the Statistical Package for the Social Sciences (SPSS) for Windows version 20.0. In order to evaluate the intervention with the reduce group, chi-square and Fisher's exact test had been performed for dichotomous parameters.

**RESULTS:**

Typically there were no considerable variations in age, gender, education level, BMI (body mass index), diabetes period, or treatment type in between patients with the intervention and the control groups as mentioned in below Table 1:

**Table 1:** Patient features in both the intervention and control group

Characteristics	Intervention	Control	p-value
	group (n=40)	Group (n=40)	
Gender			
Female	20	21	1
Male	20	19	0.833
Age (years)			
≤ 39	2	1	0.833
40-44	3	1	
45-49	5	7	
50-54	9	11	
55-59	11	9	
≥ 60	10	11	
Level of education			
< High school	14	16	0.084
High school	0	5	
> High school	26	19	
BMI (kg/m <sup>2</sup> )			
< 29	9	9	0.965
29-31	20	21	
≥ 32	11	10	
Duration of diabetes (years)			
0-4	9	14	0.447
5-9	8	9	
10-14	12	11	
≥ 15	11	6	
Type of treatment			
Tablets	36	36	1
Insulin	16	15	1
Tablets and insulin	13	12	1

Patients had been requested their physical exercise practices, particularly they had been requested either or perhaps not they did stretching, walked routinely, swam, or cycled. All individuals in both groups responded that they recognized physical exercise to generally be 'walking'.

**Table 02:** Self-care and management of diabetic patients

	Intervention group (n=40)	Control group (n=40)	p-value
<b>Self-management</b>			
<b>Walked regularly</b>			
<b>Before the education</b>			
None	13	12	0.888
≤ 30 minutes	5	4	
31-60 minutes	22	24	
<b>After the education</b>			
None	6	16	0.043
≤ 30 minutes	7	5	
31-60 minutes	27	19	
<b>Regulated blood glucose to prevent diabetic retinopathy</b>			
<b>Before the education</b>			
Yes	11	6	0.274
No	29	34	
<b>After the education</b>			
Yes	21	7	0.002
No	19	33	

**DISCUSSION:**

The objective of this particular research had been assessing the consequence of patient training or training on understanding, self-efficacy and self-management characteristics in patients suffering type2 diabetes. The intervention exclusively manufactured for this specific research had been short-term and may not include long-term follow-up. The research from some other randomized monitored research implies that self-management techniques efficiently raise participants' understanding, indication self-management, some other self-management attitude such weight control, screening blood glucose, self-efficacy, and features to a health condition [7]. Nevertheless, in This particular research, understanding enhanced to some minimal level in addition to being self-revealed self-management attitude, exclusively walking constantly and attempting to manage blood glucose levels in order to avoid diabetic retinopathy, enhanced considerably [8]. Current observational study has revealed that even without the follow-up intervention, health-affiliated enhancements achieved from self-management programs tend not to persevere over the long-term [9]. In fact it is not easy to differentiate between the particular advantage to such interventions and the nonspecific consequence to research involvement,

which include enhanced patient understanding and determination [10].

**CONCLUSION:**

Even though follow-up happened exclusively two weeks after the training program, there were some enhancements in understanding, self-revealed self-management attitude and a considerable difference in diabetes self-efficacy between the intervention and control groups. This particular short-term intervention revealed that the training program which had been manufactured according to patients requires may enhance patient's management to their disease. Nevertheless, patients should be supported to maintain the self-management characteristics long-term. It is suggested that long-term research is supposed to make sure long-term maintenance to self-management characteristics and to enhance self-efficacy.

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