

**News from School of Physiotherapy, RK University**  
National level Bio Statistics workshop  
Celebration of International Days  
Galore 2013  
Parkinson's Disease Support Group Meet

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### Physiofest 2013

Summary Report  
Publication of Papers  
Winners of various events  
Snaps of the events  
Students' Excellence in 2012-13

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### News at Glance

Complements for Physiofest – '2013  
Research Article on "Shoulder Impingement Syndrome" by Dr. Maulik Shah

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Volume III Issue 1 – June 2013

# Physioforum

Quarterly Published Physiotherapy Newsletter

The news letter from students and faculties of School of Physiotherapy, RK University, Rajkot

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**A NATIONAL PHYSIOTHERAPY STUDENTS' SUMMIT**

**PHYSIO FEST 2013**

**EVENTS 6<sup>th</sup> April 2013**

TALENT KHAZANA Cultural Competition	ABHYAAS Platform Presentation	STREET SMART Competitive MCQ Test
TREASURE HUNT Solve The Clues	MIND GAME Quiz Competition	PUBLIC SABHA Debate Competition
	ARTISTRY Students Exhibition	ARTISTRY Exhibition
	SKETCH ME IF YOU CAN Poster Presentation	

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## News from School of Physiotherapy, RK University



**National level workshop** on  
*"Computing in data mining and analysis –  
Biostatistics easier than before..."*  
Organized on 6th October, 12 At  
School of Physiotherapy, RK University

### International Day of Disabled Persons

Students interacting with disabled, arrived from Apang Bal Gruh, Bhaktinagar, Rajkot. Fun loving games were also organized for the disabled on the occasion of  
**International Day of Disabled Persons on 3 December 2012** at School of Physiotherapy, RKU



### WORLD PHYSIOTHERAPY DAY

On 8th September, 2012, students and faculties of School of Physiotherapy had organized a **WALKATHON** on global theme of **"Movement for Health"** around police Head Quarter Gate (Nal-Circle), Racecourse Ring Road, Rajkot

### Gala of Galore 2013 - The Annual Festival of RK University

A most awaited, sports and cultural festival at RKU with lots of fun and entertainment for and by the students. It consists of cultural events, sports competitions including rangoli, elocution, photo, drawing and many more competitions and events.



### Parkinson's Disease Support Group (PDSG)

organizers meets quarterly at RK University campus, RK Physiotherapy center and various places of Rajkot with more than 75 Members With Parkinson's Disease, actively serving In community to support people with Parkinson's Disease In Saurashtra.



### Summary Report on Physiofest - 2013

School of Physiotherapy, managed by **Shri Samjibhai Harjibhai Taravia Charitable (SHTC) Trust** and RK University (RKU) affiliated, constantly strives to provide the quality inputs to students by providing them various platforms for their overall development. Taking this effort further, **physiofest - 2013 – The 4<sup>th</sup> National Physiotherapy Students' Summit** was organized on 6th April, 2013 for future physiotherapists to craft their knowledge and skill beyond brick and mortar learning in presence of Chief Guest, **Prof. Bharati Bellare** - School of physiotherapy, MG Medical College, Navi Mumbai, Guest of Honor, **Dr. Dilip Doshi** - Senior Clinical Physiotherapist, Executive Vice President, RKU, **Mr. Denish Patel** - VC, RKU, **Dr. Rama Mohan Rao** - Registrar **Mr. Shivalbhai Ramani**, **Prof. Yagna Shukla** - BJ Medical College, Ahmadabad, principles, faculties and students from various institutes of India.



Dr. Maulik Shah, AP, SOPT and convener,  
on welcome speech



Lightening lamps at Inaugural ceremony



More than 700  
Students'  
delegates  
participated in  
various events  
of Physiofest  
2013.



Participants expressing their ideas with innovative educational and therapeutic concept & Models of Anatomy, biomechanics, Exercise & Electro Therapy Instruments



## Renowned Speakers at Physiofest - 2013



***“Neckpain – Backpain Rehabilitation by Core Stability Exercises” by  
Dr. Yagna Shukla PT,***

Senior Lecturer,  
Govt. Physiotherapy College & Spine Institute,  
Civil Hospital, Ahmedabad

***“Musculo Skeletal Pain – A Curse to Cure” by***

**Dr. Bhavna Gadhavi PT,**

Sr. Lecturer & Additional Principal  
AIMS, Lapkaman, Ahmedabad



***Preventive Physiotherapy and functional diagnosis by***

**Prof. Bharati Ballare, PT,**

School of Physiotherapy, M G Medical College,  
Navi Mumbai

***Using Goal Attainment Scale as an Outcome Measure by***

**Dr. Prakash V. PT,**

Assistant Professor,  
Charotar Institute of Physiotherapy, Changa



**memories...**





## Abstracts of Paper and Poster Presentations of Winners and Runners-up from Physiofest - 2013

### ABSTRACT-Paper Winner

#### **"A Study to Evaluate the Spinal Accessory Neuropathy in Individuals with Chronic Non Specific Neck Pain"- A Comparative Study**

**Presenter:** Miss Khyati Kamdar, Shree K. K. Sheth Physiotherapy College, Rajkot

**BACKGROUND:** Chronic non specific neck pain is the most common function limiting musculoskeletal problem and affects mainly modern society leading to physical, psychological, occupational disability. With an increasing sedentary population, it is predicted that the prevalence rate of non-specific neck pain continue to rise. Chronic non-specific neck pain is defined as pain located between occiput to 3<sup>rd</sup> thoracic vertebrae, lasting more than 3 months without any specific underlying pathology. To keep the body and head in an erect posture and coordinate the neck and upper-back movements, this muscle always requires sustained contraction. It has been found that trapezius muscle spasm is common with chronic neck pain. Chronic trapezius spasm associated with chronic neck pain, might result in compression of the spinal accessory nerve, leading to weakness of the trapezius muscle, thus weakening one of the cervical spine support systems and as a result causing neck pain.

**AIM:** To Evaluate The Spinal Accessory Neuropathy In Individuals With Chronic Non Specific Neck Pain.

**STUDY DESIGN:** A Cross-sectional Observation Study

**METHOD:** A total number of 30 subjects will be equally divided into two groups as per inclusion & exclusion criteria. Group- A (control group) contains 15 normal individuals and group-B (experimental group) contains 15 subjects with chronic non-specific neck pain.

MNCV of bilateral Spinal Accessory Nerves & surface EMG of both the upper trapezius will be done. And then obtained values will be compared with the values of normal individuals.

**OUTCOME MEASURE:** MNCV of the Spinal Accessory Nerve, Surface EMG of upper trapezius

**KEY WORDS:** Chronic Non Specific Neck Pain, Spinal Accessory Neuropathy.

### ABSTRACT- Paper runner Up

#### **"Effects of Kinesthesia and Balance Exercises On Knee Joint Proprioception in Women with Knee Osteoarthritis- An Interventional Study"**

**Presenter:** Miss Halak Patel, AIMS, Lapkaman, Ahmedabad

**Background/Introduction:** In patients with knee osteoarthritis (OA), there is a prominent loss in Proprioception and kinesthesia sensation compared with control subjects of the same age and gender.

**Objectives:** The aim of this study is the investigation of short-term clinical effect of kinesthesia and balance exercises on knee joint Proprioception in patients with knee OA.

**Methods:** This 3-week study was conducted on 30 female patients with knee OA who were randomized into 2 groups. The first group received kinesthesia and balance exercises (such as retro walking, walk in go their toes, leaning to the sides, balance board exercises, plyometric exercises, and so on) in addition to standard OA knee treatment protocol. The second group received only standard OA knee treatment.

**Key words:** osteoarthritis, knee, kinesthesia, Proprioception, exercises

### ABSTRACT-Poster Winner

#### **TITLE: "EFFECT OF ENVIRONMENTAL TOBACCO SMOKING ON PULMONARY FUNCTIONS IN 2<sup>nd</sup> TRIMESTER PREGNANT WOMEN"**

**AUTHOR:** Ankita Makwana, **Guided by:** Dr. Shanmugananth, Dr. Chaitsi Jani, C.U.Shah Physiotherapy College, Surendranagar

**BACKGROUND:** Passive smoking is defined as the exposure of a nonsmoker to tobacco smoke in the environment. Prolonged exposure to passive smoking during pregnancy significantly increases the risk of Miscarriage,



Preterm labor and infants with low birth weight. It was shown to be associated with significantly affected spirometric indices in pregnant women.

**OBJECTIVE:** To determine the effect of environmental tobacco smoking on pulmonary functions in 2<sup>nd</sup> trimester pregnant women.

**PURPOSE:** To create the awareness of reducing the hazardous effect of smoking on embryo.

**METHODS:** The study included 60 Second Hand Smoker pregnant subjects who are in 2<sup>nd</sup> trimester. They are divided into two groups- **Group A** involved 30 subjects who are exposed to passive smoking and **Group-B** who are not exposed to passive smoking & they are identified by Smoking Questionnaire.

**RESULT:** Result shows statically difference in FVC, FEV<sub>1</sub> and PEFR between passive smoker women and non-smoker women.

**CONCLUSION:** The study shows decrease in Pulmonary Function Test data among Second Hand Smoke in 2<sup>nd</sup> trimester pregnant women.

**KEY WORDS:** Environmental Tobacco Smoking, Pulmonary Function Test, Pregnant Women, FVC, FEV<sub>1</sub> AND PEFR.

**ABSTRACT – Poster - Runner up**  
**TITLE: “A BASELINE EVALUATION OF ENVIRONMENT & POLICIES FOR PHYSICAL ACTIVITY IN SCHOOLS OF JAMNAGAR CITY”**  
**Presenter: Miss Janki Aghera, Swaminarayan Physio College, Jamnagar**

**BACKGROUND:** Physical inactivity is a major risk factor for developing coronary artery disease. It also increases the risk factors of stroke & such other major cardiovascular risk factors as obesity, high BP, low HDL cholesterol & diabetes. Physical activity produces over all physical, psychological & social benefits. Schools have profound influence on thinking patterns and behavior of children and their families. The school environment and policies affect the behavior of children in the formative years of their personality that directly influence their lifestyles later in life. Active children are likely to become inactive adults.

**AIMS:** To evaluates the environment & policies for physical activity in schools of Jamnagar city.

**MATERIALS & METHDOLOGY:, STUDY DESIGN-** Observational study. **STUDY SETTING-** Primary schools of Jamnagar city. **SAMPLE SIZE-** 20 schools. **INCLUSION CRITERIA-** Primary section of schools in Jamnagar city. **EXCLUSION CRITERIA-** The school whose principal denied for participation. **MATERIALS:** Pen, Paper. **METHODS:** 20 schools were visited & study purpose and procedure was explained to the principal. Written consent was taken from each principal. School policies for physical activity promotion among students and environment in the schools were assessed by interviewing authorities, reviewing related documents and direct observation in schools. **KEY WORDS:** Environment, Policies, Physical Activities

### Top Ten Rankers of Saurashtra University (SU) Examination - August 2012

Years	2 <sup>nd</sup> year (SU)	3 <sup>rd</sup> year (SU)	4 <sup>th</sup> year (SU)
Names	1 <sup>st</sup> Rank – Motwani Aarti 4 <sup>th</sup> Rank – Nathavani Sahil 6 <sup>th</sup> Rank – Joshi Komal 7 <sup>th</sup> Rank – Goyani Shivangi 10 <sup>th</sup> Rank – Trivedi Mittal	1 <sup>st</sup> Rank – Fataniya Bansi 4 <sup>th</sup> Rank – Patel Disha	3 <sup>rd</sup> Rank – Makhansa Shital 4 <sup>th</sup> Rank- Singh Lalli 6 <sup>th</sup> Rank –Shah Khanjan 10 <sup>th</sup> Rank - Bhalani Ravi

### Top Rankers of RK University (RKU) Examination – February 2013

Years	1 <sup>st</sup> Semester(RKU)	3 <sup>rd</sup> Semester (RKU)
Names	1 <sup>st</sup> Rank – Bharmal Zainab 2 <sup>nd</sup> Rank –Bhattacharya Himakshi 3 <sup>rd</sup> Rank – Thakker Jeni	1 <sup>st</sup> Rank – Bhuva viral 2 <sup>nd</sup> Rank –Savsani Khushboo 3 <sup>rd</sup> Rank – Samani Kinjal



### List of Winners Physiofest – 2013

#	Event	Winners	Runner Up
1	<b>"MIND GAME"</b> Quiz Competition	1. Mr. Nathwani Sahil 2. Mr. Savaniya Shrikant 3. Mr. Desai Tilak <b>School of Physiotherapy, RK University, Rajkot</b>	1. Miss Aghera Janki 2. Miss Hirpara Julee 3. Miss Rizavana Mahida <b>Swaminarayan College of Physiotherapy, Jamnagar</b>
2	<b>"PUBLIC SABHA"</b> Debate Competition	1. Miss Patel Prachi 2. Miss Patel Nidhi 3. Miss Agrawal Rajshree <b>Charotar Institute of Physiotherapy, Changa, Ahmedabad</b>	1. Miss Parekh Kunjal 2. Miss Udeshi Vaidehi 3. Miss Vansadadia Rucha <b>Shree K K Sheth Physiotherapy College, Rajkot</b>
3	<b>"TREASURE HUNT"</b> Solve the Clues	1. Miss Megha Patel 2. Miss Maitry Trivedi 3. Miss Garasiya Devyangi 4. Miss Garasiya Nidhi 5. Miss Patel Mital	<b>School of Physiotherapy, RK University, Rajkot</b>
4	<b>"TALENT KHAZANA"</b> Cultural Competition	1. Miss Mehta Harshini <b>Shree K K Sheth Physiotherapy College, Rajkot</b>	1. Mr. Jaydev & Group <b>School of Physiotherapy, RK University, Rajkot</b>
5	<b>"STREET SMART"</b> MCQ Test (PG)	1. Miss Khyati Kamdar <b>Shree K K Sheth Physiotherapy College, Rajkot</b>	1. Miss Kunjal Parekh <b>Shree K K Sheth Physiotherapy College, Rajkot</b>
6	<b>"STREET SMART"</b> MCQ Test (UG)	1. Miss Ved Krina <b>Shree K K Sheth Physiotherapy College, Rajkot</b>	1. Mr. Bhatt Falgun <b>Charotar Institute of Physiotherapy, Changa, Ahmedabad</b>
7	<b>"SKETCH ME IF YOU CAN"</b> Poster Presentation (PG)	1. Miss Divya Gohil <b>C U Shah College of Physiotherapy, Surendranagar</b>	1. Miss Ankita Makwana <b>C U Shah College of Physiotherapy, Surendranagar</b>
8	<b>"SKETCH ME IF YOU CAN"</b> Poster Presentation (UG)	1. Miss Jivani Meet <b>Parul Institute of Physiotherapy, Baroda</b>	1. Miss Bhattacharya Himakshi 2. Miss Thakker Jeni <b>School of Physiotherapy, RK University, Rajkot</b>
9	<b>"ABHYAAS"</b> Platform Presentation (PG)	1. Miss Khyati Kamdar <b>Shree K K Sheth Physiotherapy College, Rajkot</b>	1. Miss Patel Halak <b>Ahmedabad Institute of Medical Science, Ahmedabad</b>
10	<b>"ABHYAAS"</b> Platform Presentation (UG)	1. Miss Aghera Janki <b>Swaminarayan College of Physiotherapy, Jamnagar</b>	1. Miss Zeel Upadhyay <b>B. G. Patel College of Physiotherapy, Anand</b>
11	<b>"ARTISTRY"</b> Exhibition cum Talent Hunt	1. Miss Varsha Pikal <b>Parul Institute of Physiotherapy, Baroda</b>	1. Miss Patel Avani 2. Miss Prajapati Suchi <b>Charotar Institute of Physiotherapy, Changa,</b>





## Compliments for Physiofest - 2013

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## Research Article

### “EFFECTIVENESS OF SCAPULAR STABILITY EXERCISES IN THE PATIENT WITH THE SHOULDER IMPINGEMENT SYNDROME”

**Author:** Dr. Maulik Shah, Assistant Professor, School Of Physiotherapy, RK University

**Co Author:** Dr. Ankur Khant, Associate Professor, School of Physiotherapy, RK University.

**Background and Objectives:** The scapular musculature is often neglected in the evaluation and treatment of shoulder injuries lead to scapular dysfunction which results in altered biomechanics of



the shoulder girdle. Therefore this study was designed to compare the effectiveness of Conventional Physiotherapy plus scapular stability exercises and Conventional Physiotherapy alone on pain and functional status of the patients with shoulder impingement syndrome. **Materials and Method:** Samples of 60 subjects with Shoulder Impingement Syndrome were divided randomly into two groups, control group and clinical trial group. Each subject was treated for a period of 4 weeks, 6days a week, one session per day. Pre-treatment and post-treatment

assessment was done using visual analogue scale(VAS), shoulder pain and disability index(SPADI) and lateral scapular slide test(LSST). **Result:** Paired and Unpaired t-test used for comparing control and clinical trial groups for post-treatment effects. Clinical Trial group showed extremely significant improvement in VAS, SPADI and LSST score as compared to Control group.

**Interpretation and Conclusion:** Conventional exercise therapy plus scapular stability exercises is more effective than Conventional exercise therapy alone in improving pain and functional disability in Shoulder Impingement Syndrome patients. **Discussion:** A well coordinated synergistic co-contraction of Rotator cuff muscles & Scapular Stabilizers is very necessary to anchor the scapula and guide movement, thereby maintaining scapulohumeral rhythm. Cross sectional studies demonstrate that when the muscles are weak or fatigued, scapulohumeral rhythm is compromised and shoulder dysfunction results.<sup>40, 44</sup> This dysfunction can cause micro trauma in the shoulder

muscles, capsule, and ligamentous tissue and lead to impingement. Biomechanical studies show that scapular stability exercises promotes posterior tilting, upward rotation and external rotation of the scapula. This normal biomechanics of the scapula along with surrounding musculature is very vital to the overall normal function of the shoulder. Rotator cuff strengthening is the obvious treatment for the treatment of the shoulder impingement syndrome but as the origin of the rotator cuff muscle arise from the scapula, an effective exercise regime for rehabilitation should include improving the strength and function of muscles that control the position of scapula.



Weakness of these muscles may lead to altered biomechanics of the Glenohumeral joint with resultant excessive stress imparted to the rotator cuff and anterior capsule. Hence, primary aim of this study is to determine the effectiveness of the scapular stability exercises in patients with shoulder impingement syndrome to improve pain and physical function. **KEY WORDS:** scapular stability exercise shoulder impingement syndrome, shoulder pain and disability index

## Curricular and Extra Curricular Activities at School of Physiotherapy, RK University

**Parkinson Diseases Support Group (PDSG) meet**  
has scheduled on 25<sup>th</sup> May, 2013



**Alumni meet organized by students on 4<sup>th</sup>**  
**November, 12.**



Students and Faculty celebrated **International Day Of Disabled Persons with Physiotherapy Camp**, organized by Lions Club of Tardev, Mumbai and Shri Raj Subhag Ashrum, Sayla at **Shri Ashrivad Viklang Center, Sayla, Surendranagar, Gujarat** on 2<sup>nd</sup> and 3<sup>rd</sup> November, 12.

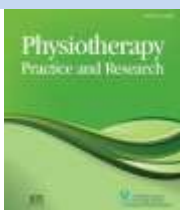


**“Break barriers, open doors”**



**Admission Announcement for Master of Physiotherapy (MPT) - June 2013 session**  
commencing from 5<sup>th</sup> July, 2013 with following specialization...

- ✓ MPT in Musculoskeletal
- ✓ MPT in Cardiovascular and Pulmonary
- ✓ MPT in Neuromuscular and Psychosomatic
- ✓ MPT in Rehabilitation (preventive physiotherapy)
- ✓ MPT in Pediatrics
- ✓ MPT in Electro Diagnostic Studies
- ✓ MPT in Women's Health



### Events concluded

- **Research Aptitude Test (RAT)** for PhD (physiotherapy) June 2013 was conducted on 5<sup>th</sup> May, 2013.
- **Doctoral Research Committee (DRC - PhD)** was scheduled on 16<sup>th</sup> April, 13.
- **Project work – PG Students**

### Fourth coming events

- **Physiotherapy Camp for people with Neck and Back pain** at RK Physiotherapy and Research Center, opp. Meghani rang bhavan, Bhaktinagar Circle, Rajkot 360002.
- **Faculty Development Program (FDP)** on 23<sup>rd</sup> June, 2013 by **Dr. Ketan Kotecha**, Dean, Nirma University on “How to make classroom teaching interactive?”



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