



# HORIZON

VOLUME 1, ISSUE 6, JUNE 2023

LIFESTYLE, PRODUCTIVITY, CULTURE & SO MUCH MORE.....

Chronic Exposure to Web-series & it's Effects

Unleashing the Thrill & Adrenaline Rush

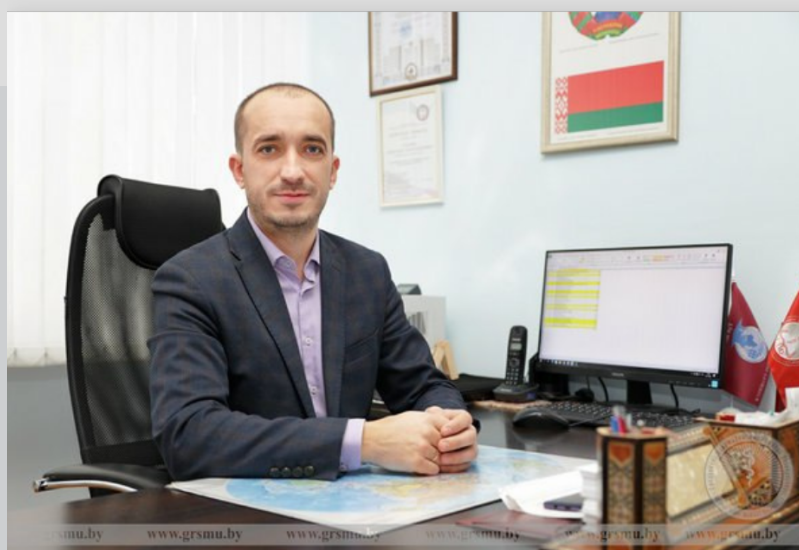
You snooze, you lose

Benefits of Cold Showers

# 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.



**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.

For inquiries and submissions.

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# EDITOR'S DESK



Experiences and knowledge we have received up until this very moment has assisted in shaping and carving our personalities and thought processes to create the individuals we are today. This metamorphosis has inculcated within us the wisdom to head in each of our personal journeys and the voicing out of pieces of our journeys is a great opportunity to create a supportive environment within the student body.

As the Editor-in-chief (Apr-Jun,2023) of this magazine and the Supervisor for future editorials, I plan on focusing on delivering together with my co-editor (Apr to Jun, 2023) a array of exciting blogs filled with facts, tips and descriptions on various topics that have been proposed and penned by students and alumni of GrSMU.



**ANJELO LEARD, SUPERVISOR FOR THE HORIZON,  
EDITOR-IN-CHIEF (APR-JUN, 2023)**



**KRISHA K. GANDHI,  
EDITOR-IN-CHIEF (APR-JUN, 2023)**

I have always loved reading and writing. Reading a good novel makes me see an entire new world from the author's point of view. I believe that apart from academics, we should be involved in other activities too which enhances our personality and uplifts our mood.

When I was offered the opportunity to work for "The Horizon" by the Founder himself, I had to take this chance! Getting to read all the articles first as they are (raw) is an honour in itself. It always brings me immense joy and pleasure to read the stories that fellow students have written. Reading this magazine makes you want to explore even more and you start noticing little things in life that you might have failed to notice before.

And a message to our dearest readers, we would like to invite you all 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

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# PSYCHOLOGICAL & HEALTH RELATED CHANGES IN CHRONIC EXPOSURE TO WEB-SERIES

The highlight of this blog is the psychological and physical health related changes that occur in youth on chronic exposure to web-series, how OTT platform contents influence us is something interesting that has been discussed in this blog

WRITTEN BY  
MEHUL H. SADADIWALA  
CLASS OF 2023

With wide access to limitless data, there has been an exponential rise of new mediums of entertainment, often going by the name of OTT platforms. These streaming platforms provide users with a huge variety of content which is tailored as per the likings of the masses. This content comes in forms of web series, which has found its home amongst the youth that find the regular television shows boring, repetitive, and lacking originality; this subgroup prefers to watch content that has a lot of drama, comedy, action, romance, thrill, and more, which comes to them through these web series.

**BIGGEST COMPETITOR OF  
STREAMING PLATFORMS IS -  
SLEEP !**

Other most important reason why such shows are highly popular amongst young subgroups is because they provide a great sense of originality and engagement but at the same time this unregulated content delivers vulgarity, explicit visuals, abusive language, which induces a sense of rebellion against the society in this vulnerable population. Therefore, although entertaining, it has a solid potential to attract the youth's attention and influence their immature mindsets on multiple layers.

This content has immense potential to influence social and political opinions, but with this blog I wish to discuss the psychological and health related impact of this mode of entertainment. While the quality and the representation of the content is highly debatable, let's try to break it down with evidence based studies done of the this topic and reach to a reasonable conclusion. I assume you might have heard in news room discussions or read on internet that a certain type of movie, games, or documentaries should be banned as they are influencing the mentality of some people which is causing a rise of riots, serial killings, school shooting and bombings and so on. Often due to such discussions a notion is built up that there might be an association between consumption of such provocative content and it translating to real life violence. So the question is, is it really possible to get influenced by TV Shows?

“ Is it really possible to get influenced by TV Shows? ”

In news we frequently hear about interrogation details of criminals where they vividly describe how they got inspired by the protagonist of their favourite TV show and tried to emulate the same in real life as well. Recently I heard about a group of youngsters inspired by a web series on a popular OTT platform, premise of which was based on counterfeit currency. Similarly there have been many real life parallels based on popular web series about chemistry teacher turning into a drug lord, serial killers, bank heist and many others which went on to inspire many to follow similar strategies. A study conducted on how these dramatic shows that are based on real incidents can trigger the emotions of people regarding crime, and aggression. In conclusions it was found out that viewers usually end up admiring these fictional characters and tend to grow liking towards their certain traits by the time they end the show their favourite characters or their ideologies leave an indelible impression on viewer's thoughts. [1]

These streaming platforms focus largely on the 'binge watching' model, which is clearly understandable through the screenplay which ends every episode in a cliff hanger, which creates this urge in viewer's minds to keep exploring what happened next. This generates more viewers and viewing hours and therefore greater revenues. It won't be wrong to label this model an 'addiction'. [2]

Studies have suggested that binge watching is thought to be closely related to negative feelings. Many studies provided examples of research articles that provide correlation between binge watching, body dissatisfaction, sleeping disturbances academic loss, depressive symptoms and more. [3]

Due to such complex impact of binge watching such highly addictive mediums of entertainment the viewers often are unaware of the effects of this experience, as their grades suffer, detrimental effects on their social lives, and the composite health effects are determined to an extent by their binge watching habit.

Infact what really took me by surprise was when I read a new article on internet in which a CEO of a leading OTT platform claimed that the streaming giant's biggest rivals aren't other rival platforms, or YouTube or even traditional broadcasters, it's - SLEEP! According to him, human need for sleep is actually their biggest barrier. His words were, "You know, think about it, when you watch a show from Netflix and you get addicted to it, you stay up late at night," he said.

In the long term this can be worrying as these platforms can influence minds of naive and young individuals in many ways and although true but it's hard to believe that many poeple are living the life of a fictional character and they lose their sense of reality. What we experience in the course of our life is stored in our subconscious mind and we make decisions based on that memory and knowledge. This can have different results for different people. Therefore, it's important for the viewers to realize that they don't drift away too much from their mental and physical health while engaging with these shows.

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# UNLEASHING THE THRILL WITH ADVENTURES AND ADRENALINE RUSH

The Idea of adventure and adrenaline is somewhat linked together. The thrill of taking risks and producing intense rush of adrenaline is the main highlight of this blog

WRITTEN BY  
NANCY M. GOR  
CLASS OF 2023

Adventure sports, thrilling activities are nowadays the new “bucket list “ add on for many of us. Well with adventure, adrenaline rush goes hand in hand. An adventure trip is a lot more than just the adrenaline rush. It’s the one thing you mind can benefit the most. Even the thought of an adventure trip can make us so happy! Imagine being on one. It’s the perfect kind of exercise our brain needs. In this fast-paced world, our minds are running faster than us. They need to take a break too.

The thrilling experiences such as bungee jumping, skydiving, white-water rafting, edge walking, highlining , all these exciting, fascinating and challenging creates a adrenaline rush which can be exciting, addictive, exhilarating and fearful too.

The “swim with the dolphins, safari ride in a dessert, go karting, scuba or deep diving, skateboarding, driving sports, bike rides in amusement park or even a car on a high speed can give us that thrills !

## What is an adrenaline rush ?

Ever wondered what’s that rapid chill filled with energy, excitement, fear, euphoria all at once ? You start to breathe quickly and your start sweating, body begins to tremble? This roller coaster experience is what we call an Adrenaline rush.

It’s a physiological response which while engaging in the adventurous activities our brain perceives them as potentially dangerous and our body’s flight-or-fight response is activated. As a result our adrenal gland releases adrenaline (epinephrine) , a hormone released in bloodstream for stressful situations by increasing heart rate, blood pressure, stimulating glucose levels, sweating and trembling. These feelings and sensations are part physiological natural responses of human body.

The effects on our energy levels, focus, sense of alertness , not only it has positive impact on our mood but also cognitive abilities. All In all, this hormone as physical, emotional, psychological effects on our body.

## BENEFITS OF ADVENTUROUS & THRILLING ACTIVITIES

“It’s not for the faint hearted “ - you must have come across this thread before many times. Like two sides of a coin this activities have it’s own pros and cons. Many of us wants to embrace this sports while some of us don’t even want to indulge ourselves into such risky adventures. This experiences are not only fun and thrilling but affects the health and body positively. Numerous benefits such as boost in energy levels, increased fitness level, a sense of accomplishment with new experiences, build up on confidence and self esteem.

Not only it's a great way of having fun but also it helps you escape from your day to day routine. With more adrenaline flowing there's improvement in your decision making process, ability to work with others more emotionally stability.

According to Murray-Prior, all the symptoms of irrational fear are similar. It starts with delay, nervous laughs, constant talking and endless questions. Then reality hits, legs go weak, palms sweat, and it's impossible to stand straight. The instant they leave the edge is followed by a panicked frozen moment, a second of free-fall, and the dreaded, "Am I falling to my death?" pondering. "Gradually and smoothly, they slow down and realize, 'I'm OK! I'm alive!', which then turns into victorious screams," he adds. Adventures are often undertaken to create a psychological arousal or in order to achieve a greater goal says Wikipedia.

While such experiences are always quoted as dangerous, traumatic, possibly fatal even with safety precautions putting life in unnecessary danger just for recreational purposes.

There was recently case stating a rarest complication of bungee jumping and other recreational activities is venous stasis and Hemorrhage due to venous engorgement.

### NEUROSCIENCE OF THRILL SEEKING



The Neurochemistry in adventurous or thrill seeking situ-which almost poses some kind of danger or fear whether real or perceived starts with the amygdala. As the situations or sports becomes imminent our amygdala (almond shaped structure in our limbic system of brain) registers that risk, which releases a combination of dopamine, adrenaline, endorphins and other hormones in order to prepare our body for the experience. Following this there's a sense of immense pleasure and reward, endless euphoria and a craving for doing it again.

### Adrenaline junkies- Superheroes of adventures

It's a phrase used to describe the people who live for the thrills, intense sensations, potentially dangerous lines of work (firefighters, emergency rescue teams), extreme sports which all generates adrenaline rush. While many studies have shown Risk taking has a strong biological and genetic component involved. Because of our early ancestors relied on hunting for survival, meant that those prone to risk-taking has a better passing down. But at the end not all of us can be adrenaline junkies, the spectrum states that only few among us are junkies or completely risk averse rest all of us are somewhere in between.



The adrenaline junkies owns a negative effects of raised adrenaline rush on them. Long term exposure to hormones are linked with chronic stress, heart diseases, diabetes and depression.



Concluding that in the end it's all about exploring and expanding our horizons, exploring new places, embracing new experiences, awareness and gaining new perspectives and escaping our daily lives it's necessary to have that adrenaline rush once in a while as the famous slang states

" You Only Live Once " .



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# YOU SNOOZE, YOU LOSE.

The blog discusses the negative effects of setting multiple alarms and snoozing them, leading to fragmented sleep and decreased cognitive ability, and provides tips for improving sleep hygiene and waking up refreshed

WRITTEN BY  
ANJELO LEARD  
CLASS OF 2024

As medical students, alarms are a life saver, because they help us leave the comfort of our bed to start a new day. An alarm is conventionally set prior to sleep and helps us to wake up when it is required but unfortunately all of us have a habit of;

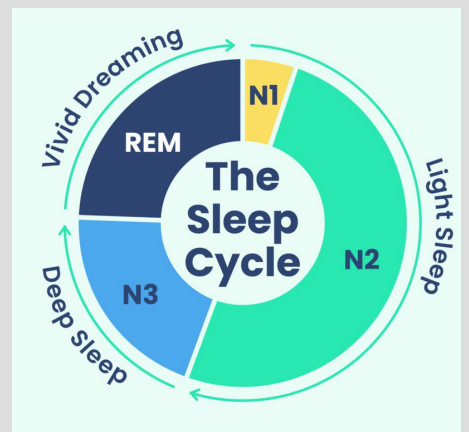
1. Setting too many alarms that are set 5 or 10 minutes apart with the expectation that we will wake up for one of these alarms that have been set. (Eg: 5:00am , 5:05am, 5:10am, 5:15am).
2. Endlessly snoozing the alarm with the expectation of an extra 5 minutes of sleep.

Both these actions that we carry out without too much thought is scientifically proven to result in fragmented sleep leading to a feeling of fatigue, compromised attention span, decreased cognitive ability as well as negatively impacting on your mood.



To understand the effect of the above mentioned habits we should first have a clear understanding of the sleep cycle and its components.

The sleep cycle is divided into 5 main stages



Wake stage, N1 stage, N2 stage, N3 stage (N1 – N3 stage is known as the NREM stage) and REM stage

Wake stage : where we are fully awake.

N1 stage (Falling asleep) : heart beat and breathing slow down, muscles begin to relax, transition from wakefulness to sleep and lasts for about 5-10 minutes.

N2 stage (Light sleep) : heartbeat and breathing slow down further, no eye movements, body temperature drops and brain produces sleep spindles, this stage lasts approximately 20 minutes

N3 stage (Slow wave sleep) : Deepest sleep state, heartbeat and breathing are at their slowest rate, no eye movements ,body is fully relaxed, delta brain waves are present, tissue repair ,growth and cell regeneration are promoted and immune system strengthens, lasts for approximately 20 to 40 minutes.

REM sleep: primary dreaming stage, eye movements become rapid, breathing and heart rate increases, limb muscles become temporarily paralyzed while brain activity is markedly increased, lasts for about 20 to 40 minutes

According to experts the sleep that you get from snoozing an alarm isn't considered quality sleep. When you press the snooze button you drift into a new sleep cycle where you are at REM sleep and when the next alarm rings you wake up mid cycle resulting in you feeling tired and groggy. So what can you do to ensure that you get quality sleep and wake up to the sound of your first alarm feeling fresh;

1. Limiting screen time before you go to bed.
2. Incorporating relaxing activities into your nightly routine (such as reading a book, doing a crossword puzzle or having a shower before bed).
3. Creating a suitable environment that promotes sleep (eg: silent room with dimmed lights).
4. Create a consistent circadian rhythm if possible where you go to sleep and wake up at approximately the same time each day, this will allow you to wake up to the sound of the first alarm as you will naturally be at the end of your REM stage.
5. Get at least 6 to 8 hours of sleep, this sounds absurd to a medical student as our schedules are packed and our daily to do lists overflowing with work but its best we try our best to get at least 6 full hours of sleep to make our day productive and efficient.



6. Set realistic alarms, this is very important as we tend to set alarms that we will most probably not wake up to, just to please ourselves and to avoid the guilt of oversleeping, but its best we set alarms at a reasonable time in which we have received an adequate amount of sleep instead of interrupting our sleep with unrealistic alarm times.

7. Last but not the least its best if you train yourself to get up from bed or sit up on bed at the sound of the first alarm instead of remaining laying down which can promote you to fall back to sleep. Another tactic is to position the alarm clock out of your reach ( such as away from your bed on a table or some place that you can't reach laying down on bed) to ensure that you will have to get off bed to switch it off.

Following these tips can help improve your sleep hygiene and allow you to feel fresh and ready to take on a new day.

So the next time you wake up in the morning to the "not so sweet" sound of your alarm clock make sure to question yourself, 'Do I really want to press that snooze button?'



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# FROM ANCIENT PRACTICE TO MODERN TREND: COLD SHOWERS AND THEIR SURPRISING EFFECTS

The blog discusses the topic of cold immersion therapy, also known as cold water immersion or cryotherapy, and explores its potential benefits. The blog emphasizes the importance of considering individual health conditions and personal preferences before engaging in the therapy

WRITTEN BY  
HARDIK BAKULKUMAR  
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CLASS OF 2023

Scroll through Instagram and you'll likely see videos of people climbing into tubs filled with ice and frigid water, taking cold showers, or plunging into freezing alpine lakes. While you might be tempted to write off these feats as a social media trend, submerging your body in bone-chilling water is actually an age-old practice known as cold water therapy.

Cold showers have been in talk for a long time. Cultures around the world have used cold water therapy for thousands of years. For example, cold water immersion was used for therapeutic and relaxation purposes in ancient Greece and promoted by Roman physician Claudius Galen as a treatment of fever.

In this blog, let's explore the benefits, aspects and drawbacks of cold showers in light of scientific reasoning.

### Physiology and benefits

When you are exposed to cold water, your body's surface blood flow is restricted, which forces the blood in your deeper tissues to circulate more quickly in order to maintain the proper body temperature. By reducing inflammation and promoting better cardiovascular health, this enhanced circulation can be beneficial. Cold showers have a positive influence on mental wellness. They may aid in lowering stress and anxiety levels, enhancing mood, and raising alertness, which is due to the sympathetic nervous system. Focus and mental clarity may improve as a result of this reaction.

Cold showers can also aid in muscle relaxation, preventing soreness, and enhancing circulation to the body regions that have been worked. Cold water helps to constrict the pores and cuticles, which can assist to shield the skin and hair follicles from dirt and oil buildup and benefit both.



### How long should you practice ?

Beginning with just 30 seconds and working up to two minutes is a good goal to aim for.

Taking a cold shower for up to 5 minutes, 2 to 3 times per week, was shown to help.

Taking a quick 30 – 60 second hot-to-cold showers actually decreased the number of sick days taken from work and improved self-perceived quality of life and work productivity in those studied.

Beginning with just 15 seconds to 30 seconds of cold water exposure is a great place to start, as cold showers take some getting used to.

It may take two to three weeks to get to a point where cold showering for a couple of minutes feels manageable.

Dr. Andrew Huberman, founder of the Huberman Lab Podcast, recommends cold showering for anywhere between 1 and 3 minutes each day.

### Effect on Immune System

A study investigated the effects of cold water immersion on the human immune system. While a single cold water immersion had a minor impact on immune function, repeated immersions three times a week for six weeks resulted in a slight increase in certain immune cell proportions and tumor necrosis factor alpha concentration. There was also a tendency towards increased levels of other immune markers after daily immersions for six weeks. However, many immune markers and blood components showed no significant changes. The study concluded that exposure to cold water raised metabolic rate and blood catecholamine concentrations, slightly activating the immune system, but the biological significance of these changes remains unclear.



"Dive into the chilling depths of and unlock the frozen potential of your mind and body."

### Psychiatric association

Participants in a clinical research who took cold showers every day for several months reported fewer depressive symptoms. According to more studies, swimming in cold water may improve your mood and reduce anxiety. Cold showers are thought to have an anti-depressive impact because they are thought to convey an excessive amount of electrical signals from peripheral nerve endings to the brain.



### Does everyone benefit from it?

It is significant to remember that individuals with specific medical disorders, such as Raynaud's illness, should refrain from taking cold showers. Furthermore, under no circumstances should those who have a diagnosis of bipolar disorder or borderline personality disorder, or who have long-term clinical depression, use cold baths as an alternative to what their doctor has prescribed.

### The Feeling of discomfort and unpleasantness

Cold showers are unsettling to a lot of individuals. If you're not used to it, the jolt of cold water striking your body might be uncomfortable. There is no scientific proof to back up the idea that taking cold showers can aid in weight loss, despite the belief of some. While taking a cold shower can increase metabolism, the effect is negligible and insufficient to result in noticeable weight loss. Taking a cold shower is not soothing. Although they might be energetic and enlivening, they are not the best for unwinding after a hard day. A hot shower or bath may be a better alternative if you're trying to unwind and decompress.



### Summary

Cold immersion therapy can have positive effects on the body and mind, particularly in terms of recovery and performance enhancement. However, it is essential to consider individual health conditions, seek professional advice, and be mindful of personal preferences and tolerances before deciding to engage in this therapy.

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## Our Editors

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