



प्रारंभ

**AN OFFICIAL NEWSLETTER OF
GMERS MEDICAL COLLEGE,
GANDHINAGAR**

2024: Issue-1 (January - March)

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Welcome to GMERS Medical College, Gandhinagar

GMERS Medical College, Gandhinagar is an academic institution of repute under The Gujarat Medical Education and Research Society of Department of Health and Family Welfare, Government of Gujarat and located in the city of Gandhinagar, Capital of Gujarat State in Western India. It is one of the fastest growing Medical College of Gujarat. The institute strives to be among the top medical colleges in India in the spheres of medical education, research and



Dr. Shobhana Gupta
Dean

GMERS Medical College, Gandhinagar



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From Editorial Desk: Rho-kinase Inhibitors – A New Treatment Avenue for Glaucoma

Glaucoma is one of the leading causes of irreversible blindness worldwide and it poses a lot of challenges to healthcare systems worldwide. It is characterized by apoptotic loss of retinal ganglion cells, optic nerve atrophy and related damage, visual field defects, and vision loss because of raise intraocular pressure (IOP). Thus, the reduction of the IOP is a modifiable risk factor to treat and prevent glaucoma.[1]

Newer treatment modalities have been introduced in the glaucoma management strategies in past few years. One such treatment is using Rho-Kinase Inhibitors. Rho A, Rho B and Rho C are a family of G proteins that are active when they are bound to guanosine triphosphate (GTP) and they become inactive when bound to guanosine diphosphate (GDP). The two Rho kinase isoforms (ROCK1 and ROCK 2) are the effectors of the Rho family.[1]

Mechanism of Action of Rho Kinase inhibitors:

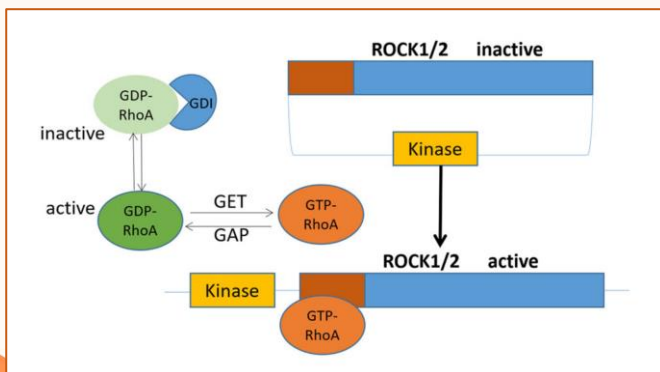


Figure 1: Activation of Rho kinase (ROCK)[2] RhoA is regulated by various cytokines and can shuttle between the inactive and active states. ROCK is the primary effector of GTP-RhoA. The catalytic center is exposed, and ROCK is activated when the GTP-RhoA binds to the Rho-binding domain in ROCK. GAP GTPase activating protein, GET guanine nucleotide exchange factor, GDI guanine nucleotide dissociation inhibitor, RhoA Ras homolog family member A, GDP guanosine diphosphate, GTP Guanosine-5'-triphosphate (Adapted from Wang J et al. 2023)

Various studies were conducted to find out the exact mechanism. The results show that ROCK inhibitors act on the trabecular tissue, ultimately increasing the aqueous humor outflow to reduce IOP. They inhibit the myosin light chain (MLC) phosphorylation or promote the dephosphorylation of MLC to reduce the diastolic pressure and resistance of trabecular cells. Thus, help in aqueous drainage.[3] Increased number of stress fibers and reduced local adhesions also play a role in reducing the IOP.[4]

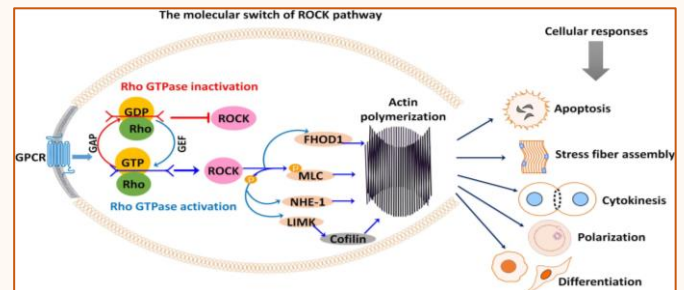


Figure 2: The molecular switch of ROCK pathway[5] Signals from G-protein-coupled receptor (GPCR) stimulate the coupling of Rho with GEF or GAP, which in turn switches ROCK on or off. ROCK downstream substrates are mostly involved in actin-mediated cellular activities like apoptosis, stress fiber formation, cytokinesis, cell polarization, cell adhesion, and cell differentiation. GAP, GTPase-activating protein; GEF, guanine nucleotide exchange factor; GDP, guanosine diphosphate; GTP, guanosine triphosphate; FHOD1, formin homology 2 domain-containing 1; MLC, myosin light chain; NHE-1, Na⁺/H⁺ exchanger type 1; LIMK, LIM kinase. (Adapted from Saadeldin IM et al. 2021)

Pharmacological Actions:

- Rho kinase inhibitors increase aqueous outflow and decrease outflow resistance by increasing the ability of the Schlemm's canal endothelial cells to form pores. Smooth muscles of trabecular meshwork are relaxed and adhesion in juxtacanalicular meshwork are reduced.[2,6]
- Neuroprotection: ROCK inhibitors increase myogenic vascular tone via endothelin 1 and improve optic nerve head perfusion. They also reduce cytotoxicity and ganglion cell injury.[2,7]

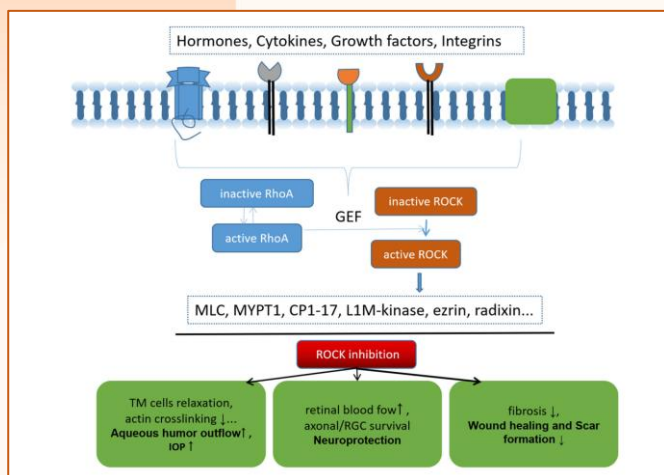


Figure 3: ROCK signaling pathway[2] (Adapted from Wang J et al. 2023)

- Wound healing and scar formation: ROCK inhibitors inhibit the trans differentiation of fibroblasts into myofibroblasts after glaucoma surgery and thus may reduce scar formation after surgery.[2,8]

Formulations:

Ripasudil and Netarsudil are the two commercially available formulations of Rho kinase inhibitors that act on ROCK1 and ROCK2 receptors. Fasudil is a newer Rho kinase inhibitor that has given with promising results in the studies.[1]

Ripasudil hydrochloride hydrate (0.4%) has been shown to reduce intraocular pressure by 2.6 mm of Hg at trough and 3.7 mm of Hg at peak plasma concentration in patients with primary open angle glaucoma and ocular hypertension. Additive Intraocular pressure lowering effect of Ripasudil 0.4% with Timolol maleate 0.5% was found to be 1.6 mm of Hg at peak plasma concentration. The additive effect with Latanoprost 0.005% was a reduction of 1.4 mm of Hg at peak plasma concentration. Netasudil is found to be statistically noninferior to timolol 0.05%.[1]

Adverse Effects:

The most reported adverse events included conjunctival hyperemia (76%), blepharitis (21%) and allergic conjunctivitis (20%). Others are perilimbal conjunctival micro-hemorrhages and cornea verticillate.[1] The

adverse effects were found to be reversible after the stoppage of therapy.

The studies in individuals below 18 years of age, pregnant, and lactating women are not conducted. No harmful effects on fetus are seen in animal studies.

Uses:

ROCK inhibitors should be used in the early stages of glaucoma, as the effect of IOP lowering is affected by the trabecular meshwork status. It is used as an adjuvant currently. Its neuroprotective action as well as proposed role in prevention of postsurgical scarring should be studied in detail.

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Dr. Darshan J. Dave
Professor and Head,
Department of Pharmacology

From Labels to Lifesavers: Unpacking the Branded vs. Generic Medicine Dilemma

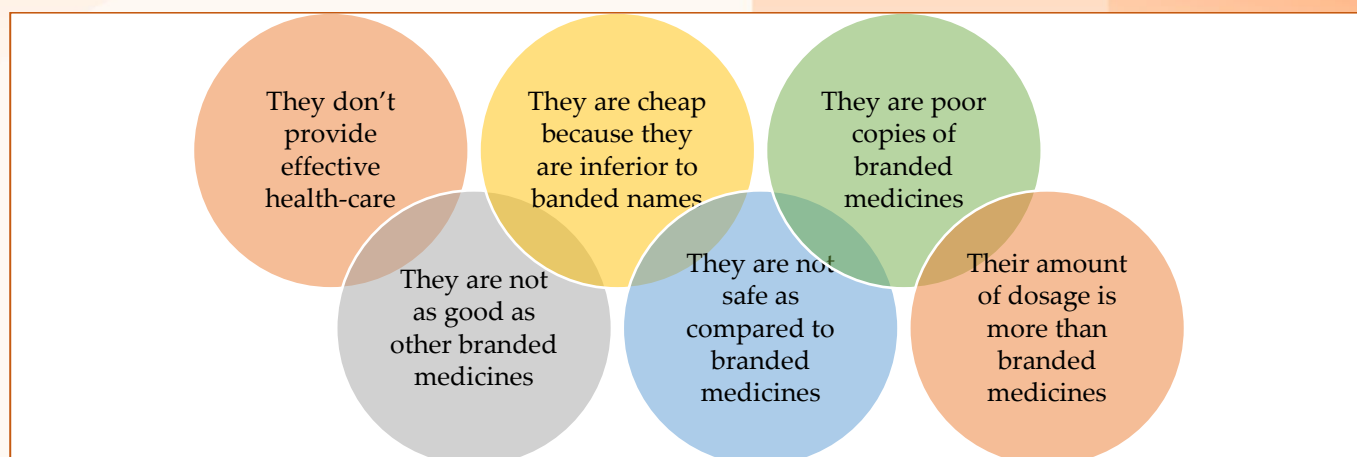


Figure 1: Myths about generic medicines

The pharmaceutical sector in India currently holds a value of \$50 billion. Forecasts anticipate this figure to rise to \$65 billion by the close of 2024, with a further surge to \$130 billion by 2030.[1] Multiple reports underscore India's pivotal role as a primary exporter of pharmaceuticals, catering to more than 200 nations worldwide. India plays a crucial part in meeting global healthcare demands, supplying over 50% of Africa's generic drug needs, about 40% of the generic market in the US, and approximately a quarter of all medications in the UK.[1] Moreover, India boasts the distinction of

producing over 60% of the world's vaccines, establishing itself as the largest global supplier in terms of volume.[2] The pharmaceutical sector is significantly shaped by the distinction between generic and branded medicines, which carries significant ramifications for the healthcare realm.[3] This piece delves into the nuances of the generic versus branded medicine dynamics within the Indian healthcare landscape. There are certain myths that are prevalent among health care professionals as well as in the general public [Figure 1].

Table 1: Differences between generic versus branded medicines

Aspect	Generic Medicine	Branded Medicine
Naming	Sold under chemical or generic names	Marketed under a specific brand name given by the company
Cost-Effective	More affordable due to lower development costs	Generally, more expensive due to research and development costs
Regulatory Approval	Undergo regulatory approval, focusing on bioequivalence	Undergo regulatory approval, demonstrating safety and efficacy
Competition	Multiple manufacturers can produce after patent expiry	Exclusive rights during the patent period, limited competition
Cost and Investment	Lower development costs; more budget-friendly	Higher costs due to extensive research, development, and marketing
Patent Protection	No patent protection; open to generic competition	Initially protected by patents, providing exclusivity
Brand Recognition	Identified by chemical or generic names	Brand associated with quality and trust
Government Initiatives	Promotion of generic drugs for affordability (e.g., Jan Aushadhi)	—
Market Dynamics	Significant market presence; emphasis on affordability and accessibility	Robust market presence: preferences and trust associated with brands
Regulatory Framework	Regulatory approval by authorities like CDSCO	Regulatory oversight to ensure safety and quality standards

Generic medicines are exact replicas of branded medicines, possessing identical effects, risks, and strengths as the original products. They offer cost-effective alternatives, slashing prices by up to 90% compared to branded medicines.[4] India stands as a leading exporter of generic medicines. Earlier, medication costs were exorbitant, but today, generic medicines provide equally effective treatment at a fraction of the cost. These medicines are manufactured after the expiration of the original patent. New formulations must meet FDA standards.[5] Branded medicines, on the other hand, are the original products developed by pharmaceutical companies. Before release, they undergo rigorous testing to ensure efficacy and safety. Many companies introduce branded medicines to combat diseases. In India's pharmaceutical market, generic medicines offer cost-effective alternatives devoid of unique branding, ensuring accessibility and ease of use. Branded medicines, meanwhile, are the result of extensive research, featuring distinct formulations and recognized names. Table 1 outlines the differences between generic and branded medicines in India.[6]

Healthcare professionals' (HCPs) viewpoints on generic and branded medicines in India can vary based on their roles, backgrounds, and areas of expertise. Table 2 presents the varied perspectives of HCPs.[7]

Table 2: HCPs' perspectives on generic and branded medicine	
Generic Medicine	Branded Medicine
<ul style="list-style-type: none"> • Favorable for chronic conditions due to affordability. • Improves patient compliance. • Appreciate cost-effectiveness. • Concerns about consistency of formulations. • Convenient for administration due to lower cost. 	<ul style="list-style-type: none"> • Preferred in situations where specific formulations or dosing are crucial. • Brand loyalty and trust in certain brands may influence choices. • Confidence in quality and consistency. • Potential pressure from patients for brands.

Conclusion

The discussion surrounding generic and branded medicine in India is complex, reflecting the interconnection of factors such as cost, trust, accessibility, and regulatory compliance. As India

advances its healthcare policies, striking the right balance between these aspects becomes crucial. The overarching objective is to effectively address the diverse healthcare requirements of the populace, underscoring the dedication to providing accessible and dependable healthcare options for everyone.

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The Autonomy of Generic Medicine in India

A generic drug is a pharmaceutical drug. They are alternative to the brand-name drugs in quality, dosage, strength and many more. You can also define it as a chemical makeup of the drug with the brand name under which the drug is sold. These drugs can only be produced and sold legally when the pre-owner of the drug delivery it someone else or the patent of the brand expires.

Dr. Amit M Shah
Associate Professor,
Department of Pharmacology

A Symposium on Analytical and Clinical Validation of Laboratory Investigations

Department of Biochemistry, GMERS Medical College, Gandhinagar organized a symposium on “Analytical and Clinical Validation of Laboratory Investigations” on February 18, 2024. Approximate 180 delegates including MD Biochemistry faculties, consultants and residents from all over Gujarat state participated in the event.

The objective of this symposium was to bring together experts, researchers and professionals from the field of laboratory medicine to share insights, discuss recent advancements and explore collaborative opportunities. The focus was on Analytical and Clinical Validation which ensures that the reports generated are precise and applicable to clinical decision-making and patient care. This symposium provided a platform for clinical laboratory experts and resident doctors to showcase their expertise, learn from peers and collectively contribute to the growth of this field.



The symposium commenced vibrantly at 9:00 am with an opening address by the Organizing Chairperson, Dr.

Kirankumar Chauhan, Professor and Head of Department of Biochemistry. In the esteemed presence of chief guests and executive members of Association of Medical Biochemists of India (AMBI), the inauguration ceremony unfolded gracefully. Dr. Yogeshanand Goswami, Chief Executive Officer (CEO), Gujarat Medical Education and Research Society (GMERS), Gandhinagar had taken special interest and gave us continuous motivation for the symposium, he cancelled his important meetings to be a part of the academic feast.



Dr. Shobhana Gupta, Dean, GMERS Medical College, Gandhinagar furnished invaluable counsel and granted permission to utilize the auditorium. Due to some unforeseen circumstances, our Medical Superintendent, Dr. Niyati Lakhani, was unable to attend the symposium, but she always inspired us with her upbeat outlook and unwavering commitment to enhancing clinical laboratory facilities and services. Distinguished dignitaries illuminated lamps while prayers resonated, setting a serene tone. The Organizing Secretary, Dr.

Gaurav Modi, Associate Professor, Department of Biochemistry, warmly welcomed all, followed by inspiring speeches from AMBI Gujarat President and AMBI National President, embellishing the event with their insights. The chief guests added further motivation with their impactful words, encapsulating the spirit of the symposium's auspicious beginning.



There were seven sessions from renowned speakers from 9:00 am to 4:00 pm. Marvelous talk by the organizing chairperson Dr. Kirankumar Chauhan, on the topic "Clinical Correlation and Integration of Routine Clinical Chemistry Investigations" added aroma to the symposium. The event was concluded by a thanksgiving from Dr. Jatin Patel, Associate Professor, Department of Biochemistry.



The entire event was a grand success under the consistent efforts of months by the organizing committee including Dr. Kirankumar Chauhan, Dr. Gaurav Modi, Dr. Jatin Patel, Dr. Lipi Patel, Dr. Ashita Vyas, Dr. Chirag Oza, Dr. Dinesh Chandnani and Dr. Hiren Prajapati, Clinical Chemistry Laboratory Technicians and other helping staff.



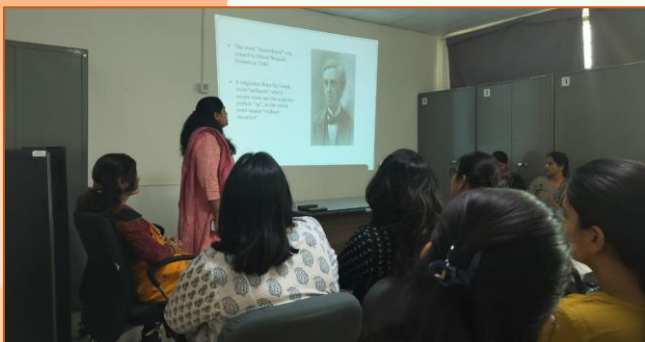
Inhalation Anesthesia – Ancient to Modern

The Department of Anesthesiology orchestrated a Continuing Medical Education (CME) event themed "Inhalation Anesthesia: From Ancient to Modern," scheduled for the March 15, 2024, running from 2:00 PM to 5:00 PM. The venue for this enlightening session is the department seminar room, graciously led by the esteemed Dean and Head of Anesthesia, Dr. Shobhana Gupta.

Inhalational agents have undoubtedly held a pivotal role throughout the history of anesthesia, traversing from the early application of Diethyl ether to the contemporary employment of Desflurane. Their hallmark characteristics of rapid induction, swift emergence, and minimal side effects have incessantly propelled the exploration for newer agents. However, the progression of modern agents incessantly seeks to refine and surpass their historical counterparts.



This academic endeavor promises a rich intellectual feast with a diverse array of interactive sessions curated by the anesthesia faculty. The topics span from the historical trajectory of Inhalation Anesthesia to an exploration of the various agents spanning ancient to modern eras. A highlight of the event was the vibrant engagement of postgraduate (PG) students in a stimulating quiz, fostering a refreshing exercise for their intellectual faculties.



The significance of CME activities within the PG department cannot be overstated. They serve as a conduit for faculty members and PG residents alike to continuously update their medical acumen and refine their skills. This pursuit not only elevates the standard of patient care but also serves as a bulwark against medical errors, thus enhancing overall patient safety.



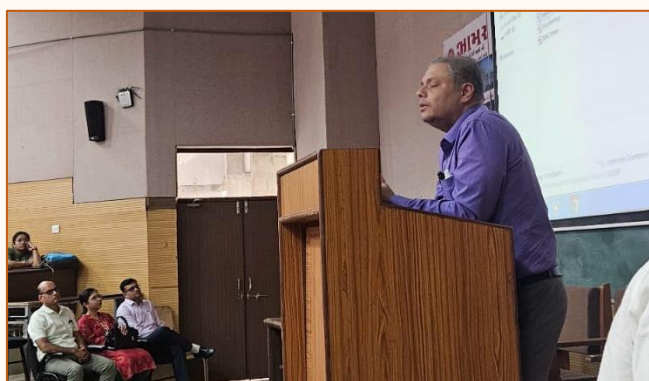
In essence, such scholarly gatherings not only enrich the knowledge repository of participants but also cultivate a culture of continual learning and improvement within the realm of medical practice. Through concerted efforts and shared insights, the pursuit of excellence in patient care remains steadfast.

"Anaesthesia is the bridge between suffering and relief, between disease and cure, between fear and hope. It is a vital component of modern medicine that enables millions of lives to be saved and improved every year."

– Dr. Adrian Gelb, Secretary of WFSA

Internship Orientation Program

The internship orientation program for newly admitted interns was conducted on March 15, 2024, at lecture hall 1, from 3:00 pm to 5:00 pm. The purpose of this program was to guide and sensitize the interns about their roles as well as duties during the tenure of internship in various departments. All 162 interns actively participated in this program.



After this session, Dr. Dinkar Goswami briefed the students about their role as intern doctors in the medicine department. This was followed by presentations on the role of interns during their postings in general surgery, obstetrics & gynecology, and pediatrics departments by Dr. Umesh Vaishnav, Dr. Rohit Jain, and Dr. Ekta Dalal respectively.



The program was initiated with a welcome speech by Dr. Darshan J. Dave, emphasizing the purpose of this session. Dr. Amit Upadhyah sensitized the intern doctors about the rules and regulations of the National Medical Council (NMC) regarding the internship. He also briefed about the time duration of postings in different departments as well as rules for leave.

Lastly, the laboratory medicine departments (Pathology, Microbiology & Biochemistry) explained to the interns about their roles in the various investigations which are going to be carried out as part of the management of indoor as well as outdoor patients. Dr. Kirankumar Chauhan from the Biochemistry dept., Dr. Gaurishankar Shrimali from the Microbiology dept., and Dr. Bhaskar Thakkar from the Pathology dept. briefed the intern doctors about their duties in laboratory medicine.

Pharmacovigilance Sensitization Session for Intern Doctors

A sensitization session on Pharmacovigilance and Adverse Drug Reaction (ADR) reporting for newly enrolled interns was conducted by the Department of Pharmacology, under the auspices of the ADR Monitoring Centre at GMERS Medical College, Gandhinagar. This session took place on March 16, 2024, from 11 am to 1 pm in the lecture hall situated on the 4th floor of the OPD building at GMERS General Hospital, Gandhinagar.



A total of 162 interns actively participated in this enlightening session. Dr. Darshan J. Dave commenced proceedings with a welcome speech, emphasizing the paramount importance of Pharmacovigilance. Following this, Dr. Amit M. Shah delivered a comprehensive presentation on the guidelines for ADR Reporting, elucidating the essential information.



The session culminated with an interactive segment, wherein intern doctors posed queries regarding ADR reporting, which were expertly addressed. This holistic approach ensured interns not only understood the theoretical aspects but also gained practical insights into ADR reporting processes, thereby equipping them with essential skills for their medical practice.

Subsequently, Dr. Riddhi Bhatt provided hands-on training to the interns on how to effectively complete the ADR reporting form, supplementing her explanations with pertinent examples. She delved into the nuances of causality assessment concerning suspected adverse drug reactions, ensuring interns grasped the intricacies of this critical aspect.



Healthy Community Connections: Adolescent Health Day & Family Adoption Visit

Celebrating Adolescent Health Day



The Department of Community Medicine at GMERS Medical College proudly celebrated Adolescent Health Day on January 6, 2024, at the Model Adolescent Health Centre (Room No. 11, OPD Building), under the esteemed guidance of Dr. Jignesh Chauhan, Head of the Community Medicine Department. To promote hygiene and health, the department distributed sanitary napkins and reusable water bottles to 25 enthusiastic adolescent

girls, coupled with an informative booklet addressing various Adolescent Health issues. Insightful sessions were delivered on combating anemia and the importance of menstrual hygiene.

Family Adoption Visit



As per National Medical Council (NMC), New Delhi guidelines, Family Adoption visits were conducted by the Department of Community Medicine for the Batch 2023-2024 on 21/02/2024 and for Batch 2022-2023 on 23/02/2024, under the esteemed guidance of the Dean, Dr. Shobhana Gupta, and Dr. Jignesh Chauhan, Professor & Head of the Community Medicine Department. Families were visited by the students, wherein their complete health profiles were recorded, and measurements of height, weight, and blood pressure were taken for all family members. There was active and enthusiastic participation from all the students.



Sports Week Extravaganza: A Recap of Thrills and Triumphs

The pulse of excitement reverberated through the air as Sports Week unfolded during March 11–17, 2024, bringing together athletes and spectators for a spectacular showcase of athleticism and camaraderie. From the green fields to the indoor courts, every corner of the sports complex was alive with the spirit of competition and sportsmanship. Let's delve into the exhilarating highlights of each game, featuring a diverse array of games and the triumphant winners who left their mark on the arena.

Inauguration



Sports Week began with the Dean's motivational address, cutting the ribbon and officially starting the event. Athletes and spectators alike were filled with excitement as they prepared for a week of intense competition and camaraderie.



Football Frenzy



The finals of men's football set the tone with a thrilling match between the Final Year and Intern batches. The stadium echoed with the roar of the crowd as players showcased their skills on the pitch. In a closely contested battle, the Final Year emerged victorious, igniting the flames of competition for the days ahead. Similarly, the finals of women's football were equally exciting, with a match between Team Warriors and Team GMED United FC. Both teams played amazingly, with Team GMED United FC winning the finals with a score of 1-0.



Girls Winners Team: Anmol Kataria, Dhanvi Vasavada, Amrita Yadav, Daisy Bavishi, Khushie Thakkar, Mokshada Wani.

Volleyball Victory

Both the Final Years and Interns brought the action to the volleyball court, where they clashed in a high-energy showdown. In the end, it was the Final Years who emerged triumphant, clinching the win with their impeccable teamwork and precision. In the men's category, the First Years and Interns clashed against each other in a spectacular display of energy and excitement. The Intern batch won the finals due to their glorious teamwork.

Team: Manan Kapadiya, Kunj, Aayush, Harsh, Daksh, Harshit.



Carrom Challenge

Indoor games took center stage with a thrilling carrom tournament. Players showcased their finesse and strategy as they flicked their pieces across the board, aiming for victory. After a series of intense matches, Parth Dhanja emerged as the champion in the men's category, while Jeel Doshi claimed victory in the women's category, demonstrating unmatched skill and precision.



Winners: (i) Boys' Singles: Parth Dhanja; (ii) Girls Singles: Jeel Doshi; (ii) Boys' Doubles: Satypal Rana and Jagdish Chaudhary; (iv) Girls' Doubles: Palak and Bela; and (v) Mixed Doubles: Vinit and Jeel Doshi.

Chess Championship



Chess enthusiasts gathered for a battle of wits and strategy. Minds clashed as players strategized their moves on the checkered board, seeking to outmaneuver their opponents. In a display of tactical brilliance, Abhilasha Agar and Bhavya Bhai Patel emerged victorious, outsmarting their rivals and claiming the title of Chess Champions.



Cricket Carnival



The sound of leather on willow filled the air as cricket fever took over the stadium. Teams faced off in a series of intense matches, showcasing their batting, bowling, and fielding prowess. After a hard-fought tournament, it was Team BC Warriors who emerged as the champions, celebrating their victory under the blazing sun. For the men's category, the members of Team BC Warriors were Dr. Dhaval, Dr. Gaurav, Dr. Rajat, Dr. Anil, Dr. Kaushal, Dr. Dipak, Dr. Kartik, Dr. Sunny, Dr. Aatish, Dr. Rishi, and Dr. Dennis. In the women's category, the victorious team was Seven Smashers, with members including Yatri Joshi (Captain), Sravya Prasad, Vrunda Rajput, Aesha Patel, Hetvi Anand, Jimmy Patel, and Maitrey Patel.

Fun Cricket Fiesta



Day six brought a twist to the traditional cricket format with a fun-filled cricket fiesta. Team Final Year emerged as the winners, showcasing their skills and sportsmanship in a day of pure enjoyment. The team comprised Jil Taviyad, Ruchir Bhatu, Pratham Soni, Harsh Dave, Rekha, Jagravi, and Zhankhi.

Sack Race and Relay Race

The excitement continued with a series of exhilarating races. Participants hopped and skipped their way to the finish line in the sack race, while teams sprinted and passed the baton in the relay race. Cheers filled the air as competitors gave their all, with Arav Shah emerging victorious in the men's category and Meshwa Busa in the women's category. The relay race winners included Kashyap Kalariya, Kenil Ranipa, Mital Kalsariya, and Hasti Beladiya in the mixed category, Nakul Ahir, Meet Patel, Darshan Barot, and Karan Katara in the men's category, and Rosalyn, Naishargi, Sowmya, and Harshita in the women's category.

Badminton and Table Tennis Thrills

These games were the highlight of Sports Week, with matches still being conducted to determine the champions. In the badminton women's category, Keta Di won the singles event, while Riddhi Di and Tanvi Di secured victory in doubles. In table tennis, Jagravi Di won the singles event, while Vishwa Di and Priyanshi Di triumphed in doubles.

Trileg Race and Deadlift Competition

The trileg race and deadlift competition brought a test of strength and endurance. Participants balanced their way through the trileg race, showcasing agility and balance, while athletes demonstrated their raw power in the deadlift competition. After an impressive display of athleticism, Dhvanitbhai and Harshbhai emerged as champions in the men's category, Rutvi and Shivani in the women's category, and Smit Borachiya and Krishna Ladva in the mixed category.

SURGE 2K24 Deadlifting Contest Winners

Winners: Girls (below 55 kg) - Kisha Anand; Girls (above 55 kg) - Roma Mitra; Boys (below 55 kg) - Meet Patel;

Boys (56-65 kg) - Ishit Pandey; Boys (66-75 kg) - Smrutiranjana Lenka; Boys (above 75 kg) - Harsh Bhai (Intern).

Tug of War and Traditional Games

The final day of Sports Week culminated in a display of teamwork and determination with the tug of war competition. Teams dug their heels into the ground, pulling with all their might as they vied for victory. In a test of strength and strategy, the best teams emerged triumphant, celebrating their hard-earned win with jubilant cheers. Additionally, traditional games like Kabaddi and Kho Kho added cultural flair to the festivities, with participants showcasing their agility and teamwork in these time-honored competitions.



As the curtains closed on Sports Week, athletes and spectators alike reflected on the memories made, the friendships forged, and the triumphs celebrated. From the thrill of victory to the camaraderie of competition, Sports Week had captured the essence of sportsmanship and left an indelible mark on all who participated.



CME on Pharmacovigilance from Clinicians' Perspective

A Continuing Medical Education (CME) on the theme "Pharmacovigilance from Clinicians' Perspective" was organized by the Department of Pharmacology (ADR Monitoring Centre) of GMERS Medical College, Gandhinagar under the aegis of National Coordination Centre (NCC) - Pharmacovigilance Programme of India (PvPI), Indian Pharmacopoeia Commission (IPC), Ministry of Health & Family Welfare, Government of India on March 26, 2024 from 2 pm to 5 pm in the lecture hall on the 4th floor of the OPD building.



It was conducted both online and offline. A total of 201 participants joined via an online platform, and 84 participants attended physically in the lecture hall. The CME commenced with lamp lighting and prayer. Dr. Shobhna Gupta and Dr. Niyati Lakhani encouraged the team with their kind words before the sessions began.

The session started with a welcome address by Dr. Darshan J. Dave, followed by a briefing on pharmacovigilance activities conducted by AMC-Gandhinagar by Dr. Shivani Trivedi. Dr. Jigar Modi led a session comparing Global safety reporting versus Indian safety reporting, while Dr. Chintan Solanki

delivered a session on pharmacovigilance from a clinician's perspective. Dr. Darshan J. Dave spoke on the underreporting of adverse events and related harm.



These sessions were followed by a debate on the theme of "ADR reporting" between clinicians and pharmacologists. On the clinicians' panel were Dr. Dinkar Goswami, Dr. Chintan Solanki, Dr. Bela Padhiyar, Dr. Ekta Dalal, and Dr. Gunjan Upadhyay. On the pharmacologists' panel were Dr. Darshan J. Dave, Dr. Amit Shah, Dr. Maulik Patel, and Dr. Apexa Shukla.

The 45-minute-long debate ended with constructive solutions from both teams. At the end of the CME, participants gathered for refreshments.



CME on Antimicrobial Stewardship Program



The Department of Microbiology at GMERS Medical College, Gandhinagar, organized a CME on Antimicrobial Stewardship Program on March 27, 2024 for residents, medical students, interns, and all the faculties of GMERS Medical College, Gandhinagar. Around 150 participants attended the CME. The inauguration was conducted by the respected Dean, Dr. Shobhna Gupta and the respected Medical Superintendent, Dr. Niyati Lakhani. The conference featured presentations on critical topics, including the global health challenge of Antimicrobial Resistance

(AMR) delivered by Dr. Hardik Bhavsar. Dr. Urvesh Shah discussed the Antimicrobial Stewardship Program, while Dr. Darshan Dave provided insights into the Rational Use of Antibiotics. Dr. Pratik Shah elaborated on Surgical Antimicrobial Prophylaxis, Dr. Bhaskar Thakkar presented an Overview of Quality Control in the Laboratory, and Dr. Bhaumik Patel addressed Sample Collection and Transportation. Additionally, Dr. Kiran Chauhan discussed Pre-Analytical Errors in the field.



CME on Infection Control for Nursing and Paramedical Staff



The Department of Microbiology at GMERS Medical College, Gandhinagar, organized a CME on Infection Control for Nursing and Paramedical Staff on March 28, 2024. Approximately 150 participants attended the CME on 28/03/2024. The lecture on Biomedical Waste

Management (BMW) was delivered by Dr. Kiran Patel, while Dr. Neeta Khokhar covered infection control practices, and Dr. Parul Patel addressed topics including Personal Protective Equipment (PPE), housekeeping, and linen management.

Graduation Ceremony of 2018 Batch

The journey of MBBS is filled with hard work, dedication, stress, exams, hectic duties, and books everywhere. Yet, it remains one of the most satisfying journeys worth experiencing. We bid adieu to the batch of 2018 on March 28, 2024.

The graduation ceremony commenced with a warm welcome extended to all dignitaries, professors, parents, and graduating batch 2018 doctors. The ceremony was graced by the presence of the following esteemed individuals: Dr. Yogeshanand Goswami, Chief Executive Officer (CEO) of Gujarat Medical Education and Research Society (GMERS), Gandhinagar; Dr. Ashish Katarkar, Deputy CEO of Gujarat Medical Education and Research Society (GMERS), Gandhinagar; Dr. Shobhana Gupta, Dean of GMERS Medical College, Gandhinagar; Dr. Niyati Lakhani, Medical Superintendent of GMERS General Hospital, Gandhinagar; Dr. Darshan J. Dave, Additional Dean and Professor and Head, Department of Pharmacology, GMERS Medical College, Gandhinagar; and Dr. Meeta Parikh, Additional Medical Superintendent and Professor and Head, Department of Pathology, GMERS Medical College, Gandhinagar.



The ceremony was honored by the esteemed presence of various Heads of Departments, Professors, and faculty members from different departments.



The atmosphere in the auditorium was filled with a sense of divinity as the lamp was lit by all dignitaries, accompanied by the recitation of Saraswati Vandana. The graduation ceremony was officially declared open by the welcome address delivered by the Dean, Dr. Shobhana Gupta, followed by kind and encouraging words from all dignitaries, which uplifted the spirits and joy of the graduating batch.

Entering medical college and experiencing the independence of living away from home for the first

time, studying anatomy, and excelling in every subject of MBBS, whether Medicine or Surgery, making enduring memories with friends, and finding a second home away from home, all evoke profound emotions when realizing that this chapter of life at this beautiful place is coming to a close. The depth of these emotions was palpable and shared by the students of the 2018 batch in their speeches.



The auditorium resonated with joy, cheers, applause, whistles, and congratulations as the graduating batch of 2018 was conferred with their hard-earned degrees by the dignitaries.



Each budding doctor solemnly took the Hippocratic oath, pledging to uphold the principles of good medical practice throughout their lives and to serve society and the nation whenever needed, under the guidance of Dr. Darshan Dave.



Every moment of the MBBS journey and the unprecedented university life of the 2018 batch came to life before everyone's eyes as the lights dimmed and a video of the batch played, eliciting laughter and nostalgia.

The organizing committee conveyed a heartfelt thank you to every member of the batch of 2018, their proud parents, dignitaries, faculties, non-teaching staff, seniors, juniors, anchors, and volunteers.

As Dr. Shobhana Gupta reluctantly declared the graduation ceremony closed, with a heavy heart but with faith in the excellence of the 2018 batch, it was followed by the National Anthem.

Promises were made to cherish the shared memories forever, and these memories were captured through videos, pictures, dances, laughter, and a festive lunch.

The event, flawlessly anchored by the final MBBS batch of 2020 students, finally came to an end.

A Case Report of Giant Neck Schwannoma

Schwannomas are slow-growing, encapsulated, benign tumors that can originate from any nerve covered with a sheath of Schwann cells. These tumors can originate from cranial, peripheral, or autonomic nerves; about 25%–45% of schwannomas originate in the head-and-neck region, of which about 10% originate from either the vagal or sympathetic nervous system. They are rare tumors and are often asymptomatic. The preferred modality for the treatment of schwannomas is surgical excision, and the recurrence of the tumor after complete resection is very rare.

This case report outlines the clinical scenario, surgical approach, and postoperative course of a patient with a Neck schwannoma who underwent Wide Local Excision at the Department of Surgery, GMERS General Hospital, Gandhinagar.

A 68-year-old male presented to the surgery OPD with a 2-year history of gradually growing mass over the left lateral neck associated with pain and tingling sensation over the left arm on compression but not associated with dysphagia, hoarseness of voice, or any neurological deficit.

Computed tomography (CT) imaging revealed a well-defined rounded lobulated lesion approximately 57×56×67 in the left posterior triangle in close approximation with the vertebral foramina of lower cervical vertebrae and major left-sided vessels.

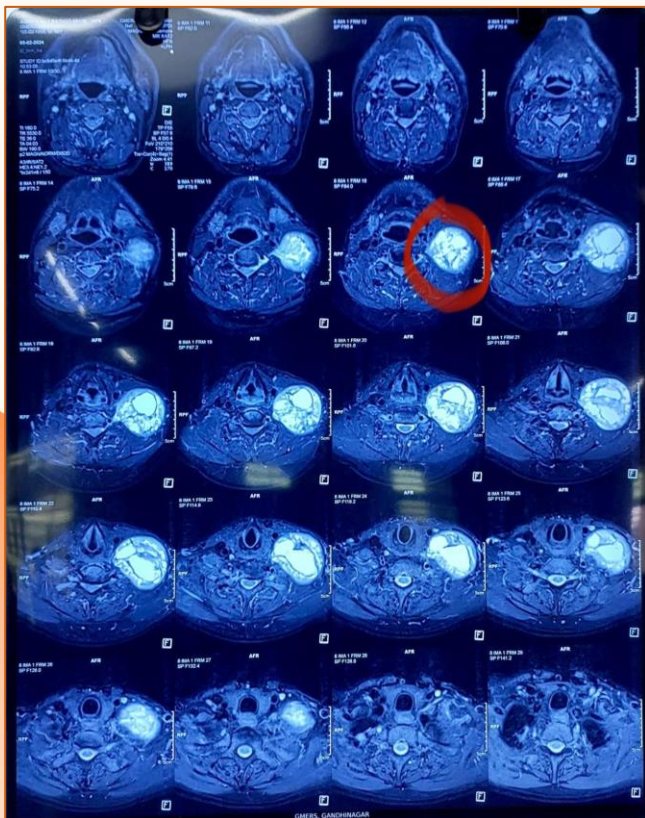
The patient underwent comprehensive preoperative assessment, including laboratory investigations, and cardiac evaluation. A biopsy and MRI were also done to further confirm the diagnosis.

Under General Anesthesia, a single transverse incision was made at the prominence of swelling over the left lateral neck. The tumor was separated from surrounding structures, including major vessels, and excised en bloc. The histopathological examination confirmed the diagnosis, and the margins were found to be free of tumor.



The patient's postoperative recovery was uneventful, and the patient was discharged on day 2. The patient is on regular follow-up with a 3-monthly USG of the neck advised.

This case illustrates the successful surgical management of a schwannoma of the neck, which was painful and also psychologically disturbing for the patient as it was gradually growing in size.



Operating Team

Dr. Mehul Patel (Oncosurgeon)
Dr. Pratik Shah (Associate Professor)
Dr. Mrugesh Chudasama (Assistant Professor)
Dr. Prayas Bachani (Senior Resident)
Dr Vighnesh, Dr Sheetal, Dr Chirag (Residents)

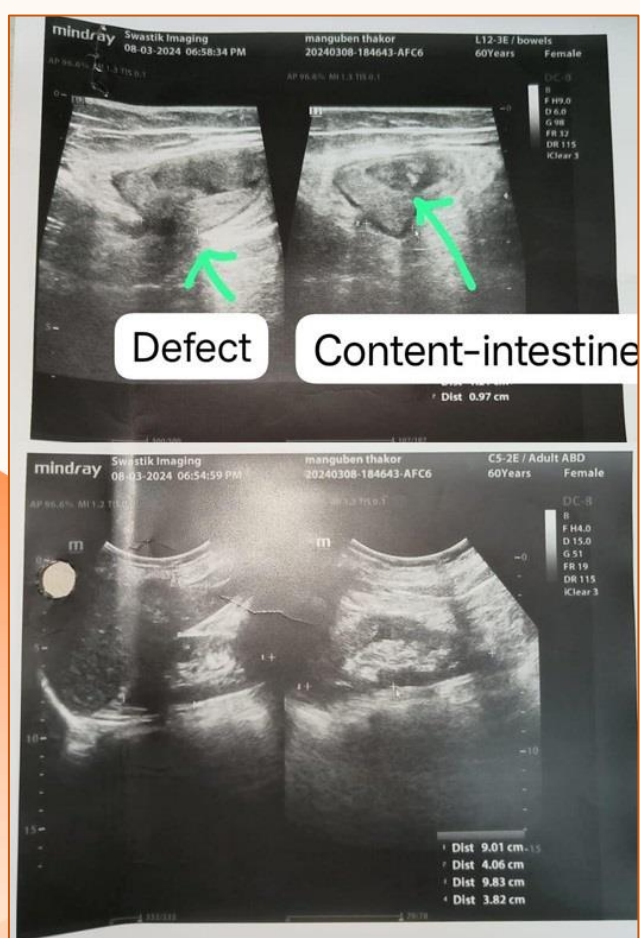
Spigelian Hernia Repair with 1° Repair of Jejunum in an Obstructed Spigelian Hernia in Emergency

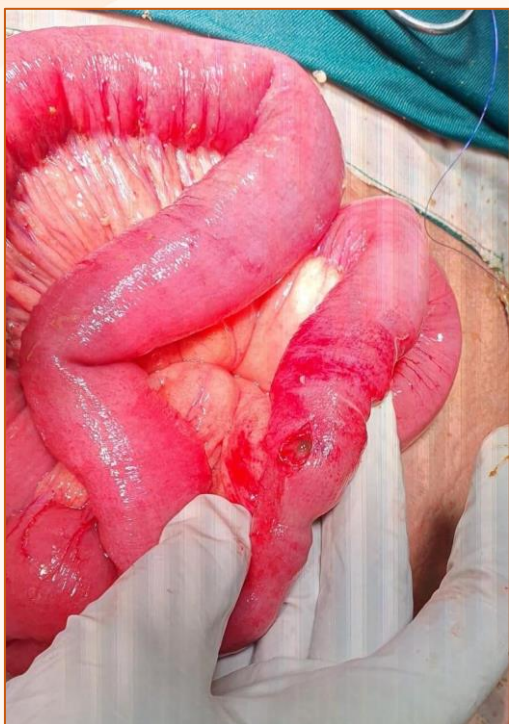
Spigelian hernias are uncommon, although probably underdiagnosed. They affect men and women equally and are most common in elderly people. They arise through a defect in the aponeurosis of the transversus abdominis (Spigelian fascia) and may advance through the internal oblique to spread out deep to the external oblique aponeurosis. Surgery is recommended because the narrow and fibrous neck predisposes to strangulation. Surgery can be open or laparoscopic. In open surgery, a skin crease is made over the hernia, but no abnormality will be seen until the external oblique is opened. The sac and contents are dealt with, and the small defect in the Spigelian fascia is repaired by suture or mesh. This case report outlines the clinical scenario, surgical approach, and postoperative course of a patient with obstructed Spigelian hernia who underwent Spigelian hernia repair with primary repair of the jejunum at the Department of General Surgery at GMERS General Hospital, Gandhinagar.

A 60-year-old female patient presented to the ED with complaints of multiple episodes of vomiting, inability to pass flatus and stool for the past 3 days. The patient was referred from a private hospital with ultrasound findings suggestive of the possibility of a strangulated hernia in the left lumbar region. After clinical examination by the team and an abdominal X-ray, a diagnosis of obstructed Spigelian hernia was made, and emergency surgery was planned.

The patient was admitted, and initial resuscitation was done in the ward, while essential blood investigations were carried out in the meantime. The patient was then shifted to the operating theatre. Pre-operative assessment of the patient by the anesthetic team was completed.

Under spinal anesthesia, an oblique skin incision along the hernia was made. After careful layer-by-layer dissection, the obstructed Spigelian hernia was identified, with the contents of the hernia including the jejunum with a perforation of size 1*1cm and the descending colon found to be healthy, and the hernia was reduced. Primary repair with PDS 3/0, simple interrupted full-thickness, single-layer closure was performed. An abdominal drain (32F) was kept in the pelvis. Subcutaneous tissue space was created, and onlay meshplasty with a 10cm*15cm prolene mesh was placed and fixed with PDS 2/0. A negative suction drain (16F) was kept above the mesh.





Postoperatively, the patient developed respiratory distress and acute kidney injury, which were managed conservatively with constant oxygen support. By postoperative day 3, the patient was mobilized and started on sips. The patient was discharged by the 5th postoperative day.

This case illustrates the successful management of a Spigelian hernia repair with primary repair of the jejunum in an obstructed Spigelian hernia in an emergency. The timely management, meticulous surgical technique, and comprehensive postoperative care contributed to favorable outcomes, emphasizing the importance of decision-making and prompt intervention in a rare case of obstructed Spigelian hernia.



Operating Team

Dr. Pratik Shah (Associate Professor)
 Dr. Abhijit Yadav (Assistant Professor)
 Dr. Prayas Bachani (Senior Resident)
 Dr Vighnesh, Dr Sheetal, Dr Chirag (Residents)

Theme 2024

Let's Talk About Obesity &...



A call to emphasize to encourage people to start conversations that address obesity from a cross-cutting perspective.



World
Obesity
Day March 4

Cytoreduction Surgery for Large Ovarian Malignancy

A 45-year-old female presented with complaints of polymenorrhagia, abdominal pain, and loss of appetite for the past 15 days. On examination, a large lower abdominal swelling approximately 12*12 cm in size was palpated. On auscultation of the chest, decreased air entry was noted in the right lower zone, with low blood pressure and tachycardia. Routine blood and radiological investigations were followed by cardiorespiratory assessment. The patient was found to be severely anemic, and the X-ray suggested moderate right-sided pleural effusion, which was confirmed by pleural fluid tapping and cytological studies, suggestive of malignant pleural effusion. Tumor markers like cancer antigen 125 (CA-125) - 1171.2 U/mL and Carcinoembryonic antigen (CEA)- 4.21 ng/mL (within normal range) were noted.

MRI of the pelvis showed a large, well-defined, solid cystic lesion in the lower abdomen region, suggestive of a right ovarian neoplastic lesion. The patient received transfusion with 3 pints of packed cell volume (PCV) preoperatively and was then scheduled for surgery.



Cytoreduction surgery, including radical hysterectomy with bilateral salpingo-oophorectomy plus omentectomy, was performed by Dr. Hiren Parmar, Dr. Nimesh Thakkar, and their team. Due to the patient's high respiratory risk, surgery was conducted under spinal with epidural anesthesia. The surgery and postoperative period were uneventful, and the patient was discharged on postoperative day 7. The histopathology report suggested infiltrative-type poorly differentiated papillary mucinous cystadenocarcinoma of the ovary.

Academic Achievements



Dr. Sayan Kumar Das, a 3rd-year DNB resident of the Department of Pediatrics at GMERS Medical College and General Hospital, Gandhinagar, has recently been conferred the Young Researchers Award in the Research Grant category at the National Summit 2024 conducted by the Metropolis Foundation at Radisson Blu Hotel, Chennai, on March 10, 2024.

The Metropolis Foundation, through its MedEngage Research Scholarship program since 2018-19, has been awarding medical students and doctors who meet the requisite eligibility criteria. This year, a remarkable total of 6,019 applications were received from both government and private medical colleges spanning 603 cities across 29 states. A total of 301 were selected in different categories. Out of the 6019 applications, 675 were in the research category, from which, after three stages of eliminations, 20 were finally selected in the Young Researcher Category.



Theme 2024

Vaccines Work For All



A call to emphasize safe and effective vaccinations are essential to protect all human lives from preventable diseases, irrespective of age, gender, location, or socioeconomic status.

National **Immunisation**
Day

16 MARCH

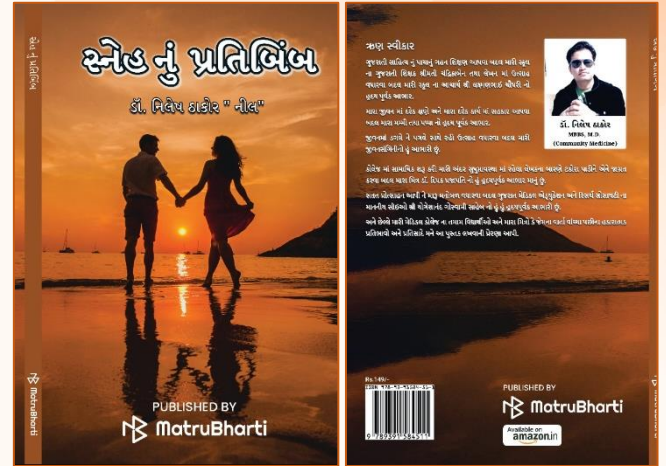
Celebrating Literary Success: Dr. Nilesh Thakor's Triumph in the World of Words

We are thrilled to share the remarkable literary journey of Dr. Nilesh Thakor, Associate Professor, Community Medicine, esteemed member of our GMERS Medical College, Gandhinagar family, whose talent has captured the hearts of readers far and wide.

From the corridors of healing to the realms of storytelling, Dr. Nilesh Thakor's transition as a writer has been nothing short of inspiring. Starting with captivating narratives featured in medical college wall magazine, his stories quickly found resonance among medical students, paving the path to digital platforms like Pratilipi and MatruBharti.

The response has been overwhelming, with over 3.5 lakh readers engrossed in his tales on Pratilipi and more than 25,000 downloads of his works on MatruBharti. Encouraged by this outpouring of support, Dr. Thakor embarked on the journey of book publishing, collaborating with prestigious houses like Navbharar Sahitya Mandir and MatruBharti Publishing.

His debut work, "Sneh no Setubandh", delicately weaves together poignant stories drawn from the emotional tapestry of doctors' lives, offering readers a glimpse into the humanity behind the white coat. Similarly, "Sneh nu Pratibimb," his latest offering, continues this tradition of heartfelt storytelling, enriching the literary landscape with its emotional depth.



Both books are now available on Amazon, inviting readers to immerse themselves in Dr. Thakor's heartfelt narratives. As we celebrate his literary triumphs, let us applaud Dr. Nilesh Thakor for his unwavering dedication to both healing and storytelling, enriching lives with every word penned.

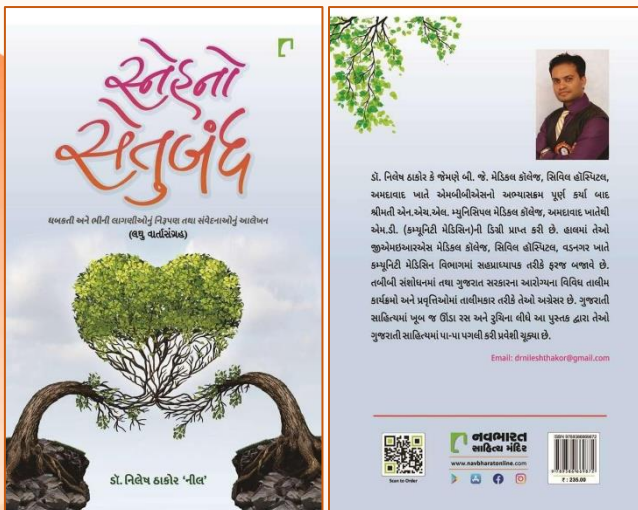
To explore the world of "Sneh no Setubandh" and "Sneh nu Pratibimb," follow the links provided below and embark on a journey of empathy and reflection:

Link to "Sneh no Setubandh" on Amazon:
<https://amzn.eu/d/flhBn9X>

Link to "Sneh nu Pratibimb" on Amazon:
<https://amzn.eu/d/gZemOhk>

Let us continue to support and celebrate the multifaceted talents within our GMERS Medical College community.

Congratulations, Dr. Nilesh Thakor, on this remarkable achievement!



“શર્વિલ, ઉઠી જાઓ, જુઓ સવાર ના સાડા સાત થઈ ગયા, પછી તમારે હોસ્પિટલ જવાનું મોડુ થશે.” રસોડા માં રસોઈ બનાવતાં બનાવતાં નિર્મિકા એ બૂમ મારી ને બેડરૂમ માં સૂઈ રહેલા પોતાના પતિ ને ઉઠાડતાં કહ્યું. શર્વિલ પણ હોશિયાર હતો. આમ બૂમ થી થોડો ઉઠી જવાનો હતો! એ જાણતો હતો કે પોતે નહીં ઉઠે તો નિર્મિકા નજીક આવી ને પોતાની બંગડીઓની ખનક થી ઉઠાડવા બેડરૂમ માં આવશે. અને બસ નિર્મિકા આવી. આવતાં જ શર્વિલએ નિર્મિકા ને પ્રેમથી પોતાના આશ્લેષ માં જકડી લીધી.

“શું શર્વિલ તમે પણ સવાર સવાર માં મસ્તી જ સૂએ છો તમનો!” નિર્મિકા એ શરમથી આંખો ઢાળી દીધી.

“પત્ની ને પ્રેમ કરવો એ પણ ગુનો છે?” શર્વિલ ની આંખો માં પ્રેમ વરસતો હતો.

“હવે, જલ્દી તૈયાર થાઓ, તમારે હોસ્પિટલ જવાનું મોડુ થશે.” નિર્મિકા શર્વિલના આશ્લેષમાંથી નીકળવા મથામણ કરી રહી હતી.

બસ આવા જ નિર્મિકાના મીઠા સંવાદ સાથે શર્વિલની સવાર થતી. શર્વિલ ખુશ હતો. બસ હજુ થોડા દિવસો પહેલા જ શર્વિલના નિર્મિકા સાથે લગ્ન થયા હતા. નિર્મિકા પણ થોડા જ દિવસો માં શર્વિલની પૂરક બની ગઈ હતી.

રસોડામાં શર્વિલ નું ટિક્કિન ભરતાં ભરતાં નિર્મિકા એક ક્ષણ માટે શૂન્યમનસ્ક થઈ ગઈ. શર્વિલ હજુ નાહી ને તૈયાર થઈ ને આવે ત્યાં સુધી તો નિર્મિકા એ પર્સ, રૂમાલ, મોજાં અને ટિક્કિન બધું જ તૈયાર કરી ડાઈનિંગ ટેબલ પર મૂકી દીધું. પ્રેમથી ભરેલા ચુંબન થી શર્વિલને વિદાય આપી પોતાના ફ્લેટની ગેલેરી માં ઊભી ઊભી શર્વિલને નીરખી રહી હતી.

સપ્તરથ પર આરુઢ થઈ ને સૂર્યરાજ ની સવારી આવી ચૂકી હતી. તડકો હજુ ફૂણો હતો. આકાશમાં આછી આછી વાદળીઓએ સુંદર મજાની ભાત પાડી હતી. શીત હવાની લહેરખી નિર્મિકાના ગાલ પર રહેલા વાળને ઉડાડતી હતી. નીચે રોડ પર રિક્ષા, સ્કૂટર, બસ, કાર અને રાહદારીઓ રથવાયાં થઈ ને દોડી રહ્યાં હતાં. આમેય સુરત શહેર વ્યસ્ત શહેરોમાનું એક શહેર હતું. ત્યાં જ નિર્મિકાની નજર દૂર એક આશરે ૩ વર્ષ ની નાની બાળકી પર પડી. એ સુંદર મજાની ઢીંગલી પોતાના પપ્પાની આંગળી ઝાલી ને ધીમે ધીમે ડગ માંડી રહી હતી, એટલામાંજ એ ચાલતાં ચાલતાં પડી ગઈ અને આંખમાંથી મોતી સરતાં જ હતાં કે એના પપ્પા એ એને ગાલ પર પપ્પી આપી ઊંચકી લીધી. નિર્મિકાને એના પપ્પા ની યાદ આવી ગઈ અને એની આંખો પર બાજેલાં મોતીઓ એ એનો પુરાવો આપી દીધો. એવું નહોતું કે સાસરે કોઈ વાત ની ખોટ હતી, એથી વિરુદ્ધ સુરત શહેરની પ્રતિષ્ઠિત કોર્પોરેટ હોસ્પિટલમાં ફરજ બજાવતાં ડૉ. શર્વિલની અનહદ પ્રેમવર્ષામાં એ ભીંજાઈ રહી હતી, પણ ચિંતા પપ્પા થતી હતી. પપ્પા હવે એકલા હતાં.

“નિર્મિકા, આજે કદાચ એક મેડિકલ અસોસિએશન મીટિંગ અંતર્ગત અમદાવાદ જવાનું થશે. રિસેપ ટાઈમમાં પપ્પા ને મળી આવીશ અને એમની તબિયત પણ

પૂછતો આવીશ. તને સાથે જ લઈ જાત પણ બધા મિત્રો જોડે એમની જ કારમાં જવાનું છે.” શર્વિલે સોફા પર મોજાં પહેરતાં પહેરતાં ટિક્કિન પેક કરી રહેલી નિર્મિકાને સાદ પડી ને કહ્યું.

શર્વિલ આજે પપ્પા ને મળવા જશે એ વાત થી જ નિર્મિકા ની આંખોમાં ચમક આવી ગઈ.

“પપ્પા ને ત્યાં જવાના છો? જજો જ, ટાઈમ લઈ ને, અને ઊભા રહો આ ગાજર નો હલવો બનાવ્યો છે એ પેક કરી આપું છું. પપ્પા ને બહુ ભાવે છે.” નિર્મિકા ની આંખોમાં ખુશી નીતરતી હતી.

શર્વિલે નોંધ્યું હતું કે જ્યારે જ્યારે નિર્મિકા ટિક્કિન પેક કરી ને આપતી હતી ત્યારે ત્યારે એની આંખો જાણે કશુંક કહેવા માંગતી હોય એવો ભાસ થતો હતો, પણ એ આંખોને નિર્મિકા એક એવા આવરણમાં ગૂંથી લેતી કે શર્વિલ એની આંખો કળી શકતો નહોતો. પરંતુ આજે નિર્મિકાની આંખોમાં એવું કોઈ જ ગૂઢ આવરણ નહોતું, ખૂબ જ ખુશ હતી.

એનો હાથ હાથમાં લઈ ને બોલ્યો, “ હા ડિયર, હું થોડો પપ્પા ને મળીને જ આવીશ અને એમની પરીની ખૂબ યાદ આપીશ. એ પણ કહીશ કે પપ્પા તમે તમારી પરીની બિલકુલ ચિંતા ન કરશો. એ એના સાસરે પણ પરી બનીને જ રહેશે.”

જ્યારે જ્યારે નિર્મિકા શર્વિલ માટે ટિક્કિન પેક કરતી ત્યારે ત્યારે પપ્પા ની યાદ આવી જતી અને એ શૂન્યમનસ્ક થઈ જતી. પોતે ૧૨ વર્ષ ની હતી ત્યાર થી જ પપ્પા માટે એ જ રસોઈ બનાવતી પણ હવે પપ્પા પાસે કોઈ નહોતું. મમ્મી ની અચાનક વિદાય પછી નિર્મિકા એ જ ઘર ની સઘળી જવાબદારી સંભાળી લીધી હતી. પપ્પા એ પણ પોતાની એકની એક લાડકવાયીને પ્રેમથી ઉછેરી હતી. પણ હવે

“બેટા, પરી મારા ચશ્માં ક્યાંક મૂકાઈ ગયા છે, જરા શોધી આપ ને?” હાથ માં છાપું લઈ બહાર હાંચકા પર બેસતાં બેસતાં નટવર કાકાએ ઘર તરફ બૂમ મારી ને કહ્યું. જ્યારે કોઈ પ્રતિસાદ ન આવ્યો ત્યારે નટવરકાકાને યાદ આવ્યું કે પરી તો હવે પોતાના સાસરે હતી. રિટાયર્ડ જીવન જીવતાં નટવરકાકાના હૃદય માં દીકરી ને સારું ઘર મળ્યા નો સંતોષ હતો. એ પરીના રૂમમાં જાતાં, પરીના હોવાનો અનુભવ કરતાં. એના કપડાં, સ્કૂલ અને કોલેજની ચોપડીઓ, એની બેગ બધું જ જેમનું તેમ સચવાયેલું હતું જેવું એ મૂકી ને ગઈ હતી. એના રૂમમાંથી એની કોઈ પણ વસ્તુ આઘી પાછી ન થાય તેનું એ ખાસ ધ્યાન રાખતાં, ક્યારેક ક્યારેક એની યાદ આવતી ત્યારે ત્યારે એનું આલ્બમ જોઈ લેતા.

“શર્વિલ કુમાર, આવો આવો, બસ તમારી જ રાહ જોતો હતો, પરી નો ફોન આવી ગયો હતો કે તમે આવશો.” નટવરકાકા ચહેરા પર આકાર લેતી

ખુશીઓની રેખાઓ શર્વિલને સ્પષ્ટ દેખાઈ રહી હતી. શર્વિલે પણ સ્મિત આપી ઘર માં પ્રવેશ કર્યો.

“હા, પપ્પા, પરી ને પ્રોમિસ જો આપ્યું હતું કે હું પપ્પા ને મળવા જઈશ. અને હા પપ્પા લો આ પરી એ તમારા માટે ગાજર નો હલવો મોકલ્યો છે.”

“પરી બેટા એ મોકલ્યો? મારી પરી મજા માં તો છે ને?” નટવરકાકા હાથ માં ગાજર ના હલવાનો ડબ્બો પકડતાં પકડતાં જાણે પરીની આંગળી ઝાલી હોય એવો અનુભવ કરતાં હતાં.

“હા, પપ્પા, પરી એકદમ મજામાં છે, હવે ઉતરાણ પર અમે બંને સાથે આવીશું.” શર્વિલ જરા હળવાશથી કહ્યું.

“શર્વિલ કુમાર તમે બેસો, હું તમારા માટે ચા બનાવી લાવું. હું બનાવી ને જ રાખત, પણ પછી ચા ઠંડી થઈ જત તો મજા ના આવત.” હર્ષપૂર્વક નટવરકાકા એ કહ્યું.

“અરે પપ્પા, કોઈ તકલીફ ના ઉઠાવો.”

“અરે હોતું હશે, શર્વિલ કુમાર, તમે લગ્ન પછી આમ પહેલી વાર સાસરે આવ્યા છો, અને મારે પણ ચા પીવાની બાકી જ છે, આપણે બંને સાથે ચા લઈશું બસા” સંવાદ પૂરો થયો ના થયો નટવર કાકા એટલામાંતો રસોડામાં પહોંચી પણ ગયા.

શર્વિલ બેઠક રૂમમાં સોફા પર બેઠાં બેઠાં નિર્મિકાના પપ્પા સાથેના નાનપણના ફોટાઓ નીરખી રહ્યો હતો, એટલામાં એની નજર ટીપોઈ નીચે પડેલી એક ચિટ્ઠી પર પડી. કુતૂહલતાપૂર્વક એને ચિટ્ઠી જોઈ તો એ પામી ગયો કે અક્ષરો નિર્મિકા ના હતાં અને એ ચિટ્ઠી નિર્મિકા એ લગ્નના દિવસે એના પપ્પા ને ઉદ્દેશી ને લખી હતી. જિજ્ઞાસાપૂર્વક શર્વિલ વાંચી રહ્યો હતો.

પપ્પા...

આવતીકાલથી હું આ ઘર માં નહીં હોઉં, તમારી તબિયત નું ધ્યાન રાખજો, બી.પી. અને ડિયાબીટીસ બંને ની દવાઓ સમયસર લેજો. બધી જ દવાઓ ટી.વી. નીચેના કબાટમાં મૂકી છે, બધી દવાઓ પર કઈ દવા ક્યારે લેવાની છે એ મે લખી દીધું છે.

કબાટના ઉપર ના ખાનામાં તમારા બધાજ ધોયેલાં શર્ટ અને પેન્ટ ઈસ્ટ્રી કરીને મૂકેલા છે અને હા તમારા ચશ્માં ન મળે તો પહેલાં ટીપોઈની નીચે છાપાં પર જુઓ, પછી સોફાની ઉપરની આખી ધાર ચેક કરો અને છેલ્લે આપણાં ઘરની બહારની બાલ્કની પર જોજો.

ધાબા ની ટાંકી નો કોક ધાબા પર નહીં નીચે રસોડાના બારણાં પાછળ છે, ટાંકી છલકાઈ ને ઉભરાઈ જાય તો ઉપર દોટ ન મૂકતાં....

દાઢી કરવાની ટૂચૂબ હમૈશા તમારા શેવિંગ કરવાના પાઉચમાં જ મુકજો, ટૂથબ્રશ અને ટૂથપેસ્ટ મૂકીએ છીએ એ પ્લાસ્ટિકના નાના બાસ્કેટ માં નહીં...

મારો નંબર તમારા મોબાઈલ માં પરી ના નામે સેવ કર્યો છે એટલે નિર્મિકાના નામે નામે શોધતા નહીં અને તોય મારો નંબર મેં રસોડા માં લગાવેલા કેલેન્ડર પર મોટા અક્ષરે લખ્યો છે. તમારી અને મમ્મી ની યાદ આવશે એટલે તમારી જાણ બહાર હું આપના લગ્ન નું આલ્બમ લઈ જાઉં છું.

અને હા પપ્પા કાલ થી રસોડા માં રસોઈ બનાવવા હું નહીં હોઉં, તમને જે આવડે એ થોડું થોડું બનાવી લેજો. રસોડા ના મસાલિયામાં મે અજમાની ડબ્બીમાં અજમો અને જીરાની ડબ્બી જીરું લખેલી ચબરખી મૂકી છે. એવું જ મીઠા ની અને સોડા ની બરણી ઓ માં પણ કર્યું છે.

મારી આંખો માં સમાય એટલી બધી જ યાદો અને પપ્પા તમારા સાથે વિતાવેલી એક એક પળ ને અને નાનપણ માં તમારા ગાલ પર મેં વ્હાલપૂર્વક આપેલી એક એક પપ્પીની યાદો ને મનમાં ભરી ને લઈ જાઉં છું. તમારી યાદ આવશે પપ્પા.....

લવ યૂ પપ્પા

તમારી લાડલી પરી.....

શર્વિલ ચિટ્ઠી પૂરી કરતાં જ લાગણીશીલ બની ગયો. દરરોજ ટિક્કિન આપતી વખતે નિર્મિકા ની આંખોમાં રહેલા ગૂઢ આવરણ પાછળ પોતાના પપ્પા ની ચિંતા ને આજે શર્વિલે કળી લીધી હતી.

ડોરબેલ વાગતાં જ નિર્મિકા એ દરવાજો ખોલ્યો અને ખોલતાં જ શર્વિલ ને જોઈ ને ખુશ થતાં થતાં કહ્યું “ પપ્પા ને મળ્યા શર્વિલ? એ મજા માં તો છે ને?”

હજુ શર્વિલ કંઈ જવાબ આપે એ પહેલાં એના હાથ માં રહેલી બેગ ને જોતાં જ નિર્મિકા એ આશ્ચર્યપૂર્વક ફરી પાછી સવાલો ની ઝડી વર્ષાવી “ આ બેગ કોની છે? કોઈ મહેમાન આવ્યું આપણાં ઘરે?”

શર્વિલે બેગ નીચે મૂકી નિર્મિકા ના ગાલ પર પ્રેમપૂર્વક હાથ ફેરવી જવાબ આપ્યો. “ માફ કરજે, તારી આંખો ને કળતાં સહેજ મોડુ થયું, પગલી પ્રેમ કરું છું તને, એકવાર પણ કહ્યું હોત.... જો કોણ આવ્યું આપણાં ઘરે, હવે એ મહેમાન બની ને નહીં પણ સદાય આપણાં સાથે જ રહેશે.”

નિર્મિકા એ જોયું તો એના પપ્પા સીડીઓ ચડી ને આવી રહ્યા હતાં. નિર્મિકા શર્વિલ ને ભેટી પડી. કોઈ સંવાદ ના કરી શકી પણ આંખો માં આવેલા આંસુઓ સઘળું વ્યક્ત કરતાં હતાં.

પપ્પા ને આવતાં જ નિર્મિકા ભેટી પડી. શર્વિલ વિયોગ બાદ આજે રચાયેલા પિતા-પુત્રી ના મિલન ના સુખદ સંયોગ ને લાગણીશીલ બની નીરખી રહ્યો હતો.

“નીલ”

Dr. Nilesh Thakor,
Associate Professor,

Department of Community Medicine

Mindfulness Meditation for Doctors



Did you know that 50%-76% of practicing doctors are currently suffering from burnout? 51.3% healthcare workers have reported having depression and 66.9% have reported dealing with anxiety. These numbers aren't just statistics, they are the reflection of healthcare all over the world today.

A profession requiring such extreme emotional needs, along with the arduous work hours and unimaginable patient load explains the state of healthcare today.

When we try to go to the root cause of the issue, we see that the only way to improve the quality of healthcare being given to the patients all over the world is by improving the quality and health of the healthcare providers. Nothing affects the quality of healthcare more than the state of a doctor. A burnt-out doctor will not be equipped to effectively treat a patient. Anyone whose work involves immense human suffering needs to be aware of the condition of their inner life. The nature of the work that physicians do makes them more vulnerable to negative emotions or making errors.

It makes a lot of sense why a patient would not want to go to a doctor who is chronically ill. Why do we expect patients to keep seeing doctors when they are burnt out and emotionally exhausted?

This brings us to the two aspects of health, the physical, and the emotional (the term can be used interchangeably with mental, or emotional, in this context). The physical aspect of health, we have learnt to look after- you eat right, go to sleep at a reasonable hour, get

7-8 hours of sleep, drink plenty of water and have a nutritious diet.

What about the emotional? The answer here is, meditation. We have been wired to disregard the entire conversation as soon as the term 'meditation' is brought up. That is only because of the negative connotation attached to it. When we think of meditation, we think of waking up at 4am and sitting with yourself, eyes closed for hours on end and who has time for that anyway? I'd rather be on social media and feel better. Trust me, that's always the starting point.

What we fail to see is that numerous researchers have concluded that meditation is the most effective way to deal with life today, especially as a doctor.

Dr. Ronald M. Epstein, M.D., Professor of Internal Medicine at the University of Rochester in New York, a Family and Palliative Care Physician, and author of "Attending: Medicine, Mindfulness, and Humanity"; says that mindfulness is a powerful tool for medical professionals in dealing with personal stress, being more compassionate, and reducing clinical errors.

Let's talk about mindfulness. It's a pretty straightforward word. It suggests that the mind is fully attending to what's happening, to what you're doing, to the space you're moving through. Mindfulness is the basic human ability to be fully present, aware of where we are and what we're doing, and not overly reactive or overwhelmed by what's going on around us.

It really is simple. We need to learn to make sure our brain is focusing on the one task at hand, dealing with the emotions attached to it, and moving on to the next. No matter how far we drift away, mindfulness is right there to snap us back to where we are and what we're doing and feeling

When you combine this with meditation, all it means is that wherever you are, you take a moment, become mindful and fully aware of yourself and your surroundings in any particular moment. It's a type of meditation in which you focus on being intensely aware

of what you're sensing and feeling in the moment, without interpretation or judgment. Practicing mindfulness involves breathing methods, guided imagery, and other practices to relax the body and mind and help reduce stress.

It can go from there to being in a meditative state for as long as you please. That is a very personal choice, how, when and where you choose to meditate. Once you start, you can develop the skill as and when required.

It is a common complaint that people today cannot find time for meditation. But the truth is, you don't need to. There are techniques that will take a few seconds for you to center yourself.

Try these six mindfulness techniques today and see how other physicians have benefited from incorporating mindfulness into their daily lives.

1. *Pause and breathe*: Pause, breathe, and notice, for example, your feet on the ground. A surgeon who uses the technique has said that at tricky moments during operations, this has helped him stay calm and clear so he is better able to respond precisely as needed to the problem at hand.
2. *Mindful meditation*: Using this meditation on the natural breath, be aware of the touch of the breath and the different sensations as you breathe. Exercise compassion by not being hard on yourself when the mind wanders, and gently return your attention to the breath. You can do this for as little as 1 minute and notice a difference.
3. *Awareness of feelings and thoughts*: Watch your thoughts come and go. You can also name individual thoughts - for example, "this is anger." Some practices involve asking "How do I feel?" and naming the emotion. Once you have named your emotion, you can ask yourself where it came from or what triggered that response from you so you will see how to deal with it better.
4. *Find your feet*: This is as simple as it sounds: when seated or standing, become aware of where your feet are, their position on the floor, the balance of weight between the two feet, and any sensations in them.
5. *Make ordinary tasks extraordinary*: Make tasks less of a routine by experiencing them as if for the first time, and with the inquisitive nature of a child. The aim is to notice the activity itself.

6. *Body scan*: Lying down, bring awareness to different parts of the body, notice the body's position in space, and take note of any sensations - both pleasant and unpleasant - while acting as a non-judgmental witness to the experience. The aim is to cultivate awareness and be present with whatever is happening.

These are methods that will not take you more than a few minutes to center yourself.

On a deeper level, if you'd like to explore the world of meditation, you could try what is known as Vipassana meditation. It is the most ancient meditation techniques rediscovered by Gautama Buddha. Vipassana stands for insight into the nature of reality. It leads to permanent release from old habit patterns of mind and gives neutral insight. It is said that by practicing vipassana, one can overcome delusions of mind and cultivate mindfulness. Vipassana operates at conscious and deep unconscious level of mind leading to long lasting happiness and peace. Vipassana is taught in 3 steps:

1. *Shila*: Code of conduct / morality
2. *Samadhi*: Focussed concentration leading to mastery over mind
3. *Pragya*: Experiential wisdom achieved with the practice of vipassana.

Let's look at the effects of meditation on brain.

- *Neuroelectrical effects*: Meditation wave pattern is a combination of alpha and theta waves. Awakened wave pattern emerges in people doing meditation over years with perfection. Even in beginners after first practice of meditation, there are perceptible changes in wave pattern
- *Neurobiology of meditation*: Neuroimaging studies with MRI, rCBF (regional cortex blood flow), MEG (magnetoencephalography), improved EEG allow detailed study of effect of meditation on neural behaviour. Meditation blocks sensory and cognitive input into the prefrontal area which is responsible for orientation of time and space. Meditation results in the sense of no time and no space. Meditation increases rCBF in prefrontal cortex which is responsible for cognition, judgement.
- *Hormonal effects*: Increased serotonin levels helps in improving mood and behaviour of person. Heart rate and breathing slows down during meditation

and stress response is cut down. Production of catecholamines is reduced as parasympathetic system activity predominates. There is reduced limbic arousal, so ability to cope up with stress is enhanced. By inhibiting left cortical hemisphere, the sense of time and logic no longer dominate consciousness.

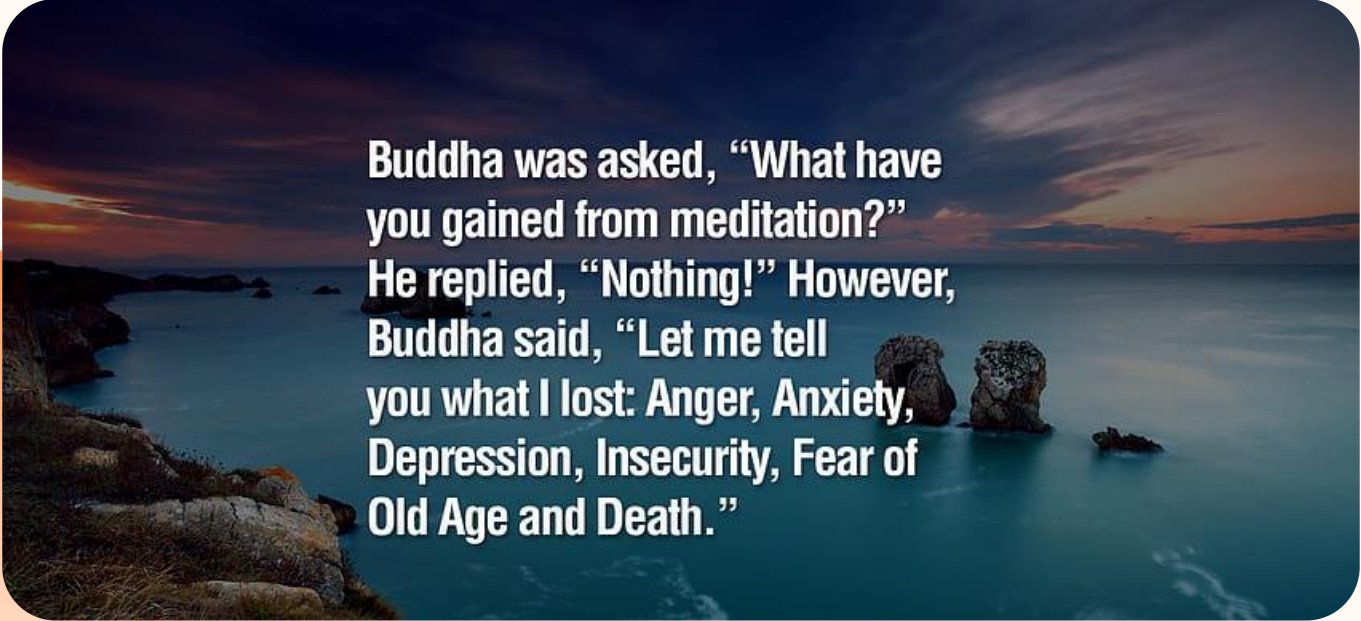
In a research paper published in the International Journal of Environmental Research and Public Health in March of 2022, it was concluded that the intervention of mindfulness meditation significantly improved the level of mindfulness, patient safety culture and patient safety competency. During the mindfulness meditation intervention, the rate of adverse events in the meditation group was also significantly lower than in the control group. As a simple and effective intervention, mindfulness meditation plays a positive role in improving patient safety and has certain promotion value.

When one has undergone the training of balancing, the mind can learn to remain equanimous in all odds of life, can face worst of circumstances and illnesses in much better way. The equanimity of mind at time of death changes the equation for next birth. This is why one should meditate regardless of their status.

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Dr. Jignesh Harakhani
Tutor,
Department of Physiology



Buddha was asked, "What have you gained from meditation?" He replied, "Nothing!" However, Buddha said, "Let me tell you what I lost: Anger, Anxiety, Depression, Insecurity, Fear of Old Age and Death."

Crafting Heritage: The Potter's Pride



Dr. Ankur Zalawadia
Professor & Head,
Department of Anatomy

MediCeleb Biochemistry Quiz



1. What was the cause of death of this superstar? Name the biochemical markers for its diagnosis.



5. Identify the disease this famous physicist suffered from. What is the genetic mutation seen in this disease?



2. Which disease is common amongst them? Name the biochemical markers to diagnose the disease.



6. Identify the common disease they both are suffering from. Which drug gives a false positive spike in serum protein electrophoresis?



3. Name the disease this famous singer is suffering from. What is the genetic mutation seen in this disease?



7. Identify the autoimmune disease he is suffering from. Which biochemical test supports the diagnosis of this disease?



4. Identify the disease for which she was in talk on social media. Which strains are used to prepare the vaccine for the disease?

Undergraduate medical students and interns are encouraged to participate by submitting their correct answers to the Department of Biochemistry on or before April 22, 2024. Winner will be announced and rewarded accordingly, serving as an incentive for active participation and engagement with the quiz material.



Theme 2024

Close the Care Gap

A call to action to reduce the global impact of cancer, reminding us that even small efforts can make a big difference.

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