

**International Conference on
Public Mental Health
&
Neurosciences**

ICPMN-2014

Next Generation Mental Health



*CONFERENCE
ABSTRACTS 2014*

International Conference on Public Mental Health and Neurosciences

ICPMN-2014

Bengaluru Chapter

Date: 18th&19th December 2014**Theme: "Next Generation Mental Health"**

Venue: Jain University, 9th block, Jayanagar,

Bengaluru, Karnataka, India

Organized by

**Satvasumanā Association®**

In collaboration with

Azyme Biosciences Pvt. Ltd.,

Bengaluru

&

Career Point University, Kota

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सर्वसुमना



Sarvasumanā Association®

Date: October 24, 2014

Mrs. Padmashree Murthy,
President
Sarvasumana Association,
Bangalore.



WELCOME

The Conference (ICPMN) is a multi-disciplinary event, whereby scholars, students working on various aspects of public health, mental health, health sciences and neuroscience will come together to present, discuss, exchange ideas and to foster inter disciplinary collaborative projects. We welcome researchers, students and interested people in all areas of public mental health and neuroscience and related areas for participating in this event. We hope that this conference will provide a stimulating platform to learn, network and spread awareness towards public mental health in India. This conference will provide a great platform and a golden opportunity to those, who are working for mental health and health sciences. Its outcome will be highly instrumental in updating the knowledge and skills of those who are actively engaged in this field.

The program of the conference intends to provide a wide range of topics pertaining to the life science and current researches on public mental health and to enable the delegates to participate in formal and informal discussion with experts. The program comprises of Keynote from invited speakers, Oral presentation, Poster presentation, Symposium and workshop.

We wish the conference will achieve the goal of exploring and discussing issues related to Public mental health in contemporary society from a multi disciplinary perspective. To make this international conference, an ideal platform to highlight the issues and challenges of Public mental health, with experienced professionals from diverse specialization. Hope, you will have an enjoyable and memorable stay during the entire span of interactions.

With best wishes.

Padmashree murthy
Mrs. Padmashree Murthy,
President

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CAREER POINT
UNIVERSITY
KOTA



Message

I am glad to know that the Sarvasumana Association, in collaboration with Azyme Bio Sciences Pvt. Ltd. and Career Point University, Kota organizing International Conference on Next Generation Mental Health on 18-19 December, 2014.

Neuroscience is much vital field of research with an exciting opportunities. It is the cross-disciplinary science of the future. The public health in large and neuroscience in specific needs to pay more attention in the developing country like India. Events of such kind provide an ideal platform for the exchange of new ideas, state of the research and latest technologies in the pertinent field, besides inculcating scientific temper among the younger generation.

I hope that the deliberations at the International Conference would pave the path for new dimensions and innovations. I send my good wishes for the success of the endeavor.

Er. Pramod Maheshwari,
Chancellor,

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Dr. B. N. Gangadhar
Professor of Psychiatry
Dean, Behavioural Sciences

14th Dec 2014

Message

Definition of health includes both physical and mental well-being. Health is incomplete without mental health. Ayurveda definition of health is a step ahead; includes not just physical and mental but also spiritual. It is therefore natural that any planning in health should necessarily include that of mental disorders. This aspect has two dimensions; treating the ill and also helping the individuals to remain positively well.

The magnitude of the problem of mental illness in the community is substantial. Proportionately, the numbers of mental health professionals and related infrastructure is minimal. In these days of unitary and smaller families the support that a distressed individual gets in times of need is compromised. This puts a higher demand on the small sample of mental health staff. Even when the staff is available for providing service, the population that should have sought help (severe mental disorders) fails to do so. Lack of awareness, fear of stigma and sometimes fear of using psychotropic drugs prevents them from obtaining help.

Clearly, there is a need to increase awareness among the public. More medical practitioners other than merely psychiatrists should join the workforce that provides treatment to the psychiatrically ill. More volunteers need to come forward to be trained as counselors for the distressed individuals. State alone cannot address this issue. More and more socially concerned individuals, NGOs and even the kin of the mentally ill should join this movement. It is possible to recruit more staff in this mission of caring the mentally ill. At the same time, means to further the mental health, positive well-being, should be strengthened. Lifestyle practices that include exercise and/or Yoga should be encouraged. Overindulgence into alcohol, drugs, tobacco, electronic media and unrealistic competition should be discouraged. The declaration of the International Yoga Day by the UN testifies that it is a secular and healthy practice and use of the same has the potential to lower the mental illness both in its severity and numbers.

The conference conducted by Sarvasumana Association is very timely and merits encouragement. I wish the conference the very best.

Dr. B N Gangadhar

**AZYME BIOSCIENCES**

Dated: November 13, 2014

Mahesh M
Director,
Azyme Biosciences Pvt. Ltd.,
Bangalore, India



Message

The 1st International Conference on Public Mental and Neurosciences -2014 (ICPMN-2014) is a multi-disciplinary event, which provides an unique umbrella to researchers, students and professionals working on various aspects of Public health, mental health, health sciences, biosciences, medicine, neuroscience and alternative therapies.

Present research focuses on inter-disciplinary approach towards mental health research.

We hope that this conference will promote an unique platform to learn, network and spread awareness towards Public mental health in India.

I wish the conference will achieve its goal promoting Mental Health as per its theme "Next Generation Mental Health".

With best wishes.

Mahesh M
Mahesh M

Azyme Biosciences Pvt. Ltd.



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It is heartening to note that Sarvasumana Association in collaboration with Azyme Biosciences Pvt. Ltd., Bangalore and Career Point University, Kota is organizing an 'International Conference on Public Mental Health and Neurosciences - 2014', which will provide a common platform for a constructive and productive interaction between experts from various fields.

With the kind of stress related diseases that the human community is associated with, the need of the hour is a state of complete physical, mental and social well-being. As the theme being "Next Generation Mental Health" this conference is an amalgamation of delegates from various countries with diverse background such as mental health, public health, medicine, biotechnology, bioinformatics, neuroscience, neuroinformatics and yoga professionals who could share their bit of findings and experiences with each other. This conference also would focus on ignored issues of the societal mental health and well being with inter and multidisciplinary approaches towards finding solutions.

I am confident that the deliberations of this conference would catalyze further efforts in this knowledge based sector to contribute towards societal benefits.

On this occasion, I am happy to extend my greetings to the organizers and to all those who are instrumental in organizing this conference.

Dr. Indira Nanaiah
Head of Department
Bioscience- UG
CMR Institute of Management Studies (Autonomous)
Bangalore

Acknowledgements

- Indian Council of Medical Research, New Delhi
- Ministry of Home Affairs, Government of India.
- Ministry of External Affairs, Government of India.
- National Institute of Science Communication and Information Resources, (Council of Scientific and Industrial Research), Government of India.
- Director, Health & Family Welfare, Government of Karnataka.
- Karnataka Medical Council.
- Event Desk, New Delhi.
- Mr. Events, Bengaluru.
- Psychosocial Genomics Institute, California, USA.
- Milton H. Erickson Institute of the California Central Coast, USA.
- Subharati Niriksha Foundation, Bengaluru, India

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ICPMN PROGRAMME SCHEDULE – 18-19 December, 2014

DAY I – 18 DECEMBER, 2014

TIME	HALL A	
8.00 onwards	REGISTRATION	
9.00 – 9.45am	INAUGURATION CEREMONY	
9.45- 10.45am	KEYNOTE TALK-DR.B.N.GANGADHAR	
10. 45- 11.00am	TEA BREAK	
11.00 - 11.30am	PLENARY 1 <i>Chair: Dr. Dharav Shah</i> Biomarkers for the early screening of Down syndrome using Proteomics approach Dr. V. Prasad Kolla, Ph.D	
11.30am- 13.00pm	Oral session 1: MENTAL HEALTH <i>Chair: Dr. Dharav Shah</i>	Poster Session 1: NEUROSCIENCE WITH BIOTECHNOLOGY
13.00 - 13.40pm	LUNCH BREAK	
13.40 - 14.00pm	Presentation: Suicide Gatekeeper Training – Public Health Approach for prevention of suicide Dr. Sharmitha Krishnamurthy, Dr Mohan Sunil Kumar (Augmenta Health (P) Ltd, Bengaluru).	Introduction to Manahsakshi Magazine
14.00-14.45pm	SYMPOSIUM 1 <i>Chair: Dr. V.Prasad Kolla</i> Role of Public health in Mental Health by Dr. Varun Gaiki, MDPSM	
14.45-15.45pm	SYMPOSIUM 2 <i>Chair: Dr. Varun Gaiki</i> Awakening to the alcohol epidemic – need of the hour by Dr. Dharav Shah, MD Psychiatry	
15.45-16.00pm	TEA BREAK	
16.00-17.00pm	Oral Session 2: NEUROSCIENCE WITH BIOTECHNOLOGY (Session Chair: Dr. V. Prasad Kolla)	Poster Session 2: PUBLIC HEALTH & HEALTH SCIENCES

DAY II -19 DECEMBER, 2014		
TIME	HALL B	
7.30 – 8.00AM	BREAKFAST	
8.00-9.00am	WEBINAR-1 The Deep Psychobiology of The Creative Psychosocial Genomic Healing Experience (CPGHE) Dr. Ernest Rossi The Psychosocial Genomics Institute, CA, USA.	
9.00-10.00am	WEBINAR-2 Integration of Classical Yoga and the 4-Stage Creative Process of Modern Science Dr. Kathryn Rossi The Psychosocial Genomics Institute, CA, USA.	
10.00-11.00am	WEBINAR-3 Caring for the Mentally Ill - A Correctional Perspective, Dallas, TX, USA Dr. Kosy Varghese	
11.00-11.15am	TEA BREAK & SNACKS	
11.15-11.45	PLENARY 2 Chair: Dr. Varun Gaiki Championing Mental Health and Social responsibility: Towards a New Dawn, Center for Health and Development, Karnataka Dr. Edmond Fernandes, MDPSM*	
11:45-13.30pm	Oral Session 2: PUBLIC HEALTH AND HEALTH SCIENCES (Session Chair: Dr. Dharav Shah)	Poster Session 2: MENTAL HEALTH
13.30-14.00pm	LUNCH BREAK	
14.00-14.30pm	PLENARY 3 Chair: Dr. Edmond Fernandes School Mental Health through School Psychology by Dr. B. Imtiyaz	
14.30-15.30pm	SYMPOSIUM 3 Chair: Dr. B. Imtiyaz Cognitive Enhancement in Children by Mr. Paul Raj and Dr. Padmakumari	
15.30-17.00pm	ANNOUNCEMENT OF AWARDS VALEDICTORY	
	Feed back	

PLENARY

Plenary 1 – Biomarkers for early screening of Down syndrome using Proteomics approach

Dr. Prasad Kolla

Coordinator of Biosciences (Asst. Professor) ITM-University, Raipur, India

Currently no specific biomarkers exist for the screening of pregnancies at risk for Down syndrome (DS). Since a quantitative proteomic approach with isobaric labelling (iTRAQ) has recently been suggested to be highly suitable for the discovery of novel plasma biomarkers, we have now used this method to examine for potential quantitative changes in the plasma proteome of the pregnancies bearing DS fetuses in comparison to normal healthy babies. In our study, we used plasma from six women with DS pregnancies and six with uncomplicated pregnancies care were taken to match cases and controls for gestational and maternal age, as these could be a confounder. In our quantitative proteomics analysis we were able to detect 178 proteins using iTRAQ labelling in conjunction with 4800 MALDI TOF/TOF. Amongst these we observed changes in betaHCG, a known screening marker for DS, indicating that our assay was functional. We found a number of elevated proteins Ig lambda chain C region, serum amyloid P-component, amyloid beta A4, and under expressed proteins like gamma-actin and titin in DS pregnancies. These proteins are also found in the sera of patients with Alzheimer disease, which share similar pathologies of DS. Our study therefore indicates that the iTRAQ labelling approach may be indeed useful for the detection of novel biomarkers.

Dr. Varaprasad Kolla is currently The Coordinator of Biosciences (Asst. Professor) ITM-University, Raipur, India. Earlier He was Senior Research Scientist at Malaria Evolution South Asia-International Centre of Excellence in Malaria Research, (funded by National Institute of Health, USA), AVBR Hospital, Datta Meghe Institute of Medical Sciences, Sawangi (Meghe), Wardha. He was Postdoctoral Fellow in Institute for Macro molecular chemistry and University of Freiburg, Germany where he studied the Role of inflammation in stem cell differentiation He was also a Postdoctoral Fellow in Lab for Prenatal Medicine, Department of Biomedicine, and University Hospital Basel, Switzerland. His Ph.D. thesis was on Molecular Medicine at Lab for Prenatal Medicine, Department of Biomedicine, and University Hospital Basel, Switzerland EU Research fellowship (FP6-Pregenesys project). He has worked as scientific research assistant at Institute for Animal Pathology, Vet Swiss Faculty, University of Bern, and Bern, Switzerland. He is professional Member of Ethical committee for Stem cell research, DMIMS, Sawangi, Wardha, Swiss Proteomics Society (SPS), Geneva, Switzerland and BioValley, Basel, Switzerland.



Plenary 2 – Championing Mental Health and Social responsibility: Towards a New Dawn

Dr. Edmond Fernandes

CEO, Center for Health and Development (R)

Mental health needs are rising at a rate faster than predicted. The target population on one hand is the elderly and aging where Dementia and Alzheimer's disease are showing an upward trend and on the other side, we have more and more youth needing assistance and psycho-social care due to contributing factors of academic and peer pressure with the e-age effect advancing on them. To make life an objective to look forward to, to distance disease and to generate social responsibility, this struggle calls for unison. Psychiatrists, Community Medicine experts working to address mental health needs should consider it a matter of highest seriousness for the task they have before them. The issues and concerns that come along with mental healthcare will not be met easily and will not be met soon either. But the bond that brings us together as mankind, paves the way forward to create an association that is meaningful and to push for reforms in mental health policy to be implemented on a priority basis. Never before has the world seen the necessity of quality care in mental health whether in community or in institution that it witness today. Let us play actor to create a socially responsible society that walks hand in hand with those who need us the most.



Dr. Edmond Fernandes is the Founder and Chief Executive, Center for Health and Development. His Current affiliations and Engagements also include Associate, Madras Diabetes Research Foundation, Chennai, Medical Journalist; Post Graduate, Department of Community Medicine; Yenepoya University; Director of Collaborative Initiatives & India Country Representative to Institute of Language & Communications, Turkey, (www.inlcs.org) – not for profit organization and Representative for Mangalore to “Issues & Concerns – towards a purposeful regimen.” His Professional Interest are Community Medicine, Public Health, Disaster Management, Medical Journalism, Health policy and planning, Internal Medicine, Health Administration, Geopolitics, Public relations, Influencing people and ideology change. He has won several awards and honours, he was recommended by Global Peace Foundation – India to represent the Indian Delegation to the 4th International Young Leaders Assembly at USA. He was nominated to represent the Indian delegation for the 61st General Assembly of The International Federation of The Medical Students Association, Mumbai. He has received the trophy of appreciation by the International Institute of Public Policy for co-coordinating the lead events, given by Mr Max Rasquinha, Houston, Texas, USA.

Plenary 3 – School Mental Health through School Psychologists

Dr. B. Imtiyaz

Founder, School Psychology India

Our homes are filled with labour-saving devices and electronic gadgets that previous generations would not have even dreamt of. Therefore, our children should be growing happier every year, right? Well, no. According to a recent research, children who kill most of their time in front of the television and spend hours on the Internet are "greedy and unhappy". "These children argue more with their family members; do not show much respect toward their parents, and possess lower self-esteem than other children!!!" Well, there is increasing evidence of escalating behavioural problems in our schools these days, even among the children of nursery and primary schools. But, any unhappy children feel low, keep their problems to themselves, and bottle up their issues; consequently, the symptoms are not revealed until the teenage years. There again, we see the evidence: the worst problems with drugs, under-age sex, anti-social behaviour, self-harm, bullying of all kinds, physical, sexual, verbal and emotional abuse. All babies are born as little "Stone Age" babies, and it's up to their parents - supported by their wider community - to help them towards maturity, gradually equipping them with the inner strength, skills and knowledge they need to live in a complex technological culture and a transition society like India. Parents usually have a notion that their job is over once they put the child in a good school and pay the fee. The school believes that teaching the school lessons and making the child score is its sole job. The society expects the child to be a disciplined man or woman and amidst all this, children fail to recognize and LIVE their childhood. Children need adults, not only to love them but to provide regularity and to set and maintain boundaries for their behaviour. However, adults neither have the time nor the patience to do it. Pathetically, the children grow with all the good and bad, without understanding which is good and which is bad and as a result, face a lot of problems. Now, this is the juncture where a school psychologist comes to play his/her role as a friend in need to the child. The child feels protected and guided in the secure hands of a school psychologist. Not an exaggeration, the future of every school is in the hands of good and capable school psychologists. The issues from home and school need to be addressed for the holistic growth of the child. The school has to become a holistic center for a child's development. Parents need to take care of the child as per the expectations of the current generation. The society needs to understand children better and a school psychologist plays the role of a liaison officer between parents, schools and the society safeguarding and nourishing the growth of children. It is impossible to even imagine any other person performing this duty as it is very complicated and needs a lot of expertise which includes a far vision, a better management, an open mind and true passion towards the betterment of the forthcoming generations. In India, the school psychology fever is slowly gripping up. Schools all over the nation have started to include

school psychology services. Of course, there is a strong fear among schools to recruit a school psychologist because the presence of a school psychologist at a school will give more work to the management, teachers, non-teaching staff and children too. BUT, considering the increasing issues and victimized children population, the schools will overcome this small fear and certainly all schools will look forward for school psychology services.

Dr. B.Imtiyaz Khan is Founder President of "School Psychology India". He is the First Trainer to train psychology post graduates to become school psychologist. He is a Rehabilitation Council of India Certified Learning Disability Trainer (2014 - 2017). He is actively working on Mental Health First Aid for Children and Adolescents. He has worked with Children for the last ten years as School Psychologist/ School Counsellor. He is actively working on Mental Health First Aid for Children and Adolescents. He is one among the 32 selected from around the world to debate and formulate "School Psychology Model of Practice" at University of Nebraska at Kearney, US. He is also currently training and Coaching Post Graduates at Avinashilingam University. He is Member of National School Psychology Association, US; American Psychology Association; International Association of School Psychology; Founder of International Association of Holistic Psychology. He is India's first Mental Health First Aid Trainer. He has received "Prof Viswanthan Award for the Best Paper 2010" by PPA, IAAP & InSPA and was nominated for "Best School Psychologist Award 2008" by American School Psychology Association.



सर्वसुमना

SYMPOSIA

S1: Role of Public Health in Mental Health

Dr. Varun Gaiki

Assistant Professor, Department of Community Medicine, Malla-Reddy Medical College for Women, Hyderabad

If we today try to see the increase in the average life span of an individual world over, during the last century i.e. from 1900 to 2000, we find that the life expectancy of the individual has increased by about 30 years. Of these 30 years, it has been further analysed that development of medicines and other technologies have merely contributed to only approximately 5 years of life age.... Rest about 25 years are increased due to development of public health system. This necessitates the need to study different aspect of public health in the management of any disease including mental health. Psychiatric epidemiology has gone through various stages of growth over the past five decades in India, starting from the first psychiatric epidemiological study by K.C. Dube, in 1961 at Agra, to the development of tools like the Present Status Examination (PSE) and the Indian Psychiatric Survey Schedule (IPSS). A major advance in psychiatric epidemiology is the development of reliable and valid diagnostic interviews. Many epidemiological studies conducted in India on mental and behavioural disorders report varying prevalence rates, ranging from 9.5 to 370 per 1000 population. These discrepancies are not specific to Indian studies but are also seen in international studies like the Epidemiological Catchment Area Program and the National Comorbidity Survey. This discrepancy will impact planning, funding and health care delivery. Providing accurate data about the prevalence of mental disorders in the community would help to justify the allocation of scarce resources and planning of health services. Psychiatric epidemiology lags behind other branches of epidemiology due to difficulties encountered in conceptualizing, diagnosing, defining a case, sampling, selecting an instrument, lack of resources and stigma. Macro-economic commission report of 2005 considered prevalence rate of 65/1000 population (average of two meta-analysis-60, 61) and projected the prevalence rate for next two decades. However, if we consider prevalence of individual mental disorder and add, the overall prevalence rate will be approximately 115-130/1000 population. Even if we consider 65/1000 population as prevalence rate, then 6.5 crore populations require professional help. If each patient requires INR 300 per month for the treatment, the total cost required per month will be 1,950 crore INR and per year will be 23,400 crore INR. If we do not address this issue by investing in mental health, the indirect costs in terms of loss of wages by the patient, disability and then families facing social isolation, burden, stigma and psychological strain will be enormous. Burden of mental disorders seen by the world is only a tip of iceberg. To promote mental health, there is a need to

create such living conditions and environment that support mental health and allow people to adopt and maintain healthy lifestyle. A society that respects and protects basic, civil, political, and cultural rights is needed to be built to promote mental health. National mental health policies should not be solely concerned with mental disorders, but should also recognize and address the broader issues which promote mental health. This includes education, labour, justice, transport, environment, housing, and health sector. For attaining this, inter-sectoral coordination is a mainstream. Another key to reduce mental morbidity is to strengthen the treatment of mental disorders at the level of primary health care. There are multiple interventions needed to prevent the progression of mental disorders from early manifestations to more serious and chronic cases. There is an urgent need of simple, easily available diagnostic test and low cost treatment to provide better primary health care. Psychiatric epidemiologists need to reorient their research in such a way that true burden of mental disorders are estimated at community level. This would provide true situation of the mental health problem. Secondary prevention must focus on strengthening the ability of primary care services to provide effective treatment.



Dr. Varun Gaiki is currently working as Assistant Professor, Dept. of Community Medicine, Malla Reddy Medical College for women, Secunderabad, Telangana. His key research interests include Community Nutrition, Health Programs and policy, Adolescent health. He has published peer-reviewed articles, also has editorial position in reputed journals, He has publishes a book on Nutritional status of late adolescent girls from India. LAMBERT Academic Publishing. GmbH & Co. KG, Germany. He has got several awards and Honors, he has received Mr. Sharangdhar Purushottam Kanhere Best Research Paper award on

Community Based Intervention /Use of Appropriate Technology, for paper titled "Effectiveness of Health Education to Mothers in prevention of Home Accidents of Under 5 children" presented at Joint annual conference of IAPH, Maharashtra Branch and IAPSM, Maharashtra chapter, at MGIMS, Sewagram, 2011 He has Membership of Professional Bodies like Active life member of Indian Medical Association (IMA), Indian Association of Preventive and Social Medicine (IAPSM), Indian Public Health Association (IPHA), Life Member, association for prevention and control of Rabies in India (APCRI), Life Member, Nutrition Society of India (NSI) and member of International Epidemiological Association (IEA).

S 2: Awakening to the alcohol epidemic – need of the hour

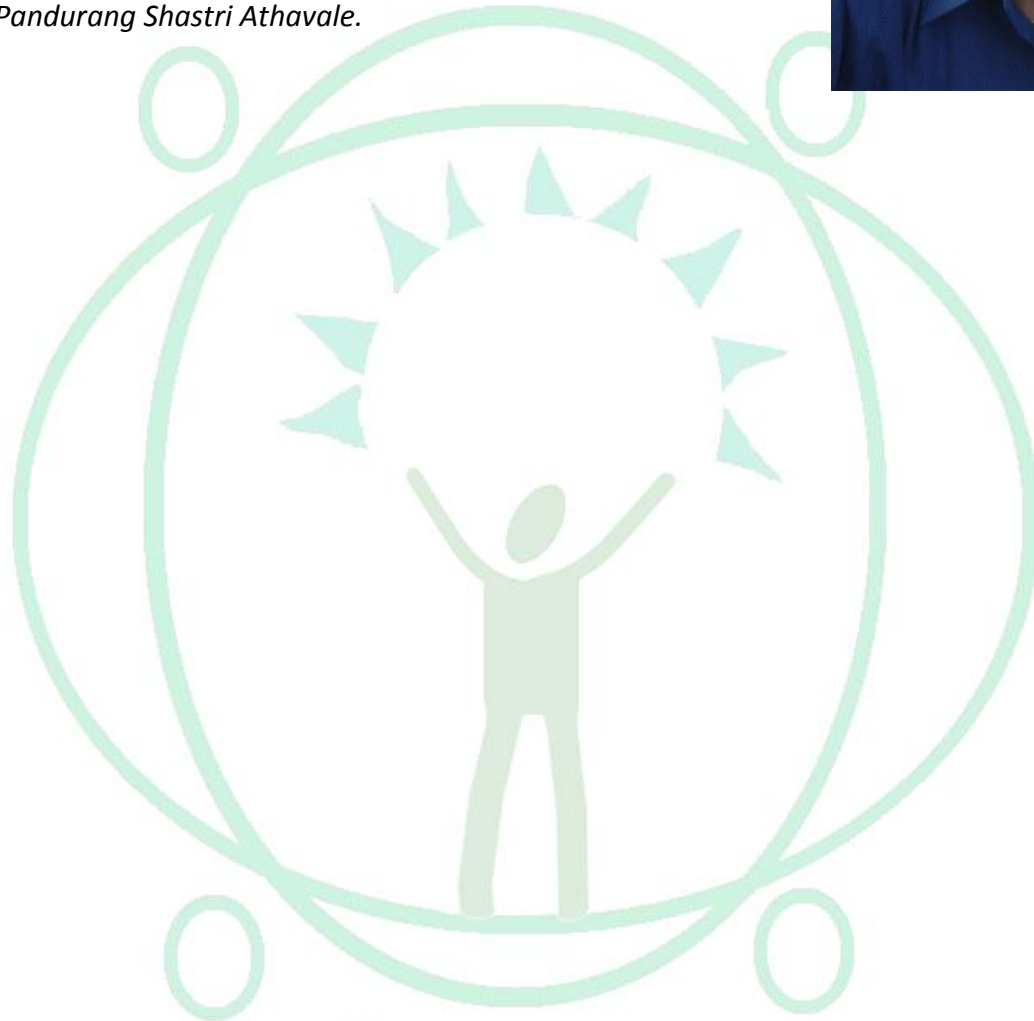
Dr. Dharav Shah

DPM, MD Psychiatry. National Consultant, ADIC-India

The scientific community has taken a strong stand against tobacco in the last 2 decades and today we can see society unanimously making efforts to reduce its harm. But alcohol continues to enjoy social acceptability. Why? Is it not doing our society much harm? According to Global burden of Disease, injury and risk factors study, 2010 - alcohol is the most common risk factor for disease burden, in young people aged 15-49yrs! As per Global Status Report on Alcohol, WHO, 2014 - alcohol caused 33,00,000 deaths in 2012 i.e. One death every 10 seconds ! 22% deaths due to interpersonal violence and 22% deaths due to suicide are attributable to alcohol! Of all the substances of abuse, the overall harm caused to society and to the user is highest for alcohol! Thanks to industrialised production and modern day marketing, use of this addictive poison has been increasing by leaps and bounds in developing countries like India. And yet hardly anyone seems to be bothered.... Alcohol companies are employing celebrities to normalise the use of this addictive poison. They want us to believe that problem is not with alcohol; but with people who drink irresponsibly. But tell me, does anyone drink out of control by choice? Anyways, people seem to be accepting their propaganda and alcohol is becoming the norm in get-togethers & parties. Till now India was protected to a great extent because of its culture of abstinence; but we are fast losing this cultural defence mechanism. We are at a critical point in the history of this country, wherein if we all don't act soon then the damage done will be very difficult to reverse. Luckily strong research evidence has been generated against it; which we can use to remove the widely prevalent misconceptions. Information we have compiled from various sources can be accessed on the website www.poisonswelove.org. We are doing a social media campaign to take facts from medical journals to the common man. We request you to join us on www.fb.com/truthofalcoholandtobacco and share the posters in your circles. Mental health and public health professionals would have to play a crucial role in educating the society about the truth of this addictive poison – so as to generate sufficient social and political will to collectively fight this epidemic. Together we can and we must halt this epidemic, NOW! Jai Hind!!

Dr. Dharav Shah has been working since 5 yrs on empowering youth with adequate knowledge about alcohol & tobacco, so that they can make an informed choice. Till date he has made more than 200 presentations on this issue reaching out to more than 10,000 youngsters. He did Diploma in Psychiatry from B.J. Medical College, Pune and then MD Psychiatry from India's premiere institute – NIMHANS. After passing MD in April 2013, he decided to give further 1 year predominantly to spreading awareness on this epidemic. He has been focusing on discussing this issue with students from medical colleges & B.Ed colleges, requesting them also to share the

dream of an addiction free, healthy, happy & powerful society. He has discussed this issue with around 3850 medical students from 38 medical colleges. He has been associated with ADIC-India, one of the leading organisations in the field of alcohol & drug control, as a national consultant. His motivation comes from witnessing, as a psychiatrist, the suffering which alcohol & tobacco bring in the lives of people; & from the teaching of his spiritual guru Pandurang Shastri Athavale.



सर्वसुमना

S 3: Cognitive Enhancement in Children

Mr. B. B. Paul Raj¹ and Dr. Padmakumari²

¹Head, Department of Psychology for BVoc course, Jyoti Nivas College (Autonomous), Bengaluru

²Associate Professor in the Department of Psychology, Christ University, Bengaluru

Changes in education over the years and the advancements in the cognitive science brought us closer to the idea of developing intervention programs for the enhancement of cognition. Many influential theorists like Piaget and Vygotsky proved that learning can force cognitive development. Enhancement of any one of the cognitive functions is expected to produce improvements in performance or to give the impression of improved functionality. All children's cognitive development depend to a large extent on their social and cultural environment and these are moderated and mediated by agents like adults who constantly interact with them, the media, and the different knowledge sources. Any cognitive enhancement programs so far developed must have addressed these issues. Different educational and remedial programs have been designed to assist and promote regular classroom teaching. Diagnostic assessments reveal unique patterns of strengths and deficits which provides clues for further remediation and enhancement of cognitive skills. Cognitive enhancement can be understood as the amplification or extension of core competencies of the mind through improvement or argumentation of internal or external information processing system. Most of the existing literature on cognitive enhancement clearly indicates that it is an effective method to increase productivity. Cognitive based training programs have been proved effective in improving reading skills in children. Such programs are designed to improve the underlying cognitive skills necessary to become a successful reader—that is, the processes through which children learn to interpret, remember, manipulate, and make use of information (Das, Parrila & Papadopoulos, 2000). The two remediation programs to be discussed in this symposium, PREP (Das, 2000) and COGENT (Das, 2004) has been successfully used in both research and educational settings, both based on a cognitive model: Planning, Attention, and Simultaneous and Successive processing (PASS; Das, Naglieri, & Kirby, 1994). The PREP aims at improving information processing strategies, especially simultaneous and successive processing, which are believed to underlie reading. The COGENT program was designed to integrate direct instruction in prerequisite reading skills and cognitive processing strategies.



Mr. B. B. Paul Raj is currently working as Head, Department of Psychology for BVoc course, Jyoti Nivas College (Autonomous), Bengaluru. He has successfully completed International Licentiate in PREP and COGENT in 2011 from Dyslexia Association of Andhra Pradesh (DAAP) and The Learning Clinic, Bhubaneswar, India. PREP and COGENT are the two remedial programs formulated by Dr J P Das and used widely for children with reading difficulties. He has obtained Certificate in Career Assessment in 2012 from the Career Scan Pvt Ltd, Bengaluru, India and the Psytech International, UK. His

key interest includes Parenting skills, Job satisfaction, Marital satisfaction, Examination anxiety among students. He is Life Member – Comparative Education Society of India (CESI), an Affiliate of the World Congress of Comparative Education Societies (WCCES), a member of sub-committee for drafting book on Human Values Development for college students which was released in December 2013 in Trichy during national youth meet. The project is undertaken by All India Association for Christian Higher Education (AIACHE), New Delhi.

Dr. Padmakumari is currently working as the Academic Coordinator and Associate Professor in the Department of Psychology, Christ University, Bengaluru, India. She has Ten years of teaching and research experience and presently guides MPhil and PhD scholars. She has a Doctorate in Clinical Psychology. She has developed/standardized tests like, Family Interaction Scale, 2004; Illness Behaviour Questionnaire (Translated & adapted), 2004; Personality Scale for Children (Translated& adapted), 2004. Her recent Publications includes Emotional Intelligence and General Well-being among Middle-aged People (2013), Recent Trends in Alexithymia,(2014).Her key Skills and areas of interests is test Development, Psychological Assessment, Therapeutic Interventions, Clinical, Neuro-cognitive and Positive Psychology, Conducting workshops and training programs and proficient in SPSS and Research Methodology.



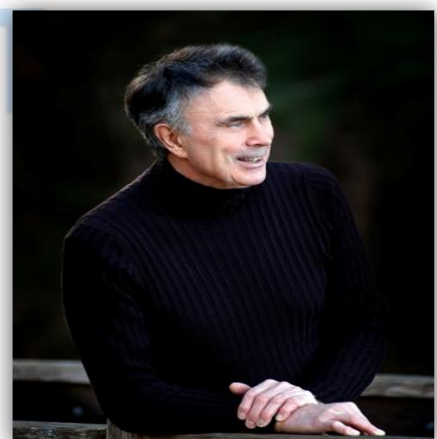
WEBINAR

W1: The Deep Psychobiology of the Creative Psychosocial Genomic Healing Experience (CPGHE)

Dr. Ernest L. Rossi and Dr. Kathryn L. Rossi
The Psychosocial Genomics Institute, CA, USA

The Creative Psychosocial Genomic Healing Experience (CPGHE) is a new paradigm for therapeutic hypnosis that evolved out of the emerging psychosocial genomic science of optimizing health and wellness. Psychosocial genomics facilitates creative consciousness, gene expression, brain plasticity and positive expectancy with focused attention. Psychosocial genomics underpins a wide variety of interdisciplinary fields ranging from stress reduction, psychosomatics, psycho-neuro-immunology, and mind-body medicine to the deep psychobiology of maximizing human performance, problem solving and spiritual development. The theoretical RNA/DNA quantum dynamics of the CPGHE purport to facilitate the qualia of experience-dependent gene expression and brain plasticity via the 4-stage creative cycle and the natural human 90-120 minute basic rest-activity cycle (BRAC). Innovative psychosocial genomic research on all levels from mind to gene is now required to replicate research on this new scientific molecular/genomic foundation for optimizing meditation, medicine, psychotherapy and the holistic healing practices of all cultures throughout human history. The new free open access scientific Journal: www.PsychoSocialGenomics.com will publish peer reviewed scientific papers that document how well controlled psychosocial experiences modulate gene expression and brain plasticity in sickness and health.

Dr. Ernest L. Rossi is a Clinical Psychologist, Psychotherapist; Director: The International PsychoSocial Genomics Research Institute; Founding Editor for The International Journal of Psychosocial Genomics: Consciousness and Health Research; Advisory Editor: American Journal of Clinical Hypnosis. His key research included the RNA/DNA Quantum Psychosocial Genomics of Consciousness, Cognition, Creativity and Therapeutic Hypnosis. Mathematics, Music, Philosophy & Spiritual Dynamics of the Human Condition. He has handled several projects & has numerous publications, the recent ones includes An Evolutionary RNA/DNA Psychogenomic Theory of the Transformations of Consciousness: The Quest for Therapeutic Mind/Gene Search Algorithms. The International Journal for



Transformations of Consciousness. Vol. 1, 1-20 (2014). A Bioinformatic Analysis of the Molecular-Genomic Signature of Therapeutic hypnosis. The International Journal of Psychosocial Genomics: Consciousness and Health Research. Vol. 1 (1), 6-11 (2014). Quantum Perspectives of Consciousness, Cognition and Creativity: The Dirac Equation in a New Contour Integral Model of Brain Plasticity. Journal of Applied & Computational Mathematics: Vol. 3(6) (2014) Collected Works of Milton H. Erickson in 16 Volumes (2008-2014). Opening the Heart and Mind with Single Session Psychotherapy and Therapeutic Hypnosis: A Final Meeting with Milton H. Erickson, M.D. Part 1. In Hoyt M (2014). Capturing the Moment: Single Session Psychotherapy and Walk-in. Creating New Consciousness in Everyday Life: The Psycho-Social Genomics of Self Creation. e-Book Amazon.com (2012). Creating Consciousness: How Psychotherapists Facilitate the Psychosocial Genomics of Self-Care: The Selected Papers of Ernest Lawrence Rossi, Vol. 2. (2011). He has received several Awards and Honors the highly recognized ones are Lifetime Achievement Awards from the Erickson Foundation, 1980; American Association of Psychotherapy, 2003; American Society of Clinical Hypnosis in 2008. He has also published 4 dozen books and more than 200 papers on consciousness, creativity, dreams, therapeutic hypnosis & psychotherapy. A New 2013 Video E-book: Creating New Consciousness in Everyday Life: The Psycho-Social Genomics of Self-Creation.



सर्वसुमना

W2: Integration of Classical Yoga and the 4-Stage Creative Process of Modern Science

Dr. Kathryn L. Rossi¹, Jane Mortimer² and Dr. Ernest L. Rossi¹

¹The Psychosocial Genomics Institute, CA, USA

²Psychology Department, University of Adelaide, Adelaide, Australia

We present a new spiritual yoga practice consistent with modern neuroscience research on optimizing consciousness and sleep. This new and unexpected research documents how sleep cleans the brain to optimal states of being. This research can help us understand the scientific dynamics of how faith, belief, meditation and spiritual practices of all cultures throughout the ages operate. We propose how personal and unique experiences of the 4-stage creative cycle during life transitions optimize health and happiness. Very gentle practices of a new spiritual yoga are outlined so everyone can easily experience the new RNA/DNA theory of the quantum transformations of consciousness and creative cognition in everyday life as well as art, the humanities and science.



Dr. Kathryn Rossi is a Clinical Psychologist, The PsychoSocial Genomics Research Institute, Founding Editor for The International Journal of Psychosocial Genomics: Consciousness and Health Research. Her research /Key Interests are Yoga, Psychosocial Genomics, Life & Laughter. She has handled several projects & has various publications with Ernest Rossi and others. In collaboration with University of Australia, Adelaide, she is handling a project on Integration of Classical Yoga and the 4-Stage Creative Process of Modern Science: Psychosocial Genomics of Psychotherapy and Optimal Health. Her recent Publications with Ernest Rossi and others: An Evolutionary RNA/DNA Psychogenomic Theory of the Transformations of Consciousness: The Quest for Therapeutic Mind/Gene Search Algorithms. The

International Journal for Transformations of Consciousness. Vol. 1, 1-20 (2014). The Quantum Entanglements of Cosmos and Consciousness: A RNA/DNA Epigenomic Quantum Theory of the Cosmos/Consciousness Field. The Journal of Cosmology (2014). A Bioinformatic Analysis of the Molecular-Genomic Signature of Therapeutic hypnosis. The International Journal of Psychosocial Genomics: Consciousness and Health Research. Vol. 1 (1), 6-11 (2014). Quantum Perspectives of Consciousness, Cognition and Creativity: The Dirac Equation in a New Contour Integral Model of Brain Plasticity. Journal of Applied & Computational Mathematics: Vol. 3(6) (2014). Collected Works of Milton H. Erickson in 16 Volumes (2008-2014). Opening the Heart and Mind with Single Session Psychotherapy and Therapeutic Hypnosis: A Final Meeting with Milton H. Erickson, M.D. Part 1.

In Hoyt M (2014) Capturing the Moment: Single Session Psychotherapy and Walk-in Services. Creating New Consciousness in Everyday Life: The PsychoSocial Genomics of Self Creation. eBook at Amazon.com (2012).Creating Consciousness: How Psychotherapists Facilitate the Psychosocial Genomics of Self-Care: The Selected Papers of Ernest Lawrence Rossi, Vol. 2. (2011).

Dr Jane Mortimer is a Senior Lecturer at The University of Adelaide, Australia. Her research interests are psychosocial genomics, Creative Psychosocial Genomics Scale, Mind Body Transformations Therapy (MBT-T), Psychoneuroimmunology. She is handling various projects & has several publications. Her Selected Publications: Mortimer J, Rossi K & Rossi E (2015 in press). Mind-Body Transformations Therapy (MBT-T) A single case study of trauma and rehabilitation: The psychosocial and cultural epigenomic theory, research and practice of the new neuroscience of psychotherapy and translational medicine. International Journal of Psychosocial Genomics Consciousness & Health Research. Mortimer J, Rossi K & Rossi E (2015 in press for February). A validation of the psychosocial genomic healing experience. International Journal of Psychosocial Genomics Consciousness & Health Research Rossi K, Mortimer J & Rossi E (2014 In press for December). Integration of Classical Yoga and the 4-Stage Creative Process of Modern Science Psychosocial Genomics of Psychotherapy and Optimal Health. International Journal of Public Mental Health and Neurosciences. Rossi, E, Mortimer, J & Rossi, K. (2013) Therapeutic Hypnosis, Psychotherapy and the Digital Humanities: The Narratives and Culturomics of Hypnosis, 1800-2008. American Journal of Clinical Hypnosis, 55 (4), p. 343-359. Atkinson, D., Iannotti, S., Cozzolino, M., Castiglione, S., Ciatelli, A., Vyas, B., Mortimer, J. et al. (2010). A new bioinformatics paradigm for the theory, research, and practice of therapeutic hypnosis. American Journal of Clinical Hypnosis, 53, 27-46. Rossi, E., Cozzolino, M, Mortimer, J, Atkinson, D, Rossi, K. (2011). A brief protocol for the Creative Psychosocial Genomic Healing Experience: the 4-Stage Creative Process in therapeutic hypnosis and brief psychotherapy The American Journal of Clinical Hypnosis, Vol.54(2), pp.133-52. Blake-Mortimer, JS. ; Spiegel, D ; Sephton, S. ; Carlson, R. ; Stites, D (2004). CytotoxicT lymphocyte count and survival in women with metastatic breast cancer. Breast Journal Vol.10(3), pp.195-199. She has received a Postdoctoral Fellowship at Stanford University School of Medicine working with women with breast cancer in the field of psychoneuroimmunology.



W3: Caring for the Mentally Ill - A Correctional Perspective, Dallas, TX, USA

Dr. Kosy Varghese and Prof. Dora Falls

Professor Varghese will briefly discuss the challenges of providing adequate mental health services to those incarcerated in US jails. He will use the Dallas County Jail as model in identifying the elements of a successful jail psychiatric program. Additionally, the presentation will focus on identifying risk factors and methods of effective intervention. Particular attention will be paid to suicide prevention and the prevention of sexual abuse in jails. Finally, Professor Varghese will address some of the challenges of community reintegration upon release from incarceration. Professor Falls will provide a brief overview of significant challenges faced by law enforcement agencies related to encountering individuals' exhibiting behaviours associated with mental illness. A review of the most common situations involving individuals with mental illness will be discussed, as well as, the legal protocols utilized when responding to a call involving an individual exhibiting mental illness. She will discuss the impact deinstitutionalization has had on law enforcement since the late 1960's and early 1970's to present times in addition to law enforcements reliance on arrests and criminal/civil psychiatric commitments.



Dr. Kosy Varghese is Associate Professor of Psychology and Biology, Collin College, Plano, Tx,. Adjunct Professor of Psychology at Eastfield College, Mesquite, TX; Adjunct Professor of Biology at Tarrant College, Arlington, TX; Adjunct Professor of Biology at Navarro College, Corsicana, TX; Mental Health Liaison, Parkland Hospital, Dallas, TX. His Current Interests: Data analysis to ascertain the effectiveness of the psychiatric program at the Dallas County Jail, Development of effective online instruction. His Recent Presentations are Designing Effective Psychiatric Programs in Jails, American Jail Association Conference,

Dallas, TX. (2014); Mental Health Services in American Jails, Jyoti Nivas College and MES College, Bengaluru, India.

Presentation: Suicide Gatekeeper Training- Public Health Approach for prevention of suicide**Dr. Sharmitha Krishnamurthy and Dr. Mohan Sunil Kumar (Augmenta Health (P) Ltd, Bengaluru)**

Introduction: “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. “Mental health is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community”. “Sound public mental or psychological health is an essential pre-condition for developing a stable, safe and prosperous society” –**WHO**. An estimated 804000 suicide deaths occurred worldwide in 2012, representing an annual global age-standardized suicide rate of 11.4 per 100 000 population (15.0 for males and 8.0 for females). In some countries, suicide rates are highest among the young, and globally suicide is the second leading cause of death in 15–29-year-olds. Approximately, one million deaths by suicide occur worldwide each year i.e one death by suicide every 40 seconds. According to WHO estimates for the year 2020 and based on current trends, approximately 1.53 million people will die committing suicide, and 10-20 times more people will attempt suicide worldwide. This represents on average 1 death every 20 seconds and one attempt every 2 seconds. Nearly 30% of all suicides worldwide occur in India and China. As per the data provided by National Crime Records Bureau (NCRB) India, for the year 2012, rate of suicide stands at 11.2 cases for a population of 1 lacs i.e., on an average, 15 suicides an hour or 371 suicides a day. The fact that 71% of suicides in India are by persons below the age of 44 years imposes a huge social, emotional and economic burden on the Indian society. Globally, the economic and human cost of suicidal behaviour to individuals, families, communities and society makes suicide a serious public health problem.



Dr Mohan Sunil Kumar MBBS; DPM, received training in Psychiatry from NIMHANS, a premier institute for mental health in India. He is the Founder and Director of Augmenta Health (P) Ltd., a new age Mental Health company, dealing with various aspects of Mental Health in the frontiers of clinical, preventive and promotional Mental Health. He has been conducting teaching and training programs at various national and international forums, on varied topics in mental health. He is a visiting faculty at various teaching institutions. His special areas of interest are Clinical Psychiatry, Cognitive Psychology, and Psychotherapy. His philosophy in life is “We live life once.” He is always a keen

learner and willing to share the ‘little knowledge’ he acquires.

Dr. Sharmitha Krishnamurthy; BDS, MPH, MBA, PGDMLE, PGDCR is Head, Public Health Division and Director, Augmenta Health (P) Ltd. She also carries a rich experience of working as a Senior Scientist in the Asia's leading Biotech Company, Biocon Limited for 4 years in the R & D (Clinical division) predominantly on the Clinical Drug Development of novel molecules. With passion for teaching and commitment to develop Public Health initiatives in the field of Mental Health, always looking forward to apply her varied learning experiences, skills, and knowledge to make the communities where individuals live, learn, work, socialize, play, and pray healthier. Being a University Gold Medalist in MPH (Health Management) and orientated to the values of ethics, rights, equity, integrity and quality, her areas of interest include application of Public Health principles to field of Mental Health, Health Promotion and Behavior Change Communication, Healthcare Technology, Community Development and Health Education.



सर्वसुमना



**ORAL PRESENTATION
(MENTAL HEALTH)**

MHO 1: TRAIT EMOTIONAL INTELLIGENCE AND PEER POPULARITY AMONG PRE-ADOLESCENT GIRLS

Dr. Asha Menon*

*Associate Professor & HOD, Dept of Human Development, S.P.N. Doshi Women's College, Cama Lane, Ghatkopar (W), Mumbai

The present study explores whether there are individual differences in trait EI scores and how is it related to adolescent school children's perception about themselves and by their classmates. The objectives of this study were: To study differences in various traits of emotional intelligence among pre-adolescent girls and to compare trait emotional intelligence and peer popularity among pre-adolescent girls. The data was analyzed through SPSS using Standard Deviation, ANOVA and Pearson Correlation. The results show highest mean score for emotionality and lowest score for Global Trait EI. There is significant difference between Trait Emotional mean scores and five components of EI. There is negative correlation between total score and peer positive nomination. Correlation between total score and negative peer nomination is not significant at any level of significance. Trait Emotional Intelligence and individual wellbeing, Global Trait Emotional Intelligence and sociability have a significant correlation but there is no significant correlation between Trait Emotional Intelligence and individual Self-control.

सर्वसुमना

MHO 2: A STUDY OF GENDER DIFFERENCES ON ACADEMIC ANXIETY AND ACHIEVEMENT OF HIGHER SECONDARY STUDENTS

Bilal Ahmad Lone*

*Ph.D. Scholar, Dept. of Applied Psychology, University of Calcutta

The present study aims to investigate academic anxiety and academic achievement of students at the higher secondary level. Using random sampling technique 200 students, from the higher secondary level in different systems of education. The Academic anxiety Scale for children (AASC) was used and their marks of class 9th were taken as academic achievement. The data collected is subjected to statistical analysis, namely, mean, Standard deviation, 't-test'. The results indicate that there exists significant difference in academic achievement of male and female higher secondary students. Girls found to be more academically anxious and had better academic achievement than boys. Thus, there is the need to inculcate the development of academic achievement. The findings of present study may assist stakeholders in the education in developing a better understanding of the effects of academic achievement of higher secondary students. The results of this study also provide insights for faculty members and institutions for better academic performance of the students.

सर्वसुमना

MHO 3: A STUDY OF SELF-PERCEPTION OF CHILDREN WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)

Hamsa N*

*Assistant Professor, Dept of Psychology, Mount Carmel College, Autonomous, Bengaluru

Self-perception refers to the attributes or characteristics people have about themselves. Children's self-perception evolves during early childhood and is shaped by their early experiences and interactions with others. Their self-perception is related to their behavioural and academic adjustment. Research shows that children with ADHD have a poorer self-perception when compared to Non ADHD children. This study is an attempt to explore the difference between ADHD children and Non ADHD children on various domains of Self-perception, such as Scholastic Competence, Social Acceptance, Athletic Competence, Physical appearance, Behavioural conduct, Global Self-worth. The difference between the two groups in Self-perception is highlighted and the need to enhance Self-perception among children with ADHD is discussed in the paper.



सर्वसुमना

MHO 4: YOUTH AND COUNSELLING IN INDIA - A STUDY OF THE AWARENESS LEVELS AND ATTITUDE OF FEMALE URBAN COLLEGE STUDENTS TOWARDS PROFESSIONAL COUNSELLING, AND THE EFFECT OF AVOIDANCE FACTORS ON HELP-SEEKING BEHAVIOUR

Ketaki Sodhi* and Shivangi Kakkar

*Department of Psychology, Sophia College for Women, University of Mumbai, Mumbai, India

Department of Psychology, Sophia College for Women, University of Mumbai, Mumbai, India

This study was conducted to investigate awareness levels of and attitude towards professional counselling in urban undergraduate students in Mumbai, India. It also measured the influence of individual avoidance factors on help-seeking behaviour in order to see the application of the avoidance/ approach theory (Kushner & Sher, 1989) in our sample, which consisted of 80 female undergraduate students of Sophia College for Women. Results show high awareness levels of and a positive attitude towards seeking help from a professional counsellor in states of distress. The results indicated that prominent avoidance factors include fear of emotion, social norms, and self-esteem.

सर्वसुमना

MHO 5: A COMPARATIVE STUDY OF MENTAL HEALTH STATUS AMONG YOUNG PROFESSIONALS

Mahvish Fatima*and Owais Khan

* Guest faculty, Department of Psychology, A.M.U Aligarh

Research scholar, department of psychology, A.M.U Aligarh

The present study is an attempt to assess the Mental Health of young professionals between the age group of 20-30 years. Tools used for the study were: Mental Health Inventory: This scale was developed by Srivastava and Jagdish (1983). This scale consist of 56 items based on 6 dimensions- (1) positive self-evaluation, (2) realistic perception, (3) integration of personality, (4) Autonomy, (5) group-oriented attitude, (6) environmental mastery. Job Involvement Scale: This scale developed by Singh(1984) comprises of 54 items. A high score indicates more job involvement and vice-versa. Well-being scale: This scale developed by Verma & Verma(1989)has been used in the present study. The scores of the individuals were treated statistically, tabulated and interpreted. The results revealed that there is significant difference between the different categories of employees. There is significant difference between males and female employees too.

सर्वसुमना

MHO 6: EMERGING HEALTH ISSUES OF ELDERLY CITIZENS: CASE STUDIES CONDUCTED IN CHAMARAJANAGAR TOWN

Manjunath* and Bhavya P

*Faculty, Department of Social Work, Post Graduate Satellite Centre, University of Mysore Chamaraaja Nagar

Department of Social Work, Post Graduate Satellite Centre University of Mysore Chamaraaja Nagar

Old age is a life stage in the life of every living being. Human beings are no exceptions to this. The phenomenon of population ageing is becoming a major concern for the policy makers all over the world, for both developed and developing countries, during last two decades. But the problems arising out of it will have varied implications for underdeveloped, developing and developed countries. Ageing of population is affected due to downward trends in fertility and mortality i.e. due to low birth rates coupled with long life expectancies. Chamaraajanagar is a town in the southern end of Karnataka, a state in India. It was carved out of the original larger Mysore in the year 1998. It is named after Chamaraaja Wodeyar IX (1774 - 1796), king of Mysore, who was born in the town. It is also one of the less developed towns in Karnataka, even though it is situated on the interstate that links Tamil Nadu and Kerala. At present, most of the geriatric outpatient department (OPD) services are available at tertiary care hospitals. Also, most of the government facilities such as day care centers, old age residential homes, and counselling and recreational facilities are urban based. The Maintenance and Welfare of Parents and senior citizen Act (Senior Citizen act) is enacted to provide some speedy and inexpensive remedy to get maintenance. This study was taken in Chamaraajanagar town to understand the Health status/condition of the aged people in the town. Objectives were To ascertain the family members' attitude towards the elders in their family and to ascertain the public participation of the elderly. To assess the extent of economic dependency of the elderly people. To ascertain the impact Social Status (caste, religion, income level) on the wellbeing of

the elderly citizens (Socio-cultural barriers for the wellbeing of the aged citizens) and to throw light on the current challenges faced by the elderly citizens in the town. As people enter old age, they face challenges rather than enjoying their old age. Ageism, which involves stereotyping and discrimination against the elderly, leads to misconceptions about their abilities. Although elderly poverty has been improving, many older people may be detrimentally affected. Dependency on care givers which increases their risk of elderly abuse. Effective and efficient programs and policies must be framed and executed at grassroots level to safeguard the interest of the elderly citizens. It's the bound duty of every human being to take care of their aged parents to be happy in their old age. Unless and until we create awareness among the individuals, societies and communities its difficult to see every senior citizen happy in their old age, even though a handful of legislations, policies and programs are available in India to protect the and safeguard the interest of the Elderly citizens. The study reveals that Elderly citizen are economically independent in the matter food clothes and shelter because of the social security measures and schemes of the governments like OAP, Anna Bhagya, widow pension Scheme etc. Though physically well, these two cases are suffering from isolation and discrimination by the family members. They are supposed to enjoy their old age with the grandchildren but in these cases this privilege is being denied. Compared to the physiological illness they are much affected by the mental harassment and isolation and denied of participating in the religious ceremonies. Male aged citizens are less denied and ignored than that of the female aged persons.

सर्वसुमना

MHO 7: THE ROLE OF RUMINATION IN THE RELATIONSHIP BETWEEN ATTENTION DEFICITS AND OBSESSIVE COMPULSIVE SYMPTOMS AMONG NON-CLINICAL SAMPLE

Nilakshi Vaidya* and Kishor Adhikari

* Department of Psychology, Christ University, Bengaluru

Professor, Department of Psychology, Christ University, Bengaluru.

The aim of the study was threefold. At first it attempted to determine the link between obsessive compulsive (OC) symptomatology and attention deficit, secondly it examined the relationship between OC symptoms and rumination, and finally the study analyzed the role of rumination in the development and maintenance of OC symptoms. Total 30 non clinical adult subjects participated in the research. They completed the Obsessive Compulsive Inventory – Revised (OCI-R) and the Rumination Response Scale (RRS). Subjects' attention-identification task also was measured using computer based Cogstate. The data was analyzed using Spearman correlation and Regression and Sobel test of mediation. Findings suggest that OC symptoms have a significant association with rumination and attention deficits. However, rumination did not underline the relationship between attention deficit and obsessive compulsive symptomatology. The results were presented and discussed. It was expected that the results would help to further elucidate the role of cognitive factors in OCD and to expand the neurocognitive models of OCD.

सर्वसुमना

MHO 8: INFLUENCE OF MEANING IN LIFE AND EXPLANATORY STYLES AMONG ARTHRITIS PATIENTS

*OWAIS KHAN and M. ILYAS KHAN

*Research Scholar, Department of Psychology, A.M.U ALIGARH

Associate Professor, Department of Psychology, A.M.U ALIGARH

The present study aims to find out the relationship between explanatory styles and meaning in life among arthritis patients. The sample for the study comprised of 100 arthritis patients. Data was collected from the patients of Jawaharlal Nehru Medical College and Hospital of ALIGARH. Tools used for the study were: Meaning in life questionnaire developed by STEGER, FRAZIER, OISHI & KALER (2006) was used to measure the meaning in life of the patients. Revised Life Orientation Scale developed by Scheier, carver& bridges (1994) was used to measure explanatory styles among patients. The results may reveal that explanatory styles will have a positive influence on Meaning In life.



सर्वसुमना

MHO 9: A COMPARATIVE STUDY OF TEACHER STRESS AMONG URBAN AND RURAL SECONDARY SCHOOL TEACHERS OF CHITRADURGA DISTRICT IN RELATION TO THEIR SELF-CONFIDENCE

Prabhakara S B*

*Research Scholar, Dept. of Education, Bengaluru University, Bengaluru

Stress is a part of all biological organisms. It affects each living organism as different way. In educational system teacher had a prominent role. Hence teacher stress plays a vital role in the field of education. The concept of stress has come into prominence since Second World War, The important biological, physiological, and sociological consequences of stress galvanize scientific interest and mobilize efforts to understand and control them. This paper mainly talks about the stress that a teacher comes across. This depends on the environment in which a teacher works. Amount of stress is indirectly proportional to the confidence level of a teacher. It is believed that teacher can fulfill the requirements of the students only if he/she is confident about themselves. This can be better created by the management or the department of education, where they will be able to meet the requirements of the teacher. Maximum efforts are to be taken to overcome stressful environment.

सर्वसुमना

MHO 10: A COMPARATIVE STUDY OF MENTAL HEALTH AMONG MALE AND FEMALE OF INTERNET ADDICT ADOLESCENTS

Dr. R. K. Chocha*

*Dept. name of organization (Psychology), Shree G. K. & C. K. Bosamia College, JETPUR, Gujarat (INDIA)

The present investigation is to find out the difference in the mental health among the male and female of internet addict adolescents. The sample consists of 60 people out which 30 male and 30 female internet addict adolescents. For this purpose of investigation mental health scale were used. The data collection was analyzed by 'T' test to know the main difference between the two groups. The result shows that, there is significant difference in mental health of male and female of internet addict adolescent male and female adolescent at 0.01 level.



सर्वसुमना

MHO 11: AGGRESSION AND PROBLEM AREAS AMONG FEMALE ADOLESCENTS

Sandra Sunitha Lobo* and Surya Rekha S.V

*Research and Development Centre, Bharathiar University, Coimbatore

Adolescence as a transition stage implies severe changes on both anatomical and psychological level, demanding psycho-social adjustment that could be beyond one's coping for some adolescents who end up developing dysfunctional adaptive behavior such as aggression. It was found that the shift between high school and colleges can be challenging and many changes occur in emotional, social and academic adjustment. The current study aimed at investigating the relationship between aggression and problems faced by adolescents. Seventy three female adolescents aged 17-19 years comprised the sample which was selected through convenient sampling. As a part of data collection, their levels of aggression and problem areas were measured using Aggression Scale by Dr. Mrs G. P. Mathur & Dr. Raj Kumari Bhatnagar and Youth Problem Inventory by Dr. M. Verma. Karl Pearson correlation was used to evaluate the correlation among the various parameters. The paper intends to discuss the findings.

सर्वसुमना

MHO 12: PSYCHOSOCIAL SUPPORT AND CHALLENGES IN PROVISION OF MENTAL HEALTH SERVICES

Dr. Sudarsan Raju Chandolu, Ph.D*

*Principal, College of Education, Visakhapatnam, Andhra Pradesh, India.

Mental health causes the feeling of shame, guilt, rejection, isolation and tension etc., and makes the man perceive the world and life as dangerous. No health without mental health. Improving global mental health is the gateway for achieving many of the millennium development goals. In spite of many controversies, mental health and psychosocial support have penetrated into the cycle of disaster response and have gained ground in being established as a stand-alone component. The present paper attempts to analyze the potential and challenges on mental health services and psychosocial support. The World Health Report 2001 focused on mental health. It estimated that, in the situations of armed conflicts throughout the world, 10 percent of the people who experience traumatic events will have serious mental health problems and another 10 percent will develop behavior that will hinder their ability to function effectively. The most common conditions are depression, anxiety and psychosomatic problems such as insomnia, back or stomach aches.

सर्वसुमना

MHO 13: CORTISOL RESPONSES TO PSYCHOSOCIAL STRESS: THE ROLE OF CHILDHOOD MALTREATMENT AND DEPRESSION

Uma Rao MD * and Matthew C. Morris, PhD

*Children's Mental Health Services Research Center, University of Tennessee

This study examined cortisol reactivity to repeated psychosocial stressors in 35 adolescents and young adults aged 12 to 26 years. Participants were divided into three study groups: controls with no history of major depressive disorder (MDD) or childhood maltreatment (n = 18); a diagnosis of MDD at Time 1 but no history of maltreatment (MDD-only; n = 10); and both MDD and maltreatment (MDD+MALTX; n = 7). Participants with MDD recovered from their depressive episode prior to the second psychosocial stress task. The MDD-only group had higher cortisol responses at Time 1 relative to other groups. No between-group differences were observed in cortisol responses at Time 2. Depressed individuals with maltreatment did not differ from controls in their cortisol responses at Time 1 or Time 2. Findings suggest that elevated cortisol stress reactivity is a state-dependent correlate of depression in youth with no history of maltreatment.



सर्वसुमना



**POSTER PRESENTATION
(MENTAL HEALTH)**

MHP1: PSYCHIATRIC REHABILITATION MODELS IN INDIA

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Psychiatric rehabilitation is a discipline utilizing techniques and strategies for restoration of community functioning and well-being of an individual diagnosed with mental illness. We describe rehabilitation assessment and collaborative care interventions for a client diagnosed with borderline intellectual function and behavioural problems. The client's parents presented with complaints of lack of interest in academics, irregular daily activities, smoking, stubbornness, and anger outbursts. Client was advised to avail day-care at psychiatric rehabilitation services to promote engagement with rehabilitation team. Life goals were negotiated and prioritized for intervention. Parents were engaged to facilitate their understanding of client's strengths and limitations. Client was differentially reinforced for achieving his life goal. Behavioural problems decreased and client started pursuing studies as per his life priorities.



सर्वसुमना

MHP2: EXECUTIVE FUNCTIONING IN POSITIVE AND NEGATIVE SYMPTOM DIMENSIONS OF SCHIZOPHRENIA

Garima Rajan* and Prof. (Dr.) Ashum Gupta

* Department of Psychology, University of Delhi, India.

Executive functioning was examined in three groups of participants with 26 control group participants, 21 participants with predominantly positive symptoms of schizophrenia, and 23 participants with predominantly negative symptoms of schizophrenia (Mage = 33.54 years). Positive and Negative Syndrome Scale was used for sub typing schizophrenia symptom dimensions into groups. Positive and negative symptoms groups were compared for impairments in executive functioning. Trail Making Test, Verbal Fluency Test and Design Fluency Test from Delis-Kaplan Executive Function System, Stroop Neuropsychological Screening Test and Tower of London, Drexel University were taken for the assessment of executive functioning. The quantitative analysis revealed that participants in negative symptoms group of schizophrenia had significantly greater impairment in the executive functioning as compared to the other two groups. Positive and negative symptom dimensions of Schizophrenia were differentially associated to executive functioning components. The study has important clinical implications for the development of comprehensive therapeutic intervention programmes.

सर्वसुमना

MHP3: EXPLORING SELF-CONSCIOUS EMOTIONS AND EMOTION REGULATION IN DEPRESSION AND BIPOLAR AFFECTIVE DISORDER: IMPLICATIONS FOR THERAPEUTIC INTERVENTIONS

Garima Rajan* and Dr. Meetu Khosla

* Department of Psychology, University of Delhi, India.

The study examined self-conscious emotions and emotion regulation in 80 participants (Mage = 38.5 years). In a 2x4 mixed factorial design, a between-subjects comparison of Gender (Men vs. Women) and Group (Non Psychiatric Control, Severe Depression without psychotic symptoms, Bipolar Affective Disorder- Depression and Mania without psychotic symptoms), and a within-subjects comparison was done on Self-Conscious Emotions (TOSCA-3; Tangney, Wagner, & Gramzow, 2000) and Emotion Regulation (ERQ; Gross & John, 2003). The quantitative statistical analysis revealed that Severe Depression and Bipolar Affective Disorder-Depression group had significantly higher shame and guilt-proneness, and expressive suppression as compared to the other two groups. The findings have been explained in the light of self-discrepancy theory (Higgins, 1987), the process model of self-conscious emotions (Tracy & Robins, 2004) and emotion regulation (Gross, 2001). The study has important implications for therapeutic intervention programmes and prevention of depression.

सर्वसुमना

MHP4: A STUDY ON DEPRESSION, ANXIETY AND ADJUSTMENT AMONG INSTITUTIONALIZED OLD AGE PEOPLE RESIDING IN COIMBATORE

J.Jerus Albert Britto*and Dr.B.Selvaraj

*Government Arts College Coimbatore, Tamil nadu

Background:Depression is the most common psychiatric illness of late life . The common emotional disorder in the elderly population is depression. Depression among elderly adults has become a major public health problem associated with mortality and suicidal behaviour because it is either undiagnosed or misdiagnosed. The background of this research focus on the health problems, isolation, fears, recent bereavement , and social withdrawal in elderly life. The goal of this study is to explore the magnitude and risk factors of the problem of depression in elderly people residing in the old age homes.

Tools used:

- ❖ Personal data sheet were given to collect the relevant background of the selected old people like gender , age , marital status .
- ❖ Geriatric depression scale was used to assess the level of depression
- ❖ Hamilton 's anxiety scale was used to measure the level of anxiety in elderly

Conclusion: The level of depression is high in old age homes. Adjustment problems were found. Poor mental health were recorded and the interventions like relaxation therapy, music therapy and counseling can be given.

सर्वसुमना

MHP5: A STUDY OF PERSONALITY DIMENSIONS AS DETERMINANTS OF ADOLESCENTS' CREATIVE INTELLIGENCE

J.Jerus Albert Britto*and Dr.B. SELVARAJ

*Government Arts College Coimbatore, Tamil Nadu

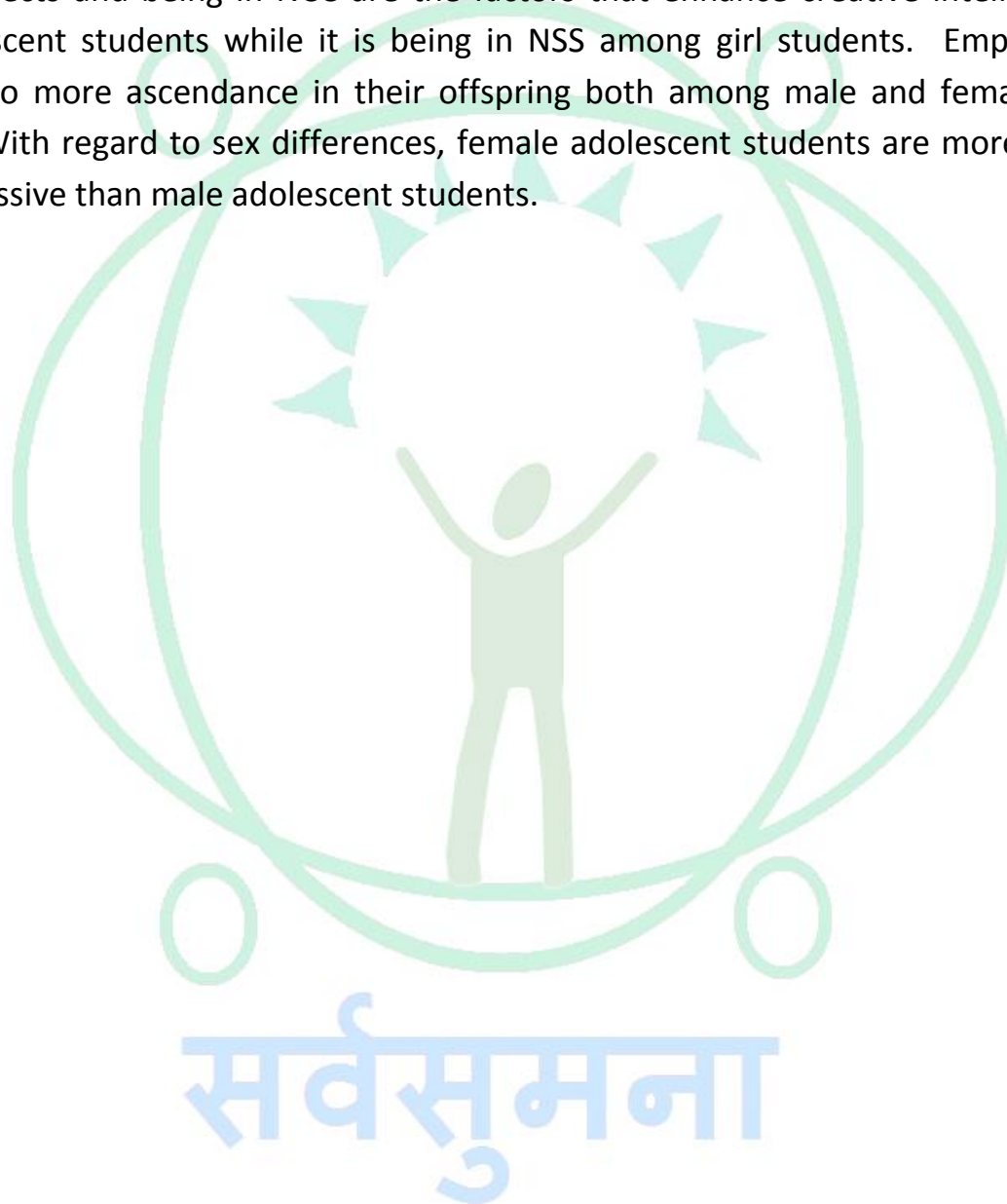
Background: Creative Intelligence (Creativity): Creativity is the ability to discover new solutions to problems or to produce new ideas, inventions or works of art. It is a special form of thinking, a way of viewing the world and interacting with it in a manner different from that of the general population (M.J. Levin, 1978). Personality: Personality is the more or less stable and enduring organization of a person's character, temperament, intellect and physique, which determine his unique adjustment to the environment (Eysenck, 1971). Ascendence Personality Dimension: Tendancy of a person to exert power over others and influence their attitude and behaviour (Eysenck, 1971). Submissive Personality Dimension: The feeling patient submissive humbleness of an individual (Eysenck, 1971). The study sought to investigate the nature of creative intelligence among the adolescent school students. Creative intelligence of the individuals is influenced by many factors such as personality of the individuals, demographics and the environmental factors. In this study it was aimed at understanding the influence of certain personality dimensions, namely, ascendence and submissiveness. In order to realize this A-S Reaction Study was used and measurement of creative ability was done by using creativity test developed by Narayanan (1972). In addition, the significant influence of demographic variables such as academic discipline, parental occupation, extra-curricular activities were studied by using an interview schedule. The primary purpose of this study was to assess the creative intelligence and to understand the relationship among creative intelligence (as measured by Creative intelligence Test developed by Narayanan), ascendence and submissive personality dimension (as measured by A-S Reaction Study) of male and female adolescent students studying in higher secondary schools in Coimbatore. The secondary purpose was to examine the significant influence of demographic variables academic discipline, extra-curricular activities and parental occupation on creative intelligence, ascendence and submissive personality dimension of male and female adolescent students studying in higher secondary schools in Coimbatore.

Tools Used:

- ❖ Creativity test developed by Narayanan (1972)
- ❖ A-S Reaction Study was constructed by Allport and Allport to measure ascendence and submissive personality dimensions of the individuals.

Results:

Based on the findings of the study the following is concluded: Creative intelligence is not related to ascendance and submissive personality dimensions of male students, however, there is a marginal relationship between creative intelligence and ascendance personality dimension among female adolescent students. Ascendance and submissive personality dimensions are correlated among both male and female adolescent students. Studying science subjects and being in NCC are the factors that enhance creative intelligence among male adolescent students while it is being in NSS among girl students. Employed parents contribute to more ascendance in their offspring both among male and female adolescent students. With regard to sex differences, female adolescent students are more creative and more submissive than male adolescent students.



MHP6: MENTAL HEALTH AND SELF-CONCEPT AMONG SECONDARY SCHOOL STUDENTS

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The main purpose of this research was a study of mental health and Self-concept among secondary school students. The total sample 80 secondary school students boys and girls (40-boys and 40- girls) were taken as a sample Rajkot city (Gujarat). The research tool for mental health was measured by mental health scale which was made by Dr. D.J. Bhatt and Miss. Geeta R. Gida (1992) while the tool was self-concept inventory for secondary school students constructed and standardized by Dr. Pallavi Patel and Dr. Hitesh Patel and utilized their tools in this research paper. Mean significant difference between mental health and self-concept in secondary school students' boys and girls was calculated result revealed. There is no significant difference in mental health of secondary school students' boys and girls. There is no significant difference in self-concept of secondary school students' boys and girls. The significant co- relation between mental health and self-concept reveals 0.78 high positive correlations.



सर्वसुमना

MHP7: IMPACT OF PSYCHO-EDUCATION ON THE PERSONS WITH DIABETES MELLITUS

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Background: A comprehensive and quality management of problems in diabetes mellitus often attracted attention of various health professionals working with Persons with Diabetes Mellitus (PDM). In the multi-disciplinary team the role of psychologist is pivotal. Adding psycho-education in the comprehensive treatment may help the victim and also the care givers to have a better self-care and there by their quality of life. **Aim:** The aim of the study is to find out the impact of Psycho-Education on the PDM. The study was intended to study the selected socio, economic and demographic conditions of PDM, to find out the impact of Psycho-Education on PDM, to find out the association between selected socio-economic and demographic conditions and the impact of psycho-education on PDM. **Methods and materials:** the Quasi-Experimental Research Design was used to for the present study. Based on inclusion and exclusion criteria 100 persons with PDM within the age range of 30 to 45 years were selected and were administered with a semi-structured interview schedule and 30 item - study structure schedule to measure the various components of PDM including the causes, Symptoms, Investigations, Treatment methods, Myths and misconceptions, various social and Emotional components about Diabetes Mellitus. Six sessions of psycho-education was given to them. **Results:** the average score obtained by PDM has raised from 28 to 63% on the study structure schedule. This trend is also seen in all the sub dimensions. Paired 't' test showed statistically significant difference ($p \leq 0.05$) between pre and posttest which was done using study structure schedule. **Conclusion:** Introduction of Psycho-Education programme has created pre and post a desired, positive impact on PDM.

MHP 8: GRATITUDE, FORGIVENESS AND SUBJECTIVE-WELL-BEING AMONG COLLEGE GOING STUDENTS

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Background: Gratitude is held in high esteem by virtually everyone, at all times, in all places. From ancient religious scriptures through modern social science research, gratitude is advanced as a desirable human characteristic with the capacity for making life better for oneself and for others. Though gratitude is associated with pleasantness and highly desirable life outcomes, it is certainly not an easy or automatic response to life situations. Forgiveness is a process (or the result of a process) that involves a change in emotion and attitude regarding an offender. Most scholars view this intentional and voluntary process, driven by a deliberate decision to forgive. This process results in decreased motivation to retaliate or maintain estrangement from an offender despite their actions, and requires letting go of negative emotions toward the offender. Subjective well-being can be defined as quality of an individual's life with regard to both the presence and relative frequency of positive and negative emotions over time and one's overall satisfaction with life. The emergence of positive psychology in the 1990s has brought a paradigm shift in understanding human behavior from human weaknesses and ailments to human strengths and resources. This paradigm has implications not only in physical but also in behavioral and emotional health in terms of speedy recovery, prevention and promotion of health. **Purpose:** The aim of the present study was to examine gratitude, forgiveness and subjective well-being among college going students. **Methods:** The main objectives of the current study were to (i) Examine gratitude among college going students (ii) Examine forgiveness among college going students (iii) Examine subjective well-being among college going students (iv) Examine the gender differences in the mentioned variables and (v) Examine relationships among the mentioned variables. A sample of 219 college going students were taken for the current study after

having taken written informed consent from them using convenience sampling from one of the private universities at Jaipur City. The mean age of the sample was 24 years with SD of 2.31. The numbers of boys were 131 and the numbers of girls were 88. The measures used were Gratitude Questionnaire-6 Item version (GQ-6, Emmons & McCullough, 2003), Transgression-Related Interpersonal Motivation Scale-18 Item Form (TRIM-18, McCullough, Root & Cohen, 2006) and Subjective Well-being scale (Diener, 1985), The data were analyzed using descriptive statistics like mean, SD, inferential statistics like independent “t” test was used to examine gender differences and correlational analysis was used to examine the relationships among the variables. **Results:** The findings of the current study indicated significant differences in boys and girls on the measures of gratitude and forgiveness. Girls scored higher on these two measures from which it can be inferred that they are more forgiving and having more gratitude than that of boys. However, significant gender difference was not found on the measure of subjective well-being. In terms of the association among these variables, no significant association/correlation was found among gratitude, forgiveness and subjective well-being in a group as a whole. **Conclusions:** The study highlights the importance of exploring possible factors for gender differences that have emerged in the current study. Incorporating positive psychology constructs like gratitude, forgiveness and subjective well-being have implications for health enhancements.

सर्वसुमना

MHP 9: DIAGNOSING MIGRAINE

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Subharati Niriksha Foundation, Bengaluru, India

Introduction: Migraine is a challenging neurological and a disabling brain disorder that makes it difficult to manage emotions, relate to others, and function normally. A **migraine** is a severe and painful headache that is usually accompanied by sensory warning signs such as flashes of light, blind spots, tingling in the arms and legs, nausea, vomiting, and increased sensitivity to light and sound. This excruciating pain that migraines bring in can last for hours or even days.

Case study: Socio Demographic data

Name: IS Sex: Female Address: Tamil Nadu, India Age: 26 years Education: M.Sc. Marital status: Single

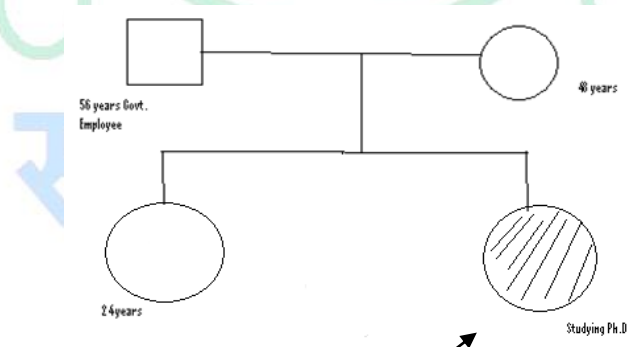
Information gathered from: From Self

Presenting Complaints: From Client: Has complained of severe headache lasting for a day with visual auras at initiation.

History of Presenting Illness (HOPI)

Ms. IS is very intelligent student. Ms. IS's symptom began from early childhood. She has severe migraine pain lasting for a day. She gets migraine auras i.e., she sees spots or flashing lights or have a temporary loss of vision before having migraine headache. Presently she is under homeopathy medication. **Past History:** Ms. IS had no birth complications. Her childhood was uneventful. She didn't have good peer relationship and play activities in childhood. She has reported her sleeping problem. She reports to wake up frequently during sleep. She seldom has sound sleep.

Family History:



Ms. IS is a 26 year old female hailing from a middle socioeconomic background. She makes first child to his parents. Her father (56 years) is employed and mother (48 years) is a home maker. IS has 1 younger sister studying

- Her family is nuclear family type
- Her parents' marriage is not consanguineous
- No history of psychological problems or other disorders in the family (according to the client)

Personal History

Birth history- Full term/ uneventful birth

Developmental milestone-

Motor	} Not Normal
Adaptive	
Speech	
Social	

Any Childhood disorders- Not seen or reported; Academic performance- Excellent; Social Relationship - Limited social circle and acquaintances; Pre morbid personality- normal; History of any physical illness- None reported

Mental Status Examination

General Appearance & behavior- Looks one's age, adequate cleanliness, and normal level of functioning

Mood- Controlled emotional expression

Talk- Slow, non-continuous talk, reaction time is late

Obsessive/compulsive phenomena- Not reported

Perception- Normal

Orientation-

Place	} Intact
Person	
Time	

Memory-

Immediate	} Not intact
Recent	
Remote	

Insight- No

Judgment- Impaired

RESEARCH RESULTS

Insight- No; Judgment- Impaired; Negative symptoms noted

Looking at the course, duration of illness, her history and present complains of migraine headache with sleep disturbance & history of present complains it is concluded that the client is suffering from migraine.

सर्वसुमना

MHP 10: RELIGIOSITY AND MINDFULNESS IN INDIVIDUALS WITH ALCOHOL DEPENDENCE: A COMPARATIVE STUDY

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*Central Institute of Psychiatry, Ranchi, Jharkhand

Background: Alcohol dependence is a major public health care problem which has an impact on all aspects of health care delivery systems. In recent days psychosocial factors like 'religiosity' & 'mindfulness' have been identified as important factors in the overall wellbeing & functioning of people & ensuring stable personality. In substance addiction these factors were also studied to be important in long term prognosis & outcome. **Aim:** This study was conducted to find out the difference between alcohol dependence group and normal control group on the basis of religiosity and mindfulness. **Method:** In alcohol dependence group according to ICD-10 (DCR) 40 individuals were taken after detoxification and 40 individuals in normal control group were taken after screening with the General Health Questionnaire-12. Age, sex, religion and education were matched in groups then Brief Multidimensional Measurement of Religiosity/Spirituality and Five Facet Mindfulness Questionnaire (FFMQ; 2005) were administered.

Result and Conclusion: Study findings indicate that both alcohol dependence and normal control group were significantly different on the basis of religiosity and mindfulness. Normal control group was more religious and mindful than alcohol dependence group.

सर्वसुमना

MHP 11: AUTISM: ITS CHALLENGES IN 21ST CENTURY

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Autism is a complex developmental disability that typically appears during the first three years of life. The result of a neurological disorder that affects the functioning of the brain, autism and its associated behaviors has been estimated to occur in as many as 1 in 500 individuals. Autism is four times more prevalent in boys than girls and knows no racial, ethnic, or social boundaries. Family income, life-style, and educational levels do not affect the chance of autism's occurrence. Autism interferes with the normal development of the brain in the areas of social interaction and communication skills. Children and adults with autism typically have difficulties in verbal and non-verbal communication, social interactions, and leisure or play activities. The disorder makes it hard for them to communicate with others and relate to the outside world. They may exhibit repeated body movements (hand flapping, rocking), unusual responses to people or attachments to objects and they may resist changes in routines (American Society for Autism). This paper focuses on preparation of teachers and related services personnel for children and youth with disabilities in the 21st century. Thus, this article touches the highlights of what needs to be done to enable parents and special education personnel preparation to meet the challenges of the future.

सर्वसुमना

MHP 12: ONLINE RESOURCES IN MENTAL HEALTH SERVICES

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Due to expansion of information available on health services and health information regarding mental health, people access it as a readily available information source and for reference sources. However mental health information web sites have a wide range of quality and focus. The information quality and content has been a matter of discussion amongst users and service providers. Interactive methods like facebook are not ideal due to issues around confidentiality and personal involvement. There are many factors affecting the quality of Internet website based resources. These include factors like ease of navigation, user interface and access to high quality unbiased literature, diagnostic tools and ability for interactive opportunities. There are different methods and ways to find those resources and quantify them according to specified parameters. We evaluated current knowledge on assessing such web resources and ways of assessing their quality.



सर्वसुमना

MHP13: PSYCHOLOGICAL AND SOMATIC MANIFESTATIONS OF DEPRESSION IN BUDDING HEALTH CARE PROFESSIONALS: A QUESTIONNAIRE BASED CROSS-SECTIONAL STUDY

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Introduction: Depression is a mental disorder characterized by a pervasive and persistent low mood that is accompanied by psychological and somatic symptoms related to the normal emotions of sadness and bereavement, but do not remit when the external cause of these emotions dissipate. Depression is likely to be the largest burden by the year 2020. Medical students are at a higher risk towards developing depressive disorders as compared to the general population. This is due to continuously increasing number of patients, varied types of sufferings and confronting death on regular basis. Previous studies have reported that mental health starts deteriorating since the beginning of medical education, and remains poor throughout the tenure of training. The repeatedly triggering stress leads to substance abuse, relationship problems, and professional deterioration and may even result in suicidal ideation among the students. This may also affect students' relationship with faculty, care of patients and the culture of medical profession and inculcate a cynical attitude in students. A Norwegian study revealed that the health of medical students can predict the later distress among the physicians. The present study was conceived, planned and carried out among medical students of our institute to assess their level of stress and the remedial measures taken by them to overcome the same. **Materials and Methods:** This questionnaire based cross-sectional study was conducted among 162 second year medical students belonging to different states of India, studying in Jawaharlal Nehru Medical College, Wardha. A structured questionnaire and Higher Education Stress Inventory (H.E.S.I.) were distributed to the students with proper instructions. Responses of participants were recorded, analyzed and interpreted logically. **Results:** Out of the 162 students, 17.78% were males and 82.22% were females. The most common psychological symptoms observed were low energy (18.75%), followed by loss of

interest (15.6%), loss of enjoyment (14.5%), sad mood (12.50%), guilt (5.2%) agitation (5.2%), worthlessness (4.1%), and melancholia (3.12%). No psychomotor retardations or suicidal ideations were observed. Weight change (14.58%) and disturbed sleep (13.54%) were the commonest somatic symptoms, followed by fatigue (12.5%), reduced appetite (9.50%), polyphagia (5.3%) and bowel disturbances (3.12%). No loss of libido was observed. In the efforts made for coping with depression related symptoms, 17.70% students were benefitted by strenuous exercise and aerobics, 14.58% by moderate to high fluid intake, 8.33% by modifications in diet. 5.20% by meditation, 5.20% by breathing exercises, and 5.20% by yoga. Music benefitted 3.24% and Socializing with friends benefitted 1.62% participants. Consultation with psychiatrist or drug therapy for the management of depression was not required by any participant.

Conclusion:

1. Medical students suffer from considerable amount of stress, which leads to anxiety and ultimately depression, if not taken care of at the right time in the right manner.
2. Timely intervention by need-based individual counseling and application of various measures to overcome stress, anxiety and depression are essential for budding health care professionals.

सर्वसुमना

MHP 14: PSYCHOLOGICAL DISTRESS AMONG CAREGIVERS

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Caregiver refer to an unpaid family member who provides care to an individual who is ill or have mental health problem and needs assistance to manage a variety of tasks from bathing, dressing, feeding care. Most caregivers are women who handle time-consuming and difficult tasks like personal care. They tend to give themselves little time to adjust. At least 40% of caregivers are men. These male caregivers are becoming more involved in complex tasks like managing finances. Research studies documented (AARP 2004) that the work of care giving is full of psychological distress and that distress can adversely harm caregivers. Caregiver experience high level of emotional, financial and physical stress. A number of studies have demonstrated that caregivers experience higher level of psychological distress (e.g. - Hodapp et.al 2013). Research studies revealed that caregivers can face psychological and emotional, social and economic challenges. Psychological and emotional challenges included being stressed by caring tasks and having worries about the present and future of patient. They had feelings of sadness and inner pain or bitter due to disturbing behavior of the patient. They also experience some communication problems with patients due to their inability to talk.

Social challenges were inadequate social services for the patient, stigma, burden of caring tasks, lack of social support, and problems with social life. The economic challenges were poverty and extra expenses associated with patient's illness (Joel Semel & Anne S.A 2013). Researches into experience of caregivers are gradually increasing and their central role in community care is being acknowledged. Caregivers experience a multi-dimensional range of problems, often associated with their care giving role.

MHP15: ROLE OF PSYCHOEDUCATION ON SELF-MANAGEMENT OF TYPE 1 DIABETES

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The efficacy of psychoeducation for adolescents with type 1 diabetes mellitus has long been debated among mental health professionals. Psychoeducation is an effective intervention which aid in managing the mental health concerns of the adolescents to take care of the parameters of their illness such as exercise, dietary and insulin regimen along with the need for autonomy, as adolescence is a developmentally challenging period. The purpose of this meta-analysis is multifold. First is to comprehend the relationship between psychosocial factors, quality of life, psychoeducation and type 1diabetes. Second is to find out the implications of psychoeducation in health care practice. A meta-analysis of 40 studies published during1991 to 2014 was carried out to understand the effectiveness of psychoeducation for adolescents with type1 diabetes mellitus. Studies have shown a positive association between psychoeducation and management of type 1 diabetes. Patients who have received psychoeducation report improvement in quality of life, reduction in disturbed eating patterns and increased management of their condition. Also, Psychoeducation can be timely introduced to manage the mental health issues associated with the life-long illness.

सर्वसुमना

MHP16: ROLE OF MENTAL HEALTH AND SELF-ADJUSTMENT AMONG CHILDREN WITH DISABILITIES IN DIFFERENT EDUCATIONAL SET-UP: A STUDY OF DELHI

Sultan Singh*

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Disability is one of the major public health problems facing the modern India and scientists as well. It is not only complex but multi layered in nature. It has been termed with different names such as handicapped persons, people with special needs, challenged people and so on. Education is considered to make people human, respected, dignified through socialization but differences in behavior of people lies here also. Differently able children are unable in self-adjustment with other normal children as they are not socially accepted and given at last importance in different education set up. The present paper is an effort to bring those divergences in lights and to give an insight to strengthen inclusive education as well as special education set up. **Purpose:** Understanding the factors causing problem in self-adjustment with children with disabilities. **Method:** Survey method (Questionnaire) with 100 teachers from integrated and special schools (50 from each), selected through purposive sampling. **Findings:** Significant difference was found in level of mental health and self-adjustment of children those in special school and integrated school. Children in special schools were found more active, confident, trained in life skills, familiar as compare to children in integrated schools. Children in integrated schools, differently able children face several adjustment problems such as feel hesitant, lonely, ignored and isolated, problem in self-expression etc. Teachers were in special schools were also found more focused towards special need of children as they were well trained in providing special education to these children. **Conclusion:** There is a need to strengthen, empower and sensitize different educational setup to rehabilitate and mainstream the children with disabilities.

MHP17: MENTAL HEALTH AND SOCIAL ADJUSTMENT AMONG COLLEGE STUDENTS

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Mental health is the wide health issue of the entire world in 21'st century and it is very much related with social adjustment. Alfred Adler had warned the people of entire world to adjust with each-other for existence or survival on the earth because of less level of land and over water of sea. The main purpose of this research was a study of mental health and social adjustment among college students. The total sample 90 college students boys and girls (45- boys and 45- girls) were taken as a sample. The research tool for mental health was measured by mental health inventory which was made by Dr. D.J. Bhatt and Miss. Geeta Gida (1992) while the tool was social adjustment inventory (S.A.I.) by Dr. R.C. Deva was used. Mean significant Difference between mental health and social adjustment in college students' boys and girls was calculated result revealed. There is no significant Difference in mental health of college students' boys and girls. There is no significant difference in Social adjustment of college students' boys and girls. The significant co-relation between mental health and social adjustment reveals 0.69 high positive correlations.

सर्वसुमना



**ORAL PRESENTATION
(NEUROSCIENCE)**

NSO 1: NONLINEAR DYNAMICAL METHODS IN COMPUTERIZED ECG CHARACTERIZATION- A CRITICAL REVIEW

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Electrocardiogram (ECG) is one of the most popular noninvasive tool for the diagnosis of heart related diseases, which is the electrical pulsation captured at the human body surface, further a representative of functional dynamics. ECG is inherently nonlinear biomedical signal necessitates the use of nonlinear dynamical models for its representation and feature extracton. The computerized diagnosis methods are cost effective which can improve the accuracy and save the time constraint compared with manual screening procedures for arrhythmia detection. The paper describes following nonlinear dynamical methods: Poincare map, capacity and correlation dimension, detrended fluctuation analysis (DFA), Lyapunov exponent, Hurst exponent, fractal dimension, recurrence plots, entropies and higher order spectra (HOS) cumulants. Presented techniques would be an appropriate support for the computerized signal interpretation and advance the clinical diagnosis.

सर्वसुमना

NSO 2: CALORIC RESTRICTION MIMETIC 2 DEOXYGLUCOSE HELPS TO PROTECT THE CYTOARCHITECTURE OF MOUSE HIPPOCAMPAL PYRAMIDAL NEURONS IN-VITRO

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Background: Typical form of neurons is crucial important for their functions. In number of studies, caloric restriction mimetic 2deoxyglucose (C₆H₁₂O₅) was found to be beneficial in improving the brain functions. However, no reports are available on the effect of 2DG on neuronal cytoarchitecture. Purpose: To study the effects of 2DG on cytoarchitecture of primary cultured mouse hippocampal pyramidal neurons Methods: In the present study, hippocampal pyramidal neurons from E17 mouse embryos were grown on poly L lysine coated coverslips in Neurobasal medium containing 2% B27 supplement, whereas neurons from the experimental group were treated with the above mentioned medium +10 mM 2Deoxyglucose for 12 hours. Results: The treatment of 2DG resulted in healthier neuronal morphology in terms of significantly lower number of cytoplasmic vacuoles, little or no membrane blebbings, maintained axon hillock and intact neurites as compared to neurons from the control group. Conclusion: The results indicate the beneficial effects of 2DG in maintaining the healthier neuronal cytoarchitecture.

सर्वसुमना

NSO 3: MENTAL STRESS EVALUATION USING HEART RATE VARIABILITY ANALYSIS: A REVIEW

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In this paper we reviewed Heart Rate Variability (HRV) analysis in evaluation of mental stress. Over the years many researchers have contributed in estimating relation between HRV and Perceived Mental Stress. In this article we analyzed various techniques available for evaluation of mental stress. Time domain and frequency domain analysis results are reviewed for understanding the significance of HRV. Various instruments developed have been reviewed and analyzed their effectiveness. Results of two case studies performed in two different environments for establishing relation between HRV and perceived mental stress have been discussed.



सर्वसुमना

NSO 4: USE OF TECHNOLOGY IN MENTAL HEALTH TREATMENT WITH SPECIAL REFERENCE TO AMBULATORY ASSESSMENTS

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Technology is increasingly being used in mental health assessment and treatment. The application of email, text messages, computer and cell phone applications and programs, blogs, gamification i.e. the use of games to promote understanding and application, video chats and talks allows for greater accessibility and efficacy. Given that mobile phones that are increasingly owned by large numbers of people they can facilitate the use of technology in screening for mental health disorders. Virtual reality programs enable behavioral role playing to enhance the effectiveness of treatment and triangulation into real world situations. Teletherapy can not only help in screening but also in treatment of patients who are home-bound due to physical or emotional reasons. Ambulatory assessments can enable ecologically valid modes of assessment and provide continuous feedback.

सर्वसुमना

NSO5: COMPUTATIONAL INVESTIGATION OF EFFECTS OF SPINES AND AMPA RECEPTOR DESENSITIZATION IN TEMPORAL INTEGRATION IN STRIATAL MEDIUM SPINY NEURONS

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The reward pathway in the brain is an important circuit for various behavioral and sensory-motor aspects of an organism. The nucleus accumbens (NAcb), which constitutes the major subdivision of the ventral striatum, plays an important role in the reward pathway. It is also considered as the major site of action for many drugs of abuse. Majority of neurons in NAcb are GABAergic Medium Spiny Neurons (MSN). At cellular level any changes in reward related behavior have been attributed to changes in the responses of the MSN. These neurons receive synaptic input over number of spines which are present on complex dendritic arbors. Properties of spines and synapses may cause distortion of the final output at soma and can create specific computational problems in MSN. For example desensitization of AMPA receptor causes paired pulse depression of excitatory post synaptic potential (EPSP) due to which neuron may not be able to estimate accurate incoming synaptic activity. Also, morphological changes in spine can affect synaptic plasticity. In our current work we have attempted to investigate the role of spines in shaping EPSPs through computational simulations using the model of MSN. It was found that, receptor desensitization and high input resistance spines alter the EPSP amplitude and width and hence found to be affecting synaptic integration pattern. Also, the location and clustering of the spines influences the EPSPs.

NSO 6: NADI DIAGNOSIS TECHNIQUES

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Ayurveda and Traditional Chinese Medicine approach uses pulse signals obtained from radial artery as a means for diagnosis of diseases. These conventional techniques are nowadays been replaced by devices using various sensors for detecting pulse signal from radial artery at wrist position. This paper gives a brief review on such diagnosing techniques developed till now for diagnosis of various diseases using the concepts of Nadi Vigyan. The use of different sensors and their results will also be discussed in this paper.



सर्वसुमना

NSO 7: YOGA THERAPY, A NOVEL TREATMENT OPTION FOR SOMATOFORM DISORDERS: A CASE STUDY

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Background: Somatoform disorders are common mental disorders in health settings. Treatment of these disorders are challenging despite availability of variety of options as the efficacy of these treatments is variable. Yoga has been considered as a treatment modality for common mental disorders like anxiety and depression however the use of yoga in treatment of somatoform disorders is limited. Objective: Yoga therapy as a potential treatment option for somatoform disorders. Case report: Mr Z, 30 year old Muslim gentleman, married, manual labourer by occupation presented with 3 years illness of insidious onset, continuous course characterised by pain in the back, chest, pain in extremities, wrist joint, knee joint, ankle along with spells of headache. These symptoms were associated with gastric dyspepsia and mild sexual dysfunction. Moderate to severe biological and socio-occupational dysfunction was noted. A poor response to conventional analgesics, ayurvedic and herbal remedies was noted in the past. Yoga therapy was offered as a treatment modality and was accepted by the patient. Trial of yoga therapy was provided to him after written informed consent. Methods: A comprehensive yoga module consisting of Asana, Pranayama and Dhyana was incorporated in yoga therapy for him. Seven days training followed by home based practice of yoga was advised for 12 weeks. Visual analogue scale (VAS), Brief pain inventory (BPI), Hamilton anxiety rating scale (HAM-A) and Pittsburgh sleep quality index (PSQI) were used for assessment. Analysis was done at the baseline, 2, 6 and 12 weeks prospectively. Results: Patient improved completely at the end of 6 weeks and improvement was sustained till 12 weeks. There was significant reduction in VAS, BPI, HAM-A and PSQI scores at the end of 6 and 12 weeks. Conclusion: Yoga therapy can be a potential treatment option among the complementary medicine. It has a great potential of being a sole treatment as well as an add on procedure. It has been tried successfully in fibromyalgia, low back pain and arthritis in the past but not in somatoform disorders. More studies are needed to prove the efficacy of yoga therapy in somatoform disorders.

NSO8: STUDY OF THE NEUROPSYCHOLOGICAL COMPONENTS OF VISUAL PROCESSING AND LEARNING IN HIGH AND LOW FUNCTIONING CHILDREN EXHIBITING AUTISM SPECTRUM DISORDER: A COMPARATIVE STUDY

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Background: Research shows that children exhibiting autism spectrum disorder learn better through sensory modalities namely visual, auditory, tactile and kinesthetic. Out of these visual mediums have shown good results and outcomes. Purpose: To understand the neuropsychological areas of visual learning and processing in children exhibiting autism spectrum disorder. Methods: The present study is a comparative study of the neuropsychological components of visual processing and learning in high and low functioning children exhibiting Autism Spectrum Disorder. Selected tests from the NIMHANS neuropsychological battery were administered on high and low functioning children exhibiting Autism Spectrum Disorder. The scores from the tests were compared, graphically represented. Results :The study showed that the low functioning group exhibiting autism spectrum disorder performed poorly in tasks assessing visuospatial working memory, visuo-constructive ability, visuo-conceptual ability, visual memory and learning in comparison to the high functioning group. The present study also carried out qualitative analysis to understand the causal factors associated with the performance of the low functioning group based on observations, rating scales and semi-structured interviews. Based on thematic analysis, the predominant themes were motor speed and function, attention, motivation, behavior change, need and nature of reinforcement, use of prompts and latency of skills. Conclusion: The analysis and discussion the of group's results showed that there is a significant difference in visual processing and learning between children exhibiting high and low functioning autism spectrum disorder in selective areas.

NSO 9: QUANTITATIVE ANALYSIS OF EEG SIGNAL BEFORE AND AFTER SUDHARSHANA KRIYA YOGA

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From ancient period, meditation has been practiced by the people. Originally, it was meant to deepen the understanding of the sacred and mystical forces of life. In today's fast life, significant amount of mental stress due to hectic work schedules is leading to psychological disorders, insomnia, depression and many other problems. In the past, many people who have done research on meditation have found out the effect of meditation on stress relief and disease improvement.

In relation with EEG signals, a lot of work has been done to find the significant changes between the signals and mental states by using different methodologies. This work is mainly designed to trace the varying spectral characteristics of EEG during meditation and then the changes of EEGs during meditation are to be analyzed using Quantitative analysis. In this work, EEG data of 43 subjects who practice Sudharshana Kriya Yoga have been collected and comparison of the amount of stress and relief before and after performing Sudharshana kriya yoga is calculated. After the analysis, it is found that, the long term practitioners show improved energy in the EEG components by 2-fold to 3-fold whereas, the short term practitioners have shown relatively less improvement. Improved energy value in alpha wave indicates that the person is relaxed and increase in beta component mean alert to the external world. Improved energy in theta indicates that the person is in extreme relaxation state. 90% of the subjects shown increase in alpha and beta values after meditation. This work draws the conclusion that, the person is in extreme relaxation state and is alert to the external world. Also, meditation can transform man's life and take him out of stress and provide him relaxation and stress-free life.



**POSTER PRESENTATION
(BIOTECHNOLOGY)**

सर्वसुमना

BTP1: ABILITY OF INTRINSIC APOPTISM (PROGRAMMED CANCER CELL DEATH) MEDIATED BY “SAPOTA” FRUIT EXTRACT

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Anti-Cancer properties which were studied using the SAPOTA fruit extract reflected that when human cancer cell lines and mice induced with breast cancer, showed that certain chemicals in SAPOTA fruit, had Cancer inhibiting properties .Experiments were carried out with different varieties of Cancer cell lines added with SAPOTA extracts to check the percentage efficiency of the fruit . Studies on the human cells showed that the anti-tumour potency was seen as in case of Leukaemia cancer cell line. In this case, over 80 percent of cell death occurred at the rate of 2mg/ml .The efficacy of the SAPOTA extracts was “limited” in normal cells in contrast with those with cancer. Mice infected with breast cancer were treated with the extract through oral pathway and a showed “significant” reduction in the tumour size .Study tells that the proliferation of the cancer cells was inhibited by activating apoptosis not by necrosis. Two kinds of programmed cell deaths or apoptosis were observed i.e. the intrinsic pathway (deals with mitochondria) and the extrinsic pathway (affect brought about by foreign body) , thus it was found that the extract activated the intrinsic pathway of apoptosis. .Cancer cells treated with the extract “dismantled” the mitochondrial trans-membrane. The main visible advantage of using this method of apoptosis is that it is an economic way to reduce the Cancer cell proliferation , however, SAPOTA advantage is pertinent in case of Leukaemia and Breast Cancer only.

सर्वसुमना

BTP2: BIODIESEL FROM MICROALGAE :- A NEW RENEWABLE AND ENVIRONMENT FRIENDLY ALTERNATIVE FUEL.

Antara Chatterjee*

The world is facing a decline of non-renewable energy resources. World's fossil fuel reserves are limited and will inevitably decline in availability. Also our much usage of fossil fuel has caused CO₂ enrichment in the atmosphere and it is the prime cause for global warming. At this situation both government and private bodies are looking for an alternative of both renewable and environment friendly source. At this stage biomass derived liquid fuels or biodiesels are drawing much attention for commercial production due to its high oil content and rapid biomass production. Biodiesel is extracted from many sources like oil crops (Jatropha , palm oilseed), waste cooking oil and animal fat. But they cannot fulfill even a small amount of existing demand of transport fuel. As demonstrated here microalgae appears to be the only source of biodiesel that is capable to meet the global demand of transport fuel because of its high productivity. Soybean can only produce about 450 litres of oil per hectare. Canola can produce 1,200 litres per hectare, and Palm can produce 6000 litres. Now, compare that to algae which can yield 90,000 litres per hectare.

सर्वसुमना

BTP3: DETECTION OF METAL TOXICITY VIA BIOMARKERS

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This study is on metal toxicity and its early detection by using biological compounds (bio markers) present in the body which increases the lead toxicity. Exposure to lead in the environment continues to be a serious public health issue. Children are particularly vulnerable to adverse health effects associated with heavy metal toxicity particularly lead. This study is focused on lead poisoning occurring in Indians. There are, in fact, several metals that are known to be human carcinogen and affecting then CNS that is central nervous system of a human being. Bio markers are the indicator of certain events in biological system or samples. Here we are considering some sources from which we can detect the amount of lead entering into the human body. This work outlay the few bio markers which include ALAD i.e delta-aminolevulinic acid dehydratase which is inhabited by lead toxicity, hence we can get an account of how much lead is accumulated in patient body by reduction of this enzyme. Similarly there are many more biomarkers which includes coproporphyrin presence in urine sample (CP I & CP III), NADS (Nicotinamide adenine dinuceotide synthetase) was found to reduce its activity when there is an exposure to lead. The P5N i.e pyrimidine 5'-nucleotidase activity in pyrimidinenucleotide metabolism declines with the linearly increase in lead concentration in blood.

सर्वसुमना

BTP4: GENETIC DIVERSITY AND RELATIONSHIP OF MUCUNA VARIETIES USING MOLECULAR RAPD MARKER

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RAPD profiles of all the 10 Mucuna accession were generated with four random primers and its pair wise combinations. The primer generated 72 RAPD loci of which 62 were polymorphic. The level of polymorphisms generated was 90% among the accessions. It was found that adopting the pair wise primer combination, enhanced the level of polymorphism as compared to the individual primer. Even the pairwise primer combination and individual primers were not able to produce unique RAPD phenotypes for all the Mucuna accessions independently.. The dendrogram based on Ward's method grouped the 10 accessions into two clusters and one lone cluster. Further work is necessary, employing a number of primers those that show a high level of polymorphism among accessions, with contrasting phenotypes for desired characters like seed coat color, less or no itching nature, L-DOPA content etc.

सर्वसुमना

BTP5: *IN VITRO* ANTIMICROBIAL ACTIVITY AND PHYTOCHEMICAL ANALYSIS OF CRUDE EXTRACTS OF ENDOPHYTIC FUNGI ISOLATED FROM SELECTED MEDICINAL PLANTS.

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Endophytes are microorganisms that reside in the tissues of living plants and are being investigated as potential sources for novel bioactive natural products for application in medicine, agriculture and pharmaceutical sectors. Medicinal plants are natural sources of drug molecules as they contain active compounds and have attracted researchers for identification of active biomolecules having important biological activities. Different parts of the selected medicinal plants- *Piper nigrum*, *Tinospora cordifolia* and *Zingiber officinale* were selected for the isolation of endophytic fungi and tested for their antimicrobial potentials. Out of 42 endophytic isolates obtained, 12 isolates exhibited significant antimicrobial activity by agar well diffusion method. Identification of the prospective endophytic fungi were confirmed by 18s rDNA analysis and hence were selected for the production of antimicrobial compounds. Production of secondary metabolites was done in both liquid and solid media followed by extraction with ethyl acetate. The antimicrobial activity of crude ethyl acetate extracts was assessed by agar well diffusion method against the human pathogenic bacteria- *Staphylococcus aureus*, *Bacillus cereus*, *Escherichia coli*, *Salmonella typhimurium* and *Pseudomonas aeruginosa*. Amongst the selected isolates, ABR4 isolated from the roots of *Tinospora cordifolia* gave effective inhibition to the tested organisms. Phytochemical screening of the selected isolates revealed the presence of alkaloids, flavanoids, tannins, saponins, phytosterols, resins, terpenoids and phenolic compounds.

BTP6: SCREENING OF PHYTOCHEMICAL, ANTIMICROBIAL, ANTIOXIDANTS ACTIVITIES WITH TOTAL FLAVONOIDS AND PHENOLS IN SEED EXTRACT OF *Swietenia mahogany* L. BY HPLC.

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Plants have the ability to produce various chemical compounds helpful in treating several diseases in human beings. In the present study *Swietenia mahogany* L seeds were extracted by solvents using soxhlet. Terpenoids, phenols, flavonoids, carbohydrates, glycosides, steroids and alkaloids are present in ethanol and water extracts. In petroleum ether terpenoids and glycosides present and terpenoids, glycosides and alkaloids are observed in chloroform. Ethyl acetate extract contains terpenoids and carbohydrates. More antimicrobial activity found in ethonol extracts against *Bacillus cereus* NCIM-2155, *Citrobacter freundii* MTCC 1658, *Serratia marcescens* NCIM 2919 and *Streptomyces aureofaciens* MTCC 325 and very less in water extracts. Ethyl acetate and ethanol extacts revealed significantly high antifungal activities against *Apsergillus niger*, *Malassezia furfur* MTCC 1374 and *Trichophyton rubrum* MTCC 3272. Anti-scavanging activities are more in ethanol and water extracts in DPPH method and ABTS method revealed that, anti-scavanging activity are significantly high in Ethyl acetate, ethanol and water extracts. Total flavonoids and phenols are found more in ethanol and water extracts by quantitative analysis using HPLC.

सर्वसुमना

BTP7: EVALUATION OF PHYTOCHEMICAL SCREENING AND IN-VITRO ANTIOXIDANT ACTIVITIES OF TOTAL PHENOLICS AND FLAVONOIDS CONTENTS FROM FRUIT OF GARCINIA INDICA

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The objective of the current research was to evaluate the in-vitro antioxidant activity of total phenolics and flavonoids compounds extracted from the fruit of *Garcinia indica*. The methanol extract of the fruit of *Garcinia indica* contains higher level of total phenol and flavonoids as per Phytochemicals test. Total phenolics and flavonoids compound in methanol fruit extract of *Garcinia Indica* was found to be 0.402 mg/g and 143.84 µg/g of extract calculated as gallic acid equivalent ($r^2 = 0.978$) and as quercetin equivalent ($r^2=0.983$) respectively. Higher amount of phenols and flavonoids were found in methanol extract compared to ethanol and chloroform. The radical scavenging activity was found to be concentration dependent method. The results obtained from this study specify that fruit of *Garcinia indica* is a potential source of antioxidants and thus could prevent many radical diseases and could be used as nutraceuticals.

सर्वसुमना

BTP8: MOLECULAR CHARACTERISATION OF *Pseudomonas* spp. ISOLATED FROM DIABETIC PATIENTS WITH URINARY TRACT INFECTION (UTI) BY AFLP.

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Present work is a prospective study on UTI infected diabetic patients from Bengaluru region, molecular character and antimicrobial susceptibility of *Pseudomonas* sp infections. Among Seventy Seven samples 10% were identified as *Pseudomonas* sp are isolated on C-TAB agar media and confirmed by morphological and biochemical tests. On testing antimicrobial activity by well diffusion methods, all organisms showed highest resistance to Ampicillin (77%) followed by amplified fragment length polymorphism. The dendrogram analysis of ten variables of *Pseudomonas* sp by using different primer (E+CTT)(M+AAT) and (E+AAG) (M+GGC) gives the total diversity among the 10 accession showed within 5.4 units of Genetic distance.



सर्वसुमना

BTP9: DETOXIFICATION OF HEAVY METALS IN E WASTE BY BACTERIAL CONSORTIUM

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Electronic devices contain certain metals Arsenic, cadmium, zinc, lead, copper, mercury, nickel, lithium, barium, PCB etc. During electronic waste degradation, these metals released into the environment and can cause neurotoxicity which leads to many health problems. Arsenic can cause skin and lung cancer, reduced nerve conduction velocity, disorganization of the cytoskeletal framework, neurological effects, hypertension and cardiovascular diseases. Pollution in industrial areas is of serious environmental concern and interest in bacterial resistance to heavy metals is of practical significance. Mercury (Hg), Cadmium (Cd) and lead(Pb) are known to cause damage to living organisms including human beings. In the present study, several bacteria were tested to evaluate their potential to detoxify Cd and Pb. The mechanisms of heavy metal detoxification will be revealed by the scanning electron microscopy (SEM) and energy dispersive X-ray spectroscopy (EDS), and/or precipitation as sulfide (for Pb). Their detoxification efficiency for heavy metal will indicate its potency for application in bioremediation of toxic heavy metals.

सर्वसुमना

BTP10: THE REGULATORY ROLE OF MICRORNA-124 IN GENE EXPRESSION

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From the last few years, microRNA (miRNA) is recognized as a one of the major regulatory molecule found in all multicellular organisms. miRNA is a small RNA of 20-22 nucleotides in length which regulates the expression of genes. miRNA play an important role in various biological activities including development, cell proliferation, differentiation and apoptosis. Although the biological functions of most miRNAs are unknown, miRNAs are predicted to regulate up to 30% of the genes within the human genome. Gradually, we are beginning to understand the functions of individual miRNA, and its general expressions and functions. We are presenting general status of miRNA-124 in mouse and human. It is one of key regulator in development of nervous system. Dysregulation of endogenous miR-124 has been implicated in various cancer conditions including breast cancer, prostate cancer, colorectal cancer etc., and also in some of the neurological disorders. The expression of effects of miRNA-124 in nervous system, pancreas, kidney and Bone marrow etc., have been studied. Dysregulation of miRNA-124 causes due to the methylation of miRNA in the CpG region and also association with lack of histone modification. However pharmacological treatment in most of the cancers can be cured by demethylating agents such as 5-aza-2'deoxyctidine. Based on the available data, here we summarize the overview of miRNA-124 regulatory network, expression profile and also knowledge of miRNA gene structure, function and also emerging therapeutic potential of miRNA in the treatment of metabolic diseases.

BTP11: EVALUATION OF ANTICANCER PROPERTIES OF SOME COMMON INDIAN MEDICINAL PLANTS.

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Cancer is a major public health burden in both developed and developing countries. Anticancer activity is the effect of natural and synthetic or biological and chemical agents to reverse, suppress or prevent carcinogenic progression. Several synthetic agents are used to cure the disease but they have their toxicity and hence the research is going on to investigate the plant derived chemotherapeutic agents. Therefore an attempt has been made to review different in vitro and in vivo methods for estimating anticancer properties of natural products from medicinal plants. In the present study, 5 anticancer medicinal plants (Abutilon indicum, Adathoda visca, Datura stramonium, Lantana camara and Tridax procumbens) of Indian origin belonging to 5 different families are reported along with detailed information regarding part used, extract used, type of the model used (MTT method) , types of tested cancer cell lines (HCT116 cells), etc. The result showed that alkaloids & flavonoids of Lantana camara & Datura stramonium have shown dose dependent activity against HCT-116 cells with IC50 values of 52.07, 43.82 & 57.23, 36.9 μ g/ml respectively. In comparison to alkaloids of Abutilon indicum & Tridox procumbens, there is a relative potent activity in alkaloids & flavonoids of Lantana camara & Datura strontium. These plants continue to be used against various types of tumours such as sarcoma, lymphoma, carcinoma and leukemia. All these plants are potential candidates for in vivo studies since they are showing good in vitro anticancer activity.

BTP12: ESTABLISHING NOVEL DRUG LEADS FOR AMYOTROPHIC LATERAL SCLEROSIS USING IN-SILICO METHOD.

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Amyotrophic Lateral Sclerosis (ALS), often referred to as “Lou Gehrig's Disease”, is a progressive neurodegenerative disease that affects nerve cells in the brain and the spinal cord. ALS is characterised by muscle spasticity, rapidly progressive weakness due to muscle wasting. This results in difficulty speaking, swallowing, and breathing. The disease usually starts around the age of 60, except in cases that are directly inherited when the usual age of onset is around 50. In this work we have identified the genes responsible for the disorder and found suitable drug ligands for the gene receptor. Drug compounds found in Natural Herbs that could lessen the symptoms faced by an person suffering from ALS were analyzed to target the receptor genes. Suitable Ligands were screened are considered for Docking , the docked drug ligands can be tested for their efficacy in treating Amyotrophic lateral Sclerosis Disorder by in-vitro receptor ligand binding assay studies.

सर्वसुमना

BTP13: PRODUCTION AND PURIFICATION OF NOVEL ANTIBIOTICS FROM MARINE ACTINOMYCETES

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Fifteen marine and water samples were collected from different places of east coast of India, such as Kakinada, Chennai, Mahabalipuram, Kovalam, Vishakhapatnam and Kumbakonam. On screening the samples, one potential actinomycetes was obtained. Colony morphology, Gram staining and biochemical tests revealed the organism as *Streptomyces* spp. Antimicrobial compound released from *Streptomyces* spp. were tested against one Gram positive organism, *Staphylococcus aureus* ATCC-259233 and one Gram negative organism, *Escherichia coli* FPFC-1407. Optimization of physico chemical parameters like incubation period, temperature, pH, different carbon sources, nitrogen sources, varied concentration of salinity was performed for antibiotic production by *Streptomyces* spp. In the current study, strain improvement using random physical (U. V. irradiation) and chemical (EtBr) mutations were also carried out. The antibiotic production by *Streptomyces* spp. was increased after optimization.

सर्वसुमना

BTP14: OPTIMISATION FOR THE NOVEL ANTIBIOTICS FROM ACTINOMYCES (HALOPHILES)

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Abstract: Novel antibiotic was produced and purified from marine actinomycetes. The isolates were obtained from different places of east coast of India, such as Kakinada, Chennai, Mahabalipuram, Kovalam, Vishakhapatnam and Kumbakonam. Colony morphology, Gram staining and biochemical tests revealed the organism as *Streptomyces* spp. Antibiogram method was performed to observe antibacterial activity of organisms. On screening the samples potential actinomycetes was obtained. Antimicrobial compound released from *Streptomyces* spp. were tested by well-diffusion method using Hiller Melton agar media against one Gram positive organism, *Staphylococcus aureus* ATCC-259233 and one Gram negative organism, *Escherichia coli* FPFC-1407. Optimization of physical, chemical parameters like incubation period, temperature, pH, different carbon sources, nitrogen sources, varied concentration of salinity was performed for antibiotic production by *Streptomyces* spp. Strain improvement using random physical (U. V. irradiation) and chemical (EtBr) mutations were carried out. The antibiotic production by *Streptomyces* spp. was increased after optimization. Purification methods such as HPLC and LCMS were performed. HPLC pattern showed retention time as 3.4 minutes. From further analysis using LCMS the compound revealed to be novel and its mass is to charge ratio was found be 381.3 m/z. The Functional group identity of the novel antibiotic was carried out using FTIR and was observed as Alkynes, and the intensity of the bond was Strong.

BTP15: OPTIMISATION OF GROWTH CONDITIONS FOR MAXIMAL LOVASTATIN PRODUCTION BY *ASPERGILLUS TERREUS* (KM017963) UNDER SOLID STATE FERMENTATION

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Effects of various cultural conditions on lovastatin production was investigated in *Aspergillus terreus* (KM017963) grown under SSF with wheat bran. Lovastatin production was influenced by various physical factors such as pH, temperature and nutritional factors such as carbon nitrogen, inorganic salts etc. The results indicated that optimum lovastatin production was found at pH6.0, 28^oC-30^oC temperature, inoculum size of 10⁸ spores /ml. The carbon sources, glucose and dextrin when supplemented at 3% w/w enhanced lovastatin production by 5 folds. Addition of metal salts such as CuSO₄, FeSO₄, CaCl₂ and MgSO₄ enhanced the production by 3-5 folds. Supplementation with nitrogen sources, amino acids, hydrocarbons, surfactants and amino acids did not have any profound effect on lovastatin production.

सर्वसुमना

BTP16: DROSOPHILA MELANOGASTER AS A MODEL TO STUDY HEAVY METAL TOXICITY

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Through human activity heavy metals have become a serious environmental neurotoxin known to affect activity levels in both sensory and cognitive function in humans. Heavy metal causes irreversible neurobehavioral damage in many developing mammals which increases oxidative stress which in turn leads to genetic manipulation, damage in neuronal DNA inducing apoptosis, mediated neuropathology, sporadic Parkinson's and Alzheimer's disease. The mechanism of this damage is caused by heavy metal compounds such as triethyl lead chloride, lead acetate, cadmium chloride etc. In order to study the mechanisms of genetic manipulation phenomenon *Drosophila melanogaster* is being used. Commonly known as fruit fly, it is used as a model organism since it is cost efficient, breeds quickly, growth acceleration is easy, undergoes genetic manipulation rapidly and has identical match with human diseases. They are commonly used to study neurological disorders and apoptosis mechanism homologous to mammalian systems. In the present study the fruit flies are exposed to heavy metals for a specified number of days and observed for fly survival, growth cycle, reproductive phase and geotactic climbing behaviour. The changes in the fly during this state are compared to the natural state and the observations are recorded.

सर्वसुमना

BTP17: EFFECT OF PHYSICOCHEMICAL PARAMETER OF BIOREMEDIATION ON BARIUM.

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Biosorption is becoming a promising alternative to replace or supplement the present removal processes of organic pollutants from wastewater (Aksu, 2005). In this study, Barium adsorption bacteria was isolated from different areas of Mangampeta, Kadapa (dist.) and the biosorption of Barium by these isolates were evaluated for the applicability of Barium removal from Barium polluted areas. Among the thirty isolates from six samples, one isolate (R1) showed the potential for high barium adsorption and was selected for further studies. Gram staining, biochemical tests and 16s RNA sequencing revealed R1 as *Pseudomonas* species. Incubation period, temperature, pH, supplementation of different carbon sources and nitrogen sources was optimized for Barium adsorption. The effect of mutation, both physical and chemical was conducted to test the ability of adsorption of Barium by *Pseudomonas* sps.



सर्वसुमना

BTP18: OPTIMIZATION OF BUSHNELL HASS MEDIUM FOR DEGRADATION OF CRUDE OIL AND N- HEXADECANE BY *PSEUDOMONAS* FROM INDUSTRIAL AREAS

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Present study conducted to obtain the optimum conditions for efficient degradation of crude oil and n-Hexadecane by *Pseudomonas* from industrial areas of Kerala, Tamil Nadu, Mangalore and Mumbai. The growth pattern of the isolate was evaluated in BH (Bushnell and Hass) broth supplemented with crude oil and n-Hexadecane individually at different pH(4,5,6,7,8 and9), temperature(20°C,37°C,50°C and60°C) and salt concentrations(Bushnell medium with varying concentration of MgSO₄ (0.05, 0.10, 0.15, 0.20 and 0.25g/L) ,FeCl₃ (0.02, 0.04, 0.06, 0.08 and 0.10g/L) and CaCl₂ (0.005,0.010,0.015,0.020 and 0.025g/L). The incubation period was for ten days in shaker (120rpm). Optical density at 600nm was recorded on 3rd, 5th, 6th, 8th and 10th day. The optimum BH medium composition obtained by experiments for the degradation of crude oil and n-Hexadecane degradation showed maximum growth at pH 7 and 37°C with a salt concentration of magnesium sulphate (0.25), calcium chloride (0.05)and ferric chloride (0.02) g L⁻¹. The bacteria were found to be degrading up to 50% of crude oil and 40% of n-Hexadecane under optimized condition.

सर्वसुमना

BTP19: ESTIMATION OF PHYTOCHEMICAL SCREENING, ANTIMICROBIAL ACTIVITY AND FREE RADICAL SCAVENGING PROPERTIES OF *Cestrum Diurnum*.

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In the present experiment, phytochemical analysis of crude extract of *Cestrum diurnum* using petroleum ether, chloroform, acetone, ethanol and water was conducted. Results showed the presence of numerous phytochemical compounds like alkaloids, saponins, tannins, flavonoids, phenols, diterpenes and glycosides. Saponins and phenols were absent in petroleum ether extract but all other components were present. Antimicrobial sensitivity was tested against *Staphylococcus aureus* (MTCC 4301), *Serratia marcescens* (MTCC 7103), *E.coli* (DH5 α). *Staphylococcus* and *Serratia* were found to be sensitive against ethanol, acetone and chloroform. *E.coli* was found to be sensitive against ethanol and acetone and less sensitive to chloroform. These microorganisms were found to be least sensitive to crude extract of petroleum ether compared to others. Water extract was not sensitive against bacteria. These extracts were screened for their free radical scavenging properties using DPPH and ABTS methods. Acetone, chloroform and petroleum ether extracts showed considerable amount of antioxidant properties whereas ethanol have high free radical scavenging properties. Total phenols and flavonoids were estimated by using HPLC.

सर्वसुमना

BTP20: BIOPLASTICS: A WAY TOWARDS WASTE MINIMIZATION

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There has been substantial interest in the advancement and production of biodegradable polymer to solve the current problem of pollution triggered by the continuous use of synthetic polymer of petroleum origin. The materials properties exhibited by PHAs, varying from stiff, brittle to rubber-like makes it a precise substitute for the synthetic plastic. The high cost of PHAs production has restricted its applications. The likelihood of producing these bio-polymers commercially and at comparable cost has been the key focus in this area. This paper confers the likelihood of the conventional petro-plastics being substituted by the new-age degradable and renewable bio-derived polymers. It presents the keynote issues that support findings of the benefits these materials have in relation to conventional, petrochemical based counterparts. It is the view of the authors that biodegradable plastic materials are most apt for single-use disposable applications where the post-consumption waste can be locally composted.



सर्वसुमना

BTP21: SELECTING NOVEL LIGANDS FOR RETT SYNDROME USING IN-SILICO METHOD

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Rett syndrome is a rare genetic postnatal neurological disorder of the gray matter of the brain. Mutated Glycine receptor subunit alpha-2 (GLRA2), Gamma-aminobutyric acid receptor subunit alpha-3(GABRA3) and Holocytochrome c-type synthetase (HCCS) genes have been implicated as factors causing Rett disorder which were retrieved from the National centre for Biotechnology Information (NCBI). 3D structure of the above receptor was determined by homology modelling technique. Several ayurvedic herbs are seen to cure for Rett disorder. The phyto-compounds information of the above herbs was retrieved from various literature studies. The pharmacophore hypothesis was generated for the reported inhibitors. The phytochemical compounds were screened against the GLRA2, GABARA3 and HCCS receptor. Novel ligands were shortlisted based on their fitness and docking score.

सर्वसुमना

BTP22: PRODUCTION AND PURIFICATION OF L-ASPARGINASE FROM *Aspergillus* sp. BY USING SOLID STATE FERMENTATION.

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L-Asparaginase was produced by fungi *Aspergillus* sp. from the soil. Production of L-asparaginase using various substrates continuously like Lemon peel showed maximum activity and was used for extraction of enzyme compare to Sweet lemon peel, Pineapple peel and Sugar cane peel powder. Purification of enzyme using Ammonium salt precipitation, dialysis, ion exchange and gel filtration chromatography were subsequently used so as to achieve the enzyme L-Asparaginase in its purest form. The fold purification of enzyme was increased 11.3 U/mg and yield purification is 86%. Physical characterization of the enzyme showed that its activity was highest at 37°C and pH 8. The enzyme activity saturated at 1400 µg concentration of the substrate L-Asparagine. Increasing concentration of activator and inhibitor increased and decreased the enzyme activity respectively. Chemical characterization of L-Asparaginase enzyme was performed through SDS PAGE and Native PAGE. The molecular weight of L-Asparaginase was found to be 48 kDa and monomer unit. L-Asparaginases (0.01 to 3 IU/ml over 72 hrs) were tested on 2 human leukemia cell lines such as T cell (Molt-4) and acute promyelocytic leukemia (HL-60). Viable cells were determined by MTT assay.

सर्वसुमना

BTP23: SEASONAL DYNAMICS OF PHYTOPLANKTON IN RELATION TO PHYSICO-CHEMICAL CHARACTERISTICS IN GULUR WETLAND ECOSYSTEM, TUMKUR DISTRICT, KARNATAKA, INDIA.

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An investigation on the quantitative distribution, seasonal dynamics, species composition of phytoplankton and physico-chemical characteristics of water was carried out in Gulur wetland ecosystem from June 2010 to June 2012. Present study recorded a total of 61 species under 36 genera belonging to five different classes. Algal composition was dominated by Diatoms (41.67%) followed by blue-greens (27.78%), Chlorococcales (13.89%), Euglenoids (8.33%) and Desmids (8.33%). Physico-chemical factors like air and water temperature, pH, potassium, sulphate, silica, nitrate nitrogen have direct bearing on density, diversity and periodicity of different groups of phytoplankton and they showed significant positive correlation with these groups at 5% level. All the groups of phytoplankton recorded their seasonal maxima during pre-monsoon season except Chlorococcales, as their maximum density is recorded during post-monsoon season. Inter-relationship of different physico-chemical parameters and their role with the seasonal dynamics of phytoplankton is discussed.

सर्वसुमना



**ORAL PRESENTATION
(Public Health)**

PHO 1: ASSESSMENT OF STRESS AMONG AUTO-RICKSHAW DRIVERS IN BENGALURU CITY - A CROSS SECTIONAL STUDY

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Auto-rickshaw is the one of the main mode of public transport in urban and semi-urban areas.

Some of the auto-rickshaw drivers may suffer from some kind of stress due to following reasons, like stress due to finance, due to driving, due to health status etc. This may pose risk to

Auto-rickshaw drivers and Auto-rickshaw passengers. OBJECTIVES: Hence this study was conducted to assess the stress and to determine the association between stress and Duration of job & Socio-demographic characteristics among Auto-rickshaw drivers. MATERIALS AND

METHOD: Study was conducted among randomly selected Auto rickshaw drivers -480 from the randomly selected Auto-rickshaw unions in Bengaluru city from October 20th to November 19th. Stress was assessed as perceived by Study Subjects. RESULTS: Out of 480

Auto-rickshaw drivers 29.8% had mild stress and 2 % had moderate stress, 90.6% belongs to age group 21 to 40 years and they had 27.8% stress as compared to 41 to 60 years(9.4%) had 32.2% stress. Socio-economic class depicts that 69.8% were upper lower (class IV) had 29.8%

stress as compared to lower middle class III (30.2%) had 34.5% stress. 84.2% had been in this profession since 10 years or less and stress was found to be 24.3% as compared to those

driving more than 10 years-15.8% who had stress 75.7%.

सर्वसुमना

PHO 2: GENDER AND TIME OF THE DAY PREFERENCE FOR ALERTNESS: STUDY OF MORNINGNESS–EVENINGNESS AMONG YOUNG SUBJECTS.

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Introduction: The day and night alterations, influences essentially on biological processes. Morningness-Eveningness refers to the individual differences in diurnal preferences, sleep-wake pattern for activity, and alertness in the morning and evening (Susman et al., 2007). The self-rated Morningness-Eveningness Questionnaire (MEQ) is used to measure these morning type and evening type people. The present study examines the divergence of gender on the time of the day preference for alertness among young subjects. **Methods:** A prospective, descriptive survey and documentation of socio-economic details and self-administered Morningness-Eveningness questionnaire data was collected on young subjects visited NIOH with due informed consent. The subjects were 110 (69 females and 41 males), aged 23.62 ± 6.23 and 28.09 ± 6.56 years with education duration of 16.39 ± 1.83 and 17.19 ± 1.74 years for females and males respectively. All subject's self-administered MEQ response was collected and analysis was performed using R statistical software. **Results:** Among the subjects majority were ($n=57$ (51.8%), M:F; 22:35) were of morning alert type with a MEQ score of 63.19 ± 3.07 , one subject (0.9%) was of evening type and the rest ($n=52$ (47.3), M:F; 19:33) were of intermediate alert type with a MEQ score of 53.47 ± 4.42 . The distribution of types were not significantly differing between the gender ($p>0.05$). There were trends that morning type (24.18 ± 5.34) subjects were slightly older than the evening type (26.31 ± 7.63) subjects. **Discussion:** Study findings suggest that majority of subjects were alert during the morning followed by intermediate type with no disparity between the genders. Interestingly, almost no subjects were of evening type in the study. These initial results indicate that among the young subjects were alert during the early part of the day. However study is ongoing and larger samples would delineate better picture of alertness pattern among young Indian subjects.

PHO 3: INFLUENZA LIKE ILLNESS (ILI): PREVALENCE AND PREVENTIVE PRACTICES AMONG INDIAN HAJ PILGRIMS OF KARNATAKA.

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Haj pilgrimage, gathers annually 3 million Muslims from, 186 countries into one confined geographical area.60% of them develop influenza like illness, during haj or transit; particularly in geriatric, and immune-com promised pilgrims. Secondary infections in home countries are source of global spread. Saudi Arabia recommends influenza vaccination of all pilgrims; however it is not widely implemented in India. Hence WHO recommended preventive practices are recommended. Objectives: To determine prevalence of ILIs-Influenza like illness among Indian haj pilgrims, the effect of WHO/CDC recommended preventive practices and assess awareness of pilgrims on Influenza vaccination, MERS, Ebola infection. Material methods: A cross sectional study was done among pilgrims departing from Bengaluru, Karnataka for Haj 2014.270 pilgrims were selected by simple random sampling, interviewed telephonically post Haj. Results: Overall prevalence of ILIs was 66.3%, 7.8% developed ILIs post haj, 4.4 % among these required hospitalization. Geriatric age and comorbidities taken together were significantly associated with ILIs prevalence ($p<0.001$).All the 5 preventive practices were significantly associated with lower prevalence of ILIs ($p<0.05$).Less than 50% of pilgrims had awareness regarding MERS CoV, Ebola infection, influenza vaccination. Conclusion: High prevalence of ILIs especially with comorbidities, low levels knowledge and practice of recommended preventive practices was observed. Recommendation: Seasonal influenza vaccine is made mandatory for Indian Haj pilgrims. There is need for health education regarding preventive practices and free distribution of face masks, hand sanitizers, face tissues by International authorities concerned with Haj.

PHO 4: ASSESSMENT OF HEALTH STATUS OF THE STONE QUARRY WORKERS IN YELAKELI, WARDHA DISTRICT IN CENTRAL INDIA

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Background: Stone Quarry workers in India work in dusty environment and it is an unorganized sector scattered all over India. Various procedure and methods are involved in this work. Respiratory morbidity is commonly associated with this industry. **Objective:** 1) To Study the socio-demographic profile of stone quarry workers in Wardha district. 2) To assess the health status of stone quarry workers with special reference to respiratory morbidities. **Method:** A cross sectional study was carried out at a stone quarry in Yelakeli, in Wardha district. It included total 150 workers of which Male: 138, Female: 12. Pulmonary function test was also carried out. Result: Most of the workers 63% of them were between 21 to 40 years of age. 89% of the workers were staying near the stone crushing industry. 68% of the workers were working since less than 5 years. 81% of the workers were not using any protective equipment. Smokers had decreased PEFr than the non-smokers, more than 30 years old had decreased PEFr. **Conclusion:** Many of workers had some or the other health related problems. The significant problems were musculoskeletal problems, eye problems and respiratory problems.

सर्वसुमना

PHO 5: PREVALENCE AND RISK FACTORS OF POLYPHARMACY AMONG ELDERLY IN INDIA: EVIDENCE FROM SAGE DATA

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Population ageing is a result of high life expectancy and declining fertility. Ageing usually accompanied with the chronic illness conditions. Polypharmacy is becoming a common problem among older persons. Polypharmacy increases the risk of drug-related events such as falls, confusion and functional decline. In one of the studies, it was found that elderly commonly used both prescribed and non-prescribed medicine together which get them into the risk of major drug-drug reaction. The aim of the present study is to explore level and pattern and the risk factors of polypharmacy among elderly in India. Present study has utilized the SAGE 2007 data, conducted in India, for the fulfillment of the objectives for 60+ populations. All the analysis has been carried out in SPSS and STATA software. The prevalence of polypharmacy is 4.2% among elderly in India. The present study shows the likelihood of polypharmacy is higher among old old (OR = 1.877, 95% CI = [0.97, 3.61] and it is lower among high wealth quintile elderly (OR = 0.339, 95% CI = [0.14, 0.83]). The study has revealed bad self-rated health (OR = 0.339, 95% CI = [0.14, 0.83], diabetes (OR = 4.205, 95% CI = [2.14, 8.25], depression (OR = 5.987, 95% CI = [2.45, 14.62] and hypertension (OR = 11.629, 95% CI = [5.49, 24.63] as the major risk factors of polypharmacy among elderly in India. Findings of the study will be helpful for the programmes and policymakers, researchers, academician and social workers who are working in the field of ageing and health.

PHO 6: STRESS, ANXIETY AND DEPRESSION AMONG STUDENTS OF SELECTED MEDICAL AND ENGINEERING COLLEGES, BENGALURU- A COMPARATIVE STUDY

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Students of professional courses are under considerable amount of stress, owing to the ever-increasing study load and the burden of expectations from the society. Some of them go to the extent of falling into Depression and associated psychosocial disorders. This study was done to assess the proportion of students with stress, anxiety and depression in the 2nd, 3rd and final years of MBBS and Engineering courses, in selected medical and engineering colleges, Bengaluru using the Depression Anxiety Stress Scale. Of the total 304 students in different years of each of the professional course, 33.6 % suffered from stress, 49.3% suffered from anxiety and 37.8% suffered from depression in varying levels of severity.

सर्वसुमना

PHO 7: A COMPARATIVE STUDY OF WORK RELATED STRESS AMONG GOVERNMENT AND PRIVATE SCHOOL TEACHERS OF KURNOOL TOWN

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Although several studies have been reported in field of medical, banking, corporate and health services, the most emergent field i.e. teaching sector especially in India is still neglected. In this context present study is planned to find out difference in the stress levels of government and private school teachers and symptoms experienced due to stress. The study was conducted in 180 school teachers (n1=86 government school teachers, n2=94 private school teachers). Pretested semi structured questionnaire was administered. From results there is significant difference between private and government teachers in relation to personality and system factors, but no significant difference is seen in interpersonal factors. Also private teachers show more symptoms of stress.

सर्वसुमना

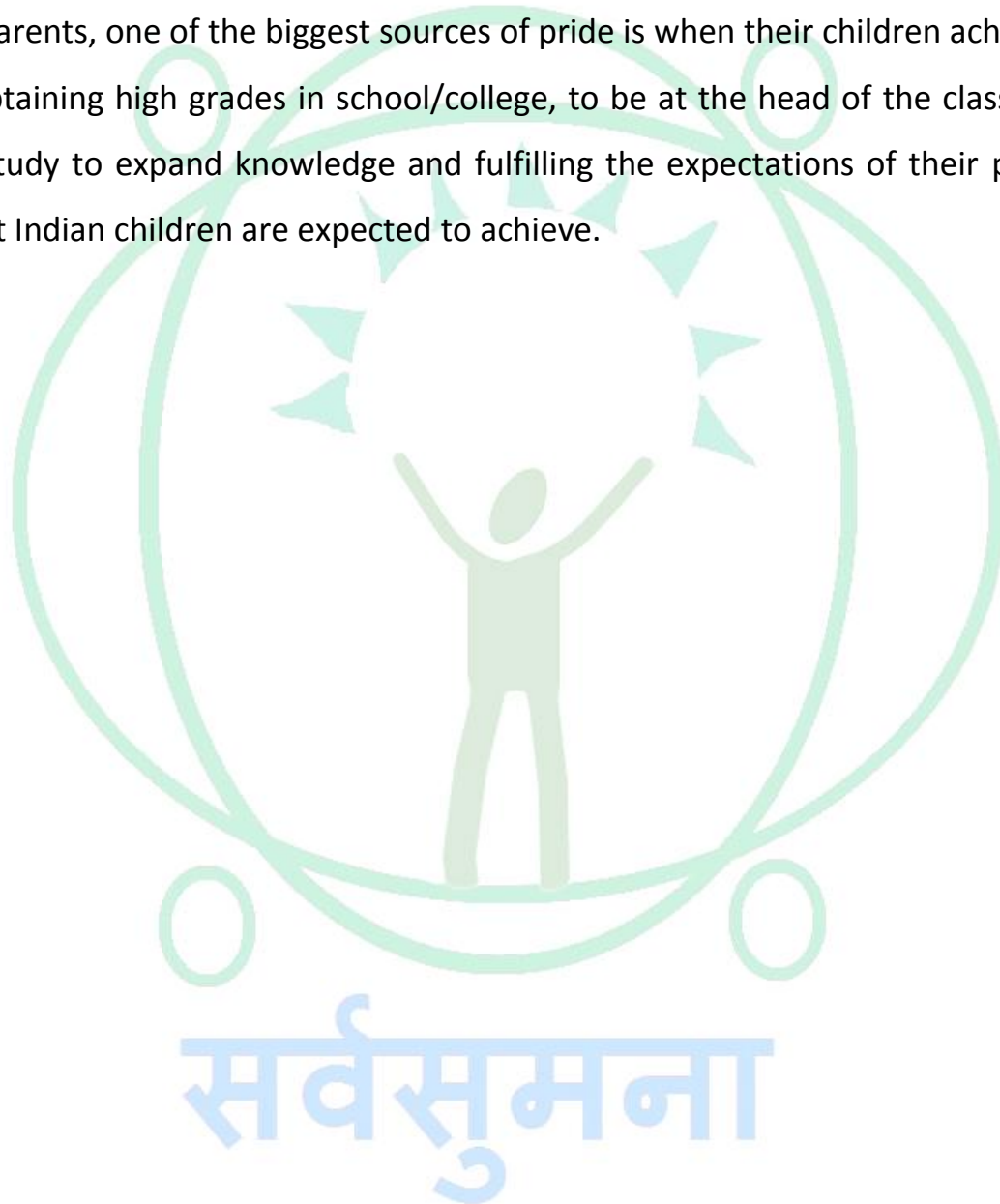
PHO 8: PARENTAL PRESSURES - A MAJOR STRESS FACTOR FOR CHILDREN IN INDIA

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For Indian Parents, one of the biggest sources of pride is when their children achieve academic success. Obtaining high grades in school/college, to be at the head of the class, undertaking additional study to expand knowledge and fulfilling the expectations of their parents are all pursuits that Indian children are expected to achieve.



PHO 9: HIV/AIDS, ART MANAGEMENT AND ADHERENCE: A MAJOR PUBLIC HEALTH CONCERN

Seema Bohet, Bohet. S*

Background: HIV/AIDS, the epidemic has become a major public health concern as it has devastated the huge population around the globe. Since the beginning of the disease globally around 34 million people infected with HIV, 60 million have contracted HIV and nearly 30 million have died of HIV related causes (WHO, 2012). Antiretroviral treatment therapy though helped in spreading the virus among PLHIVs and prolongs their life to a great extent but non-adherence has occurred as vital barrier in the management of HIV. Purpose: Understanding the social factors causing non-adherence and role of social support system in promoting adherence. Method: (total eight, No of respondents, 65-70) Focus group discussion with PLHIVs (People living with HIV) in selected hospitals of Delhi. Findings: Social Support for people living with HIV is lacking at all level. Stigma and discrimination is prominent despite the range of awareness programs run by the government as well as non-government institutions and it further leads to non-adherence in ART. PLHIVs don not accept the treatment as life savior. People with HIV especially women and being widow face many inhuman situations(such as sin on society, infected and kill husband, bad character excel from the house , no treatment access, no care and support , dependency, gender disparity etc.) in society . Moreover the various social support systems such as DNP+ (Delhi Positive Network), WNP+ (Women Positive Network) are unable to support and even access them effectively. Counseling of family members, community awareness on treatment is not considered accurately. Result and Conclusion: The findings suggest that the institutional help by providing treatment, counseling on HIV and related issues are not sufficient for the success of treatment and improve the lives of PLHIVs as well. There is a need to strength our social support and its various institutions (family, NGOs, peers etc) in such a balancing manner so that each and every system can help in providing better care and support to PLHIVs. The social work profession also found of immense support to PLHIVs as far as their human rights and social justice is concerned

PHO 10: IMPACT OF MASS MEDIA ON HEALTHCARE SEEKING BEHAVIOR

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The objective of the study is to obtain insights into the impact of mass media (television, news -paper, radio) on health seeking behavior among women with specific reference to Antenatal Care (ANC). ANC service, the dependent variable, is a dichotomous variable, defined as if the woman has received ANC from a trained healthcare professional (doctor, lady health visitor, auxiliary nurse midwife, nurse) at least once during the last pregnancy. Results: Among 600 respondents of the study, around 61 per cent (369 respondents) utilized ANC service form a trained healthcare professional at least once during their previous pregnancy and extent of ANC service. The extent of ANC service utilization was 'low' (29 per cent), 'moderate' (43 per cent) and 'high' (28 per cent) among the 369 respondents who had accessed ANC service. Socio Demographic factors had a significant association to ANC service utilization. Correlation analysis revealed that media exposure ($r=0.65$ ***) has a significant positive correlation to ANC service utilization. Logistic regression analysis revealed that media exposure had a significant influence of ANC service utilization ($\beta=.43$, $t(364)=12.6$, $p<0.01$).

सर्वसुमना



**POSTER PRESENTATION
(Public Health)**

PHP1: A CROSS-SECTIONAL STUDY OF ANXIETY AND DEPRESSION AMONG DOCTORS IN A MEDICAL COLLEGE IN CENTRAL INDIA

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Introduction: Work plays an important and central role in the lives of many people and thus, the impact of occupational stress is an important issue both for individual employees and the organization. Medical profession, since its very beginning has been stressful for all those who are involved in it, directly or indirectly. This brings about the development of anxiety or depression or both among the doctors as well as aggravation of the same among those who already have them for some other reason. A variable level of anxiety as well as depression has been shown among doctors working in clinical/non-clinical departments in the pilot study. The apparent factors behind the condition may be a few but an in-depth analysis may reveal several in apparent yet significant factors behind an individual doctor's anxious or depressed behavior. The present study is an attempt to assess the level of anxiety and depression and their associated factors among the doctors of a medical college in central India. **Aim & objectives:** To assess the level of anxiety and depression among the doctors. To compare the level of anxiety and depression among doctors based on factors such as clinician/non-clinician, academician/non-academician etc. To establish an association of anxiety and depression with work-stress **Material & methodology:** The study is conducted among all the doctors of Index Medical College, Hospital & Research Centre, Indore. Hospital Anxiety & Depression Scale (HADS) was administered to all the doctors and the responses were recorded. The data so recorded was analyzed using MS-Excel 2010 and SPSS 20.0. All the volunteering doctors were included in the study. Incorrect/incompletely filled forms, doctors not volunteering for the study and those already on anti-anxiety/antidepressant drugs were excluded. **Results and Discussion:** The results show a significant level of anxiety as well as depression among doctors of both college as well as hospital. The doctors involved in academics showed higher levels of anxiety as compared to non-academicians. Higher the designation, greater was the prevalence of depression among the doctors. The detailed and tabulated results would reveal interesting unsaid facts about anxiety and depression among the doctors.

PHP2: KNOWLEDGE, ATTITUDE AND PERCEPTION OF MOTHERS OF ADOLESCENT GIRLS REGARDING PHYSICAL AND PSYCHOLOGICAL CHANGES DURING ADOLESCENT PERIOD

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Introduction: WHO defines that in the age group of 10-19 years are known as adolescent. The term adolescence literally means to emerge, to achieve identity. One fifth of world's population is between 10 & 19 years old. Adolescence is a cross road in the development of life through which a child gradually walks to reach the maturity of adults. India has 327 million young people in the age group in the age group 10-24 years. Adolescence is the stepping stone for a child to reach adulthood. Adolescent girls constitute a vulnerable group, particularly in India where female child is neglected one. Menstruation is still regarded as something unclean or dirty in Indian society. The reaction to menstruation depends upon awareness and knowledge about the subject. The manner in which a girl learns about menstruation and its associated changes may have an impact on her response to the event of menarche. Although menstruation is a natural process, it is linked with several misconceptions and practices, which sometimes result into adverse health outcomes. **Objectives:** Aim of this study was to investigate the perceptions of mothers of adolescents on markers of reproductive, sexual and psychological development during adolescence. To elicit the beliefs, conception and source of information regarding menstruation among the study population.

Methodology:

- STUDY SETTING: Study was conducted at Pipri village (Wardha)
- STUDY POPULATION: 50 families
- STUDY DURATION: 2 days
- STUDY DESIGN: Community based cross sectional (observational) study
- Study period:- Two months duration from march to April 2014
- Questions were asked in the local language.

- Information was taken regarding the name of the respondent's name, age, education, occupation, number of daughters.
- Questions regarding physical and psychological development of their daughters during adolescence were asked.

Observation and Results:

Average age of menarche is found to be 12 to 14 years (Mean 13 years)

- 80% women were aware of menstruation.
- Knowledge of STD / HIV is around 77% among population.
- It was found that majority of adolescent girl are unaware of early pregnancy consequences.
- Knowledge on menstrual hygiene
- 82.5% use sanitary pads
- 76% clean their external genitalia
- Half of women use water for cleaning purpose while rest use soap and water.
- Perception about menstruation in adolescent
- It is physiological process
- 80% adolescent girls know their site from where menstrual blood comes.



सर्वसुमना

PHP3: PATTERN OF CONTRACEPTIVE USE BY COUPLES OF A VILLAGE IN MANENDRAGARH, KOREA DISTRICT OF CHHATTISGARH

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Introduction: The single most important problem that India is facing now is the uncontrolled growth of population. In spite of availability of a wide range of contraceptives and mass media campaigns and IEC programs, the population control remains a distant dream to achieve. Numerous studies have been carried out in different parts of the country to identify the poor acceptance of the program

It is pertinent to identify the factors responsible for poor acceptance of family planning program in different socio-cultural and socio-economic groups. Keeping this in mind, this study was carried out in a village in Manendragarh block to identify the factors influencing the contraceptive acceptance pattern in the study area. **Materials & Methods:** The study was carried out in Belbahra sector, a village in Manendragarh . It has an approximate population of 2900. The health department was providing family planning and other health care services to the village through a team of doctors, ANM, MPW and social workers. The analysis of the records of family welfare services were carried out by studying the contraceptive acceptance pattern of eligible couples during a period of six months (July to Dec) in the year 2013. **Results:** In the study, 398 eligible couples were identified in the whole village. Of these, 121(30.4%) had accepted a permanent method of contraception and 47 (11.8%) were, using temporary methods viz. Intrauterine device (IUD) 27 (6.7%) and condoms 20 (5.1%). Influence of various probable factors on contraceptive acceptance was studied. To study the impact of economic status, the families were grouped in different income groups(table-1). Majority of the couples (39.3%) belonged to middle income group and 29.4% were from higher income group. It was seen that the contraceptive acceptance was directly proportional to the economic status. Acceptance rate was 51.9% in the higher Income groups Table 2.Shows the acceptance of family planning among educated and illiterate Couples. Contraceptive acceptance among illiterate couples was only 26.2%, as compared to acceptance of 71.4% amongst the couple who had at least 12 years of formal education. Sex of the last live birth was found to affect the acceptance of permanent method of family planning. Acceptance of terminal method was higher after the birth of a male child as compared to after that of a female child. Among the 121 women who accepted terminal methods of family planning, 69.6% did so after delivery of

a male child and remaining 31.4% after that of a female child. Acceptance of family planning methods was also analyzed in relation to number of live born children per couple (Table 3). Contraception acceptance after delivery of up to two children was only 42.6% out of which 24.9% went for permanent method. The acceptance rate was 50% after the delivery of third child but only 55.4% accepted family planning methods after the delivery of four or more children. Number of female children born to a couple was also found to influence the contraception practice. About 30% of the couples accepted sterilization without having a female child. **Discussion:** Acceptance of contraception shows wide variation across the country. The variation in different parts of the country is wide and need to be investigated locally. Family income is at best a proxy indicator of the community. However it has been found in this and supported by other studies [4] also that improved economic status of the families promote acceptance of family planning methods. The family structure, i.e. joint or nuclear type is a significant variable. In this study, no such impact was observed. 'Male child syndrome' is still a widely prevalent concept. It was evident from the fact that acceptance of family planning methods after delivery of a male child (69.6%) is significantly higher than that of a female child (31.4%). However, there may be bias in this finding, as the analysis is not adjusted for total number of children. Two children, family is the recommended norm, but only 19.7% of the couples accepted sterilization after two or less number of children.



सर्वसुमना

PHP4: AWARENESS AND NEED ASSESSMENT OF OCCUPATIONAL HEALTH AND SAFETY IN TERTIARY CARE HOSPITAL

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INTRODUCTION: Healthcare associated infection affects hundreds and millions of people worldwide and is a major global issue for patient safety. Every year, lives are lost because of the spread of infections in hospitals. It complicates between 5 and 10% of admissions in acute care hospitals in developed countries. In developing countries, the risk is two to twenty times higher and the proportion of infected patients frequently exceeds 25%. Nosocomial infection rate in India is over 25% with frequency of 1 in every 4 patients admitted into the hospital and 1/3rd of all such infections are preventable. The Nosocomial infections are responsible for more mortality than any other form of accidental death. Most frequently isolated pathogens are Staphylococcus aureus(13%), E.coli (12%), Coagulase negative staphylococci(11%), Enterococcus(10%), Pseudomonas aeruginosa(9%).

This study is designed to assess and evaluate the awareness among hospital staff about the Infection Control Committee at AVBRH, a tertiary care hospital. The members of the committee in AVBRH which includes General physician, Infectious disease specialist, Surgeon, Clinical microbiologist, Infection control nurse, Representatives from other relevant departments, Laboratory, Housekeeping, Pharmacy and central supply, Administration .

Aim: Awareness and need assessment of Occupational Health and Safety in tertiary care hospital

Objectives:

- To determine awareness of infection control committee in tertiary care hospital
- To assess the need of infection control committee in a tertiary care hospital.

MATERIAL AND METHODS:

Study Setting: The study was conducted in Acharya Vinoba Bhave Rural Hospital a tertiary hospital of Datta Meghe Institute of Medical Sciences, Sawangi, Wardha.

- *Study Design: Hospital based cross-sectional Study*
- *Study Period: Data collection was done in February and March 2014.*
- *Sample size: 150 health personnel (42 doctors, 54 nurses, 54 attendants)*
- *Study population: 10% of total number of doctors, nurses and attendants (atleast 1% from each department) working in AVBRH were randomly selected as our study population.*
- *Data collection procedure: Data was collected in a predesigned structured questionnaire.*

Observation and Results: 59% of attendant, 52% of doctors, 40% of nurses in our study population belongs to the age group of 26 to 35. 51% of attendants have 6-10 years of work experience, while 69% of doctors, 42% of nurses in have 5 years of work experience. 42.5% of attendants, 80% of doctors and 75.9% of nurses are working in surgical/maternity/medical/paediatrics ward. 29.6% of attendants feel that they themselves are responsible for their safety. 50% of doctors feel that infection control committee is responsible for their safety. 25.9% of nurses feel that their supervisor is responsible for their safety. 68.5% of attendants, 83.3% of doctors, 94.4% of nurses feel that protective clothing is necessary. 68.5% of attendants, 83.3% of doctors, 94.4% of nurses feel that ventilation is as important as lighting. 18.5% of attendants, 30.9% of doctors, 25.9% of nurses in our study population have suffered from injury/infection in hospital. 90% of attendants, 92% of doctors, 92.8% of nurses in our study population report their injury/infection. 50% of attendants, 46.15% of doctors, 42.85% of nurses feel that the cause of injury/ infection is due to lack of equipment. 73.8% of doctors are sure about the existence of infection control committee, but 59.2% of attendants and 50% of nurses are not sure about the existence of infection control committee. 46.2% of attendants, 42.8% of doctors and 59.2% of nurses feel that there is no definite time of training. 46.2% of attendants, 52.3% of doctors and 61.1% of nurses feel that there is no definite time for monitoring. 62.9% of attendants, 61.9% of doctors and 68.5% of nurses are satisfied with management's efforts. 50% of attendants, 85.7% of doctors and 64.8% of nurses believe that effective infection control policies do have an impact over job performance. 62.9% of attendants, 50% of doctors and 75.9% of nurses feel that effective infection control policies aid in reducing injury/infection.

PHP5: KNOWLEDGE, ATTITUDE AND PRACTICE OF HIV IN THE LATE ADOLESCENT STUDENTS IN RURAL AREA OF DEOLI BLOCK, WARDHA DISTRICT, MAHARASHTRA.

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Background: HIV prevalence continues to be high among vulnerable groups. Physical, psychological, and social attributes of adolescence make young people particularly vulnerable to HIV and other sexually transmitted infections. **Objectives:** 1) To determine awareness about HIV among the adolescent age students. 2) To assess the interpretation regarding the signs and symptoms, modes of transmission, type of sex that carries high risk, safer sex and how to keep them healthy. **Method:** A cross sectional study on Late adolescent college going students both males and females in a Junior College in Deoli block of Wardha district where 200 students were interviewed (Male: 117, Female: 83) by a pre-designed, pre-tested anonymous, self-administered questionnaire was filled by 11th, 12th standard students after obtaining necessary permission. **Result:** Sixty three percent students were aware about HIV/AIDS. TV was the main source of information. Male students were found to have better knowledge regarding transmission and prevention of AIDS than female students. Decrease in misconceptions and an increase in knowledge occurred about various modes of transmission of HIV& its prevention. **Conclusion:** The present study highlights that 100% of them are aware of HIV/AIDS. TV plays a significant role in knowledge about HIV among adolescents.

सर्वसुमना

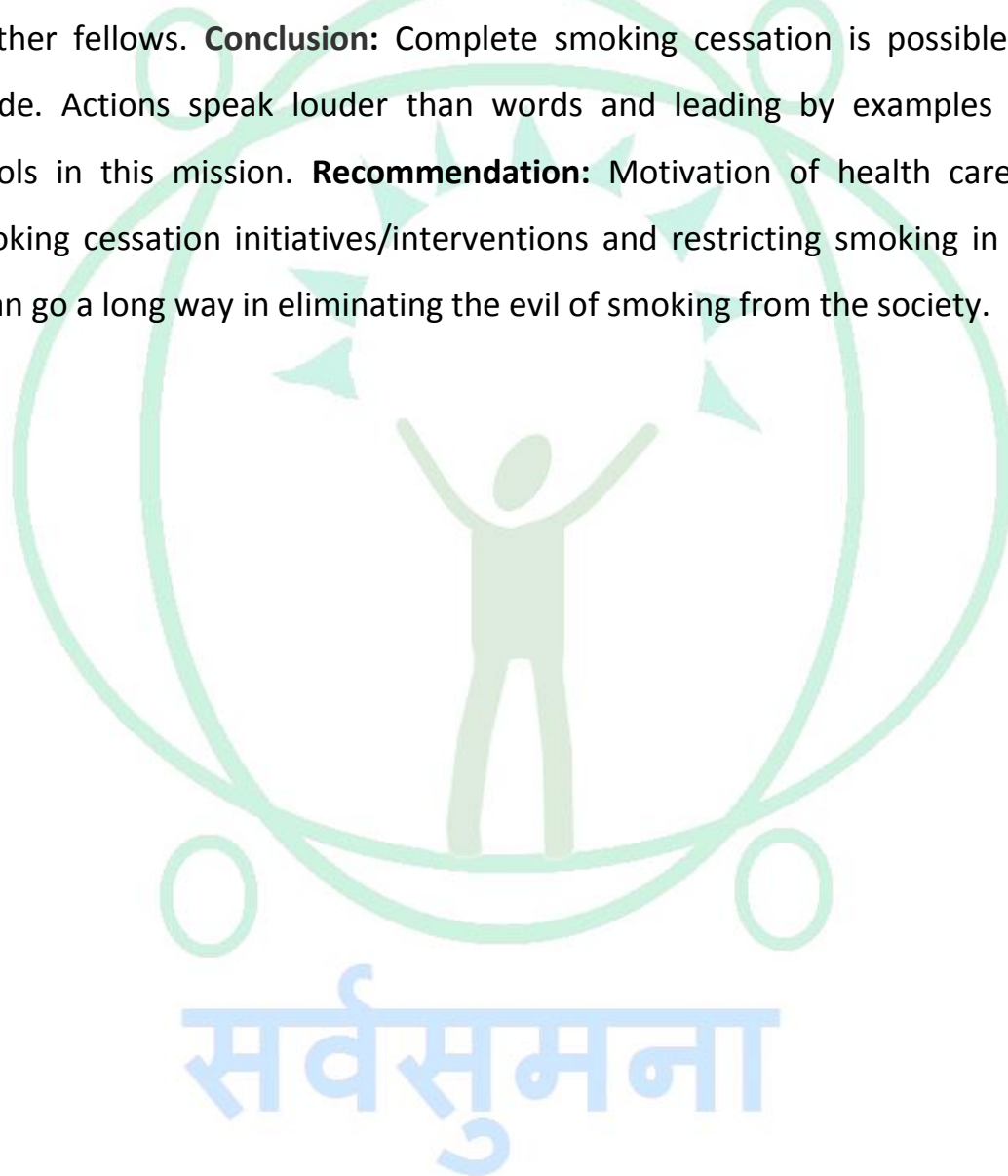
PHP6: SMOKING CESSATION SUCCESS STORY AMONG SECURITY PERSONNEL IN RURAL TERTIARY CARE INSTITUTE OF HARYANA

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Introduction & Objectives: Smoking is one of the top risks for health loss in India, leading to nearly one million deaths every year. More than 80% of the world's smokers live in low- and middle-income countries. At present over 1,300 million people in the world are smokers. Tobacco kills 5.4 million people a year - an average of one person every six seconds - and accounts for one in 10 adult deaths worldwide. In spite of all this smoking rates remain dangerously high for men. Peer pressure and addiction components play major role in initiation and continuation of smoking habits. So, there is more work to be done to get rid of this evil on these lines. Hence, for the same objective, after assessing smoking problem magnitude and socio demographic data of all security personnel, smoking cessation interventions were undertaken. **Material and Methods:** All the security personnel working in the institution were included in the study. The adopted strategy for smoking cessation included: Actions speak louder than words and leading by examples. So, first of all, investigator made it clear to all personnel that falling into the habit of smoking is simply a matter of social environment (peer group) and not a sin. In the same way, if an environment conducive for smoking cessation is created, one can get out of this addiction. Success and failure for smokers and non-smokers were set in the form of coming out of habit of smoking and helping their peers to come out of smoking respectively. Initially more focus was put on security officer, assistant security officers and supervisors to help them come out of this habit. Subsequently, same focus was put on all the 114 security personnel having 49 smokers. Since, all the 11 females were non-smokers, the smoking cessation interventions were initiated among males only. **Results:** Among all the supervisory staff (one security officer (SO), two assistant SO and four supervisors), SO and one ASO and three supervisors were smokers. After

one month of intensive efforts, all of them turned in to currently non-smokers. Smokers and non-smokers were appreciated for their success in 'coming out of the habit' and 'taking out of the habit' respectively. Then, the supervisory staffs were used as live examples and it motivated others to a large extent. After six months of this intervention, all security personnel, but for three, became currently non-smokers. These remaining three are also being motivated and supported to come out of it and it is expected that very shortly, they will also join their other fellows. **Conclusion:** Complete smoking cessation is possible if taken in a mission mode. Actions speak louder than words and leading by examples are the most effective tools in this mission. **Recommendation:** Motivation of health care providers to address smoking cessation initiatives/interventions and restricting smoking in institutions in true spirit can go a long way in eliminating the evil of smoking from the society.



PHP7: THE DETECTION OF POSTNATAL DEPRESSION IN MOTHERS USING THE EDINBURGH POSTNATAL DEPRESSION SCALE.

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Introduction: Postpartum depression is less common than postpartum blues but is a more disabling psychiatric illness associated with childbirth. According to ICD-10 classification, postnatal depression is mild mental and behavioural disorder associated with the puerperium and onset is considered to be within 6 weeks after delivery. Postnatal Depression is an important category of depression in its own right. Depression is prevalent in pregnancy and its prevalence is reported between 4%-29% globally. **Objectives:** To find out Prevalence of Postnatal Depression in Mothers during six weeks to six months following delivery in rural area of Wardha district. **Methodology:** The study was conducted in Seloo block, which is field practice area of Acharya Vinoba Bhave Rural Hospital, Sawangi (Meghe), Wardha, Maharashtra, India. The study was conducted in two and half year's duration from June 2012 to October 2014. Total 280 mothers were eligible for the study. This study is a Community Based Cross Sectional Study. Edinburg Postnatal Depression Scale (EPDS) was used with a cut-off score of 12 is taken. The data is analyzed using SPSS version 16. **Result:** 28.9% mothers were found to be depressed on Edinburg postnatal depression scale. Thus, 81 mothers have marked for score of more than or equal to 12 on depression scale, while 199 mothers were non-depressed. **Conclusion:** This study provides good evidence that the postnatal depression is a severe disorder and common among mothers in postnatal period and the Edinburgh Postnatal Depression Scale is an effective screening tool that can be easily used in primary care settings for screening at-risk mothers.

PHP10: ASSESSMENT OF DIABETES DISTRESS AND DISEASE RELATED FACTORS IN PATIENTS WITH TYPE 2 DIABETES ATTENDING A TERTIARY CARE HOSPITAL, BENGALURU

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Diabetes is one of the most serious health concerns worldwide. It is estimated that a 55% increase will occur in the number of patients living with Diabetes from 2010 to 2030. Diabetic patients also suffer from diabetic related distress and prevalence of Depressive symptoms which ranged from 18% - 35%. **OBJECTIVES:** To assess Diabetic distress among type 2 diabetic patients attending Medical OPD at Rajarajeswari Medical College and Hospital, Bengaluru by using DSS17 scale. **MATERIALS AND METHODS:** A cross-sectional study was conducted from October to November in 2014. All diabetic patients who met inclusion criteria attending Medical OPD during month of October and November were included in the study, which constituted 134 study subjects. Patient diabetic distress was measured by using DDS 17, which developed by Polonsky et al. in 2005. Data collected was analyzed by using SPSS 20.0. **RESULTS:** Among 134 type-2 Diabetics the proportion of patients with Diabetic Distress was 30. The average score for patients' diabetes distress was 2.15 ± 0.90 ; and the average scores for each domain of DDS-17 scale for Emotion burden was (2.20 ± 1.07) , for physician distress was (1.96 ± 0.92) , regimen Distress was (2.13 ± 0.99) and interpersonal distress was (2.24 ± 1.21) , respectively. It was observed that 'interpersonal distress' was the most significant domain in measuring diabetes-related distress. There was a significant relationship between the total DDS-17 score and patients' related variables such as education ($p = 0.03$) and Years with type 2 Diabetes ($p=0.03$).

Post –Conference Workshop on
“Child safety at schools”

**“Growing with peace, helping to eradicate
violence @ schools”**

Dr. B. Imtiyaz



The selected articles will be published in the
**“International Journal of Public Mental
Health and Neurosciences”**

ISSN 2394-4668



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With best wishes from

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