

TITLE

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Independent College of Nursing (LSN)

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IJSER
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TITLE

A research project submitted by

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In the partial fulfillment for the Degree of
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The Research Project and its presentation of **Madiha Manzoor** (Regd. No. 60153025_____) was held on **Date 24,5,2017** at the Independent College of Nursing, The University of Lahore. The Supervisory and Examination Committee gave satisfactory remarks on the project and was approved for the award of the degree of Bachelor of Science in Nursing (BSN)

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Undertaking

I Madiha Manzoor (Regd. No. 60153025) declare that the contents of my research project entitled "TITLE" are based on my own research findings and have not been taken from any other work except the references and has not been published before. I also undertake that I will be responsible for any plagiarization in this project.

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**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENT**

FOR THE DEGREE

**OF
IJSER
BACHELOR SCIENCES
IN**

NURSING

COLLEGE OF NURSING

INDEPENDENT UNIVERSITY FAISALABAD

PAKISTAN

2017

DEDICATION

I dedicate this humble effort,

IJSER

The fruit of my thoughts and study

To

My Beloved Parents

Whose hands always rose in prayers for me for higher ideas
of life.

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ACKNOWLEDGEMENTS

I feel actuated from within to offer my humblest and sincerest thanks to “ALMIGHTY ALLAH”, the most Merciful, the most Beneficent, the Gracious and Compassionate, Who created the Universe and bestowed the mankind with knowledge and wisdom to search for its secrets and bestowed the ability to perceive and pursue higher ideas of life. I offer my praises and sentiments to “HOLY PROPHET HAZRAT MUHAMMAD (PBUH)”, who is an external beacon of guidance and knowledge for humanity as a whole.

I deem it utmost pleasure to express my heartiest gratitude and deep sense of obligation to my reverend Supervisor **Mam Shafquat Inayet** (Principal of Nursing College) Independent University Faisalabad for his skilful guidance, learned patronage, unflinching patience, untiring help throughout and inspiring attitude to work with patience and consistency on scientific logics during undertaking of this study and write up of manuscript.

I wish to express my deep sense of obligation and esteem to member of my supervisory committee **Dr. Shehbaz** , Associate Professor of Department of Community Medicine, Independent University Faisalabad for his kind, sympathetic, inspiring and scholastic guidance and ever encouraging attitude.

IJSER **Madiha**

Abstract:

Diabetic become global epidemic. irrespective of modern approach to control it ,its cases continuous increases .however, The diabetic individual need to knowledge and skill to make informed choice to facilitates self directed behavior change and ultimately to reduce the risk of complications, but by knowing its importance majority people not receive education yet now. However self management education proved effective for them, to evaluate the effect of self management education on patients with all type of diabetes visiting Allied hospital Faisalabad, a cross sectional study was conducted. Sample sizes of 100 patients (29-70 year)

were selected. Four degree of education proved effective were selected, very much proved effective considerable proved effective, some proved effective and not proved effective. Total 20 questions regarding self care activities were selected to know about effect of self management education. The study revealed great variance amongst different degree regarding self care provided them. Overall education proved effective was 63%, 16% were proved considerable effective 10% some degree, while 11% proved not effective. It proved best tool for prevention from complication. Diabetic education helped the patients understand diabetes, its progression, and possible complications.

Key words: Diabetic mellitus, Self management education, Education.

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Significance:

Diabetic self management education is an integral part of diabetic care and like many aspect of health care. Now it becomes popular term for behavioral intervention as well as educational intervention. Diabetic become global epidemic.

irrespective of modern approach to control it ,its cases continuous increases .however, The diabetic individual need to knowledge and skill to make informed choice to facilitates self directed behavior change and ultimately to reduce the risk of complication.

As a diabetic self management is a critical component of diabetic treatment but by knowing its importance majority people not receive education yet now. It is not necessary to taking strike diet and maintains blood sugar monitoring but it is more important to have self management skill through education.

The value of diabetic self management education is evident from research that patient who not receive education have more risk of developing the complications then those who receive education. So, it is important for health workers to motivate individual through education, participation and self management support for improving outcome and prevent them from complication

Diabetic self management education has great effect for improving the quality of life for diabetic patient. In low and middle income countries patients typically lack required skill and knowledge to effectively self mange their condition .consequently education for patient and health workers is seen as key to improving this dire situation.

As a previous studies conducted in different population showing different result, I assume that, our population may have different magnitude, however it is necessary to conduct another study in our population which will be helpful for diabetic patient to improve their management skill. It will have significant effect on them and prevent them from complication.

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Introduction:

“(Aponte and Nickitas 2007) Diabetic self management education is ongoing process of facilitating the knowledge, skill and ability necessary for diabetic self

care. “It is very important because during last twenty year, the prevalence of diabetic has increased in many part of world. It is now estimated that between 340 and 536 million adults (aged 20–79 years) worldwide have diabetes, with the disease accounting for an estimated 14.5% of global all-cause mortality in 2015. In Pakistan, there were 7 million cases of diabetic in 2015⁽¹⁾. .Poorly managed diabetes results in hyperglycemia and eventually serious micro vascular and macro vascular complications. The main cause of developing complications is, many patients are totally unaware about .some of them, who know about their disease but not act upon it, so they developed complications. However, properly manage themselves through educational strategies prevent from developing the complications. But .there is many barriers (medicine cost. financial status , family support, physical limitation, health literacy level, etc) that effect on outcome of diabetic patient. (Essien,oko,3 january 2017)

The purpose of this study is to evaluate the effect of self management education on diabetic patients.

On international level, number of researcher conducted their researches on it. In Hidalgo County located in South Texas, a study carried out by (Sanchez, 2011) to see effect of self management education on diabetic patients. The finding of this study reveals the success of DSME program.

Another study carried out by.(Tshiananga, et al.2012) to exam the effect of DSME program on maintain blood sugar level by the meta analysis . After intervention, improvement in A1c by 0.70%.The finding of this study revealed that DSME program have effect on study group.

A comparative study was conducted by (Fan,Huang,2016)to evaluate the effect of individualized education for patients with type 2 diabetes mellitus (T2DM).After completing his study, he proved that individualized diabetic education much better then group.

As previous studies appraise the efficacy of DSME, it is important for all of us to know about what is effect of self management education on diabetic patient.

Objectives:

- To evaluate the effect of self management education on diabetic patients in tertiary hospital (Allied hospital Faisalabad).

Research Question:

What is effect of self management education on diabetic patients?

Variables:

Independent variable:

Self management education

Dependent variable:

Effect on Diabetic patients

Literature Review:

As a diabetic self management education is most important for improving the quality of life of diabetic patient. For this purpose a large number of researchers conducted their research and draw their conclusion on it. So I read many articles, some of them are given below:

Hidalgo County located in South Texas, a study carried out by (Sanchez, 2011) n= 70 participants, at the starting program A1c average 7.95%. The result of this study showed a decrease in A1C after the 2nd and 3rd measurements; by 58% and 55%. The finding of this study reveals the success of DSME program.

A study was carried out by (Pena-Purcell, Boggess et al, 2011) a quasi-experimental study design was used. DSME program was carried out for 5 weeks. n= 144, in this study total sample size consist of study group and a control group. After the intervention study group showed major effect on A1C values. . The

finding was effectiveness on patients and gave positive feedback about DSME program.

Another study carried out by (Tshiananga, et al.2012) to exam the effect of DSME program on maintain blood sugar level by the meta analysis . He also formed two group study group and non study group. After intervention, improvement in A1c by 0.70%.The finding of this study revealed that DSME program have effect on study group.

In China a study conducted by (Shen, Edwards et al. 2012). By using quasi experimental design The study group (n= 190) and (n= 95) participants in each group for 4 and 12 weeks program. They used outcome variables self-efficacy, social support, self-management behavior and healthcare utilization. The result of this program showed that need for improving diabetic education in Chinese.

Like above mention studies, another study carried out by (Jesse and Rutledge ,2012) In Virginia to appraise the effectiveness of DSME program by making two group . He draw conclusion, DSME program have significance effect on glycaemic control.

A comparative study was conducted by (Fan,Huang,2016)to evaluate the effect of individualized education for patients with type 2 diabetes mellitus

(T2DM in this study ,he find out whether individualized diabetic education is effect or group. After completing his study, he proved that individualized diabetic education much better then group.

In Nigerian tertiary care hospital ,a study conducted by (Essien,oko,3 january 2017) to evaluate the intensive patient education improve glycaemic controle in diabetic patient compare to conventional education by unblinded parallel group individually randomised controlled trail . . After 6 month study, he concluded that Intensive group has better value of A1C then conventional group

Different educational method used to improve quality of life of diabetic patient .I identified education has positive effect on patient .DSME is readily learned by nursing, personnel and dietitian. Patient become skillful after taking education .I was curious to see whether DSME would improve patient outcome. The result of previous studies has show that education has positive effect on outcome and improves their self management skill.

Methodology:

Setting:

Allied Hospital Faisalabad (surgical unit, Medical unit and Gynae).

Study Design

Cross sectional study

Study Duration:

3 month

Research tool:

Questionnaires

Sample Technique:

Convenience sampling.

Sample Size:

Data collection time was 1 month. $N=134$, 95% confidence level and 5 % confidence interval by using formula $N/1+N(0.05)^2$, my sample size is 100 patients with diagnosed diabetic

Sample Selection

Inclusion criteria:

Gender, male and female

Age 29-70 years.

All diagnosed diabetic patient with type 1,2 and GDM.

Exclusion Criteria:

Child with history of diabetic mellitus,

Data collection process:

A total of 100 cases fulfilling the inclusion /exclusion criteria enrolled from Allied hospital Faisalabad. Through data collection process, I only want to take feedback from diabetic patient who received education and improved their quality of lives. I filled the questionnaire form after taking consent from patient by using convenience technique. After this, I entered data in study and draw conclusion on *spss* version 20:

Statistical Analysis:

Statistical methods and techniques are applied in many fields of study. Special techniques are derived for specific problems, but the basic strategies and principles are common in most applications. The appropriate statistical techniques, to achieve the objective of the study, include frequency distribution, percentages among the important variables. Different variables are regarded as of equal importance. A starting point for the analysis of study would be to display the variable graphically by using software SPSS

. Ethical Consideration

The study will be approved by the Independent Nursing College's Ethics Review committee. Ethical principles would be followed during study including anonymity, confidentiality, and risk minimization and rights of participants..

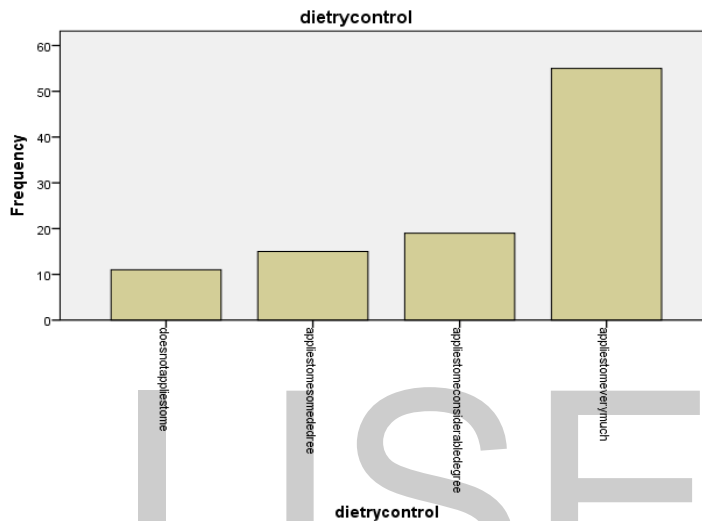
RESULTS AND DISCUSSIONS:

N	Question	Effect to me very much		Effect to me considerable degree		Effect to me some degree		Effect to me not at all	
		age	%	age	%	age	%	age	%
	I check my blood sugar level carefully.	7	7	7	7	6	6	0	0
	The food I choose to eat maintain my blood sugar level.	1	1	8	8	2	2		
	I follow the doctor order strickly for my	3	3	7	7	9	9	1	1

	diabetic treatment								
	I take my diabetic medicine as prescribed	3	3	8	8	1	1		
	I avoid eating lots of sweets or other foods rich in carbohydrate.	3	3	7	7	0	0	0	0
	I record my blood sugar level regularly	1	1	8	8	3	3		
	I tend to avoid diabetic related doctor appointment.	7	7	8	8	1	1	4	4
	I do regular physical activity to achieve optimal	1	1	2	2	5	5	2	2

	blood sugar level								
	I strickly fellow diety recmmendation given by my doctor .	5	5	9	9	5	5	1	1
0	I donot check my blood sugar level frequently.	4	4	0	0	2	2	4	4
1	I do exercise for 30 mints daily	9	9	6	6	0	0	5	5
2	I tend to forget to take or skip my diabetic medication.	3	3	9		4	4	4	4
3	sometim es I have real food binges	4	4	3	3	8		5	5
4	regardin g my diabetic	0	0	2	2	5		3	3

	care ,I should see my medical practitioner									
5	I can judge the sign of hypoglycaemia/ hyperglycaemia	7	7	7	7	6	0	0		
6	I can manage the hypoglycaemia/ hyperglycaemia	6	6	8	8	4	2	2		
7	I do foot care regularly	8	8	1	1	9	9	2	2	
8	I maintained personal hygiene	0	0	5	5	7				
9	I received education about self care through dr	2	2	6	6	4				



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Table 1: The finding showed that after receiving education patient control dietry regime very much 63% considerable degree 17%, some degree 10% and 10% does not control it .

Skippeds					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	doesnotappliestome	14	3.9	14.0	14.0
	Appliestomesomedegree	14	3.9	14.0	28.0
	Appliestomeconsiderabledegree	9	8.9	9.0	37.0
	appliestomeverymuch	63	62.4	63.0	100.0

	Total	100	99.0	100.0	
Missing	System	1	1.0		
Total		101	100.0		

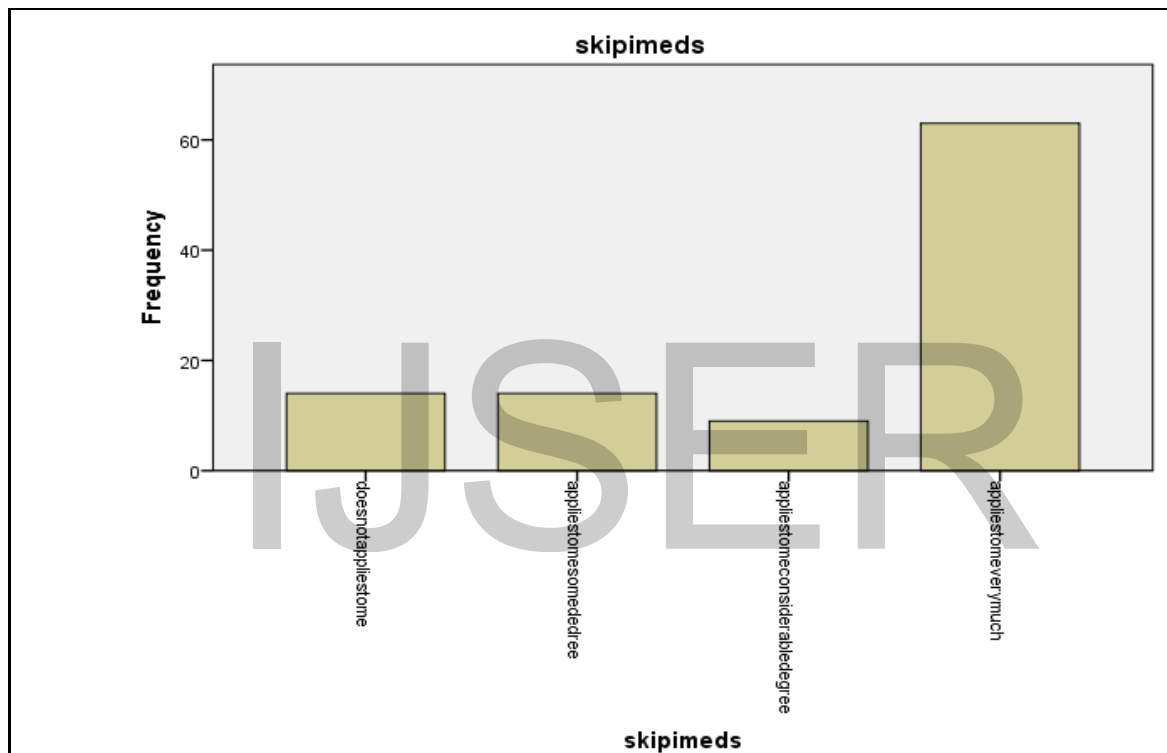


Table 2: in this my study revealed that after receiving education patient taking their medicine very carefully 63%, considerable degree 9%, some degree 14% and 14% does not taken it properly

		Judgesign			
		Fre quency	P ercent	Valid Percent	Cumul ative Percent
Valid	Doesnotappliesome	10	9.9	10.0	10.0
	Appliesomesomededr	6	5.8	6.0	16.0

	ee			.9	
	Appliestomeconsidera bledegree	17	6.8	17.0	33.0
	Appliestomeverymuch	67	6.3	67.0	100.0
	Total	100	9.0	100.0	
Missing	System	1	1.0		
	Total	101	100.0		



Table3:Figure showed that patient become conscious about judging sign very much 67% considerable degree 17% some degree 6% and10% does not judge it

Footcare					
		Fre quency	P ercent	Valid Percent	Cumul ative Percent
Valid	V	Doesnotaplietome	12	1 1.9	12.0 12.0
	ee	Appliestomesomededr	29	2 8.7	29.0 41.0
	bledegree	Appliestomeconsidera	11	1 0.9	11.0 52.0
	Total	Appliestomeeverymuch	48	4 7.5	48.0 100.0
	Missing	M	System	1	1 .0
Total		10 1	9 00.0	100.0	

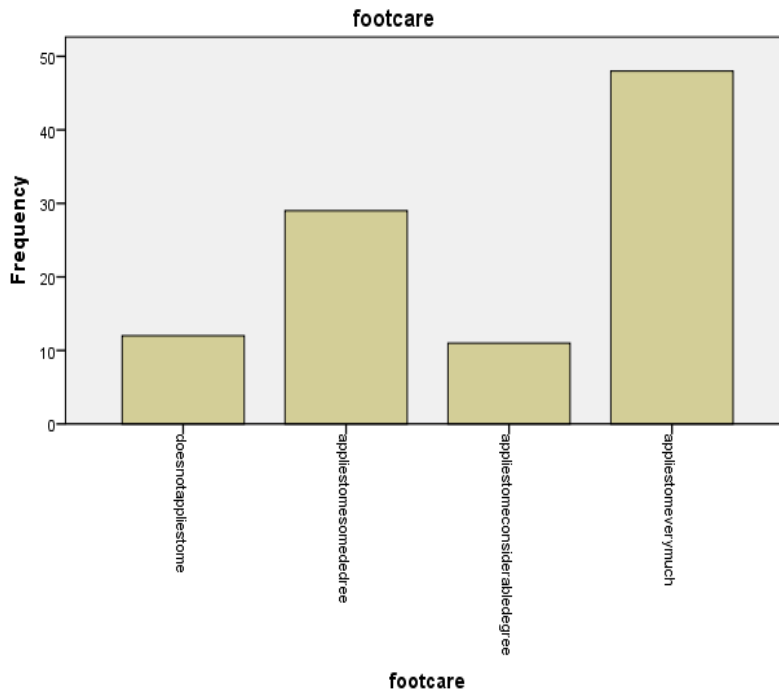


Table 4: foot care in diabetic patients is vital. Patients after receiving education did care very much 48% considerable degree 11% some degree 29% and did not care 12%.

Result:

In total of 100 patients, 67% were educated and 33% were uneducated. All diabetic patient, after receiving self management education ,act upon it and showed different result Education proved .63% effective very much,16%effective considerable degree,10% effective

some degree education. Total 63% self management education proved effective .only 11% patients develop complication those were unaware about it. It also proved effective for female with gestation diabetic then other type of diabetic. Diabetic patients were totally satisfied and they improved their quality of lives.

.Conclusion:

This study confirms that diabetic patients who received self management education have better outcome and improved their quality of lives. It proved best tool for prevention from complication. Diabetic education helped the patients understand diabetes, its progression, and possible complications.

Discussion:

. As a previous studies find out that DSME is effective for better outcome, my study also reveals that DSME is effective for better outcome of diabetic patient. Participated in the DSME has similar outcomes in A1C and patient satisfaction as previously reported.

The DSME program improves patients' condition by maintaining blood sugar level. This reduction of risks and complications of diabetes improves patient outcome. Diabetic education is helpful for patients understand diabetes, its progression, and possible complications. In whole study I checked the practice of self maintain of diabetic patients. I found that mostly participate were very well know about their disease .they known how they manage sign of hypoglycemia. foot care is important tool of care for diabetic patient .but mostly patient were not known, only 48% patients care very much. The value of diabetic self management education is evident from

research that patient who not receive education have more risk of developing the complications then those who receive education. So, it is important for health workers to motivate individual through education, participation and self management support for improving outcome and prevent them from complication. Diabetic self management education has great effect for improving the quality of life for diabetic patient. In low and middle income countries patients typically lack required skill and knowledge to effectively self mange their condition.

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