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HIGHLIGHTS OF THE YEAR



ISMM-WMS GRANT

MMSN awarded Dr. Kamal Thapa, Dr. Suman Acharya, Dr. Suraj Shrestha and Dr. Rajesh Sharma travel grant of \$1000 each to present their research at the Wilderness Medical Society (WMS) & International Society for Mountain Medicine (ISMM) world congress July 28-August 1 in Snowbird, Utah, USA. MMSN is proud to be able to support their members whose research abstracts were accepted for the conference.

Eleven MMSN members participated in ISMM/WMS meeting 2024, Snowbird, Utah. Dr. Kamal Thapa, Dr. Suman Acharya, Dr. Suraj Shrestha, Dr. Surya Joshi, Dr. Ashru Neupane, Dr. Santosh Baniya and Dr. Rajesh Sharma presented their research abstract in the conference. Dr. Santosh Baniya and Dr. Rajesh Sharma won the best oral presentation award at the conference.



Best Oral Presentation Award



ISMM-WMS Conference



BLS TRAINING

Piloting of BLS training to medical students has been started from this year to include members from all the medical colleges throughout the country. Dr. Kamal Thapa facilitated the BLS training session in MMSN office where 30 participants attended the training session.

MMSN has been conducting MMSN introduction session at different medical colleges to ensure engagement of young medical students and doctors in mountain medicine, research and medicine in rural settings. This year we conducted our program in KIST Medical College, PAHS, CMC, COMS and JMC. We are committed to bring this to every medical colleges in coming days



INTRO SESSIONS

EDITORIAL BOARD

Chief Editor: Dr. Sanjeev Kharel

Associate Editor: Dr. Reshika Shrestha, Dr. Ranjeet Ghimire, Mr. Amit Kumar Mishra

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Your Story



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New Executive Board Announcement



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Dr. Santosh Baniya
Vice President



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Dr. Shreyashi Karki
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Dr. Sanjeev Kharel
Member



Dr. Aakash Sherpali
Member



Ashika Aryal
Member



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mmsn_8848.86 We hereby congratulate the New 6th Executive Board of MMSN.

July 22



Dr. Kamal (Ghan Bahadur) Thapa heads the Department of Emergency Medicine and Prehospital Care at Grande International Hospital, Kathmandu. Dr Thapa has been actively involved in mountain rescues and altitude illness research in the Nepalese Himalayas. After completing a B.A. in English Literature, Sociology, and Anthropology, he completed an MBBS and MD in General Practice and Emergency Medicine from Tribhuvan University Teaching Hospital (TUTH), Institute of Medicine Maharajgunj, Kathmandu. He is the newly elected President of the Mountain Medicine Society of Nepal (MMSN).

Dr Thapa has taken training both national and international, in the field of mountain emergency medicine. He completed a postgraduate Diploma in Mountain Medicine (UIAA/ISMM/ICAR certified) in 2012 in Nepal. He also completed the highly technical and specialized rescue training course 'International Diploma of Mountain Emergency Medicine' from the Institute of Mountain Emergency Medicine, European Academy of Bolzano (EURAC), Bolzano, Italy. He has been closely working with the Himalayan Rescue Association (HRA) as a high-altitude volunteer doctor in the Nepalese Mountains. Dr. Thapa has been involved in numerous talks and workshops on the prevention and creating awareness of high-altitude illnesses among the locals, pilgrims, and trekkers. Dr Thapa is one of the trainees of the Nepalese Mountain Rescue Development Project, a project conducted by EURAC, Bolzano, Italy. He has been trained as an instructor for the mountain emergency rescue medicine and is a faculty of Mountain Medicine/DiMM. Besides his emergency and mountain emergency medicine practice, he is involved in community health promotion, rural medicine, and public health awareness projects. In his spare time, Dr Thapa loves writing poems, and songs and going climbing, biking as well as hiking.



Dr. Kamal Thapa
President , MMSN

HRA Medical report 2023-2024

Dr. Ken Zafren, the Associate Medical Director of the HRA, was honored at the joint meeting of The International Society of Mountain Medicine and Wilderness Medicine Society at Snowbird Utah at the end of July 2024. Gobi Bashyal, the CEO of HRA, and Dr Kamal Thapa, the new President of MMSN (Mountain Medicine Society of Nepal) articulated Ken's accomplishments at the HRA. The most important accomplishment is Ken's unwavering help from almost 1992 till the present, specifically, he has quietly helped choose 2 volunteer doctors for Manang and Pheriche every year in the summer and fall when the aid posts remain active.

This undertaking is incredible work with no pay and sometimes even complaints about how the choice of a doctor for that season was subpar. But Ken has taken all this in his stride and continues to painstakingly choose the doctors and make recommendations to me as the Medical Director. I must confess that he does almost all the work in choosing and indeed deserves all the credit. I together with the rest of the HRA feel very lucky and privileged to have a close friend and a guide in Ken.

Furthermore, Ken has tremendously helped young Nepali doctors write better high-altitude medicine studies, case reports, and such. That he has given unstintingly of his time in this regard would be an understatement. When the young doctors send him a draft, Ken has, over the years, conscientiously taught them how to write more clearly and correctly. He has also taken young Nepali and Western doctors on his treks which clearly become an opportunity for the young doctors to learn more altitude and hypothermia medicine from a doctor who really knows his subject matter.

Hence, at the HRA we are all indeed very glad that this unsung hero's work has finally been truly acknowledged by well-known international societies. And that this recognition will help inspire other mountain medicine doctors to follow in his footsteps to be so generous in spirit.

At the same meeting at Snowbird, it was wonderful that many Nepalis had the opportunity to fly out from Nepal and attend the meeting. Besides Dr Kamal Thapa and Mr Gobi Bhasyal, Drs Suvash Dawadi and Santosh Baniya were also there. It was great that Drs Kamal, Suvash, and Santosh (all Institute of Medicine, Maharjgunj graduates) who over the years have been permanently working in Nepal, and often helping the HRA, took time off to attend the meeting and enjoy themselves at Snowbird.

Dr Santosh did such a wonderful job in 2018 when, as an intern, he skillfully spearheaded the World Congress of Mountain Medicine meeting here in Kathmandu at the Yak and Yeti. Many attendees felt that was an unforgettable (and probably the best) ISMM meeting because it had great scientific content and was run so well and on time. Gobi, our CEO, also made a spellbinding presentation. Many Western participants had not expected the meeting to be of such excellent caliber.

At the Snowbird meeting, in attendance directly from Nepal, were also Dr Rajesh Sharma who received the best oral presentation, and Dr Suraz Shrestha who has an impressive list of references to his name.

There were of course many other Nepalis and Western doctors (too many to name here) in the meeting who over the years have all helped out with the HRA or the Mountain Medicine Society of Nepal (MMSN) and for which we at the HRA are forever grateful. Yours truly did not make it to the Snowbird meeting.

In other news, in keeping with the MMSN tradition of

choosing and sending 2 young Nepali medical students\interns to Oxford University Radcliff Hospital for electives, the selection process has been completed and Drs Akash Sherpali and Sanjeev Kharel have been picked this year.

We are very grateful for the support of our Oxford University friends who have over almost 15 years transformed the lives and careers of these young Nepali students by enriching them with an experience of working at Oxford University that they perhaps would not otherwise have access to.

These young doctors who are chosen to go to Oxford usually also have a strong record of working and helping the HRA at the aid posts, including at the Everest ER and Gosainkunda.

Finally, the HRA has also chosen young doctors to help with the health camp during the Jaani Purnima Gosainkunda festival which takes place at 4300 m on August 19 this year.

Jai Bhole Baba.

Let the HRA continue to help people in the mountains and enrich the lives of young doctors by helping them appreciate the glory and the magnificence of the Himalayas.



Prof. Dr. Buddha Basnyat, MD, MSc, FACP

Medical Director, HRA

Aug 2,2024

Dr. Matiram Pun, Dr. Sanjeeb S Bhandari

Writing something when someone asks to write is hard. But sometimes it flows as mellifluously as a gigantic river. Whenever we think of the MMSN newsletter, we always think it has to do with MMSN's activities. That's partially true but not necessarily it has to be that way though. This time around as well, when we sat to write something for the MMSN newsletter, a question came up – what should we write about? We thought to give some casual perspectives and memoirs on MMSN aka Mountain Medicine Society of Nepal itself here.

Well, it is a society. What are societies or interest groups? From the dawn of civilization, we as humans have formed interest groups or societies. That is how like-minded humans have been sharing ideas that gave rise to the renaissance, and the different branches of modern-day science. That is how modern medicine was born in the early 1900s. That is how different branches of medicine came into existence. From modern-day human physiology to emergency medicine and wilderness medicine.



Courtesy: Dr. Matiram Pun

We, Nepali people, are from a country that has 75% of the total area, covered by non-plains, i.e. topographically covered by hills and mountains. Out of the total area, 35 % is covered by very high mountains, a significant portion of the Himalayas, the highest mountain range in the world. We have eight out of the top ten highest peaks in the world. Most of us Nepali grew up witnessing these giant white walls on the northern part of the country and grew up worshipping the goddesses and gods who have supposedly made these mountains their humble abodes for a long time. Grew up hearing tales from our parents, grandparents, relatives, and neighbors about their pilgrimage to these sites, how arduous it was, and how they were successful in their journey. These mountains are far away from our homes. It takes days to weeks to reach there. Traveling to the base of these mountains takes time, money, hardships, and hardly any incentives except pilgrimage. All these factors have always impacted our psyche, knowingly or unknowingly. Among us, who are in medicine, who have been brave enough to question the impact of high altitude on the human body came together in the early 2000s, inspired by our founder president, Prof. Basnyat, and started talking about it as an interest group which eventually became the current MMSN. At times, thinking about mountains and medicine seemed luxurious and sort of side-talk especially when there was to lack the medical manpower and many Nepalese never had an opportunity to consult physicians in their lifetime. But, thinking about research, asking questions, and going with the traditional mindset seemed like there was something. Hence, we all got hooked on listening to Dr. Basnyat. Then many of us got introduced to altitude, wilderness, emergency medicine, and research.

In 2003, when the Himalayan Rescue Association (HRA) of Nepal was organizing a health camp for pilgrimages in Gosainkund Lake (4300 m), Dr. Basnyat asked some of the interested young

medical doctors to join. Dr. Pritam Neupane and Dr. Prajan Subedi joined the team of HRA along with Mr. Gobi Basyal (a veteran of altitude medicine). As the team trekked up to Sing Gompa and then to Lauribina, Dr. Neupane, and Dr. Subedi realized we needed some kind of group or society. Hence, they came with 'masaan' which means MMSN but also the literal Nepali meaning is 'ghost'. So, they came up with a name and immediately started drafting the constitution while trekking up. All the spare time during this health camp especially trekking up, trekking down, and on their way to Kathmandu; was utilized to write the preamble, rules/regulations (constitution), and formation of MMSN. After they came to Kathmandu and further elaborated, all the handwritten notes were typed into an electronic version. Then they assembled a team under the presidency of Dr. Basnyat and other active doctors such as Dr. Devish Pyakurel. Then we trotted ahead. At first, we started with a journal club which still continues.

At least this is how MMSN started. Then we slowly expanded our horizon of interest and activities. The majority of our work is focused on learning about the impacts of high altitude on the human body, through discussion of published studies, critical appraisal of those studies, and designing our own studies to answer questions that arise during the meeting. As we are a scientific organization our main work involves studying and critically appraising the scientific literature on high-altitude physiology and mountain medicine. The regular journal club we conduct is our organization's basic building block as it compels our members to learn how to analyze a research study. Once you learn how to read a study you tend to question the methodology and results of any study. and that's how new studies or projects are born. MMSN has been involved in many high-altitude



Courtesy: Dr. Sanjeeb Bhandari

research studies that have happened in the mountains in Nepal, and we have contributed to much of the literature that we have on high-altitude physiology, currently.

So, do we only do journal clubs and research studies in MMSN? We also coordinate with the Himalayan Rescue Association to conduct health camps at high altitudes. At remote and austere places like Gosainkunda lakes during the Janai Purnima festival. We also help the Himalayan Rescue Association staff the aid posts located at Pheriche, Mt Everest Base camp in Solukhumbu district, and Manang village in Manang District. We also conduct other health awareness programs, especially focusing on high-altitude illness and travel medicine. In addition to these, we also do fun stuff under our flagship project called "climbing for fun" where we teach our members about basic rope skills needed for rock climbing, mountaineering, and mountain rescue. We also do other fun things, like biking activities, hiking activities, and white water rafting. During these activities, we encourage our members to have fun in addition to the basic wilderness first aid and first responder training, which often involves simulation of scenarios using live subjects or a mannequin.

For the last eleven years, we have also been conducting a Diploma in Mountain Medicine (DiMM) course which is UIAA (International Climbing and Mountaineering Federation), ICAR (International Commission for Alpine Rescue), and ISMM (International Society of Mountain Medicine) approved course for mountain medics, which is one of the six courses in the world when it started. We have trained many Nepali doctors along with doctors from all around the world including but not limited to the

countries of England, Scotland, South Africa, Australia, New Zealand, The United States, Canada, Hong Kong, Norway, Sweden, Lithuania, Singapore, Ireland, and Netherlands.

We were also able to bring a large scientific conference, the World Congress of ISMM to Nepal in 2018. This gave much-needed exposure to Nepali doctors to the scientific world of high altitude and wilderness medicine and gave wide exposure to world experts in the field. We should keep moving with this momentum and keep conducting scientific studies on our own and in collaboration with all the world experts in the field as we have the highest mountains in our backyard and work towards the goal of making each Nepali physician an expert on high altitude physician who any other person in the world can look up to in this field.

Sanjeeb S Bhandari, MD FAWM

Emergency Medicine Physician,
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Active member of MMSN since 2007

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Active member of MMSN since 2003

Peak Prepared: Notes and Insights from Everest Expedition 2024

Interviewer : Dr Sanjeev Kharel

Interviewee : Dr. Abhyu Ghimire

Running a clinic at Everest Camp 2

While it is true that I spent 1.5 months on the Everest Expedition as an Expedition doctor, including 25 days at Camp 2 (6500m), witnessing over 180 cases, it would be inaccurate to say I was running a full-fledged "clinic". Instead, I merely moved from tent to tent, wherever I was summoned, with my stethoscope and a sackful of medications, treating patients either out in the open or in their private tents. If we were to call this a "clinic," the word would need to be prefixed with "mobile".

Unfortunately, many of today's doctors must practice within the confines of a claustrophobic clinic, with a ceiling overhead and walls caving in from all around. Nonetheless, much like the great Hippocrates, who treated his patients with the tree of Kos at his back its roots still deeply ingrained in the souls of doctors today via the Hippocratic Oath I, too, could enjoy the privilege of treating patients with the blessing of godly mountains behind me and the majestic sky over my head.

Throughout this period, I witnessed a wide spectrum of medical presentations, each offering crucial insights for medics navigating the complexities of high-altitude expeditions. This document seeks to illuminate how to prepare as an expedition medic, briefing the climbers on the most prevalent cases encountered, the indispensable medications required, and consumption statistics while outlining key management strategies for frequently recurring conditions.

These reflections are intended to support practitioners in similarly extreme environments. The reason for penning it down as a document is not so much to demonstrate how much I have learned, but because I know how little I remember. If not recorded, the valuable insights gathered would be lost to the "sands of time" time"; or dare I say the "snows of global warming".

Interview Questions

What inspired you to run a clinic at Camp 2 this year after scaling Mt. Everest last year?

Serving as an expedition medic isn't exactly driven by inspiration for me; it's simply a part of what I've been doing in the Everest region for nearly nine years i.e. working as a doctor in a remote mountain clinic. What inspired me to do that if you ask is the immense satisfaction derived from finding unorthodox and creative medical solutions in the absence of proper medical

infrastructure in a rural mountainous setting. It's similar to how someone who loves mathematics would enjoy solving problems without using a calculator.

Did you plan to set up a clinic earlier? If so, why did you jettison that plan?

To plan (or to jettison it) is all but an illusion, whatever happens in the head is automatic.

As revealed by Dr. Libet's experiment (1983), Dr. Wegner's Theory (2002), and the works of Dr. Sam Harris (2012), it has been proven to sufficient scientific satisfaction that there is unconscious brain activity preceding conscious thought by several seconds, indicating that our decisions are made before we even become aware of them, leading us to question the very existence of free will. Therefore, I do not engage in active planning of any sort; I simply become conscious of it when the universe decides to impart its plan onto me.

What types of treatment are typically required for mountaineers at that altitude?

It might seem obvious that mountaineers would primarily suffer from altitude-related ailments at high altitudes, but that would be a false assumption. Climbers, well versed in the do's and don'ts of high altitude, rarely fall victim to altitude sickness. Respiratory issues like Respiratory Tract Infections and the infamous "Khumbu" Cough (like your lips cracking and skin becoming dry and flaky, the cold dry mountain air is abrasive on the airways causing a kind of irritative cough, notoriously difficult to manage) are the most prevalent, followed by musculoskeletal problems such as overuse pain/injuries, blisters, and trauma. Skin issues like fungal infections and cold sores are also quite common. Serious though they are, high

altitude conditions like Acute Mountain Sickness, High Altitude Pulmonary/Cerebral Edema, and frostbite are less common and rank lower in incidence. Gastrointestinal issues, dental problems, and occasional cases of menstrual issues also sometimes occur. The mountain presents a myriad of formidable obstacles, whereas some are not so “formidable” as to “troublesome”, this reflects the extraordinary endurance and resilience climbers must embody to prevail.

Can you describe last year's expedition and what led to abandoning your previous attempts?

In the interest of saving the readers from misinformation brought about by confabulatory recollections from tarnished memories, I would rather invite them to look into this detailed synopsis titled "Stethoscope to Summit" on YouTube. This is my fourth time on Mt. Everest. My first attempt (2020) was thwarted even before it began by the onset of COVID-19 and can be disregarded entirely. The second attempt (2021) had to be abandoned because of adverse weather conditions (crazy winds), though I did achieve the milestone of Camp 4 South Col, 8000m. The third time (2023) was the charm whereby I successfully summited. The fourth attempt (2024) didn't see me go beyond Camp 3, 7200m, as I needed to accompany patients back to the safety of Camp 2, 6500m.



Courtesy: Dr. Abhyu Ghimire

Can you also mention the peaks you climbed before Everest?

While I hesitate to sound very boastful when saying this, I must say that I have climbed a handful of 6000m peaks in the upper Khumbu region, some of them multiple times, even being part of a music video where I performed on the guitar at the summit of Mt. Lobutse East in Youtube.

Would you consider running a clinic at Everest Camp 2 a greater achievement than climbing Everest?

One might contend that this year's expedition was a more monumental undertaking than last year's summit. However, I would like to refrain from making subjective comparisons about things that cannot be objectively measured using an instrument. There are no numbers, no criteria, nor any factors to be taken into consideration for us to decide the relative level of achievement of this year's climb compared to the previous year's.

How can climbers maintain mental hygiene?

Hypoxia at high altitudes can cause the brain to behave erratically. Even your closest friend (from normoaltitude), when asking for something as simple as a bottle of water, might irritate you enough to want to throw it at his face. Staying calm is crucial.

- **Manage Emotions:** Hypoxia can amplify irritability and frustration. Stay composed and avoid unnecessary conflicts.
- **Monitor Behavior of Co-climbers:** Sudden irritability, confusion, or even hallucinations can signal altitude sickness (e.g., HACE). Early detection saves lives.
- **Stay Grounded:** Stay mindful of your own physical and mental state. Regular self-assessment is important. At set intervals, ask yourself: Am I thinking clearly? How do I feel physically and emotionally? There is a tendency to hide problems until they become devastating. This might jeopardize the reliability of the whole operation. There is no shame in the mountains, sharing helps

even if it's something you would consider minor and not worth sharing.

- Rely on Team Leader and your Climbing Sherpa: These professionals know what they're doing. Climbers may often want to go against the team leader's directives due to irrational motivations caused by brain hypoxia; "Summit Fever" has cost many lives. Be well informed of the "Cognitive Fog" which, in addition to emotional swings, can also cause mental "fogginess"—slow or unclear thinking, impaired problem-solving, and forgetfulness. This puts your team leader in the best position to decide what's best for you.



Courtesy: Dr. Abhyu Ghimire

Everest ER: Being a "woman" doctor in the Everest Base Camp?

Dr. Shreyeshi Karki, KIST Medical College

He who has a why to live can bear almost anyhow." I repeated this mantra many a time during the difficult times at 5364 meters when even breathing was challenging. My "why" to work at Everest ER started as a distant dream years ago when I happened to watch a YouTube video from 2006 of "the world's highest hospital" and seeing Dr. Luanne Freer make heli-rescues, set up IV lines and save lives in a tent amidst the rubble left me mesmerized. I then discovered the HRA and MMSN. In 2023, I got the amazing opportunity to be a part of the annual HRA Gosainkunda health camp. It was my eye-opener to the realms of mountain medicine and definitely a stepping stone to finally working at Everest ER in 2024.

Life in EBC was the most structured life I have ever lived. The day started at 7.30 am when I would wake up with my Nalgene hot water bottle and frost around my sleeping bag. At around 8 am, as the sun begins to thaw the base camp, we would all meet for breakfast in the dining tent where the kitchen staff would give us so much love in the form of heaps of food and warm hospitality. We opened the clinic sharp at 9 am and closed at 5 pm. In the evenings, we soaked in the sight of the glorious mountains that lay right in front of us. This was my favorite part of the day. Everyone would gather in front of the flagstaff- us 3 HRA doctors, Lakpa dai, the army, liaison officers, government officials, helping staff, each of us with hot tea in our hands marveling at the nature together.



Courtesy: Dr. Shreyeshi Karki

In a place so barren, we were our own little community providing each other with an air of comfort and familiarity. We would watch avalanches go by and try to name all the peaks around us. Lingtren and Pumori were shaped beautifully and I never grew tired of commenting on that every single day for two months. I absolutely dreaded getting inside my cold tent and even colder sleeping bag. Some of us had high altitude periodic breathing, almost everyone had Khumbu cough, and we could hear each other struggling to fall asleep through the thin tent walls.

Setting up a clinic from scratch, we spent the first few days organizing our inventory of drugs and equipment. Initially, as the camps were being built, Nepali workers would come to our clinic with back pain, hand lacerations, and mainly orthopedic injuries. Later, as climbers joined, there were bouts of traveler's diarrhea that broke out in a few camps and almost everyone had the infamous Khumbu cough. Getting to see my first frostbite and chilblains outside a textbook was really fascinating. I was learning a new thing every day- be it different techniques of splinting or Greg's cool trick of draining a paronychia. Dr Greg was a passionate teacher who provided us with his invaluable expertise and helped us develop a strict 9-5 work ethic, quite in a military fashion. We would be frequented with many HAPE cases requiring heli rescue.



Courtesy: Dr. Shreyeshi Karki

It was extremely rewarding when timely rescue was made and equally frustrating when people would ascend rapidly on horses and helicopters and present to the clinic with spectrums of AMS.

Since HRA had made the charges free of cost for Nepali patients this year, a lot of workers benefitted and presented to us timely before getting any worse. Fortunately, there was no mortality among those who visited the ER. However, we did encounter death in the form of corpses that were being carried down from the higher camps and even summit by the brave Sherpa dais and the Nepalese army. We HRA doctors helped the military doctors perform a basic forensic examination for identification before the bodies were dispatched to Kathmandu. These bodies had served as landmarks near the summit for years and I felt shivers down my spine on finding out that there might be chances of them being the famous mountaineers from the tragic 1996 incident...the very characters of a book I was then reading.

Those two months in Everest ER were definitely not all work and no play. On one of my days off, I accompanied the Sherpa dais into the Khumbu icefall with harnesses and crampons to experience the thrill of climbing. Another fine morning I walked from EBC to Gorakhshep and ticked off a bucket list item of mine-solo traveling. The journey was merely a morning walk as per the EBC standards, but to a naive girl who had not been away from home, let alone this extreme a place, it sure felt like the most liberating experience. The feeling was similar after I landed at Lukla and had the whole day by myself to explore.

I introspect how I have gone from a naive girl with little life experiences and even little sense of spatial orientation to having gained survival skills and a broadened worldview.

An interaction that still lives vividly in my mind is with a lovely Englishwoman and her granddaughter who shared how pleasantly surprised they were to see a female doctor in Everest. Women are rarely spotted in the wilderness. Lack of interest? Difference in biology? Or maybe...we just need to see more women in the wild, like a young medical student once saw in a video over the internet.



Courtesy: Dr. Shreyeshi Karki

Saving Lives on the Shadow of Everest: Experience at HRA Pheriche Aid-post

Dr. Sujan Timilsina , Intern, TUTH

In the fall of 2024, I served as a volunteer doctor at the Himalayan Rescue Association (HRA) Aid Post in Pheriche, which was nestled in the Everest region. Our Medical team comprised four volunteer doctors- two from the Netherlands, one from the USA, and myself from Nepal. Together, we encountered a spectrum of altitude-related illnesses, including High Altitude Pulmonary Edema (HAPE), High Altitude Cerebral Edema (HACE), and Acute Mountain Sickness (AMS). We also had a daily free Altitude Talk session with interactive lectures on the recognition, prevention, and management of various types of altitude-related issues mainly focusing on AMS, HACE & HAPE.

Cases: AGE mimicking HACE symptoms, Acetazolamide Overdose

One case that stood out was a patient with severe Acute Gastroenteritis(AGE) complicated by electrolyte imbalance, likely hyponatremia. Initially, the symptoms mimicked HACE, with the patient presenting drowsiness and an unsteady, ataxic gait. He had been living in Lobuche for the past two months, which led me to consider HACE as a less likely diagnosis. This was true as the patient's status improved the next morning when I treated him with adequate fluid and electrolytes. I also encountered a patient with Acetazolamide overdose. She was taking 500 mg of Acetazolamide twice daily for 10 days even before starting Trekking as prophylaxis for altitude illness. She was also under antihypertensives as well. She presented to our clinic with light-headedness and features of electrolyte imbalance. Though we didn't have access to the Arterial Blood Gas(ABG) and serum electrolytes test, I figured out that her symptoms must be suggestive of Metabolic



In Picture: Dr. Timilsina hiking in a snowy terrain, Island peak in the background

Acidosis and electrolyte disturbance along with additive effects of Acetazolamide in decreasing BP. Her BP was on the low normal and there was no orthostatic hypotension.

Beyond the clinic, the region itself was breathtaking. I hiked to Everest Base Camp, Kalapathar—where the view of Mount Everest left me spellbound. I also explored the nearby AmaDablam Base Camp and Banana Lake. Above everything, It was that sense of purpose I felt while treating patients, particularly porters who lacked access to even basic healthcare. At the HRA clinic, we provided almost free medical care to Nepali people, ensuring that financial barriers wouldn't stand in the way of life-saving treatments.

One particularly memorable case was a severely ill porter suffering from HACE. After initiating treatment, we saw remarkable improvement within just three hours, and we could also manage a seat for the porter in a helicopter to evacuate him down to Lukla. Such experiences made me feel that I was making a difference in the lives of people.

While there were financial challenges of working as a volunteer doctor, this journey offered me some of the most rewarding experiences as a doctor, deepening my passion for providing healthcare to those in challenging, remote areas.

Dr. Sujan Timilsina
Volunteer Doctor,
HRA Pheriche Aid Post, Fall 2024

Two Weeks at John Radcliffe Hospital: A Different Perspective

Dr. Sanjeev Kharel, Intern, TUTH

A day before the interview for an eight-week placement at John Radcliffe Hospital in Oxford, I asked my professor for a leave. But his response to my question sounded discouraging: "Why do you want to go to Oxford? With your knowledge, you'll bring shame to Nepal." Taken aback, although I did feel disappointed, I decided to look at his remark as a push to work even harder.

The nervousness could be felt in the room on the day of the interview: fidgeting feet, forced smiles, and parched mouths. I thought the interview went well passion for research seemed to strike a good chord with the interviewers. Upon receiving news of my selection, I was overwhelmed with excitement. We arranged for visas and transport, and on 27 October, we arrived in Oxford, ready to start placement the next day.

We entered John Radcliffe Hospital on 28th October and got a very warm welcome and introduction to the team in Acute General Medicine. I must say that I'm impressed with how utterly paperless the hospital system is; how the patient's information is available through the NHS, giving a big picture with the history of each patient. Later on, although it was initially difficult to clearly understand discussions of the team and to communicate with patients, as time passed, it became easier and more comfortable.

Our professor Timothy Hanks is a great individual. He used to work in Mission Hospital in Tansen, Nepal some 24 years ago and greeted me with a familiar "Namaste" the moment he saw me, making my interactions all so easy. His way of conducting the care of his patients is something to emulate: kneeling beside them, explaining to them their illness



Fig : Hospital Visit

and treatment, and explaining the possible side effects of the medications prescribed. I also remember how he diagnosed an elderly patient with Paxlovid side effects due to persistent diarrhea and stopped the medication. There was another case of ILD as a side effect by Nitrofurantoin given for a urinary tract infection. We also saw one case of a patient who presented with sensory ataxia due to "nanging," the recreational use of nitrous oxide.

"Patients come first in everything we do."—Slogan of NHS

During the encounters, Dr. Hanks always encouraged us to examine patients directly while emphasizing the need for patient consent. There was this one day when he invited the whole team for an "IIT" a coffee break with cakes and cookies—to discuss patient care plans and divide responsibilities amongst ourselves in a very relaxed manner.

I attended the grand rounds, ethics lectures, and case presentations led by Professor Bryan Angus. Meeting other professionals from Nepal here has been another important part of my experience; it makes me feel less out of place.

Two weeks into the placement, I am still in a state of wonder about John Radcliffe Hospital. I can finally feel how different the NHS system is from that in Nepal since I have been thoroughly included in it. I am grateful to the MMSN society for allowing me to have this opportunity.

Echoes of Adventure on the Majestic Trail of Langtang

Dr. Ranjeet Ghimire Email : ranjeetghimire01@gmail.com

Firsts are always special. You always remember your first love, your first bike, and your first day in college. My first trek too was bound to be something special. It might not be worthy of a blockbuster movie script but it definitely was surreal enough for me to be writing a piece about.

On March 3, 2023, I with my friends Sameep and Subodh, decided to embark on a trek to Langtang Valley during our fourth year, Health System Management (HSM) field. We were posted at Trishuli Hospital in Nuwakot, the gateway to Langtang. And, we could feel the mountains calling to us. We knew, there would never be a better time to do this. Three of our seniors—consultants in ophthalmology, orthopedics, and psychiatry—were also thrilled to join us. We quickly planned a four-day trek from Trishuli Bazaar to Langtang Valley and back, and the adventure was set!

Day 1: The Journey Begins

We started our journey from Trishuli Bazaar on March 4, 2023, taking a local bus at 9 am toward Syafrubesi. The gravel road twisted and turned, passing through Dhunche—a checkpoint and gateway to both Langtang Valley and Gosainkunda. We finally reached Syafrubesi by 2 pm, where the road ended, and the trekking trail began. Following the Langtang River, we walked through a beautiful forested path, the sounds of rushing water, chirping birds, and buzzing insects our only companions. The trail varied from flat



Fig : The ascend

and easy to steep and challenging, with occasional rickety suspension bridges adding a thrill. As dusk approached, clouds gathered, and rain threatened, but we managed to reach “Bamboo” in time to avoid the storm. We stayed in simple bamboo cottages, aptly named after the area. With no internet or phone signal, we bonded over a hearty dinner of dal, bhat, and tarkari. The night ended with laughter and a round of Call-Break around a cozy fire—an experience I’ll always treasure.

Day 2: Pushing Limits to Reach Langtang Valley

We woke at 5 a.m. and set off for Lama Hotel, arriving after a two-hour trek. There, we enjoyed a quick snack of tea and hot, spicy wai-wai soup. The climb was steep, and halfway up, Sameep remembered he’d left my thermos back at the hotel. Frustrated but left with no choice, I trekked down and back again, an exhausting extra effort that drained my energy.

After four more hours of hiking, snow-capped mountains began to appear, filling us with joy and inspiring us to keep going. We took breaks at small houses along the trail, snacking on hot coffee and wai-wai noodles, filling our water bottles, and pressing on. Around noon, we reached Ghodatabela and stopped for lunch, letting the refreshing mountain breeze wash away our exhaustion. Locals there assured us that Kyanjin Gompa was reachable with another seven hours of steady walking.

We were filled with excitement and determination, walking with a shared goal of reaching Kyanjin Gumpa. However, as we continued to climb, exhaustion set in. By 5:00 pm, we finally glimpsed the Langtang Valley in the distance, just a 45-minute walk away. Pushing on, we arrived around 6:00 pm. Though we were three young, energetic trekkers, we were still somewhat naive. We decided to push further towards Kyanjin Gumpa, while our seniors, more experienced, chose to stay in Langtang Valley, pointing out the fading daylight. Locals assured us that Kyanjin Gumpa was only an hour away, so we took a leap of faith and pressed on.

As we pressed forward, the sky darkened, and the sun dipped below the horizon. Moonlight reflected off the snow-capped peaks, casting a dim glow, while the soothing sounds of the Langtang River guided our steps. By 6:45 pm, we found ourselves alone in the wilderness, with no signs of shelter. At 7:00 pm, we finally spotted a few small Gumbas, where local Lamas worship, which gave us a momentary sense of relief.

Hoping to find a place to stay, we reached the Gumbas, only to realize they were empty. At this point, we were physically and mentally drained, and a bit desperate. Our seniors' advice to stay in Langtang Valley echoed in our minds. We'd already covered a staggering 26 kilometers that day, walking from 5:00 am to 7:00 pm, and now felt close to tears. Finally,



Fig : Selfie time with our senior iomites during our trek

we called the hotel owner in Kyanjin Gumpa, admitting we were completely lost and exhausted. He reassured us that it was only an hour away and that he'd send someone to guide us.

With renewed determination, we mustered the strength for one more push. Our legs felt like lead, every step heavier than the last, as hunger, fatigue, and a sense of hopelessness began to creep in. After about 45 minutes, we reached a suspension bridge and saw a light coming towards us—it was our guide. Our spirits lifted instantly, knowing that our journey was almost over.



Fig : Majestic View of Langtang

After crossing the bridge and navigating a small rocky trail, we finally saw the lights of Kyanjin Gumpa, nestled under the moonlit Kyajin Ri mountain. We reached the guesthouse, dropped our bags, and sat around the fire for dinner. Snow was gently falling outside, adding to the surreal atmosphere. That day, we had covered 27 kilometers and climbed from 2,200m to 3,860m. Exhausted beyond words, we tried to sleep. My friend Sameep was experiencing a headache, which concerned us all, as we feared it might be altitude sickness. Sameep and I took 250 mg of acetazolamide, hoping it would help, and drifted off to sleep, ending one of the most challenging and rewarding days of our lives.

Day 3: Reaching the Summit of Kyajin Ri

In the dusky dawn, we set off for the Kyajin Ri viewpoint at 4,400 meters. The path was steep,



Fig : Trinity Saga

narrow, and crowded even at this early hour. Every step was a struggle against the biting cold, thin air, and persistent headaches, but we were motivated by the sight of the Langtang Valley bathed in the first light of morning. The climb to the summit was demanding, with a mix of rocky and snow-laden paths. Cautiously maneuvering past loose stones and narrow edges, we finally reached the viewpoint, where a breathtaking panorama of snow-capped peaks greeted us. It was surreal—standing at the summit, we felt like we were truly part of the mountains. We celebrated with photos and shared a special moment as Sameep, also a talented singer, serenaded us with Timilai Dekhera Himalai Haseko... song. For a moment, we were just absorbed in the stillness and beauty of the mountains, forgetting all the exhaustion.

Day 4: Descending Back with Memories to Last a Lifetime

After savoring the incredible views from the summit, we made our way back down and met up with our seniors, who had already reached Kyanjin Gompa and were waiting to have lunch with us. On our descent, we even ran into Bishal Gautam, a rising comedian in Nepal. We shared some laughs, and he managed to work slang into almost every sentence, making our encounter all the more memorable.

Once back in Kyanjin Gompa, we enjoyed dinner surrounded by the majestic mountains, right at the source of the Langtang River. Sameep and I even had a playful snowball fight—though I'd like to think I won, truthfully, Sameep came out victorious!

We also wanted to buy some of Langtang's famous cheese, but when we saw the prices, we realized it was a luxury a bit out of reach. Still, we left Kyanjin Gompa with warm memories of the landscape, the people, and the laughter. As we descended back to Ghodetabela, we felt the calm satisfaction of completing something challenging and unforgettable.

That night, gathered in the cozy shelter, we had deep talks about our trek, our future, and our career plans with our seniors. For a while, we were all lost in thought, but then we picked up our deck of cards and launched into yet another fun round of Call Break.

The next morning, we rose early, grabbed some quick snacks, and started our final descent to Syabrubesi. On the way down, we passed many eager climbers, answering their questions about how far it was to various spots. By around 3:00 pm, we finally reached Syabrubesi, where we caught a local bus back to Trishuli Hospital.

Those four days will remain etched in our minds—a blend of breathtaking landscapes, camaraderie, and a deep sense of accomplishment. We often look back on it and smile, thinking, *Did we really do that?*

High Altitude Medicine: A Medical Student's Experience at Gosaikunda Health Clinic (4380m)

Sachet Subedi ; Email: subedisachet@gmail.com

Introduction:

I am an outdoor enthusiast and an active member of the Mountain Medicine Society of Nepal, based in Nepal. Currently, in my fourth year as a medical student at Maharajgunj Medical Campus, Institute of Medicine, Tribhuvan University, Kathmandu, I combine my passion for the outdoors with my medical studies, fostering a deep interest in understanding high-altitude medicine and its applications.



Courtesy: Sachet Subedhi

My Experience:

Thousands of Hindu and Buddhist pilgrims visit the holy site of Gosaikunda at an altitude of 4380m in the Janai Purnima festival. Most of them take a rapid ascent in 1-2 days from Dhunche which is at an altitude of 1960m and stay for one night to take a holy dip in the lake on the occasion of the festival. Previous studies have reported cases of Acute Mountain Sickness (AMS), High Altitude Headache (HAH), High Altitude Cerebral Edema (HACE), and High Altitude Pulmonary Edema (HAPE) among pilgrims. The Himalayan Rescue Association(HRA), a non-profit non-governmental organization has been running a

temporary clinic near the Gosaikunda Lake through medical doctors every year for over 25 years during the festival to provide care to the pilgrims and manage many high-altitude cases. This year a team of five medical doctors with a medical student were stationed in the HRA clinic in August 2023.

Our journey started in Kathmandu. We went to Dhunche in a jeep and stayed at Dhunche(1960m). We spent the following nights in Chandanbari (3,300m), Lauribina (4,610m), and finally on the fourth day, we reached Gosaikunda (4380). Our team worked to spread essential awareness about AMS to ascending pilgrims. We advised the trekkers whom we met on our way to ascend slowly and take prophylactic acetazolamide to reduce the risk of AMS.

Then in the main day, we set up the clinic and I was assigned to measure patients' vitals and keep proper records of the patients including their age, sex, residence, date of ascent, and diagnosis. Our leader and other members of the team managed the cases. As the resources were very limited, there was a judicious distribution of medicine to the pilgrims.

More than 5000 pilgrims visited the holy site on Janai Purnima. During record keeping, I found the ascent profile of pilgrims hasn't changed much. Most pilgrims ascent quickly in 1-2 days



Figure 1: This is me standing in front of our clinic. The temporary medical clinic is situated inside this structure (Sachet Subedi)



Figure 2: View of Holy Gosaikunda Lake from HRA clinic (Sachet Subedi)

to the holy site like in the past. We found the majority of our patients in the clinic were suffering from mild to moderate AMS. During my stay, I got a close look into the management of two High Altitude Cerebral Edema cases, four probable High Altitude Pulmonary Edema cases, a fall injury in an alcohol hangover, and tinea corporis in a five-year child of a local family. The severe AMS cases were descended by porters carrying them on their backs as Helicopter rescue wasn't feasible due to bad weather conditions for evacuation. In the clinic, I also encountered several pilgrims who had taken acetazolamide as prophylactic complaining about a tingling sensation in limbs and frequent urination.

In the clinic, I saw a firsthand example of the effect of religious dynamics on patients compliance with our medical advice. There was a middle-aged man with moderate AMS. He was in no state of comfort and our medical team advised him to descend as soon as possible. But he resisted and took one extra hour to take the dip and then started to descend. This made me realize that we should always consider religious values when thinking about patients' compliance with our medical advice and deciding what is good for patients.

This immersive experience has deepened my understanding of high-altitude medicine and ignited my passion for mountain medicine. I think opportunities to work in a team in high-altitude settings are invaluable in nurturing the next generation of wilderness medicine practitioners and enthusiasts

worldwide. Diving into the divine water at Gosaikunda and experiencing a real scenario of wilderness was a major takeaway from this trip.

I would like to thank the Himalayan Rescue Association and Mountain Medicine Society of Nepal for the opportunity to work in such a setting. I am grateful to the medical team for their constant guidance during my stay in the clinic.

References:

1. Basnyat B. Acute mountain sickness in local pilgrims to a high altitude lake (4154 m) in Nepal. *J Wilderness Med.* 1993;4(3):286-292. doi:10.1580/0953-9859-4.3.286
2. Zafren K, Pun M, Regmi N, et al. High altitude illness in pilgrims after rapid ascent to 4380 M. *Travel Med Infect Dis.* 2017;16:31-34. doi:10.1016/j.tmaid.2017.03.002
3. Basnyat B, Subedi D, Sleggs J, et al. Disoriented and ataxic pilgrims: an epidemiological study of acute mountain sickness and high-altitude cerebral edema at a sacred lake at 4300 m in the Nepal Himalayas. *Wilderness Environ Med.* 2000;11(2):89-93. doi:10.1580/1080-6032(2000)011[0089:DAAPAE]2.3.CO;2
4. Schmickl CN, Owens RL, Orr JE, Edwards BA, Malhotra A. Side effects of acetazolamide: a systematic review and meta-analysis assessing overall risk and dose dependence. *BMJ Open Respir Res.* 2020;7(1):e000557. doi:10.1136/bmjresp-2020-000557
5. Koenig HG. Religion, spirituality, and medicine: research findings and implications for clinical practice. *South Med J.* 2004;97(12):1194-1200. doi:10.1097/01.SMJ.0000146489.21837.CE

My First Trekking Adventure to Annapurna Base Camp: A Journey of Awe and Discovery

Amit Kumar Mishra, MBBS, IOM

The Decision to Trek

Trekking to Annapurna Base Camp (ABC) was not just a travel decision; it was a leap into the unknown for me. As someone who had never trekked before, the thought of venturing into the heart of the Himalayas seemed like an audacious challenge. I had read countless blogs and watched videos showcasing the breathtaking scenery and diverse culture of the Annapurna region, but nothing could truly prepare me for the experience itself. However, being in a group of eight friends was encouraging me to take this endeavor.

Preparations: From Gear to Mindset

Preparing for the trek was an adventure in itself. I scoured online forums for advice on what to pack, what to wear, and how to deal with altitude sickness. A sturdy pair of trekking boots, layers of warm clothing, and a backpack were among the essentials I packed.

But physical preparation wasn't enough. I also needed to prepare mentally. I knew the trek would push me to my limits, so I set small fitness goals weeks before the journey to build stamina. Friends who had trekked before shared tips: "Hydrate constantly," "Take it slow," and "Don't let the altitude scare you."

The Trek Begins: From Pokhara to the Trails

The adventure officially began in Pokhara, a charming lakeside city that serves as the gateway to the Annapurna region. After a short drive to Jhinu Danda, our starting point, we set off on the trail. On the first day, we trekked upto Lower Sinua enjoying the views of Modi Khola and villages on the way. All of us were exhausted to our limits.

We stayed in Lower Sinua that night. The next morning, we kicked off again and reached Himalaya through Upper Sinua and Bamboo, always making moments and beholding sceneries. After Bamboo, there had been recent snowfall, which was the icing on the cake but also made our steps slippery as we had no used spikes with our shoes. And as expected, I along with one of our friends slipped on the trail. Fortunately, no significant injury occurred. Spending a chilling night in Himalaya, we stepped out in the early morning toward ABC. After a continuous trek for about 4 hours, we reached Machhapuchchhre Base Camp (MBC), where we had our meal and rested for a while. Finally, after an hour uphill from MBC, we reached our destination in the evening.

The Gradual Ascent: Challenges on the Trail

As the trek progressed, the terrain became more challenging. Stone steps seemed never-ending, and every steep ascent tested my stamina. One particular climb from Deurali to MBC left me breathless but also exhilarated.

The landscape evolved dramatically as we climbed higher. The dense rhododendron forests gave way to alpine meadows, and the air grew thinner and colder. We passed through places like Ghorepani and Chhomrong, each offering stunning views of the surrounding peaks and a chance to meet fellow trekkers from all over the world.

One of the most memorable challenges was crossing the Modi Khola River on swaying suspension bridges. While the views from the bridges were awe-inspiring, the height made my heart race every time.

Facing the Altitude

As we approached 3,000 meters, altitude sickness became a real concern. Simple tasks like walking

uphill felt like monumental efforts. I consulted Dr. Rajesh Sharma regarding things to pay attention to and medications. They were very helpful.

The Final Push to ABC

The last leg of the journey was surreal. Walking through snow-covered trails surrounded by towering peaks felt like stepping into another world. The weather was unpredictable; one moment, the sun bathed the mountains in golden light, and the next, clouds enveloped us in a chilly mist.

Reaching Annapurna Base Camp at 4,130 meters was an emotional moment. The panoramic views of Annapurna I, Machapuchare (Fishtail), and other peaks were indescribable. The silence of the mountains was profound, broken only by the occasional sound of avalanches in the distance. Standing there, I felt an overwhelming sense of accomplishment and gratitude.

Descending with New Perspectives

Descending was faster but no less beautiful. With the physical challenge easing, I had more time to soak in the details I had missed on the way up—the intricate carvings on prayer wheels, the cheerful laughter of children playing in villages, and the melodious chants of monks at small monasteries.



Courtesy: Amit Kumar Mishra

Lessons from the Journey

The trek taught me lessons I'll carry for life. I learned to appreciate the simplicity of life in the mountains, where joy comes from small things—a warm meal, a kind word, or a stunning sunrise. The physical and mental challenges showed me the importance of perseverance and taking one step at a time, both literally and metaphorically.



Courtesy: Amit Kumar Mishra

Advice for First-Time Trekkers

If you're considering your first trek, here are my tips:

1. Train in Advance: Build stamina with regular hikes and exercises.
2. Pack Smart: Carry only the essentials to keep your backpack light.
3. Hydrate: Water is your best friend, especially at higher altitudes.
4. Take it Slow: Rushing can lead to altitude sickness.
5. Enjoy the Journey: It's not just about reaching the destination; every step offers something unique.

A Memory Etched Forever

Trekking to Annapurna Base Camp was more than a journey; it was a transformative experience. The Himalayas have a way of humbling you and inspiring awe simultaneously. As I look back on this adventure, I know it was the first of many. The mountains now hold a special place in my heart, and I can't wait to return to explore more of their magic.

From Dreamer to Doer: Conquering Mardi Himal as a First-Time Trekker

Ashika Aryal, MBBS

The mountains have always been close to my heart and the Mardi Himal Trek strengthened that connection. Filled with excitement and hope, our ten adventurers started trekking to Mardi Himal from Kande after an hour's drive from Pokhara. From there, we hiked to Deurali, where we spent time acclimatizing to the altitude of 2125 meters. We had some idea this trek would not test only our physical ability but also our capacity to adapt to the unpredictable conditions of high altitude. We were excited to witness the beauty of the Annapurna Conservation Area.

On the second day of our journey to Low Camp (3,150 meters), we got to see the gorgeous blend of vivid rhododendron trees, flourishing green hills, and panoramic views of snow-capped peaks. We could feel the effects of the altitude on our bodies by the time we reached Low Camp. As we ascended to High Camp at 3,700 meters the next day, the landscape drastically changed. Even though we were all suffering from headaches and shortness of breath due to the steep rise and altitude, our spirits remained high. We gathered around the campfire in High Camp, telling each other tales of our previous adventures and our hopes for reaching Mardi Himal Base Camp.

Our headlamps lit the steep, narrow trail as we began the hike in the early morning hours. We took a 250 mg dose of acetazolamide to aid with the altitude.

Every step was difficult because of the thin air, and four from our group had to quit on the way because of headaches and dyspnea, leaving the other six of us to continue. As we continued our journey, one of our female trekkers suddenly stopped, unable to bend her leg due to intense discomfort. Each step became painful, and it was clear she couldn't continue.

With five of us left, we were determined to make it to base camp.

I was amazed by the stunning Annapurna range and the towering Machhapuchhre upon arriving at base camp. It was an emotional moment, filled with joy and sadness. When we reunited with our group at High Camp and shared our stories, I realized that this trek had tested us in unexpected ways and created lasting memories and connections. The Mardi Himal Trek taught me that success isn't just about climbing to the top but also about making good decisions and encouraging one another.



Courtesy: Ashika Aryal

From Darkness to Dawn: Conquering the Mulde View Point

Grishma Timilsina, 3rd year, COMS

In late February 2024, while the mountains were still cloaked in snow, my friends and I embarked on a trek to Mulde View Point (3637m) in Kaski. It had been more than 15 years since I had last seen snow, and this time, the experience was as if I were seeing it for the first time.

As we set out from Ghandruk, we sang and danced our way through Bhaisi Kharka, Tadapani, and Meshar, eventually reaching Isharu. Our journey took an unexpected turn after we ascended Isharu, where the patches of snow first began to appear. The higher we climbed, the thicker the snow became, and with it, our challenges multiplied.

One of my friends, unable to continue due to aching knees and symptoms of altitude sickness, had to stay behind at a lodge in Isharu with another friend. We left her with acetazolamide and some warm encouragement, promising to see her soon, and continued on, led by a hotel staff member who assured us our destination was close. But as the sun set and the cold night closed in, the trek became more treacherous. The snow-covered path was slippery, and only a few of us had proper trekking shoes. The rest improvised by wrapping their shoes with socks to gain some traction. Despite our efforts, we slipped constantly, each fall intensifying our fear and fatigue. With no electricity or lights along the path, we relied on the dim beams from our phone flashlights, but the cold drained their batteries quickly. We walked in a line, along the apparent cliff, clutching each other's hands, while the darkness and the cold wrapped around us like a shroud. The hotel, which was supposed to be just half an hour away, seemed unreachable as we trudged through the snow for hours. The fear was



Courtesy: Grishma Timilsina

palpable—some of my friends even cried as we pressed on, exhausted and terrified.

We finally arrived at the motel at 9 PM, having endured five exhausting hours. The warmth of the firewood in the heating room was a welcome relief, we sat in a circle, drying our wet socks and shoes, the flames flickering on our tear-streaked faces. There was relief, but also a shared sense of vulnerability. That night, the comfort of our beds was bittersweet; I could still hear some of my friends' quiet sobs as we drifted off to sleep.

The next morning, I woke up at 6 AM and stepped outside, only to be greeted by a sight that took my breath away. The view was stunning, the landscape bathed in the golden light of dawn, and all the fear and exhaustion of the previous night melted away. In my excitement, I even washed my face with freezing water, eager to embrace the new day. As we made our way to the Mulde View Point, just 20 minutes away, we couldn't help but laugh at how terrified we had been the night before. The path that had seemed so perilous under the cover of darkness was now a beautiful, snow-covered trail.

In the end, the battle, the anxiety, and everything was worth it. That morning, standing on the viewpoint, surrounded by my friends and the majesty of the mountains, I experienced one of the most profound and beautiful experiences of my life.



Courtesy: Grishma Timilsina

The Unplanned Experience

Utsa Mulmi, MBBS, IOM

Hi, I am Utsha and I love to sleep but that night when I was chosen as a candidate for research assistant was one of the very few things that made me sleepless. All of a sudden all the tiredness vanished out and I was completely awake, got up, and studied about high altitude illnesses from Harrison. As days of research here in Kathmandu took place, my insecurities about being with strangers for the very first time for such a long time gradually diminished as we all moved as a team for the same purpose.

My first helicopter ride:

As we watched in movies, I always thought helicopter to be something like a taxi through the air route but that day our taxi was large enough to fit a few groups in together so I thought it to be like a micro van through the air and by our surprise even the locals there in Lukhla were surprised by how that particular helicopter flew us as it took off its flight once in a blue moon.

Research days:

Walking the miles from Lukhla and to reach Everest base camp was in itself thrilling but what else was running within our minds was how efficiently we could manage our research settings in a resource-limited setting. After 3 days of trek from Lukla to Namche and then to our to be research place Khunde finally the real reason for the trek had to be initiated. The place over there was so peaceful surrounded by hills and mountains entailed with the presence of Danphe and Snowleopard somewhere hidden around the bushes, living there

was in itself very comforting and filled with nature. Every morning there was something new waiting for us to experience accompanied by the dog of the guesthouse we lived in.

As our days of work set in we were overwhelmed with the inflow of the participants, how we could manage things so well, and how we all set our own individual records for the work we did. It was very interesting to be part of the actual research and it will be ingrained within me forever. I even realized how meaningful a discussion could be when you are surrounded by a bunch of mindful people around you. How a good mentor can make you feel comfortable and confident about yourself and the potential you carry.



Courtesy: Utsa Mulmi

The trek days;

Nature has a lot to offer with how ever-growing and ever-changing it is. The weather just adds up to what it wants you to see and whatnot for that day. We often over emphasize the company we are moving with while traveling but the real best you can get from the trek is when you carry yourself just along with nature, cherishing its beauty and enjoying the melody of the gurgles of water flowing underneath added by the rustling of the leaves along with the breeze and accompanied by the rings of the bells that Zoes and Yaks carry around their neck. Zoes, yaks, and horses are what add to the adventure and the dictum is to move away from the side of the cliff when you hear their bells ring. And as you feel tired just take a moment to look at those encapturing view nature has to offer you and get

yourself an energy bar along with some hydration and keep moving.

Yes, everything looks beautiful until you are in health and as the altitude sets in, things can take a turn. For me, Gorakhshep was the point of turn, “me” who calls herself a foodie didn’t want to even see at food, the headache getting intolerable and sleep somewhere wandering around in those chilly mountains. Despite all, I managed to reach the Everest base camp and then wanted to immediately drift back back to a lower altitude but then the enigmatic view just before leaving the place attracted me more to the place any way we set ourselves back to Pheriche. On the way back I felt hungry and that was the time that let me realize the real sense of what anorexia feels like and how good it can be to just feel hungry and get to have some delicacies.



Courtesy: Utsa Mulmi

“

This entire trip was one of the best memories
to start with and welcome what next, life
has to offer...

”

Unprepared Journey to Gosaikunda: Our Encounter with Snow Blindness

Anupam KC, Jagat Bhatt, Govinda Bhandari, Suman Oli, Arjun Pandey, Anush Acharya (Then 1st-year medical students)

After our rigorous academic schedule of 1st year, we planned to escape from the chaos of city noise into nature's lap. So, me and my four classmates decided to embark on a spontaneous adventure to Gosaikunda, Nepal. Drawn by the allure of its pristine lakes and the promise of a challenging trek, we set off with minimal preparation. From Arubari bus park we moved to Kutumsang (3200m). It was already 6 pm and getting dark when we reached there but we still decided to move forward to Mangelkot (3420m). We moved swiftly through the woods, hearts pounding with excitement, and adrenaline surged as we hiked higher and deeper into the woods. And the trip soon turned into a sobering lesson on the importance of proper planning.

Stepping through the woods, the first sight of snow felt like stumbling upon hidden treasure. But slowly as the darkness increased, we all felt a hint of fear as there were only trees till our sight could reach, and we didn't have any battery lights or good boots. The ice surface was too slippery, we could barely stand. Taking each step slowly and carefully, we moved forward with the mobile phone light. After a long walk through the woods, we saw a faint light. It gave us a sense of relief. Following it, we somehow reached Mangelkot at around 9 pm. The flickering flames and warmth of the firewood in the heating room were a welcome relief. The night was quite challenging for us as we were compelled to stay in a single room due to a shortage of motels. Early morning we resumed our journey. The thickness of the snow was up to our knees. Our laughter

and fun-filled the air, making the ascend a memorable adventure. As we headed upwards, the mesmerizing view of the snow-covered peaks made us excited. Those breathtaking views along with the challenges were increasing. As there were no boards or signs on the way we were not even sure where we were leading toward. Sliding, skiing, slipping, and falling, we moved along the path of the forest with full entertainment. Trekking continuously from those snowy woods we didn't see a single hotel on our way. That made us wonder if we would reach somewhere to a human settlement or not. Although hungry and tired, we were also thrilled to walk on a clueless path. On the other hand, the sun's rays were hitting upon our eyes. We were so unprepared that we didn't even think about carrying sunglasses and sunscreen. It was around 4 pm when we saw a hotel from a distance, our body felt alive and we had a great sense of relief. But the stay at such an altitude (Thadepati, 4100m) was equally challenging for us.



Fig 1: Stressfully opening his eye due to pain

The climb was beautiful and challenging, with breathtaking views of the snow-covered peaks. We are so excited to play in the snow, experiencing it for the first time in life.

The weather was clear, and the sun shone brightly, reflecting intensely off the snow. The fun and laughter filled the air, making the ascent a memorable adventure. At Gosaikunda Lake, we took a holy bath in the sacred waters, an experience that was both refreshing and spiritually uplifting.

However, as we began our descent, severe pain started to build up in our eyes. One evening as experienced by one of my friends, he started feeling irritation and pain in my eyes. Initially, we thought it could be just the intense light that got exposed to us after walking all day through the shining snowy path and it will go away eventually. We had no idea how it could be burdensome to all of us.

The bright reflection of the sun off the snow had affected us. The pain became almost unbearable, and our faces also suffered from sunburn. The descent, which initially seemed like a continuation of our joyous adventure, turned into a life-taking ordeal. One friend was in so much trouble that he was requesting a helicopter rescue. The only concern on all our minds was: what if this damage is permanent and we become blind? To make matters worse, many of our families were unaware of our trek, adding to our stress.

One of our friends, who wore prescription glasses, experienced less discomfort and took the lead, guiding us carefully along the path. Despite his efforts, our fear

of permanent vision loss grew with each step. We decided to call our senior Dr. Suman Acharya, who reassured us that the condition was temporary, a result of snow blindness caused by prolonged exposure to intense UV rays reflected off the snow.

Despite this reassurance, the pain and stress were overwhelming, and that night became the longest night of our lives because we were waiting to reach the hospital as soon as possible. We reached Rasuwa District Hospital in the morning, where the staff provided ice packs for our eyes. After resting for six hours, we felt a slight relief. Determined to prevent further damage, we bought sunglasses and made our way back to Kathmandu. Upon returning, we had a thorough check-up, and doctors confirmed that our condition would resolve within a week, which thankfully it did. This experience was a stark reminder of the importance of proper preparation for high-altitude treks. The intense UV exposure at high altitudes can cause significant harm if adequate protection is not taken.

In retrospect, our adventure taught us a valuable lesson: always carry adequate eye protection and sunblock to safeguard against the harsh mountain elements. Our encounter with snow blindness reminds us of the necessity of respecting the power of nature and preparing thoroughly for every trek.



Fig 2 :Taking rest at Rasuwa District Hospital

"Seeing Beyond the Summit: An Emergency Physician's Experience with High Altitude Retinopathy"

Interviewer : Govinda Bhandari

Interviewee : Mattijs Van Hooreweghe

Question 1: Can you share your experience working as an emergency physician at Everest Base Camp and how it differs from a typical emergency setting?

Ans: Working as an expedition doctor had been long-held dream for me. My job at Everest Base Camp proved to be the perfect combination between my passion for the outdoors and my love for Emergency Medicine - and Nepal! As the expedition doctor, it was not only my job to look after the clients, but the team as a whole, including the amazing sherpa team and porters.

This was obviously very different from my usual work in the Emergency Department. A lot of expedition medicine is about preventing illness and injuries rather than curing them and this was one of the most important aspects of my job.

Another major difference with working in an Emergency Department is the type of 'doctor-patient relationship' you build with clients and the team. Instead of seeing a patient once, you build a relationship with your team members for an extended period of time, are able to see how they progress throughout the expedition, and follow-up with any complaints they might have. You also adopt a much more holistic approach where you not only look after somatic complaints but also mental well-being, sleep quality, etc.

The way you approach medical issues at Basecamp is also very different from how you normally would in a hospital setting. You work in a low-resource environment with limited equipment available and have to make decisions based on good clinical judgment, a broad differential diagnosis, the expected course of illness, weather conditions and subsequent evacuation options. This creates an interesting clinical decision-making process where you have to trust your knowledge, experience, and skills to make the right decisions.

Question 2: What were the key challenges you faced as a foreign physician?

Ans: There are many challenges involved in working abroad. Nepal has its own culture, habits, hospital system and getting to know those was an important aspect of preparing myself for the expedition. I was lucky enough to be able to participate in the Nepalese DiMM-course which provided me with a good understanding of many of those topics, especially how the (pre)hospital system works. Having so many amazing Nepalese colleagues on the course and being able to spend time with them was also a great way to learn more about Nepalese culture! Practical aspects such as arranging indemnity insurance can be difficult as well.

Question 3: Could you explain the circumstances that led to your development of high-altitude retinopathy, and what symptoms did you first notice?

Ans: I think that developing symptomatic high-altitude retinopathy was just bad luck more than anything else. It is a very common ocular disorder at altitude that usually goes unnoticed, but I was unfortunate to have involvement of my macula which led to a scotoma just peripheral to the center of my vision of the right eye. Possibly a lack of sleep, strenuous activity, and dehydration might have played a role (but there is not much evidence to support those risk factors). I didn't sleep much the two nights before, looking after a few sick clients, and was participating in the icefall training sessions and acclimatization hikes throughout the day which were quite intense. That morning, I was enjoying a coffee during breakfast and suddenly noticed the scotoma. Initially, I thought it could be an aura of one of my usual migraines, but I quickly realized that wasn't possible given it was monocular.



Courtesy: Dr. Mattijs Van Hooreweghe

Question 4: how did you manage your condition at base camp, and what immediate actions did you take when you realized it was serious?

Ans: I realized pretty quickly that the scotoma was most probably caused by retinopathy. Other causes were much more unlikely. Of course I was unable to perform an ocular exam on myself, so I presented at Everest ER where a fundoscopy was performed and the presence of a macular bleed on my right eye was confirmed. After a short discussion with the Everest ER team it was clear that staying at basecamp was not an option if I wanted to maximize healing. Of course I needed some time to discuss everything with the rest of my team, pack my bags and say goodbye. I then hiked down to Pheriche where I was evacuated to Lukla by helicopter the next morning. I stayed on oxygen that night. I tried to continue my work as much as possible from Kathmandu, providing advice and tele-medicine through video calls, until another expedition doctor made it up to basecamp to take over from me.

5. Based on your experience, what advice or recommendations would you give to healthcare professionals working in high-altitude environments?

Ans: A few recommendations that I would give are the following:

- Prepare yourself and gain specific knowledge and skills regarding high-altitude physiology, high-altitude illnesses, and working in high-altitude environments. A DiMM course is an excellent way to do this! Read up and refresh your knowledge before every expedition.
- If you wish to work for an expedition company, choose one that you feel comfortable with. Before you say yes to the job, make sure you are on the same page in regard to what they expect of you, who you will be looking after, the equipment you will have available and whether you have to provide it yourself or not. Not all expedition companies are the same.
- Try to gain as much knowledge about the culture, hospital system and medical facilities of the country you will be working in.
- Prepare yourself mentally and physically for the challenge. To look after others, you have to be in good shape yourself!
- Most importantly, have fun and enjoy what you do!

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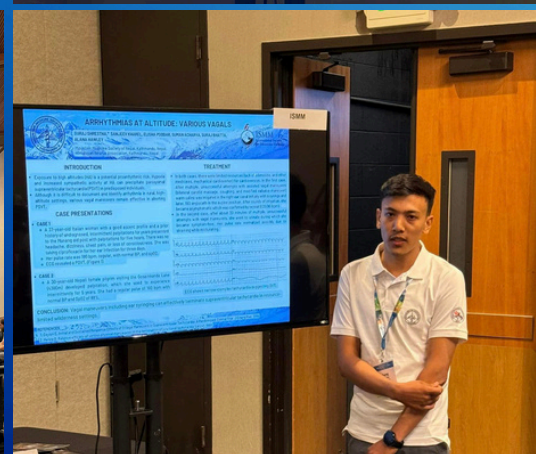
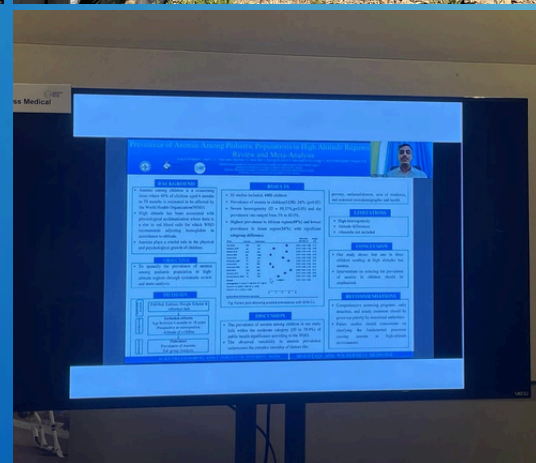
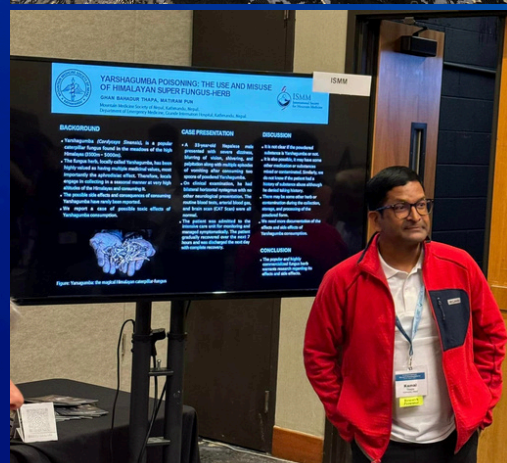
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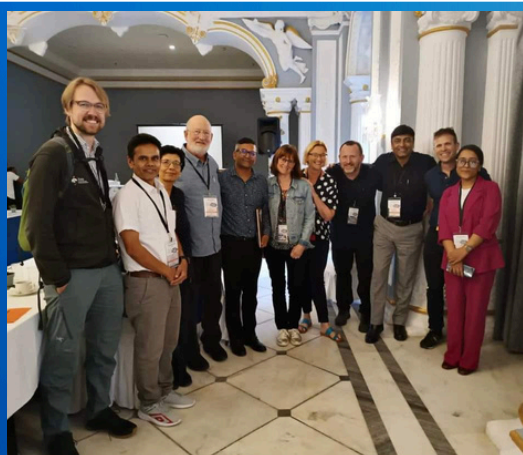
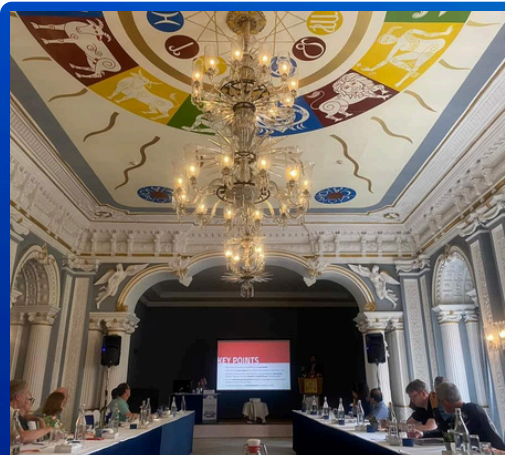
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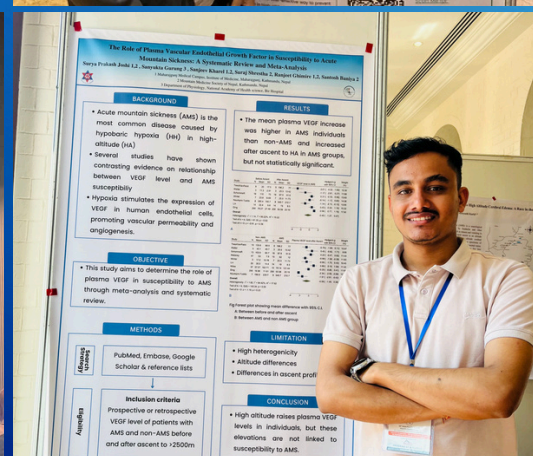
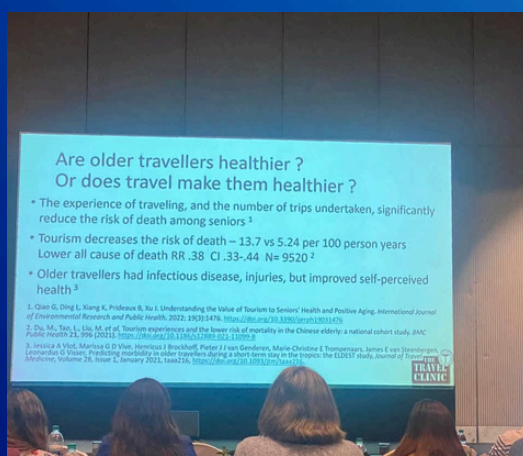
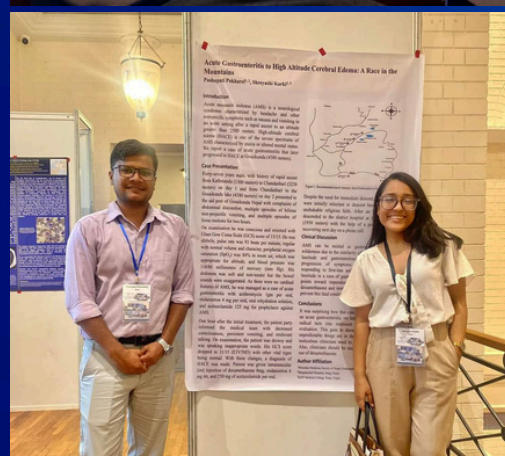
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MMSN Academic Activities of 2024

Dr. Aakash Sherpali, Intern, TUTH

MMSN has been actively engaged on doing academic programs throughout the year in the presence of our esteemed Faculties and the members. On year 2024, we had journal club's presentation by Dr. Anil Bist and Dr. Sanjeev Kharel. We had a talk session with Dr. Siddhartha Yadav MD working at Mayo Clinic on topic, Introduction and Importance of Research and his Journey in Medical Research.



Fig : Dr Siddhartha Yadav MD and MMSN members

We had experience sharing sessions of Dr. Saramshika Dhakal of their medical elective at JR Hospital, Oxford University Hospital. A session led by Dr. Nishant Joshi about the experience of Everest ER for 2 months and Dr Sabita Thapa who let the Gosaikunda Health Camp this year.



Fig : Experience sharing session

We had been successful to take introduction sessions of MMSN at different medical colleges to ensure engagement

of young medical students and doctors in mountain medicine, research and medicine in rural settings.



Fig : MMSN Introduction to different medical colleges

Piloting of BLS training to medical students has been started from this year to include members from all the medical colleges throughout the country. We had around 30 participants and was conducted in our MMSN office and Dr. Kamal Thapa facilitated the training session.



Fig : BLS training to medical students

MMSN Outdoor Activities of 2024

Dr. Surya Prakash Joshi, Intern, TUTH

MMSN, with generous support from the Farrar Foundation, has been conducting several impactful outdoor activities designed to promote safety, inclusivity, and skill development. In 2024, two indoor wall-climbing and training sessions were held at Astrek Wall Climbing, where 22–25 participants in each session learned essential rope techniques, climbing skills, and safety precautions under the guidance of a mountain trainer and a Diploma in Mountain Medicine (DiMM) graduate.



Fig : Wall Climbing Program

In addition, MMSN organized cycling-for-fun programs, bringing together 18–20 medical students in each event to promote physical fitness and camaraderie. Furthermore, two hiking sessions integrated case-based medical scenarios, focusing on managing trauma, airway emergencies, ankle injuries, hypothermia, and the proper use of emergency tools like pelvic and Sam splints. These activities attracted 20–25 participants, offering a blend of outdoor adventure and practical medical education.



Fig : Hiking Program



Fig : Wilderness Medicine Training

MMSN also successfully conducted the Wilderness Medicine Training on March 28 at Tribhuvan University Teaching Hospital with 100 enthusiastic participants. Led by Dr. Jessie Gehner and her team from Virginia Tech Carilion, USA, the session featured eight interactive stations covering topics like patient assessment, hemorrhage control, hypothermia, water treatment, and altitude illnesses. Participants rotated through each station in 20-minute intervals, making it a dynamic learning experience. The three-hour session concluded with certificates of participation distributed by Dr. Jessie Gehner. MMSN extends its gratitude to Dr. Gehner and her team for their invaluable contribution and to all participants for their enthusiasm.



Fig : Simulation Workshops





SIGNING OFF FROM EDITORS

Hello, mountain medicine enthusiasts!

As the Mountain Medicine Society of Nepal (MMSN) journey this year comes to a close, we reflect on the journeys chronicled within these pages and the stories that continue to inspire our shared mission. This edition stands as a testament to the resilience, dedication, and passion that shape the MMSN community and its ongoing commitment to mountain medicine.

The 2024 MMSN Newsletter showcases an incredible tapestry of experiences and achievements, spanning the heartfelt recollections of first-time trekkers to the profound insights of seasoned mountain medicine practitioners. Each article encapsulates not only the spirit of exploration but also the unwavering commitment to advancing healthcare in some of the most challenging environments. A space where experiences are transformed into insights and where stories of resilience and innovation inspire collective growth.

This newsletter serves as a vibrant platform for like-minded individuals who share a deep love for mountain medicine to express their scientific writing, celebrate achievements, and share personal anecdotes from the field. When interest groups like ours sit to have scientific discussions and share ideas, the whole becomes greater than the sum of its parts.

To the incoming editors, you inherit not just a newsletter but a legacy of experiences, advocacy, and camaraderie. We trust you to carry forward this torch, shedding light on new and uncharted tales.

As we sign off, we extend our heartfelt gratitude to every author, volunteer, and supporter who made this publication possible. To our readers, thank you for your unwavering support and curiosity—it is your engagement that fuels our efforts.

May we continue to learn, inspire, and ascend together.

Here's to the mountains and the medicine that keeps us climbing!

Warm regards,
Editorial Team,
MMSN Newsletter 2024

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Mountain Medicine Society of Nepal

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