

BLOOD SUGAR MANAGEMENT THROUGH PSYCHONEUROBICS

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Abstract

Diabetes is a metabolic illness cause to meddle in ordinary digestion. Diabetes can't be restored, yet it tends to be controlled by different techniques including: safe Practice. The point of the this investigation was to decide the impact of one-month ordinary Psychoneurobics and Practice on glucose levels in sort 2 diabetic patients. This Semi-Experimental examination was led on 60 volunteer with diabetic kind 2. The Participants arbitrarily were isolated in to 3 gatherings: 20 patients on any gathering. Psychoneurobics and gatherings rehearsed for 45 minutes day by day for 30 days. Information were investigated utilizing spss win 16. P-esteem was viewed as under 0.05 as essentialness criteria. Results: The distinctions as indicated by age, sex, and training level and number of tablet were not huge ($p > 0.05$). The underlying Fast Blood glucose didn't demonstrate noteworthy distinction ($p > 0.05$). Following multi month, the distinction between blood glucose was huge in Psychoneurobics and gatherings and among Psychoneurobics and control gatherings. Be that as it may, this distinction was not altogether between and control gathering. Number of tablet between the three gatherings was not huge following multi month ($p > 0.05$). In 3 bunches a huge distinction was seen in Fast Blood glucose on bases rehashed estimation test. ($p < 0.05$) Conclusion: According to the discoveries, multi month of Practice (Psychoneurobics -) was successful in diminishing blood glucose levels and in analyze among Psychoneurobics and , Psychoneurobics Practice is increasingly viable in decreasing blood glucose levels.

Keywords: Blood Glucose; Psychoneurobics; ; Diabetes

1) Introduction

Diabetes mellitus does not have a single definition. Diabetes is a complex chronic illness that Cause to interfere in normal metabolism (carbohydrates, fats and proteins). Diabetes has Complication on Micro vascular and Macro vascular (1).

In other words, Diabetes is a metabolic disorder (2). Research was conducted in 2009 by Aziminezhad which demonstrated that almost 190 million people are with diabetes in the world and is predicted to be near 330 million in 2025 (3). Also, obesity and reduced physical

activity increase the prevalence of type 2 diabetes (1-4). The prevalence of type 2 diabetes is near 1.2% to

14.6% in Asia 6.4% to 40% in Middle East, and 1.3% to 14.7% in Iran (3). The research conducted in 2008 by Azimineghad; indicate that 5/8% of women and 5/1% of men have diabetes (3).

Diabetes can't be cured, but it can be controlled by other methods, such as Practice (5-6). Psychoneurobics is a series of physical and breathing and stretching Practices (67). There is a relationship significant between mind and health. The base of Psychoneurobics is, create an adjustment between mental healths (psychology – nervous) with physical health to increase the quality of life (7).

Physical practicing in Psychoneurobics, increase the blood circulation that at this why increase, oxygen absorption and hormonal system performance .also relaxation in Psychoneurobics cause to improve the autonomous nervous system functional (7). Ross's study(2010) showed that Psychoneurobics can be useful in reducing pain(37%), fatigue (25%), sleep disturbance,55%,and cholesterol(25%)compared to other methods(8). In a comparative study, which was conducted in 2010, Psychoneurobics was shown as an effective Practice to improve glucose (9-10), lipid profiles (10) and stress (10-11). Psychoneurobics is more effective in reducing fatigue, increasing balance and social functioning (8). In Study of Aljasir (2008) results indicate that Psychoneurobics is helpful in upper than 50% of patients with diabetes (12). Practice and are two excellent ways

to control Type 2 diabetes and health promotion for people with diabetes (13). As 10,000 steps foot or 5 miles a day can reduce take up insulin almost 25%,

(13). Studies show that 3-4 times per week, 3060 minutes each time can be effective in reducing blood glucose in diabetics (14-15-16).in Psychoneurobics all part of joints are used but it isn't in other sports. Psychoneurobics is shown to be more capable than any other sport. Thus, the aim of this study is to compare with Psychoneurobics effects on blood glucose level in patients' with type 2 diabetes.

2) Material and Method

This investigation was directed in republic Islamic of Iran in Qazvin city in 2012. In this Semi-trial think about, According to the examination model (individual must have type 2 diabetes and taking pills (metformin 500mg – glibenclamide 5mg) to control of their ailment. People must join tribute and their age was between 30-55 years.) and last paradigm of study (Person who had muscle - skeletal – heart-vessels and inhales illness and had issues in doing physical Practices. People who experienced issues in time of re-

look and need to utilize Insulin or couldn't do Practice), To allot 60 (as indicated by past examination * and equation) patients(male - female),30-55year old patients with Type 2 diabetes were haphazardly stratified allocated to three gatherings Psychoneurobics, and control. Each example were relegated a number, The principal patients were utilized in the Psychoneurobics gathering, two patients in gatherings and third patient in control gathering, etc.

$$n = \frac{2 \left(z_{1-\frac{\alpha}{2}} + z_{1-\beta} \right)^2 \delta^2}{d^2}$$

$$n = \frac{2(1.96 + 0.85)^2}{17^2} 19.5^2 = 20.7$$

$\alpha_{1-0.05}$	$z_{1-\frac{\alpha}{2}} = 1.96$	$d = 17$
$1-\beta = 0.80$	$z_{1-\beta} = 0.84$	$\sigma = 19.5$

Trials (IRCT201107247101N1) and Qazvin medical university (number d/6/3659)

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Study's motivation clarified and one composed tribute guaranteed.

We have utilized a Questionnaire which was approved by a paper in Qazvin University of Medical Sciences. Survey reasonability was endorsed by staff of Qazvin University of Medical Sciences incorporating 15 people with aptitude of mentor and PhD understudy. Likewise survey solidness was endorsed by the test triple in 10 tests inside 3 weeks after the fact who were not engaged with the examination.

In the wake of giving composed assent from all people, we have measure are factors in each gathering, a poll containing 15 questions (4questions about socioeconomics 6questions are about diabetes history and 5 questions are about games history).

The gatherings were haphazardly chosen for our three gatherings by illustration strategy. Patients were tried twice for FBS. (One day before the principal day of training– one after quite a while instructional class). The patient was advised to quick no less than 8 hour preceding Fast Blood glucose checking. Blood glucose was estimated by glucometer (ZD) (GM300).

Protocols of the groups

Instructive projects and laws that were enrolled for was: After breakfast must be improved the situation 30 days in the first part of the day and 45 minutes day by day. These people practiced in an equivalent place and same time.

They were not allowed to eat nourishment or desert with special case of water additionally were not permitted to tune in to music. (Because of absence of uniform ecological conditions in the two gatherings), and they needed to answer the inquiries with respect to their technique. We had at down-pouring project for the Psychoneurobics aggregate was: After breakfast Psychoneurobics Practices must be improved the situation 30 days toward the beginning of the day and for 45 minutes day by day. A Single Psychoneurobics Practices educator

performed comparable exercises through all sessions.

Statistical Analysis

All information were entered and examined by SPSS form 16.

The information were tried for ordinary circulation by OneSample Kolmogorov-Smirnov Test. The Levin test for balance of differences was tried. For looking at the information, free examples T-test, matched examples Ttest, ANOVA, Post hoc test and chi2 were utilized, a p-esteem under 0.05 was considered as critical.

Results

Mean maturing in 3 assemble was 46 years .There was no critical age contrast among groups.(p=0.793)(Table1).

From 60 people of 3 gathering, 25 (41%) were men and 35(58%) were female There was no critical sexual orientation contrast among gatherings (p = 0.937). (Table1)

A great many people in the Psychoneurobics gathering (35%) had auxiliary dimension training. The vast majority in the gatherings (30%) and controls (40%) had essential dimension training .there was no factual distinction between the gatherings in dimensions of instruction. (P = 0.765)

Among the three gatherings of subjects ((45%) 24) were taking 2 tablets every day. there was no measurable distinction between the gatherings in include of pills that devour 24 hour

The underlying FBS was not essentially unique; be that as it may, In 3 bunches a critical contrast was seen in FBS on bases rehashed estimation test. (p=0.024) with contrast was basically observed among Psychoneurobics and control gatherings. (Table3)

Blood glucose essentially decline in the Psychoneurobics gatherings

(p=0.017) be that as it may, alternate gatherings did not have any Noteworthy contrast after the intercession. (p=0.097) (Table 4)

Number of tablet between the three gatherings was not noteworthy when multi month ($p > 0.05$) ($p = 0.291$)

Exchange

In this examination, multi month of standard Practice, Psychoneurobics and on blood glucose dimensions of individuals with type2 diabetes had a critical effect. This discoveries are in concurrence with numerous different investigations that demonstrate Psychoneurobics and effectsly affect blood glucose levels (2-6-12-17-18). Each of these examinations have been performed in a singles port. In this examination the vast majority were 46 years. Which was like Haghdoost's investigation (2009) which said the diabetes between 40-60 is higher than one more years (19)

This is on the grounds that with expanding age, movement diminishes and weight gain builds patients and causes fat stockpiling and weight gain around the mid-region and abdominal area, particularly in ladies after menopause. Movement and less weight gain, lessen body insulin activity and insulin obstruction happen (20)

In this examination, in every one of the three gatherings, ladies were more than men. These outcomes are comprising with the aftereffects of Azimineghad's examination (2008) that the commonness of diabetes was 5.8% among ladies and 5.1% among men the predominance of diabetes (3). In Haghdoost's investigation (2009) had 1.7% a greater number of ladies than men (19). It appears that ladies in Iran invest the greater part of their energy at home and does Minimal physical action at this why increment the body fat, it making them progressively inclined to diabetes (3-19).

In this examination a great many people who have contemplated in grade school have diabetes and this outcome is predictable with the consequences of Azimineghad's investigation, he noticed that the predominance of diabetes is higher in individuals with low proficiency (3). Because of loss of learning identified with

the diabetes (what is the counteractive action or treatment), diabetes is the more in this dimension of training.

As indicated by the examination, in view of multi month of Practice (Psychoneurobics -) on blood glucose levels, as per ponder results and the correlation between the separate factors, the effect of multi month of Psychoneurobics Practice to lessen blood glucose levels was significant ($P = 0.004$). Though gathering was diminished yet not measurably significant ($P = 0.12$).

Numerous examinations have appeared enhancing diabetes. Some of them have referenced up to upper than 50 percent of the advantageous impacts of treating diabetes with Psychoneurobics (12) Evidence demonstrated that Psychoneurobics can therapeutically affect type 2 diabetes. The present examination contrasted Psychoneurobics and gatherings and control, blood glucose levels in the Psychoneurobics aggregate demonstrated a huge decline contrasted with. In numerous examinations Psychoneurobics have decline blood glucose (2-6-12-17-18). In comparative examinations, for example, Amita's investigation (2009) of glucose diminished 159 to 137. (2) But in Skoro's examination (2005) Psychoneurobics has no huge impact on blood glucose (21). In general appears to Psychoneurobics cause to duplicate pancreatic cells. Increment fat percent, cause to diminish in affectability to insulin and higher insulin obstruction however don't stress in light of the fact that Psychoneurobics causes to diminish the fat percent (22). Psychoneurobics causes to diminish free unsaturated fat, it that to enhance β cell work. (23) gathering, blood glucose levels were lower than the control gathering, yet the thing that matters was not critical, aggregate had less misfortune than Psychoneurobics gathering. In Karstoft's examination (2008) cause to brings down blood glucose-triglyceride (14). This outcome wasn't steady with the consequences of Karstoft's investigation. This was expected to expend dimension of calorie and the season of intercession (45

minute). The variable Number of tablet, after the intercession in any of the three gatherings, no distinction was watched. Normand's (2011) and Sharoff's (2010) think about recommended that the mix of metformin treatment and Practice does not decrease blood glucose. Thus, the number pills won't decrease (24-25). These outcomes are predictable with the aftereffects of the present examination .In Saha's study(2007)of 20 patients with diabetes who were 5066 years of age, the outcomes showed that the normal tablets

from 1.47 to 0.55 reached(23).These results are not reliable with the consequences of the present investigation. Maybe this absence of consistency is because of the obstruction term.

- Normal & Very Good Control - 4.0 - 6.0 %
- Good Control - 6.0 - 7.0 %
- Fair Control - 7.0 - 8.0 %
- Suboptimal Control - 8.0 - 9.0%
- Poor Control - > 9.0 %

Table 1: Comparison of gender and age groups

group	mean age	gender	
		N and p of male	N and p of female
Psychoneurobics	47.6±6.21	8 (40%)	12 (60%)
meditation	45.8±10.0	8 (40%)	12 (60%)
control	46.9±7.8	9 (45%)	11 (55%)
total	46.8±8.0	25 (41.7%)	35 (58.3%)
P value p=0.397		P v alue p=0 .937	

N and p: The number and percentage

Table 2: Comparison of Number Of Tablet (metformin – glibenclamid) groups

group	Number Of Tablet (metformin- glibenclamid)						Total
	1.00	2.00	3.00	4.00	5.00	6.00<	
Psychoneurobics	2 (10%)	9 (45%)	3 (15%)	2 (10%)	2 (10%)	2 (10%)	20(100%)
meditation	6(30%)	6 (30%)	2 (10%)	3 (15%)	1 (5%)	2 (10%)	20(100%)
control	4 (20%)	9 (45%)	1 (5%)	4 (20%)	1 (5%)	1 (5%)	20(100%)
Total	12 (20%)	24 (40%)	6 (10%)	9 (15%)	4 (6/7%)	5 (8/3%)	60(100%)

This table showed : count of pills that consume in 24 hour

Table 3: Comparison of the Blood Sugar intervention groups together

Variable	Group	Mean±SD	F	P Value
BG(1)	Psychoneurobics	162.3±43.2	2.965	.060
		217.7±90.7		
BG(2)	Control	190.7±73.7	3.970	.024
		194.7±89.7		
	Control	194.0±83.6		

BG 1: Blood Glucose (early intervention)

BG2: Blood Glucose (end intervention)

Table 4: Comparison of blood glucose in the intervention group

Dependent variables	Group		mean	Std deviation	p.value	95% Confidence level	
						Lower Bound	Upper Bound
Blood Glucose (after of intervention)	Psychoneurobics		-57.150	23.277	.017	-103.761	10.538
		control	-56.450	23.277	.018	-103.061	-9.838
		Psychoneurobics	57.150*	23.277	.017	10.538	103.761
		control	.700	23.277	.976	-45.911	47.311
	control	Psychoneurobics	56.45000*	23.27717	.018	9.8383	103.0617
			-.70000	23.27717	.976	-47.3117	45.9117

3) Conclusion

As per the discoveries, multi month of Practice (Psychoneurobics) was successful in diminishing blood glucose levels looking at Psychoneurobics. As per Authors' Hypothesis: Psychoneurobics Practice successful in enhancing blood glucose levels than. In Psychoneurobics all piece of joints are utilized however it isn't in different games. Psychoneurobics is appeared to be more proficient than some other game in noteworthy decrease in blood glucose level. Subsequently, the point of this investigation is to contrast and Psychoneurobics impacts on blood glucose in patients' with sort 2 diabetes. This kind of Practice can be useful for patients And then again because of the numerous accessible free practice, the creators inferred that Practice (Psychoneurobics) enhance the physical health of individuals with diabetes advancing feeling of health and instruction divisions in the medical network ought to be considered.

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