

обнаружения МБТ являлись GeneXpert МТВ/RIF и ВАСТЕС MGIT 960 в 8% (3,0–18,3). Проанализировав информативность современных методов лабораторной диагностики микобактерий туберкулеза, выявили, что процент обнаружения микобактерии туберкулеза только методом GeneXpert среди новых случаев и рецидивов составил 78% (65,8–88,0), что соответствовало 47 случаям заболевания.

### **Выводы**

Результаты проведенного исследования подтверждают высокую диагностическую значимость использования GeneXpert МТВ/Rif в практике фтизиатрической службы. Кроме того, современный ускоренный метод GeneXpert МТВ/RIF имеет преимущество по сравнению с традиционными методами диагностики ТБ по срокам получения результатов.

### **СПИСОК ИСПОЛЬЗОВАННОЙ ЛИТЕРАТУРЫ**

1. Постановление Министерства здравоохранения Республики Беларусь от 16 декабря 2022 № 118 утвержденного клинического протокола «Диагностика и лечение пациентов с туберкулезом (взрослое и детское население)».
2. Сравнительный анализ результатов молекулярно-генетических и культуральных методов в определении лекарственной чувствительности микобактерий туберкулеза / Н. П. Кушнир [и др.] // Туберкулез и болезни легких. – 2019. – Т. 97, № 11. – С. 65–66. – doi: 10.21292/2075-1230-2019-97-11-65-66.
3. Diagnostic utility of GeneXpert МТВ/RIF assay versus conventional methods for diagnosis of pulmonary and extra-pulmonary tuberculosis / A. M. Elbrolosy // BMC Microbiol. – 2021. – Vol. 21, № 1. – P 144. – doi: 10.1186/s12866-021-02210-5.

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**B. A. Ambepussage Don, N. H. A. Goniamalimage**

*Scientific supervisor: A. I. Kozlova, Ph.D., Associate Professor N. E. Kolchanova*

*Educational Establishment  
“Gomel State Medical University”  
Gomel, Republic of Belarus*

## **STUDENT KNOWLEDGE OF THE ROLE OF MICROBES IN ALLERGIC DISORDERS**

### **Introduction**

The complex relationship between our skin microbiome and allergic skin diseases is being thoroughly investigated by scientists [5]. While the exact processes are still being studied, there is growing evidence that our skin microbiome’s health has a major impact on how susceptible we are to certain allergies. Dermatitis, Eczema and Contact dermatitis are some examples to skin allergic disorders. Allergic respiratory diseases include allergic rhinitis, chronic rhinosinusitis with nasal polyps, and asthma. Researchers have shown that the development of allergic respiratory illnesses usually involves bacterial microbiota dysbiosis [1]. The results of interventional studies on mice and birth cohort studies on humans converge to suggest that a lack of certain commensal microbes colonizing the respiratory or gastrointestinal tract affects the development of systemic and/or local immune function, increasing susceptibility to viral lower respiratory infections and allergic sensitization [4]. Dr. Strachan postulated what is now known as the “hygiene-hypothesis” in the 1980s. It should be noted that the hygiene hypothesis has not been found to apply to personal hygiene, but rather to independent host factors that have been shown to affect the composition of the microbiome and the development of immunologic tolerance, such as the number of older siblings, contact with pets, and living in an urban versus rural area [3].

### **Goal**

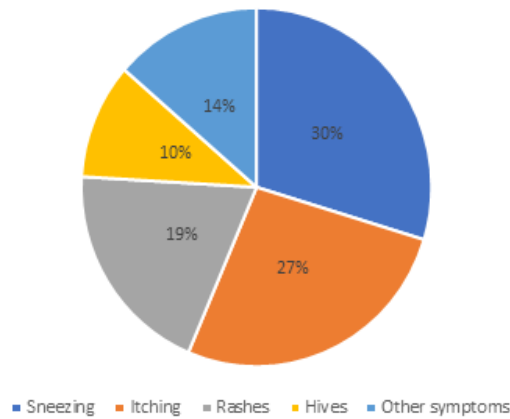
The goal is studying student knowledge of the role of microbes in allergic disorders.

### ***Material and methods of research***

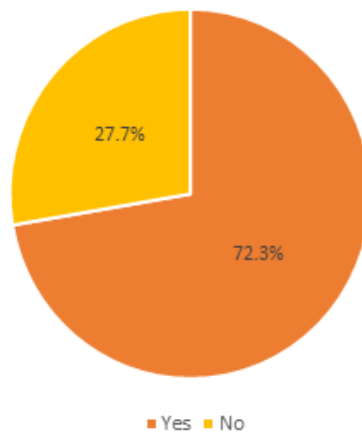
This study was conducted among 120 university students who study in Belarus and Sri Lanka to assess their knowledge about the involvement of microbes in allergic disorders. Data collected from using an online self-administered questionnaire using Google form which include 15 questions.

### ***The results of the research and their discussion***

The study involved 120 students: 55,3% are students from Sri Lanka and 44,7% are students from Belarus, 59,3% females and 40,7% males of them. In this study we search main types of allergies that can diagnosed in people. As results we got 33,1% have been diagnosed with food allergies, 15,3% – with seasonal allergies, 5,6% – with pet allergies and 48% – with other types of allergies. This shows 48% are having 52% are not having family members with allergic disorders. When we are studying the most common symptoms: 30.6% experienced sneezing, 25,8% experienced itching, 19,4% experienced rashes, 10.5% experienced hives and 13,7% experienced other types of symptoms.



***Figure 1 – The symptoms that students experienced***



***Figure 2 – How students' awareness that early exposure to microbes can influence the development of allergies***

When we study about the knowledge of the role of microbes in allergic disorders 57,7% student thought that the diversity of microbes in their environment has influence allergies while 28,5% are not. Also 72,9 % believed that microbes can influence the development of allergies while 27,1% are not. When we study how often sanitize and clean living space to reduce exposure to allergen producing microbes, 45,5% are weekly, 36,6% are daily, 7,3% are monthly.

When we talk about main systemic allergies, 20,5% have respiratory allergies such as allergic rhinitis, asthma and 79,5% are not having any respiratory allergies. When we talk about skin allergies, 24,6% are having skin allergies and 75,4% are not. 42,35% are having reactions to environmental allergens such as dust, mites, and pollen while 57,7% are not. When study about the medication, 14,6% regularly taking medication or antibiotics that may impact to microbial composition while 85,4% are not. 16,3% are have been hospitalized for allergic reaction and 83,7% are not. When studying about the hygienic practice which can prevent from allergen producing microbes which reducing allergic disorders, 56,7% are participating recommend hygienic practice and 43,3% are not.

### **Conclusions**

A majority of participants believed that the diversity of microbes in their environment and the presence of microbes can influence the development of allergies and majority of participants engaged in hygienic practices to prevent exposure to allergen-producing microbes. The study highlights the prevalence of allergies among university students among Sri Lanka and Belarus and their awareness of the role of microbes on allergic disorders. It also emphasizes the importance of hygiene practices and environmental factors in managing allergic conditions. Further research and education on this topic could help improve understanding and management of allergic disorders among this population.

### **LITERATURE**

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**K.D. Kavindya Pudara Randini Perera**

*Scientific supervisor: A. I. Kozlova, Ph.D., Associate Professor N. E. Kolchanova*

*Educational Establishment*

*“Gomel State Medical University”*

*Gomel, Republic of Belarus*

## **PREVALANCE AND PREVENTIVE MEASURES OF MENINGOCOCCAL MENINGITIS IN SRI LANKA**

### **Introduction**

Meningococcal meningitis is an infection of the meninges that envelops spinal cord and the brain. This infection is caused by bacteria named *Neisseria meningitidis*, which is an anaerobic, gram-negative diplococci. With 5–10% atmospheric carbon dioxide, it grows in blood agar at room temperature. *N. meningitidis* localizes mainly in naso-and oropharynx and can colonize in other parts of the body like conjunctiva, mucosa and urogenital tract. This form of meningitis has high mortality and morbidity rates [1]. Of the many different bacteria that can cause meningococcal meningitis, *N. meningitidis* can result in large epidemics. Different pathogens like bacteria, fungi or viruses can cause the disease, but bacterial meningitis have the