THE ROLE OF SIMULATION TECHNOLOGIES IN TRAINING AND RETRAINING OF A FAMILY PHYSICIAN

Boboev M.M., Mamatov B.Y.

Andijan State Medical Institute, Andijan, Uzbekistan Ayubshoh@mail.ru

The requirements of the present time dictate the introduction of new, more efficient organizational forms of providing medical care to the population of the Republic of Uzbekistan. The possession of a general practitioner with modern competence and practice-oriented treatment technologies will ensure the quality of life of patients after treatment, which will increase the level of healthcare in general, as well as the demographic potential of the state.

HBA1C LEVELS IN OVERWEIGHT PATIENTS WITH TYPE 2 DIABETES MELLITUS

Ilyas Khairi Hussein Ilyas

Yanka Kupala State University of Grodno, Grodno, Belarus khayrialas@yahoo.com

Introduction. Type 2 diabetes mellitus is characterized by hyperglycemia, insulin resistance, and a relative decline in insulin production. Although persons with type 2 diabetes have varying degrees of decreased insulin synthesis and activity, the diagnosis of the disease is only based on measures of elevated blood sugar without a good knowledge of the underlying pathophysiology (insulin resistance). Insulin resistance may have a substantial impact on the emergence of other abnormalities in type 2 diabetes, such as inflammation, abnormalities of the lipoproteins, hypertension, and a broad variety of other metabolic abnormalities.

Type 2 diabetes is a common disease with a prevalence that increases markedly with advancing age and growing obesity rates [1]. Type 2 diabetes incidence has alarmingly increased over the last 10 years [2, 3], mostly due to the obesity and sedentary lifestyle trends [4].

 $\it Aim\ of\ the\ study$. To make a correlation between body mass index and $\it HbA1c$ in type 2 diabetes mellitus.

Material and method.

Study design and participants. This observational research is standing on the comparison body mass index in overweight group of 26 patients and *HbA1c* put in mind the groups were included the same numbers of both genders (13 females and 13 males).

Population Study of the Patient. The Department of Biochemistry at Grodno State University's Faculty of Biology and Ecology gave its clearance before this work was carried out (Belarus). The Senone General Hospital and the Blood Bank in Iraq's Nineveh city implemented the diagnostic. It was governed and controlled by the Governorate of Nineveh. The Institutional Review Board of Sunoon General Hospital gave its approval to the research procedure, which ran from August 12 through September 8, 2021.

Statistical analysis. The patient's sex, age, height, and weight were recorded as part of this study's data entry into a computerized database interface. A database for each patient was sorted based on the data gained from the patient and the results of their samples once the whole set of samples had been collected. In order to establish a link between each illness and all patients, statistical analyses were obtained using the statistical software SPSS version 20 in combination with the program Microsoft Excel version 2010, and such variables were characterized by mean, SD, and standard deviation (SD). The relationship between renal disease and obesity was established using a receiver operating characteristic analysis and diagnostic testing.

Research results.

Table 1. – Descriptive statistics of body mass index and HbA1c

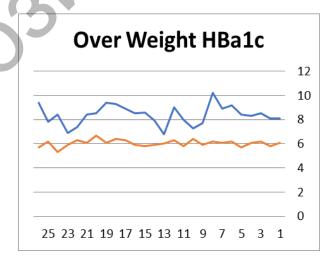
1		J			
Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
BMI	26	26,0	30,0	27,7	1,2
HbA1c	26	6,8	10,2	8,4	0,8

A correlation between the control and the patient groups is represented as significant with a Std. Deviation \pm mean, all factors show a strong significant correlation between the control and disease groups.

Table 2. – Correlation of body mass index and HbA1c

BMI	HBa1	С	
Pearson Correlation		1	0,051
Sig. (2-tailed)		1	0,794
N		26	26

In the table above there is significant relationship between HbA1c and the overweight patient of type 2 diabetes mellitus according to the Pearson correlation value and approved by sig.(2-tailed).



Picture 1. – Over weight HBa1c (blue line - for patints group; red - for normal group)

Conclusion. According to the Pearson correlation value and sig approval, there is a substantial link between HbA1c and the overweight type 2 diabetes patient (2-tailed).

Reference:

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Yanka Kupala State University of Grodno, Grodno, Belarus khayrialas@yahoo.com

Type 2 diabetes mellitus is characterized by hyperglycemia, insulin resistance, and a relative decline in insulin production. People with type 2 diabetes have problems with both insulin production and action. Over the last ten years, there has been an alarming rise in the prevalence of type 2 diabetes, which is mostly related to the obesity and sedentary lifestyle trends.

X-RAY CHANGES IN THE CHEST, HEART, PULMONARY AND EXTRAPULMONARY STRUCTURES AS INDICATORS OF THE SEVERITY OF CHEST DEFORMITY

Kadirov K.Z, Abdurakhmanov F.S

Andijan State Medical Institute, Andijan, Uzbekistan anonim_f@mail.ru

Introduction. According to the WHO definition, «health is not only the absence of disease, but also the complete physical, mental and social well-being of a person». With funnel chest deformity, disorders of the cardiovascular system and respiratory organs often lead patients to disability in adolescence. The presence of deformation is a severe cosmetic defect and seriously affects the mental state of the individual, his behavior, social and sexual contacts. The vast literature is devoted to the problem of pectus excavatum, detailing the etiology, pathogenesis, clinic, diagnosis and treatment of this pathology.

Materials and methods. Data of 44 children, respectively, 26 (3-6 years old) and 18 (7-15 years old), were subjected to X-ray analysis of the material. When