



**Navyug Vidyabhavan Trust's**  
**C. K. Pithawalla Institute of Pharmaceutical**  
**Science & Research, Surat - 395007**



*Honourable Late. Shri. Chhotubhai K. Pithawalla*  
*(Founder & President)*  
*Navyug Vidhyabhavan Trust, Surat*



### *Co-Editor's Message*

**Prof. Dr. Mahesh. G. Saralai**  
**Principal,**  
**C. K. Pithawalla Institute of Pharmaceutical Science and Research, Surat.**

It gives me an immense pleasure to publish with pride **CKPIPSR E-Newsletter, Volume -8 Issues II, 2016**. The pride of every student and staff would be in his/her college. It was quite inspiring to watch and witness the potential of our students/staff unfolding at various stages and situations each day. Trying and testing times during the hectic semester system have elicited our students to put forth their best. A college may reach heights of glory but without materials like a college newsletter, the outside world may not know of it. Therefore, a college bulletin is vital in promoting what an institution offers. CKPIPSR Newsletter carries the contributions reflecting ethos and aspirations of the students, faculty and other team members of the institution. CKPIPSR Newsletter brings to light the names of the unsung heroes and their mighty deeds. I am happy that there is a dedicated team of staff and students who have presented the astonishing achievements of C. K. Pians in the fields of academics, research, sports and extra-curricular activities.

The management and the staff have been supportive of the various activities that were undertaken by the students in view of helping them reach the pinnacle of perfection and professionalism in whatever task they took on thus strengthens our journey of achieving excellence. There is nothing... absolutely nothing that stops the C.K.P.I.P.S.R juggernaut from rolling forward, going on boldly from one project to another leaving the spectators spell-bound. Everything that C.K.P.I.P.S.R. touches turns into gold.

It continues to sustain its growth. People reading this newsletter will realize the tremendous changes that are happening in the C.K.P.I.P.S.R. Campus. The CKPIPSR Newsletter is presenting a glimpse of the growth of the institution on many fronts. The college has been simply unstoppable in its progress as it has been actively involved in various activities that have brought to light the hidden talents of the college students and staff. The highly qualified and dedicated members of staff have always stood shoulder with the Principal and it is always a pleasure to be a part of a team which strives to bring out the talents of students.

CKPIPSR Newsletter has recorded achievements such as: academic excellences, conferences attended by staff members and students, competitions won by the hugely talented students/Staff, innovative projects carried out by students with the guidance of staff, among others. They stand as a witness to the monumental efforts taken by the management to make the college a centre of excellence in education and research.

I am sure the college will scale even greater heights in the years to come and serve many more millions in the society.

Congratulations to **Ms. Richa Vasava (Dept. of p'ceutical chemistry)** and **Ms. Falguni Rathod (Dept. of Pharmacognosy), Assistant Professor, Co-editor/Co-ordinator of CKPIPSR Newsletter** and my team for their determined efforts in bringing out this Newsletter.

### *Co-Editor's Message*



**Ms. Richa T. Vasava.**  
Assistant Professor,  
(Department of Pharmaceutical Chemistry)



**Ms. Falguni N. Rathod**  
Assistant Professor,  
(Department of Pharmacognosy)

Dear CKPIPSR Students and Readers;  
Welcome to **E-Newsletter, Volume-8, Issues-II, 2016.**

It is a wonderful opportunity for us to consign the E-Newsletter of C.K. Pithawalla Institute of Pharmaceutical Science and Research, Surat.

This E-Newsletter not only comprise the academic achievements of C.K.P.I.P.S.R. family but it also includes a spirited activity of our students in painting, poetry, stories, literature and their enthusiasm in sports and cultural activity.

We would like to express sincere thanks to our Respected Principal Sir, **Prof. Dr. Mahesh G. Saralai** for giving us an opportunity and reliable guidance to Co-ordinate this e-newsletter. We also thank our colleagues, students and staff for their co-operation, support and encouragement during compilation of this e-newsletter.

We hope that you will enjoy reading this issue. **CKPIPSR E-Newsletter** Values your contribution and we look forward to your Support and suggestion for better edition of E-newsletter in the future.



## A GESTURE TO PROFESSION

# DEDICATED TO



**Dr. Hemchandra P. Tipnis** retired Principal of the Bombay College of Pharmacy (BCP) and Central Executive Council Member of the Indian Pharmaceutical Association (IPA)

**Date of Birth:** 7<sup>th</sup> July, 1933

**Place of Birth:** Mumbai, Maharashtra, India

**Occupation:** as Principal

### **Educational Track**

**College:** BSc (Tech) and MSc (Tech) from the University Department of Chemical Technology (UDCT), Mumbai in 1958.

**Higher Study:** Master's and doctorate completed from the University of California School of Pharmacy, San Francisco; and University of Nebraska, Omaha respectively.

### **WORK EXPERIENCE**

He was worked as reader at UDCT.

**1966-:** Starting participation in professional activities of IPA right.

**1971-:** as the principal of Bombay College of Pharmacy

**1988 to 1991-:** Convener of IPCs

**1997 to 2006-:** as Associate Editor for Indian Journal of Pharmaceutical Sciences (IJPS),

**2007-:** elected as President of 59 Indian Pharmaceutical Congress (IPC), held at Varanasi.

### **Research contributions:**

**2013-:** IRF Lifetime Achievement Award

**2015-:** the prestigious Acharya P. C. Ray Gold medal of IPA Bengal Branch in November 2015 for his outstanding contributions to the overall development of the profession of Pharmacy.

**Lunsford- Richardson award (USA)**

- He has over 180 research papers and review articles, written 10 books and produced 35 Ph.D., and over 100 Masters Graduates.
- He pioneered the initial bioavailability studies in human volunteers and his research papers formed the basis for amendments to Drugs & Cosmetics Act, with the ultimate inclusion in to Schedule Y in the Act.
- He was amongst the first to understand the importance of industry tie-ups in the growth of academic institutes and sew-up partnerships between the pharmacy industry and BCP, a move that propelled BCP into the big league of pharmacy colleges not just in the country but internationally as well.
- His vision and acumen helped the Indian pharma industry get attuned to the global regulatory requirements and opened the doors to Indian ANDA filings with the USFDA.
- To development of scientific journals in our country & the development of scientific writing skills among Indian research students and academicians.

After his retirement from BCP, Dr. Tipnis took up the assignment as Corporate Advisor-Pharmacy Practice, in Medicine Shoppe where he ensured implementation of Good Pharmacy Practice concept in several of the stores of Medicine Shoppe.

He formulated many leaflets, educational materials, articles in newspapers on the subject of patients' understanding of taking medicines and compliance.

In this crusade he gave many presentations in remote areas of Maharashtra, Gujarat, Karnataka, Kerala to introduce the concept of Community Pharmacy.

### **AWARDS AND HONOURS**

**1993-:** Prof. M. L. Khorana Memorial Lecture Award

**2004: IPA Eminent Pharmacist Award**

**PAMDAL Award and IDMA awards for best research papers**

**Dr. G. P. Srivastava Award**

He was also awarded the **AICTE Emeritus Professorship**

Dr. H. P. Tipnis died on 23 May, 2016

*Academic Excellence***SUMMER-2016 EXAM**

- **Eighth Semester** – **Two** students secured more than 8 SPI while **eleven** students secured more than 7 SPI in Winter-2015 exam.
- **Sixth Semester** – **Two** students secured more than 8 SPI while **eight** students secured more than 7 SPI in Winter-2015 exam.
- **Fourth Semester** – **Four** students secured more than 8 SPI while **twenty** students secured more than 7 SPI in Winter-2015 exam.
- **Second Semester** – **Three** students secured more than 8 SPI while **twenty three** students secured more than 7 SPI in Winter-2015 exam.

**MERITORIOUS STUDENTS**

CLASS	RANK	NAME OF STUDENT	SPI
SEMESTER-VIII	1	MotwaniAvinash Patel Henisha	8.27
	2	GamitSheron	7.82
	3	RajwadwalaYachita	7.55
SEMESTER-VI	1	QadriMisbah	8.45
	2	Indave Jaya	8.00
	3	GajjarHinal	7.73
SEMESTER-IV	1	Patel Bansari	8.55
	2	JangidJyoti	8.27
	3	BariaNiketa	8.18
SEMESTER-II	1	Singh Chandani	8.14
	2	Hakeem Safiya	8.08
	3	Sharma Puja	8.03

**State wise ranking of the Institute at GTU, Gandhinagar (2015-16)**

Semester	% of Result of Institute	Institute wise rank
8 <sup>th</sup>	71.43%	30
6 <sup>th</sup>	51.72%	35
4 <sup>th</sup>	65.22%	11
2 <sup>nd</sup>	62.90%	13

## *Feathers on the Crown*

### Conferences/ Seminars/ Workshop attended by Faculty

- ✚ Dr. M. G. Saralai (Chairperson, scientific session) attended 4<sup>th</sup> International Conference on “Theranostic Nanoparticles : Recent breakthrough in Nanotechnology” at Shree Dhanvantary Pharmacy college kim, Surat on 15<sup>th</sup> & 16<sup>th</sup> April 2016
- ✚ Dr. Dr. M. G. Saralai (Guest speaker) attended GSPC Sponsored seminar on “Refresher Course for Registered Pharmacists” at Shree Naranjibhai Lalbhai Patel College of Pharmacy, Umarakh on 8<sup>th</sup> and 15<sup>th</sup> May, 2016
- ✚ Dr. M. G. Saralai (Judge), Dr. Pinal Harde (Judge) and Dr. Ashok Akbari (Judge) attended GUJCOST sponsored one day National Seminar on “Role of Indian System of Medicine in the era of make in India” at Shree Naranjibhai Lalbhai Patel College of Pharmacy, Umarakh on 24<sup>th</sup> September, 2016.
- ✚ Dr. Pinal Harde (Delegate) and Mrs Kavita Sutariya (Delegate) attended GSPC Sponsored “Two Days of Refresher Course for Registered Pharmacists” at C. K. Pithawalla Institute of Pharmaceutical Science and Research, Surat on 17<sup>th</sup> –18<sup>th</sup> September, 2016.
- ✚ Mrs. Mitali Patel(Delegate)attended GSPC sponsored “Two Days Of Refresher Course for Registered Pharmacists” at C. K. Pithawalla Institute of Pharmaceutical Science and Research, Surat on 30<sup>th</sup> –31<sup>th</sup> July,2016.

### Conferences/Seminars/Workshop attended by Students & achievements

- ✚ Six students of fifth semester and five students of third semester participated in competitions like scientific visual delight, pharamamodeling and word war; crack the code at “APOCALYPSE 2016” organized by K. B. Institute of Pharmaceutical & Research, Gandhinagar on 5<sup>th</sup> and 6<sup>th</sup> August, 2016. Students got: 1<sup>st</sup> Prize (Scientific Visual Delight, Let’s face): Vyoma Patel
- ✚ Fourteenth students of fifth semester participated in various competitions like Poster presentation, Model Inncepharm, pharamarecipe, pictionary at “7<sup>th</sup> PHARMAVISION” organized by Babariya Institute of Pharmacy, Vadodara on 17<sup>th</sup> -18<sup>th</sup> September, 2016.
- ✚ Eleven students of third semester attended GUJCOST sponsored One day National Seminar on “Role of Indian System of Medicine in the era of make in India” at Shree Naranjibhai Lalbhai Patel College of Pharmacy, Umarakh on 24<sup>th</sup> September, 2016. 1<sup>st</sup> Prize : Rangrej Krishna

## Publication

- ✚ A review on “**Herbal’s use for Parkinson and Various Procedures for Parkinson Disease**” by M. G. Saralai, Patil Vishal S. and Manoj Alai; Journal of Bioinnovation, 2016, Volume 5, Issue 4.
- ✚ A research on “**Development and Evaluation of Polyherbal Formulation for the Treatment of Eczema**” A. G. Gandhi, M. G. Saralai, H. P. Patel, B. M. Patel, P. K. Jadav, International Journal of Pharma Research & Review, Sept 2016; 5(9): 20-29
- ✚ A research on “**Development and Validation of Stability Indicating RP-HPLC Method for Estimation of Fluvastatin Sodium in Bulk and Capsule Dosage Form**” by Ashok Akabari, Bhanubhai Suhagia, Mahesh Saralai, Vishnu Sutariya; Eurasian Journal of Analytical Chemistry-00016-2016-02.
- ✚ A research on “**Frequency of Satellite Associations of Acrocentric Chromosomes in Oral Squamous Cell Carcinoma Patients after 5-FU and Cisplatin Treatments**” by Pankaj Gadhia and Bhumika Desai; International Journal of Molecular Medical Science, 2016, Vol.6, No.1, 1-5.
- ✚ A review on “**Medicinal Value of *Mimosa pudica* as an anxiolytic and antidepressant: a comprehensive review**” by Zoya Shaikh, Samaresh Pal Roy, Pankti Patel, Kashmira Gohil, world journal of pharmacy and pharmaceutical sciences ,Volume 5, Issue 3, XXX-XXX Review Article ISSN 2278 – 4357, 2016.

## Upcoming Events

- ✚ World Congress on Drug Discovery & Development on 23rd-25th November, 2016 held at Bangalore.
- ✚ 68th Indian Pharmaceutical Congress on 16th-18th December, 2016 held at Andhra University, Visakhapatnam and Andhra Pradesh.



## *Guest Lecture Organized*

- ✚ A guest lecture on a topic of **“Study in Abroad”** by Mrs. Rajni Purohit, Edwise Consultancy, Surat was organized on 5<sup>th</sup> July, 2016.
- ✚ A guest lecture on a topic of **“Tablet formulation and Novel drug delivery system”** by Dr. Pranav Shah and Dr. Bhavin Vyas, Maliba Pharmacy College, UkaTarsadiya University, Bardoli was organized on 8<sup>th</sup> July, 2016.
- ✚ A guest lecture on a topic of **“Pharma Industry Interaction”** by Dr. Bhanubhai Vaghasiya, Globela Pharma Pvt Ltd, was organized on 15<sup>th</sup> July, 2016.
- ✚ A guest lecture on a topic of **“Successful career in pharma sector & other scopes of pharma”** by Dr. Vijayendra Swami, Bhagwan Mahavir College of Pharmacy, Surat was organised on 15<sup>th</sup> July, 2016.
- ✚ A guest lecture on a topic of **“Soft Skill Development”** by Mr. Vatsal Naik and Dr. Chandrakant Shelat, Mahavir Synthesis, Surat was organized on 15<sup>th</sup> July, 2016.
- ✚ A guest lecture on a topic of **“Pharmacy Practice Regulation”** by Mr. Pravin Vekariya, S.G.C.A, Surat was organised on 30<sup>th</sup> July, 2016.
- ✚ A guest lecture on a topic of **“Good Manufacturing Practice”** by Dr. Bhanubhai Vaghasiya, Globela Pharma Pvt Ltd, was organized on 30<sup>th</sup> July, 2016.
- ✚ A guest lecture on a topic of **“Rational use of Drugs”** by Akshay Koli, Sun Pharmaceutical Ltd, was organized on 30<sup>th</sup> July, 2016.
- ✚ A guest lecture on a topic of **“An overview of rule 65 under the provision of drugs and cosmetics Act 1940 and rules their under”** by Mr. H. K. Patel, Sun Pharmaceutical Ltd, was organized on 30<sup>th</sup> July, 2016.
- ✚ A guest lecture on a topic of **“Drug Interaction”** by Dr. Ashish D. Mishra, Maliba Pharmacy College, Bardoli was organized on 31<sup>th</sup> July, 2016.
- ✚ A guest lecture on a topic of **“Self-medication and its demerits”** by Dr. Pranav Shah, Maliba Pharmacy College, Bardoli was organized on 31<sup>th</sup> July, 2016.



- ✚ A guest lecture on a topic of **“Adverse Drug Reactions: Adverse Cutaneous Drug Reactions”** by Dr. Sunil Gandhi, Reviva Skin Clinic, Surat was organized on 31<sup>th</sup> July, 2016.
- ✚ A guest lecture on a topic of **“Pharmacy Regulation Practice 2015”** by Mr. Pravin Vekariya, S.G.C.A, Surat was organized on 17<sup>th</sup> September, 2016.
- ✚ A guest lecture on a topic of **“Advance in Nano Medicine”** by Dr. M. N. Noolvi (Principal), Shree Dhanvantary Pharmacy College, Kim, Surat was organized on 17<sup>th</sup> September, 2016.
- ✚ A guest lecture on a topic of **“Role of Pharmacist in Health Care System”** by Mr. Hetal Patel (ex Pricipal), Dayaram College of Pharmacy, Bardoli, Surat was organized on 17<sup>th</sup> September, 2016.
- ✚ A guest lecture on a topic of **“Introduction to novel drug delivery system”** by Mr. Dhiren Shah (principal), Shree N. L. Patel college of Pharmacy, Umarakh was organized on 17<sup>th</sup> September, 2016.
- ✚ A guest lecture on a topic of **“Amendments in G.S.P.C.”** by Mr. Montu Patel, President G.S.P.C. was organized on 17<sup>th</sup> September, 2016.
- ✚ A guest lecture on a topic of **“Patient counselling and CRM: The road ahead for retail pharmacist”** by Dr. Mehul Thakkar, Agriculture University, Navsari was organized on 18<sup>th</sup> September, 2016.
- ✚ A guest lecture on a topic of **“Safe Disposal of Medicines”** by Dr. Shrikant Joshi, Maliba Pharmacy College, Bardoli was organized on 18<sup>th</sup> September, 2016.
- ✚ A guest lecture on a topic of **“Osteoporosis Diagnosis and Treatment”** by Dr. Shweta Bhagat, Florence Hospital, surat was organized on 18<sup>th</sup> September, 2016.



## *Events Organized*

### Refresher Course

A two days "Gujarat State Pharmacy Council sponsored Refresher Course for registered pharmacists"; First Refresher course was organized on 30th & 31st July, 2016 and Second Refresher course was organized 17th & 18th September, 2016 with active participation of 200 Registered Pharmacists.

### FIRST REFRESHER COURSE



### SECOND REFRESHER COURSE



## Teacher's Day Celebration

5<sup>th</sup> September is celebrated as Teachers' Day as a mark of tribute to the contribution made by teachers to the society. 5<sup>th</sup> September is the birthday of a great teacher Dr. Sarvapalli Radhakrishnan. Extracurricular committee members organized Teacher's day Celebration on 6<sup>th</sup> September, 2016.



## Swachhata Samarasata Abhiyan

The Swachha Bharat campaign was officially launched on 2 October 2014, by Prime Minister Narendra Modi. It is India's biggest ever cleanliness drive and 3 million government employees and school and college students of India participated in this event. So, our college participated in this Abhiyan as a part of making our country healthy and clean.

### **CAMPUS CLEANING ACTIVITY**



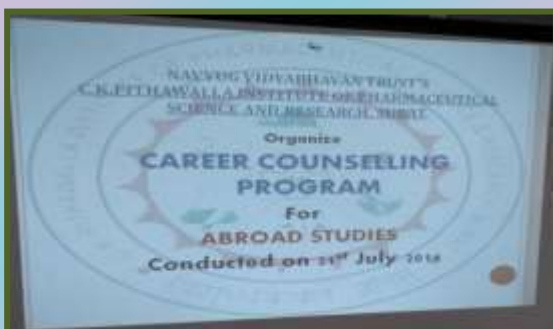


### PLEDGE ON CLEANING ACTIVITY



## CAREER COUNSELLING PROGRAM

Career Counselling Program for Abroad Studies and Placement opportunities was organized on 21<sup>st</sup> July 2016. A Counsellors, Paridhi Desai, Khatiwala Payal, ParmarVaishali, Rajni Purohit, and Richie Christie have counselled the students for Abroad Studies for Canada/U.S.A/Australia/U.K. Total 38 Students have participated in Career counselling Program and got benefited.



## INTERNATIONAL YOGA DAY 2016 CELEBRATION

Under the visionary Leadership of Hon. Prime Minister Shri Narendrabhai Modi, 21<sup>st</sup> June has been declared as INTERNATIONAL YOGA DAY. Yoga training was conducted at the institute during 5.00pm to 6.00 pm from 14<sup>th</sup> to 20<sup>th</sup> June 2016.

### Yoga Training Sessions Photo Gallery



### International Yoga Day Celebration Photo Gallery





## Excellence press note

### C. K. Pithawalla Institute of Pharmaceutical Science and Research

GSPC sponsored Refresher course for Registered Pharmacists

A two days "Gujarat State Pharmacy Council sponsored Refresher Course for registered pharmacists" was organized at C. K. Pithawalla Institute of



Pharmaceutical Science and Research, Surat on 17<sup>th</sup> and 18<sup>th</sup> September, 2016 with active participation of 200 Registered Pharmacists. The inaugural session was chaired by renowned personalities such as Mr. Montu Patel, President, GSPC, Mr. Pravin Vekariya, President, GSCA, Dr. M. N. Noolvi, Principal, Shree Dhanvantary College of Pharmacy, and Prof. Dr. Mahesh G. Saralal, Principal of host institute. Mr. Montu Patel briefed about upcoming GSPC activities and emphasized that all pharmacists should become updated with newer advancements in the field. Mr. Pravin Vekariya guided about current and upcoming modifications in law for the betterment of pharmacists. Mr. Pravin Vekariya expressed his views on "Pharmacy Practice Regulation 2015". Dr. M. N. Noolvi spoke in detail about "Advances in nano medicine". Mr. Hetal Patel delivered a talk on "Role of Pharmacist in community Pharmacy". Dr. Dhiren Shah gave a speech on "Introduction to NDDS". Day 2 session was flying started and timely accomplished by effective presentation by speakers with all participants stupendous throughout session. Dr. Mehul Thakkar delighted audience by his presentation on "Patient counselling and CRM: A road ahead for community pharmacist". Dr. Shrikant Joshi impressed every one by his excellent talk on "Safe disposal of medicines". Dr. Shweta Bhagat carefully explained minute details of "Osteoporosis- Symptoms and treatments". Valedictory programme was chaired by glorious dignitaries, Dr. Shrikant Joshi Member GSPC, and Prof. Dr. Mahesh G. Saralal, Course director and principal, CKPIPSR. Dr. Shrikant Joshi admired the efforts taken by Dr. Mahesh G. Saralal and his team.

### C. K. Pithawalla Institute of Pharmaceutical Science and Research, Surat

A one day seminar was organised under GTU Innovative Sankul on "Soft Skill development" at C. K. Pithawalla Institute of Pharmaceutical



Science and Research, Surat, Gujarat on 19<sup>th</sup> July, 2016. More than 120 students/faculties were benefited by a talk of Chief guest Dr. Bharubhai Vaghoshia, M.D, Globela Pharma Pvt. Ltd. on "How to prepare and face Pharma Industries interview". Mr. Vatsal Naik, M.D., Mahavir Synthesis Pvt. Ltd. given a lecture on "Soft skills for survival out of egg shell". Prof. Dr. M.G. Saralal, Dean GTU Innovative Sankul, Principal C.K. Pithawalla Institute of Pharmaceutical Science and Research explained that the main objective of the "GTU Innovative Sankul" is to build a strong relation between the industry and academia, its activities and its benefits to students, faculty & industry. Prof. Dr. Vijayachandran, Principal, Bhagwan Mahavir College of Pharmacy, Surat guided the students to succeed in their career.

C. K. Pithawalla Institute of Pharmaceutical Science and Research Refresher course, also organised two day refresher course on 30<sup>th</sup> & 31<sup>st</sup> July, 2016 sponsored by Gujarat State Pharmacy Council. The programme was inaugurated by Hon'ble Chief guest Dr. C.D. Shelat, Asst. Commissioner, FDCA, Surat and Dr. Shrenik Shah, Vice President GSPC with Mr. Maheshbhai Pithawalla, Hon'ble trustee, Navyug Vidyabhavan Trust, Dr. Prof. M.G. Saralal, Principal Dr. Bharubhai Vaghoshia, Mr. Pravin Vekariya, Mr. Hitesh Bhuria, Mr. H.K. Patel, Dr. Akshay Koli and Mr. Feni Shah. Prof. Dr. M.G. Saralal, in his opening speech highlighted the objective of GSPC and moral responsibilities of Pharmacists towards the society. Dr. C.D. Shelat's talk was centered on upgradation of knowledge of pharmacists through arrangement of such kind of refresher courses. Dr. Shrenik Shah explained the role and need of Community Pharmacist in the society. On the second day, Dr. Ashish Mishra, Dr. Suneel Gandhi and Dr. Pranav Shah were the eminent speakers. In the Valedictory function,



Dr. Shrikant Joshi gave an informative talk on the proposed amendments in GSPC rules and regulations regarding refresher course. Mr. Maheshbhai Pithawalla appreciated the efforts of Prof. Dr. M.G. Saralal, Principal of host Institute and he's team members in successful organisation of the event and the program was concluded with Vote of Thanks.

Pharmatimes, volume: 48, No: 10  
October 2016

### C. K. Pithawalla Institute of Pharmaceutical Science and Research, Surat

A one day seminar was organised under GTU-Innovative Sankul on Soft Skill development at C. K. Pithawalla Institute of Pharmaceutical Science and Research, Surat, Gujarat on 15<sup>th</sup> July, 2016. Chief guest Dr. Bharubhai Vaghoshia, M.D, Globela Pharma Pvt. Ltd. delivered a talk on "How to



prepare and face Pharma Industries interview'. Mr. Vatsal Naik, M.D., Mahavir Synthesis Pvt. Ltd. gave a lecture on Soft skills. Everyone present at the senior, were benefitted by the talks of the speakers.

Pharmatimes, volume: 48, No: 10  
October 2016

### પીઠાવાલા કોલેજમાં રિફ્રેશર કોર્સનું આયોજન કરાયું

ફોટો રિપોર્ટ: સુરત, ૧૭/૦૯/૧૬

સી. કે. પીઠાવાલા ઇન્સ્ટિટ્યુટ ઓફ ફાર્માસ્યુટિકલ સાયન્સ એન્ડ રિસર્ચ, સુરત દ્વારા ગુજરાત રાજ્ય ફાર્માસ્યુટિકલ એસોસિએશન (GSPC) ની આયોજિત રિફ્રેશર કોર્સનું આયોજન કરાયું હતું. આ કાર્યક્રમનું ૨૦૦ ફાર્માસ્યુટિકલ પ્રોફેશનલ્સ અને સ્ટુડન્ટ્સ હાજર રહ્યા હતા. મુખ્ય અર્થ દ્વારા ગુજરાત રાજ્ય ફાર્માસ્યુટિકલ એસોસિએશનના વાઇસ પ્રેસિડન્ટ ડૉ. શ્રેણિક શાહ, ડૉ. અશિષ મિશ્રા, ડૉ. સુનીલ ગાંધી અને ડૉ. પ્રણવ શાહ દ્વારા આ કાર્યક્રમનું આયોજન કરાયું હતું.

City Bhaskar  
18<sup>th</sup> September 2016



## *Scientific Articles*

### **DEVELOPMENT AND EVALUATION OF POLYHERBAL FORMULATION FOR THE TREATMENT OF ECZEMA**

A. G. Gandhi, M. G. Saralai, H. P. Patel, B. M. Patel<sup>2</sup>, P. K. Jadav.

#### **Abstract**

In Ayurveda, most of the drugs are given in the form of powder, kasaya or bhasma. In this study, topical formulations were prepared for local effect. The main objective of the study was to develop a semisolid dosage form of Aloe Vera – Aloe barbadensis and Turmeric-Curcuma longa extract using emulsifying ointment BP as a base for the treatment of eczema. Eczema is a non-contiguous skin disease, which can be prevented by administration of drugs through topical route having the ability to deliver a higher concentration of drug to the skin, would be possible with systemic therapy. For preclinical study, oxazolone induced allergic contact dermatitis by using Swiss albino mice. Formulations were prepared which containing 3%, 4% and 5% herbal extracts and applied topically once a day on outer and inner surface of the mouse's ear for 10 days post-operatively, compared with base control. Assess the efficacy of formulations assay, microbial activity, stability, spreadability, extrudability and other physical characteristics were evaluated. In the control group, rise in ear thickness was 52 % at 24 h after challenge by oxazolone whereas betamethasone demonstrated significant rise in ear thickness was 42% ( $P < 0.0001$ ). Formulation 1, 2 & 3 exhibited 48%, 45% and 44% raise in ear thickness respectively at 24 h after challenge. Formulation 3 exhibits best effects as compared to 1 and 2 which gives the best antimicrobial activity as well as oxazolone induced allergic contact dermatitis model. Prepared polyherbal formulation complies with all the physical parameters.

### **LEPTIN SIGNALING AND DEVELOPMENT OF HYPERTENSION IN OBESITY**

P K Jadav, A G Gandhi, B M Patel, M G Saralai.

#### **Abstract**

Leptin is synthesized and secreted by white adipose tissue, by acting on hypothalamic nuclei; it decreases appetite and increases energy expenditure through sympathetic activation to decrease adipose tissue mass. Leptin also activate sympathetic nervous system in kidney, spleen, heart and hind limb. Leptin secretion decreases during fasting and increased after several days of overfeeding to regulate energy balance. Leptin act on Ob-Rb receptor, which is tyrosine kinase receptor and activate JAK/STAT pathway, PI3 kinase signaling pathway and Mitogen Activated Protein kinase [MAP] kinase signaling. Leptin induced anorexic effect is mediated by synthesis of melanocyte-stimulating

hormone in POMC neuron which act on MCR-3 and MCL-4 leptin induced sympathetic activation is also mediated by STAT3 activation in propiomeclanortin neuron. It is released melanocyte stimulating hormone which act on MCR-4 receptor. Most of obese human have high circulating lepin but remain obese indicating resistance to anorexic and weight lowering effect of leptin. Leptin induce anorexic effect and sympathetic nervous system stimulatory effect is mediated by different area of brain. Thus leptin resistance is selective in obesity i.e. increased leptin level shows resistance to anorexic and weight lowering effect of leptin with preservation of sympathoactivation. Although leptin stimulate renal SNS, acute administration of leptin does not significantly affect blood pressure because of release of NO and natriuresis. But chronic hyperleptemia in obesity induces increased renal sympathetic activity and rise in BP by activation of  $\text{Na}^+ \text{K}^+$  ATPase pump and inhibition of inhibitory effect of NO on  $\text{Na}^+ \text{K}^+$  ATPase pump, which increases  $\text{Na}^+$  and water reabsorption and raise arterial blood pressure.

### **FREQUENCY OF SATELLITE ASSOCIATIONS OF ACROCENTRIC CHROMOSOMES IN ORAL SQUAMOUS CELL CARCINOMA PATIENTS AFTER 5-FU AND CISPLATIN TREATMENTS**

**Pankaj Gadhia, Bhumika Desai.**

#### **Abstract**

Oral squamous cell carcinoma is one of the most prevalent diseases worldwide. Acrocentric (D and G groups) satellite associations are known to play important role in the pathogenesis of diseases including cancers. The present work was aimed to study the frequency of satellite associations (SA) in human peripheral blood lymphocytes of freshly diagnosed oral squamous cell carcinoma patients and comparison will made with in vitro combined treatments of 5-Flurouracil (5-FU) and Cisplatin to observe the changes in frequency and pattern of satellite associations.

### **MEDICINAL VALUE OF MIMOSA PUDICA AS AN ANXIOLYTIC AND ANTIDEPRESSANT: A COMPREHENSIVE REVIEW**

**Zoya Shaikh, Samresh Pal Roy, Pankti Patel, Kashmira Gohil**

#### **Abstract**

Mimosa pudica from latin "pudica" means shy, shrinking is also called a sensitive plant and touch me not is a creeping annual and perennial herb. The species is native to South America and Central America. Mimosa belongs to the taxonomic group Magnoliopsida and belonging to family Mimosaceae. It folds itself when touched and spreads its leaves once again after a while. Thigmonastic movements in the sensitive plant Mimosa pudica

L., associated with fast responses to environmental stimuli, appear to be regulated through electrical and chemical signal transductions. These are plants used in traditional medicine in Cameroon to treat insomnia, epilepsy, anxiety, agitation, leprosy, dysentery, depression, vaginal, uterine complaints, inflammations, burning sensation, asthma, leucoderma, fatigue and blood diseases. The major components said to be responsible for activities are C-glycosyl flavones namely, isorientin, orientin, isovitexin and vitexin. Scientific evidence exists with respect to their major and minor constituents. A review of literature was conducted to ascertain actions of this plant in addition to systemic review of controlled preclinical trials for treatment of depression and anxiety. *M. pudica* is the most important controversial and effective natural origin that has a tremendous future for research. The novelty and applicability of *M. pudica* are hidden. Such things should be overcome through modern scientific concept.

### **DEVELOPMENT AND VALIDATION OF STABILITY INDICATING RP-HPLC METHOD FOR ESTIMATION OF FLUVASTATIN SODIUM IN BULK AND CAPSULE DOSAGE FORM**

**Bhanubhai N Suhagia, Ashok H Akabari, Mahesh G Saralai, Vishnu A Sutariya.**

#### **Abstract**

A sensitive, specific and stability-indicating reversed phase high performance liquid chromatography-diode array detection method was developed for the quantitative determination of fluvastatin sodium in the presence of its degradation products. The chromatographic separation was performed on a Phenomenex Luna C18 column (150 X 4.0 mm, 5 $\mu$ m) in isocratic mode using acetonitrile and 0.02M potassium phosphate buffer (50 + 50, v/v, pH 5.0 adjusted with potassium hydroxide) as the mobile phase at a flow rate of 1.0 ml/min. The quantification was performed with a photodiode array detector at 235nm based on peak area. The method showed good linearity over the concentration range of 5-40  $\mu$ g/mL with a detection limit of 1.1 $\mu$ g/mL and quantification limit of 3.3 $\mu$ g/mL. The proposed LC method was used to investigate the kinetics of acidic and oxidative degradation of fluvastatin sodium. The acidic and oxidative degradation had shown an apparent first-order kinetics and rate constants were found to be 0.0191 $\mu$ g/mL/min and 0.0048 $\mu$ g/mL/min, respectively.

### **REVIEW ON HERBAL'S USED FOR PARKINSON AND VARIOUS PROCEDURES FOR PARKINSON DISEASE**

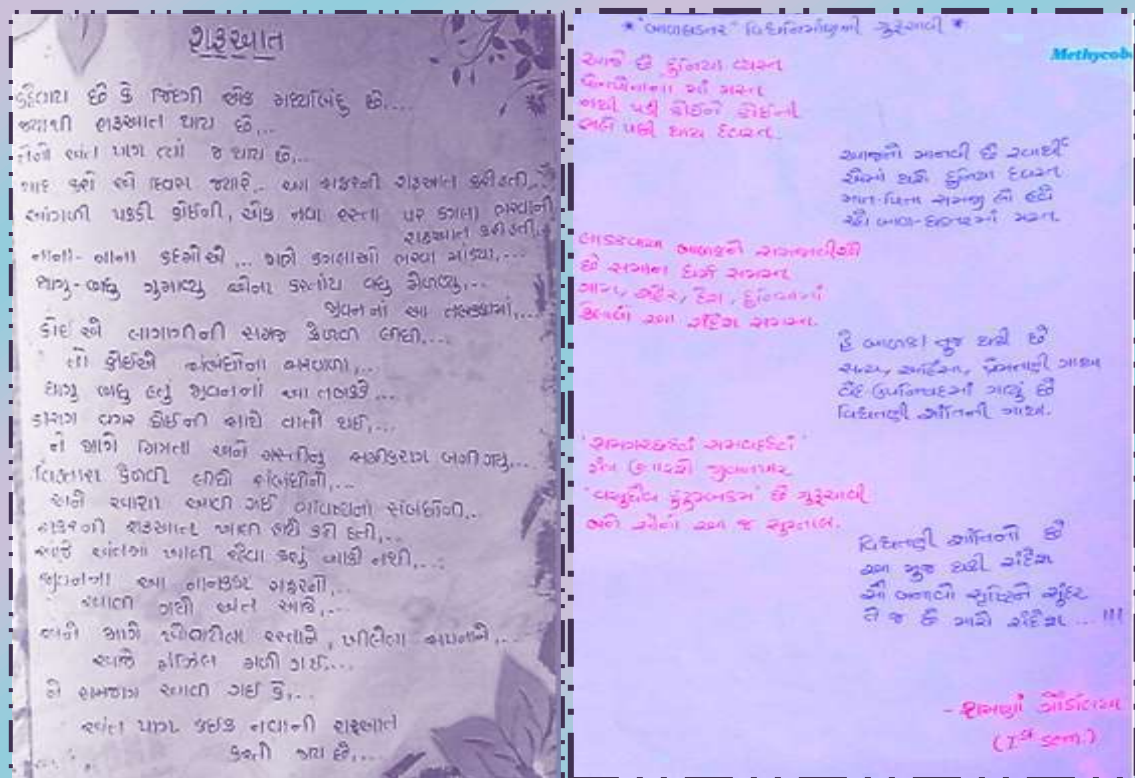
**Patil Vishal Satish, Manoj Alai and Mahesh Saralai.**



## Abstract

Parkinsonism is one of the commonest neurodegenerative diseases, which is characterized by a selective and progressive degeneration of dopaminergic neurons, causing a series of symptoms which might ultimately induce programmed cell death. Although the etiology of Parkinsonism remains unknown, recent studies have suggested that oxidative stress (OS), produces apoptosis which results in mitochondrial defects, neuroinflammation may also play important roles in its pathogenesis. Various agents as 6-Hydroxydopamine (6-OHDA), 1-methyl-4-phenyl 1,2,3,6-tetrahydropyridine, Rotenone a neurotoxin commonly and many more are used in models of PD, induces selective catecholaminergic cell death, mediated by reactive oxygen species (ROS) and mitochondrial defects. The present article puts focus on the possible use of various herbs used for parkinson. The main purpose of this article is to have a closer look towards the herbal treatment for parkinsonism.

## Hobby Corner



## ***SHE was born***

*She said it,  
He felt the kick,  
The three of them  
Embraced each other tightly,  
The doctor entered,  
“All okay?” they asks,  
He nods with hesitation deep  
within eyes;  
And then, Instead of He,  
She was born;  
First day of school,  
First school trip with friends,  
Half hearted, Mother packs  
her bags  
Both had trouble sleeping that  
night;  
Learned to make  
Perfect round chapattis,  
“Ready for marriage.” They  
said,  
“Ready to live alone.” She  
thought;  
At the airline check-in  
counter,*

*She wished,  
They would limit the baggage  
Her heart could carry too;*

*Years later,  
Time caged into polaroid  
Saw pictures of her younger  
self,  
Her wrinkled face smiled,  
Love hadn’t aged after all;*

*Regret- at birth,  
Joy- when she giggled,  
Pride- when she excelled,  
Sorrow- Now that she’ll be  
leaving;*

*Daughter,  
You found a human within a  
hypocrite.*

*By: Rangrez Krishna*

## *Extra-curricular Activities*

Number of extra-curricular activities including Indoor sports celebration, Teacher's day celebration, Industrial visit, Yoga Days celebration, NSS Activities (Campus Cleaning, Patriotic events, essay competition), various competitions like Mehndi, Drawing, FoodyFunda, Rangoli, Best out of waste, Hair style, were organized by institute during academic Year 2016.

### Indoor sport celebration



### Patriotic competition on account of freedom fortnight





## Photo Gallery

*Essay Competition*



*Drawing/ Painting*



*Best out of waste*



*Foodyfundu*



*Hairstyle*



*Mehndi*



*Rangoli*





## Indigenous Plants which have Anxiolytic Property

Falguni N. Rathod, Mahesh G. Saralai

Department of Pharmacognosy,

C. K. Pithawalla Institute of Pharmaceutical Science and Research, Dumas Magdalla Road, Surat-395007, India.

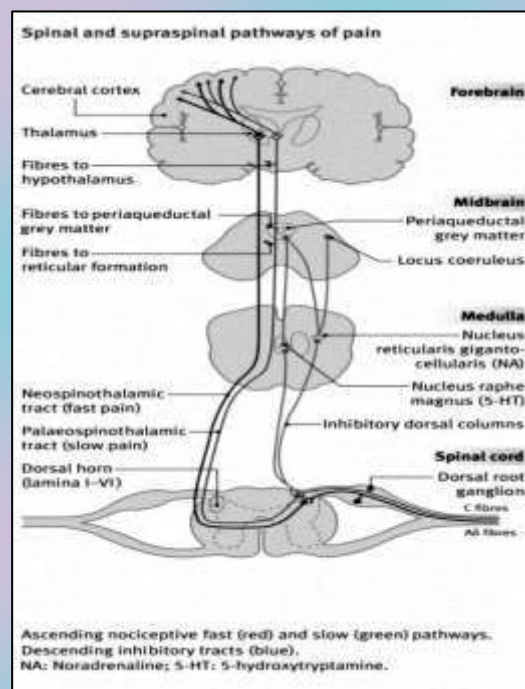
### ABSTRACT:

Anxiety refers to an unpleasant feeling with vague fear with no definite content, and includes uncertainty, inability, and physiological arousal. Anxiety can be a debilitating factor for many daily activities, and may even cause adverse physiological effects on normal functions of the body. Several chemical drugs are used to treat anxiety disorders. However, most of these drugs are associated with several side effects and if they are discontinued, relapse of disorders is likely. Because many of the medicinal plants play a role in treating anxiety and many other diseases, and are used abundantly in traditional medicine, the aim of this review article is to report the native medicinal plants of India that are used to treat anxiety.

**KEYWORDS:** Anxiolytic Plant, Anti- anxiety, Indigenous Plants

### INTRODUCTION<sup>1,2</sup>:

Anti-anxiety drugs (anxiolytic agents or anti panic agents) are used to treat anxiety and anxiety disorders. Anxiety disorders are characterized by fear and stress. It is referred to unpleasant feeling of fear and stress. It decreases physical stimulation, cause depression and shivering. So many chemical drugs are used as anti-anxiety, but they have also side effects. Traditionally, so many plants are used for treatment of anxiety and its disorders. So, here we give information about our native herbal plants which have anxiolytic property.



*Garcinia indica*<sup>3</sup>





It is indigenous to the Ghats region of India located along the western coast of the country. It is found in forest lands, riversides and wastelands. Aqueous extract of dried fruits have reported anxiolytic activity. The dose of extract to animal was 500 mg/ kg.

#### *Coriandrum sativum*<sup>4, 5</sup>

Plant is cultivated in Andhra Pradesh, Maharashtra, West Bengal, Uttar Pradesh, Rajasthan and Jammu and Kashmir. Coriander seeds and oil and fruit are having anti-stress and anti- depression action. Its oil has anti-anxiety activity in Alzheimer's disease. The doses of extract given (by Poonam Mahendra et al. 2011) to animal were 200 mg/ kg which produced anti-anxiety effect.

#### *Cannabis sativa*<sup>6</sup>

It is indigenous to India. It is cultivated in Maharashtra, West Bengal and Madhya Pradesh. Cannabis leaves and flowering top are used as drug. Cannabidiol, a constituent of this plant has anxiolytic property. The dose of drug was 200-250 mg/kg.

*Bacopa moniera* plant found throughout India in wet, damp and marshy places, Asia and Middle-East. *Bacopa moniera* and *Centella asiatica* grows in wet area in India. It is found in some regions of Himalaya and in wet areas of India. The parts of the plant used are leaf and stem. There was found that Bacoside A has anti-anxiety property. Clinical data are available for this plant which show it is anxiolytic agent. The 500 mg dose is used twice daily after meal for treatment.

#### *Mimosa pudica*<sup>9</sup>



It is found in Thailand, India, and Indonesia. It grows mostly in undisturbed shady areas, under trees or shrubs. Whole plant is used in anxiety but leaves are more potent. The anxiolytic-like activity of the plant could be explained by the presence of some components in the plant extracts interacting with the benzodiazepine/GABA A receptors or with the 5-HT 1A receptors or with the NMDA receptors as antagonists, or with any other mechanisms. Aqueous extract is used of dried leaves (Dose: 180 mg/kg).

#### Brahmi and Jalbrahmi<sup>7-8</sup>

#### *Withania somnifera*<sup>10-11</sup>

This plant grows wild in all dry parts and subtropical India. It is obtained from Madhya Pradesh, Punjab and North-Western parts of India like Gujarat and Rajasthan. The root and stem parts are used in various treatment of psychotic disease and disorder. Study investigated the anxiolytic and antidepressant actions of the bioactive glycowithanolides (WSG), isolated from its roots (Bhattacharya S K et al. 2000). Glycowithanolides (20 and 50 mg/kg) was administered orally once daily for 5 days for the antidepressant investigations.

#### *Ocimum sanctum*<sup>12, 13</sup>

It is herbaceous plant found throughout India. The fresh and dried leaves are used. Thirty-five subjects were medicated with the plant extract in a fixed dose regime (500 mg/capsule, twice daily, after meal). The observations exhibited that, *O. sanctum* significantly ( $p < 0.001$ ) attenuated generalized anxiety disorders and also attenuated it is correlated stress and depression (D Bhattacharya et al. 2008). It is found that plant extract increases willingness and attention.

#### *Cuminum cyminum*<sup>14</sup>

It is cultivated in all states of India except Assam and Bengal. The seed part is used in various treatments. The ethanolic extract (800 and 1000 mg/kg once daily, oral) of cumin seeds are given for 3 days treatment of anxiety (Kaur Harpreet et al. 2016).

#### *Shankhpushpi*<sup>15, 16</sup>

*Canscora decussate* is found throughout India up to altitude of 1300 metre. Aerial parts are used. Plant extract at a dose of 100, 200 and 400 mg/kg p.o. showed an anxiolytic effect in Albino rats (Alok Nahata et al. 2006). Dose of 400 mg/kg gives significant effect.

#### *Sandalwood*<sup>17</sup>

Plants of *Santalum album* found in India. Sandalwood oil obtained from Sandalwood is used in aroma therapy. Aroma therapy using sandalwood oil produces anti-anxiety effect in human.

#### *Thyme*<sup>18</sup>

*Thymus vulgaris* is cultivated in some hilly part of India. Dried leaves and flowering tops of plant are used. Plant extract is used for study. 200 mg/kg dose is given to rats by feeding (Alireza Komaki et al. 2016). It shows anxiolytic activity.

### Discussion

All 12 plants have shown anti-anxiety activity. In which, clinical data are already available for these plants Brahmi, Jalbrahmi and Shankhpushpi. The anti-anxiety properties of these plants which have already been confirmed by scientific investigations and their phytochemical compounds, the effective substances of the plants presented in this review article can be studied in clinical trials to investigate whether they can be used to produce nature-based, anti-anxiety drugs.

REFERENCES:

1. Neeraj Gilhotra and Dinesh Dhingra. A Review on antianxiety Plants. Natural Product Radiance, Vol 7(5), 2008, pp- 476-478.
2. Masoud Nikfarjam<sup>1</sup>, Mahmoud Bahmani, Saeid Heidari-Soureshjani. Phytotherapy for anxiety in Iran: A review of the most important Anti-anxiety medicinal plants. Journal of Chemical and Pharmaceutical Sciences, ISSN: 0974-2115.
3. Manish Patel, Bhavesh Antala, Chandana Barua<sup>1</sup>, Mangala Lahkar. Anxiolytic activity of aqueous extract of *Garcinia indica* in mice. International Journal of Green Pharmacy, 2013, pp:332-335.
4. Oana Cioanca, Lucian Hritcu, Marius Mihasan, Adriana Trifan, Monica Hancianu. Inhalation of coriander volatile oil increased anxiolytic property in rat model of Alzheimer's disease, Physiology and Behavior, vol-131, 28 May 2014, Pages 68–74.
5. Poonam Mahendra, Shradha Bisht. Anti-anxiety activity of *Coriandrum sativum* assessed using different experimental anxiety models. Year : 2011, Volume : 43 Issue : 5, Page : 574-577.
6. Alexandre Rafael de Mello Schier. Cannabidiol, a *Cannabis sativa* constituent, as an anxiolytic drug. Laboratory of Panic and Respiration, Institute of Psychiatry (IPUB), Universidade Federal do Rio de Janeiro (UFRJ), Brazil, Vol-34, June 2012.
7. S.K. Bhattacharya, S. Ghosal. Anxiolytic activity of a standardized extract of *Bacopa monniera*: an experimental study *Phytomedicine*, Volume 5, Issue 2, Pages 77-82.
8. U Jana, TK Sur, LN Maity, PK Debnath and D Bhattacharyya. A clinical study on the management of generalized anxiety disorder with *Centella asiatica*, Nepal Med Coll J 2010, 12(1): 8-11.
9. Zoya Shaikh, Samaresh Pal Roy, Pankti Patel and Kashmira Gohil. Medicinal value of *Mimosa pudica* as an anxiolytic and antidepressant: a comprehensive review. World journal of pharmacy and pharmaceutical sciences, Volume 5, Issue 3, ISSN 2278 – 4357.
10. S.K. Bhattacharya, A. Bhattacharya, K. Sairam, S. Ghosal. Anxiolytic-antidepressant activity of *Withania somnifera* glycowithanolides: an experimental study. *Phytomedicine*, Volume 7, Issue 6, December 2000, Pages 463-469.
11. Chittaranjan Andrade, Anitha Aswath, S. K. Chaturvedi, M. Srinivasa & R. Raguram. A double-blind, placebo-controlled evaluation of the anxiolytic efficacy of an ethanolic extract of *Withania somnifera*. Indian Journal of Psychiatry, 2000, 42 (3), 295-301.



12. D Bhattacharyya, TK Sur, U Jana and PK Debnath. Controlled programmed trial of *Ocimum sanctum* leaf on generalized anxiety disorders. Original Article, Nepal Med Coll J 2008; 10(3): 176-179.
13. ManaviChatterjee, PinkiVerma, RakeshMaurya & GautamPalit. Evaluation of ethanol leaf extract of *Ocimum sanctum* in experimental models of anxiety and depression. Original Article Pages 477-483, Feb 2011.
14. KaurHarpreet, Singh Rajmeet , Gupta Sumeet , KaurJaswinder , KaurJasvir. Anxiolytic Activity of Ethanolic Extract of Seeds of *Cuminum cyminum* Linn in Albino Wistar Rats. International Journal of Toxicological and Pharmacological Research 2016; 8(4); 219-222.
15. Neeraj K. Sethiya, AlokNahata,Vinod K Dixit. Anxiolytic Activity of *Candacecusata* in Albino Rats. Journal of Complementary and Integrative Medicine, Volume 7, Issue 1 (Jun 2010).
16. AlokNahata, U.K. Patil& V.K. Dixit. Anxiolytic activity of *Evulusalsinoides* and *Convolvuluspluricaulis* in rodents. May 2009, Pages 444-451.
17. JiroImanishi, Hiroko Kuriyama, IchiroShigemori, SatokoWatanabe, YukaAihara, Masakazu Kita,Kiyoshi Sawai, Hiroo Nakajima, Noriko Yoshida, Masahiro Kunisawa, Masanori Kawase, and Kenji Fuku Anxiolytic Effect of Aromatherapy Massage in Patients with Breast Cancer. Evidence-Based Complementary and Alternative Medicine Volume 6 (2009), Issue 1, Pages 123-128.
18. AlirezaKomaki ,FaegheHoseini, SiamakShahidi, NegarBaharlouei. Study of the effect of extract of *Thymus vulgaris* on anxiety in male rats. Journal of Traditional and Complementary Medicine 6 (2016) 257-261.