

**The 3<sup>rd</sup> National Conference on Student Medical Research** Government Medical College Thiruvananthapuram, Kerala, India; January 9 & 10, 2010

# Best papers of the Third National Conference on Student Medical <u>Research</u>

Please cite this paper as Third National Conference on Student Medical Research. Abstracts. AMJ 2010, 1, 3, 221-225, Doi 10.4066/AMJ.2009.237

# Factors responsible for lack of coverage of <u>universal immunisation</u> programme

Gopalakrishnan.B.Yadav, Diya Rachel George, Ibad Shah, Meenakshi Government Medical College, Thiruvananthapuram, Kerala, India

#### Background

Universal Immunization Programme (UIP) was launched in India in 1985 to improve existing immunization coverage<sup>1</sup>. Despite all the efforts put by governmental as well as nongovernmental institutes for 100% immunization coverage, there are still pockets of low coverage areas. Full immunization coverage was decreased as per the National Family Health Survey (NFHS) - 3, in many states of India<sup>2</sup>.There lies the significance of identifying the factors responsible and thereby completing the coverage.

#### **Materials and Methods**

The study is a case-control study conducted in an urban area of Trivandrum. The cases included 30 children below the age of 5 years who were unimmunised or partially immunised for age and the controls were 60 children below the age of 5 years who were fully immunised for age. The informants of cases and controls were interviewed based on a questionnaire. Those who were non co-operative or unwilling or had insufficient data were excluded.

#### **Results and Discussion**

By the univariate analysis, the fear that taking vaccination will cause disease (odds ratio=24.182,95%CI=6.879 to 85.007), the fact that the child was unwell at the scheduled time of vaccination (odds ratio=8.653,95%CI=2.981 to 25.119), long term drug intake of the child (odds ratio=6.000,95%CI=1.966 to 18.311), lack of faith in vaccination (odds ratio=6.882,95%CI=2.267 to 20.891) and difficulty in taking the vaccine at the immunisation clinic (odds ratio=7.000,95%CI=1.972 to 24.850) were found to be reasons for failure to be fully immunised under UIP.

#### **Conclusion and recommendations**

The results obtained indicate that the prime reasons for not fully immunising the child are the lack of awareness and false beliefs of the parents. Difficulty in taking the vaccine at the clinic because of availability of staff and vaccines only on certain days of the week was also seen to be a factor hindering effective coverage.

Based on the findings recommendations are:

To create more awareness among parents about the need for vaccination, Ensure that adequate vaccine and staff are available at immunisation clinics on all days, Remove false beliefs that minor ailments are contraindications for vaccination and that vaccination causes disease

#### References

- Park K. Park's Textbook of Preventive and Social Medicine, 18th Edition. Jabalpur: Banarasidas Bhanot Publishers;2004.p. 103
- Ministry of Health and Family Welfare: National Family Health Survey 3, India, 2007.[http://mohfw.nic.in/nfhs3/CD.htm]

Health status and health seeking behaviour of elderly persons in urban and rural areas of Bellary district, Karnataka Pradeep H Chandake, Arunkumar Halli, Muthuraju N, RameshK

VIMS, Bellary,Karnataka, India

#### Introduction

AGEING is the progressive, universal decline first in functional reserve then in function that occurs in organisms over time. Attributions of ill health to ageing, low economic status, and a negative attitude of health workers towards the care are some of the factors associated with delay in seeking health care. Availability of health services and distance of health services are other factors which are more pronounced in rural areas. With increase in proportion of aged population, number of elderly population with ailments is also increasing but the health care delivery systems of most developing countries are not equipped to tackle the problems. In India where health care system has no component of geriatric care, the number of elderly in need of special care in 2001 was about 27million.Large gaps still exists in the knowledge on the health status and health seeking behaviour of elderly persons especially in India. So this study is an attempt to understand health status and health seeking behaviour of elderly persons.



#### **Objectives**

To determine the health status and health seeking behaviour of elderly people aged 60years and above in urban and rural areas of Bellary District.

#### Methodology

Study Design: - Cross sectional study, Study Setting: Urban and Rural Areas of Bellary District Urban Area – Ward no 31 and Ward no 17(Bellary Corporation) and Rural Areas - Veniveerapura, Allipur and Guggaratti(3 villages), Study Subjects: - Elderly people of age 60 years and above, Sample Size: - 200 (100 from rural areas and 100 from urban areas)Sampling Technique: - Wards and Villages were selected by simple random sampling technique and study subjects were selected by systematic random sampling technique, Study Period: - September 15th 2009 to November 15th 2009 Data Collection and analysis: - Data was collected using a pre tested semi structured questionnaire after getting consent from study subjects. Data was analysed using SPSS 15 version

#### Results

About 200 peoples were interviewed. Out of 200 study subjects,106(53%) are male and 94(47%) are females. 54.5% of study subjects are living with their spouse where as 45.5% of study subjects are without their spouse. 87% of Study subjects are living with their children and 13%,without children. Among the study subjects the prevalent disease included Visual Impairment(55%), Locomotive Disorder(65.5%), Neurological Complaints(7.5%),Cardiovascular(33.5%),

Gastrointestinal(17%), psychiatric(2.5%), Hearing(26%), Genitourinary(7.5%), Respiratory(35.5%).

There was a difference in prevalence of the disease between rural and urban areas. About 28% of elderly with chronic illness went to less than fully qualified practitioner, while 33% went to government hospital facilities and 30% went to private hospital facilities. The reported social problem included economic dependency, distance of health centre and feeling not needed of respondents.

#### Conclusion

The effects of ageing, low economic status and inadequate access to health care contributed to the elderly poor health status. Some more studies are needed at the national level in order to elaborate and understand the Health Seeking Behaviour of Elderly people.

# Risk factors of postpartum depression among married mothers attending SAT Hospital, Trivandrum.

Sreelekshmi F, Sharika S, Vidyakrishna V, Rekha Rachel Philip

Government Medical College, Thiruvananthapuram, Kerala, India

#### Introduction:

Postpartum depression, a severe form of depression that develops within six months of childbirth in approximately 1 out of 10 mothers is considerably under diagnosed. If left untreated the disorder can have serious adverse events on

the mother, her relationship with others, and on the child's social, emotional and cognitive development.

#### **Research Question:**

What are the risk factors of postpartum depression among 50 depressed married mothers as compared to 100 normal married mothers at SAT Hospital, Trivandrum?

#### Materials and Methods:

A case control study was carried out in SAT Hospital, Trivandrum between August 2009 – November 2009.Cases were postpartum mothers with EPDS score  $\geq$ 10 or a positive answer to question 10(the thought of harming oneself) and controls were postpartum mothers with score < 10 . Those with postpartum period < 2 weeks and > 12 weeks were excluded from the study. Sample size was 150 with a case control ratio of 1:2 (50 cases and 100 controls).Information was gathered by interviewing the study subjects using a pretested semi-structured questionnaire.

#### **Results and Conclusion:**

The regression (Binary Logistic) model predicted postpartum depression with the help of a composite measure of five factors- low socioeconomic status; adjusted odds ratio 6.666(95% Cl 1.882-23.604),lack of postpartum help 9.144(2.146-38.951),depression in early life 10.601(2.434-46.174), lack of support from husband 30.7773(1.128-839.689), apprehension about future 25.478(7.872-82.458). We did not find any relationship between parity, type of delivery, complication during pregnancy or labour and postpartum depression.

#### Suggestions:

Screening mothers during their postnatal period for depression, and early postpartum counselling given to the family to build social and emotional support for the mother, will go a long way in mitigating postpartum depression

### Determinants Of Obesity In Women During First Five Years Postpartum

Anoob Mohamed, Arya Sameera V.M.,Ann George Government Medical College, Thiruvananthapuram, Kerala, India

#### Background

Pregnancy weight gain exceeding current recommendations is associated with increases in maternal fat gain, pregnancy complications and delivery problems and postpartum weight loss is essential to prevent permanent weight increase. Women at extremes of body mass index and those with greater weight gain during pregnancy are at increased risk of postpartum depression. Breast feeding is found to decrease postpartum weight retention. So we consider it necessary to study the determinants of postpartum obesity which we hope will aid to prevent and manage the same.

#### Objective

To find out the determinants of obesity during first five years postpartum among mothers attending the immunisation clinic in Medical College Hospital



#### Methodology

The study design was case control, with the study set at the Immunisation Clinic, SAT Hospital, Medical College, Trivandrum. Population under study consisted of mothers of children below 5 years of age attending immunisation Clinic in SAT Hospital, which is the Mother and Child Wing of Medical College, Trivandrum between September 1 and October 31, 2009. The sample size was 120(Number of cases = 40, Number of controls = 80). Study Instruments were 1. Piloted Questionnaire, Edinburg Postnatal Depression Scale, 3. Validated Food Frequency Questionnaire, 4. Validated Physical Activity Scoring. Exclusion Criteria were Women of reproductive age group with child / children > 5 years of age OR women not belonging to reproductive age group. A Woman of reproductive age group with BMI (Body Mass Index)  $\geq$  30 and having at least one child of age < 5 yrs at present was defined as a case and a woman of reproductive age group° with BMI (Body Mass Index) < 30 and having at least one child of age < 5 years as control. Data Collection done by interviewing the subjects using a piloted questionnaire. Data analysed using SPSS Software and Logistic Regression.

#### Results

Mean Age = 25.75 Standard Deviation = 4.259 Variables which had a significant odds ratio were Family History of Obesity Odds Ratio 5.476 [2.371 - 12.645], Hypothyroidism Odds Ratio 3.105, [2.390 - 4.035], Multiple Pregnancy with Odds Ratio 3.105 [2.390 - 4.035], Customary Foods Odds Ratio 5.444 [2.378 - 12.464], Postpartum Depression Odds Ratio 2.579 [1.152 - 5.775], Physical Activity Score, Odds Ratio 12.333 [4.370 to 34.805]

#### **Conclusions and Policy Implications**

Since positive family history of obesity is found out to be a risk factor for postpartum obesity, such women should be made aware while planning pregnancy. Postpartum diet habits and physical activity should be healthy and adequate to prevent postpartum weight gain.

# Assessment of symptomatic burden in terminally ill patients

Arun Prathap, Ghasni Pasil, Nidhin Mathew, Aneesh Department of Community Medicine, Government Medical College, Thiruvananthapuram, Kerala, India

#### Background

The term palliative care is increasingly used with regards to diseases like cancer, progressive pulmonary disorder, renal diseases, chronic heart failure and progressive neurological conditions. In patients who have cancer, fatigue and anorexia rank as the top two reasons for emotional and physical distress with ranked third. Nausea, constipation, altered mental state (delirium) and dyspnoea are the next most common symptoms. Treatable causes of anorexia and cachexia in patients who are near the end of life include chronic pain mouth condition, gastro-intestinal motility problem and reflex oesophagitis. The main goal is to prevent and relieve suffering and to improve quality of life for people facing serious complex illness. Quantitative studies have provided insight to needs and desires of those who are dying as well as those who care for the dying. Yet research with the terminally ill is particularly challenging. There are number of ways for error or bias to occur while researching this population. This is a narrative description of the experience of developing and administering a theoretically based survey instrument to measure the suffering of terminally ill patients.

#### Objective

To assess the symptomatic burden in terminally ill patients seeking care from palliative centres in Trivandrum

#### Methodology

Study Design: Case series study, Study Setting:Pallium India, SUTHospital, Pattom, Trivandrum. StudySample: All patients diagnosed with terminally ill diseases.Sample size: 102Study periodSomble size: 24-November 25, 2009.Study tool:Pre-testedsemi

structured questionnaire administered by interviewer method. Study variables : Age, sex, Socioeconomic status, personal habits, Health seeking behaviour, diagnosis, presence of long term illness, Pain- Character, Intensity, Other symptoms, Activity of Daily Life Statistical analysis done using SPSS Software

#### Results

Pain is the most common symptom complained by almost all patients, the intensity of which varied. Severe pain was experienced by 12%, moderate by 71%, while remaining had mild pain. Loss of appetite (19.6%), difficulty to swallow (19.6%), and sleeplessness (19.6%) were the other commonest symptoms next to pain. Nausea, drowsiness, delirium, constipation, swelling, ulcer were the other common difficulties. Vomiting, itching, urinary symptoms, heart burn, sore mouth were symptoms complained by few. About half of the study population find it difficult to perform their day to day activities without help. Other



factors such as age of the patient, gender, place of residence, socioeconomic status, presence of other chronic illnesses, health seeking behaviour, were found not to have any major bearing in the study.

#### Conclusion

Significant proportions of older patients who visit the palliative care centre for complaints related to chronic illnesses can be expected to have limited likelihood of survival. There was some evidence to suggest that the provision of palliative care and case management services in an urban palliative care centre was associated with increased patient and family satisfaction with symptom relief and increased uptake of hospital-based palliative care services and hospice. When cure is possible it supports the sufferer through curative treatment, relieving pain and minimising suffering. When cure is difficult, the emphasis of treatment shifts to care for improving the quality of life of the patients and the family.

# Determinants of acute exacerbation of asthma in Chronic asthmatics

Natarajan R, Jeeno Jayan, Vijin Varghese, Saran Soman Government Medical College, Thiruvananthapuram, Kerala. India

#### Background

Asthma is a chronic inflammatory disorder of the airways that causes recurrent episodes of wheezing, breathlessness, chest tightness, and cough, particularly at night and/or in the early morning. These symptoms are usually associated with widespread but variable bronchoconstriction and airflow limitation that is at least partly reversible, either spontaneously or with treatment. It is thought that inflammation causes an increase in airway responsiveness (bronchospasm) to a variety of stimuli.

Asthma is a global health problem.300 million people suffer from asthma worldwide. By 2001 estimates, India had 25 million people suffering from asthma. This is likely to go up by 50% by 2016. During asthma attacks (exacerbations of asthma), the smooth muscle cells in the bronchi constrict, and the airways become inflamed and swollen. Attacks can be prevented by avoiding triggering factors and by drug treatment.

This study was undertaken to identify the trigger factors of asthmatic attack among people in our setting.

#### Objectives

To study the determinants of acute exacerbation of asthma in chronic asthmatics.

**Study Setting:** 1) Department of Respiratory Medicine (Pulayanarkotta) 2) Chest and Thoracic Clinic, S P FORT Hospital 3) Asthma Clinic, Government Hospital, Trivandrum

#### Methodology

A case crossover design was used for the study. The study was conducted on chronic asthmatic patients (>12 years of age) who reported with acute exacerbation and those who came for review within 2 days of their last exacerbation. A semi-structured questionnaire was used to interview them.

A paired analysis was done using McNemar test and the possible trigger factors of the asthmatic attack were identified. A total of 50 patients took part in the study.

#### Results

The following factors were found to have statistically significant association with asthma exacerbation:

1) Dust exposure (OR-18.000, p-0.0002) 2) Respiratory Infection (OR-15.5, p-0.0001) 3) Physical exertion (p-0.0005) 4) Climate change (p-0.0001) 5) Exposure to Smoke (p-0.0133) 6) Stoppage of regular medication (p-0.0077) 7) Emotional and psychological stress (OR-5.000, p-0.0433)

#### Conclusion

The trigger factors of asthmatic attack were identified. In our setting, the most important trigger factors of acute asthma exacerbation include-Dust exposure, Respiratory Infection, Physical exertion, Climate change, Exposure to smoke, Stress and Stoppage of regular medication. The study also revealed that in most cases, the attack was triggered by a combination of factors

#### Misconceptions and social stigma of epilepsy Anjana Gopal, Meera R, Dhanya Elsa James Government Medical College, Thiruvananthapuram, Kerala, India

#### Background

Misconceptions and social stigma associated with epilepsy cause more suffering than the seizures themselves. Studies have shown that though familiarity with epilepsy was high, misconceptions and negative attitudes were alarmingly high.<sup>1</sup>

#### Objective

To study the misconceptions and social stigma of epilepsy in a rural and urban setting.

#### Methodology:

Study setting: 1) Anandeswaram (Sub Centre area under pangappara PHC, Kerala) 2)Ward 35 of Trivandrum Corporation. Study Population: People in the age group 15 - 85 years who were willing to participate in the study.

Sample Size: 210, Study Instruments: Questionnaire which was piloted and developed. After receiving ethical clearance we proceeded with data collection. Analysis was done using SPSS

#### Results

Mean age of the study population was  $45.9 \pm 15.23$  (range, 16-85).Of the 210 individuals 82 were males and 122 were females, 108 were from an urban setting and 96 were from a rural setting. Eleven percent of the urban population and 26% of the rural population respectively thought that epilepsy was a form of mental retardation. Exorcism as a way to cure epilepsy was more of a misconception in the rural population were not willing to hire an epileptic for household work. Fifty percent of the population thought epilepsy was a hindrance to marriage and that it affected



pregnancy. The stigma was obvious from the fact that 31% were not willing to let their children interact with people with epilepsy. Even now, about 29 % of the population still feels that society discriminates against people with epilepsy. **References** 

1.Pandian JD, Santosh D, Kumar ST et al, High school students' knowledge attitude and practice with respect to epilepsy in Kerala, Epilepsy and behaviour 2006;9:492-497