MARRI LAXMAN REDDY GROUP OF INSTITUTIONS

Marri Laxman Reddy Institute of Pharmacy

(Approved by AICTE & PCI, New Delhi, JNTUH Affiliated)

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"Education is not the learning of facts but the training of the mind to think."

– Albert Einstein

INSIDE THIS:

PharmaScout

MLRIP's officially e-mag

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Sri Marri Laxman Reddy

Chairman

MLR Group of Institutions

He has been in the field of education for more than three decades. He is an exemplary personality and extraordinary visionary and a constant inspiration to the younger generation. He is a veteran athlete of international repute. He emphasizes the importance of physical health for academics and overall personality development.

Sri Marri Rajshekar Reddy

Founder-Secretary

MLR Group of Institutions

He is a person of great acumen and remarkable abilities. He is a dynamic leader and strives hard to make every dream a reality. He is an initiator, innovator, and executor of novel plans for the progress of the institutions. He is the motivational and driving force of all the activities in the campus.

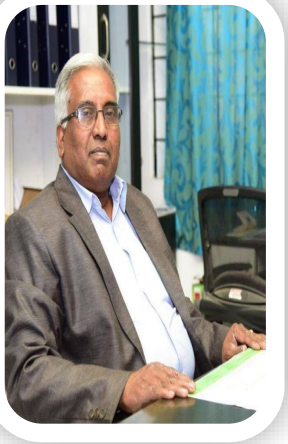
PRINCIPAL'S DESK

A Tale of Inspiration:

It may not necessarily always come from a celebrity. Even an ordinary person may inspire and influence many in one or other way. The real time experiences of them are often exciting and stimulating.

I will tell about a person who is in fact a student of mine. She created a record of that sort in Gujarat Technological University, Ahmedabad by scoring SGPA of 10 out of 10 for her dissertation in M. Pharm. When she approached for a job in Pharma Company in her hometown, she was told there was no vacancy. But when their conversation slowly led to an unexpected interview, she was offered a job and asked her to report immediately because of her depth in the subject.

Her start up idea was declared the 4th best with a cash prize of 1 Lakh among 650 in the event conducted by GTU and felicitated by the Vice chancellor and consulates of France and Britain. She is launching an ayurvedic formulation for diabetes soon. Sure I hope this story will surely stimulate us.



Dr. K. S. Murali Krishna
Professor & Principal
MLR Institute of Pharmacy

A great person said somewhere: ***Success gives you the positive addiction than any other.... Is it not?***

GUEST SPACE

"What is Amblyopia sir??"

Dr. Ch . Srinivasa Murty, MS

Professor & HOD
Department of Ophthalmology
Malla Reddy Medical College for Women
(former HOD, Ophthalmology, Osmania Medical College)

Though I was a bit baffled by this interruption in the midst of my class that was essentially meant for final year students from an unexpected quarter, a new entrant to the PG course, his curiosity took the upper hand and I was convinced that I must answer his query not unconnected to the topic I was speaking about at that time.

My introductory explanation to this amazing condition called Amblyopia applies not only to the students of Ophthalmology but to the scientific community and more importantly the inquisitive parents.

Refer the complete article in Page no. 2

Guest Space

The term Amblyopia applies to a condition of 'lazy eye(s)' that can affect one or both the eyes causing a significant decrease of visual acuity, but not a total loss of vision.

(Though not strictly a medical definition, these words suffice to give a bird's eye view of the disorder).

Why & How

Early life of formative years is crucial for a child's normal development, and eye sight is one of the most important aspects. The human brain perceives and interprets any image that forms on the Retina from very early days of life, which forms a part of the learning process.

If, during this phase of learning process there is interference in proper image formation on retina, this is bound to be affected and the brain is prone to accept a wrong configuration of the image of an object as right.

The factors that interfere with image formation on the Retina could be any of the following...

- Congenital drooping of eye lid(s)
- Opacities on the cornea (the black of the eye ball) causing an improper or no transmission of light through, to facilitate a good image formation on retina.
- Similar is the case with congenital cataracts.
- Childhood Glaucoma.
- Squinting, especially in one of the eyes.

These, apart from some other conditions, may cause the parents to approach an ophthalmologist sooner, in view of the striking abnormality in child's eye.

But, a cause described here, last but never the least, and unfortunately ignored by many of the parents is a refractive error that goes uncorrected in the child's formative years.

It's Impact

Untreated Amblyopia is no doubt a cause for concern for parents who have so many dreams about their children to be fulfilled.
For an individual, it's a deprivation of his right to grow as a successful individual, and he is incapacitated in competing with his peers.

But, for a society at large it could pose a grave concern, with ever growing visual demands in an increasingly mechanized life, particularly youth being productive segment in any society.

Setting aside the statistical figures of a larger population, as per my experience, I used to encounter on an average of ten suspected patients with this disorder, while I was working in squint department of Sarojini Devi eye hospital.

AMBLYOPIA IS NOT A BLINDNESS...
BUT
IT KNOCKS OFF MUCH OF THE USEFUL VISION IN A PRODUCTIVE INDIVIDUAL AND IF IGNORED IN A LARGER SECTION OF POPULATION - IT MAY CRIPPLE A SOCIETY!!!

It's Prevention

Parents have a larger role to play. The moment, they notice any obvious physical abnormality in the child's eye; they are expected to consult the eye specialist. It doesn't matter even if the infant is a few days or weeks old. Things should be done on a war footing.

Any slightest doubt about a child's visual status , especially in slightly older children , for instance going very close to a television, or holding a book much nearer to eyes should be a cause for concern, as uncorrected or improperly corrected refractive errors need to be kept in mind , and medical advice is to be sought at the earliest.

Treatment & Limitations

For congenital and developmental cataract(s) the eye specialist performs a surgery at the earliest, more so if only one eye is affected, after the necessary evaluation. If both eyes of the infant are involved surgery for both needs to be done at the same sitting or within a gap of a few days.

Occlusion therapy is the time tested way of treatment, where a normal eye is patched for a duration and a cycle that depends on the intensity of visual loss, and as prescribed by the clinician.

It goes by the logical principle, that in order to make a lazy eye to be stimulated the normal eye should be discouraged to participate in vision. It is similar and as simple as forcing a lazy guy to work delegating him all the responsibility!

Sometimes, both the eyes need to be patched alternately, if the condition is on both sides.

Research is going on and certain newer drugs are being tried, but more trials are needed to be convinced about their efficacy.

Conclusion

Parent counseling occupies a lion's share. They should be educated about enforcing the constant use of glasses by their children even at a very early age, if need arises.

For constant monitoring of treatment by patching, the role of a class teacher is as important as parents.

Starting treatment at an age later than seven may not serve much of the useful purpose due to the inherent mechanism of this condition's pathogenesis.

E.COLI SUPERBUG STRAIN'S PERSISTENCE IN HEALTHY WOMEN'S G.I.T

Bhavya Sai

A recent study of over 1,000 healthy women with no symptoms of urinary tract infections showed nearly 9 percent carried multi-drug resistant Escherichia coli strains in their guts.

This is of clinical concern because disease-causing *E. coli* bacteria can transfer from the digestive tract to the female urinary tract via the urethra, the urine duct, which is shorter and positioned differently in females than in males. The bacteria can then make their way into the bladder and other parts of the urinary tract.

More than a third of urine samples provided by those who had fluoroquinolone (Cipro) resistant gut *E. coli* tested positive for *E. coli* growth. Of those, nearly 77 percent were Cipro-resistant, and the clonal type of the bacteria matched the fecal sample.

Most of the pathogenic *E. coli* found belonged to the pandemic, multi-drug resistant ST131-H30R or ST1193 clonal groups that currently cause the majority of drug -resistant urinary tract and bloodstream infections. They were detected twice as frequently in the urine of people who had these specific strains in their gut, compared to other strains of *E. coli* in general.

In addition, the presence of ST ST131-H30R in the gut in this study was associated with older age.
The researchers also checked to see which participants might have had an antibiotic prescription during the study for any type of infection, including respiratory.
Three months after that earlier urine collection, urinary tract infections were diagnosed in nearly 7 percent of the 45 previously asymptomatic carries who consented to follow-up electronic medical record examination. The study participants were from the Puget Sound area.

"The two pandemic fluoroquinolone-resistant urinary tract pathogenic strains of *E. coli* found in the clinical specimens are superior gut colonizers and tend to persist there," noted the researchers. "They can also show up, at an unusually high rate, in the urine of healthy women who did not have a documented urinary tract infection diagnosis at the time of sample testing. Both phenomena appear to be interconnected."

The researchers pointed out that it has long been known that a patient's gut microbial flora often harbors urinary tract infection-causing strains. It was not certain whether pandemic, drug-resistant strains have distinct moorage patterns in the gut or lower urinary tract of healthy people.

The study was published in the Oxford University Press journal, *Clinical Infectious Diseases*.

The findings could have several clinical care and infection control implications, according to *Evgeni V. Sokurenko*, professor of microbiology at the University of Washington School of Medicine. He was the senior researcher on the study. Several other UW microbiology faculty and Kaiser Permanent Research Institute investigators in Seattle collaborated on the work. The lead researcher was *Veronika L. Tchesnokova*, of the UW medical school's Department of Microbiology.

The results suggest the specific multi-drug resistant *E. coli* strains detected in this study take up a much more prolonged residence in the gut than do some other resistant strains, and also can become present in the urine of healthy women without causing burning, urgency, blood in the urine or other warning signs of bacterial infection.

Sokurenko explained that knowing whether or not multiple drug resistant strains are present in a woman's gut could help predict the resistance profile of a subsequent clinical infection. Efforts to get rid of the pandemic *E. coli* strains in the carriers gut could reduce their rate of multiple drug resistant infections, and perhaps protect their household or other contacts as well.

Sokurenko also said medicine might need to revisit the clinical significance of finding bacteria in the urine, even without symptoms, during this pandemic of multiple antibiotic resistant strains of *E. coli*, because those strains could put the carriers at risk for a difficult-to-treat bacterial illness.

Fluoroquinolones are the most often prescribed drugs for urinary tract infections. Despite efforts to limit its use, strains resistant to this category of antibiotic are flourishing and spreading globally, according to the researchers.

This study, the researchers concluded, highlights the likely physiological reasons behind the pandemic of these resistant *E. coli* strains. It also points out the value of determining female patients' carrier-status to predict future resistant infections, and the need to rethink the clinical significance of bacteria present in the urine without symptoms, especially as these pandemic strains can be superbugs: highly pathogenic to the urinary system and treatment resistant.

Health input

Breast Feeding

Breastfeeding is the best way to provide infants with the nutrients they need for healthy growth and development.

Colostrum, the yellow, sticky breast milk produce at the end of pregnancy, is recommended by WHO as the perfect food for the newborn, and feeding should be initiated within the first hour after birth.

WHO recommends exclusive breastfeeding starting within one hour after birth until a baby is 6 months old. Nutritious complementary foods should then be added while continuing to breastfeed for up to 2 years or beyond.

1st August to 7th August

WHEN SHOULD BREASTFEEDING START IN NEWBORN

Best to try to breastfeed baby in the first hour after birth. By latching on and sucking rhythmically, baby begins switching on the cells in breasts to initiate milk supply.
This will get oxytocin-the love hormone –essential for the release of first milk, colostrum.

HOW OFTEN SHOULD A NEW BORN FEED

Breastfeeding frequency and duration can vary a lot in the first week. The first 24 hours differ considerably from baby to baby.

DO A NEWBORN NEED FEEDING SCHEDULE

Frequent feeding helps initiate and build your milk supply. Therefore shouldn't worry about planning a newborn feeding schedule as this may reduce his opportunities to feed.

FACTS AND IMPORTANCE OF BREASTFEEDING

BREASTFEEDING FOR THE FIRST SIX MONTHS IS CRUCIAL

To achieve optimal growth, development and health, breastfeeding should be continue for up to two years or beyond.

BREASTFEEDING PROTECTS INFANTS FROM CHILDHOOD ILLNESS

Milk is the ideal food for newborns and infants. It gives infants all the nutrients they need for healthy development. It is safe and contains antibodies that help protect infants from common childhood illness such as diarrhoea and pneumonia, the two primary causes of child mortality worldwide.

BREASTFEEDING ALSO BENEFITS MOTHERS

Exclusive breastfeeding reduces risks of breast and ovarian cancer, type II diabetes, and postpartum depression.

INFANT FORMULA DOES NOT CONTAIN THE ANTIBODIES FOUND IN BREAST MILK

Long-term benefits of breastfeeding for mothers and children cannot be replicated with infant formula.

SOLID FOODS SHOULD BE PHASED IN AT SIX MONTHS

Breastfeeding should not be decreased when starting on solids.

BREASTFEEDING HAS LONG-TERM BENEFITS FOR CHILDREN

Adolescents and adults who were breastfed as babies are less likely to be overweight or obese. They are less likely to have type-II diabetes and perform better in intelligence tests.

TRANSMISSION OF HIV THROUGH BREASTFEEDING CAN BE REDUCED WITH DRUGS

Anti-retroviral drugs given to either the mother or HIV exposed infant reduces the risk of transmission.Together, breastfeeding and ARV'S have the potential to significantly improve infants chances of surviving while remaining HIV uninfected.

SUPPORT FOR MOTHERS IS ESSENTIAL

Breastfeeding has to be learned and many women encounter difficulties at the beginning. To provide this support and improve care for mothers and newborns, most countries hav implemented the WHO-UNICEF baby-friendly hospital initiative , which sets standards for quality care.

Dr. B. Raja Rajeshwari, Pharm. D, Asst. Professor, Pragnya Tappa, Pharm. D VI year.

Pharma#Throwback

Dr. YELLAPRAGADA SUBBAROW

Dr. Yellapragada Subbarow was born in 1895, 12th January in Bhimavaram, Andhrapradesh. As he supported Mahatma Gandhi by boycotting British goods and wore Khadi surgical dress in response to the Swadeshi call, earned the displeasure of his surgery professor M.C.Bradfield at Madras Medical College, and for which he was given the lesser LMS degree, instead of the MBBS degree in 1921. Later he settled as an Anatomy lecturer at Dr. Lakshmipathi's Ayurvedic College in Madras. In 1922 on 26th Oct, made his way to Boston, USA and took admission in Harvard School of Tropical Medicine, completed his diploma and became Harvard's junior faculty.

His first scientific breakthrough came when he worked in Harvard along with Cyrus Fiske, discovered **phosphocreatine and adenosine triphosphate (ATP)** (in 1927 and 1929 respectively), two chemicals in our body, that store energy. The Fiske-SubbaRow method of estimating phosphorous is used to date by most biologists around the world.

However when Harvard denied him a regular faculty position, Subbarow, left for Lederle Laboratories(now a part of Wyeth, owned by Pfizer) in 1940. He was made the director of Lederle Laboratories in year 1942, and under his guidance, Benjamin Duggar discovered **Aureomycin** – the first Tetracycline antibiotic of world and was presented in the year 1948.

In 1945, Subbarow along with his team at Lederle, synthesized Folic acid from liver and a microbial source, which would play a role in curing tropical sprue. This discovery was found to cure many anaemias, and in 1988, US Govt ordered all grain products to be enriched with folic acid to prevent spinal cord defects for new-borns. He also laid the foundation for the identification of Vitamin B12.

"Do you know that methotrexate was discovered by an Indian?"

Subbarow along with several inputs from Dr. Sidney Farber, synthesized **aminopterin**, a molecule that reversed the action of folic acid, and thus arrested the growth of cancer cells. Methotrexate, a derivative of aminopterin, is today one of the major drugs used to treat many form of cancers, Rheumatoid arthritis and Psoriasis. It was one of the very first cancer chemotherapy agents (because of which, he is called as the "*Father of Chemotherapy*").

He discovered Hetrazan, the cure for Filariasis, which was a serious disease may leads to elephentiasis.He also came up with Polymixin that is used

Art by: Dr. B. Raja Rajeshwari

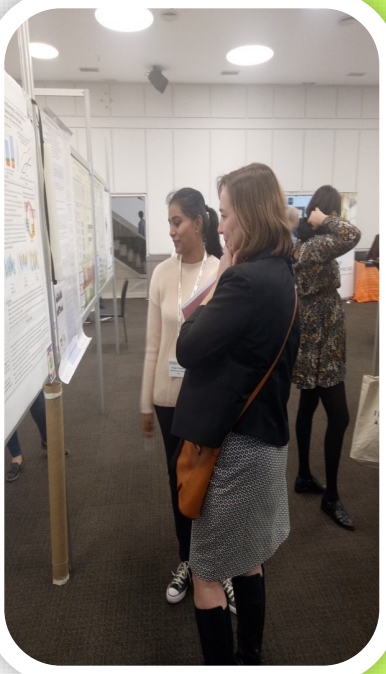
worldwide in cattle feed. Because of Subbarow's amazing discoveries, American Cyanamid named a newly discovered fungus as ***Subbaromyces splendes***.

Dr.Subbarow passed away in 1948 on 09th August, in America with a massive heart attack at a very young age of 53. Subbarow's centenary year began in 1994, and the centenary committee succeeded in getting the Government to release a postal stamp in his honour.

Dr. C. Suhas Reddy, Pharm. D, Asst. Professor
Rehana Shaik, Pharm. D VI year

Student achievements

It is a matter of pride & prestige to us, as our student, **P.UNNATI of Pharm. D V year**, presented a poster entitled **"KAP survey of sedentary lifestyle: investing knowledge, attittude, practice as determinants of sedentary behavior among Indian young adults"** in an international summit, **URBAN TRANSITIONS 2018**, with a theme **"Integrating urban and transport planning, environment and health for healthier urban living"** on 25th to 27th November 2018 at **Sitges, Barcelona Spain.**



SOWJANYA of B. Pharm 3rd year won three prizes this year:

First prize in **3rd Indo-US conference** on "Innovation Strategies in Pharmaceutical Education and Research"

First prize in a conference held at Pulla Reddy Institute of Pharmacy with a theme: **"Innovations in Pharmaceutical research- 2018"**.

Second prize in **Indo-Malaysian conference on** " Advances and current scenario of pharmaceutical sciences".

Recently approved FDA drugs

DRUG NAME	ACTIVE INGREDIENT	APPROVAL DATE	FDA-APPROVED USE ON APPROVAL DATE
INREBIC	FEDRATINIB	8/16/2019	To treat adult patients with intermediate-2 or high-risk primary or secondary myelofibrosis
ROZLYTREK	ENTRECTINIB	8/15/2019	To treat adult patients with metastatic non-small cell lung cancer (NSCLC) whose tumors are ROS1-positive
WAKIX	PITOLISANT	8/14/2019	To treat adult and pediatric patients 12 years of age and older with solid tumors. To treat excessive daytime sleepiness (EDS) in adult patients with narcolepsy
PRETOMANID	PRETOMANID	8/14/2019	For treatment-resistant forms of tuberculosis that affects the lungs
TURALIO	PEXIDARTINIB	8/2/2019	To treat adult patients with symptomatic tenosynovial giant cell tumor
NUBEQA	DAROLUTAMIDE	7/30/2019	To treat adult patients with non-metastatic castration resistant prostate cancer
ACCRUFER	FERRIC MALTOL	7/25/2019	To treat iron deficiency anemia in adults
RECARBRIO	IMIPENEM, CILASTATIN AND RELEBACTAM	7/16/2019	To treat complicated urinary tract and complicated intra-abdominal infections
XPOVIO	SELINEXOR	7/3/2019	To treat adult patients with relapsed or refractory multiple myeloma (RRMM)

Dr. Kainat Panjwani, Pharm. D, Assistant Professor.

Alekhya Jakkoju, Pharm. D VI year

Seminars

Prof. Dr. Debendra Kumar Mohapatra, Senior Principal Scientist, CSIR – Indian Institute of Chemical Technology delivered the key note address on ***Present scenario and future perspective in pharma research.***

A seminar on Clinical Research Careers by ***SHAIK MEHRAAJ,*** Clinical Data Manager in a leading CRO and ***SIVA RAM PRASAD,*** Senior Clinical Data Manager in a leading CRO.

A workshop was conducted on ***"Pharmacist Intervention In Optimizing Patient Care",*** for Pharm. D students in association with Pharmacon Society for Pharmacy Practice. ***Dr. Karthik Rakam,*** President, Pharmacon Society, conducted the session.

Cultural fests

ఫార్మసీ కళాశాలలో టెక్నికల్ ఫెస్ట్

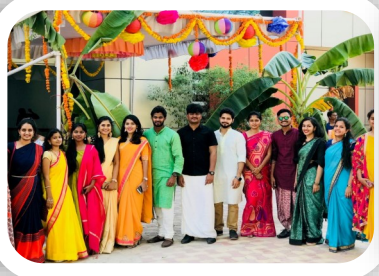
దుండిగల్ : నగర శివారు దుండిగల్‌లోని ఎంఎల్ఆర్ ఐటీఎం, ఎంఎల్ఆర్ ఫార్మసీ కళాశాలలో శుక్రవారం వెలారస్ 2k19 టెక్నికల్ ఫెస్ట్ ఘనంగా జరిగింది. ఈ ఫెస్ట్‌కు ముఖ్య అతిథిగా ఐఐసీటీ హైదరాబాద్ ప్రిన్సిపల్ సైంటిస్టు డా. దేవేంద్రకుమార్ మహాపాత్ర హాజరై ఉన్నత విద్య ప్రాముఖ్యత, ఆధునిక సాంకేతిక పరిజ్ఞానాన్ని పెంపొందించుకోవాలని విద్యార్థులకు సూచించారు. అధ్యాపకులు ఉన్నత విద్యా, సాంకేతిక పరిజ్ఞానం పై దృష్టి సారించాలని చెప్పారు. ఈ ఫెస్ట్‌లో విద్యార్థులు పేపర్ ప్రజెంటేషన్, టెక్నికల్ క్విజ్, ఇంజనీరింగ్ వర్క్‌షాప్, డీకోడింగ్, డీబగ్గింగ్, మోడల్ బిల్డింగ్స్, స్వాక్‌మార్కెట్ రోబోటిక్స్ ప్రదర్శించారు.

టెక్నికల్ ఫెస్ట్‌లో సీబీఐటీ ప్లేస్‌మెంట్ అధికారి డా. ఎన్ఎల్ఎన్ రెడ్డి, ప్రిన్సిపల్స్ కేవీరెడ్డి, మురళీకృష్ణ, డైరెక్టర్ కోటయ్య, కార్యక్రమ నిర్వాహకులు నాగేశ్వర్‌రావు, వెంకటేశ్వర్లు, అమర్‌నాథ్, స్టూడెంట్ కో-ఆర్డినేటర్ మణిదీప్, విద్యార్థినీ విద్యార్థులు పాల్గొన్నారు.

ఫెస్ట్‌లో పాల్గొన్న ముఖ్య అతిథులు

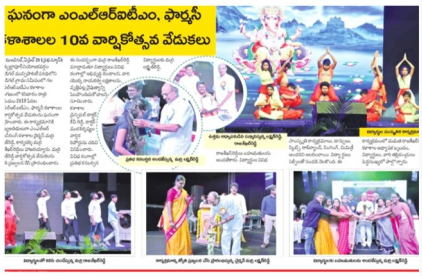
విద్యార్థులు ప్రదర్శించిన నమూనా

Traditional Day – 2K19



Orientation Day – 2K19

Annual Day – 2K19



About MLRIP

VISION

To be an educational institute of par excellence and produce competent pharmacy professionals to serve the community through research and the ever-increasing needs of Industry.

MISSION

1. Imparting quality education and innovative research for various career opportunities.
2. Creating conducive academic environment to produce competent pharmacy professionals.
3. Indoctrination of students adorned with high human values and make them aware of their responsibility as health care professionals.

PROGRAMME EDUCATIONAL OBJECTIVES (PEO's)

PEO 1: To produce graduates with sound theoretical knowledge and technical skills required for their career opportunities in various domains.
PEO 2: To incite the students towards research and to address the challenges with their innovative contributions for the benefit of the mankind.
PEO 3: To instill the essence of professionalism, ethical commitment to become a health care professional with sound integrity and adherence to the core human values in the service of the society.

PROGRAMME OUTCOMES

1. Pharmacy Knowledge: Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.

2. **Planning Abilities:** Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.

3. **Problem analysis:** Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.

4. **Modern tool usage:** Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.

5. **Leadership skills:** Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and well-being.

6. Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g., health care professionals, promoters of health, educators, managers, employers, employees).

7. **Pharmaceutical Ethics:** Honour personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.

8. **Communication:** Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.

9. **The Pharmacist and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.

10. **Environment and sustainability:** Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

11. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.