Conclusions

Most students experience intestinal disturbances (67.9%) or heart palpitations (60.3%) during periods of anxiety, and these physical manifestations demonstrate a significant relationship. The results highlight the importance of adopting a holistic approach to students' mental health, which considers both psychological and physiological aspects of stress responses.

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ASSESSMENT OF PATIENT KNOWLEDGE AND ATTITUDE ON HYPERTENSION: ITS IMPACT ON TREATMENT EFFICACY

Introduction

Hypertension (HTN) is one of the most prevailing chronic health conditions worldwide representing a significant negative impact on quality of life in terms of health, social life and psychological status of affected individuals. Data from World Health Organization (WHO) signifies a prevalence of the disease among adults aged 30 to 79 years with majority of population being from developing countries due to presence of a larger population in them. Several studies have estimated that the number of individuals with hypertension would increase by 60% in the future. Moreover, studies also have discovered the contribution of hypertension for occurrence of serious complications like cardiovascular diseases, renal diseases, strokes and other. Although exact etiology is unclear, several risk factors have been identified to be contributory factors for hypertension. These can be either non-modifiable or modifiable. Non-modifiable risk factors such as genetic predisposition, age, family history and modifiable risk factors which can be managed through lifestyle adjustments like diet, physical activity, stress, smoking can be mentioned. Combined consistent adherence to medication and lifestyle modification can result in effective management and control of hypertension. Recent studies indicate failed hypertension treatment due to lack of compliance of patients with the prescribed therapy which may be thought to be a result of various factors like lack of sufficient knowledge about the disease, cultural beliefs, lack of access to medical care, high cost of medications, ignorance of long-term treatment [1–3]. Further, the majority of studies have confirmed that insufficient knowledge about the disease, its associated risks and the available therapeutic options is the major contributory factor for failed hypertension treatment. Patients need to monitor their blood pressure to prevent complications such as myocardial infarction, stroke, and chronic heart failure [4–5].

Goal

Presence of adequate knowledge about a certain disease, its associated risks, available therapeutic options play a key role in achieving efficacy of treatment of any disease. Hence, the main goal of this article is focused on assessing the patient's knowledge and attitude about hypertension and its effect on reducing the burden of hypertension and its related complications ultimately improving long-term health outcomes.

Material and methods of research

A cross-sectional analysis was performed among hypertensive patients aged between 45 and 75 whom have been diagnosed to have hypertension for more than six months of duration for collecting information. In order to assess the level of knowledge and attitude on hypertension a questionnaire was designed which included 20 multiple-choice and 6 short paragraph questions in which the patients were asked about risk factors, therapeutic options, diagnosis, prevention and possible complications of the disease. The questionnaire was translated to Russian language (local language) before given to the patients and back-translated into English to obtain relevant information. Each correct answer was awarded 1 point. The scoring range was 0 (minimum) to 20 (maximum). It was assumed that a total score of > 15 points represents presence of good knowledge, 8–14 points average knowledge and <8 points represents poor knowledge about hypertension, respectively. Further, an in-depth literature search was conducted in ResearchGate, PubMed and other databases using keywords such as "arterial hypertension" OR "knowledge on hypertension" to assess information. The data was then analyzed to obtain a final conclusion.

The results of the research and their discussion

The study involved a total of 30 patients with mean age 63.5 ± 1.1 years, majority (56.6%) being women and 43.3% being men. Mean BMI was recorded as 32.82 ± 3.0 kg/m^2. A vast majority of the participants were overweight (56.6%), whereas 36.6% of them were obese respectively. All participants were treated for hypertension on an inpatient basis at Gomel State Clinical Hospital № 3. The average duration of disease was recorded as 14.2 ± 4.3 years. Mean value of systolic blood pressure was recorded as 145.4 ± 13.3 mmHg and mean diastolic blood pressure was 86 ± 11.4 mmHg. Most (43.3%) of the participants declared to have obtained higher education while remaining participants declared secondary, primary or vocational education. 71.2% of the participants were pensioners whereas 22.2% stated to be employed and a very few were unemployed (1.4%).

According to the results it revealed 30% of the participants had good knowledge about hypertension, whereas 23.34% had an average and 46.65% had poor knowledge about the disease as shown in figure 1.

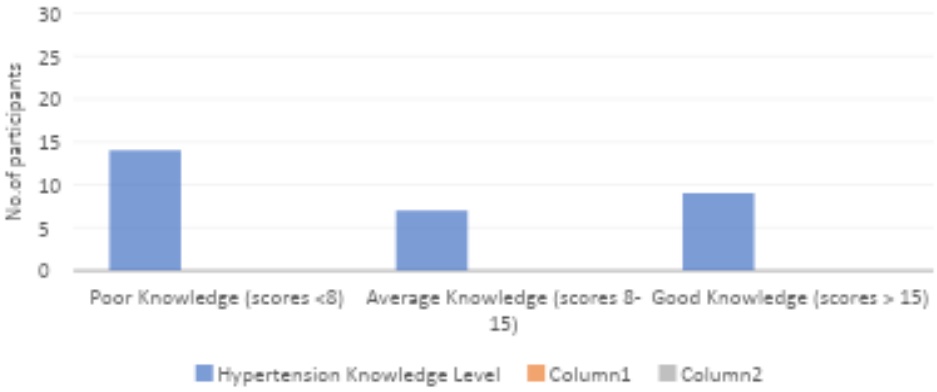


Figure 1 – Hypertension knowledge level

It was also demonstrated that patients have various levels of knowledge on individual components of the disease like risk factors, complications and management. Results revealed

that participants had a good knowledge about the risk factors of hypertension obtaining a mean percentage of 54.65%. Nearly 73.33% of the participants were aware that high salt intake is one of the major risk factors that can lead to arterial hypertension. Similarly, 13% were aware of smoking and 12% were aware of obesity as potential risk factors for hypertension.

Further, the study revealed a vast majority of participants had significantly low knowledge levels regarding complications and management strategies in comparison with risk factors. Overall, 35.05% of participants depicted to have an average knowledge whereas 64.65% to have poor knowledge about the disease complications. 43.33% recognized heart attack as a major complication, making it the most acknowledged complication of hypertension. Other complications including cancer (36.6%), renal problems (33.34%), stroke (23.3%) were recognized respectively. Similarly, only a mean percentage (32.85%) of participants showed to have good knowledge about management strategies. Out of them 46.66% recognized the importance of eating less salt making it the most acknowledged management approach. Further, losing weight (43.33%), engaging in physical exercises (36.66%) and regular medication (23.33%) were identified as frequently used approaches in hypertension control. Additionally, 33.33% of participants recognized the importance of a low-fat diet and increased intake of fruits and vegetables. Only a significant proportion of participants (16.6%) showed to know the importance of both medication and life-style changes in hypertension management.

In comprehensive evaluation of the obtained results, it depicted the presence of significant gaps in knowledge about hypertension among patients. Overall, only 30% were depicted to have adequate knowledge while the majority depicted (69.9%) to have inadequate knowledge. Among the main three elements (risk factors, complications, management strategies) which were used to assess the knowledge level, participants declared to have higher awareness about risk factors in comparison with complications and management strategies as depicted in Figure 2. Hence, above findings highlight the importance of targeted education on severe health complications of untreated hypertension and effective treatment approaches.

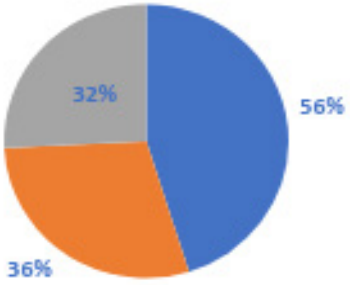


Figure 2 – Patients awareness

Conclusions

According to the research results it is clearly evident that the overall knowledge about hypertension was significantly insufficient among the participants. Particularly, knowledge about complications of the disease and treatment approaches was inadequate resulting in decreased adherence to prescribed treatments. Also, it's a well-known fact that poorly managed hypertension leads to gradual irreversible organ damage, causing life-threatening complications or even death. Therefore, it demonstrates the need of good understanding about the disease highlighting the need of adequate knowledge about hypertension, it's complications and available therapeutic strategies in order to achieve the maximum efficacy of hypertension treatment and thereby lower subsequent consequences like cardiovascular disorders, renal disorders, stroke and improve the general quality of life.

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NON-ALCOHOLIC FATTY LIVER DISEASE: THE PREVALENCE, ASSOCIATION AND IMPACT OF METABOLIC RISK FACTORS IN THE DEVELOPMENT AND PROGRESSION

Introduction

Non-alcoholic fatty liver disease (NAFLD) is currently one of the most common chronic liver diseases worldwide and represents a major public health problem. It is characterized by excessive fat accumulation in hepatocytes in the absence of significant alcohol consumption or other causes of liver disease. According to epidemiological studies, the global prevalence of NAFLD reaches approximately 25–30% of the adult population [1].

NAFLD encompasses a wide spectrum of pathological conditions ranging from simple hepatic steatosis to non-alcoholic steatohepatitis (NASH), liver fibrosis, cirrhosis, and hepatocellular carcinoma [2]. The disease is closely associated with metabolic disorders such as obesity, dyslipidemia, insulin resistance, and type 2 diabetes mellitus [3].

Metabolic syndrome plays a key role in the pathogenesis of NAFLD. Several studies have demonstrated that abnormalities in lipid metabolism, impaired glucose regulation, and arterial hypertension significantly increase the risk of hepatic steatosis and disease progression [4].

Early identification of metabolic risk factors associated with NAFLD is essential for timely diagnosis and prevention of disease progression. Ultrasound examination remains one of the most widely used non-invasive diagnostic methods for detecting hepatic steatosis in clinical practice [5].

Therefore, investigating metabolic risk factors associated with NAFLD in clinical practice is important for improving early diagnosis, identifying high-risk patients, and preventing the progression of liver disease and related metabolic complications.

Goal

To investigate the association between metabolic risk factors and the presence of NAFLD among hospitalized patients, and to evaluate the clinical, biochemical, and ultrasound characteristics that may contribute to the development of hepatic steatosis.