Conclusion

By the study conducted among the patients in therapeutic departments. Overall response to sleep by the Pittsburgh Sleep Quality Index (PSQI-P) was positive approximately 40% and 60 % percentage sleep realeted issues. Here we can see more half of the patients suffering from significant sleep realeted issues by our index scale measurements. So, we need to do Improving sleep measurements involves adopting strategies that enhance the accuracy and effectiveness of assessing sleep quality. Keep a daily sleep diary for several weeks to identify patterns and variations. Track lifestyle factors include notes on caffeine intake, exercise, and stress levels, which can affect sleep. Sleep efficiency aim for high sleep efficiency (85% or higher). This can be monitored through diaries or devices. Reduce sleep latency like Aim to fall asleep within 20 minutes. Track time taken to fall asleep and make adjustments to bedtime routines. Ensure you're getting sufficient REM sleep, as it is crucial for cognitive function and emotional health. Create a Sleep-Friendly Environment Dark and Quiet Ensure the sleep environment is conducive to rest dark, quiet, and comfortable.Go to bed and wake up at the same time each day to regulate your body's internal clock.Educate yourself learn about sleep hygiene,familiarize yourself with best practices for improving sleep quality, such as limiting screen time before bed and avoiding heavy meals late at night improving sleep measurements involves a multifaceted approach that combines effective tracking, lifestyle adjustments, and education. By leveraging various tools and strategies, individuals can gain deeper insights into their sleep quality and make informed changes to enhance their overall sleep health.

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RISK FACTORS AND COMPLICATIONS IN DIABETES MELLITUS

Introduction

Diabetes mellitus has become a serious and chronic metabolic disorder that results from a complex interaction of genetic and environmental factors, principally characterized by hyperglycaemia, polyuria, and polyphagia [1]. Uncontrolled high blood sugar can result in a host of diabetic complications. Prolonged diabetes leads to serious complications some of which are life-threatening. The prevalence of diabetes patients is rising at epidemic proportions throughout the world. Every year, a major portion of the annual health budget is spent on diabetes and related illnesses. Multiple risk factors are involved in the etiopathogenesis of the

disease and turning the disease into an epidemic. Diabetes, for which there is no cure, apparently can be kept under control by maintaining self-care in daily living, effective diabetes education, with comprehensive improvements in knowledge, attitudes, skills, and management [2–5].

Goal

This study aimed to evaluate the Diabetes Mellitus risk factors and its complications.

Material and methods of research:

This is cross sectional study of Diabetes patients, conducted in different departments of Gomel city clinical hospital number 3, Belarus. This study was conducted in a month January 2025. A total number of patients included in the study were 30 members with Diabetes Mellitus. The mean onset was 40 years. The ratio of male to female was 1.06:0.81 of all Diabetes Mellitus cases showing male predominance. In which Diabetes Mellitus type 1 were 7 patients and Diabetes Mellitus type 2 being 23 patients. It consists of analysing risk factors and complications for Diabetes Mellitus.

The results of the research and their discussion

A total number of patients included in the study were 30 members with Diabetes Mellitus. The mean onset was 40 years. The risk factors are classified into modifiable and non modifiable. Modifiable risk factors are obesity (n=14), smoking (n=18), unhealthy diet (n=10), physical inactivity (n=20), blood pressure (n=16). Non modifiable risk factors are family history (n=11), age more than 45 years (n=15) (tab. 1).

Tabel 1 – Comparative study of Modifiable and Non-Modifiable risk factors in Diabetes mellitus

Modifiable and Non-Modifiable Risk factors	Diabetes mellitus type 1 &2 onset less than 5 years		Diabetes mellitus type 1&2 onset greater than 5 years		Total n (%)
	Male	Female	Male	Female	
Obesity	2	2	6	4	14 (15.90%)
Smoking	3	1	8	6	18 (20.45%)
Diet	2	2	3	3	10 (11.36%)
Physical inactivity	3	2	8	7	20 (22.72%)
Age>45 years	2	1	6	6	15 (17.04%)
Family history having diabetes mellitus	1	1	5	4	11 (12.5%)

Criteria of compensation study in patients with Diabetes Mellitus with compensated (n=5), sub compensated (n=8), decompensated (n=17) (fig. 1).

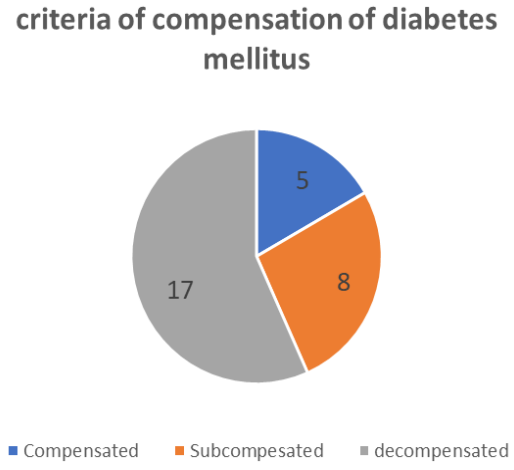

Figure 1 – Compensation of patients with diabetes mellitus

In addition, with Diabetes Mellitus were complications like Nephropathy (n=13), Retinopathy (n=17), Diabetic foot (n=17) and diabetic foot with amputation (n=5).

Conclusion

According to our study, we concluded that with modifiable risk factors patients majorly lacking physical activity and most of them were smoking making it a leading risk factor for prevalence of Diabetes Mellitus. Non modifiable risk factors, patients were mostly of more than 45 years of age making them more prone to diabetes mellitus. The maximum patients are almost in a decompensated state with complications of diabetic foot in which 5 were amputated, nephropathy and retinopathy. The rest of them were in sub compensated state with mild nephropathy symptoms and others in compensated state. Modifications healthy diet (Foods to Emphasize: Whole grains, Fruits, Vegetables, Lean proteins, Healthy fats; Foods to Limit/ Avoid: Sugary drinks, Refined carbohydrates, Saturated and trans fats, High-sodium foods; to Meal Planning Tips: Eat regular meals, choose complex carbohydrates, incorporate protein and healthy fats, monitor carbohydrate intake), regular physical activity, weight management, quit smoking and drinking alcohol and stress reduction. Medications: Oral hypoglycaemic agents, insulin therapy, and injectable medications. Monitoring Regular blood glucose monitoring, HbA1c testing, and lipid profile monitoring.

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ARTERIAL HYPERTENSION AND EFFECTIVENESS OF TREATMENT

Introduction

Arterial hypertension (AHT) is the leading cause of death worldwide and is one of the most important public health problems. Arterial hypertension is a major cardiovascular risk factor with an increasing incidence [1].Hypertension is defined by increasing blood pressure (BP) above 140/90mmHg.The World Health Organization (WHO) [2] defined AHT as a persistent increase in systolic BP values above 140mmHg and/or diastolic≥90mmHg in persons not receiving antihypertensive therapy.The 2018 ESH-ESC guidelines recommend that the first therapeutic goal should be to reduce values below 140/90mmHg for all patients.If treatment is well tolerated, values should be lowered to 130/80mmHg or even below for most patients.