



आरोग्यम् सुखं सम्पदा

# NAMSCON 2016



## 56th Annual Conference of National Academy of Medical Sciences (India)

21st - 23rd October



All India Institute of Medical Sciences Raipur ( C. G.)



**शमीमा सिद्दिकी**  
**SHAMIMA SIDDIQUI**

भारत के राष्ट्रपति की उप प्रेस सचिव  
Deputy Press Secretary  
to the President of India



राष्ट्रपति सचिवालय,  
राष्ट्रपति भवन,  
नई दिल्ली-110004.  
PRESIDENT'S SECRETARIAT,  
RASHTRAPATI BHAVAN,  
NEW DELHI - 110004.

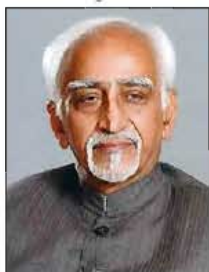


### MESSAGE

The President of India, Shri Pranab Mukherjee, is happy to know that the All India Institute of Medical Sciences (AIIMS), Raipur is organising the 56<sup>th</sup> NAMSCON 2016 (National Academy of Medical Sciences, India-Annual Conference) on October 21-22, 2016.

The President extends his warm greetings and felicitations to the organisers and participants and sends his best wishes for the success of the Conference.

Deputy Press Secretary to the President



भारत के उप-राष्ट्रपति के विशेष कार्य अधिकारी  
OFFICER ON SPECIAL DUTY  
TO THE VICE-PRESIDENT OF INDIA  
नई दिल्ली/NEW DELHI - 110011  
TEL.: 23016422 / 23016344 FAX : 23012645

### **MESSAGE**

The Hon'ble Vice President of India is happy to learn that the All India Institute of Medical Sciences, Raipur, Chhattisgarh is organizing its 56<sup>th</sup> Annual Conference 'NAMSCON 2016' from October 21 - 23, 2016.

The Vice President extends his greetings and congratulation to the organizers and the participants and wishes the event all success.

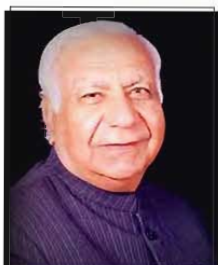
(Anshuman Gaur)

New Delhi  
6<sup>th</sup> October, 2016.

**BALRAMJI DASS TANDON**  
Governor of Chhattisgarh



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No. 124 /PRO/RS/2016  
Raipur, 14 Oct 2016

### Message

It is a matter of immense pleasure that All India Institute of Medical Sciences, Raipur is going to organize 56<sup>th</sup> NAMSCON 2016 (National Academy of Medical Sciences, India–Annual Conference) this month. During this conference a symposium is being held on "Tobacco or Health: Make better choice".

The habit of tobacco chewing and smoking is a huge social malady also. We have to eradicate this habit through wide publicity and awareness campaign. I hope this symposium will be a great help in this regard.

My best wishes for the event.

  
(Balramji Dass Tandon)



**SHRI. AJAY CHANDRAKAR**  
**Minister**  
Department of Health & Family Welfare  
& Department of Medical Education  
Govt. of Chhattisgarh

**Message**

It gives me immense pleasure to know that All India Institute of Medical Sciences Raipur is organizing the 56<sup>th</sup> annual conference of National Academy of Medical Sciences, India from 21st – 23rd October 2016.

NAMSCON 2016 is one of the highest academic conference being organized in Chhattisgarh and is meant to confer the degrees of FAMS, MAMS and MNAMS in a convocation and for presentation of national level competitive orations and awards. The conference will be an eye-opener for the medical education and health department doctors and will act as a stimulant for promotion of research in this field.

The symposium on “Tobacco or Health - Make better choice” is a very important topic and must be attended by all health professionals of the state.

I wish Prof. (Dr.) Nitin M Nagarkar, Director, AIIMS and his team. My best wishes for the success of the conference.

**( Ajay Chandrakar )**





**National Academy of Medical  
Sciences (India)**

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New Delhi – 110029  
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Dated : 5<sup>th</sup> October, 2016

**MESSAGE**

I am delighted to send the Message on my behalf and on the behalf of the Members of the Council of National Academy of Medical Sciences.

The primary objective of establishing the Indian Academy of Medical Sciences, later termed as National Academy of Medical Sciences, since its inception on 17<sup>th</sup> December, 1961, is: *'the cultivation of scientific knowledge and its application to human welfare'*. Since then, the academy has grown in stature as well as in its major contributions to the national issues dealing with the medical education and national healthcare. Since 1982, the National Academy of Medical Sciences is the highest academic body in the country, having highly talented bi-medical scientists and members, providing an excellent forum for the academicians and scientists to put forth their wisdom and to update their knowledge for better delivery of medical education, patient care and health care at large. The Academy has risen to glorious height ever since its inception and the same has been also acknowledged by the Ministries of Health, Family Welfare and AYUSH.

The Academy encourages and sponsors nation-wide Continuing Medical Education (CME) programmes across the length and breadth of the country and has earned great significance today, being the nodal funding agency of the Government for Continuing Medical Education for medical and allied health professionals and is advising the Government of India in several matters of National Health Policy and Planning. It has contributed towards excellent CME Programmes, Symposia and Workshops in basic sciences and applied clinical disciplines; high priority is accorded to activities that would result in the practical application of recent advances in medicine and promotion of research in areas of national health priority.

The scientific program of this annual conference is preceded by a National Symposium CME Programme on **"Tobacco or Health: Make better Choice"**, which to my mind, is the right choice this year. I hope this CME will deliberate on the theme of the symposium, which will be followed by series of NAMS Orations by eminent scientists. There will be also NAMS Scientific Symposium on **"AYUSH: Need of Integrated Medicine"**. Award Paper Presentation during following two days of the conference will provide a great opportunity for fruitful deliberations and will enhance the knowledge of young minds in these fields providing an opportunity to interact with one another and with experts in these fields to improve health status of the country as a whole.

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I am fortunate to see that the growth of the Academy to this level that after applying stringent criteria for the election of new Fellows and Members for high potentiality for future Fellowship after 8 years, only a few gets included to be regarded as the highest recognition in the field of biomedical and health sciences. I wish to felicitate, whole heartily, all the honoured academicians to whom membership and fellowship of the Academy would be conferred and who will be receiving scrolls during the NAMSCON-2016 convocation ceremony. Our salutation to all of them and our heartiest good wishes to others who we finally believe shall be recognized in the future.

The effort of the Academy is to involve all Fellows and Members of the NAMS having come from different backgrounds, different specialization, and different culture to share their vast experience at this Conference. At this occasion of the 56<sup>th</sup> Annual Conference of the National Academy of Medical Sciences (India) known as NAMSCON-2016 from 21<sup>st</sup> to 23<sup>rd</sup> October, 2016 at AIIMS, Raipur (Chhattisgarh), we are hopeful that under the leadership of this unique organization, not only the medical community but the researchers, scholars and students will be highly benefitted. Time has come that NAMS has continue to accept more responsible work related to promote medical education as entrusted by the Government, being major funding agency, to increase CME programmes in the country using new educational and other internet technologies.

May I join you in conveying personal regards to the Chief Guest and sincere greetings to the President, Officers and Fellows of the Academy. My sincere felicitations to the recipients of the Fellowship and Membership of the Academy, and to Dr. Nitin M. Nagarkar and his dedicated faculty for a meticulous organization. My best wishes for the success of the NAMSCON 2016.

**Prof. J.S. Bajaj**  
*Emeritus President, NAMS*



**National Academy of Medical  
Sciences (India)**

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Dated : 3<sup>rd</sup> October, 2016

**MESSAGE**

It gives me immense pleasure and joy to welcome all distinguished delegates, invitees and participants at the All India Institute of Medical Sciences, Raipur, Chhattisgarh, Raipur, popularly known as the rice bowl of India, where hundreds of varieties of rice are grown having the Mahanadi River flowing to the east of the city, and the southern side having dense forests, is the city with beautiful geographic background. On the demographic side, the population includes local ethnic Chhattisgarhia, North Indians, South Indians, and a few people from the North East. This city of forts, is virtually mini India, where this prestigious 56th Annual Conference of the National Academy of Medical Sciences (India) – NAMSCON 2016 is scheduled from 21st to 23rd October, 2016. I am happy and convinced that AIIMS, Raipur, the host for this academic event would serve as a platform for contributing to ideas and present day devising methodology to deal with issues related to health, management and medical education.

The National Academy of Medical Sciences that was established with the primary objective: *'the cultivation of scientific knowledge and its application to human welfare'*. The Academy is going fast over the years in fulfilling of this objective by large number of Indian scientists, some of them are honoured by Fellowship of this Academy and that number is gradually rising. Since 1982, the National Academy of Medical Sciences is the highest academic body in the country, having highly talented bi-medical scientists as its members, providing an excellent forum for the academicians and scientists to put forth their wisdom and to update their knowledge for better delivery of medical education, patient care and health care at large. The Academy has risen to glorious height ever since its inception and the same has been also acknowledged by the Ministry of Health & Family Welfare.

The scientific program of this annual conference is preceded by a National Symposium CME Programme on **"Tobacco or Health: Make better Choice"**, which to my mind, is the need of the hour. Tobacco chewing and smoking has become a health hazard and that require surgical and medical interventions. I hope this CME will deliberate on the theme of the symposia and related issues, which will be followed by series of NAMS Orations by eminent personalities. There will be also NAMS Scientific Symposium on **"AYUSH: Need of Integrated Medicine"** and Award Paper Presentation coupled with Poster Presentations during the next two days of the conference, that will provide a great opportunity for fruitful



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deliberations and will enhance the knowledge of young minds in this field and will provide an opportunity to interact with one another and with experts in this field to improve health status of the country as a whole. We all are here because there is new knowledge to be gained and that knowledge to be used by all of us for the progress of all people.

The Academy also recognizes outstanding achievements of scientists by conferring them Fellowships and Memberships. At this occasion, I heartily wish to congratulate the newly elected Fellows and Members who would be receiving scrolls in recognition of their professional eminence during the 56th NAMSCON 2016 convocation ceremony this year. I also congratulate the distinguished Orators and Awardees who became eligible for various prestigious Orations & Awards by virtue of their academic excellence. My salutation to all of them, having come from different backgrounds, different specializations, different culture and my heartiest good wishes to others, who I firmly believe, shall be recognized in the years to come.

First of all, I should not forget the eminent personality and Patron of the Academy, Prof. J.S. Bajaj who, in spite of his ill health, has ably coordinating this annual conference with advice at each step. My sincere thanks to this great Mentor of the Academy, without his advice it would have not happen. I, on behalf of the Academy and on my own behalf, would like to place on record my sincere appreciation and congratulate Dr. N.M. Nagarkar, Organizing Chairman and Director, AIIMS, Raipur and none but the least, Dr. S.P. Dhaneria, Organising Secretary and Dean AIIMS, Raipur and his entire team of NAMSCON 2016, background staff at AIIMS, Raipur collectively responsible for organising the said conference for their pain-taking efforts in organizing this Annual Conference and the CME to make it a truly memorable and successful event. I would like to thanks my own NAMS staff members at Delhi, who are working in the background, have put their pains as a team work to make this conference a great success and a memorable event, for the years to come.

I wish the NAMSCON2016 Conference a grand success.

Jai Hind.

**Prof. Mukund S. Joshi, FAMS**  
DMRE, MD, President, NAMS &  
Hon. Professor of Radiology,  
LTMG Hospital, Maharashtra.



**National Academy of Medical Sciences (India)**  
NAMS House, Ansari Nagar, New Delhi - 110029  
Professor, Dept. of Physical Medicine & Rehabilitation,  
AIIMS, New Delhi - 110029  
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**Dr. Sanjay Wadhwa, FAMS**  
**Vice-President, NAMS**

4 October, 2016



## MESSAGE

I am very glad that the 56<sup>th</sup> Annual Conference of National Academy of Medical Sciences (India) is being organised from 21st to 23rd October, 2016 at the All India Institute of Medical Sciences, Raipur, Chhattisgarh.

I heartily congratulate all the recipients of the Fellowship and Membership of this unique and prestigious Academy and wish that they may always prove worthy of the faith reposed in them.

I also congratulate the distinguished Orators and Awardees who have earned unique recognition by virtue of their hard work and academic excellence.

This three-day academic event provides a varied and rich feast of scientific information and knowledge. It begins with the NAMS Symposium on 'Tobacco or Health: Make Better Choice', and is followed by a Scientific Symposium on '*AYUSH: Need of Integrated Medicine*', as well as 8 important Orations, besides Scientific Presentations by 5 Awardees and a Golden Jubilee Commemoration Award Lecture. There is a Poster Presentation Session as well.

I have no doubt that the scientific presentations and deliberations during this NAMS Conference will be quite useful to all the participants and will inspire them to strive for excellence in their respective disciplines.

**Dr Harvey Williams Cushing had said, "A physician is obligated to consider more than a diseased organ, more even than the whole man – he must view the man in his world."**

I congratulate Prof. (Dr.) Nitin M Nagarkar, the Director, AIIMS, Raipur & Organising Chairman of the NAMSCON2016, and his entire team and wish this Conference every success.

(SANJAY WADHWA)



**National Academy of Medical Sciences (India)**  
**- A Unique Institution Utilising Academic Excellence**

**Report by**

Dr. Deep Narayan Srivastava, FAMS  
Honorary Secretary, NAMS (India)  
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National Academy of Medical Sciences (India) was established on 21<sup>st</sup> April, 1961 as a registered Society namely, the 'Indian Academy of Medical Sciences' under Societies Registration Act XXI of 1860, with the objective of promoting the growth of medical sciences. It was inaugurated at New Delhi on 19th December 1961 by Pandit Jawaharlal Nehru, the first Prime Minister of India. The Academy was re-named 'National Academy of Medical Sciences (India)' on 16th November, 1976 on the recommendations of a Working Group set up by the Government of India. The official address of the Academy is NAMS House, Mahatma Gandhi Marg, Ansari Nagar, New Delhi-110029. The National Academy of Medical Sciences (India) is a unique institution which fosters and utilises academic excellence as its resource to meet the medical and social goals.

Over the years the Academy has recognized the outstanding achievements of Indian scientists in the field of medicine and allied sciences and conferred Fellowship and Memberships. Fellows and Members are chosen through a peer review process consisting of screening by the Advisory Panel of Experts and the Credential Committee, election through voting by the Council and by all the Fellows.

As on 17<sup>th</sup> September, 2016 the Academy has on its roll large number of eminent medical professionals categories of Specialists, Emeritus Professors, Fellows, Members, and Professionals with different areas of specialization. The Academy has 31 Emeritus Professors, 3 Honorary Fellows, 873 Fellows (FAMS) and 6,628 Members (1,830 MAMS and 4,798 MNAMS) on its rolls.

The Academy also elects very eminent persons as Honorary Fellows. The list of eminent persons who have been conferred Honorary Fellowship of the Academy includes, Shri Jawaharlal Nehru, Dr. BC Roy, Major Gen. SL Bhatia, Col. RN Chopra, Dr. HM Lazarus, Dr. Jivaraj N Mehta, Dr. A Lakshmanswami Mudaliar, Dr. NA Purandare, Maj Gen SS Sokey, Dr. AC Ukil, Dr. Sushila Nayar, Smt. Indira Gandhi, Dr. VTH Gunaratne, Dr. Karan Singh, Dr. Ihsan Dogramaci, Dr. FC Robbins, Dr. U Ko Ko, Dr. Dharmendra, Shri PV Narasimha Rao, Prof. Rolf Luft, Dr. CP Thakur, Dr. PK Sethi and Dr. APJ Abdul Kalam, an eminent Scientist and former President of India.

The Academy has been fortunate enough to have had very eminent medical men and women, namely Drs. VR Khanolkar (the first President), CG Pandit, KL Wig, RV Rajam, AK Basu, Ms S Padmavati, PN Chhuttani, BK Anand, B Ramamurthi, BN Sinha, HD Tandon, RK Gandhi, P Siva Reddy, JS Bajaj, Mrs. SS Deshmukh, BK Sharma, Ms Mathangi Ramakrishnan, NK Ganguly, Hari Gautam, PK Dave, Ms Prema Ramachandran, KK Talwar, CS Bhaskaran, Mukund S Joshi (at present), as its Presidents.

A number of prestigious Orations and Awards have been instituted by the Academy and are bestowed upon eminent bio-medical scientists in recognition of their outstanding contributions.

The Academy has been recognized by the Government of India as a Nodal Agency for Continuing Medical Education for medical and allied health professionals and is advising the

Government of India in several matters of National Health Policy and Planning. National Academy of Medical Sciences encourages and sponsors nation-wide CME programmes, Symposia and Workshops in basic sciences and applied clinical disciplines; high priority is accorded to activities that would result in the practical application of recent advances in medicine and promotion of research in areas of national health priority. Since 1982, supporting CME programmes is an important activity of the NAMS to keep medical professionals abreast with newer/current medical problems of the country and to update their knowledge for better delivery of medical education, patient care and health care at large. Twenty two (22) Scientific Symposia/Workshops/CME Programmes were conducted with the financial assistance of Ministry of Health & Family Welfare, New Delhi during year 2014-15 and fourteen (14) during the year 2015-16.

The Academy also contributes towards Human Resource Development under Scientific Exchange Programme by selecting and sending Junior Scientists to Centres of excellence for training in advanced methods and techniques. One Hundred Ninety-eight (198) Medical Scientists/Teachers have been selected for advance training upto the year 2016.

NAMS-AIIMS collegiums have been formed with AIIMS at Bhopal, Bhubaneswar, Jodhpur, Patna, Raipur and Rishikesh in order to provide the benefit of experience of eminent Emeritus Professors and Fellows of NAMS to advise and support academic programmes at the newly established AIIMS.

NAMS awards Orations to eminent Indian Bio-medical Scientists for their outstanding contributions in the field of medical and related sciences every year. Similarly, with a view to encourage talent and recognize merit, the NAMS has established various Awards. During 2015-16, nine Orators and five Awardees (total fourteen) were selected for NAMS awards.

The National Academy of Medical Sciences (India) has its website <http://nams-india.in> which can be accessed from any part of the world with internet connectivity. All information is put onto the site and one can easily gather the information from this website. The site is under redesign and will be launched in the near future. One can download information of Annals of the NAMS (abstracts of published articles), Monographs published by NAMS, contents related to Workshops, Symposia, CME Programmes and Annual Conferences. Contents related to Learning Resources, all Convocation addresses during NAMS Annual Conferences and updated list of Fellows and Members has been uploaded.

Every year, during the NAMS Annual Conference, a Scientific Symposium is organized on a topic of great relevance to the health care needs of the Country. The Theme of the NAMS National Symposium during the 56<sup>th</sup> Annual Conference at AIIMS, Raipur on 21<sup>st</sup> October, 2016 is *Tobacco or health: Make better choice*. The NAMS Scientific Symposium on *Ayush: need of integrated medicine* will be held on 22<sup>nd</sup> October, 2015 during NAMSCON 2016.

As on date, the National Knowledge Network (NKN) connectivity is excellent and we are in the process of starting the Distinguish Guest Lecture Series and CMEs from the auditorium.

Our aim is for the perpetual success of the Academy and the Academy will encourage, enhance and amplify achievements to meet medical and social goal of the Government.

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अखिल भारतीय आयुर्विज्ञान संस्थान, रायपुर (छत्तीसगढ़)  
All India Institute of Medical Sciences, Raipur (Chhattisgarh)

**PROF. (DR.) NITIN M. NAGARKAR**

MS (PGI), DNB, MNAMS, FIMSA

**DIRECTOR**

Professor, Otolaryngology-Head & Neck Surgery



It gives me immense pleasure to invite you to be part of the 56<sup>th</sup> Annual Conference of National Academy of Medical Sciences (India) – **NAMSCON 2016**, being organized at All India Institute of Medical Sciences, Raipur (Chhattisgarh) from 21<sup>st</sup> to 23<sup>rd</sup> October 2016.

The theme of the National Symposium on the first day is **“Tobacco or Health: Make Better Choice”** comprising various relevant topics. The other academic events are also very meticulously planned.

The Team NAMSCON 2016 Raipur is blessed with positive energy and enthusiasm to host this prestigious academic activity.

All India Institute of Medical Sciences, Raipur is one of the apex healthcare Institutes established by the Ministry of Health and Family Welfare, Government of India in the year 2012 under the Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) on the pattern of AIIMS, New Delhi.

Raipur, the capital city of Chhattisgarh is very rapidly developing on various fronts. This city is poised to become a medical and educational hub in the next few years.

The entire organizing team has worked very hard to make it a memorable conference. We have received full support from the Patron and office bearers of National Academy of Medical Sciences.

I heartily congratulate all the individuals who will be receiving their Fellowships, Memberships and also the Orators and Awardees.

I again take this opportunity to welcome you all in this esteemed event.

I wish this conference a great success.

With best wishes,

**Prof. (Dr.) Nitin M Nagarkar**

Organizing chairman, NAMSCON 2016

Director, AIIMS Raipur

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Dr. G. B. Gupta M.D. D.M. (Cardiology)  
Vice-Chancellor



### Message

It is my pleasure to hear that AIIMS Raipur is holding a conference in associated with National Academy of Medical Sciences (India) on important subject of "Tobacco & Health".

In view of the increasing burden of morbidity & mortality by "Tobacco" use, the theme chosen for the conference is of a National & Worldwide interest. This will be informative and generating awareness on "Tobacco & its Hazards".

Most young people don't consider the long term health consequences associated with "Tobacco", because most high school "Tobacco" users are not able to come out from the addiction of powerful effects of the "Nicotine". Most of them will smoke or chew "Tobacco" in adulthood & may have death 13 years earlier than their non smoking peers.

This conference will have high values on health and awareness agenda at the Regional, National and Global levels for long time.

I congratulate all the men and women who are the part of this conference.

Dr. G.B. Gupta  
(Vice-Chancellor)



**अखिल भारतीय आयुर्विज्ञान संस्थान, रायपुर (छत्तीसगढ़)**  
**ALL INDIA INSTITUTE OF MEDICAL SCIENCES, RAIPUR, CHHATTISGARH**



**Dr. S.P. Dhaneria**  
Organizing Secretary, NAMSCON 2016  
Acting Dean (Academics)  
Professor & Head  
Department of Pharmacology  
AIIMS, Raipur

**MESSAGE**

It is a matter of great pride that All India Institute of Medical Sciences, Raipur is organizing 56<sup>th</sup> Annual Conference of National Academy of Medical Sciences, India from 21<sup>st</sup> to 23<sup>rd</sup> October 2016.

National Academy of Medical Sciences, India was established with the primary objective “the cultivation of scientific knowledge and its application to human welfare”. This esteemed organization during its journey has made remarkable progress in fulfilling this objective.

On behalf of organizing committee, I take the privilege to cordially welcome the distinguished office bearers, speakers, guests and delegates to NAMSCON 2016 at AIIMS Raipur.

The conference will begin with National Symposium “Tobacco or Health: Make better Choice” a very pertinent topic for scientific discussion and public awareness. The scientific programme also includes Orations by learned speakers, presentation by awardees, symposium on AYUSH and poster presentation. I trust that all the delegates will be immensely benefited by the scientific deliberations of the conference. I am truly thankful to all the learned speaker for honouring our invitation and obliging us by their presence, knowledge and experience.

I wish to congratulate all the fellows and members who would be receiving scrolls during convocation ceremony.

I am extremely thankful to Prof. Mukund S. Joshi, President, Dr. Sanjay Wadhwa, Vice president, Dr. Deep Narayan Srivastava, Honorary Secretary of National Academy of Medical Sciences India for the trust and faith bestowed on AIIMS Raipur for organizing this conference and also for their constant support and guidance.

I wish to express sincere gratitude to all the members of local organizing committee for their invaluable advice, guidance and support throughout last few months during the process of organizing the conference.

The Organizing committee has tried its best to make your visit to AIIMS Raipur as comfortable and scientifically fruitful as possible and any inadvertent lapse may please be excused.

My sincere felicitations to all the delegates and wish them all the success in their future endeavour.

**( Dr. S. P. Dhaneria )**



**Dr. P. K. Neema**  
Chairman Scientific Committee  
NAMSCON 2016, Raipur  
Chhattisgarh, India

It gives me a great pleasure to welcome the distinguished office bearers, guests, participants, and delegates to All India Institute of Medical Sciences Raipur on the occasion of 56<sup>th</sup> Annual conference of National Academy of Medical Sciences, India.

The theme of this year's conference "Tobacco or Health: Make better choice" shall unfold widespread hazards of consuming tobacco in various forms and shall attempt to provide solutions to the problems associated with its consumption. Apparently, the consumption of tobacco in different forms among various strata of the society originates as social practice, as fascination, and finally evolves in psychological and physical dependence. The damages associated with its consumption are widespread and they are generally irreversible. The deliberations of this conference shall add knowledge to the various aspect of this very pertinent subject.

The events of the scientific program include orations by eminent scientists of our country, presentations by National Academy of Medical Sciences awardees, convocation for the awardees and poster presentations by the delegates. The scientific committee has taken all possible efforts to ensure to stick to the guidelines of NAMSCON.

I am sure that each of us will find this conference a stimulating and informative meeting. I take this opportunity to request you to actively participate to add to the richness of this conference and make it a memorable event. On behalf of the scientific committee, I express gratitude to National Academy of Medical Sciences for giving opportunity to AIIMS Raipur to host this scientific meet.

**( Dr. P. K. Neema )**





**Prof. Dr. Alok Chandra Agrawal**  
MS Orthopaedics, DNB Orthopaedics, PhD  
Orthopaedics, MNAMS, MAMS  
HOD Orthopaedics  
HOD Physical Medicine and Rehabilitation  
All India Institute of Medical Sciences , Raipur  
Chairman Oncology Section of IOA  
Editor Orthopaedic Journal of Central Zone of IOA  
and IOA CG Chapter  
Joint Organising Secretary  
NAMSCON 2016, AIIMS Raipur CG

### **Message**

It gives me great pleasure in being a part of the organizing committee of NAMSCON 2016, AIIMS Raipur being organized on 21-23 October 2016 at AIIMS Raipur CG. Awards from the National Academy of Medical Sciences (India) are one of the most prestigious awards to win and the recipients are considered to be of the highest academic caliber. NAMS confers the prestigious FAMS, MAMS, MNAMS degrees apart from the National Orations and awards. Organizing this 56th conference in Chhattisgarh for the first time will make the people aware of such activities and promote the desire to excel in academics in them.

I welcome all distinguished guests, faculty and delegates to attend the symposium and conference and also evidence the convocation organized by us. We will be happy to take care of you during your stay at Raipur.

Prof. Dr Alok Chandra Agrawal

## **ABOUT RAIPUR**

Raipur is capital city of Chhattisgarh state in Central India. The region's economy has been traditionally based on agricultural-processing steel alloy, cement and rice. It serves as a regional center for trade and commerce in range of local forest and agricultural products. Raipur is indeed a major tourist destination. Raipur is one of the biggest industrial centers in India. Raipur was initially a part of Madhya Pradesh before Chhattisgarh was formed and that happened in the year 2000 and since Raipur has made its place and one of the most visited places of the state.

### **HISTORY OF RAIPUR**

Raipur is a pretty old city, even by the yardstick of the many ancient cities found in the Indian subcontinent. Kings of the Satvahana dynasty ruled the region between the 2nd and 3rd centuries AD and were followed by the Somvanshi kings whose capital was at Sirpur, a few hours away from Raipur. The earliest evidence of Raipur's existence can be found in the 9th century ruins in the southern part of modern Raipur. A later dynasty, the Kalchuris had their capital at Ratanpur, and it was a scion of this dynasty, King Ramachandra, who founded the city of Raipur, subsequently the capital city of his kingdom. The city was named 'Raipur' after Ramachandra's son Brahmdeo Rai. Once the region disintegrated into small little principalities, it passed from one powerful empire to the other till it came under the British in 1854. The British made Chhattisgarh a separate administrative area or Commissary with its district headquarters at Raipur.



### **SIGHTSEEING ATTRACTIONS IN RAIPUR**

- **DOODHADHARI MONASTERY AND TEMPLE**

Doodhari Monastery and Temple that was built in dedication to Rama. It was built by King Jaitsing in the 17th century. The Doodhadhari Monastery and Temple located in the banks of a river which is popular among tourist named in the memory of Balbhadra Das a saint. The monastery Situated in the southern part of Raipur, this temple lies on the banks of another tourist attraction called as the Maharajbandh River. The monastery and temple is both visited by not just tourists but also by devotees who throng in large numbers to pay their respects and offerings. The other great reason why people come here even if they are not believers is that the brilliant architecture of this temple that is filled with beautiful carvings.



- **VIVEKANAND SAROVAR**



Situated right in the heart of the city is the beautiful Vivekanand Sarovar which is also popularly called as Budha Talab. The name of the lake is obviously derived from the great Swami Vivekanand who was a famous and renowned philosopher. It is believed the Vivekananda had lived in the vicinity on his visits to this gorgeous city of Raipur. There was a particular spot near this lake that is said to have been his desired spot for meditation.

We can see a tall statue of Vivkeananda that is 37 feet height and this installation of the statue was done very recently. It has been set up in a garden that is situated close to the lake. There is a provision for boating in this area which attracts the tourist. A day spend in this lake is sure to keep you engaged and entertained. Most tourists visit this place since the lake and it surroundings make for an ideal place to have serenity and tranquillity.

- **MAHANT GHASIDAS MEMORIAL MUSEUM**

**Mahant Ghasi Memorial Museum**  
Built by Raja Mahant Ghasidas of Rajnandgaon, it was set up in 1875, which is the tenth oldest museums in the country. This museum is a historical octagon building using a traditional British style of architecture that will definitely attract people who love architecture. The dome of this building looks similar to a crown of the British which has a total of two floors and five galleries. The museum also has a beautiful and quaint library inside and these two are located in the same building. The galleries display stunning collection of many traditional kalachuri sculptures, ancient coins, carvings, inscriptions and also Buddhist bronzes, along with the many ornaments and clothes that were mostly used by the tribes of Chhattisgarh.



**Mahant Ghasidas Memorial Museum**

This museum gives a perfect insight into the history of the state and also the lifestyle of the people living in Chhattisgarh. Their galleries are divided into different categories and each of these galleries display things relevant to the name given.

The Archeological Gallery exhibits the many artifacts of the Stone Age, whereas the Sculpture Gallery exhibits the beautifully carved idols of the different Gods and also Goddesses. The many other galleries of this museum are the Natural History Gallery, the Tribal Gallery, the Anthropology Gallery and the Ancient Arms and Armory Gallery. Art lovers will enjoy visiting the Museum because of the magnificent art works, and crafts.



## • DOODHADHARI MONASTERY AND TEMPLE

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## • MAHAMAYA TEMPLE

The Mahamaya temple located banks of kharoon river at sea fort area in Raipur is an another key attraction for the tourist visiting Raipur. It was built in dedication to Mahamaya, a form of Durga and devotees from all across the country visit this temple to worship and offer their prayers. Visiting this temple during Navratri and durga pooja , is a visual spectacle The whole temple is illuminated and beautifully decorated during these festivals with much pomp and grandeur. The Kho Kho Lake and also the Budhapara Lake are situated close to the temples which are two other attractions that can be visited after visiting the temple. It is best to visit the temple from the month of October to March.





- **BUDHAPARA LAKE**

The Budhapara Lake was built by King Brahmadei who was also a Kalchuri Emperor in the era 1404 AD. This is a paramount place for people fond of solitude and peace away from all the city chaos. The alluring waters of this lake evoke sense of peace and serenity by just gazing at the beautiful nature and the waters of the lake flowing smoothly.



- **KEVALYA DHAM**

The Kevalya Dham is a Jain temple which is one of the prime tourist attractions of Raipur. The temple is made of white marble and is popularly called as the Sri Adinath Jain Swhetambhar Tirth.

The temple complex has a total of 26 temples that are small and big. Almost all these temples are built of white marble and architecture buffs will surely love the sight of these magnificent temples.



These temples have idols of 24 Thirthankars and as we walk into each temple we will see the idols that are equally stunning. And these temples and idols are what forms to be a large temple complex along with an idol of Risabhdev. The temple also houses a Dharamshala that has every modern facility.

- **NANDAVAN GARDEN**

The Nandavan Garden, located in Raipur is situated on the banks of the beautiful Khaaroon River. The Nandavan Garden is not just a garden area, but also boasts of a mini zoo that has many animals like the tigers, panthers, lions and also deers. This place is an ultimate spot for those who love nature and wildlife. The ever blooming flora and fauna that surrounds the park makes it for a beautiful view.



The Nandavan Garden is a place that offers rejuvenation and recreational activities for travellers and tourists as well. The Park is open on all days from 9 am to 5 pm.

The city is fast emerging as an important industrial hub for coal, steel, power and aluminium industries in the country. Raipur has very well-connected to all the major cities of India as well as with the countries

## ABOUT AIIMS RAIPUR

### Introduction

AIIMS Raipur is one of the new apex healthcare institutes established by the Ministry of Health & Family Welfare, Government of India under the Pradhan Mantri Swasthya Suraksha Yojna (PMSSY) on the pattern of AIIMS, New Delhi. The Institute was established with the aim of correcting regional imbalances in quality tertiary level healthcare in the region and attaining self sufficiency in graduate and postgraduate medical education and training in this hitherto under-served area of the country. The Institute got operational from the year 2012.

### Mission Statement

To establish a centre of excellence in medical education, training, health care and research imbued with scientific culture, compassion for the sick and commitment to serve the under-served.

### Location

AIIMS, Raipur is situated at NH-6, GE Road, Tatibandh, Raipur with a total area of 103.63 Acres. This includes Hospital & College Complex (63.85 Acres) and Residential Complex in Kabir Nagar (39.78 Acres).

### Medical and Nursing Colleges

All the pre-clinical and para-clinical departments of the medical college viz. Anatomy, Physiology, Biochemistry, Pathology, Microbiology, Pharmacology, Forensic Medicine & Toxicology and Community & Family Medicine are functional and located in their respective earmarked spaces. The College of Nursing is also functional in its own building near Medical College.

### Hospital

Currently, the hospital and clinical departments are being run from the Trauma Centre, AYUSH & PMR building.

**OPD services:** Multi-specialty (Medicine, Surgery, Obstetrics & Gynaecology, Paediatrics, Pulmonary Medicine, Orthopaedics, ENT, Ophthalmology, Dermatology, Psychiatry and Dentistry) OPD services have been started from 5<sup>th</sup> June 2013. OPD services in Homoeopathy and Ayurveda have also been started in August and September 2014 respectively. The OPD is run on all working days. Around 5 Lacs 90 thousand patients are benefitted by this service till September 2016. Special clinics have also been started in various departments, viz. Glaucoma Clinic, Oculoplasty Clinic, Hypertension Clinic, Diabetes Clinic, Rheumatology Clinic, Geriatric Clinic, Rhinology Clinic, Vertigo Clinic, Cancer Special Screening Clinic, Asthma & Allergic Clinic, Headache Clinic, Convulsion & Neurodevelopment Clinic, Congenital Club Foot Clinic, Diet Clinic, Menopause Clinic and Adolescent friendly Reproductive Health Clinic. These special clinics are being run on specified days during the afternoon hours between 2.30 PM to 04.30 PM.

**IPD Services:** The total number of beds planned for the hospital is 960 with 30 sanctioned operation theatres. IPD services have been started from 26.12.2013. In the first phase, 160 bedded hospital has been made functional with routine OT facility. Modular operation theatres (4 Nos), MGPS and CT scan (128 slice) facilities are functional. Major and Minor surgeries are being routinely conducted.

**Diagnostic services:** X-ray, ultrasound, biochemistry, pathology and microbiology tests are all available within the hospital at a nominal cost. The services are available round the clock. Specialized audio logical investigations have also been started.

**Drug Store:** 2 drug stores are present in the hospital premises, which offers all drugs prescribed by the doctors of AIIMS Raipur at reasonable discount to the patients.

### **Library**

The Institute has an excellent Central Library spanning over 3 floors comprising about 15000 square feet floor area. The lower floor is the Medical books and general reading section, the middle being the reading facility. The top floor of the library is the state-of-the-art e-library and journal section. More than 4700 medical and nursing books and about 500 books of general reading are available in the library. Wi-Fi internet facility is available in all three floors of the library. Institute has subscribed 243 e-journal through Ermed Consortium.

**Basic Life Support** – A hands-on training workshop to impart skills in emergency life-saving procedures is being conducted by a team of faculty members of the Institute for Medical Students, Para Medical Staff, Police and other security personnel and different sections of society. The course has successfully empowered them with the knowledge and skills to deal with a medical emergency.

**Telemedicine OPD:** Telemedicine OPD services were started in collaboration with CRPF since 2<sup>nd</sup> April 2013 and also with BSF from 01 July 2014. The service is being provided twice a week on every Monday and Thursday. This service specifically caters to the population of remote and inaccessible areas of Chhattisgarh, especially LWE (Left Wing Extremists) affected areas. 3500 patients from 29 Centres (CRPF & BSF) have benefited till September 2016.

### **Academic Progress of the Institute**

Currently MBBS and B.Sc. (Hons) Nursing courses are being run. Postgraduate courses of MD, MS etc. are being planned to be started next year.

The first batch of MBBS students was admitted in September 2012 with an intake of 50 students and the first Academic Session was inaugurated on 24th September 2012. Subsequently, the intake capacity was enhanced to 100 students every year from 2013 onwards. The first batch of MBBS student will appear in 3<sup>rd</sup> Professional Final Examination in December 2016.

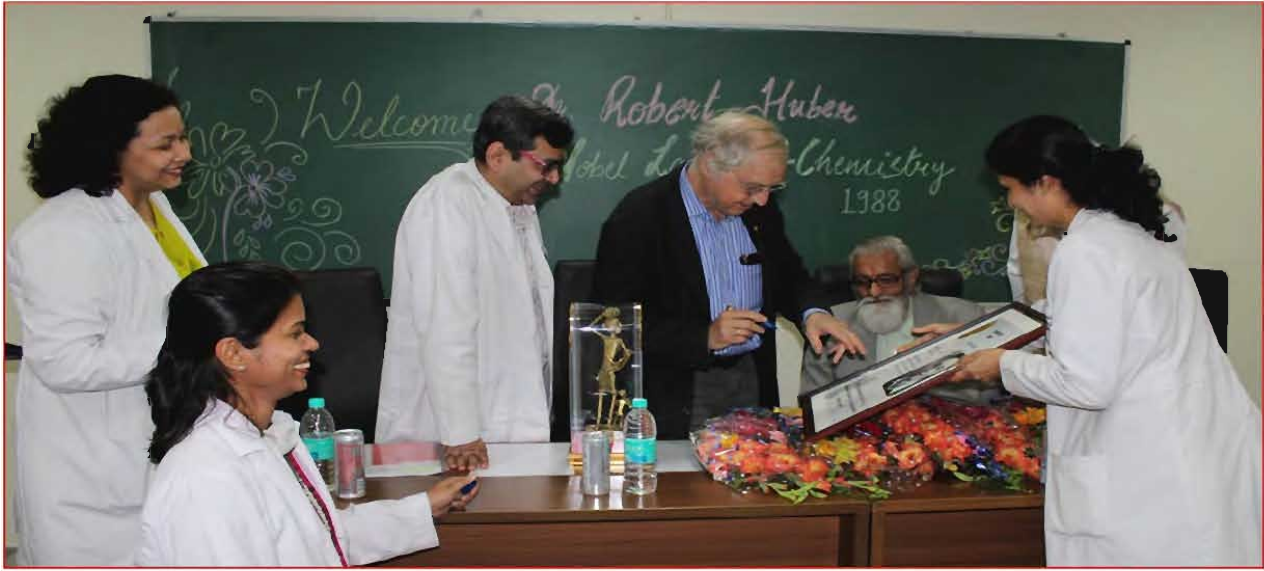
The first batch of students for B.Sc. (Hons) Nursing course with annual intake of 60 students was admitted in August 2013. This batch will appear in Final Examination of IVth Year in July 2017.

### **Academic Activities**

Even though the Institute is very young and is in a nascent stage, various CMEs/Seminars/Conferences/Workshops were conducted by different departments in the short period of two years since inception of the Institute.

The details of the various academic meets conducted at the Institute are as below:









<b>Sr. No.</b>	<b>Name of the Programme/Conference/ Workshop/CME</b>	<b>Organized by Department</b>	<b>Dates</b>
1.	Road traffic accidents-need to re-emphasize prevention;	Community & Family Medicine	10.11.2012
2.	Stress management & gender sensitization for police professionals,	Multidisciplinary	12.03.2013
3.	Polytrauma management at Institutional level,	Trauma & Emergency Medicine Orthopaedics	29.06.2013
4.	Body donation awareness programme	Anatomy	29.07.2013
5.	Eye donation awareness programme	Ophthalmology	31.08.2013
6.	Chhattisgarh State CME on Gynecological oncology,	Obstetrics & Gynaecology	20.10.2013
7.	World Roentgen Day Celebration	Radiodiagnosis	08.11.2013
8.	CME on the occasion of World COPD Day,	Pulmonary Medicine	20.11.2013
9.	CME on Awareness on Mental Health Day	College of Nursing Psychiatry	10.10.2013
10.	Public Awareness Walk on World AIDS Day	Community & Family Medicine	01.12.2013
11.	CME on World AIDS Day	Obstetrics & Gynaecology	04.12.2013
12.	National CME on Interdisciplinary Comprehension in Transfusion Medicine	Transfusion Medicine	28.01.2014
13.	National Conference on Stem Cell Biology and the Era of Regenerative Medicine	Anatomy	04.02.2014 & 05.02.2014
14.	Micro CME 2014 – The Menace of Emerging and Re-emerging Microbes: an overview	Microbiology	15.02.2014
15.	National CME on Biochemical Insight Into Clinical Immunology	Biochemistry	21.03.2014 & 22.03.2014
16.	National Symposium on Fragility Fractures of the lower limb	Orthopaedics	24.08.2014
17.	Body Donation Awareness Programme	Anatomy	12.09.2014
18.	AOICON – 2015 67 <sup>th</sup> Annual Conference of Association of Otolaryngologists of India	ENT	7.01.2015 to 11.01.2015
19.	Training for DH/CHC Laboratory Technicians	Biochemistry, Microbiology,	17.08.2015 to 22.08.2015

Sr. No.	Name of the Programme/Conference/ Workshop/CME	Organized by Department	Dates
		Pathology & Lab Medicine	
20.	CME cum Workshop on Mechanical Ventilation: from bench to bedside	Paediatrics	22.08.2015
21.	LAP VISION 2015: Live laparoscopic surgery Workshop	Obstetrics & Gynaecology	22.08.2015
22.	Body Donation Honor by Students	Anatomy	31.10.2015
23.	CME in Transfusion Medicine	Blood Transfusion	17.01.2016
24.	CME on Breast cum Live Workshop	General Surgery	03.02.2016
25.	World Cancer Day	College of Nursing	04.02.2016
26.	National CME on foot and ankle trauma	Orthopaedics	10.07.2016
27.	CME on Pharmacovigilance	Pharmacology	23.07.2016

#### **Teaching Faculty & Staff**

Sixty One (79) faculty members including two faculty members from the college of nursing are presently working in the Institute. 53 Senior Residents, 27 Junior Residents and 207 nursing staff are currently employed in the institute. 1 Senior Medical Officer in Ayurvedic discipline providing services to the patients.

#### **Residential area (Kabir Nagar)**

Residential accommodation is available in the residential campus of the Institute located in Kabir Nagar. Distance between the Residential Complex and AIIMS Hospital is 3.5 KM.

Adequate number of spacious residential units of Type I, II, III, IV and V are available in the residential campus of the Institute. The Director of the Institute resides in the Director Bungalow located within the residential campus. The residential campus also has a Guest House which is fully furnished and functional and is being used by the guests.

#### **Hostels**

Adequate facilities for accommodating students exist in the students' hostels located within the hospital/medical college campus. More number of hostel blocks are being readied for future increase in the number of students.

#### **Inauguration**

AIIMS, Raipur was inaugurated on 27.02.2014 at 11.00 AM by Shri Ghulam Nabi Azad, the then Hon'ble Union Minister for Health and Family Welfare. Dr. Raman Singh, Chief Minister of Chhattisgarh was the Chief Guest for the occasion. The dignitaries included Dr Charan Das Mahant, the then Minister of State, Agriculture and Food Processing, Govt of India, Shri Amar Agarwal, Minister for Health & Medical Education, Govt of Chhattisgarh, Shri Ramesh Bais, Member of Parliament, Dr Bhushan Lal Jangde, Member of Parliament, Shri Lov Verma, Secretary, Ministry of Health & Family Welfare, Govt of India, Shri Sundeep Kumar Nayak, Joint Secretary, Ministry of Health & Family Welfare, Govt of India and the members of the Institute Body of AIIMS, Raipur.

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**Future Plans and  
Additional Facilities/Infrastructure required**

The **Standing Finance Committee (SFC)** of the Institute has approved the setting up of a **School of Public Health (SPH)** under AIIMS, Raipur.

**Centre of Excellence** for Cardiac care, Neurosciences, Nephrology and Oncology has already been approved by the Govt of India. To be developed in the hospital complex in Tatibandh.

HSCC (India) Ltd. has been nominated to prepare DPR for **Housing Project (Phase – II)** for 191 Units for Rs. 100 Crore in Kabir Nagar, Raipur.

**Additional Land:**

- **Additional land at Sarona** 54 Acres additional land at Sarona has been approved and is being allotted to AIIMS, Raipur.
- **Additional Land at NRDA:** Additional land of 50 Acres in Naya Raipur has been allotted to AIIMS Raipur for establishing School of Public Health.

**Other proposed centres for Chhattisgarh**

**RURAL Health Training Centre, AIIMS, Raipur, Chhattisgarh**

**Sarai/Dharamsala**



# All India Institute of Medical Sciences, Raipur (C.G.)

## **NAMSCON 2016**

### **56<sup>th</sup> Annual Conference of National Academy of Medical Sciences (India)**

**21<sup>st</sup> to 23<sup>rd</sup> October 2016**

**National Symposium on : Tobacco or Health: Make Better Choice**

#### **Patron:**

**Professor J.S. Bajaj, FAMS**

#### **NAMS OFFICERS**

##### **President**

**Dr. Mukund S Joshi, FAMS**

##### **Vice President**

**Dr. Sanjay Wadhwa, FAMS**

##### **Treasurer**

**Dr. Manorama Berry, FAMS**

##### **Honorary Secretary**

**Dr. D.N. Srivastava, FAMS**

#### **LOCAL ORGANIZING COMMITTEE**

<b>Organizing Chairman</b>	:	Dr N M Nagarkar
<b>Organizing Secretary</b>	:	Dr S P Dhaneria
<b>Joint Organizing Secretary</b>	:	Dr Alok C. Agrawal
<b>Treasurer</b>	:	Dr Manish Raghani
<b>Scientific Committee</b>	:	Dr P K Neema (Chairman) Dr Rachita Nanda Dr Ripudaman Arora
<b>Transport Committee</b>	:	Dr Alok C. Agrawal (Chairman) Dr Saumitra Trivedi Dr Satyajit Singh Dr Harshal Sakale
<b>Accommodation Committee</b>	:	Dr D K Sharma (Chairman) Dr Nitin Kashyap Dr Ankur Shrivastava Dr Satyapriya Mohanty
<b>Catering Committee</b>	:	Dr Alok C. Agrawal (Chairman) Dr Sarita Agrawal Dr Avinash Ingle Dr Amit Bugalia Dr Gurpal Singh Chhabda

**Certificate & Souvenir Committee:** Dr Abhiruchi Galhotra (Chairman)  
Dr Mrithunjay Rathore  
Mrs. J. Jeayareka

**Registration Committee :** Dr Ramanjan Sinha (Chairman)  
Dr Shreemanta Kumar Dash  
Dr Anjali Pal  
Dr Yogendra Kecher

**Reception Committee :** Dr Padma Das (Chairman)  
Dr Nakul Uppal  
Dr Suprava Patel  
Dr Manas Ranjan Patel

**Cultural Committee :** Dr NK Bodhey (Chairman)  
Dr Gouri Padhy  
Dr Ekta Khandelwal  
Dr Binu Mathew

**Advisory Committee :** Mr Neeresh Sharma (Chairman)  
Dr Manisha Ruikar  
Dr Eli Mohapatra  
Dr Meenakshi Sinha  
Dr Anudita Bhargava  
Dr Subrat Singha  
Mr Ravindra Pattar

**Symposium :** Dr. Krishnadutt Chavali

**Faculty incharge web site :** Dr Manisha B Sinha

# NATIONAL ACADEMY OF MEDICAL SCIENCES (INDIA)

56<sup>th</sup> Annual Conference

Venue : All India Institute of Medical Sciences, Raipur (Chhattisgarh)

Friday, the 21<sup>st</sup>  
October, 2016

Saturday, the 22<sup>nd</sup>  
October, 2016

Sunday, the 23<sup>rd</sup>  
October, 2016

Friday, October 21<sup>st</sup>, 2016

## National Symposium on Tobacco or Health: Make Better Choice

Dr. Nitin M. Nagarkar  
Director, AIIMS, Raipur

Chairpersons

Dr. K.K. Sharma, FAMS

Operating Officer: Dr. Krishnadutt Chavali, Professor, AIIMS, Raipur

Time

Symposium Activities

08.00 - 08.30 AM

Registration

08.30 - 09.00 AM

Pre-symposium Assessment

09.00 - 09.30 AM

Inauguration

Dr. Mukund S. Joshi,  
President, NAMS

Welcome Address and Objectives of  
the Symposium

Dr. Nitin M. Nagarkar,  
Director, AIIMS, Raipur

Topics

Speakers

09.30 - 09.45 AM

Historical background, Plant  
Introduction & toxicological overview

Dr. Krishnadutt Chavali,  
Professor, AIIMS, Raipur

09.45 - 09.50 AM

Audience Interaction Session

09.50 - 10.20 AM

Overview of epidemiology and hazard  
of tobacco use.

Dr. Krishnan Anand,  
Professor, AIIMS, New  
Delhi

10.20 - 10.25 AM

Audience Interaction Session

10.25 - 10.45 AM

TEA BREAK

Time	Topics	Speakers
10.45 – 11.20 AM	Pathological effects of Tobacco use	Dr. Ravi Mehrotra, Director, Institute of Cytology & Preventive Oncology, Noida
11.20 - 11.25 AM	<b>Audience Interaction Session</b>	
11.25 – 11.55 AM	Imaging of complications of tobacco consumption: Radiologists Perspective	Dr. Deep Narayan Srivastava, Professor, AIIMS, New Delhi
11.55 – 12.00 PM	<b>Audience Interaction Session</b>	
12.00 – 12.30 PM	Health Hazards of Tobacco smoking requiring medical intervention	Dr. Prasanta Raghav Mohapatra, Professor, AIIMS, Bhubaneswar
12.30 – 12.35 PM	<b>Audience Interaction Session</b>	
12.35 – 12.55 PM	Tobacco & Bone Health	Dr. Alok C. Agrawal Professor, AIIMS, Raipur
12.55 – 01.00 PM	<b>Audience Interaction Session</b>	
01.05 - 01.45 PM	<b>LUNCH BREAK</b>	
01.45 - 02.25 PM	Health Hazards of Tobacco smoking requiring Surgical intervention	Dr. Sanjeev Misra, Director, AIIMS, Jodhpur
02.25 - 02.30 PM	<b>Audience Interaction Session</b>	
02.30 - 03.05 PM	Health hazards of Tobacco chewing requiring surgical intervention	Dr. Nitin M. Nagarkar, Director, AIIMS Raipur
03.05 - 03.10 PM	<b>Audience Interaction Session</b>	
03.10 - 03.30 PM	Radiotherapy in Tobacco related lesion	Dr. Siddarth Nanda, Associate Professor, AIIMS, Raipur
03.30 - 03.35 PM	<b>Audience Interaction Session</b>	
03.35 - 04.15 PM	Management of Tobacco Dependence	Dr. S.P. Dhaneria, Professor & Dr. Lokesh Kumar Singh, Associate Professor, AIIMS, Raipur
04.15 - 04.20 PM	<b>Audience Interaction Session</b>	
04.20 - 04.50 PM	<b>Post Symposium Assessment</b>	
04.50 – 05.10 PM	<b>TEA BREAK</b>	
05.10 - 05.40 PM	Panel discussion on “Strategies to overcome problem of Tobacco dependence in India”	<b>Moderator</b> Dr. Krishnadutt Chavali, Professor, AIIMS, Raipur
05.40 – 05.50 PM	<b>Symposium Evaluation</b>	
05.50–06.10 PM	<b>Concluding Session</b>	



# NATIONAL ACADEMY OF MEDICAL SCIENCES (INDIA)

56<sup>th</sup> Annual Conference

Venue : All-India Institute of Medical Sciences, Raipur (Chhattisgarh)

## SCIENTIFIC PROGRAMME : Saturday, October 22, 2016

Saturday, the 22<sup>nd</sup> October, 2016

Time	Topic	Orator	Chairperson
08.00 – 08.30	<b>Registration</b>		
08.30 – 09.00	<b>Achanta Lakshmipathi Oration</b> "Cancer in Women"	Dr. Aleyamma Mathew, FAMS	Dr. Kamal Buckshee, FAMS
09.00 – 09.30	<b>Dr. V.R. Khanolkar Oration</b> "Biomedical Applications of Nanomaterials: Diagnosis and Therapy of Thrombotic Disorders"	Dr. Debabrata Dash, FAMS	Dr. Mukund S. Joshi, FAMS
09.30 – 10.00	<b>Col. Sangham Lal Memorial Oration</b> "Experimental and clinical evidence based rationality of incorporation of deep fascia in tissue transfer for reconstructive surgery"	Dr. Visweswar Bhattacharya, FAMS	Dr. Saroj Chooramani, FAMS
10.00 – 10.15	<b>TEA/COFFEE BREAK</b>		
10.15 – 13.00	<b>Scientific Symposium on AYUSH: Need of Integrated Medicine</b>		
Moderators	<b>Dr. K.K. Sharma, FAMS</b>		<b>Dr. Sanjay Wadhwa, FAMS</b>
Time	S.No.	Topics	Speakers
10.15 - 10.35	1	Introduction - Various traditional/ Indigenous system of healing and their integration with modern medicine	Dr. Radhey Shyam Sharma Vice Chancellor, Dr. Sarvepalli Radhakrishnan Rajasthan Ayurved University, Jodhpur
10.35 – 11.00	2	Mind Body Union- An interconnected phenomenon	Dr. Shirley Telles, Director, Patanjali Yogpeeth, Haridwar
11.00 – 11.25	3	Role of Health seeking behavior in evolution of Integrated medicine	Dr. G.G. Gangadharan, Medical Director of I- AIM Health Care Centre,
11.25 – 11.45	4	Tryst with Integrated System of Medicine: Synergy, Synthesis, and Symbiosis	Dr. Sanjeev Misra Director, AIIMS, Jodhpur and Rishikesh
11.45 – 12.10	5	Evidence based Medicine - Evidence appraisal in alternative care: what literature says	Prof. (Dr.) Surekha Kishore AIIMS, Rishikesh, Uttarakhand

12.10 – 12.35	6	Updates on New Draft National policy on AYUSH -2016	Dr. Dinesh Katoch Adviser, Ayurveda Ministry of AYUSH
12.35 – 12.55	7	Panel Discussion: Integrated Medicine: An Approach to Holistic Healing & Success Stories	Dr. G.G. Gangadharan, Dr. Rajpurohit, Dr. Shirley Telles, Dr. Sanjeev Misra
13.00 – 16.00	Poster Session		
13.00 – 14.00	LUNCH BREAK		
14.00 - 16.00	Rehearsal for Recipients of Scrolls and Awards		
16.00 - 18.00	Convocation		
18.00 - 18.30	Tea/Coffee		
18.30 - 19.15	Annual General Body Meeting (Fellows and Members of NAMS)		
19.15 - 21.00	Cultural Programme		
21.00	Dinner		

# NATIONAL ACADEMY OF MEDICAL SCIENCES (INDIA)

56<sup>th</sup> Annual Conference

Venue : All-India Institute of Medical Sciences, Raipur (Chhattisgarh)

## SCIENTIFIC PROGRAMME : Sunday, October 23, 2016

Sunday, the 23<sup>rd</sup> October, 2016

Judges	Dr. P.K. Dave, FAMS	Dr. M.S. Boparai, FAMS	
Time	Topic and Presenter		
08.00 – 11.00	Oral Presentation by NAMS Awardees (and other free papers) [AWARD WINNERS TO BE SELECTED]		
	1. DR. S.S. MISRA MEMORIAL AWARD - Dr. Madhusudhan K.S. (Topic: Role of Multi-Detector Computed Tomography Esophagography in Patients with Esophageal Carcinoma)		
	2. DR. VIMLA VIRMANI AWARD - Dr. Jagadisha Thirthalli (Topic: Prospective comparison of course of disability in antipsychotic-treated and untreated schizophrenia patients)		
	3. DR. S.S. SIDHU AWARD - Dr. Ashok Kumar Jena (Topic: Long-Term Effect of Maxillary Distraction Osteogenesis (DO) on Nasal Index in Adult Patients with Cleft Lip and Palate Deformities)		
	4. DR. VINOD KUMAR BHARGAVA AWARD - Dr. Ganesh Venkatraman (Topic: P21-activated kinase 1 (Pak1) signaling influences therapeutic outcome in pancreatic cancer)		
	5. DR. NANDAGUDI SURYANARAYANA RAO AWARD - Dr. Keyur Parikh (Topic: Unique Aspects of Coronary Artery Diseases in Indian Women)		
11.00 – 11.15	TEA/COFFEE BREAK		
Time	Oration Topic	Orator	Chairperson
11.15 – 11.45	Dr. Baldev Singh Oration “Reproductive issues of women with Epilepsy”	Dr. Sanjeev V. Thomas, FAMS	Dr. Madhuri Behari, FAMS
11.45 – 12.15	Dr. R.V. Rajam Oration “Surveillance & Targeted Action to Prevent HIV/AIDS”	Dr. Rajesh Kumar, FAMS	Dr. P.K. Dave, FAMS
12.15 – 12.45	Gen. Amir Chand Oration “Genetic Basis of Diabetic Nephropathy”	Dr. O.P. Kalra, FAMS	Dr. Kuldeep Singh, FAMS

12.45 – 3.15	<b>Dr. S. Janaki Memorial Oration</b> <i>“Neurodevelopmental Disorders : The Journey, the Dreams and their Realization”</i>	Dr. Sheffali Gulati, MAMS	Dr. Deep Narayan Srivastava, FAMS
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13.15 – 14.00	<b>LUNCH BREAK</b>		
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14.00 – 14.30	<b>Dr. Pran Nath Chhuttani Oration</b> <i>“Neurocysticercosis Burden in Pig farming Community of North India”</i>	Dr. Kashi Nath Prasad, FAMS	Dr. Sanjay Wadhwa, FAMS
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14.30 – 15.00	<b>Golden Jubilee Commemoration Award Lecture</b> <i>“Essential Skills in Post-graduate Medical Curriculum of Community Medicine”</i> <b>Lecturer : Dr. Jugal Kishore, FAMS</b>		Dr. M.S. Boparai, FAMS
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15.00 – 15.30	<b>Valedictory Session</b>		
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15.30 – 16.00	<b>Tea</b>		
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*Note : There may be a few last minute changes due to unforeseen reasons.*



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**Friday, October 21st 2016**  
**National Symposium**  
**on**  
**Tobacco or Health: Make Better Choice**  
**ABSTRACTS**

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## TOBACCO: HISTORICAL BACKGROUND, PLANT INTRODUCTION & TOXICOLOGICAL OVERVIEW

**Krishnadutt Chavali**  
MBBS, MD, DNB, PGDHA, MNAMS, FIMSA  
Professor & Head, Forensic Medicine & Toxicology,  
**AIIMS Raipur**

Tobacco belongs to the nightshade family of plants which contain high levels of alkaloids. In nature, these alkaloids work as a pesticide, and are a natural defense against being eaten. Nicotine in tobacco is an alkaloid. *Nicotiana tabacum* and *Nicotiana rustica* are the commercially cultivated plants for their tobacco. Indian tobacco refers to *Lobelia inflata*. Currently, tobacco is the most widely produced non-food crop in the world.

Tobacco is one of the major toxic agents in our civilization. Nicotine is one of the most potent, toxic and readily available drugs today. Tobacco smoke has strong biological and toxicological effects in vitro and in vivo. The main toxic compounds in tobacco are CO, nicotine and tars which have both local as well as remote effects on the human body. All organs and tissues can be damaged by the toxic compounds that are present in tobacco and, in particular, in tobacco smoke.

Tobacco was considered sacred to the ancient peoples that lived in both South and North America. Tobacco has also been used as a trade item that was readily accepted. It was also used by American Indian tribes in sacred and sociolegal events for smoking. Tobacco is considered a gift from the Creator, and tobacco smoke is seen as carrying one's thoughts and prayers to the spirits. Practical applications for tobacco have also been recorded; tobacco smoke and juice were used as insecticides on other plants and were also rubbed on the skin to keep bugs away, and a host of medicinal qualities were attributed to it by the native populace. In fact, tobacco was considered to be a master cure for all ailments from bad breath to cancer.

Although tobacco was smoked by ancient Native Americans, they also ingested it by mixing with liquids and drinking it, chewing, grinding and snorting it through the nose, and even by preparing and using enemas laced with it.

Modern use of tobacco is far away from its ancient roots. With the advent of cigarette machines, the public had fast, easy access to what was once considered a potent drug of the gods. Despite the well documented health concerns related to tobacco use, its popularity has yet to wane.

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Over the years, more and more scientists began to understand the chemicals in tobacco, as well as the dangerous health effects smoking produces. In 1826, the pure form of nicotine was finally discovered followed soon by scientists concluding that nicotine is a dangerous poison that had the potential to kill a human being.

In 1964, the Surgeon General's report on "Smoking and Health" helped the US government to take a decision to regulate the advertisement and sales of cigarettes. The 1960's in general was a time when much of the health hazards of smoking were reported. In 1965, television cigarette ads were taken off the air in Great Britain. In 1966, health warnings on cigarette packs began to appear. Because of the negative press about tobacco, the major tobacco companies began to diversify their products giving rise to proxy advertising. In 1982, it was reported that second hand smoke may cause lung cancer. In 1985, lung cancer became the number one killer of women, beating breast cancer!

Despite the knowledge that cigarettes are harmful, tobacco industries continue to market and sell them. The fact that nicotine is addictive was probably also known and this very property has been exploited to get millions of people hooked on this dangerous habit!

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## Overview of Epidemiology of Tobacco use and its control

**Prof. Anand Krishnan,**

Centre for Community Medicine, AIIMS New Delhi

### Summary:

Tobacco use is the leading preventable cause of mortality and morbidity globally. Six million people are currently estimated to die annually from tobacco use, with over 600 000 deaths due to exposure to second-hand smoke. Tobacco use accounts for 7% of all female and 12% of all male deaths globally. WHO estimates that in 2012 there were some 1.1 billion smokers worldwide, with over 8 out of 10 tobacco smokers smoking daily. In India, 47.9% of men and 22% of women use tobacco with predominant form being smokeless tobacco use. This is especially true for women where only 2.9% consumed smoked tobacco compared to 18.4% who were using smokeless varieties. Nearly two in five (38%) adults in rural areas and one in four (25%) adults in urban areas use tobacco in some form. Khaini or tobacco-lime mixture (12%) is the most commonly used smokeless tobacco product, followed by gutkha (8%), betel quid with tobacco (6%) and applying tobacco as dentifrice (5%). The prevalence of each of the smokeless tobacco products, except dentifrice, is higher among males than females. Among smoking tobacco products, bidi (9%) is used most commonly followed by the cigarette (6%) and the hookah (1%). Some of the more recent concerns for tobacco control are the emergence of e-cigarettes and hooka bars as many of the control measures do not adequately cover them. Among the consequences of tobacco use heart disease and cancer are the leading killers. The four tobacco related diseases (CVDs, Cancers, Chronic respiratory diseases and tuberculosis) were together estimated to cause a loss of 104500 Crores in 2011.

Global Adult Tobacco Survey (GATS) India shows that 52 percent of adults were exposed to second-hand smoke (SHS) at home. In rural areas 58 percent and in urban areas 39 percent were exposed to SHS at home. Among those who visited different public places within 30 days prior to the survey, 29 percent were exposed to SHS in any of the public places; 18 percent on public transport, 11 percent in restaurants, 7 percent in Government buildings and 5 percent at the health care facility. The quit ratio for among ever daily smokers is 13 percent, while the quit ratio among ever daily users of smokeless tobacco is 5 percent. A little more than half (52%) of adults in India noticed anti-cigarette information on any media/location during the last 30 days prior to the survey. A relatively higher proportion of adults noticed anti-bidi information (61%) and anti-smokeless tobacco information (66%). About 15% to 18% of adolescents use tobacco.

Framework Convention on Tobacco Control (FCTC) is the first globally negotiated health treaty facilitated by WHO and lays down a framework on measures for tobacco control. The strategies include, making public places smokefree; starting tobacco cessation services, banning advertisement and sponsorship of tobacco companies in media and channels; inform people about dangers of tobacco through IEC activities including pictorial warnings on tobacco packets, increase taxes on tobacco products and finally establish tobacco surveillance systems.



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## **Pathologic Effects of Tobacco Use**

**Dr Ravi Mehrotra**

Tobacco, or the Big ‘T’, is the leading preventable cause of cancer is a little known fact in the public. The health risks with Tobacco usage (both smoking and non-smoking forms) are enormous. Assessing the global magnitude or severity of the health effects of tobacco use is complex because of the variability of product composition and the different ways in which these products are used around the world. The 2015 WHO estimate states that 6 million individuals die prematurely each year due to Tobacco related diseases. In India alone, tobacco use kills around 1 million individuals every year, which is expected to rise to 13% of total deaths of the entire nation by 2020. Tobacco is associated with an increased risk of multiple conditions including several types of cancer (including cancer of the lung, larynx, oral cavity, esophagus, throat, bladder, kidney, liver, stomach, pancreas, colon and rectum, and cervix, as well as acute myeloid leukemia), type 2 diabetes mellitus, heart diseases, chronic obstructive pulmonary disease, congenital defects, adverse reproductive effects (such as low birth rate and decreased fertility in women and erectile dysfunction in men), osteoporosis and hip/vertebral fractures, and overall diminished health, relating increased absenteeism from work and increased health care utilization and cost. Overall mortality among tobacco users increases three-fold as compared to non-users, with major culprits being cancer, respiratory and vascular disease. Tobacco kills more than AIDS, legal and illegal drugs, road accidents, murder and suicide combined. With this background, the current presentation aims to convey the global magnitude of its pathological effects and update on the current scenario of the problem.

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## **Imaging of complications of tobacco consumption : Radiologist's perspective.**

**Dr. Deep Narayan Srivastava MD, MBA, FAMS, FICR**  
Professor, Department of Radio-diagnosis, AIIMS, New Delhi-29.

**Abstract :** Smoking can enormously harm the whole body as it's the leading cause in a number of gruesome diseases like lung cancer, coronary artery disease, strokes, growth retardation of fetus etc. Role of radiologist is to establish the correct diagnosis in time, to rule out close mimickers, play a role in deciding the management and to treat, wherever possible.

Lung cancer is the deadliest disease caused by smoking. A radiologist, besides diagnosing and staging the disease, can intervene by performing RFA and bronchial artery embolization (BAE) procedures also.

In coronary artery diseases the CT coronary angiography is used in coronary calcium scoring, plaque imaging and also to rule out other causes of chest pain as acute coronary syndrome, aortic dissection and pulmonary embolism.

The roles of imaging in stroke are accurate and rapid diagnosis and interventional treatment like thrombolysis and mechanical thrombectomy.

Sonography is frequently used in the diagnosis of intrauterine growth retardation and other congenital anomalies.

The radiological findings of some of the common diseases will be discussed.

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## **The Health Effects of Electronic Cigarettes**

**Prasanta Raghav Mohapatra**

MD, FRCP (Glasg), MAMS, FNCCP, FIAB, FIMSA, FCALFISDA, FICS, FICP, FAPSR, FCCP(USA)

Professor, Dept of Pulmonary Medicine, All India Institute of Medical Sciences,

Bhubaneswar-751019, India. [prmohapatra@gmail.com](mailto:prmohapatra@gmail.com)

Electronic cigarettes (e-cigarettes or EC), also known as electronic nicotine-delivery systems, are devices that produce an aerosol by heating a liquid that contains a solvent (vegetable glycerine, propylene glycol, or a mixture of these), one or more flavourings, and nicotine, although the nicotine can be omitted. EC were introduced to the market nearly a decade ago as an alternative to tobacco smoking and aimed to provide an additional opportunity for tobacco smokers to quit smoking. There is a striking diversity in the flavourings in e-cigarette liquids and the effects on health of the aerosol constituents produced by these flavourings are unknown. To make more appealing to youth, the vapour is often flavoured with various attractions. The content of EC cartridges have found varying nicotine levels(0 to 150% of that in cigarettes) as well as other unlisted and dangerous ingredients. Due to the addictive nature of the Nicotine, there are concerns that EC use will lead young non-smokers to take up nicotine through EC, gradually from a low to a very high level. The safety of EC has not yet been scientifically proven, and outcomes of the available studies are against the ECs as a smoking cessation aids. In the absence of clear regulations, the manufacturers are free to promote these devices in various social media, including Internet, TV, YouTube by sexy advertisements, who urge the youth to 'take their freedom back'. Due to lack of regulations, big tobacco companies started selling tobacco products as EC. Different countries regulate ECs differently, resulting in legal complexity, possible uncertainty and a big regulatory gap.

In India, ECs are currently marketed mostly online, including a link through social networking sites. They are also becoming more visible in shopping malls and kiosks near universities and educational areas. Allowing unproven claims about its ability to help smokers quit may also prove 'equally dangerous'. So far only a few countries have banned the EC.

EC have become very popular among younger age groups even in India, seeming to be efficacious and are relatively safer as compared to conventional smoking, but issues of continued dependence and possible harm remain as a great concern. The health effects of vaping include the potential negative impact of nicotine on adolescent brain development, risk for nicotine addiction and initiation of the use of conventional cigarettes. It is impossible to reach a consensus on the safety of EC except perhaps to say that they may be safer than conventional cigarettes but are also likely to pose risks to health that are not present when neither product is used. Certainly it will not be an acceptable and effective public health practice in India to promote EC.

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## **Tobacco and Bone Health**

**Prof. Dr. Alok Chandra Agrawal**

MBBS, MS Orthopaedics, DND Orthopaedics, PhD Orthopaedics, MAMS  
HOD Orthopaedics  
AIIMS Raipur CG

Tobacco has been implicated in the development of nonunion and delayed union. Smoking has been found to decrease oxygen levels in the cutaneous and subcutaneous tissues leading to poor wound healing. Nicotine has been found to decrease vascularization at fracture sites, increasing the chances for the development of osteomyelitis.

Smoking has been shown to adversely affect bone mineral density, lumbar disc disease, the rate of hip fracture, and the dynamics of bone and wound healing. A review of multiple studies into the adverse effects of tobacco use on fracture repair revealed that there are several hypotheses as to the mode of action: a reduced blood supply, high levels of reactive oxygen intermediates, low concentrations of antioxidant vitamins and the effects of nicotine on arteriole endothelial receptors bringing vasoconstriction. Nicotine in high doses is directly toxic to proliferating osteoblasts.

Experimental studies have shown that tobacco has negative effects on fracture healing in diaphyseal fractures. Nicotine seems to affect the early revascularization of the fractured bone, probably through down-regulated gene transcription of fibroblast growth factor, vascular endothelial growth factor, and bone morphogenetic protein cytokines known to be important to angiogenesis and osteoblast function. Smoking is believed to affect bone healing in diaphyseal fractures of Femur, Tibia and Humerus. Other diaphyseal fractures may be affected too but this has not been formally demonstrated yet, except for the negative effect of tobacco in healing of scaphoid nonunion and of lumbar arthrodesis .

Although approximately 50% of smokers return to their habit, it is best for healing of bone and soft tissue if they can abstain while being treated for their injury.



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## **“Health hazards of tobacco chewing requiring surgical intervention”**

**Prof. (Dr.) Nitin M Nagarkar,**

Director, AIIMS Raipur.

### **Abstract:**

This would include discussion about the various methods in which tobacco is been used in daily life. The resulting health hazards of tobacco including the most prevalent head and neck cancer (HNC) will also be discussed in detail. Carcinoma of oral cavity is the most common HNC for which tobacco chewing has got a major role to play. Presently, surgical treatment plays a major role in management of these cancers.

The surgical intervention for oral cavity or head and neck carcinoma is very complicated as, oral cavity has a vital role to play in deglutition, phonation as well as respiration. Any surgical intervention would require to consider all these vital functions. Along with this such cancers have high possibility of metastasis to cervical lymph nodes. This makes it mandatory to manage the neck in majority of the cases and hence increasing the chances of complications and making the surgical intervention more challenging.

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## **Topic: Radiotherapy in Tobacco Related Lesions**

**Dr. Siddarth Nanda**

### **Abstract:**

Global tobacco menace has reached pandemic proportions. Tobacco has significant impact on public health and global health care systems. It is the single most important cause of preventable mortality. As many as 2,500 persons die every day due to tobacco-related diseases in India & smoking accounts for 1 in 5 deaths among males as compared to 1 in 20 among females, accounting for an estimated 9,30,000 deaths in 2010. India is the second largest consumer and third largest producer of tobacco in the world. The prevalence of overall tobacco use among males is 48% and among females is 20%.

More than 400,000 Indians die each year as a direct result of cigarette smoking, making it the nation's leading preventable cause of premature mortality. Worldwide, the picture is even bleaker; with current smoking patterns, about 500 million people alive today will eventually be killed by tobacco use. By 2030, tobacco is expected to be the single biggest cause of death worldwide, accounting for about 10 million deaths per year. One-half of these deaths will occur among people 35 to 69 years of age, losing an average of 20 to 25 years of life.

All types of tobacco both smoking and smokeless have been established as causal agents for oral and pharyngeal cancer and are responsible for several other cancers like lung, liver, colon and acute myeloid leukemia. Tobacco habits are practiced in various different forms and many of them are specific to certain areas of India. The reasons for the initiation of tobacco use are many.

Tobacco is extremely addictive, and its use is harmful in many ways. Both smoked and smokeless tobacco contains the alkaloid, nicotine, which is the main addictive agent. Smoked as well as unburnt tobacco contains thousands of chemical compounds. Many of these compounds are not only irritants and toxins, but they are also carcinogens. The most potent carcinogens in tobacco are the tobacco-specific nitrosamines, polycyclic aromatic hydrocarbons, and many others.

Current management of cancer is multidisciplinary and it involves several clinical and other supportive departments. Surgery, radiotherapy and chemotherapy remain the major modality for management of cancer. Radiotherapy has a definite role to play in management of tobacco related cancers both in curative as well as palliative setting.

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## **Pharmacotherapy of Tobacco Dependence**

**Dr. S.P. Dhaneria**

M.D., D.M., D.N.B., MNAMS, M.Sc., LL.B.(Hons)

Acting Dean (Academics)

Professor & Head

Department of Pharmacology

**AIIMS, Raipur**

Long term use of Tobacco is a leading cause of preventable diseases and premature deaths. Tobacco related diseases impose substantial financial burden of healthcare providers. Nicotine present in Tobacco is a ganglionic cholinergic agonist and its repetitive exposure leads to neuroadaptation and dependence.

Tobacco cessation programme is very effective when psychotherapy (Counselling and behaviour therapy) is coupled with Pharmacotherapy. Pharmacotherapy is indicated when a person is ready to quit tobacco in any form. Discontinuation of Tobacco leads to unpleasant manifestation of withdrawal syndrome and that can be managed by Nicotine Replacement Therapy (NRT) Nicotine is administered as chewing gum, Nasal Spray, Transdermal patch, Sublingual tablet and Lozenges. The dose of nicotine in the formulation is gradually reduced. Besides NRT other first line drugs are Bupropion and Varenicline. These Non-Nicotine options relieve the withdrawal symptoms and decrease the craving for tobacco. Bupropion inhibits reuptake of Dopamine and Noradrenaline while Varenicline is a partial agonist of Nicotine receptors. Second line drugs like Clonidine and Nortriptyline are used when First line drugs are ineffective. Clonidine is a  $\alpha_2$  agonist reducing sympathetic discharge from locus Ceruleus. Nortriptyline inhibits reuptake of Noradrenaline.

Mecamylamine (a non-competitive nicotinic receptor antagonist) and Naltrexone (Opioid receptor antagonist) have also been tried in management of nicotine dependence with significant outcome. Role of Buspirone, Baclofen, Cystisine, Selegiline, Silver acetate and Acupuncture is still uncertain. Vaccine for prevention of smoking relapse is also under trial.

Tobacco dependence treatment are both clinically effective and cost-effective relative to other medical and disease preventive interventions. Good political commitment, awareness and participation of population and proper implementation of health programmes are necessary for success of tobacco cessation programme.

### **Abstract**

**Dr. Lokesh Singh**

Associate Prof. Department of Psychiatry

**AIIMS, Raipur**

Smoking or chewing tobacco is one of the most prevalent substances used in India and worldwide. Various healths related hazards have been identified and efforts are made for tobacco cessation to reduce the morbidity and mortality related to tobacco use. Both pharmacotherapy and other non-pharmacological strategies can be used effectively for tobacco cessation. Medications including varenicline, bupropion, and nicotine replacement therapies like patches or gum help people quit tobacco. Medical health professionals have to take responsibility to cut down the use of tobacco in our society.

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## **ORATIONS & AWARDS ABSTRACTS**



## **CANCER IN WOMEN**

### **ABSTRACT**

Cancer is emerging as a public health problem among an array of non-communicable diseases. The common cancers in women are breast, cervix uteri, colo-rectum, ovary, corpus uteri, lung and oral cavity. Breast cancer (BC) is the common cancer (20-30% of all cancers in women) and the leading cause of cancer death in women worldwide. About half of the BCs and 60% of the deaths are estimated to occur in economically developing countries. In most of the registries in India, BC is the commonest cancer with the highest incidence of nearly 50 per 100,000 women in Trivandrum. Half of this cancer is reported in <50 years of age and it exercise adverse influence on the productive role of women in the society. The factors that contribute to the international variation in BC incidence rates are largely due to the differences in reproductive and hormonal factors and the availability of early detection services.

Gynecological cancers account 15-30% of all cancers in women. Cervix uteri cancer (CC) is the 3<sup>rd</sup> most common cancer affecting women worldwide, the most common cancer among women in several less developed countries and 2<sup>nd</sup> common cancer in India. During last few decades, this cancer incidence has been decreased in India. Significant declines in CC are likely due to changes in marriage and family planning, supported by underlying improvements in education and socioeconomic status. In spite of decreasing incidence of this cancer, gynecologic cancers have increased in India. Among these, ovary and corpus uteri cancers are the major contributors. Ovarian cancer (OC) has emerged as one of the common malignancies affecting women in India and is the 5<sup>th</sup> common cancer in India (4<sup>th</sup> common in Trivandrum). A steady increase has been observed in OC incidence in several registries including Trivandrum. More than 50% of women with OC are under the age of 50 years. The risk of it increases in women who have ovulated more over their lifetime. This includes those who begin ovulation at a younger age or reach menopause at an older age. Other risk factors include hormone therapy after menopause, fertility medication and obesity. Factors that decrease risk include hormonal birth control, tubal ligation, and breast feeding. Efforts are to be made to detect ovarian cancer at an early stage by educating population about the risk factors. Corpus uteri cancers (CUC) are most common in western countries but are becoming more common in Asia. In India, the highest CUC incidence rates are observed in Trivandrum and its incidence has been increasing. Presently, it is the 5<sup>th</sup> common cancer among women in Trivandrum, 75% of women are over the age of 50 years. The risk factors of CUC include obesity, diabetes mellitus, breast cancer, use of [tamoxifen](#), [never having had a child](#), late menopause and high levels of estrogen.

Colo-rectal cancer (CRC) is the 2<sup>nd</sup> most common cancer in women world-wide. The burden of CRC has risen rapidly in some economically developed Asian countries like Japan, South Korea and Singapore. In India, the highest CRC incidence rates are observed in Trivandrum and its incidence has been increasing. Presently, it is the 5<sup>th</sup> common cancer among women in Trivandrum. The major factors include certain dietary practices and family history of cancer. Individuals with a family history of colon cancer, especially if more than one relative has had the disease, are at increased risk of CRC. Other common cancers in women are tobacco-related cancers such as oral cavity (lip, tongue and mouth) and lung. Declining trends in mouth cancer has been reported in India.

Results on the burden, trends in incidence & mortality, risk factors of breast, cervix uteri, ovary and corpus uteri colo-rectal, lung and oral cavity cancers will be presented.

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**Dr. V.R. Khanolkar Oration**  
**Orator : Dr. Debabrata Dash, FAMS**

## **BIOMEDICAL APPLICATIONS OF NANOMATERIALS : DIAGNOSIS AND THERAPY OF THROMBOTIC DISORDERS**

### **ABSTRACT**

We have employed unique properties of carbon-based as well as metallic nanomaterials to develop diagnostic / therapeutic devices targeted against thrombotic disorders. This Oration will dwell at length on the design of a novel graphene-based biosensor that can detect individuals with high coronary risk and describe an innovative strategy to ablate pathological thrombus *in situ* employing near-infrared laser-irradiated gold nanorods (photothermal therapy).

We have designed a graphene oxide-based electrochemical biosensor for detection of platelet-derived microparticles (PMPs), a major risk factor for arterial pro-thrombotic pathologies like acute myocardial infarction and ischemic stroke. Electrodes were fabricated with immobilized layers of graphene oxide and a specific antibody targeted against active conformation of integrin  $\alpha_{IIb}\beta_3$  on PMP surface. Results showed progressive rise in impedance in Nyquist plots with increasing number of PMPs in analyte. The sensor was highly specific for PMPs and did not identify microparticles originating from other cells. Blood obtained from patients diagnosed with acute myocardial infarction exhibited significantly higher values of impedance, consistent with larger number of circulating PMPs in these patients, as compared to samples from healthy individuals, thus validating biosensor as a specific, sensitive, label-free and cost-effective tool for rapid point-of-care detection of PMPs at bedside. Our biosensor is most ideal for mass population screening programs at periphery-level healthcare units with limited resources. It is aimed at early detection of individuals having higher imminent cardiovascular risk, as well as for routine analysis, which in turn would contribute to better management and survival of screened 'high-risk' subjects (*Biosens. Bioelectron.*, 2015, 65: 274-280) (*Patent # 1959/DEL/2013, dated 02.07.2013*).

Fibrinolytic therapy for arterial or venous thrombotic disorders warrants systemic administration of thrombolytics like streptokinase, which is associated with serious bleeding complications. In this study we have provided proof-of-concept of photothermal ablation of thrombus. Thrombi were generated *in vitro* either from purified fibrinogen or from plasma, or *in vivo* in murine blood vessels. Gold nanorods were added on fibrin-rich clots *in vitro* or targeted towards thrombi *in situ* in mice, followed by irradiation with a 808 nm near-infrared laser source at power density of 1.05 W/cm<sup>2</sup>. Local rise in temperature (up to 55–65°C) was detected with an infrared thermal camera that leads to nearly 15% lysis of clot. This is the first report on application of photothermal therapy as an anti-thrombotic measure. Remarkably, addition of streptokinase has a multimodal additive effect in accelerating the photothermal lysis of thrombi (up to 40%) even at a dose significantly lower (by 30 to 50 times) than therapeutic concentration, thus minimizing life-threatening side effects and adverse complications. This combinatorial approach has great potential in bringing about lysis of pathological clots that can effectively overcome the drawbacks of existing therapies (*Nano Res.*, 2016, 9: 2327-2337) (*Patent # 3168/DEL/2014, dated 03.11.2014*).

## **EXPERIMENTAL AND CLINICAL EVIDENCE BASED RATIONALITY OF INCORPORATION OF DEEP FASCIA IN TISSUE TRANSFER FOR RECONSTRUCTIVE SURGERY**

### **ABSTRACT**

Intense Clinical Research since 1984 through 93 parameters has unveiled the rationality of reconstructive procedures with several new concepts and innovative techniques of various compositions. **Such extensive work has been done totally in our country** popularizing the techniques amongst the Plastic Surgeons of the world. This presentation deals with the **tissue constituents and vascular network of the deep fascia**. This prolonged research was conducted at inter departmental, interfaculty and interinstitutional levels.

**Fresh cadaveric dissections, animal experimentations and clinical research** revealed crucial findings applicable for resurfacing defects of different etiology and magnitude. The deep fascia covering the muscle is thought to be an inert a vascular structure with protective function only. We have demonstrated for the **first time in the World the live vascular and lymphatic microcirculation in deep fascia proving it to be having dense vascular network**. Therefore its incorporation enhances the vascularity allowing transfer of large dimension of tissue for reconstruction in cases of trauma, infection, cancer surgery, etc. It has proved the rationality of these procedures convincingly to the scientific world.

**Histology** of deep fascia showed rich subfascial and suprafascial arteriols and capillaries. Intrafascial course of the perforating vessels from the subfascial plane to the suprafascial plane was visualized. **Confocal microscopic** analysis of fluoresceinised deep fascia under 40X magnification showed longitudinally aligned collagen fibres and nuclei of multiple fibroblasts. **Electron Microscopic Y of deep fascia revealed** (a) Elastic tissue and collagen fibres, (b) Lymphatic vessel, (c) Thin walled venule with single layer of muscle fiber, endothelial cell nucleus, Venule with multiple RBCs, Mast cell with granules and capillary showing endothelium and endothelial cells.

**Angiography in experimental model and patients**, demonstrated longitudinally oriented vascular network in deep fascia and fasciocutaneous flap. **Live Microcirculation and Lymphatic Circulation in the Human Deep Fascia** was demonstrated first time in the world under 150 & 600 magnifications.

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***Dr. S.S. Misra Memorial Award***  
**Dr. Madhusudhan K.S.**

## **ROLE OF MULTI-DETECTOR COMPUTED TOMOGRAPHY ESOPHAGOGRAPHY IN PATIENTS WITH ESOPHAGEAL CARCINOMA**

### **ABSTRACT**

#### **Aims and Objectives :**

1. To evaluate the feasibility, comfortability and diagnostic ability of MDCTE in patients with esophageal carcinoma
2. To compare the findings of MDCTE with barium swallow and upper gastrointestinal endoscopy

**Materials and Methods :** 70 patients (44 males; 26 females; mean age 55.1 years) of carcinoma of esophagus were initially evaluated with endoscopy and biopsy, followed by MDCTE and barium swallow. MDCTE was performed after inserting a nasogastric tube (NGT) with its tip just below the cricopharyngeal sphincter. Once the patient was on the CT table, room air injection through NGT was started at the rate of 700 ml/30 seconds just prior (10 – 12 sec) to the scan and continued till the end of the scan. The total amount of air injected, patient comfort, degree of distension (good, fair and poor) and overall diagnostic quality (four point scale) were evaluated. The Kappa weighted analysis was done to detect concordance between MDCTE (virtual endoscopy) and conventional images (barium and endoscopy).

**Results :** MDCTE was comfortable and tolerable in all patients without procedure-related complications. Esophageal distension was good in 50 (71.5%) patients, fair in 13 (18.5%) and poor in 7 (10%) patients. The average amount of air injected was 656 ml. The overall quality of MDCTE was diagnostic in 63 (90%) cases. The agreement between conventional studies (barium and endoscopy) and MDCTE was 91.3% and 63% respectively.

**Conclusion :** MDCTE provides diagnostic quality images with adequate distension of the esophagus and better lesion detection in most patients without significant discomfort.

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*Dr. Vimla Virmani Award*  
**Dr. Jagadisha Thirthalli**

## **PROSPECTIVE COMPARISON OF COURSE OF DISABILITY IN ANTIPSYCHOTIC-TREATED AND UNTREATED SCHIZOPHRENIA PATIENTS**

### **ABSTRACT**

**Objective:** To compare the course of disability in schizophrenia patients receiving antipsychotics and those remaining untreated in a rural community.

**Method:** Of 215 schizophrenia patients identified in a rural south Indian community, 58% were not receiving antipsychotics. Trained raters assessed the disability in 190 of these at baseline and after 1 year. The course of disability in those who remained untreated was compared with that in those who received antipsychotics.

**Results:** Mean disability scores remained virtually unchanged in those who remained untreated, but showed a significant decline (indicating decrement in disability) in those who continued to receive antipsychotics and in those in whom antipsychotic treatment was initiated ( $P < 0.001$ ; group X occasion effect). The proportion of patients classified as 'disabled' declined significantly in the treated group ( $P < 0.01$ ), but remained the same in the untreated group.

**Conclusion:** Disability in untreated schizophrenia patients remains unchanged over time. Treatment with antipsychotics in the community results in a considerable reduction in disability.



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**Dr. S.S. Sidhu Award**  
**Dr. Ashok Kumar Jena**

**LONG-TERM EFFECTS OF MAXILLARY DISTRACTION  
OSTEOGENESIS (DO) ON NASAL INDEX IN ADULT PATIENTS WITH  
CLEFT LIP AND PALATE DEFORMITIES**

**ABSTRACT**

**Objective :** To evaluate the immediate and long-term effects of maxillary distraction osteogenesis (DO) on the morphology of nose among adult subjects with cleft lip and palate deformities.

**Design :** Twelve adult subjects in the age range of 17-20 years with complete unilateral cleft lip and palate underwent DO for maxillary advancement. The effects of maxillary DO on the morphology of nose was evaluated from extra-oral full face frontal photographs recorded prior to DO ( $T_0$ ), at the end of active DO ( $T_1$ ) and at least 2-years after the DO ( $T_2$ ). The ANOVA, Post Hoc test (Bonferroni) and Pearson correlation coefficients were used. The probability value (P-value) 0.05 was considered as statistically significant level.

**Results :** SNM angle and Ptm-M distance increased significantly by DO ( $P < 0.001$ ). The nasal index increased significantly ( $P < 0.01$ ) by 13.85% at the end of active distraction ( $T_1$ ) and by 12.69% at the end of long-term follow-up ( $T_2$ ). The correlation between sagittal maxillary advancement and nasal index was significant ( $P < 0.001$ ). For each millimeter of maxillary advancement, the nasal index increased by 1.38% and 1.8% at the end of active distraction and long-term follow-up respectively.

**Conclusion :** The advancement of maxilla increased the nasal index significantly among subjects with cleft lip and palate deformities.

**Keywords :** Distraction Osteogenesis, Nasal Index, Cleft lip and Palate.

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**Dr. Vinod Kumar Bhargava Award**  
**Dr. Ganesh Venkatraman**

**P21-ACTIVATED KINASE 1 (Pak1) SIGNALING INFLUENCES  
THERAPEUTIC OUTCOME IN PANCREATIC CANCER**

**ABSTRACT**

Resistance to Gemcitabine in PDAC is attributed to activation of various signaling mechanisms in a cell. In this study, by utilizing *in vitro* Pak1 inducing and knockdown cell line models as well as *in vivo* nude mouse xenograft models, we clearly demonstrate that deregulated p21 activated kinase 1 (Pak1) signaling leads to Gemcitabine resistance. Our results from Gemcitabine resistant and sensitive cell line models showed that elevated Pak1 kinase activity is required to confer Gemcitabine resistance. This was supported by elevated levels of phosphorylated Pak1 levels in majority of human PDAC tumors as compared to normal. Mechanistic pathway revealed that Pak1 confers resistance to Gemcitabine by evading apoptosis and regulating survival signals. Further, we found that Pak1 is a physiological interacting substrate of Tak1 - a molecule previously implicated in Gemcitabine resistance. Bioinformatic studies showed that Gemcitabine docks with Pak1 and Gemcitabine exposure induces Pak1 kinase activity both *in vivo* and *in vitro*. Finally, results from nude mouse tumor models showed that Pak1 inhibition by IPA-3 partially increases the efficacy of Gemcitabine and brings about pancreatic tumor regression.

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***Dr. Baldev Singh Oration***

***Orator : Dr. Sanjeev V. Thomas, FAMS***

## **REPRODUCTIVE ISSUES OF WOMEN WITH EPILEPSY**

### **ABSTRACT**

There are about 10 million people with epilepsy in India and a quarter of them are women in reproductive age group. The social stigma of epilepsy has pervasive impact on the life of people with epilepsy particularly women. The cyclical hormonal changes during menstrual cycle and during pregnancy can influence the seizure pattern in women with epilepsy. Exposure to antiepileptic drugs can increase the risk of fetal malformations in the infants. This risk is higher with polytherapy and valproate in higher doses. A small proportion of children with antenatal AED exposure can have problems with cognitive development. All women with epilepsy need to have preconception evaluation to simplify the treatment of epilepsy. It is preferable to avoid valproate as an antiepileptic drug in women who are planning pregnancy.

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*Dr. R.V. Rajam Oration*

*Orator : Dr. Rajesh Kumar, FAMS*

## **SURVEILLANCE & TARGETED ACTION TO PREVENT HIV/AIDS**

### **ABSTRACT**

Epidemiological surveillance played a key role in the identification of AIDS and its modes of transmission. In India, laboratory-based surveillance of HIV was initiated among most at-risk populations in 1990s, which was later expanded to antenatal clinics. On the basis of surveillance, high risk geographic areas and high risk populations were identified; and preventive behaviour change interventions were targeted among high risk groups in mid 1990s. In 2003, analysis of surveillance data revealed a declining trend in HIV. Further analysis, indicated that targeted sexual behaviour change interventions among high risk groups had been responsible for the decline. The targeted behaviour change strategy among high risk groups was also found to be cost-effective. In the era of ART, HIV prevalence trends would no longer be useful for tracking the epidemic. Hence, new laboratory essays are needed for tracking HIV incidence. Verbal autopsy method can provide direct estimates of HIV mortality trends to evaluate the effectiveness of ART. Since the number of new HIV infections is showing plateauing trend, further intensification of HIV/AIDS prevention and control effort is required to achieve the end of HIV transmission and deaths due to AIDS by 2030.

**Keywords:** Public Health, Epidemiology, Surveillance, HIV, AIDS, Prevention, Control

## **GENETIC BASIS OF DIABETIC NEPHROPATHY**

### **ABSTRACT**

It is well known that all patients with Type 2 diabetes mellitus (T2DM) do not develop chronic kidney disease. Several metabolic, hemodynamic and intracellular mechanisms have been proposed to play a role in the pathogenesis of diabetic nephropathy (DN). Clustering of patients with DN in certain ethnic groups and families suggests the role of genetic factors. We have studied various facets about genetic determinants which may influence the development of kidney disease in patients with T2DM.

We have found that ACE DD genotype conferred the maximum risk, whereas ACE II genotype seemed to confer protective role against development of diabetic and nondiabetic CKD. Further, we found that oxidative stress plays a significant role in the development of diabetic nephropathy, and that GSTT1 and/or GSTM1 null genotypes are associated with higher oxidative stress in patients with DN. In addition, we also found that increased levels of inflammatory mediators i.e. TNF- $\alpha$ , hsCRP and uMCP-1 play a significant role in contributing to oxidative stress. We have shown that genetic polymorphism of NF- $\kappa$ B gene and TNF- $\alpha$  gene plays a role in determining serum level of various inflammatory markers and oxidant stress parameters. We found significant association of -429T/C and Gly82Ser receptors for advanced glycation end-products (RAGE) polymorphisms with the development of macrovascular and microvascular complications respectively in T2DM subjects. Further, we have observed that AGE-mediated exacerbation of RAGE expression may play a role in pathogenesis of various vascular complications in T2DM.

To conclude, polymorphisms of various genes involved in renin-angiotensin aldosterone system, inflammatory, oxidant stress, cytoprotective and nitrous oxide pathways and enhanced RAGE mRNA expression may adversely influence final common pathway through oxidant stress mechanisms, and influence the levels of various cytokines and intracellular signaling mechanisms, thereby influencing the susceptibility of patients with diabetes mellitus for development of kidney disease and vascular complications.



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*Dr. S. Janaki Memorial Oration*  
*Orator : Dr. Sheffali Gulati, MAMS*

## **NEURODEVELOPMENTAL DISORDERS : THE JOURNEY, THE DREAMS AND THEIR REALIZATION**

### **ABSTRACT**

Neurodevelopmental disorders (NDD) are associated with significant morbidity. This involves early identification of the disorder, the correct management of the disorder and associated disabilities. In India, the paucity of trained personnel and lack of knowledge about these disorders has been instrumental in inadequate management and recognition of these NDD. The Child Neurology Division, Department of Pediatrics at All India Institute of Medical Sciences has made few noteworthy and meaningful contributions in these aspects: devising a DM curriculum for pediatric neurology, developing indigenous tools for diagnosing these NDDs and performing relevant research. These endeavors would go a long way in serving the children with NDDs.

**Keywords:** Neurodevelopmental disorders, Autism, Cerebral Palsy, Attention deficit hyperactivity disorder, All India Institute of Medical Sciences

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***Dr. Pran Nath Chhuttani Oration***

***Orator : Dr. Kashi Nath Prasad, FAMS***

## **NEUROCYSTICERCOSIS BURDEN IN PIG FARMING COMMUNITY OF NORTH INDIA**

### **ABSTRACT**

Neurocysticercosis (NCC) is the most common cause of acquired active epilepsy (AE). NCC is under reported in India due to lack of systematic studies. We investigated NCC burden in pig farming community of Lucknow district.

Total 294 families with 1640 subjects from 30 villages were surveyed for AE; 595 asymptomatic individuals underwent magnetic resonance imaging of brain. TLR4, MMP9, ICAM1 and GST genes polymorphisms were studied for their role in symptomatic disease. Slaughtered pigs were screened for cysticercosis.

Total 95 (5.8%) subjects with AE were identified; 48.3% of them had NCC. Ninety (15%) asymptomatic individuals had NCC. Thirteen (26%) of 50 pigs slaughtered had cysticercosis.

The results showed high NCC burden in pig farming community and NCC as major cause of AE. Individuals with polymorphic TLR4, MMP9, ICAM1 and GST genotypes were susceptible for symptomatic disease. High swine cysticercosis prevalence suggests the transmission dynamic between human and swine in the community.

**Keywords:** Active Epilepsy, Host Genetic Factors, Neurocysticercosis, Seizure, Swine Cysticercosis

## **ESSENTIAL SKILLS IN POST-GRADUATE MEDICAL CURRICULUM OF COMMUNITY MEDICINE**

### **ABSTRACT**

**Introduction:** Community based education has been considered a suitable approach for health promotion and for requisite skill development regarding primary health care. In the current perspective, public health training and research, being two important aspects require immediate attention.

**Objective:** To assess the skills of post graduate students in department of community medicine in four medical colleges of Delhi.

**Materials and methods:** It was a cross-sectional study conducted among 70 postgraduate medical students of 4 medical colleges in Delhi. The data was collected through a self administered, pre-tested questionnaire containing items assessing socio-demographic profile and skills essential for Post graduate students of community medicine.

**Results:** There were 58.6% male and 29% female students. A large proportion of participants aged between 25-29 years. Ability 'to resolve conflict among the nurse at Primary Health Centre (PHC)', 'generate community participation', 'making thick and thin smear in case of fever', 'making a chart showing month-wise distribution of CuT', and 'calculating chi-square of data', was found to significantly higher in 2<sup>nd</sup> and 3<sup>rd</sup> year PG students than first year PG students ( $p < 0.01$ ). Only 27.1% of students felt that they could test water sample for microbiological aspects while only 47.1% said that they could examine an industrial worker for pre-placement examination.

**Conclusions:** PG students assessed themselves to possess necessary skills on communication, counselling and health education. However, many students lacked skills pertaining to occupational health and epidemiology.

**Keywords:** Competency in Community Medicine, public health, epidemiological skills, communication skills.

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# **POSTER PRESENTATIONS**

## **ABSTRACTS**

## “Analysis of Myoelectric Activation Patterns during Yoga Postures”

**Dr Mrithunjay Rathore**

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All India Institute of Medical science, Raipur, India.

Yoga, is an ancient culture in our country. In the present era, yoga has become an international subject. And the practice of yoga pose has developed as an approach to align, strengthen, and balance the structures of the body. And yoga consists of the basic positions of standing, sitting, forward bend, twisting, inversion, and supine pose. The purpose of this presentation is to explore the myoelectric activation patterns of different yoga poses, particular attention is paid to abdominal, hip and trunk musculature. The literature search is performed using the following electronic database: Cochrane library, Pub MED, Google Scholar, EMBASE, and web of science. The search terms used to contain: muscle activation and yoga posture OR yoga and rehabilitation OR Intervention AND Electromyography. Variation in myoelectric activation firing patterns depends on the trunk and pelvic positions during different yoga pose. The *Chaturanga Dandasana* and *Adho Mukha Svanasa* are effective for strengthening external oblique abdominis muscle, and *Utkatasana* and *Virabhadrasana* pose for targeting the Gluteus Maximus, and *Ardha utthanasana* pose for strengthening longissimus thoracis muscle. Based on results, it can conclude that the knowledge of myoelectric activation of different yoga pose can be used for designing of an evidenced based yoga program for treatment of musculoskeletal disorder and also to guide for clinical decision to making a rehabilitation program.

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## Structure-Based Drug Design of BET-Family BRD2 Inhibitors

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Bromodomain containing protein (BRDs) monitors the level of histone acetylation and regulate epigenetically controlled processes like gene transcription and chromatin modification. BET family (Bromodomain and extraterminal domain family) is one of the eight families, which contains two tandem bromodomains (BD1 and BD2) and a conserved extra-terminal domain. Dysfunction of BRD protein has been linked with development of several diseases. Altered protein acetylation, leading to deregulation of transcription function, is evident in several forms of cancer. BRD2 has been implicated in pathogenesis of cancer, neurodegenerative disorders such as Parkinson's disease and defects in embryonic stem cell differentiation. Inhibitors selectively targeting BRDs can pave path for new drug discovery against several types of cancer.

We have recently identified BRD2-BD2 specific inhibitors by in-silico screening using NCI Diversity Set III. We identified 20 potential compounds and performed co-crystallization screening using them with BD2. The compound NSC127133 binds significantly to BD2 at the histone acetyl-lysine binding pocket. The high-resolution crystal structure of the complex was determined at 1 Å resolution and we have proposed that NSC127133 is a potential lead molecule to develop a library for BD2 (Shailesh et al., 2016). The detailed crystal structure and biochemical study of the complex will be presented.

### Reference

Shailesh T, Shruti M, Prashant D, Manjula R and Padmanabhan B. (2016). A novel phenanthridione based scaffold as a potent inhibitor of the BRD2 bromodomain: Crystal structure of the complex. PLoS ONE, DOI:10.1371/journal.pone.0156344.

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## Effect of Oxcarbazepine on serum Brain Derived Neurotrophic Factor (BDNF) in bipolar mania

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Bipolar disorder involves dysfunctions of critical neurotrophic, cellular plasticity and neuroprotective processes due to abnormalities of neurotrophins (NTs) and other trophic factors. BDNF, which is one of the most studied and abundant NTs in the brain, is important for neurogenesis, neuronal survival, and normal maturation of neural development pathways. The present prospective, interventional, open label clinical study was conducted on 25 patients of bipolar mania and 25 healthy controls to evaluate the change in serum BDNF level with oxcarbazepine monotherapy in bipolar mania. Detailed history, clinical evaluation including YMRS scoring and serum BDNF were assessed at baseline for all 50 subjects. The bipolar patients were prescribed tablet oxcarbazepine and followed up after 4 weeks for clinical evaluation and re-estimation of serum BDNF and YMRS scoring. The serum BDNF level in bipolar manic patients were compared with healthy controls at baseline and results revealed that there was a significant reduction ( $p=0.002$ ) in serum BDNF level in bipolar patients. At follow-up after 4 weeks, the increase in serum BDNF in bipolar group was significant and the mean change in serum BDNF in bipolar group was also found statistically significant ( $p=0.02$ ) in comparison to healthy controls. The YMRS score and serum BDNF at baseline had an inverse relation ( $r = -0.59$ ) whereas change of the YMRS score had a positive correlation ( $r = 0.67$ ) with the change of serum BDNF over 4 weeks. Analysing the data of this study we can conclude that in bipolar mania serum BDNF level decreases and short term monotherapy with oxcarbazepine can increase the level and helps in restoring the neural functions.

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**"TO Evaluate the Healing Effects of Punica granatum peel on Experimental Colitis" –by Arpit Verma et al., Department of Pharmacology, AIIMS ,Raipur, CG-492001**

**ABSTRACT: Objective:** To evaluate the healing effects of 50% ethanolic extract of dried peel of *Punica granatum* (PGE) on acetic acid-induced colitis in rats. **Methods:** *Punica granatum* peel extract was administered orally, once daily for 14 days in rats after the induction of colitis with 50% acetic acid and 100mg/kg dose of extract was found to have optimal effect against acetic-acid-induced colonic tissue damage and adhesions. Effect of above dose of extract was then further studied for its effects on various physical and biochemical changes in the colonic tissue. It included physical parameters like fecal output, presence of blood/mucous, changes in body weight, food and water intake done till 14<sup>th</sup> day of experiment while other physical (colonic tissue damage score, colonic weight and adhesions) and biochemical parameters (antioxidants-superoxide dismutase and reduced glutathione; free radicals-nitric oxide and lipid peroxidation) were studied on 15<sup>th</sup> day of experiment in 18 hours fasting rats. Antibacterial activity of the extract was also studied using in vitro procedures.

**Results:** *Punica granatum* peel extract (PGE) decreased colonic damage and enhanced the antioxidants but decreased free radicals activities in the colon affected in acetic acid colitis. Acute toxicity study indicated no mortality or other ANS or CNS related adverse effects even with 500 mg/kg dose (10 times of effective dose) indicating its safety.

**Conclusions:** *Punica granatum* peel extract (PGE) seemed to be safe and effective in colitis by its predominant effect on promoting antioxidant status and decreasing intestinal bacterial load and free radicals responsible for tissue damage and delayed healing.

**Reference:** Ghatule RR, Goel Shalini, Gautam MK, Singh A, Joshi VK, Goel RK; Effect of Azadirachta indica leaves extract on AA-Induced colitis in rats: Role of antioxidants, free radicals and myeloperoxidase. Asian Pac J Trop Disease, 2012;2(2):S651-S657. Effect of methanolic extract of *Pongamia pinnata* seed on gastroduodenal ulceration and mucosal offensive and defensive factors in rats. T. Prabha, M. Dorababu, Shalini Goel, P.K. Agarwal, A. Singh, V. K. Joshi, & R.K.

Goel, Indian J Exp Biol, 2009, 47:649-659.

## SAFETY AND ROLE OF SMALL VOLUME PLASMAPHERESIS IN CHILDREN WITH AUTOIMMUNE ENCEPHALITIS

**Dr. Sundar Periyavan, Akshay Batra**

National Institute of Mental Health & Neurosciences, Bengaluru

**Background:** *N*-methyl-d-aspartate receptor (NMDAR) antibody encephalitis is a recently recognized immunotherapy-responsive pan-encephalitis with characteristic features that include a psychiatric onset and a later movement disorder. There are no established guidelines but clinicians have commonly used pulsed intravenous methylprednisolone followed by high-dose oral prednisolone, with addition of plasma exchange and/or IVIg

Patients were referred to transfusion medicine center for plasma exchange. The procedure is usually done by automated or manual methods. We have done manual method in children because of low body weight and economic constraints.

**Aim:** The aim of the study was to find the safety and efficacy of small volume plasma exchange.

**Materials:** The study was performed over a period of 9 months from January to September 2016, at Transfusion Medicine Centre, National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru, South India. The study included 11 children in the age group of 4 to 12 years. Only cases with diagnosed NMDA were included for the study. Of these 3 were males and 08 females constituting 73%. The body weight of all the patients was below 35 kgs, the minimum being 10 Kgs and maximum 30 Kgs. Each patient underwent 5 to 10 procedures on consecutive days.

**Methods:** Whole blood, 10 ml per kg body weight, was collected into a double bag. All the patients

underwent phlebotomy through peripheral venous access: antecubital vein. The bag was centrifuged at 5000 g for 10 minutes at four degree centigrade. All the plasma was expressed under laminar flow bench into a satellite bag, the tubing was sealed and the satellite bag was separated. The plasma was discarded as per standard protocol. Requisite amount of normal saline was added to the packed cells with sterile infusion set in ultraviolet hood and sent to the ward for infusion to the patient. One unit FFP was used as replacement for protein loss, on alternate days. A total of 247 procedures were performed. The maximum was 20 exchanges in two patients (0.6%) of autoimmune encephalitis and the minimum was three exchanges in three (0.9%) patients of GBS. The rest of the patients underwent five to ten procedures.

**Results:** No procedure related complications occurred in any of the patients. One patient had allergic reactions to FFP infusion in the form of rash and itching. The reactions were mild to moderate in nature and subsided with antihistaminic agents. All the children showed signs of arrest of the progression of the disease and later showed clinical improvement during the stay at hospital. All of the patients are being followed up by the neurologist and

**Conclusion:** From our experience plasma exchange is safe and effective procedure in children with NMDAR disease. This procedure is can be done hospitals attached blood banks having blood component facility but no apheresis machine; this will avoid huge expenditure involved in automated plasmapheresis or IVIg

## Pattern, correlates and implications of multi-morbidity among older adults in selected Indian states

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**Objectives:** The objective of the present study was to estimate the proportion of older adults with non communicable disease (NCD) multi-morbidity, its correlates and implications in selected Indian states.

**Methods:** The study used data of 9,852 older adults ( $\geq 60$  years) (men 47%, mean age 68 years) collected by the United Nations Population Fund from seven selected Indian states. Multiple logistic regression analysis was used to assess the correlates of NCD multi-morbidity and hospitalization.

**Results:** NCD multi-morbidity was reported by 30.7% (95% CI 29.8-31.7). Those in the highest wealth group (OR 4.68, CI 3.90-5.62), aged  $\geq 70$  years (OR 2.44, CI 2.19-2.71), alcohol users (OR 1.53, CI 1.25-1.89), women (OR 1.51, CI 1.35-1.69) and tobacco users (OR 1.22, CI 1.08-1.37) were more likely to report NCD multi-morbidity compared to those without any NCD. Those with multi-morbidity (OR 2.34, CI 1.84-2.98) and the wealthiest (OR 2.07, CI 1.42-3.02) were more likely to be hospitalized due to NCD in the last year compared to those with single NCD and lower wealth index respectively.

**Conclusions:** Multi-morbidity needs to be considered for planning NCD health services provision particularly inpatient facilities focusing on alcohol users, tobacco users and women. Further studies are required to find out reasons for higher rates of multi morbidity among the wealthier group other than higher health services utilization and detection rates.

## Impact of smoking, occupation and Lifestyle on male fertility

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The present study evaluated the impact of smoking, occupation and lifestyle on male fertility. A total of 200 subjects were recruited for the study from the Division of Infertility, Department of Urology, SMS Medical College and Hospital, Jaipur. The data obtained were statistically analyzed using ANOVA and correlation was drawn among various parameters. A significant ( $p < 0.05$ ) decline was observed in sperm motility and vitality above the age of 30 years. A significant inverse ( $r = -0.25$ ,  $-0.20$ ,  $p < 0.05$ ) correlation were found between sperm motility and vitality to higher age group. In lower age group, conversely, these parameters were found to be positively correlated with age. Highest prevalence of azoospermia occurs in farmers (66.66%, 50%). The least azoospermia were found among casual laborers in both high and low age groups. In lower age group highest percentage of azoospermia (55.55%) subject were alcoholics and smoker (50%) and 50% severe oligozoospermia subjects were smokers in both the groups. The age is intimately related to decrease in sperm motility and vitality, whereas, least effect is observed on sperm count. Occupationally, highest prevalence of abnormal semen quality is noticed in farmers. Lifestyle of smoking and alcohol consumption further diminishes the semen quality.

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## "A study of patient satisfaction and expectation in a newly established tertiary-care teaching hospital: a cross-sectional study"

**Background:** AIIMS in Patna, India, was started as a tertiary-care centre under Pradhanmantri Swasthyay Surakshha Yojna scheme of Government of India. For a newly developing institute, patients' satisfaction regarding clinical services is of utmost importance for the overall growth of the institute.

**Objective:** To find out the level of patient satisfaction related to different parameters of quality health care in a newly established tertiary-care hospital and to understand the expectation of the patients with respect to quality of delivered health-care services.

**Materials and Methods:** A cross-sectional study was conducted among the patients attending OPD of AIIMS, Patna. Total number of patients interviewed using questionnaires were 445 from different departments.

**Result:** Around 47% patients told that more than 10 min were given to them during consultation and 95.5% patients were satisfied with the time given to them. Around 82% patients thought that treatment/suggestion given to them were either excellent or good. Around 74% patients were satisfied with treatment plan discussed with them. Around 86% had told that attitude of doctors at AIIMS, Patna, was better than doctors at other institutes where they had visited previously. Mean rating to doctors and other health staffs on the basis of advice/treatment given by them was 8.30 and 8.01, respectively, on a 0–10 scale. Around 55% patients thought that drugs should be free to them. Around 63% patients thought that investigations should be free to them and 59% thought that this institute should work as tertiary centre but see all the patients who come to OPD.

**Conclusion:** Patient's satisfaction from health care decides the fate of health-care providers and health-care delivery system. The institute management need to ensure that the quality care is being provided and a standard is maintained by routine patient feedbacks and evaluation. Training of the faculty needs to be organized routinely.

## Escitalopram in disorder of laughter and crying with predominant laughter incontinence

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Disorder of laughter and crying (DLC) is a condition defined by sudden, uncontrollable episodes of laughter, crying or both, which occurs without any apparent internal or external emotional cues, and frequently occurs incongruous to the hedonic mood state. This construct has been alternatively termed as pseudobulbar affect, emotional incontinence, or pathological emotionalism. This condition is associated with various neurological disorders, such as stroke, multiple sclerosis, gelastic epilepsy, Parkinson's disease, pseudobulbar palsy, Amyotrophic lateral sclerosis (ALS) and tumours in the cerebellopontine region. We intend to report an interesting case with the clinical presentation of DLC of hyperactive, motor, negative type with presentation of predominantly paroxysmal incontinence of laughter which responded dramatically to Escitalopram. This report highlights the use of SSRIs in such atypical presentation of DLC, which opens up further research possibilities in this domain.

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## Solitary Fibrous Tumor of lateral Pelvic wall: a rare differential with newer trends in their management

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**Introduction:** Solitary Fibrous Tumor (SFT) is a rare soft tissue sarcoma resembles hemangiopericytoma. Most common site is pleura. It is benign, but may recur locally or at distant sites despite of clear margin of resection. The relationship between histology and clinical behavior is unpredictable.

**Case report:** A 53-year male presented with painless lump in hypogastrium, with frequency, dysurea and constipation for 6 month. On examination a 6×5 cm well defined, smooth, nontender, hard lump was present in hypogastrium. DRE revealed extramural left pelvic wall mass with retained mucosal integrity. There was history of occasional cough with haemoptesis.

CECT abdomen suggested homogenous, well encapsulated, highly vascular, hypoattenuated mass of 10×8 cm from left lateral pelvic wall with maintained fat plane. Pulmonary metastasis was present.

Incisional biopsy suggested spindle cell tumor with mild nuclear atypia. Immunohistochemistry was positive for CD-34, CD99-, and bcl-2, Vimentin and KI 67< 1 % (suggests SFT).

The patient was managed by tumor embolization and oral sorafenib. There was no tumor progression in last in last one year. Long term result is still awaited.

**Conclusion:** In unresectable /metastatic tumor the chemotherapeutic drugs have very limited role. The anti-angiogenic drugs (bevacizumab with temozolomide) and targeted therapy of sunitinib, sorafenib, or imatinib can be tried.

## Supraclavicular Cutaneous Metastasis from Squamous cell Carcinoma of Penis

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Penile cancer is considered a disease of the developing nations. A structured patient awareness system that can allay the social stigma attached with this entity is virtually non-existent in these countries. Delay in seeking medical attention accounts for the increased incidence of loco regional spread and distant metastasis at the time of initial evaluation. An elderly gentleman reported to us with a painful left supraclavicular swelling of two weeks duration. The patient had undergone partial penectomy with bilateral ilio-inguinal block dissection for squamous cell carcinoma of penis three months back. Fine needle aspiration cytology of the supraclavicular mass revealed metastatic squamous cell carcinoma consistent with the microscopic features of the index penile lesion. The patient requested for excision of the neck lesion due to the associated constant pain and cosmetic disfigurement. Wide excision with a 1 cm margin was carried out under local anesthesia. The patient was subsequently administered taxane based chemotherapy for management of disseminated disease. Distant cutaneous metastasis heralds the presence of disseminated disease and is an indication for prompt initiation of chemotherapy. Local excision of the solitary metastatic mass offers rapid pain relief and safeguards against future development of local complications like recurrent infection, ulceration, and fungation.

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## The Versatility of Perforator-Based Propeller Flap for Reconstruction of Distal Leg and Ankle Defects

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The propeller flap is a local island fasciocutaneous flap based on a single perforator. It is designed like a propeller with 2 blades of unequal length with the perforator forming the pivot point. when the blades are switched along the perforator as a pivot point, the long arm comfortably fills in the defect. The ability of this flap to rotate any angle up to 180 degrees makes it extremely versatile for reconstructing traumatic as well as other defects of the distal lower limb. AIMS AND OBJECTIVE of our study is to show the versatility of perforator flap in relation to technique, time of surgery, donor site morbidity and aesthetic outcome. From May 2016 to October 2016, 5 patients were treated with perforator-based propeller flap for distal leg and ankle defects. Flap was based on single perforator of posterior tibial or peroneal artery rotated up to 180 degrees. RESULT: One patient had distal margin necrosis of 2.5 cm x 0.5 cm which required excision and primary closure. CONCLUSION: The perforator-based propeller flap for distal leg and ankle defects is a good option in comparison to free flap. The technique is safe provided meticulous design and technique are used, less time consuming, and with minimal donor site morbidity with aesthetically satisfactory result.

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## Surgical Correction of “O” Deformity of the lower limbs

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**Introduction:** Multiple deformities of the femur and tibia in a child are known to occur in Multiple hereditary exostosis or diaphyseal achalasia, polyostotic fibrous dysplasia, Osteogenesis imperfect, Achondroplasia, multiple epiphyseal dysplasia and Rickets. Rickets is well known to bring about multiple bony deformities of the lower limb in the form of Bow legs, Knock Knees, Wind Swift Deformities and stunted growth. We are reporting a 6 year old girl with stunted growth and an “O” deformity of the lower limbs and a waddling gait which was corrected by a single diaphyseal osteotomy of each femur and tibia to give her parallel limbs and a normal gait.

**Case Report:** Having corrected the Vitamin D deficiency and keeping a 3 week vitamin D supplement free period to avoid postoperative hypercalcemia both the femur were corrected by ball and socket osteotomy stabilized by LCP. 3 weeks later the same procedure was done for the tibia and Plaster of Paris casts were given. All the 4 osteotomy united by the end of 2 months and now the child is walking with a normal gait.

**Conclusion:** Although bony deformities in children with rickets gets corrected with vitamin D supplementation and remodeling, severe deformities do not remodel specially in hypophosphatemic rickets and also disturb the gait. Surgical correction is well established in these children following multiple osteotomy being stabilized by exfix, Ilizarov, Intramedullary rod, K wires and JESS distractors etc. We used LCP's for a single stage stable fixation of both femur and then the tibia and found this procedure beneficial to the patient.

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## Management of Idiopathic Clubfoot By Ponseti Method

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### Abstract

**Background:** Clubfoot occurs approximately 1 in 1000 live births and is one of the most common congenital birth defects. There have been many reports of successful treatment of idiopathic clubfoot with Ponseti method in the western world, but there are only few studies done in the developing country like India. So the present study was undertaken with the following objective.

**Objective:** To evaluate the efficacy of Ponseti method in the treatment of idiopathic clubfoot.

**Methodology:** A study was conducted from August 2015 to August 2016 in AIIMS Raipur. Total 12 patients (20 clubfoot) were evaluated in our study. All patients were treated by manipulation and casting as described by Ponseti. Main outcome measures included in the study were, the degree of correction of the deformity and the effect of different variables in the course of management.

**Results:** In our study, we treated 12 babies with idiopathic clubfoot by Ponseti method, among them 08 had bilateral affection. The mean age of the babies was 14 weeks. Out of the 12 babies, 12 of the 20 feet had deformity of a severe grade i.e., Pirani score of 5 and above. The average number of casts required were increased as age of presentation increases indicating increasing difficulty and delay in correction of babies who presented late. The results were excellent in 74% (14 out of 20) and good in 26% (6 out of 20). There was significant improvement in Pirani score.

**Conclusion:** Ponseti method is a very safe, efficient and economical treatment for the correction of clubfoot which radically decreases the need for extensive corrective surgery. The results are excellent when treatment begins early.

**Keywords:** Ponseti method, Idiopathic clubfoot, Pirani score, Tendonotomy

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## Medical Management of Dental Caries

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Dental caries is an infectious disease which has affected the human civilization from time immemorial. Traditionally restoration of the even incipient lesion mainly focused on surgical model. This surgical management can lead to several lifetime replacement procedures, resulting in an increased restoration size or more invasive procedures over time and ultimately leading to extraction of tooth. Now the traditional approach of Drill & Fill surgical attitude has been taken over by the medical model by modifying and correcting factor that favors oral health. The current approach for dental caries management focuses on modifying and correcting factors to favor oral health. This poster highlights the medical management of dental caries.

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## **Fibroids in mullerian agenesis: a diagnostic dilemma – Case report**

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Mullerian agenesis is the most severe form of mullerian anomalies, occurring due to failure of fusion of mullerian ducts at 6<sup>th</sup> and 7<sup>th</sup> weeks of embryonic life and resulting in absent or hypoplastic uterus and variable degree of vaginal hypoplasia. Leiomyoma are the most common benign tumor occurring in the uterus but the occurrence of leiomyoma in hypoplastic uterus is a rare event and degeneration is even more rare. We are reporting a case of mullerian agenesis, where fibroids with myxoid degeneration led to the diagnostic dilemma and extensive work up for adnexal mass.

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## **Sex Chromosome Aberrations in Premature Ovarian Failure: A Pilot Study**

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Premature ovarian failure (POF) is a primary ovarian defect with symptoms of absent menarche (primary amenorrhoea) or premature depletion of ovarian follicles before the age of 40 years (secondary amenorrhoea). The etiology of POF remains idiopathic in many cases. Studies have shown that idiopathic POF has a strong genetic association with sex chromosomal aberrations. These chromosomal aberrations remain unidentified with the conventional cytogenetic techniques. Comparative genomic hybridization (CGH) microarray identifies the submicroscopic chromosomal rearrangements with higher genomic resolution. Selection of POF subjects (24) was based on occurrence of secondary amenorrhoea with elevated levels of FSH (= 40 IU/L) on two different occasions of 4-6 months apart. Each sample was processed for array CGH (Agilent protocol version 7.3). The results were compared with the data software (Agilent Cytogenomics 3.0.1.1).

In the present study, at X chromosome, around 10 loci between varied base pair lengths showed gene alterations such as deletions, amplification, loss and gain. These loci showed presence of various genes already implicated in POF such as ZNF185, TMLHE, PNMA5, DACH2, CYLC1, HMGN5, RPA4 etc. The presence of known genes in our sample group strengthens their association in POF. Various other unknown genes were also observed, about which no information regarding their association with POF, is mentioned in the data bases. These genes can be assigned as genetic markers of POF once enough data proves their presence in POF. Early identification of these genetic alterations helps in early diagnosis of familial POF. This will help in predicting the likelihood of early menopause and allow these women to opt for embryo preservation techniques or planning early pregnancy.

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## **Necrotizing fasciitis after spinal anesthesia.**

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Regional anesthesia is the preferred technique for Cesarean delivery. Strict aseptic precautions should be taken; otherwise, infectious complications including abscess formation, meningitis and necrotizing fasciitis may result.

We report a case of a 26-year-old post-partum female who presented with necrosis of the skin of back following spinal anesthesia, which was administered for Cesarean delivery 5 days prior at a private nursing home. On presentation, she was drowsy, appeared dehydrated and febrile. Examination of her back revealed necrosis of skin extending from just below the scapula to the gluteal region. Debridement of skin over the back was performed, and intravenous antibiotics started. After three debridements following which skin grafting was performed, she made complete recovery. Infectious complications following regional anesthesia are rare, and most of the literature focuses on colonization of epidural catheters or epidural abscess. There is no report of necrotizing fasciitis following spinal anesthesia so far.

Sources of infection that are suspected in our case include:

- local anesthetic solution used for subcutaneous infiltration,
- nonadherence to aseptic precautions,
- skin flora of patient, endogenous source and
- nasopharyngeal flora of anesthesiologist.

We considered each possibility, and the most likely cause in our case appears to be infection from an already-used vial of a local anesthetic agent. Local anesthetics have bacteriostatic properties, but infection may still be transmitted through contaminated solutions. The present case highlights the importance of maintaining strict aseptic precautions, avoiding reusing multidose vials and early recognition of this complication as timely intervention can be lifesaving.

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### **Case series of a neglected tropical disease: Ocular cysticercosis in school going children from foothills of north Himalayan region of India**

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Ocular cysticercosis is a parasitic infection caused by larvae of *Taenia solium* occurring in 10-30% of the infected patients in endemic areas. It is one of the neglected tropical diseases. It may cause significant visual loss if not treated in time. Here we report three cases of ophthalmic cysticercosis in school going children, all of whom were vegetarian by diet. Each case was unique representing varied clinical features and treatment requirements.

**Case 1-** A five-year-old school going female presented with painless nodular swelling in her left eye for 3 months. On examination a subconjunctival nodule measuring 7mm x 6mm, about 3mm nasal to the limbus. Radiological findings revealed a well-defined cystic lesion with well-defined eccentric hyperintensity suggestive of extraocular cysticercosis. Histopathological examination showed features of cysticercosis cellulosae. ELISA was equivocal.

**Case 2-** A fourteen-year-old male presented with nodular painless swelling in the lateral aspect of the left eye since 8 years. Ocular examination revealed a swelling measuring 13mm x 11mm about 6mm temporal to limbus. Clinical and radiological findings were suggestive of subconjunctival cysticercosis which was confirmed by Histopathological Examination after a surgical excision. ELISA was positive for Cysticercosis.

**Case 3-** An eleven-year-old girl, vegetarian by diet presented with complaints of blurred vision and floaters in right eye for more than 3 weeks. On retinal examination a single translucent vitreous cyst was found which on ultrasound scans had features suggestive of intravitreal cysticercosis. Patient was taken up for pars plana vitrectomy for the removal of the cyst which was removed piecemeal.

**Conclusion-** Ocular cysticercosis is emerging as a common disease in the tropics but often remains neglected. The diagnosis is mainly based on clinical features, radiology and histopathology. Awareness about importance of early diagnosis, appropriate surgical & medical management with appropriate anthelmintic drugs should be increased among clinicians & community.

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## Thoracic wall desmoid: a rare case report

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**Introduction:** Desmoids are slow-growing, benign tumors, invade locally and have a tendency to recur despite of clear surgical margins. It occurs around limb girdles, proximal extremity, abdominal wall and in bowel mesentery. The desmoids involving thoracic wall is the first case report of the literature.

**Case report:** A 20-year-old female presented with a painless gradually increasing mass in the right hypochondrium for 3 months. She had no history of fever, jaundice, weight loss, bleeding disorder, abdominal surgery/ trauma. A 8x3 cm, non-tender, smooth, firm, non-fluctuant and non-transilluminant lump was palpable in midclavicular line, whose upper margin couldn't be reached.

CECT revealed a homogenous mass 8 x 7.3 x 3 cm mass from lower three intercostals muscles along midclavicular with minimal post contrast enhancement.

FNAC was inconclusive so wide excision of tumor, segmental resection of adjacent ribs with repair of diaphragm was done (figure 2). Histopathology and IHC was positive for Vimentin, smooth muscle actin and beta catenin. Ki 67 was positive < 1 %. The patient was discharge on 6<sup>th</sup> postoperative day.

**Conclusion:** Wide excision is the first line management in desmoids. Re excision, Radiation therapy or drug therapy are often used with recurrent disease/ alternative to mutilating surgery.

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## Use of trochar intercostal drain as tunneller in hydrocephalous: a novel technique

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### Introduction:

Insertion of Ventriculoperitoneal shunt in hydrocephalous requires creation of subcutaneous tunnel. Many times when tunneller is unavailable it becomes difficult. This report highlights the use of trochar intercostal drain as tunneller.

### Case report:

3 month male child with massive hydrocephalous and features of raised intracranial pressure requiring urgent intervention. As tunneller was unavailable other possible options were explored. Trochar intercostal drain was considered due to its easy availability in sterile ready to use pack.

Semicircular incision was given over right parietal region. Number 16 intercostal drain with trochar was inserted in the shallow space created and advanced under guidance towards right hypochondrium. Stab incision was given over the drain; abdominal end of the shunt was inserted through the drain after removal of trochar to guide it downwards after cutting the conical end of the drain. The remaining procedure was completed as it is done usually. Total time required was 45 minutes and 30 seconds were required for the creation of the tunnel.

**Conclusion:** Trochar intercostals drain is an easily available alternative. Its use can be popularized even in setups with limited facilities.

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### Diagnostic and Management dilima for adenocarcinoma third part duodenum: A case report

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**Introduction:** Dudenal adenocarcinomas (DA) (represent 0.3% of malignant gastrointestinal tumors, mostly found in D2 duodenum [1]. We report a rare case of adenocarcinomas D3 of duodenum (very rare in the literature) with discussion on controversies in their diagnosis and management.

**Case report:** A 65-year-old woman presented with a two month history of intermittent bilious vomiting, post-parandial abdominal pain and weight loss. Per-abdomen examination was normal. CEA, CA 19-9, and 125 (CA-125), were markedly raised. First esophagogastroduodenoscopy upto D2 duodenum was normal. Abdominal ultrasound was normal. CECT abdomen revealed dilated stomach and D2 duodenum, but no growth in



duodenum (Figure 1). Due to CT findings, second endoscopy was performed which confirmed an ulcerative, intraluminal mass, completely occluding D3 duodenum. Histology demonstrated an adenocarcinoma with moderate differentiation.

Intraoperatively, a solid mass of around 2×2 cm completely occluding lumen of D3. Whipple operation with locoregional lymph-node dissection was done. Histopathology verified moderately differentiated adenocarcinoma without any lymph node involvement. On 15<sup>th</sup> postoperative day patient died because of severe fulminant acute pancreatitis.

**Conclusion:** Adenocarcinoma of third/ fourth part of duodenum presents diagnostic challenge as symptoms may be subtle, until tumor is advanced. Whipple operation or segmental resection with locoregional Lymph node dissection is the ideal treatment

#### **Phosphodiesterase (PDE) inhibitors and their interaction with nitric oxide (NO) in adjuvant-induced rheumatoid arthritis in rats**

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Theophylline (non-specific PDE inhibitor) and their interactions with nitric oxide modulators were evaluated in adjuvant-induced arthritic model of rats. Wistar rats (200-300g), 8 animals per group were used in the study. The animals were injected with 0.1mL of squalene and 0.2mL of complete Freund's adjuvant on day (0) in sub-planter region of right hind paw controls received only saline. The treatment with theophylline and nitric oxide modulators were

done from day 14 to day 28. Arthritis indexes, ankle diameter, paw volume, and body weight were determined to assess RA progression from day (0) to day 28. On day 28 animals were sacrificed and their blood collected for IL-10 and TNF- $\alpha$  cytokine levels and hind paw for pathological analysis. Synovial fluid from joint spaces of CFA inoculated rats was collected to estimate TNF- $\alpha$  level in synovial fluid. The data obtained was analysed by two-way ANOVA followed by the Newman-Keuls post-hoc test. Theophylline (10 and 20mg/kg) significantly decreased adjuvant induced increased arthritis-index, paw volume and ankle diameter ( $p < 0.05$  in all parameters) compared to only adjuvant control group. It also reversed adjuvant induced slight decrease in body weight to normalcy. L-Arginine 100mg/kg+theophylline 20mg/kg suppressed TNF- $\alpha$  and elevates IL-10 level as well as reversed adjuvant-induced elevated arthritic parameters as compared to only adjuvant and prednisone group ( $p < 0.001$ ).

Synovial TNF- $\alpha$  level of adjuvant only group was several fold higher than its serum level. Treatment with theophylline 20mg/kg significantly reduces synovial TNF- $\alpha$  level as compared to adjuvant only group. Theophylline 20mg/kg+L-NAME 10mg/kg significantly reversed these adjuvant-induced changes in immunological, histopathological and arthritis parameters ( $p < 0.05$ ).

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## ASSESSMENT OF CARDIOVASCULAR SYMPATHETIC REACTIVITY TO COLD STRESS USING DIGITAL VOLUME PULSE CHARACTERISTICS IN HEALTH AND DIABETES

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**Objective.** Cold pressor test (CPT) assesses cardiovascular sympathetic reactivity by the rise in diastolic blood pressure secondary to the vasoconstriction during immersion of hand in cold water. Assessment of sympathetic reactivity in health and diabetes during CPT has been attempted by objective measures of Photoplethysmogram (PPG) that include pulse transit time (PTT).

**Methods.** Finger-PPG characteristics were studied before and during CPT (1 min) in 10 healthy volunteers and 10 diagnosed Type 2 Diabetes Mellitus (DM) patients. In controls, the recordings were continued for 5 min after CPT.

**Results.** PTT was significantly shortened in control and DM groups ( $180.0 \pm 3.8$  ms vs.  $187.1 \pm 3.9$  ms,  $P < 0.006$ ,  $177.7 \pm 7.0$  ms vs.  $192.9 \pm 5.6$  ms,  $P = 0.002$ , respectively) during CPT as compared to baseline. However, the decrease in PTT was significantly higher ( $-15.2 \pm 3.4$  ms vs.  $-6.0 \pm 1.9$  ms,  $P = 0.03$ ) in DM patients than controls.

**Conclusion.** This preliminary study suggests that the responses of PTT can be used to objectively quantify the sympathetic reactivity to cold stress in health as well as to detect the deficits of vascular reactivity in diabetes.

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## Male infertility and Tobacco: at Genetic Level

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**Background:** Almost half of the total infertility is due to male factor. Tobacco has countless ill effects on our body. It has substances like nicotine, tar, CO, benzopyrenes, cadmium and lead. These affect the sperm at molecular level. There are many markers to detect the effect of tobacco on sperm DNA.

**Material and Methods:** To see the association between semen (sperm) and tobacco we searched database of PubMed and Google scholar of recent 10 years manuscripts.

**Result:** Nicotine from smoking is the main hazardous substance present in serum and semen after active and passive smoking. Effect of these substances result from elevated oxidative stress, DNA damage and cell apoptosis. Additionally, we found controversial results on effects of smoking on male fertility.

**Conclusion:** Tobacco smoking may reduce semen quality like volume, motility, viability and morphology. Reproductive hormones levels, functions of seminiferous tubules i.e. spermatogenesis, epididymis function, spermatozoa maturation and spermatozoa acrosomal activity are affected by smoking. Although there are controversies, smoking definitely affects semen parameters and they do get benefitted after quitting smoking.

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**Radiographic Assessment for Technical  
Quality of Root Canal Treatment Performed  
by Undergraduate Students at King George's  
Medical University, Lucknow, India.**

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Total of 525 teeth were prepared by step back technique using K-files of 0.02 taper and filled with gutta-percha using a cold lateral condensation technique.

Periapical radiographs were used to assess the technical quality of the root canal filling, evaluating three variables: Length, Density and Taper. These data were recorded and used to study the "technical success rate".

Length of each root canal filling was classified as acceptable, non-acceptable and based on their relationship with radiographic apex. Density and taper of filling were evaluated based on the presence of voids and the uniform tapering of the filling, respectively.

Statistical analysis was used to evaluate the quality of root canal treatment, considering  $p < 0.05$  as a statistical significant level.

Overall, acceptability of root canal treatment in anterior and posterior teeth in maxillary and mandibular arch was found to be 77.7%. The acceptability was significantly higher among anterior teeth (85.9%) compared with posterior teeth (72.1%). The acceptability was 1.19 times higher in anterior teeth than posterior teeth ( $p=0.0002$ ).

This study showed that the overall technical quality of root canal fillings done by non-specialists (undergraduate students) was better than earlier reports.

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11.15%

12  
सर्वाधिक  
सुविधाएं

5  
सर्वाधिक  
सुविधाएं

संपत्ति पर  
ऋण

न्यायिकी हेतु :  
• यहाँ अप्रप्रेरित लिमिट की सुविधा  
• अधिकतम गारंटी-बैंकिंग व्यवस्था का 20%

अधिक जानकारी के लिए अपनी नजदीकी बैंक ऑफ इंडिया शाखा  
में संपर्क करें या फोन करें...

99774-08003, 82238-39889, 90987-87003,  
7070356299, 9000870400, 0771 - 4048633

टोल फ्री नंबर  
1800 103 1906/1800 220 229  
[www.bankofindia.co.in](http://www.bankofindia.co.in) देखें |  
पर हमें कॉल करें

बैंक ऑफ इंडिया  
विश्व की जगहों पर

अपफ्रंट/प्रोसेसिंग शुल्क तथा  
डॉक्यूमेंटेशन चार्ज से पूरी तरह छूट



01.10.2016 से 31.12.2016



पंजाब नैशनल बैंक  punjab national bank  
...भरोसे का प्रतीक ! ...the name you can BANK upon !



# बर-तर में डिजिटल हाइवे

बर-तर में संचार व्यवस्था को बेहतर बनाने बिछेगा  
**832 किमी.** ऑप्टिकल फाइबर नेटवर्क

- ▶ **40 करोड़** रुपये की परियोजना
- ▶ बर-तर के कोने-कोने में होगी  
मोबाईल / इंटरनेट की कनेक्टिविटी
- ▶ विकास में आएगी तेजी और पारदर्शिता

छत्तीसगढ़ संवाद





# छत्तीसगढ़

उच्च शिक्षा हेतु नक्सल प्रभावित क्षेत्रों के बच्चों को  
शून्य प्रतिशत पर और सामान्य क्षेत्र के बच्चों को  
एक प्रतिशत रियायती ब्याज दर पर ऋण प्रावधान करने वाला राज्य



राजकीय विश्वविद्यालयों की संख्या -08  
शासकीय महाविद्यालयों की संख्या-214  
निजी एवं शासकीय महाविद्यालयों की संख्या-472  
बिलासपुर में केन्द्रीय विश्वविद्यालय की स्थापना।  
बालिकाओं को स्नातक तक निःशुल्क शिक्षा  
50 इंजीनियरिंग कॉलेज - 16,833 स्वीकृत सीटें  
51 पॉलिटेक्निक कॉलेजों की संख्या - स्वीकृत सीटें 8,074  
23 स्नातकोत्तर पाठ्यक्रम  
163 शासकीय आईटीआई - स्वीकृत सीटें 18,184  
96 निजी आईटीआई - सीटें 10,816  
6 मेडिकल कॉलेज, 6 डेंटल कॉलेज, 7 आयुर्वेदिक कॉलेज  
सहित 30 मेडिकल एजुकेशन इंस्टीट्यूट

IIM  
AIIMS  
NIT  
HNLU  
IIT  
IIIT





माननीय श्री नरेन्द्र मोदी  
प्रधानमंत्री, भारत सरकार



माननीय डॉ. रमन सिंह  
मुख्यमंत्री, छत्तीसगढ़ शासन

## उज्जर-सुगंघर हमर छत्तीसगढ़

### स्वच्छ भारत मिशन (ग्रामीण)

#### गौरवपूर्ण उपलब्धि

- ▶ राज्य के 18 विकास खंड खुले में शौच से मुक्त (ODF) हुए
- ▶ 3269 ग्राम पंचायतों के 5920 गांव खुले में शौच से मुक्त हुए
- ▶ जिला राजनांदगांव, धमतरी, कोरिया, दुर्ग, मुंगेली एवं कबीरधाम ODF होने की ओर अग्रसर

#### रणनीति एवं नीतिगत निर्णय

- ▶ स्वच्छता कार्य के लिए समुदाय को पूरी राशि
- ▶ शौचालय के निर्माण एवं उपयोग पर हितग्राही के खाते में राशि का हस्तांतरण
- ▶ जनप्रतिनिधि का चुनाव लड़ने के लिए घर में शौचालय होना अनिवार्य
- ▶ शासकीय / संविदा / मानदेय कर्मियों के घरों में शौचालय होना अनिवार्य
- ▶ स्वच्छता ग्राम सभा के स्थायी एजेंडे में शामिल

#### राज्य में ODF की स्थिति



छत्तीसगढ़ संवाद



सबका साथ-सबका विकास

# रमन सरकार का प्रयास अंतिम छोर तक विकास

**प्रयास**  
आवासीय विद्यालय



## प्रयास से मिला पंख बच्चों ने छू लिया आसमान

लक्ष्य हमारा  
अगली बार  
100 के पार

६६ राज्य के प्रयास आवासीय विद्यालयों में  
अध्ययनरत नवसल प्रभावित आदिवासी क्षेत्र के  
गरीब परिवारों के 27 बच्चों ने हासिल की

**IIT**

प्रवेश परीक्षा  
में शानदार सफलता  
(जहाँ 100% परीक्षा 2016)

९९

IIT के विद्यार्थियों को मुख्यमंत्री डॉ. रमन सिंह की सौगात  
व्याज मुक्त शिक्षा ऋण



सबका साथ - सबका विकास





# प्रधानमंत्री उज्ज्वला योजना



- राज्य के **25 लाख** परिवारों की महिलाओं को मुफ्त रसोई गैस कनेक्शन
- मात्र **200 रुपये** के अंशदान पर डबल बर्नर का गैस चूल्हा और पहला गैस सिलेंडर देगी छत्तीसगढ़ सरकार