



Niranthara- Ramaiah Hospital Day



Another year brings another celebration of Hospital Day, a time when the dedicated staff members of the hospitals take a break from their busy schedules to fully immerse themselves in the events organised to them.

This year was no exception, filled with the same enthusiasm, joy, and excitement.

The Ramaiah Medical College and Hospitals hosted the hospital day- Niranthara. Variety of events, which included sports, dance, singing competitions etc, was all designed for the entire staff members to participate in the events.

The Ramaiah Medical College and Hospitals celebrated Hospital Day, known as Niranthara, with a diverse range of events. These activities, which included sports, dance, and singing competitions, were specifically organized to encourage participation from all staff members.

The annual celebration took place on December 4th, 2024. This year, the chief guest for the event was H.G. Dattatreya, a renowned

Kannada film actor, who graced the occasion with his presence. He shared insightful thoughts on life and its philosophy.

Dr. M R Jayaram, Chairman, GEF & Chancellor, RUAS, M R Sreenivasa Murthy, Chief Executive, GEF(M), Venugopal Sastry, Chief Finance Officer, GEF(M), Dr. S C Nagendra Swamy, President, Ramaiah Memorial Hospital, Prof. K K Raina, Vice Chancellor, RUAS, Dr. Shalini C Nooyi, Principal & Dean, Ramaiah Medical College & Hospital, Dr. Ramesh D, Associate Dean, Ramaiah Medical College Hospital, Dr. Madan S Gaekwad, Chief Operating Officer, Ramaiah Memorial Hospital, Dr. Razdan, Advisor, GEF(M) and others were part of the programme.





RAMAIAH

Celebrating Milestones, Innovation, and Community Engagement at Ramaiah Institutions

ಜ್ಞಾನವಾಹಿನಿ
Jnana Vahini

Monthly Newsletter - Gokula Education Foundation (Medical)

Volume - 15 Issue - 12
December - 2024

Chief Patron

Dr. M R Jayaram
Chairman, GEF
Chancellor, RUAS

Editor in Chief

M R Sreenivasa Murthy
Chief Executive, GEF (M)

Editor

Dr. B S Nandakumar

Associate Editor

Chandra

Editorial Team

Ragi Saggere
Ravi V
Ravi C U, Photographer

Design and Printing

DIGITAL ART WORKS
info@dawindia.com

Contact

+91 2218 2822/3205
+91 2360 5190, Extn. 1315/3595
+91 88674 99288
gokula.jnanavahini@msruas.ac.in
gokulagnanavahini@gmail.com

www.ramaiah-india.org

As the year draws to a close, it is heartening to reflect on the accomplishments and the shared spirit of progress at Ramaiah Medical College and Hospitals. December has been a month brimming with events, achievements, and meaningful contributions across diverse domains.

The annual Hospital Day, celebrated on December 4th, brought a wave of joy and camaraderie, epitomized by its theme, "Nirantharam." The enthusiasm of staff members during the logo competition and cultural events highlighted the spirit of togetherness. Esteemed guests like Kannada actor H.G. Dattatreya graced the event, underscoring the institution's deep-rooted community values.

Innovation in cancer care was celebrated with the Radiation Oncology Department's remarkable achievement of treating over 1,000 patients using the advanced Saginova HDR brachytherapy system. This milestone, coupled with the department's recognition as a Centre of Excellence, affirms its commitment to pioneering medical practices and improving patient outcomes.

The institution also shone brightly in academics and research, with several faculty members and students earning accolades at national and international platforms. From prize-winning presentations in conferences to faculty publications and community-driven outreach programs, the dedication to excellence remains steadfast.

December also showcased initiatives like the World AIDS Day role play, emphasizing awareness and education, and Civil Defence Day health camps, which reinforced the institution's focus on public health and inclusivity. These programs are a testament to Ramaiah's holistic approach, blending medical expertise with societal responsibilities.

As we welcome the new year, let us carry forward the legacy of excellence, innovation, and community impact. Together, we can build on these successes, ensuring that Ramaiah Medical College and Hospitals remain a beacon of hope and progress for all.

The Department of Dermatology celebrated World AIDS Day on 6th December, 2024 by enacting an educative role play performed by the post graduate students at Ramaiah Institute of Nursing Education and Research to raise awareness and promote education about HIV/AIDS among the students.



Vikram Gowda and Harsha R were been selected for the All-India University Nationals which was in Chennai at SRM University on 21st – 23rd December, 2024.

Every year on December 6, Civil Defence Day is observed to raise awareness among the public and underline the relevance of civil protection. Dr. Aruna C Ramesh, Prof. & HoD, Dept. of Emergency Medicine, Commanding Officer of Casualty Services, Civil Defence, Karnataka, inaugurated the cancer detection program. As a part of this Ramaiah Medical College Hospital conducted the health camp for Civil Defence, and Home Guards.



Dr. Priyanka NP, MS Ramaiah Medical College
ORAL PRESENTATION AWARDS - MISCELLANEOUS 1 TRACK

Dr. Priyanka & Dr. Santra from department of Radiation Oncology won first and second prize in Oral presentation at National Conference Association of Radiation Oncologists of India (AROI) Annual conference AROICON at Mangaluru.



ORAL PRESENTATION AWARDS - ADVANCES IN ONCOLOGY TRACK
 Dr. Santra Mary Jose, MS Ramaiah Medical College

Illuminating Hope: 1000 Lives Transformed Through HDR Brachytherapy at Ramaiah Medical College



The Radiation Oncology Department at Ramaiah Medical College has achieved a remarkable milestone, successfully treating 1,000 patients using the state-of-the-art Saginova High Dose Rate (HDR) Brachytherapy system within a short span. This accomplishment underscores the commitment of the department to excellence in cancer care and innovation,

particularly in brachytherapy.

A Journey of Excellence in Brachytherapy

The journey in brachytherapy began in 1998 with Low Dose Rate (LDR) treatments close to 1000 patients, laying a strong foundation for cancer care. Over the years, the team has continually embraced advancements, treating nearly 1,250 cases using the Bebig Multi-Source HDR system over 7 years before adopting the Saginova HDR brachytherapy machine in 2020. The transition to Saginova has been transformative, offering unparalleled precision and versatility in cancer treatments.

Transforming Cancer Care with Image-Guided Brachytherapy

The integration of image-guided brachytherapy (IGBT) has revolutionized outcomes for cervical cancer patients, one of the most common malignancies treated at the department. Combining CT imaging techniques with precision treatment delivery, has significantly improved local control rates while minimizing treatment-related toxicity. This technology allows for accurate tumor targeting, ensuring optimal escalated dose delivery while protecting healthy tissues.

The department has also extended the use of brachytherapy to treat other gynecological malignancies like endometrial cancer, vulvar and vaginal tumors, head and neck malignancies, interstitial brachytherapy for soft tissue sarcomas, mould brachytherapy for skin cancer and benign lesions like keloid.

Recognition as a Centre of Excellence

Radiation Oncology Department of Ramaiah Medical College has been recognized as a Centre of Excellence for training in brachytherapy. A testament to its leadership in the field was hosting first-ever hands-on cadaveric brachytherapy workshop. This pioneering event covered intricate procedures for head and neck, cervical, and prostate cancers. The workshop, held in 2021, featured renowned brachytherapy expert Dr. Peter Hoskin, who conducted specialized sessions on prostate cancer.

Acknowledging Contributions

This achievement is a collective success, made possible by the unwavering support of our senior faculties whose leadership has been instrumental in pioneering advancements in brachytherapy, shaping the department into a beacon of excellence. Department extends heartfelt gratitude to our former faculty who have since moved on but left an indelible mark on its legacy. Their efforts, combined with the unwavering support of current faculty, management, surgical and medical oncology colleagues, and dedicated staff, have made this milestone possible.

With this milestone, the department remains committed to pushing boundaries in oncology, ensuring access to cutting edge therapies for patients while advancing research and clinical excellence. This achievement is a testament to our mission of providing world class cancer care and improving patient lives.



Dr. Spandana won 2nd best paper presentation in the free paper category at 43rd Karnataka State Paediatric Conference -KARPEDICON at Mysuru.



Dr. A R Somashekhar, Prof. Dept. of Pediatrics was felicitated by the Mandya District Collector's office for his service in the field of medicine, at 87th All India Kannada Sahitya Sammelna, Mandya.

He was also a speaker at a workshop on 'Gateways To Airways' as national co-ordinator and spoke on Approach To Congenital Airways Anomalies case-based approach.

On the occasion of the 69th Kannada Rajyotsava at Gandhi Bhavan, Dr. A R Somashekhar's book was released. The book titled 'Teenage Problems, Challenges'. It is a book which is a manual for the physical health and mental development of teenagers.



Dr. Sahil Srinivas won the best paper presentation titled, "Second Victim Syndrome among Nurses in a Tertiary Care Hospital in India: Prevalence and Exploring Organizational Mitigatory Efforts" at the National SASH conference in New Delhi on 19th December, 2024.



Dr. Smitha R Chandra, Junior resident from the Department of Hospital Administration won 1st prize in poster presentation for the topic 'Effectiveness of Outreach Programs through Mobile Screening Unit'.



Dr. Varsha, Asst Prof. Dept. of Cardiology, was invited as faculty speaker at the DEDEPT cardiology annual CME programme on 20th - 21st December, 2024 at Gangtok.

The dignitaries honoured the senior employees who completed 16 and 25 years of service



Sports and cultural events were organised as part of the hospital day celebrations



0.15 Delta

Sleep is a vital physiological process essential for physical and mental health. Among the various stages of sleep, non-rapid eye movement (NREM) stage 3, also known as deep sleep or “restorative sleep” because of its crucial role in physical recovery and maintenance.

This restorative phase of sleep has profound effects on brain function, physical health, metabolism, hormonal balance, behavioural patterns and body weight regulation and overall well-being, making it indispensable for a healthy life. During this phase, the body repairs tissues, regenerates cells, and strengthens the immune system. Growth hormone, which is essential for muscle growth, tissue repair, and bone health, is predominantly secreted during deep sleep.

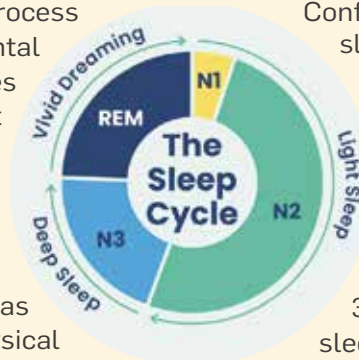
Additionally, deep sleep helps regulate metabolism. A lack of adequate stage 3 sleep has been linked to an increased risk of obesity, diabetes, and cardiovascular diseases. Chronic sleep deprivation disrupts the balance of hunger-related hormones, such as ghrelin and leptin, leading to overeating and weight gain.

It typically occurs early in the sleep cycle and constitutes about 15-25% of total sleep in adults. During this stage, the body is in its most relaxed state: heart rate and breathing slow to their lowest levels, muscles are completely relaxed, and the brain’s metabolic activity decreases significantly. Confirmative tests for this is Level 1 Polysomnography.

Disorders associated with disrupted stage 3 NREM sleep

Night terrors

Sleep walking (Somnambulism)



Confusional arousals (partial waking with sleep inertia)

Periodic limb movement disorders (PLMD)

Sleep related eating disorders

Ways to Promote Deep Sleep:

To optimize the benefits of NREM stage 3 sleep, it is essential to maintain healthy sleep hygiene. Some strategies include:

1. Establishing a Consistent Sleep Schedule: Going to bed and waking up at the same time every day helps regulate the sleep-wake cycle.
2. Creating a Sleep-Friendly Environment: A dark, quiet, and cool bedroom promotes better sleep quality.
3. Limiting Stimulants: Avoiding caffeine and electronic devices before bedtime can reduce interference with deep sleep.
4. Regular Physical Activity: Exercise promotes deeper sleep, but it is best to avoid vigorous activity close to bedtime.
5. Managing Stress: Relaxation techniques, such as meditation and deep breathing, can enhance the ability to transition into deep sleep.

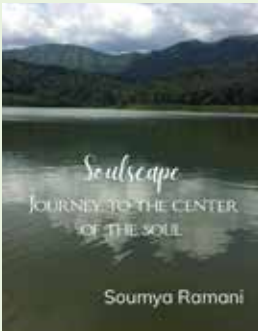


Dr. Prasanna Kumar T

Associate Professor
Dept. of Respiratory Medicine



Dr. Komala N, Prof. Dept. of Anatomy received third prize in quiz competition in International conference on health professional education on 14th December, 2024 at Sduaher, Kolar.



Dr. Sowmya Ramani, Faculty, Ophthalmology published her first book of poetry called Soulscapes

NSS-RUAS, RUAS-Rotaract in association with Department of Community Medicine, Ramaiah Medical College and Faculty of Dental Sciences, conducted a school health camp at the Government Tribal Residential School in Konanakere village, located at the foothills of the Malai Mahadeshwara Reserve Forest in Chamarajanagara District. The multidisciplinary team of medical professionals from the Departments of Community Medicine, Paediatrics, Ophthalmology, ENT and Dermatology, Ramaiah Medical College was led by Dr. Ananth Ram, NSS Coordinator-RMC, Assistant Professor, Community Medicine. The team provided a comprehensive health promotion, screening and curative clinical services to 144 students from class 1 to class 6, created individual student health records and provided medications to the school. This was publicized widely in multiple local newspapers and was ably supported by the school staff, local administration and the community.



Dr. Jyothi G S Prof. & Head Dept. of OBG, was as an expert panelist for the session on – Menopausal Care-Innovation to Implementation, at the Femtech 360 degree Global Women's Health Innovation Conference & Awards on 11th December, 2024 at IIT Mumbai. She was an invited speaker and faculty for the symposium on “Navigating Surgical complications in Obstetrics and Gynaecology” and gave a talk on – “The Role of Adhesion Barriers in Obstetrics & Gynaecology” organized by the AIG Hospitals, Hyderabad on 14th December, 2024.

She also participated as a speaker and gave an awareness talk in the JAGRUTHI BMS / IMS program on 17th December, 2024 for the public on the importance of HPV Vaccination at Bengaluru.

The Border Run – The hell Race

Dr. Dhananjaya G, Professor in the Department of Pedodontics, Faculty of Dental Sciences, participated in the marathon 'The Border Ultra'. He successfully completed a 100 KM run in the remarkable time of 13:05:58. Kudos to his incredible energy and achievement.



Self Pap Smear: A Step Towards Accessible Health Care

Cervical cancer remains a significant health concern worldwide. According to the World Health Organization (WHO), an estimated 604,000 women were diagnosed with cervical cancer in 2020, resulting in 342,000 deaths. India has one of the highest incidences globally. It is the second most common cancer among Indian women and a leading cause of cancer-related deaths. In response to these alarming reports, in May 2018, WHO initiated a global call for action for elimination of cervical cancer. The three key pillars for the program are referred to as 90-70-90; 90% vaccination of girls by age of fifteen, 70% of women to be screened with a high-quality test twice by ages 35 and 45 and 90% treatment of women with pre-cancer and cancer.

To support the endeavour **January** is celebrated as **Cervical Cancer Awareness month**. The theme for 2025 is **"To Get Educated"**. The goal is to highlight the importance of empowering women with the knowledge of screening and preventive measures. It is even more pertinent in a densely populated country like India with majority of the population in the middle and low socioeconomic strata. The Self Pap Smear plays a pivotal role in this and will be an effective game changer.

Developed in the early 20th century by Dr. Georgios Papanikolaou, Pap Smear is now synonymous to cervical cancer screening. This clinically simple procedure had nestled as a cumbersome examination in the minds of patients. During the recent pandemic, when routine health check-ups became unfeasible, self-sampling methods for Human Papillomavirus (HPV) began to gain traction. It was recognized that HPV testing could complement or replace Pap smears for cervical cancer screening. Scientists explored ways that women could self-collect vaginal and cervical samples to test for high-risk strains of HPV, which cause nearly all cases of cervical cancer. Earlier studies had indicated that self-sampling for HPV was effective and well-accepted by patients,



especially among those with limited access to regular screenings.

The primary cause of cervical cancer is persistent infection with high-risk Human Papillomavirus (hrHPV) types. Factors like limited screening, lack of awareness, and barriers to healthcare access contribute to the high burden. Recent efforts focus on expanding HPV vaccination and improving access to cervical screening through community-based programs and initiatives. Studies suggest that self-sampling could increase screening participation by up to 20-30% among women who might otherwise skip regular tests.

As evident by the name, self Pap smear is a test that women can conduct on themselves at their place of choice, using a kit to collect a sample from the cervix. This kit usually includes a swab or brush similar to the one used in a clinical setting and clear instructions. Once the sample is collected, it is then sent to a laboratory for analysis. In some cases, the test can screen for both cervical cell abnormalities and the HPV.

Often confused with Self-collection HPV testing, self-administered Pap smears differ fundamentally in objectives and procedural complexity. The self-collection HPV test is designed for the detection of high-risk human papillomavirus types, utilizing a simple vaginal swab to collect epithelial cells. This approach facilitates ease of use in non-clinical settings, with laboratory analysis focused on viral DNA detection. In contrast, a self-administered Pap smear aims to identify cervical cytological abnormalities by collecting exfoliated cells directly from the cervix. This requires greater precision and technical proficiency, limiting its viability as a reliable at-home screening method.

Research has shown that self Pap smears can be an effective alternative to traditional Pap smears. In a 2020 meta-analysis of 36 studies across various countries, self-collected samples for HPV testing demonstrated a sensitivity of 83% and a specificity

of 84% in detecting cervical intraepithelial neoplasia grade 2 or higher (CIN2+), conditions that can lead to cervical cancer. This is nearly comparable to clinician-collected samples, which showed an 85% sensitivity and 88% specificity. These findings are significant because they support the potential for home-based Pap smears to detect pre-cancerous conditions with a similar degree of accuracy to clinical tests.

The effectiveness of self-collection also extends to HPV testing, often included with self Pap smear kits. A study conducted in the Netherlands found that self-sampling was effective in identifying high-risk HPV strains, such as HPV-16 and HPV-18, with a sensitivity of over 90% for HPV infection, nearly matching the sensitivity of clinician-collected samples.

In clinical settings, professionals are trained to collect cervical samples correctly to maximize accuracy, but home-based tests depend on the individual following instructions closely. To help women understand the process better, most kits come with visual aids, written instructions, or online tutorials.

The benefits of self pap smear outweigh any doubts over the efficacy as it increases access to screening: Many women face logistical challenges in accessing routine gynecological care due to geographic, economic, or personal barriers. Self Pap smears allow women in rural or under-served areas to test themselves at home, reducing the need for frequent visits to healthcare facilities.

Self Pap smears offer several benefits, including greater privacy and comfort for women who may find pelvic examination stressful or uncomfortable, providing a less invasive alternative that encourages regular screenings. They also hold potential for early detection of cervical cancer by making it more convenient to collect samples at home, increasing adherence to screening schedules and boosting early detection rates. Additionally, self-testing can save time and reduce costs, particularly for women with busy lives or limited access to affordable care. However, challenges remain, such as ensuring

proper sample collection for accurate results, particularly for women unfamiliar with clinical Pap smears, emphasizing the need for user-friendly kits and clear instructions. Follow-up care is also crucial, as abnormal results require immediate medical attention, making it essential for women to understand the importance of follow-up appointments. Furthermore, maintaining quality control in sample handling and interpretation highlights the necessity of clinical oversight and collaboration between healthcare providers and laboratories. Lastly, addressing disparities in health literacy through comprehensive instructions and support resources can enhance the effectiveness of self-sampling programs.

Although self Pap smears are not yet widely available everywhere, more clinical research and data collection could help make self Pap smears a widely accepted option. In India, self-collection HPV testing kits for cervical cancer screening are more commonly available than self-administered Pap smear kits. Companies like **Mapmygenome and Datar Cancer Genetics** offer HPV self-testing services, which include sample collection kits that can be used at home. These kits are generally used to detect high-risk HPV strains, a major cause of cervical cancer. Additionally, initiatives by public health programs and NGOs are helping to increase the availability of self-sampling methods in India, particularly in underserved areas. This transition would mark a meaningful step forward in women's health, empowering women to take greater control of their preventive care and leading to an estimated 20% increase in screening participation and earlier detection of cervical cancer. In turn, self Pap smears could play a critical role in reducing the global cervical cancer mortality rate, especially in low- and middle-income regions.

Dr. Jyothi G S

Professor & Head
Department of Obstetrics & Gynaecology



Healing Journeys: Tales from the Field

The story of Jyotish, a resident from our field practice area, exemplifies the impact of timely medical intervention and multidisciplinary teamwork.

When a diabetes-related complication, initially mismanaged elsewhere, threatened his health, swift action was taken by our Medical Social Workers, Ravikumar (RICPHI) and Harish (Community Medicine), who promptly referred him to our hospital under the guidance of Dr. Ananth Ram.

Upon arrival, Jyotish required an emergency fasciotomy, expertly performed by Dr. Bharati and Dr. Suhas from the Department of Surgery. Shortly after, he faced a life-threatening health challenge that rapidly escalated, with severe end-organ damage affecting the kidneys, liver, and lungs, compounded by dengue-related thrombocytopenia.

Despite these challenges, coordinated efforts by our ICU team, the Infectious Diseases unit led by Dr. Srikanth and Dr. Sandeep Reddy, residents from the Department of General Medicine, and our dedicated nursing staff ensured comprehensive care and expert management during the critical period.

Today, Mr. Jyotish is on a steady path to recovery. With ongoing follow-ups facilitated by our Medical Social Workers and diligent care by interns who manage his periodic wound dressings at Kaiwara PHC, he is healing well at home.

This case highlights the essence of patient-centred care and the seamless collaboration between our departments. We take pride in these efforts and wish Mr. Jyotish a complete and swift recovery.

WELCOME



Dr. Kadambari Nanmaran
Senior Resident, Community Medicine



Dr. Bhavya N. Raju
Senior Resident, Anaesthesiology



Dr. Sneha P
Senior Resident, Pathology

SEPARATED



Dr. Blessy Babu
Senior Resident, Community Medicine



Dr. Swathe P
Senior Resident, Community Medicine



Dr. Virupaksha H.S
Professor, Psychiatry



Dr. Ravinuthala Purnima
Senior Resident, Respiratory Medicine