

generation. The conducted study suggests the need for mandatory health monitoring of students in medical universities, as well as the importance of educating future doctors on prevention methods. The results of this study draw attention to the growing problem among students and emphasize the importance of increasing awareness among medical students on health protection and prevention methods.

LITERATURE

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ANTIBIOTIC USE AND MISUSE AMONG MEDICAL STUDENTS IN GOMEL STATE MEDICAL UNIVERSITY

Introduction

Antibiotics are a group of powerful medications that have revolutionized the treatment of bacterial infections. However, WHO recognizes antimicrobial resistance (AMR) as 1 of the 10 major global public health threats, with an estimated 5 million deaths annually associated with bacterial AMR worldwide. More than half a million of these deaths occur in the WHO European Region, which comprises 53 Member States in Europe and central Asia [1]. This issue is particularly relevant among medical students, as they get in depth information about antibiotics in various subjects and opt to use antibiotics on their own before obtaining a full comprehensive knowledge on the subject. It's important for medical students to understand the importance of antibiotic use and also, it's potential consequences of misuse.

Goal

The aim of this work is to evaluate medical students awareness and attitudes towards the issue of antibiotic resistance, as well as to examine the antibiotic usage practices of medical students of GSMU.

Material and methods of research

A survey was carried out among medical students of Gomel State Medical University, Among Pre-medicine to 6th year students using the author's an anonymous Google Form questionnaire. The questionnaires were distributed to groups of GSMU students via social messaging platforms. Based on the data obtained, a database was compiled using the Microsoft Excel program. 142 students submitted their answers. Among 142 students there were 92 females (65%) and 48 males (34%). 2 students (1%) didn't mention their gender. Majority of the participants are from 3rd year (42 – 30%), followed by 6th year (38 – 27%), 2nd year – 30 respondents (21%), 5th year – 18 people (13%), 1st year – 6 (4%), Pre-medicine – 4 respondents (3%) and 4th year – 2 respectively (1%).

The results of the research and their discussion

When asked to describe what is an «antibiotic» majority was able to describe it correctly as a class of drugs that act against a specific bacteria, but 26 (3 from pre-med, 2 from 1st year,

6 from 2nd year, 6 from 3rd year, 1 from 4th year, 3 from 5th year, 5 from 6th year) described it broadly as antimicrobial substance, which is a considerable amount. Junior students (before 4th year) were more likely to give a broader concept (17 (12%)) than senior students (after 4th year) – 9 (6%). 110 (77%) students said they have a comprehensive knowledge about antibiotics and antibiotic resistance, while 30 (33%) admitted otherwise.

Out of the participants, 76 students admitted that they self-prescribed antibiotics at least once in their lifetime which is more than 50% of the participants and 4 (3%) have been prescribed antibiotics by fellow medical students. 81 (57%) students at least once have bought antibiotics without a prescription. 128 (90%) participants obtained their medication from the pharmacy while 8 (6%) students used antibiotics that were already with them. 4 (3%) students borrowed from their friends.

According to figure 1, students most commonly took antibiotics for colds and sore throat.

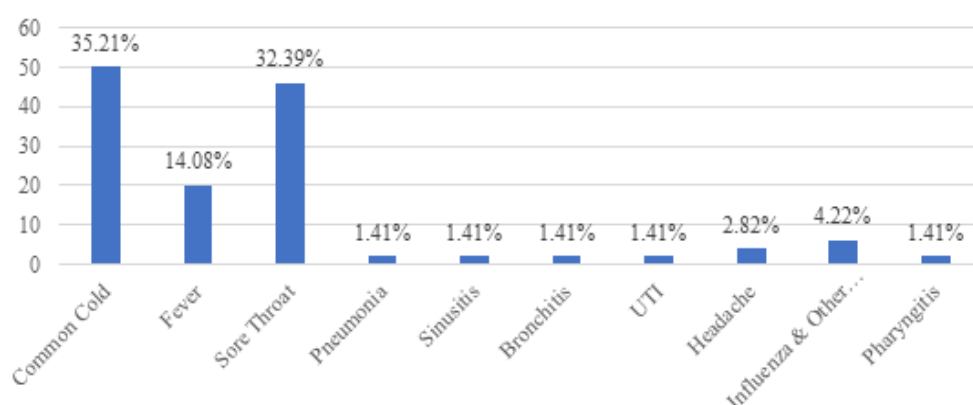


Figure 1 – Number of students and corresponding symptoms

14 students (10%) started antibiotics from the moment of onset of symptoms, 64 (45%) with in less than 3 days, 56 (39%) – between 3 to 5 since the onset of symptoms.

According to figure 2, Amoxicillin and Azithromycin is the most prescribed antibiotics. Our research findings align with global data [2].

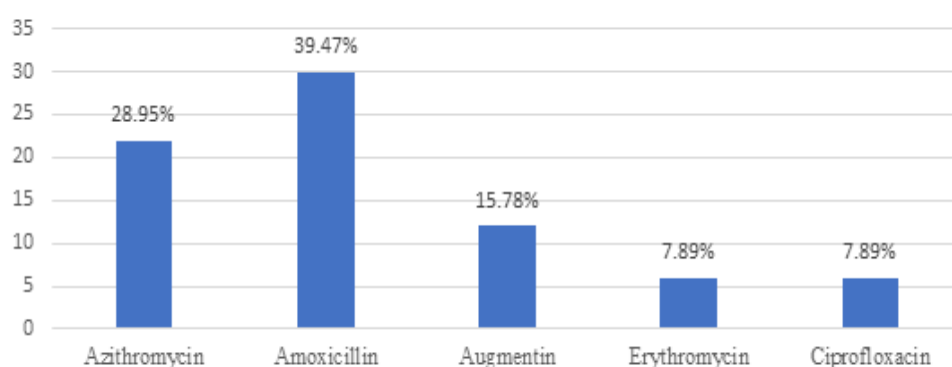


Figure 2 – Number of Students and the self prescribed antibiotic

Once started on antibiotic therapy 42 (30%) continued taking till symptoms subdue, 56 (39%) people used 3 days, which is acceptable for taking azithromycin. 38 (27%) for a week and 6 students (4%) used for 2 weeks. 124 (87%) of respondents participants at least once had adverse effect from antibiotics with nausea and bacterial overgrowth syndrome (BOS) being the most common side effect. 18 (13%) participants never had any adverse effects even once.

When asked how often they have been prescribed with antibiotics 62 (44%) were prescribed once a year, 64 (45%) at least 2 to 3 times a year. 12 people used antibiotics 5 or more times a year, which corresponds to 8% of respondents. 2 (1%) participants self-prescribed and used at least 10 times per a year which is alarming.

When analyzing the results, it is clear that majority of the participants have used antibiotics for self-limiting diseases such as common cold and sore throat as some time those symptoms are caused by viral infections, antibiotics play no role in subduing those symptoms. An taking antibiotics for fever and headache instead of NSAIDS are baffling and alarming. Inadequate continuation of antibiotic therapy is another major reason for antibiotic resistance as we can see many students discontinue antibiotic therapy after symptoms subdue. Early initiation and inadequate continuation of antibacterial therapy is one of the main causes of antibiotic resistance, as we see that many students stop antibiotic therapy after symptoms have subsided, without completing a full course of treatment. The second of the main causes of resistance is the frequent prescription of an antibiotic. Therefore, repeated use of the same antibiotic should be avoided in order to avoid the formation of resistance to it. As we can see, many students (54%) used it repeatedly, which also increases resistance.

Conclusions

The conducted study is of great importance to assess the involvement of future physicians in the problem of antibiotic therapy. Senior students were more knowledgeable and less likely to give a general definition of the «antibiotics» group, then junior students (6 and 12%, respectively) students. More than 50% students admitted that they self-prescribed antibiotics. Amoxicillin and Azithromycin is the most prescribed antibiotics. These antibiotics were used in 39 and 29% of cases, respectively. Unfortunately, students were often in a hurry to start taking antibiotics (55%) and did not always keep the required duration of intake (39%). Also, previous antibacterial therapy during the year was not always taken into account. Therefore, as part of training at medical schools, competencies in the field of antibiotic selection algorithms, timing and safety of treatment should be further developed.

LITERATURE

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MENTAL HEALTH ASSESSMENT AND ANTIDEPRESSANT USE AMONG MEDICAL STUDENTS

Introduction

Two of the most widespread mental disorders seen among today's school and college students are depression and anxiety. Anxiety and depressive disorders are among the most common psychiatric illnesses; they are highly comorbid with each other, and together they are