PRAVARA RURAL EDUCATION SOCIETY'S
PRAVARA RURAL COLLEGE OF PHARMACY
LONI

CLINI PHARMA CONNECT

THE PRCOP NEWSLETTER

PRAVARA RURAL COLLEGE OF PHARMACY, PRAVARANAGAR

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ABOUT THE INSTITUTE

Pravara Rural College Of Pharmacy, Loni was established in 1987 with aim to provide Quality Pharma education to the rural population. The Institute with a robust National and International Alumni Network of 3000+ Alumni, is today a bustling 800 student, 45 Teacher strength campus with State of the Art infrastructure. PRCOP continues to set benchmarks in pharma education, reflected in its accreditation by the NAAC with prestigious 'A' Grade.

Currently PRCOP offers D Pharm., B.Pharm, M.Pharm and Pharm D programmes– Approved by All India Council of Technical Education (AICTE), Pharmacy council of India (PCI),New Delhi and Govt. of Maharashtra . Our focus is on all round student development driven through our energetic academic research projects and industry driven curricula for D.Pharm/B.Pharm and M.Pharm. Our newer Pharm D Program offers Clinical Bench to Bedside Professional Pharmacy Training, as Global Pharma Education is becoming into a more patient centric .

CHIEF EDITOR'S DESK

It gives me great pleasure to present the inaugural issue of CLINI PHARMA CONNECT, a newsletter created by our Pharm.D students as part of the Pharmacy Practice Department's journey in its very first year. This milestone also coincides with the fourth year of our professional Pharm.D program, making this effort both timely and meaningful. This newsletter is envisioned as a vibrant space that bridges students, faculty, and practicing pharmacists—fostering dialogue, collaboration, and professional growth. In every issue, our goal will be to highlight not only academic learning, but also the evolving role of pharmacists as vital members of the healthcare team.

In this first edition, you will find a blend of content ranging from drug alerts and case reports, to insights on excipient safety, updates on state-level public health concerns, and creative contributions in our Talent Corner. Campus highlightstoo, added a personal touch to the professional narrative.

Looking ahead, our upcoming issues will explore emerging areas in professional pharmacy—clinical decision support systems, digital health and telepharmacy, regulatory updates, practice-based outcomes (PBOs), and evolving patient safety protocols. We also plan to include interviews with practicing clinical pharmacists, interactive puzzles, and thought pieces from healthcare experts to enrich learning.

What you see today is a modest beginning, but it carries the energy and vision of our budding pharmacists who are preparing to step into an ever-expanding professional arena. I thank our contributors and editorial team for their dedication, and I invite all readers to journey with us as CLINI PHARMA CONNECT grows into a dynamic platform for knowledge-sharing, curiosity, and professional inspiration.

Happy reading—and happy connecting!

CONTENT

1.DRUG SAFETY ALRETS

1.DRUG SAFETY ALRETS

MONTH	DRUGS	INDICATION	ADR
Mar 2025	Metronidazole	Amoebiasis , giardiasis and urogenital trichomoniasis	Acute Generalised Exanthematous Pustulosis
	Luliconazole	Cutaneous mycosis viz. Tinea pedis, Tinea corporis and Tinea cruris	Chloasma/ Melasma
	Dalteparin	Venous Thromboembolism (VTE) proximal Deep Vein Thrombosis (DVT)	Muscle Spasm
	Gliclazide	Maturity onset diabetes, diabetes without or with obesity in adults.	Erythema multiforme
	Tramadol	Severe acute and chronic pain.	Fixed Drug Eruption
May 2025	Sulfamethoxazole + Trimethoprim	UTI, Respiratory-tract infection including Bronchitis, Pneumonia, infections in Cystic Fibrosis,	Leukopenia
Jun 2025	Beta-blockers (Propranolol, Metoprolol)	**Propranolol** : Cardiac arrhythmias, tachycardia, hypertrophic obstructive cardiac myopathy, **Metoprolol:** Angina pectoris, hypertension, myocardial infarction.	Psoriasis, Erectile Dysfunction
Aug 2025	Tranexamic Acid	Pulmonary, haemorrhage, epistaxis, renal bleeding abnormal bleeding during or after prostate surgery.	Nasal Congestion
Jun 2024	Acetazolamide	Open angle glaucoma.	Choroidal effusion or Choroidal detachment
	Amlodipine	Hypertension	Lichenoid Keratosis

2. BREAST CANCER

"Paraben free present, cancer - free future."

ARE YOUR BEAUTY PRODUCTS HIDING A BREAST CANCER RISK?

Parabens are synthetic preservatives keep products fresh, but recent research is raising a worrying question—could they also be linked to breast cancer?

Parabens are everywhere. Found in lotions, shampoos, cosmetics, processed foods, and even medicines, they enter the body through skin absorption and ingestion. Scientists have detected them in urine, blood, breast milk, placenta, and breast tissue. Among them, methyl paraben appears most often.

Human studies, however, paint a mixed picture. Some researchers have discovered parabens inside breast tumors, with higher levels near the underarm area—suggesting a possible link to deodorant use. A few case-control studies reported that women with higher urinary paraben levels had increased breast cancer risk, especially those with lower body mass. Yet other large studies found no significant connection. These contradictions highlight a major challenge: most studies rely on a single urine sample, which may not reflect a person's long-term exposure.

The concern lies in their hormone-like behavior. Parabens can mimic estrogen, a hormone that plays a central role in breast development and breast cancer. Though far weaker than natural estrogen, parabens can still bind to estrogen receptors in breast cells, triggering changes that resemble those seen in cancer biology

3. CASE STUDY

Adverse Drug Reactions in a Triple-Positive Invasive Ductal Carcinoma Case

A 53-year-old woman was diagnosed with invasive ductal carcinoma of the right breast with mucinous differentiation, Grade 3 (Modified Bloom Richardson's Score 8/9). The tumor occupied ~70% of the biopsy core and was ER+, PR+, HER2+ (triple-positive).

Sonography showed a lobulated right breast mass in the upper and central quadrants with micro calcifications (BIRADS IV), while the left breast was normal (BI-RADS I). FNAC revealed ductal epithelial cells with anisokaryosis and hyperchromasia, consistent with ductal carcinoma.

FDG whole-body PET-CT demonstrated a large FDG-avid lesion (30 × 40 × 56 mm, SUV max 26.99) with extension into the nipple–areolar complex, nipple retraction, two satellite nodules, and FDG-avid right axillary and interpectoral nodes, but no distant metastasis.

Baseline 2D echocardiography showed preserved LV function (LVEF 60%), mild TR, and grade I diastolic dysfunction.

Treatment and Complications:

The patient received 4 cycles of Adriamycin (60 mg/m²) + Cyclophosphamide (600 mg/m²), followed by Paclitaxel (80 mg/m²) with Trastuzumab (loading 4 mg/kg, then 2 mg/kg maintenance) for 5 cycles.

During treatment, hemoglobin progressively declined from 11 g/dL to 8 g/dL, requiring hematinic support. After cycle 5, she developed painful defecation due to internal hemorrhoid, managed with lignocaine ointment (pre-stool, BD) and metronidazole gel (post-stool, BD).

Hemorrhoids are not a classic direct adverse effect of paclitaxel, cyclophosphamide, doxorubicin, or trastuzumab, but chemotherapy-related constipation, mucosal fragility, and myelosuppression can exacerbate or unmask hemorrhoidal symptoms.

By cycle 8, she also developed tingling and numbness of the limbs (chemotherapy-induced peripheral neuropathy), for which inj. glutathione 600 mg in 100 mL NS pre-chemo and tab. glutathione 500 mg post-chemo were started.

A repeat 2D echo later showed LVEF reduced to 40%, consistent with trastuzumab-related cardiotoxicity.

4.Beyond Pills: How Diet Shapes Breast Cancer Care

Breast cancer is a complex disease influenced by genetics, hormones, environment, and lifestyle, with diet playing a critical role in recovery and long-term outcomes. While surgery and medical treatments are primary, nutrition is increasingly recognized for supporting healing, immunity, and reducing complications and recurrence risk after surgery.

Postoperative nutrition focuses on three main goals: promoting tissue repair, preventing malnutrition, and encouraging sustainable healthy habits. Adequate hydration supports metabolism and healing, while high-quality proteins from sources like fish, poultry, eggs, and dairy help tissue recovery and boost immunity. Antioxidant-rich fruits and vegetables combat oxidative stress, and whole grains provide essential fiber and micronutrients to maintain gut health. Patients are advised to limit alcohol, saturated fats, and processed foods containing high salt, sugar, or harmful compounds, as these may increase inflammation and impede recovery.

A significant area of interest in breast cancer nutrition is phytoestrogens—plant compounds resembling human estrogen, primarily found in soy, flaxseed, and sprouted legumes. Phytoestrogens can interact with estrogen receptors, often favoring tumor-suppressive pathways, potentially reducing cancer cell growth and promoting programmed cell death. While Asian populations with lifelong high soy intake show lower breast cancer rates, Western studies present mixed results due to genetic and dietary differences. High-dose phytoestrogen supplements may interfere with treatments like tamoxifen, so natural dietary sources are preferred, and supplementation should only be done under medical supervision.

The Mediterranean Diet (MeDi) is a well-supported, sustainable approach for breast cancer recovery and prevention. Rich in fruits, vegetables, whole grains, legumes, nuts, olive oil with moderate fish intake, it provides anti-inflammatory and metabolic benefits through polyphenols, flavonoids, and fiber. Interestingly, MeDi closely resembles traditional Indian diets, which also emphasize fresh, bioactive-rich ingredients and healing spices rooted in ancient wisdom. On the basis of availability of clinical trial evidence, the West promotes MeDi for health benefits often overlooking the equally valuable, centuries-old dietary traditions of the Indian subcontinent that share similar protective qualities.

5.NEWLY APPROVED FDA DRUGS

DRUG	MOA	ADR	FDA APPROVED USE
Datopotamab deruxtecan-dlnk	Its antibody drug conjugate that targets TROP-2 on cancer cells. Releases topoisomerase I inside tumor cells which causes DNA damagar ad cell death It is a DNA.	Stomatitis, nausea, fatigue, decreased leukocytes, decreased calcium, alopecia, decreased lymphocytes, decreased hemoglobin, constipation, decreased neutrophils, dry eye, vomiting, increased ALT, keratitis.	To treat the unresectable or metastatic, HR positive, HER2-negative breast cancer patients who have received prior endocrine-based therapy and chemotherapy for unresectable and metastatic disease.
Treosulfan	Alkylating agent used in prior to allogenic haematopoeitic stem cell transplantation.	Musculoskeletal pain, stomatitis, pyrexia, nausea, edema, infection, and vomiting.	For use in combination with fludarabine as a preparative regimen for allogeneic hematopoietic stem cell transplantation for acute myeloid leukemia and myelodysplastic syndrome.
Sunvozertinib	It inhibits EGFR exon 20 insertion mutant tyrosine kinase irreversibly, blocking abnormal EGFR signalling and tumour growth in NSCLC.	Diarrhea, rash, decreased appetite, stomatitis, fatigue, nausea, paronychia, vomiting	To treat locally advanced or metastatic non-small cell lung cancer with epidermal growth factor receptor exon 20 insertion mutations, as detected by an FDA-approved test, with disease progression on or after platinum-based chemotherapy

6. FEDERAL HEALTH INITIATIVES

World's Largest Government-Funded Health Insurance Programme

1.Mahatma Jyotiba Phule Jan Arogya Yojana (MJPJAY)

The Mahatma Jyotiba Phule Jan Arogya Yojana (MJPJAY) is a flagship health insurance scheme of the Government of Maharashtra, designed to provide free and quality medical care to economically weaker sections of society.

Key Highlights:

1.Target Group: Families holding Yellow and Orange Ration Cards, and eligible Antyodaya or Annapurna cardholders.

2.Coverage: Cashless treatment up to 1.5 lakh per family per year for nearly 1,000+ surgeries, therapies, and procedures.

3.Special Focus: Cancer care, cardiac surgeries, burn treatment, renal diseases, and other critical conditions.

4.Network Hospitals: Government and empaneled private hospitals across Maharashtra provide treatment under this scheme.

5.**Cashless Facility:** Beneficiaries only need to show their ration card and photo ID at the hospital desk for availing treatment.

Impact:

MJPJAY has improved access to affordable secondary and tertiary healthcare for thousands of underprivileged families in Maharashtra, reducing the financial burden of catastrophic health expenditures.

6. FEDERAL HEALTH INITIATIVES

2.Ayushman Bharat (PM-JAY)

Coverage:
• 5,00,000 per family per year (secondary & tertiary care)
• No limit on family size, age, or gender
• All pre-existing diseases covered

Beneficiaries:
• Over 12 crore+ families identified from SECC 2011 list
• In 2023-24, more than 29 crore Ayushman cards issued
• Recently expanded to senior citizens 70+ years & frontline workers (ASHA, Anganwadi).

Network Hospitals:
• Over 28,000 empanelled hospitals across India
• More than 1,000 hospitals in Maharashtra under PM-JAY & MJPJAY convergence

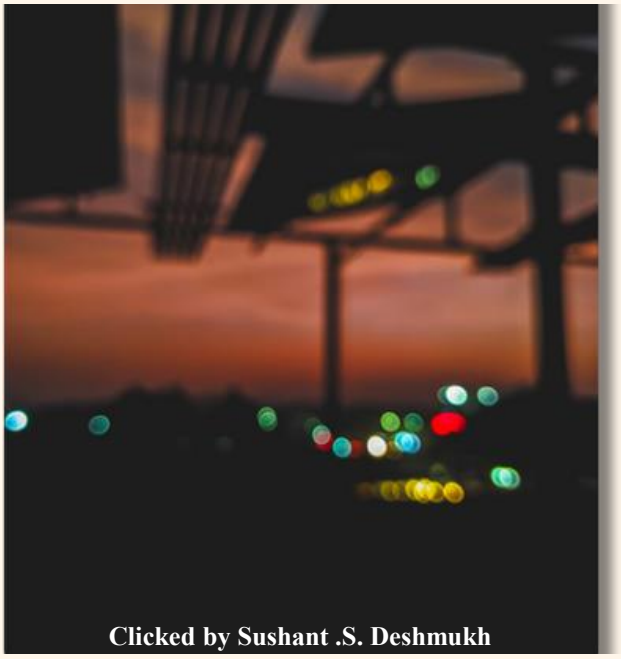
Impact (as of 2024):
• 6 crore+ hospital admissions worth
• 78,000 crore covered

Top treatments: cardiac surgery, oncology care, orthopaedics, renal transplant, neurosurgery

Digital Health (ABDM):
Ayushman Bharat Health Account (ABHA): Unique Health ID for safe digital records
Over 50 crore ABHA IDs generated nationwide

7.TALENT CORNER

Beyond the formulas and clinical notes, our students possess a vibrant world of imagination and reflection. In this special section, we're proud to share original poems and captivating photography crafted by our talented students . Dive into these verses and visuals for a creative pause from academic life, and discover the diverse talents within our college.



Clicked by Sushant .S. Deshmukh

भाकरीचं झाड

माझ्या बापाच्या शेतात | झाडं भाकरीच आलं
|| पिकं मातीवरीं उभं । कस वाऱ्याने डोललं || धृ ||
चाले तिफनीचा फाळ | करा पेरणी पेरणी ||
बीज दडे भुईआड | त्याची निराळी कहाणी ||
बाप राबतो राबतो । औत धरीतो शेतात ||
त्याच्या घामावं तरल | पिकं हिरवं रानात ||
बाप माझा अणवाणी । करी रक्ताचं पाणी ||
सारं शिवार हिरवं । झाली झाली आबादाणी

रात रात जागुनीया । पाणी भरीतो शेताले||
लेकरांवाणी जपतो । बाप माझा पिकांले ||
उन्हतान्ह बारा मास | राबतोय रातंदिस ||
अवकाळी, दुष्काळी | झेले संकटांचे फास||
तुरे बहरता शेतं धरी गोफनीचा गोट ||
माझ्या बापाच्या हातात साऱ्या दुनियेचं पोट ||

चार घास आनंदाचे । शेतकऱ्या उपकार ||
धन्य धन्य बाबा तु रं । तुझं भाकरीचं झाडं ||

कवीः मनिष आहिरे
M-Pharma P'cognosy

Clicked by Sushant S Deshmukh

मला येऊ देनागं (मूलगी जन्म)

आई मला ये दे ना गं
जन्म मलाही घेऊ दे ना गं .. पप्पाला
पण सांग ना गं आई मला येऊ दे ना गं .

मी अंधविश्वास नाहीसा करीन, नव्या
क्रांतिसाठी सज्ज होईन गं नवी दिशा
समाजास देईन
का असतो मुलगी जन्माचा तिरस्कार?
म्हतारपणाची काठी आम्ही होऊ गं

नवी वाट, नवी पहाट, यातून काढू
जीवनाची पाऊलवाट .
आई मला येऊ दे ना ग पप्पाला पण
सांग ना स्त्री घड़वा स्त्री वाचवा उंच
भरारी तिलाही घेऊया

कवीः वैष्णवी निर्मळ B-Pharma

8.CAMPUS HIGHLIGHTS

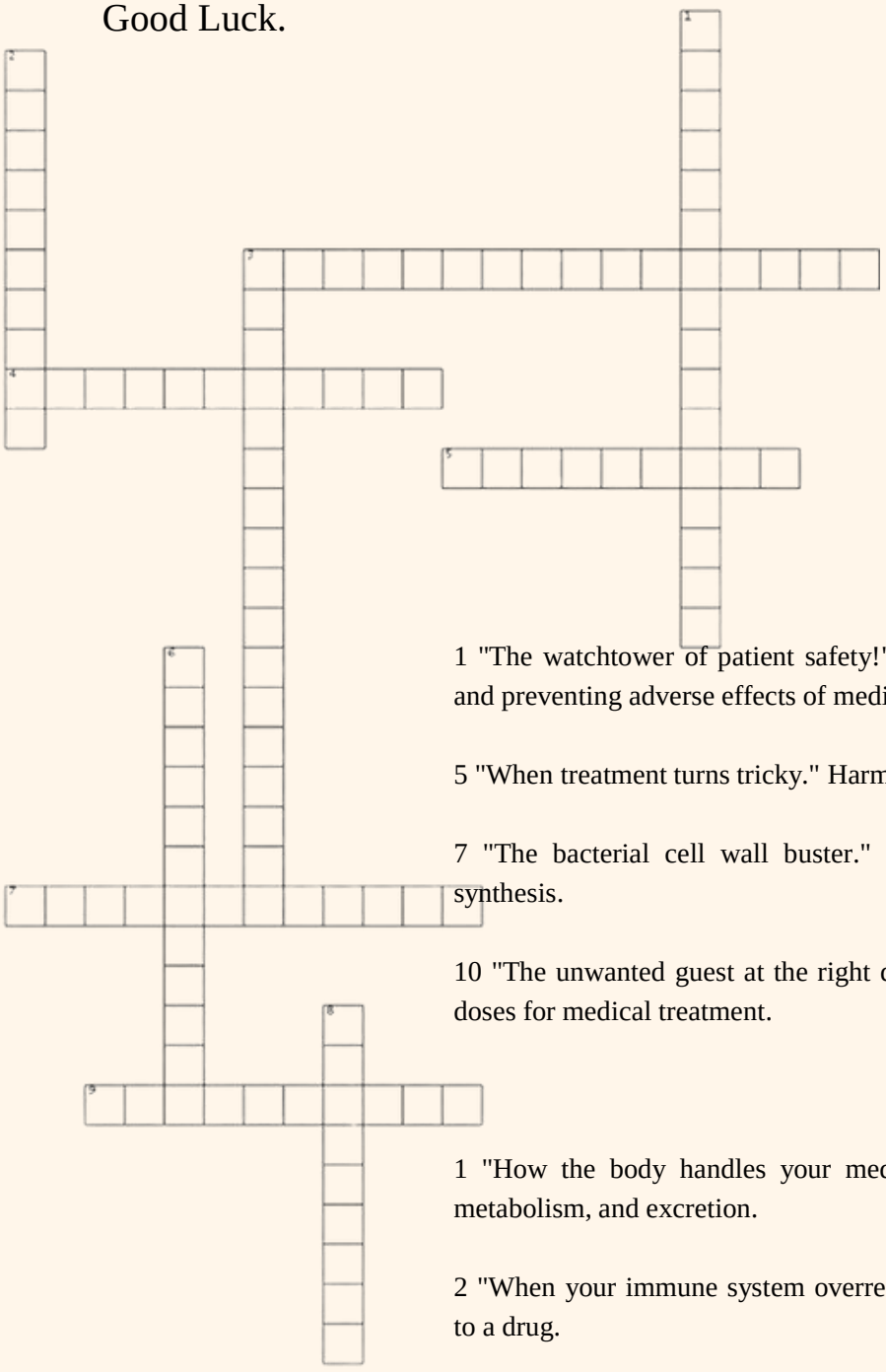
Seizing the moment! The intensity and talent of our girls' team shine through as they conquered the Pharma Cup 2024 organized by Pravara Institute Of Medical Sciences. Congratulations on a well-deserved win!

A truly heartwarming sight! Students, faculty, and staff came together at our Blood Donation Camp, exemplifying the spirit of community service and saving lives. Every drop makes a difference!

8.CAMPUS HIGHLIGHTS

9.PHARMA FUN CROSSWORD

Ready for a challenge? Test your expertise on advanced drug therapy. This puzzle focuses on the core of patient care in pharmacology.
Good Luck.



ACROSS

1 "The watchtower of patient safety!" System for detecting, assessing, understanding and preventing adverse effects of medicinal products.

5 "When treatment turns tricky." Harmful event that was not expected from the drug.

7 "The bacterial cell wall buster." Class of drugs that inhibit bacterial cell wall synthesis.

10 "The unwanted guest at the right dose." An unwanted effect that occurs at normal doses for medical treatment.

DOWN

1 "How the body handles your medicine." Study of drug absorption, distribution, metabolism, and excretion.

2 "When your immune system overreacts." Reaction mediated by the immune system to a drug.

3 "The enzyme family that loves to meddle." Enzyme family key to many drug interactions.

4 "Fine-tuning your dose like a pro."Clinical process of adjusting drug dose based on response.

6 "Your report can save the next patient." Documentation of side effects sent to regulators.

8 "One and done – once every 24 hours." Administered once every 24 hours.

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ABOUT PRES

PRAVARA RURAL EDUCATION SOCIETY

Loknete Dr. Balasaheb Vikhe Patil (Padmabhushan Awardee) Pravara Rural Education Society Pravaranagar creates prosperity - educational, social, economical, cultural, physical and psychological for complete student development.

The Society started with a handful of students under a thatched shed called Pravara Public School in 1964. But the story dates back to 1950 when the Pravara Cooperative Sugar Factory established by visionary leader Padmashri Dr. Vitthalrao Vikhe Patil, enabled prosperity for hitherto debt-ridden farmers. Pravara Rural Education Society took things to the next level by utilizing education for nation building, women empowerment, and integrated rural development. Today, our 42 thousand plus students and over 1 lakh alumni continue to carry forward our values to the world as we create synergy between the global and the local.

www.prcop.in

pravarapharmacy@rediffmail.com

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