

years of age. Children with normal nutrition were taken as controls and those with undernutrition were taken as cases. The study found that undernutrition was a severe health problem in cerebral palsy children and the risk factors were also found out. The main risk factors were oromotor dysfunction, presence of medical problems, GMFCS levels.

## O5

### Efficacy of spinal brace in preventing progression of adolescent idiopathic scoliosis

Sreekala V K

*Professor & HOD, Department of PM & R, Medical College, Trivandrum*

Eighteen adolescent girls in the age group of 10 to 16 were studied in June 2010 to May 2012. Of these two had to undergo surgery as the curve was more than 50 degree Cobb's angle at the time of first presentation (11%). Out of 16, 12 have remained the same improved (75%). All 16 were treated with very low temperature Thermoplastic Spinal brace. One interesting finding is that irrespective of the duration of wearing the brace none worsened / progressed during the period of study.

**Keywords:** Adolescent Idiopathic Scoliosis, Spinal Brace.

## O6

### Rehabilitation of burn injury cases

Dash J B

**Objectives of Investigation:** Burn injuries comes up with challenges of being most sensitive, riskful area of treatment, unwarranted chances of recovery, demanding experienced handling and optimal care. My investigation was atfirst geared up within my own domain in PM&R dept. in Kalinga Hospital(Odisha) wherein I selected 30 suitable cases that answered almost all queries pertaining to this area. Hereby I present an overlook about the relevant findings of my work.

**Methods Used:** Prior to the conventional methods of treatment a very essential step is creating awareness for physiotherapy in the patient to help prevent *contracture and deformity* followed by the *Planning of Physiotherapy* such as

TBSA assessment

Progressive Therapeutic Exercises Program

Wax bath in hand injury cases.

Electrophysiotherapy

Ambulation etc (detailed in the presentation)

and most importantly social integration to family & society.

**Result:** Post the initial treatment results of recovery are classified under excellent, good, average and poor. Regular follow-ups and treatments are lined up from time to time even after the patient is discharged till the journey from "poor" to atleast "good" ensures our job is well done.

**Conclusion:** Medication saves life but rehabilitation helps live it again. However this is practised by few corporate hospitals only. Moreover burn injury cases being acute are referred to PM&R dept. after the patient's vitals are stable. My cases under investigation have been probed over a period from 8.4.2005-8.8.2012. Still a thousand other cases await to be put under scanner. With some serious interest and skillful indulgences I hope our purpose sees the ultimate sunshine.

## O7

### Study of histopathological features in various stages of pressure ulcer and to know whether this knowledge will help in its management

Sreejith R

**Objective:** To study the histopathological features in various stages of pressure ulcer and to know whether this knowledge will help in its management.

**Materials and Methods:**

**Design:** Descriptive study

**Settings:** Inpatients in Dept .of Physical Medicine & Rehabilitation, Calicut Medical College

**Study tool:** Spinal cord injury patients with pressure ulcer

**Period of study:** 1<sup>st</sup> November 2011 to 31<sup>st</sup> May 2012

**Inclusion criteria:** Patients with pressure ulcer of stages 2,3 &4 who required tissue biopsy for culture and sensitivity.

**Exclusion criteria:** Patients with cognitive impairment, patients without significant caregiver.

**Procedure:** Subjects were taken into study with written informed consent. A bit of tissue is biopsied from the edge of the ulcer along with those taken for culture and sensitivity and send separately to department of pathology for histopathological examination.

**Results:** The salient histopathological features of stage 2, 3 & 4 pressure ulcers is studied.

**Conclusion:** Discuss if the knowledge of microscopic details help in improving management of pressure ulcers.

**Keywords:** Pressure ulcers, Histopathology

## O8

### Quality of life and functional status of inmates of old age homes

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**Objectives:** To study the Quality of Life (QOL) of inmates of oldage homes in the urban part of Thiruvananthapuram district using SF36 QOL Questionnaire.

To assess the functional status of these inmates of Oldage homes using Barthel Index.

**Design:** Descriptive Cross-sectional Study

**Setting:** Oldage homes in the urban part of Thiruvananthapuram District.

**Population or Participants:** People selected by following inclusion and exclusion criteria

**Inclusion Criteria:** Both males and females above age of 60 years who gave a written consent for the study.

**Exclusion Criteria:** Bed ridden patients

Spinal Cord Injury survivors

Stroke patients

Traumatic brain injury survivors

Amputees

Patients with psychiatric illness or on medication

Patients with dementia, parkinsonism, etc

Malignancy

**Period of Study:** 1 year.

**Method of Sampling:** Conveniently selected oldage homes in urban area of Thiruvananthapuram district.

**Methodology:** Study to be conducted using self developed Proforma and Questionnaires by Interview method.

**Outcome Measures:** SF36 QOL Questionnaire: It is a generic measure which consists of 36 questions spanning 8 domains. It has been validated for geriatric population.

**Barthel Index:** It is to assess the level of functional independence/dependence for ten Activities of Daily Living (ADLs) primarily related to personal care and mobility. It tests ten ADLs including the ability to independently feed oneself, bathe, groom oneself, control of bowels and bladder, toilet use, transfers, mobility on level surfaces and stairs. It has a point value for each section. A higher score means the patient is more independent.

## O9

### Study to assess the role of peripheral exercise in rehabilitation of C.O.P.D patients

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**Introduction:** C.O.P.D is characterized by irreversible airflow limitation. Despite the availability of a host of medications a C.O.P.D patient suffers from physical disability ranging from mild exercise intolerance to limitation of ADL.

**Type of study:** Prospective case control study.

**Place of study:** S.N.P.Hospital Kolkata.

**Methodology:** The study was conducted on 40 patients of C.O.P.D who fell in 2<sup>nd</sup> stage of GOLD criteria, to assess the role of peripheral exercise in rehabilitation. The patients were divided in two groups of 20 each.

The groups received the following treatment regimen:-

GROUP 1:

- Drugs
- Specific chest exercises.
- Occupational therapy.
- Nutritional supplementation.

GROUP 2:

- Drugs
- Specific chest exercises.
- Peripheral exercises.
- Occupational therapy.
- Nutritional supplementation.

Subjects reported to the training facility three times a week for 1.5 hrs each session. The total duration of training of each subject was 8 weeks.

**Result analysis:** Results were analyzed by comparing the BODE index of patients before the beginning of programme with that of after completion of 8 weeks of programme.

**Result:** Result showed a better improvement in BODE index of the second group in comparison to that of the first group.

**Conclusion:** The findings of this study relates to short term impact of peripheral exercise on the activity of c.o.p.d patients &

may contribute to improving programmes by addressing patient needs.

**Keywords:** C.O.P.D, Pulmonary rehabilitation, Peripheral exercises.

## O10

### Differently abled in the service of the differently abled

Sundar S

**Objective:** To explore and implement a new model of vocational rehabilitation in which hearing impaired children are trained to make ocular prosthesis

**Methods:** Freedom trust nurtures exceptionally talented hearing and speech impaired children and gives them a scholarship to develop their talents. Some of these children have become excellent artists and five of our artists have received National awards. These differently abled children need to take up a profession after the skills have been imparted.

An artificial eye is a cosmetic aid which improves the appearance without any vision. People who have lost their eye either due to injury or tumor or any blind shrunken eye are ideal candidates for artificial eye fitting. Making an artificial eye needs a lot of painting, involves many procedures and takes about 8 hours to complete one shell. Children who are good at art and who are differently abled are trained by a senior ocularist for one year and after the training they have been absorbed into a sheltered work shop where they make ocular prosthesis under supervision.

**Results:** Over the last one year, since inception 55 patients have been given ocular prostheses and are well integrated with their new eyes. The uniqueness of this new approach is that differently abled children who have outstanding talent in art are vocationally trained and placed in a sheltered workshop where patients with visual disability are cosmetically rehabilitated.

## O11

### Power wheelchair for all in need-towards accomplishment of a vision

Anees Javed

We a group of professionals including a doctor-Physiatrist, Alumni of Calicut Medical College and engineers-who are eminent professors and Students at National Institute of Technology, Calicut have decided to build a movement for making millions of differently abled person's life better via science and technology incorporated with our social and cultural values. We want to concentrate on issues faced by our physically challenged brothers and sisters who are also challenged by money from accessing technology for their pride and survival. Now we are successful in making worlds cheapest but efficient power wheel chair which we want to provide to the needy after assessing the familial and disease condition with the help of Disabled Persons Organizations, Palliative Care Units and Other NGOs.

This study is regarding cost effectiveness of the Power Wheel Chairs we made and a chance to live demonstrate this power wheel chair will be inspirational to my fellow Physiatrists

**Study setting:** Palliative care Unit, Ponnani, THQH and National Institute of Technology, Calicut.