

### DEAN'S DESK



Dear students, we at Grodno State Medical University strive to provide students with top-quality education, but that's not it. GRSMU is also a hub for Scientific, Cultural, and Sports related activities. We wholeheartedly acknowledge that International students are an integral part of our university, and we take immense pride in that. Grodno State Medical University is glad to work with students from different countries and provide them with a stage to represent their nation and culture.



DEAN OF FACULTY OF INTERNATIONAL STUDENTS
DR. ALEKSANDER ALEKSANDEROVICH STENKO

GRSMU celebrates its uniqueness in diversity, for in its true essence our university is a junction where students from various backgrounds and cultures come together as one big family. GRSMU has always encouraged students to explore further and beyond in every field they try their hands at. I hope that you like the novel concept of 'The Horizon' - a magazine that serves as a platform for the students to voice their opinions, share their takes and present their points of view.

'The Horizon' is a medium of extended communication where we can learn a lot from one another. I highly appreciate this initiative and personally support it. I look forward to reading the interesting blogs written by you.

# WELCOME TO THE HORIZON



"We all have fascinating stories to share!" For the longest time, I have had this idea of starting a magazine. But not just any conventional magazine, one that shall serve as a platform for the students and alumni of International faculty at Grodno State Medical University to share their stories. A platform that enables students to share their takes on various curricular and extracurricular aspects of medicine. Thus, the idea of 'The Horizon', came to life.



DR. MEHUL H. SADADIWALA, FOUNDER, CLASS OF 2023

'The Horizon' will be a creative intersection where students can freely give commentaries about Lifestyle, Culture, Productivity tips, and more. Throughout the years, many individuals at GrSMU have inculcated valuable skills and gained experience with a fair share of success in various disciplines. Maybe you run a successful YouTube channel or an educational website, or maybe you are a successful student-researcher or an educator, and so much more. 'The Horizon' enables students to share their personal experiences. The insights that you share will encourage other students to take further strides and explore future possibilities.

**'The Horizon'** is supported directly by the Dean of the International Faculty, and it will operate under the supervision of the International Students' Scientific Committee. Students from 1st to 6th year, and even graduates, can submit their blogs to this magazine. The articles should directly or indirectly revolve around student life to share knowledge and the collective growth of students.

### EDITOR'S DESK





66 I'm a sixth-year student at Grodno State Medical University, and I am passionate about curating captivating content that resonates with readers across diverse interests, especially in lifestyle medical blogs. With my keen sense of trends and attention to detail, I collaborate closely with writers and creatives to produce vibrant, informative pieces that inspire and inform. My editorial approach combines creativity with precision to ensure each story is visually appealing and thoughtfully composed. I am dedicated to delivering fresh, relevant content.

As an editor-in-chief, I thrive on bringing lifestyle topics to life in ways that deeply connect with audiences. I am truly grateful to the ISSS for this incredible opportunity.



L.R. SATHISHA DESHAN LIYANAGE EDITOR-IN-CHIEF (OCT-DEC, 2024)



**MARYAM ANOOSHA EDITOR-IN-CHIEF (OCT-DEC, 2024)** 

I have always had a keen interest in a variety of medical disciplines and writings outside of medical training. My journey into this field has afforded me the chance to expand my expertise in writing and research.

As the editor-in-chief, my goal is to assist all of my fellow students and work with them to push the boundaries of knowledge. I'm excited to share fascinating insights and concepts!

And a message to our dearest readers, we would like to invite you all, students and alumni, to share with us the blogs that directly or indirectly revolve around student life, to share knowledge and experiences that has had an impact on your growth within and outside the bounds of our university.

Concluding, let us alter the limitations of our individual efforts and collectively explore limitless Horizons.

**Cover Credits** 

### THE HORIZON

OCTOBER 2024

## THE EFFECT OF CULTURAL DIVERSITY ON ACADEMIC PERFORMANCE IN UNIVERSITIES

The focal point of this article is to explore the intricate relationship between cultural diversity and its impact on the academic performance of university students.

WRITTEN BY G.A. RESHMI DILEKA CLASS OF 2025

### INTRODUCTION

Cultural diversity is an essential hallmark of modern higher education, enriching the university experience and shaping the academic landscape. As universities become increasingly globalized, the interplay between diverse cultural backgrounds and academic performance has garnered significant attention. This blog explores how cultural diversity influences academic outcomes among university students, highlighting both its benefits and challenges.

### ENRICHING THE LEARNING ENVIRONMENT

One of the most profound effects of cultural diversity is the enhancement of the learning environment. In a classroom filled with students from various cultural backgrounds, discussions become more dynamic and multifaceted. Diverse perspectives lead to richer dialogues, encouraging students to think critically and creatively. When students engage with peers who have different viewpoints, they are often challenged to reconsider their assumptions and expand their understanding of complex issues. This exposure not only deepens intellectual engagement but also fosters a culture of inclusivity and respect.



### BUILDING COLLABORATIVE SKILLS FOR A GLOBALIZED WORLD

Moreover, collaboration in diverse groups cultivates essential skills that are invaluable in today's interconnected world. Working alongside individuals from different cultures teaches students how to navigate varied communication styles and problem-solving approaches. This experience enhances teamwork abilities, preparing students for future careers in increasingly global workplaces. The ability to collaborate effectively with people from diverse backgrounds is a significant asset, making graduates more competitive in the job market.



### NAVIGATING THE CHALLENGES OF DIVERSITY

Despite the many advantages, cultural diversity also presents significant challenges that can impact academic performance. Communication barriers often arise when students are not proficient in the dominant language of instruction. These barriers can lead to misunderstandings, decreased participation, and feelings of isolation among non-native speakers.

Additionally, cultural differences can result in conflicts stemming from varying beliefs, values, and social norms. For instance, a group project may face tension if students interpret deadlines or contributions differently based on their cultural backgrounds. If these challenges are not addressed, they can hinder both individual and group performance, creating an environment where some students may struggle to succeed.

### PROMOTING INCLUSIVITY: THE ROLE OF UNIVERSITIES

To harness the benefits of cultural diversity while mitigating its challenges, universities must prioritize the creation of inclusive environments. This begins with comprehensive orientation programs that celebrate cultural diversity and facilitate intercultural understanding. Such initiatives can help students acclimate to their new academic surroundings and build connections with peers from different backgrounds.

Moreover, universities should provide robust support systems, including mentorship programs and peer support networks, to guide students through the complexities of a multicultural academic landscape. Faculty training on cultural competency is also vital, as it equips educators to recognize and address the diverse needs of their students. By fostering a culture of inclusivity, universities not only enhance individual success but also cultivate a cohesive academic community where all students can thrive.



### **ENVISIONING AN INCLUSIVE FUTURE**

The influence of cultural diversity on academic performance in universities extends far beyond the classroom, shaping a more inclusive and vibrant future for education. As institutions of higher learning embrace a diverse student body, they not only enhance the quality of education but also cultivate global citizens equipped with the skills necessary to navigate an increasingly interconnected world. To truly harness the power of diversity, universities must adopt a proactive approach, embedding inclusivity into their core values and practices. This involves not just addressing challenges but actively celebrating the myriad cultural narratives that enrich the academic fabric.



By fostering an environment where every voice is heard and valued, universities can inspire students to engage deeply with one another, leading to transformative learning experiences. In this way, the academic landscape evolves into a dynamic space where the exchange of ideas flows freely, innovation thrives, and students graduate not just with knowledge, but with a profound understanding of the world around them. This vision for the future is one where diversity is not merely tolerated, but celebrated as a vital component of the educational journey—a journey that prepares students to lead with empathy, creativity, and a commitment to social justice in their future endeavors.

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OCTOBER 2024

## FROM SUNLIGHT TO SUPPLEMENTS: THE VITAL ROLE OF VITAMIN D IN STUDENT LIFE

This blog discusses the importance of vitamin D for students, focusing on its role in bone health, immune function, and mental well-being. Many students struggle to maintain adequate levels due to busy schedules and seasonal changes, which can lead to fatigue. This is written in hopes to encourage students to prioritise their health by finding simple ways to boost their vitamin D levels.

WRITTEN BY
IBA SHAREEF
CLASS OF 2026

### **INTRODUCTION**

Vitamin D (calciferol) is a fat-soluble vitamin responsible for increasing intestinal absorption of calcium, magnesium, and phosphate. The most important forms of vitamin D in humans are vitamin D3 (cholecalciferol) and vitamin D2 (ergocalciferol).

We all know the primary natural source of vitamin D is sunlight. Cholecalciferol is synthesized in the lower layers of the skin's epidermis through a photochemical reaction triggered by ultraviolet B (UV-B) radiation. Additionally, vitamin D3 and D2 can be obtained through diet and supplements. Usually, just getting out into the sun without sunscreen and exposing your face and hands to daily direct sunlight for 5 to 30 minutes is enough for your body to start producing cholecalciferol.

Most of us are busy navigating university life, which makes it difficult to prioritize our health unless it actively affects our daily routine.



### WHY DO WE NEED VITAMIN D?

- Promotes calcium absorption: Vitamin D enables normal bone mineralization and preventing hypercalcaemic tetany. It is essential for bone growth and remodelling, otherwise bones can become thin, and brittle.
- · Reduces inflammation
- Regulates neurological pathways that control psychological functions. Vitamin D actively fights depression by increasing serotonin, the hormone key to stabilising mood and increasing happiness.
- · Modulates cell growth
- Regulates neuromuscular and immune function
- · Modulates glucose metabolism

### WHAT IS VITAMIN D DEFICIENCY?

A normal vitamin D level in the blood is between 20-40 ng/mL. Vitamin D deficiency is typically defined as having blood levels below 20 ng/mL, while 21-29 ng/mL is considered insufficient.

According to the National Institutes of Health (NIH), individuals with darker skin are more likely to have lower vitamin D levels than those with lighter skin. Despite year-round sunshine, the Middle East and Asia have high rates of vitamin D deficiency due to the melanin in the skin, which hinders vitamin D synthesis. Personally, I've noticed that low vitamin D levels are quite common in my home country, the Maldives.

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Vitamin D deficiency is also more prevalent in winter due to reduced sunlight exposure. This is particularly challenging for students with darker skin since melanin protects against sun exposure, making it harder to produce sufficient vitamin D. In Belarus, with its cold autumns and winters, most university days pass without much sun, and university life itself can be so demanding that we often neglect our health and diet. We might not get enough sunlight or eat a diet rich in essential nutrients.

Vitamin D deficiency is widespread, and many people are unaware they have it. Some common signs and symptoms include frequent illness, lack of energy, anxiety, depression, bone, back, and muscle pain, slow wound healing, bone loss, hair loss, and weight gain. These are issues that not only affect university students but anyone struggling to keep up in today's fast-paced world. It's easy to overlook these signs. However, if you suspect a vitamin D deficiency, it's best to talk to your doctor and get a blood test.

SYMPTOMS OF VITAMIN D DEFICIENCY Fatigue and Bone and back Muscle tiredness pain weakness, aches, or cramps **Impaired** Hair loss Bone wound fractures or healing brittle bones

### IMPACT ON ACADEMICS AND HEALTH RISKS

Low vitamin D levels are no small matter. It may not seem important, but a deficiency in this essential vitamin can bring numerous health risks and life disruptions.

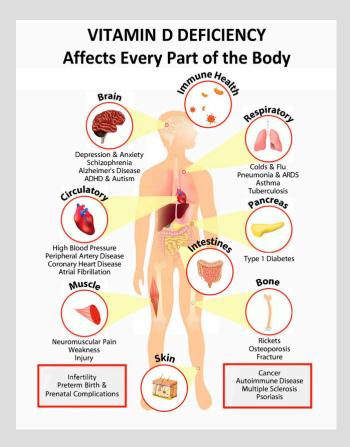
Przybelski and Binkley's retrospective chart review revealed the effects of vitamin D deficiency on memory function and cognitive decline. Numerous studies suggest a link between low vitamin D levels and cognitive impairment.

Research has also been conducted on how, despite ample sunlight, vitamin D deficiency is widespread in Saudi Arabia, particularly affecting university students with psychological burdens such as depression, anxiety, and stress. It was shown that once their vitamin D levels were improved, their academic performance and mental health also saw improvement.

Students experience the highest levels of stress during the early years of studying medicine and other health sciences. Low vitamin D levels can aggravate this stress and adversely affect academic performance. Difficulty focusing in class, shorter attention spans, trouble studying due to musculoskeletal pain, and even psychological mood swings can all be influenced by vitamin D levels, ultimately impacting how well students perform academically and manage their social lives.

Severe vitamin D deficiency can also lead to other diseases, such as:

- · Osteomalacia, causing musculoskeletal pain
- Osteoporosis
- Depression
- An increased risk of developing cancers, including melanoma
- Cognitive impairment and a higher risk of developing Alzheimer's disease

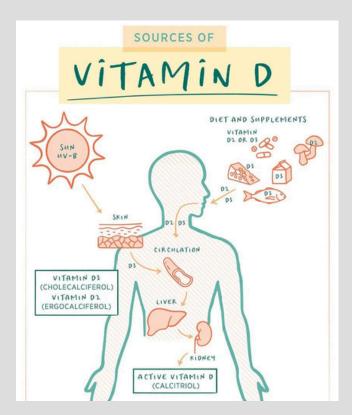


### RAISING AND MAINTAINING VITAMIN D LEVELS

How long it takes to recover from a vitamin D deficiency depends on its severity. Generally, it takes about 6-8 weeks of supplementation to restore vitamin D levels to the normal range.

The best way to prevent vitamin D deficiency is to ensure you get enough vitamin D through diet and safe sun exposure.

- Diet:
  - · Eat foods rich in vitamin D. Some of the best sources include: Fatty fish, cod liver oil, mushrooms, fortified dairy products, orange juice and cereals, whole eggs and egg yolks, beef liver etc.
- Sun Exposure:
  - Aim to stay outside without sunscreen for 5–30 minutes a day.
- Supplements:
  - If you don't get enough vitamin D through your diet and sun exposure, adults under 65 should take 600-800 IU of vitamin D3 daily.



### CONCLUSION

Vitamin D plays a significant role in overall health, and as medical students, we should be particularly mindful of our well-being. Not only to set an example for our future patients but also for our own sake. During university, we often don't have the time or energy to focus on lifestyle and dietary choices, which can lead to worsened health over time. Let's take responsibility for ourselves by getting outside, enjoying the sun, and maybe even going for a walk while we're at it. It doesn't have to feel like a chore-enjoy the fresh air. And on days when there's no sun, don't sit indoors feeling gloomy. Cook a healthy meal with vitamin D-rich ingredients and invite friends over to enjoy it together. Or, if you prefer, enjoy some alone time with a good meal. Just remember, vitamin D doesn't come through the window, so be sure to get outside when you can!

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### THE HORIZON

OCTOBER 2024

### **ALCOHOLISM**

Alcoholism and drug addiction are pressing issues that affect millions of individuals and families worldwide. While they both fall under the broader umbrella of substance use disorders, they manifest in different ways and have unique consequences. Understanding these issues is essential for individuals struggling with addiction, their loved ones, and society as a whole.

WRITTEN BY J.D.DINU IRANDI JAYASINGHE CLASS OF 2025

### INTRODUCTION

Alcoholism, or alcohol use disorder (AUD), is characterized by an individual's inability to control their drinking despite the negative effects it has on their life. It is a chronic disease recognized by medical professionals and it can range from mild to severe.



Symptoms may include such as,

- •Craving: A strong need or urge to drink.
- •Loss of control: Inability to limit drinking on any given occasion.
- •Physical Dependence: Withdrawal symptoms such as nausea, sweating, or shaking when the individual stops drinking.
- •Tolerance: Need to drink larger amounts of alcohol to achieve the same effects.

### HOW MUCH IS TOO MUCH ALCOHOL?

Moderate drinking is characterized as drinking one standard drink a day for women and two standard drinks for men within a day. A standard drink is defined as any drink regardless the size of the container or the kind of alcohol in it and which contain 10 grams of pure alcoholic beverages (beer, wine, liquor, etc.)

- 30 mL of spirits (40% alc. vol)
- 100 mL of wine (13% alc. vol)
- 285 mL of full strength beer (4.8% alc.vol)

### WHAT ARE THE CAUSES OF ALCOHOL ADDICTION?

Several of the most common causes of alcoholism are:

- Biological factors (Genetics and physiology.
   While some individuals can limit the amount of alcohol they consume, others feel a strong impulse to keep going.)
- Environmental factors.
- Social factors (Social factors can contribute to a person's views of drinking. Your culture, religion, family and work influence many of your behaviours, including drinking. Family plays the biggest role in a person's likelihood of developing alcoholism. Children who are exposed to alcohol abuse from an early age are more at risk of falling into a dangerous drinking pattern.)
- Psychological factors. (Different psychological factors may increase the chances of heavy drinking. people with high stress, anxiety, depression and other mental health conditions are more vulnerable to developing alcoholism)

### HEALTH EFFECTS OF ALCOHOL

### Brain:

Alcohol interferes with the brain's communication pathways, and can affect the way the brain looks and works. These disruptions can change mood and behavior, and make it harder to think clearly and move with coordination.

### Heart:

Drinking a lot over a long time or too much on a single occasion can damage the heart, causing problems including: Cardiomyopathy - Stretching and drooping of heart muscle, Arrhythmias - Irregular heartbeat, Stroke, High blood pressure.

### Liver:

Heavy drinking takes a toll on the liver, and can lead to a variety of problems and liver inflammations including: Statuses, or Fatty liver, Alcoholic hepatitis, Fibrosis, Cirrhosis.

### Pancreas:

It is known that alcohol is what stimulates the body as well as the pancreas to start creating toxins over time which ultimately results into pancreatitis which is inflammation in the pancreas that triggers swelling and will manifest pain (we may extend). And other symptoms in that the pancreas lose the functional ability in producing enzymes and hormonal substances needed for digestion.



### HOW TO HELP A FAMILY MEMBER WITH ALCOHOL ADDICTION?

Helping a loved one struggling with alcohol dependence can be tough and needs empathy, patience, and understanding. Here are a few things you can do to offer support:

Communicate openly while also setting healthy boundaries. Express your care and concern from a place of caring, not criticism. Hear their perspective with an open mind. While addiction is a family disease, you cannot rescue them from it - they must choose help themselves. Professional guidance is often necessary for recovery to stick.

Lending a hand to an addict requires stamina, as healing is rarely a straight path. Keep your own well-being a priority too by avoiding codependent tendencies. Encourage treatment options and maintain hope, but remember the journey back is theirs alone. Research addiction science so you recognize it as an illness, not a personal flaw, and show compassion accordingly. Read about others' recovery experiences for insight and encouragement.

If your relative or friend is struggling with alcoholism or related signs, delay no longer in connecting with a specialist. Addiction should not be allowed to undo a person's hopes, bonds and future. With understanding and the right help, long-lasting recovery is achievable.

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### THE HORIZON

OCTOBER 2024

## FROM INTERN TO EXPERT: THE TRANSFORMATIVE POWER OF MEDICAL INTERNSHIPS

Embarking on the journey from medical school to internship is a formidable transition that not only marks the culmination of years of academic dedication but also serves as the gateway to practical application. As you step into the realm of medical internships, you are not just gaining clinical experience; you are unlocking a pathway to confidence and expertise. In this exploration, we delve into how medical internships play a pivotal role in boosting confidence, dispelling fears of inadequate knowledge, and molding aspiring doctors into seasoned professionals.

WRITTEN BY AROOSHA IBRAHIM CLASS OF 2024

### INTRODUCTION

Entering the world of medical internships can be similar to taking a plunge into the unknown. However, it is within this hands-on experience that confidence is forged. No longer confined to the theoretical realms of textbooks, interns find themselves at the frontline of patient care, making decisions and executing procedures under the guidance of experienced mentors. The immersion in real-world scenarios is where classroom knowledge evolves into practical wisdom, laying the foundation for a self-assured medical professional.

### EMBRACING THE LEARNING CURVE

It's natural for new medical graduates to harbor concerns about not knowing "enough" when they step into their internships. The reality is that medicine is a vast and continuously evolving field, and the learning curve is perpetual. Instead of succumbing to the fear of inadequacy, consider it an opportunity for continuous growth. Internship serves as a bridge between academia and the dynamic world of healthcare, where each day brings new challenges and learning experiences.

### MENTORSHIP: YOUR GUIDING LIGHT

One of the distinctive features of medical internships is the close mentorship provided by seasoned healthcare professionals.

Mentors serve as guides, imparting not just clinical knowledge but also sharing insights gained from years of practical experience. Establishing a strong mentor-mentee relationship is crucial for navigating the uncertainties of the medical field. This personalized guidance fosters a supportive environment where interns can ask questions, seek advice, and gradually gain the confidence to make independent decisions.



### THE EVOLUTION OF KNOWLEDGE

Internship is not a static phase; it's a dynamic process of continuous learning. The exposure to diverse cases, patient care, and the collaborative nature of healthcare teams contribute to a multifaceted learning experience. As an intern, you will witness the adaptation and application of medical knowledge in real-time, honing your diagnostic and decision-making skills. Embrace each case as a puzzle to solve, recognizing that every encounter adds another layer to your expertise.

### NAVIGATING CHALLENGES WITH RESILIENCE

The medical journey is replete with challenges, and internship is no exception. Facing situations where the answer is not immediately apparent fosters resilience.

It's essential to understand that overcoming challenges is an integral part of the learning process. Each hurdle surmounted contributes not only to your medical knowledge but also to your ability to handle adversity—an invaluable skill for a career in healthcare.

### CELEBRATING MILESTONES: A CONFIDENCE BOOSTER

Throughout your internship, celebrate the milestones, both big and small. Whether it's successfully performing a procedure, effectively communicating with patients, or collaborating seamlessly with your medical team, recognize and appreciate your achievements. These milestones serve as tangible markers of your growth and accomplishments, bolstering your confidence and reinforcing your capabilities.

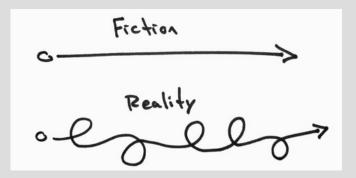


### EMBRACING THE FUTURE

As you approach the culmination of your internship and stand on the brink of independent practice, acknowledge that the journey of learning and growth is ongoing. Medical expertise is a lifelong pursuit, and each stage of your career adds depth and nuance to your understanding of medicine. Embrace the uncertainty, stay curious, and continue to seek knowledge. Remember, the most seasoned professionals were once interns navigating the complicated web of medical practice.

### BEYOND THE WALLS OF INTERNSHIP

It's crucial to acknowledge that the skills and confidence gained during internship lay the foundation for a lifelong journey of learning and adaptation in the medical field. Beyond internship, medical professionals engage in continuous education, specialized training, and collaborative research, further refining their expertise. The journey from intern to expert is not a linear path but a continuum of growth and refinement.



### CONCLUSION

In conclusion, the transition from medical school to internship is a transformative phase that shapes aspiring doctors into confident, knowledgeable professionals. Embrace the challenges, value the guidance of mentors, and celebrate the milestones along the way. The journey from intern to expert is a continuous evolution, and every step brings you closer to the pinnacle of medical proficiency. So, step into your internship with an open mind, a resilient spirit, and the understanding that, in the realm of medicine, the journey of learning is as significant as the destination of expertise.

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