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**ABSTRACTS OF THE
TWENTY-FIRST ANNUAL SCIENTIFIC SESSIONS**

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**ABSTRACTS OF THE TWENTY-FIRST ANNUAL
SCIENTIFIC SESSIONS**

Edited and compiled by

Upul Senarath (Editor JCCPSL, Professor in Community Medicine)

Sumal Nandasena (Co-Editor JCCPSL, Consultant Community Physician)

Thilini Wickramaarachchi (Registrar in Community Medicine)

Surangi Jayakody (Registrar in Community Medicine)

Dushyanthi Alagiyawanna (Registrar in Community Medicine)

Sathira Perera (Registrar in Community Medicine)

Correspondence

The College of Community Physicians of Sri Lanka

No. 06, "Wijerama House"

Wijerama Mawatha, Colombo 07

Sri Lanka

Email: editorjccpsl@gmail.com

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02nd September 2016

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Abstracts of oral presentations

OP 01

Prevalence and factors associated with elderly pregnancies among pregnant mothers in Pitakotte MOH area in Sri Lanka

M D U B Gunawardane¹, T S P Gunawardane¹, M A S R Gunawardane^{1*}

¹Pre intern medical officer, Faculty of Medicine, University of Colombo

*Correspondence: sachini89@me.com

Introduction

Elderly pregnancy is a high risk situation which affects the health of the mother and the baby. It is essential to identify the factors which influence the occurrence of elderly pregnancies.

Objectives

This research was done to describe the prevalence and associated factors of elderly pregnancy in Pitakotte MOH area.

Methods

The study consisted of two phases which were done in antenatal healthcare settings of Pitakotte MOH area from July to August in 2014. First phase was a descriptive cross sectional study using the pregnancy records of the Public Health Midwives. This was done to describe the prevalence of elderly pregnancies and to identify 40 cases (pregnant mothers ≥ 35 years) and 40 controls (pregnant mothers < 35 years). Second phase was a case control study done among these matched groups with an interviewer administered questionnaire.

Results

Of the 361 registered pregnant mothers, 71 (19.7%) were above 35 year old at the registration. Most of them were from Thalapatthipitiya (24.5%). Mean age at marriage in control group was 22.48 years and 29.0 years in cases. Parity ($p=0.029$), marriage duration ($p<0.001$), type of marriage (i.e-proposed or not) ($p=0.039$), age at marriage ($p=0.006$) were significantly associated with occurrence of elderly pregnancies. Presence of miscarriages had a p value of 0.056.

Conclusions and/or Recommendations

Prevalence of elderly pregnancies in Pitakotte MOH area was approximately one fifth of all pregnancies. This is associated with several demographic, reproductive factors. Interventions must be planned to provide inputs on reproductive health issues at community level. Further research should be encouraged especially within the areas with higher prevalence.

Keywords: Elderly pregnancy, Determinants of elderly pregnancy, Pitakotte MOH area

OP 02

Mothers' awareness of developmental milestones and advantages of early identification of delayed milestones among 18 month old children attending immunization clinics in Colombo district

A F F Fazla^{1*}, C S E Goonewardena²

¹ Registrar Community-Medicine, PGIM,

² Senior-Lecturer, Department of Community-Medicine, University of Sri-Jayewardenepura

*Correspondence: aff.fazla@yahoo.com

Introduction

Developmental milestones are set of age specific tasks children can do at a certain age range and this process of development can be optimized by timely interventions given through stimulations by mothers in supportive environment.

Objective

To assess mothers awareness of advantages of early identification of delayed milestones among 18 month old children attending to the immunization clinics in Kolonnawa and Dehiwala MOH areas.

Methods

A descriptive-cross-sectional study was conducted among 421 mother and child-pair of 18 months. A pre-tested interviewer-administered questionnaire and a checklist were used to collect data. Data was analyzed using SPSS version 17 package

Results

Assessment of knowledge of developmental milestones based on ECCD concepts was good among 73.9% of mothers. Majority (n=387, 93.5%) of mothers agree the importance of developmental milestones and considerable proportion (n= 188,45.5%) were not aware of certain conditions which need medical attention by 18 months. Only <20% mothers were able to correctly identify age appropriate development milestones which needs attention. However, 82.6% (n= 342) stated developmental-disorders can be identified early and majority (72.6%, n= 301) by parents. 36% of were not aware of facilities available for children with special-needs. Higher proportion of mothers with good knowledge seek advice from midwife in case of a developmental-delay and this was statistically significant (p<0.05). Interestingly, mothers with good knowledge on milestones did not consider certain delays need medical attention by 18 months (p<0.05).

Conclusions and/or Recommendations

A considerable proportion of mothers were not aware of certain conditions which need medical attention by 18 months and they should be educated on the availability of early-intervention and facilities.

Keywords: Developmental milestones, Developmental-delay, Early-intervention

OP 03

Adherence to evidence based practices in maternal care service delivery in Sri Lanka: Mothers' perspective

S S P Godakandage¹, S Dhanapala¹, N Hemachandra¹, H G Jayakody^{2*}, M R Ranathunga³, S Kumaravel⁴, N Lansakara¹, P Y S Jayasinghe³

¹ Consultant Community Physician, Family Health Bureau, Ministry of Health, Sri Lanka

² Registrar in Community Medicine, Faculty of Medicine, Colombo

³ Medical Officer, Family Health Bureau

⁴ Medical Officer in Maternal and Child Health, RDHS office, Jaffna

*Correspondence: gayathri_hj@yahoo.com

Introduction

Revision of maternal care package in 2012 introduced best available evidence based practices in antenatal and postnatal care delivery.

Objectives

To describe adherence to evidence based interventions provided in the maternal care package among antenatal and postnatal mothers in Sri Lanka.

Methods

A cross sectional descriptive study was conducted among antenatal and postnatal mothers from April to June 2015 with sample size was 840 in each category. Antenatal component was hospital based and the post natal component was community based. Multistage random cluster sampling method was adopted at both settings. Pre tested interviewer administered questionnaire was used to collect data.

Results

Response rate was 99.1% (n=832) and 96.1% (n=808) for antenatal and postnatal components respectively. Average number of clinic visits was 10.3 while 4.0%(n=34) had not attended any antenatal clinic. Of mothers 86.8%(n=547) had complied with the referral to specialist care. Pre pregnancy folic acid was reported by 61.5% (n=512) while 92.8%(n=772) and 90.3%(n=751) of mothers reported with compliance to iron and calcium tablets intake. Only 74.0%(n=616) of mothers and 45.0% (n=374) of spouses had attended at least one antenatal classes. Of mothers who referred to oral health care 578(83.4%) had complied and 674(81%) had an emergency preparedness plan. Among the participants 89.7% (n=746) and 88.0% (n=732) had at least a single measure of blood sugar and haemoglobin respectively. Early ultra sound scan was available for 87.5% of mothers. Of mothers who referred to oral health care, 578(83.4%) had complied and 674 (81%) had an emergency preparedness plan. Postnatal clinic visits were made by 83.9% (n=678) of mothers. By two months postpartum 63.2%(n=511) were on a family planning method.

Conclusion and/or Recommendations

Upon provision of care, adherence of mothers to the practices was satisfactory. However, programmatic approach needs to be followed to improve the coverage of interventions.

Keywords: Maternal care package, Antenatal care, Postnatal care, service delivery

OP 04

Knowledge on postnatal care and associated factors among pregnant women in the Mannar district

C J M Raj^{1*}, R Batuwanthudawe²

¹ Medical Officer, Family Health Bureau, Colombo, ² Consultant Community Physician, Health Education Bureau, Colombo

*Correspondence: jmathanraj@gmail.com

Introduction

Community behavior change through inculcating knowledge leading to attitude and behavior change is one of the best strategies in health promotion. This is being used in Sri Lanka in MCH, including postnatal aspects. Hence assessing postnatal knowledge and associated factors among pregnant women is very useful in assessing the success of the current programme and directing future changes/improvements.

Objective

To assess the knowledge on postnatal care and associated factors among pregnant women in Mannar District.

Methods

A community based descriptive cross sectional study was carried out among 336 pregnant women in Mannar District. Interviewer administered questionnaire was used. 50% of the scores was taken as cut off for good/bad knowledge. Association of knowledge with associated factors were assessed by comparing the mean difference of knowledge.

Results

Among the study population 87.2% (n=293) possess 50% more on overall postpartum knowledge and 96.1% (n=323) possess 50% more on overall neonatal knowledge. Domiciliary care receiver (mean-difference 2.84, $p < 0.01$, 95%CI 0.8-4.8), Antenatal class attendance with husband (mean-difference 4.98, $p < 0.01$, 95%CI 1.9-8.0), using radio as health resource (mean-difference 2.48, $p < 0.001$, 95%CI 1.1-3.8), using mothers' club as health resource (mean-difference 3.17, $p < 0.001$, 95%CI 1.8-4.5), member of mothers' club (mean-difference 2.82, $p < 0.001$, 95%CI 1.4-4.3), showed significant difference in mean postpartum knowledge. Using television as health resource (mean-difference 1.25, $p < 0.01$, 95%CI 0.3-2.1), using radio as health resource (mean-difference 1.35, $p < 0.01$, 95%CI 0.5-2.1), using mothers' club as health resource (mean-difference 1.27, $p < 0.01$, 95%CI 0.4-2.1), Member of mothers' club (mean-difference 1.42, $p < 0.01$, 95%CI 0.5-2.3), Non-prime pregnancy (mean-difference 1.08, $p = 0.01$, 95%CI 0.2-1.9) showed significant difference in mean neonatal knowledge.

Conclusions and/or Recommendations

Mothers' club, receiving domiciliary care, attending antenatal class with husband, using television & radio as health information source had positive effect in increasing the knowledge.

Keywords: Antenatal class, Mothers club

Time series analysis of neonatal mortality in Sri Lanka

D A Gunawardane^{1*}, S D Dharmaratna², D Rowel³

¹ Senior Registrar in Community Medicine, Family Health Bureau, Sri Lanka

² Associate Professor, Department of Community Medicine, Faculty of Medicine, Peradeniya. Sri Lanka

³ Consultant Community Physician, Family Health Bureau, Sri Lanka

*Correspondence: damithagunawardane@gmail.com

Introduction

Remarkable progress has been made in recent decades to reduce the number of neonatal deaths in Sri Lanka. But Neonatal Mortality Rate (NMR) declined at a slower pace. Yet a considerable proportion of newborn deaths are preventable. In preparing neonatal mortality reduction strategies, it is important for country to see the trend of neonatal mortality, in order to assess needs and fine tune the neonatal care programme.

Objectives

To analyze trends in neonatal mortality rates in Sri Lanka, between 1992 to 2012 and forecast up to 2025.

Methods

Data on neonatal mortality between 1992 to 2012 were obtained from Registrars General Department. Joint point regression analysis was performed by using Join Point Regression Program Version 4.3.1.0

Results

There were substantial changes in the trend of NMR in Sri Lanka. For the best fitting model there were 2 joint points in 1996 and 2007. Annual Percent Changes (APC) for the three segments with two joint points were, 0.48% (1992-1996), 6.17% (1996-2007) and 0.08% (2007-2012) respectively. But only 1996 to 2007 segment gave a statistically significant APC. The calculated APC given for the period of 2000 to 2012 was - 3.6 (95%CI: -1.8 to -5.4, P=0.001). If Sri Lanka continues on the same APC country will reach a NMR of 3.79 (95%CI: 2.96 to 4.82), which is slightly above the 2025 country specific Every Newborn Action Plan (ENAP) target (3.4 neonatal deaths per 1000 live births) for Sri Lanka.

Conclusion and/or Recommendations

Based on the joint point regression method, at the current APC of NMR, Sri Lanka would be able to achieve the ENAP country specific target by 2025.

Keywords: Neonatal Mortality, Time series analysis, Neonatal care

OP 06

Prevalence and associated factors of work-related musculoskeletal disorders among male paddy/ chena cultivators in the Medical Officer of Health area, Kanthale

H K A Galappaththi^{1*}, C Arambepola²

¹ Registrar in Community Medicine, PGIM, Colombo

² Senior Lecturer, Department of Community Medicine, Faculty of Medicine, Colombo

*Correspondence: drhiman.g@gmail.com

Introduction

In Sri Lanka, 31% of the labour force is in agriculture-related occupations, which involve strenuous work, thus more prone to develop Work-related Musculo-Skeletal Disorders (WMSDs). Despite its resultant burden, research on this topic is limited in developing countries.

Objectives

To describe the prevalence and associated factors of WMSDs among male paddy/chena cultivators in Medical Officer of Health (MOH) area, Kanthale

Methods

A community-based cross-sectional study was conducted in Kanthale MOH area among adult male farmers engaged in paddy/chena cultivation for over one year and working for >20 hours per week. Farming as secondary occupation and having diagnosed chronic pain conditions were excluded. Based on an estimated prevalence of 77%, 432 were recruited using a three-stage probability sampling technique, with Grama-Niladhari divisions as clusters. An interviewer-administered questionnaire assessed their socio-demographic characteristics and WMSDs prevalent during last year and last seven days according to pre-validated criteria.

Results

A majority (73.2%,n=316) of farmers were aged over 40 years and married (95.1%,n=411), educated up-to O/Levels (85%,n=367) and income <Rs.20,000 (72.3%,n=312). Their mean age was 49.1 (SD=12.1) years. The prevalence of WMSDs during last year was 44.2% (95% CI: 39.6-48.6) and 39.8% (n=172; 95% CI: 35.4-43.8) during last 7 days. Lower back was the most affected site during last year (68.1%,n=130) and last 7 days (59.7%, n=114). Age >40 years (prevalence OR=3.1, 95% CI=1.9–5.0), education below O/Levels (OR=2.6, 95% CI=1.7-3.9), income <Rs10000 (OR=1.9, 95% CI=1.2–3.1) and no additional income source (OR=2.4, 95% CI=1.4–4.1) were significantly associated with the prevalence of WMSDs.

Conclusion and/or Recommendations

Considering the high prevalence of WMSDs, establishing proper ergonomics at work place and a referral system for early identification of WMSD are recommended especially for poverty-stricken paddy/chena cultivators.

Keywords: work-related musculoskeletal disorders, male paddy/chena cultivators, ergonomics

Knowledge, attitude and practices on food safety among commercial food handlers in hotels in the Medical Officer of Health area Dehiwala

W M D H Jayatissa^{1*}, S Dhanapala², M D R Ranathunga³, H G Jayakody⁴

¹ Medical Officer, Family Health Bureau, Colombo

² Consultant Community Physician, Family Health Bureau, Colombo

³ Medical Officer, Family Health Bureau, Colombo

⁴ Registrar in Community Medicine, Faculty of Medicine Colombo

*Correspondence: mudithahj@gmail.com

Introduction

General food safety is one of the major requirements in emergency management. Unsafe food consumption is a major health problem worldwide and commercial food handlers are one of main stakeholder in providing safe foods.

Objectives

Aim was to assess knowledge, attitude and practices on food safety among commercial food handlers in hotels in the MOH area Dehiwala.

Methods

A descriptive cross-sectional study using an interviewer-administered questionnaire and observational checklist was conducted in November 2015. It included all 73 registered hotels and 180 food handlers who were randomly selected from those hotels.

Results

Response rate among food handlers was 95.5%(n=172). Majority of food handlers (66.3%) had an overall good knowledge with regard to food handling. However, 94.8%(n=163) thought that handling food with bare hands was safe in food preparation and using used water in washing dishes was safe 84.9% (n =146). Majority of food handlers 69.2% (n=119) believe that the awareness programmes on food safety and general safety were beneficial. Majority of food handlers (57.6%) had an overall positive attitude. 91.8% (n=67) hotels were visited by Public Health Inspectors at least once during past year. Majority of the hotel management 45.2% (n= 33) were unaware about H 800 form while 75.3% of the hotels did not have a copy of H 800. Civil status of the food handlers and type of food handled at work showed a significant association ($p < 0.05$) with the knowledge score. Of the socio demographic variables, none of the variables showed a significant association ($p < 0.05$) with the overall attitude score of food handlers. Type of food handled at work showed a significant association ($p < 0.05$) with the attitude category.

Conclusions and/or Recommendations

Study revealed that majority of food handlers had an overall good knowledge with regard to food handling and majority of food handlers had an overall positive attitude. Although there were positive attitudes regarding personal hygiene and food safety, they were not observed in practice. Food safety practices were inadequate. Monitoring of food safety by the PHI was inadequate and the monitoring of hotels using the standard H 800 form was grossly inadequate.

All food handlers should be trained on food safety measures and regular training under taken and certificates provided. Monitoring of food safety in hotels using the H 800 should be promoted and regular assessment of food safety practices should be done

Keywords: Food safety, Commercial food handlers, Food handling trades

Prevalence and correlates of work stress among Nursing Officers working in psychiatric in-ward facilities, in Colombo District

H D J J Gunasekera^{1*}, I K Suraweera²

¹MD Trainee in Community Medicine, PGIM

²Consultant Community Physician, Directorate of Environmental and Occupational Health, Ministry of Health

*Correspondence: janjeewa@gmail.com

Introduction

Work stress among Nursing Officers (NO) in psychiatric care is considered an important occupational health problem due to the nature of the services provided. However, studies on work stress in this study group is scarce in Sri Lanka.

Objectives

To describe the prevalence and correlates of work stress among Nursing Officers in psychiatric in-ward facilities in Colombo District.

Methods

This descriptive cross-sectional study was conducted among Nursing Officers working in the three in-ward psychiatric facilities in Colombo District namely, National Institute of Mental Health, National Hospital of Sri Lanka and Colombo South Teaching Hospital. The entire population (N=345) was given a pre-tested self-administered questionnaire composed of two parts; validated Job Content Questionnaire and questionnaire on correlates. Prevalence of Work Stress was measured using indices namely, 'High Job Strain'(HJS) and 'Iso-strain'(IS).

Results

The response rate was 89.5%(N=309). Prevalence of HJS and IS was 37.2% and 21.4% respectively. Factors significantly associated with HJS were; being single (OR=1.84, 95%CI=1.15-2.95), working more than 48 hours weekly (OR=1.71,95%CI=1.05-2.78), violence by patients (OR=3.45,95%CI=1.81-6.57), verbal abuse by patients (OR=3.11, 95%CI=1.80-5.39), mental health concerns (OR=2.68,95%CI=1.595-4.40), stigma (OR=2.21,95%CI=1.24-3.94), lack of assistance (OR=4.56,95%CI=1.68-12.27), difficulty in obtaining leave (OR=2.98, 95%CI=1.48-6.00), inadequate facilities (OR=1.62,95%CI=1.01-2.59) and poor work recognition (OR=2.89,95%CI=1.68-4.96).

Conclusion and/or Recommendations

A significant amount of NO was undergoing HJS. A large proportion from them were subjected to IS as well. Several factors unique to in-ward psychiatric facilities were significantly associated. A surveillance system for early diagnosis of work stress, plan to minimize violence and an appraisal management system are recommended.

Key-words: Work stress, Psychiatry, Nursing officers

OP 09

Competency enhancement of field public health staff on legislative procedures of food sampling and litigation

S A Hewage^{1*}, A Pathirana¹, N Gunathilaka¹, D Udugama¹, C Rodrigo¹, K Hirimuthugoda¹, S Nandasena², P De Silva², L Magodaratne², R Ferdinando²

¹ Registrar in Community Medicine, Postgraduate Institute of Medicine, University of Colombo.

² Consultant Community Physician, National Institute of Health Sciences.

*Correspondence: sumuduavanthi@gmail.com

Introduction

Food safety is a major responsibility entrusted upon field health staff in Sri Lanka. There is evidence to say it's not functioning in full capacity due to inadequate skills and competencies, which may be aggravated by lack of in-service training programmes for MOOH and PHII. A rapid situation analysis conducted in Beruwala MOH area revealed performance gaps in food sampling related legislative procedures. Only 0.7 food samplings per PHI per month were conducted compared to the standard of 2, and 16 cases filed in 2015. Key informant interviews confirmed lack of competencies in food sampling related legislative work as root causes.

Objectives

To improve competency of public health staff on food related legislative procedures through inter-sectoral collaboration in Beruwala MOH area.

Methods

One day training program was conducted with Legal Aid Commission-Kalutara, Police Training School, staff of National Institute of Health Sciences Training Faculty and field health staff of MOH Beruwala. Thirty six participants included 6 MOOH/AMOOH and 21 PHII.

Results

Training programme was effective according to Kirk Patrick's model. Level 1: 80.9% (n=17) believed it will improve future duties. Level 2: pre-program mean scores (SD) of knowledge = 70.4% (34.7) and post-program = 73.5% (31.7). Level 3: nine food raids were conducted in Beruwala MOH area within one week, which can be seen as a short-term behavior improvement. Long term behavioral improvement will be assessed quantitatively in future. Perception of resource persons from Legal Aid Commission and Police was that this workshop will improve field health staff capacity on food related legislative procedures.

Conclusions and/or Recommendations

It is feasible to undertake capacity building programmes for health staff on public health legislation with collaboration of other sectors including legislation and police department at divisional level. This could be replicated in other field settings. This program was relevant and effective in enhancing knowledge of public health staff.

Keywords: Public health legislation, Food sampling, Litigation

Knowledge, reported practices and their associated factors on disaster preparedness among residents of MOH area, Agalawatta

A Ambagahawita^{1*}, S Nandasena², S Perera³

¹Medical Officer, Family Health Bureau.

²Consultant Community Physician, National Institute of Health Sciences, Kalutara.

³Consultant Community Physician, Ministry of Health, Sri Lanka

*Correspondence: anjanaambagahawita@gmail.com

Introduction

Agalawatta Medical Officer of Health (MOH) are is vulnerable for natural disasters. In year 2014 alone, 8 deaths were reported, 1188 people were affected and 24 houses were completely destroyed.

Objectives

To assess the knowledge, reported practices and their associated factors of disaster preparedness among persons aged 15-59 years in MOH area, Agalawatta.

Methods

A descriptive cross sectional study was conducted among aged 15-59yearold permanent residents in MOH area, Agalawatta. Estimated sample size of 630 was selected from 30 clusters by probability proportionate to the size of number of households in each GN area (cluster interval was 21). In the case of more than one eligible participant is present in a selected household, Kish method was used to identify a single participant in random manner. Interviewer administered questionnaire was used to ascertain data. A knowledge score was developed based on questions on different aspects of knowledge on disasters and disaster preparedness.

Results

Response rate was 95% and 598 questionnaires were successfully administered. Mean age of the study population was 37.5 years (SD = 10.9). Majority of the respondents found floods (72.9%, n=436) and landslides (67.1%, n=401) as the most commonly occurring natural disasters in Agalawatta. Only 16.2% (n=97) of the study population was having more than the middle value of the knowledge score (i.e. 45 out of 90). Participants with previous experience in natural disasters had higher knowledge compared to those who were not (58.7% vs. 41.4%, p<0.01). Only, 17.9% (n=107) of the population identified "divisional focal point" as a stakeholder who needs to contact during a disaster and 33.3% (n=199) of the study population has identified a potential safe location to move during a natural disaster in the area. Among those faced to a natural disaster, better practices are reported by those who have higher knowledge. As examples, residents having higher knowledge drank only bottled water (50.6% vs. 22.8%, p<0.01) and used separate toilets for women/girls at safe locations (83.3% vs. 42.3%, p<0.01).

Conclusions and/or Recommendations

Majority of the population had unsatisfactory level of knowledge based on the knowledge score. Those who have experienced previous disasters were having higher knowledge and favorable practices than who haven't experienced a disaster.

Keywords: Disasters, Disaster preparedness, Floods, Landslides, Disaster master plans

OP 11

Disordered externalized behaviours among 3-5 years old children in a Medical Officer of Health area in Eastern Province, Sri Lanka

K Wickramasinghe¹, S Vaidyanatha², E P Wickramasinghe^{3*}

¹Acting Paediatrician, General Hospital, Trincomalee

²Consultant Paediatrician, Lady Ridgeway Hospital

³Registrar in Community Medicine, Health Education Bureau

*Correspondence: enoka7@gmail.com

Introduction

Global prevalence of behaviour disorders among children is rising including Sri Lanka. Maternal parenting style is a modifiable determinant of disordered behaviours of children. Early detection and intervention has been proven to be beneficial for effective management and prevention of future psycho-social consequences of childhood disordered behaviours.

Objectives

This study aimed to identify disordered externalized behaviours and the associated factors among children aged 3 to 5 years, in Medical Officer of Health (MOH) area, Valachchenei.

Methods

A community based cross sectional descriptive study was performed among 198 systematically selected mothers, having children aged 3-5 years, visiting well baby clinics of MOH area Valachchenei. The externalized behaviour patterns of child were assessed using Child Behaviour Assessment Instrument, translated and validated in Sri Lanka. Parenting style of mother and socio-demographic characteristics were obtained using interviewer-administrable, Parenting Styles and socio-demographic questionnaires.

Results

Response rate was 100% (N=198). Mean age of mother was 28.5 years. Majority were Tamil (93.9%) and Hindu (81.3%). Most mothers had three (55.6%), and four (37.4%) year old children. Majority of mothers had boys (54%). Mothers were educated up to grade 10 (63%), and 7% had never schooled. Most mothers were house wives (69.7%). Abnormal externalized behaviour was seen among 25.8% of children of the study sample. Parenting style of 61.6% was Authoritative, while 15.7% Authoritarian and 22.7% Permissive. Abnormal externalized behaviour and permissive parenting style (p

Conclusion and/or Recommendations

Significant proportion of children had abnormal externalized behaviour. Maternal permissive parenting style showed significant association with abnormal behavior of the child. Screening of behaviour disorders and promotion of positive parenting skills at primary health care level is recommended to improve child well-being.

Keywords: Disordered behaviour, Authoritative, Authoritarian, Permissive, Parenting style

The prevalence of undernutrition and associated factors among children aged one to five years in Siyambalanduwa MOH area

A M U P Kumari^{1*}, S Ginige²

¹ MD trainee in Community Medicine, Post Graduate Institute of Medicine, Colombo.

² Consultant Epidemiologist, Epidemiology Unit, Ministry Of Health.

*Correspondence: abeykoonprabha@gmail.com

Introduction

High prevalence of child undernutrition is a well-known issue in rural areas of Sri Lanka. Identification of real burden, underlying specific causes and addressing those issues will help to improve the nutritional status of those children.

Objectives

To describe the prevalence of undernutrition and associated factors among children aged one to five years in Siyambalanduwa MOH area.

Methods

A community based cross-sectional study was conducted among 421 child-mother pairs in Siyambalanduwa MOH area using two stage cluster sampling method. Children of mothers who cannot communicate in Sinhala were excluded. Data collection done by using pre tested interviewer administered questionnaire. Relevant anthropometric measurements were done according to WHO guidelines. Statistical analysis was done using SPSS 20. The chi-square test was used, and $P < 0.05$ was considered for statistically significant.

Results

Overall 41% of children aged 1-5 years were undernourished in Siyambalanduwa MOH area. Among the study subjects 24% were underweight, 25.7% were stunted, 16.4% were wasted, 9.2% were both underweight and stunted, 6.8% were both underweight and wasted, 0.5% were both stunted and wasted and 9.9% were underweight and stunted and wasted. Only the low total monthly income ($P < 0.001$) and low birth weight ($P < 0.001$) were significantly associated with child under-nutrition. Among parents or caregivers 18.6% had good knowledge, 35.6% had favorable attitudes and 12.6% had good practices related to child nutrition. None of the above three factors were significantly associated with child undernutrition.

Conclusions and/or Recommendations

Prevalence of under-nutrition among children aged 1-5 years is unacceptably high and urgent efforts to reduce undernutrition should be a priority. Future studies should focus on assessing how to reduce the burden of under-nutrition with low cost interventions.

Keywords: Undernutrition, Children aged 1-5 years, Stunting, Wasting, Underweight

Effectiveness of Oral Healthcare in Pregnancy in reducing Dental Caries in young children in the district of Gampaha

N Ranasinghe^{1*}, U S Usgodaarachchi², R D F C Kanthi³

¹Senior Registrar in Community Dentistry, Health Education Bureau, Colombo

²Consultant in Community Dentistry, National Institute of Oral Health, Maharagama

³Consultant in Community Dentistry, Health Education Bureau, Colombo

*Correspondence: nirosandi1976@gmail.com

Introduction

Antenatal oral healthcare programme was introduced in Sri Lanka with the collaboration of existing Maternal and Child Health Programme in 2009. Evaluation of its effectiveness in prevention of dental caries in young children is needed to strengthen the current oral health promotion efforts during pregnancy.

Objectives

To evaluate the effectiveness of the National Oral Healthcare Programme for Pregnant Mothers in reducing Early Childhood Caries (ECC) in the district of Gampaha.

Methods

A descriptive cross sectional study was carried out in 2013, among 558 mothers attending 20 MCH clinics in the district, having one year or 1 ½ year old child. A structured interview was conducted with every mother and the children were clinically examined for ECC. The effectiveness was determined by comparing the level of knowledge, attitude and practices on preventive measures for ECC between exposed and unexposed mothers to the oral healthcare package in pregnancy and ECC status of their children. Multivariate analysis was performed to treat the potential confounders.

Results

Among interviewed, 41.8% (n=233) were exposed to the 'total oral healthcare package' consisted of oral health education, timely referral, oral screening and recommended treatment. The level of knowledge, attitude and practices on oral healthcare during early childhood was satisfactory in the exposed (n=120, 51.5%) than the unexposed (n=49, 15.1%) and a significant difference (P<0.01) was observed (Adj. OR=6.2, 95%CI=4.16-9.34) between groups. The prevalence of early childhood caries among one year old children was 17.2% (n=46), while it was 32.4% (n=94) among 1 ½ year old children. The occurrence of ECC was significantly less likely (P<0.01) in the children of exposed mothers (n=43, 18.5%) than the unexposed (n=97, 29.8%) (Adj. OR=0.41, 95%CI=0.22-0.75).

Conclusions and/or Recommendations

The antenatal oral healthcare programme is effective in prevention of ECC.

Keywords: Oral health care, Oral health in pregnancy, Dental caries

OP 14

Rapid assessment of selected school health activities using a postal questionnaire at national level: coverage of interventions and the feasibility of methodology

S Danapala¹, A Lokubalasooriya¹, A W P I Gunatilake^{2*}, N Widanapathirana³, S Senanayake⁴, H Jayakody⁵, R Peiris⁶

¹ Consultant Community Physician, Family Health Bureau

² Post Graduate Trainee in Community Medicine, Family Health Bureau

³ Registrar in Community Medicine, Ministry of Health

⁴ Registrar in Community Medicine, Family Health Bureau

⁵ Registrar in Community Medicine, University of Colombo

⁶ Director Health and Nutrition, Ministry of Education

*Correspondence: indumini12@gmail.com

Introduction

The School Health Programme of the Ministries of Health(MoH) and Education aim to enable children to achieve full education potential by implementation of evidenced based interventions such as the Health Promoting Schools Programme and Weekly Iron Folate Supplementation (WIFS).

Objectives

To assess the coverage of interventions on Health Promoting School Programme and WIFS.

Methods

A cross sectional descriptive study, using stratified random sampling method was conducted among all government schools. A sample of 1383 was calculated with a 20% nonresponsive rate. Data were collected using a pre-tested self-administered questionnaire. Descriptive analysis was done using SPSS.

Results

Response rate = 47%, n=682. Health promotion committee were established in 599(87.8%), of which 497(83%) had completed the self – assessment. A canteen was available in 392(57.5%) of which 322(82%) had received the circular on school canteen policy. The Public Health Inspector(PHI) had supervised the preparation of mid-day meals in 93.6% of schools which had implemented the programme(n=366). School Health Survey was conducted in 625(91.6%) and the report was received by 380(60.8%). School Medical Inspection completed in 629(92.2%) and the defect sheet received by 480(76.3%). Water quality surveillance completed in 319(46.8%). The WIFS initiated in 645(94.6%) of which 583(90.4%) conducted for 2015.

Conclusion and/or Recommendations

Supervision and monitoring of school health activities at local, regional and national levels need strengthening. An independent information system through the education sector is recommendation for data validation. A higher non-response rate should be considered for postal surveys in the local context.

Keywords: Rapid-assessment, School health programme, Health promotion in schools

OP 15

Factors affecting difficulties in breast feeding in mothers attending selected lactation management centers in Colombo district

T S M Fernando^{1*}, S Prathapan², H R M Fernando³

¹MD trainee in Community Medicine, Post graduates Institute of Medicine.

²Senior Lecturer in Community Medicine, Faculty of Medical Sciences, University of Sri Jayawardhanapura

³Medical officer, Colombo South Teaching Hospital.

*Correspondence: meksfdo@gmail.com

Introduction

Exclusive breast feeding (EBF) up to six months is recommended as it is the best food for the infants and provides vast benefits to the mother. The objective of the study was to describe the socio demographic and maternal factors associated with difficulty in breast feeding in mothers with neonates attending selected lactation management centers (LMC) in Colombo District.

Methods

A hospital based descriptive cross sectional study was conducted at LMC in De Soyza Maternity Hospital and Colombo South Teaching Hospital from August to September 2015. 288 Mothers who pay their first visit with the corresponding neonates were selected by systematic random sampling method, proportionate to the monthly admissions. Study instruments were a structured interviewer administered questionnaire, B.R.E.A.S.T Feed observation form and a checklist of the neonate. Chi squared and Fishers exact tests were used for statistical analysis at a significance level of 5%.

Results

Majority (n = 236; 81.9%) of the mothers were referred to the LMC from the hospital where they delivered and 163 (56.6%) had difficulty in breast feeding. Among the socio demographic factors studied, employed mothers (p = 0.009) and nuclear type of family (p<0.0001) were statistically significantly associated with breast feeding difficulty. Among the maternal factors, previous experience in breast feeding (p<0.0001), any type of illness of the mother (p<0.0001), perception of inadequate milk supply (p<0.0001), primi parity (p<0.0001) undergoing instrumental or operative type of delivery (p=0.007) were statistically significantly associated.

Conclusions and/or Recommendations

There are many factors which can be modified most factors above are not modifiable during the ante natal, intra natal and post natal period to overcome breast feeding difficulty. Antenatal health education on breast feeding at the hospital ante natal clinic and after getting admitted to the ward, providing every mother with a bed and a chair are recommended as solutions to overcome breast feeding difficulty.

Keywords: Breast feeding, Breast feeding difficulties, Lactation management centers

OP 16

Techniques of breast feeding and factors associated with it among post-natal mothers at De Soysa Maternity Hospital, Colombo.

C A Hettiarachchi^{1*}, N Gunawardena²

¹ Registrar in Community Medicine, National Institute of Health Sciences, Kalutara

² Professor in Community Medicine, Faculty of Medicine, Colombo.

*Correspondence: dr.charith@gmail.com

Introduction

Improper breast feeding techniques lead to inadequate breast milk intake of the newborn with many adverse outcomes to both newborn and mother.

Objectives

To assess the techniques of breast feeding and to describe factors associated with inappropriate positioning and poor attachment of the baby when feeding.

Methods

A descriptive cross-sectional study at De Soysa Maternity Hospital included a consecutive sample of 403 postnatal mothers 16-24 hours after singleton delivery. Sessions of breast feeding were observed and assessed using a checklist and an interviewer-administered questionnaire gathered data on potential factors. Checklist was based on World Health Organization guide on standard features of positioning and attachment at breast feeding and those not demonstrating any of the four features were classified as inappropriate positioning and poor attachment.

Results

Of mothers, 15% (n=58) showed inappropriate positioning of the baby and 8.5% (n=33) showed poor attachment. Knowledge on technique of positioning was "good" among 80.2% (n=311) and it was significantly associated with appropriate positioning (p<0.01). Even though 91.5% (n=355) had "good" knowledge on attachment it was not significantly associated with the good attachment (p>0.05). Birth weight <2.5kg (11.6%, n=39) (p<0.01), birth weight >3.5kg (35.8%, n=19) (p<0.01), lack of help from a health worker at first occasion of breast feeding (88.9%, n=8) (p<0.01), sharing the bed with another mother-baby pair (2.4%, n=2) (p<0.01), unavailability of a chair near the bed (35.1%, n=20) (p<0.01) were significantly associated with inappropriate positioning. The factors significantly associated with poor attachment were, time taken more than 1 hour to initiate breast feeding after delivery (17.7%, n=9) (p<0.05), Sharing the bed with another mother-baby pair (1.2%, n=1) (p<0.01). Non separation of the baby from the mother was significantly associated with good attachment (92%, n=342) (p<0.01).

Conclusions and/or Recommendations

Proportions of inappropriate positioning of the baby and poor attachment of the baby during breast feeding were low. The study identified modifiable factors that were significantly associated with either inappropriate positioning or poor attachment. Correcting those factors can improve the breast feeding in post-natal wards.

Keywords: Breast feeding technique, Positioning of the baby, Attachment of the baby

The effectiveness of a homemade supplementary food in improving the weight gain of moderately acute malnourished children, aged 3 to 5 years in Kopay Medical Officer of Health area

J T Sivashankar^{1*}, N Thalagala²

¹Registrar Community Medicine, National Institute of Health Science, Kalutara, ² Consultant Community Physician, Family Health Bureau, Colombo

*Correspondence: thiru_siva@hotmail.com

Introduction

Improving wasting and stunting among under 5 children (MDG 1) is a challenge even with food supplementation and cash transfer programmes for the marginalized populations.

Objectives

To assess the feasibility, acceptability and effectiveness of a homemade supplementary food (HMSF) to improve the weight gain of moderately acute malnourished children (MAM) between the ages 3 to 5 years.

Methods

This was a community based quasi experimental study carried out in Kopay MOH area in Jaffna district during October to December 2014. The acceptability and feasibility was assessed by Focus group discussion with the Public health staff and the mothers. The intervention study population was children with MAM ($\geq -3SD$ to $\leq -2SD$ for Weight for Height) between 3-5 years, in Kopay MOH (n=275), and the control group was MAM children of similar age in Uduvil, Nallur MOHs (n=285). Amount of HMSF to be given was decided after a test study (mean 90 gm). Fifty grams HMSF was given to the children daily as a snack with added sugar and scraped coconut (total=90gm= 500 kcal) to the intervention group for 3 months. Monthly weight gain was measured in both groups by the investigator. Average weight gain of both groups was analyzed using independent sample t -test.

Results

Acceptability and feasibility of the intervention was proved by the focus group discussions with the Public health staff and the mothers of the children. Mean age of the test group was 42.6 months and control was 43.1 months. Males in test group were 54.2% and control was 46.3%. There were no base line differences between the groups before the intervention (95%CI -0.059-0.416: p=0.14). The mean weight gain in the test group and the control group in 3 months were 688.5 gm (SD 437gm) and 583 gm (SD 461gm) respectively. The mean weight gain difference is 105 gm and it is statistically significant (95%CI 0.03-0.18, p=0.006). The mean height gain in the test group and the control group in 3 months were 1.5 cm (SD 0.93cm) and 1.66cm (SD 1.3 cm) respectively. The mean height gain difference is -0.11 cm and it is statistically not significant (95%CI -0.30 -+0.07, p=0.234).

Conclusions and/or Recommendations

This HMSF is easy to prepare at home by mothers, and could be recommended for MAM children under five years for the improvement of weight.

Keywords: Home Made Supplementary Food, Moderately acute malnutrition, undernutrition

Risk factors for colorectal cancer among adults in the districts of Colombo and Gampaha

Y M Samarakoon^{1*}, N S Gunawardena², A Pathirana³

¹ Registrar in Community Medicine, Department of Community Medicine, Faculty of Medicine, Colombo

² Professor in Community Medicine, Department of Community Medicine, Faculty of Medicine, Colombo

³ Consultant Surgeon, Department of Surgery, Faculty of Medical Sciences, University of Sri Jayewardenepura

*Correspondence : yasara.samarakoon@gmail.com

Introduction

Colorectal cancer (CRC) has been ranked as the fifth common cancer among men and the sixth among women in Sri Lanka.

Objectives

The aim was to determine risk factors for CRC among adults in the districts of Colombo and Gampaha.

Methods

The study was conducted in 2015, in the districts of Colombo and Gampaha and included 65 new clinically confirmed CRC cases and 130 controls from major five hospitals and 130 controls from the community, selected using consecutive sampling method. Lifestyle related, environmental, socio-demographic, genetic and co-morbid factors were assessed by an interviewer-administered questionnaire with verification through medical records when appropriate. Multivariate logistic regression assessed the risk of these factors on CRC.

Results

Frequent consumption (more than three times per week) of red meat (OR=3.1, 95% CI=1.3-7.4) and deep fried food (OR=2.5, 95% CI=1.2-5.4); age \geq 50 years (OR=2.6, 95% CI=1.1-5.9); presence of hypertension \geq 10 years (OR=3.3, 95% CI=1.2-5.4); CRC (OR=4.9, 95% CI=1.7-14.2) and other cancer (breast endometrial, ovarian) among first degree relatives (OR=3.0, 95% CI=1.1-7.8) were found to be significant risk factors for CRC when compared with hospital controls, while frequent consumption of deep fried food (OR=4.18, 95% CI=1.73-10.10); being a former (OR=3.2, 95% CI=1.1-9.3) and a current smoker (OR=5.4, 95% CI=1.1-27.8) and presence of hypertension \geq 10 years (OR=5.1, 95% CI=1.71-15.6), were found to be significant risk factors for CRC when compared with community controls.

Conclusion and/or Recommendations

Modifiable risk factors such as frequent deep fried food consumption and presence of hypertension were identified in relation to both control groups, while frequent red meat consumption and being a current or former smoker were modifiable risk factors identified in relation to one control group. Non-modifiable risk factors of advancing age, CRC and other cancers among first degree relatives were identified in relation one control group.

Modifiable risk factors should be targeted in designing on the preventive interventions while non-modifiable risk factors should be considered when identifying high risk groups for screening of CRC.

Keywords: Colorectal cancer, Risk factors, Gastro-intestinal malignancy

Survival and associated prognostic factors of cervical cancer patients in the Western Province of Sri Lanka

P.V.S.C. Vithana¹, V. Patabendi Bandarage², D.S.A.F. Dheerasinghe², P.N. Samarakoon², U. V. H .S. Amaradasa², S. H. Naseemdeen², S. Perera², E. Fernando², N.Paranagama²

¹Consultant Community Physician, Family Health Bureau

²National Cancer Control Programme

*Correspondence : chiranthikav@gmail.com

Introduction

Cervical cancer is the second commonest cancer among Sri Lankan females.

Objectives

Present study assessed the five year survival of cervical cancer patients diagnosed in 2008 in the western province of Sri Lanka and the associated prognostic factors.

Methods

Five-year survival-study was conducted among cervical cancer patients of the western province, diagnosed in 2008, from cancer registry. Total number eligible patients were 177. Two pre-tested data records sheets were utilized. Patient details were abstracted from the hospital records by medical officers. Patients were followed up at the field by the public health nursing officers to assess survival-status at five years and associated prognostic factors in 2014. Statistical analysis was conducted using Stata-12. Observed survival rates were calculated using Kaplan-Meier product-limit method. Survival-time was limited only for the five years from the incidence date. Survival at 1, 3 and 5 years were calculated. Log-rank test was used in univariate analysis to identify potentially important prognostic variables. Cox-proportional hazards model was used in multivariate analysis using covariates found to be with probability of 0.2 and below in log rank test in univariate analysis.

Results

Mean age of the total of 177 eligible patients was 56.3 years(SD=12.4). Forty-one(23.1%) had experienced the death within the five-year period from the incidence data. Sixty-five percent(n=115) were over 50 years. Seventy (56.0%) were in stage 111A and B. Overall one, three and five year survivals were 86.0%, 70.0% and 62.5% respectively. District, clinical stage, undergone surgery were statistically significant in univariate analysis.

Conclusion and/or Recommendations

In spite of having fairly good five-year survival, majority of patients being diagnosed at 111A or 111B stages reflects the need of strengthening primary prevention and screening strategies as cervical cancer is preventable cancer.

Keywords: Cervical cancer, Survival, Prognostic factors

Survival of Breast Cancer Patients Treated at Teaching Hospital Karapitiya, Galle from 2004 to 2008

H R T De Silva^{1*}, A R Wickremasinghe², S C R Perera³

¹Nursing Officer (BSc. Nursing & MPH in Epidemiology), Onco Surgical Unit, Teaching Hospital Karapitiya, Galle

²Professor of Public Health, Department of Public Health, Faculty of Medicine, University of Kelaniya

³Consultant Oncological Surgeon, Onco Surgical Unit, Teaching Hospital Karapitiya, Galle

*Correspondence : ruwandi09@gmail.com

Introduction

Breast cancer is the commonest cancer in women worldwide and in Sri Lanka. Early detection and improvements in therapy will help to improve survival of breast cancer patients. Data on survival of patients treated for breast cancer are limited in Sri Lanka.

Objectives

To determine the survivorship of breast cancer patients treated at Teaching Hospital, Karapitiya, Galle from 2004 to 2008

Methods

A retrospective study was done among female breast cancer patients who were registered at the oncology clinic of Teaching Hospital, Karapitiya, Galle from 2004 to 2008. All eligible patients were sampled consecutively and 590 patients were recruited. They were followed up till 31st December 2012. Patient's district of residence, age, marital status, menopausal status, parity, body mass index, histological type, tumour status, nodal status, onset of metastases, Nottingham Grade, hormone receptor status, status of treatment schedule and current status (death/alive) were extracted from oncology clinic records. The patients who have stopped clinic visits were contacted via telephone or a letter to determine their current status. Survival analysis was done by Kaplan Meier curves with log rank test and Cox's proportional hazards model.

Results

Mean survival time was 56.3 months and the median survival time was 61.98 month (SD=31.67). The common age group with breast cancer was the 45-54 year. Tumour status, nodal status, onset of metastases, Nottingham grade and status of treatment were statistically significant ($P < 0.001$) independent predictors of survival. Nodal status, onset of metastases, Nottingham grade and treatment status were significant predictors of survival after controlling for other variables.

Conclusions and/or Recommendations

Nodal status, onset of metastases, Nottingham grade and treatment status were significant predictors of survival in breast cancer patients.

Keywords: Cancersurvival, Breast Cancer, Survival analysis

Pattern of physical activity, among school children aged 14-15 years in the Kalutara District

I P Godakanda^{1*}, C Abeysena², A Lokubalasooriya³

¹Senior Registrar in Community Medicine, Mental Health Unit, Ministry of Health

²Professor in Community Medicine, Department of Public Health, Faculty of Medicine, University of Kelaniya

³Consultant Community Physician, Family Health Bureau, Colombo 10

*Correspondence : indranigodakanda29@gmail.com

Introduction

Non communicable diseases (NCDs) are the world's biggest killers causing 36 million deaths every year. Insufficient physical activity is considered as a major contributor and modifiable risk factor for NCDs.

Objectives

To describe the pattern of physical activity, among school children aged 14-15 years in Kalutara district.

Methods

School based descriptive cross sectional study was conducted among school children aged 14-15 years in Kalutara district, during the period of September to November 2013. Participants selected using multi stage stratified cluster sampling technique with probability proportionate to the school children, creating 90 clusters with 20 participants in each cluster. Self-administered, Physical Activity Questionnaire – Sinhala, validated by Ranasingha in 2009, was used to data collection. Participation in moderate to vigorous physical activity (MVPA) for at least 60 minutes per day for > 5 days per week was categorized as sufficiently active.

Results

Response rate was 99.8%,(N= 1795) with 990 males (55.2%) and 805 females (44.8%). Adolescents 33.1 % were sufficiently active. Males (35.1%) were more sufficiently active than females 30.6% (P < 0.05). Among the participants, 26.7% of Overweight, 35.1% of normal weight and 30.2% of underweight were sufficiently active (P =0.02). Urban school participants (35.1 %) were more active than rural participants (30.6 %), (P< 0.01). Average number of days for a week the engagement of MVPA at least 60 minutes per day was 4.45 (SD ±1.81) days, and only 4.8% (P <0 .05) participated for 3 or more days for a week in school physical exercise periods.

Conclusions and/or Recommendations

Only about one third of the adolescents were engaged in sufficient level of physical activity. Males, children with normal weight and urban school participants were more physically active. The study showed low level of adolescents' participation in school physical exercise periods.

Keywords: Adolescents, Physical activity, Non Communicable Diseases

OP 22

Prevalence of risk factors for non-communicable diseases among the screened population in Colombo district - 2015

D S V Mallawaarachchi^{1*}, T D B Illangasinghe², S M Arnold³

¹ Consultant Community Physician, Non-communicable Disease Unit, Ministry of Health.

²MO(NCD), RDHS Office, Colombo

³ Regional Director of Health Services, RDHS Office, Colombo

*Correspondence : virginimal2015@gmail.com

Introduction

Considering the need to reduce NCD burden, many primordial, primary and secondary strategies have been adopted by the Ministry of Health. Screening programmes conducted through Healthy Life Style Centres (HLCs), outreach clinics and work place screening to screen people in the age group 40- 65 years is one main strategy adopted to reduce the burden of NCDs.

Objectives

The aim was to identify the pattern of behavioural and intermediate risk factors and cardiovascular disease (CVD) risk among the population who were subjected to screening in the district of Colombo in 2015.

Methods

In the year 2015 32 HLCs were functional in the district which conducted an average of one clinic per week. In addition, outreach clinics and work place screenings also had been conducted in 2015. The targeted population for screening are adults of 40-65 years. Information on risk factors of the screened are collected in the routine information system was analyzed and the results are based on analysis of these data

Results

Of the 14,108 clients screened in Colombo district in 2015, 79.86% (n=11267) have been screened at HLCs, 18.15% (n=2561) screened at outreach clinics and 1.98% (n=280) at screening sessions conducted at work places. A majority screened (n=10501, 74.43%) were females. Of the screened females 30.9%, (n=3255) were overweight and 1.3% (n= 144) were obese. Among males, 37.2% (n= 1343) were overweight and 5.4% (n=196) were obese. Of the screened, 410 males (11.3%) and 999 females (9.5%) were found to have blood pressure $\geq 140/90$ mmHg whereas 531 males (14.7%) and 1303 females (12.4%) had fasting blood sugar >126 mg/dl. Of the males (n= 815, 22.5%) were smokers and (n= 756, 20.9%) were tobacco chewers whereas 25.2% (n=909) were consuming alcohol. Of the total screened in 2015, 0.3% had a CVD risk more than 30%.

Conclusion and/or Recommendations

Behavioural risk factors among the screened population were high indicating the need for rigorous behavioural interventions.

Keywords: Non-communicable diseases, Risk factors, Screening, Healthy Life Style Centres

OP 23

Drug compliance and associated factors among hypertensive patients attending outpatient medical clinic at Colombo South Teaching Hospital, Kalubowila

K J C N Jayawerdane^{1*}

¹Medical Officer, National Dengue Control Unit, Narahenpita

*Correspondence : chandana.murage@gmail.com

Introduction

Nearly one billion of the world adult population is suffering from hypertension. Drug treatment is the key factor in controlling hypertension and preventing its complications. However, nearly 58% of hypertensive patients do not take medicine as prescribed globally.

Objectives

To assess the drug compliance for hypertensive treatment and determine the factors associated with drug compliance.

Methods

A longitudinal descriptive study was carried out on a sample of 400 hypertensive patients attending Out Patient Medical Clinic at Colombo South Teaching Hospital Kalubowila. Drug compliance was measured by 2 methods (1). Questionnaire adopted from Morisky Medication Adherence Scale (MMAS) with some modifications. A scoring system was developed ranging from zero to eighteen. (2). Patients self-reporting of drug taking for 28 days period was completed using a check list.

Results

The mean age of the participants was 63.5 years and 82.55% were females. Nearly 85% of the participants were unemployed and in more than two thirds, the self reported monthly income was less than ten thousand and mean knowledge score was 3.6 (SD=2.2). The mean drug compliance was 53.3 % (mean MMAS score 9.6 ,SD=1.4). The common behaviours identified in the patients leading to poor compliance were forgetfulness in taking drugs, manipulating dosage forms and halting treatment when feeling bad or better with drugs, not bringing or consuming drugs when go out and not clarifying treatment problems with clinicians.

Conclusions and/or Recommendations

Drug compliance of the respondents were unsatisfactory. Low health literacy level leading to incorrect behavior of taking medication due to poor understanding of danger of hypertensive complications and benefits of drug treatment was identified. These findings may be used to improve public awareness to reduce morbidity, mortality and health care cost by planning and implementing programs.

Keywords: Hypertension, Drug compliance, Health literacy

Self-reported disease status and health-seeking pattern for prevention of non-communicable diseases among private sector bankers in Colombo district

F R Niyas^{1*}, L D J U Senarath²

¹Postgraduate Trainee in Community-Medicine, Post-graduate Institute of Medicine, Colombo

²Professor in Community Medicine, Faculty of Medicine, University of Colombo

*Correspondence : rushda2000@gmail.com

Introduction

The economically productive workforce in Sri-Lanka is vulnerable to high morbidity and mortality due to Non-Communicable diseases (NCDs). Secondary prevention of NCDs has been identified as a strategy in the NCD policy.

Objectives

To describe self-reported disease status and health seeking pattern for prevention of NCD's among private sector bankers.

Methods

Descriptive study was conducted in four selected private commercial banks in Colombo district, among 520 bankers aged 35 years and above. A two-stage cluster sampling was used for sampling and a self-administered questionnaire for data collection.

Results

Response rate was 88.8% (n=462). The majority of the sample was males (64.9%, n=300), aged between 35-44 years (85.9%, n=397), work tenure 15 years or less (70.1%, n=324), worked for eight hours or less daily (91.6%, n=423), and non-executives (51.7%, n=239).

Self-reported morbidities were: hypertension in 24.7% (n=114) of the respondents, hypercholesterolemia /dyslipidemia in 20.3%(n=94), and diabetes in 13.9%(n=64).

Proportion screened for hypertension was 81.4%(n=376), for diabetes 71.4%(n=330), and for dyslipidemia 61.7%(n=285). Among non-hypertensives, 66%(n=173) underwent blood pressure screening annually. Self- monitoring of blood pressure was carried out by 17.5%(n=81). Blood pressure screening was done at general practitioner in 53.4%(n=201), private hospital in 39.4%(n=148), medical check-up in 29.2%(n=110), healthy lifestyle center(HLC's) in 4.5%(n=17), and traditional doctor in 3.8%(n=14)

Blood sugar screening was performed at medical check-up in 29.4%(n=98), general practitioner in 14.8%(n=49), specialist/consultant in 13.9%(n=46), HLC's in 4.8%(n=16), and traditional doctor in 3.9%(n=13).

Dyslipidemia screening was done at medical check-up in 31.1%(n=88), general practitioner in 19.1%(n=54), specialist/consultant in 17.5%(n=50), HLC's in 3.5%(n=10), and traditional doctor in 3.5%(n=10)

Conclusions and/or Recommendations

Majority screened for hypertension, diabetes and dyslipidemia. Strategies should be implemented to sustain the favorable practice of undergoing screening for NCD's.

Keywords: Non-Communicable diseases, Health seeking pattern, Healthy lifestyle

OP 25

Stress level and associated factors among parents having a child less than six years of age with congenital heart disease attending the Lady Ridgeway Hospital for children

K M Athukorala^{1*}, A Kasturiratne²

¹Postgraduate Trainee - MD Community Medicine, Postgraduate Institute of Medicine

²Consultant Community Physician/ Lecturer, Faculty of Medicine – Kelaniya

*Correspondence : kanishka@pamod.net

Introduction

Parents of children with Congenital Heart Disease (CHD) are easy victims of psychological ill-health. Assessment of stress level and its associated factors among them is vital to recognize high risk parents and prevent them from becoming psychologically ill persons so that planning long-term care for children for better outcome is feasible.

Objectives

To determine the level of stress and associated factors among parents who are having less than six year old children with CHD attending the cardiology clinic at the Lady Ridgeway Hospital for children (LRH).

Methods

A descriptive cross sectional study was conducted. 380 eligible parents of less than six year old children with CHD attending the cardiology clinic at LRH were selected consecutively and they were assessed, using an interviewer-administered questionnaire based on the parental stress scale, perceived stress scale and the cardiologists' perception on medical severity scale.

Results

In the unemployed female predominate sample, the mean score of parental stress scale was 29.95 (SD 7.3), while the mean score of perceived stress scale was 14.37 (SD 5.1). In the study sample the commonest defect among children was Atrial Septal Defect(21.3%). In initial bivariate analysis and subsequent multivariate analysis, a statistically significant greater parental stress level was observed with advanced age of parents [$\beta=1.98(0.50-3.47)$;p value:0.01], advanced age of child [β value=1.02 (0.21-1.83); p=0.01], Parental knowledge on CHDs [β value=1.56(0.83-2.30); p=0.001] and presence of genetic disorder [β value=3.30 (0.31-6.29); P=0.04].

Conclusions and/or Recommendations

Parents of children with CHDs are experiencing varying degrees of stress level which are related with their age, age of the child, knowledge on CHDs and co-existing genetic disorders. When long term care for children with CHDs is planned these parent related factors should be considered for better outcome.

Keywords: Parental stress level, Congenital Heart disease, Parental Knowledge

OP 26

Factors associated with psychological distress of chronic kidney disease patients attending Maligawatta Nephrology Unit

R S Hettiarachchi^{1*}, H T C S Abeysena²

¹Postgraduate trainee in MD Community Medicine, Postgraduate Institute of Medicine, Colombo

²Professor, Department of Public Health, Faculty of Medicine, University of Kelaniya

*Correspondence : ramyasrimathi7@gmail.com

Introduction

Chronic kidney disease (CKD) is associated with high morbidity and mortality. Hence CKD patients are often in chronic psychological distress.

Objectives

To describe factors associated with psychological distress of CKD patients attending Maligawatta Nephrology Unit.

Methods

A descriptive cross sectional study was conducted among 382 CKD patients above 18 years of age applying systematic sampling. The data was collected using self-administered questionnaires to assess the psychological distress (GHQ-12), social support (SSQ6), coping strategies (BRIEFCOPE), pain (0 to 10 numeric pain rating scale) and physical role limitation due to ill-health (SF36QOL). Socio-demographic and disease-related data were collected using an interviewer administered questionnaire and a data extraction sheet. Factors associated with psychological distress were assessed by multiple logistic regression. The results were expressed as adjusted odds ratio (AOR) and 95% confidence intervals (95%CI).

Results

Percentage of psychological distress was 55.2% (95%CI: 48.4% to 62%). Female sex (AOR =2.95,95%CI:1.79-4.9), poor social support (AOR=1.81,95%CI:1.14-2.88) unsatisfaction with the social support received, (AOR=4.14, 95%CI:1.59-10.78), stage four and five of CKD (AOR=2.67, 95%CI:1.65-4.20), presence of comorbidities (AOR=2.38,95%CI:1.21-4.67) within one year of diagnosis (AOR=2.23,95%CI:1.36-3.67) low monthly income (AOR=2.26, CI:1.26-4.06) and higher out of pocket expenditure per month (AOR =1.75,95%CI: 1.75-1.99) were significantly associated with psychological distress.

Conclusions and/or Recommendations

More than half of the CKD patients were psychologically distressed. Factors such as social support will be worth considering early because of its modifiability.

Keywords: Chronic kidney disease, Coping strategies, Psychological distress, Social support

OP 27

Psychometric properties of the World Health Organization Disability Assessment Schedule 2.0, the proxy version for assessment of disability among schizophrenic individuals

H M A D M Wijesekara^{1*}, P Jayawardana², P L N Fernando³,

¹ Senior Registrar in Community Medicine, Ministry of Health

² Professor in Community Medicine, Department of Public Health, Faculty of Medicine, Ragama

³ Consultant Psychiatrist, Colombo North Teaching Hospital, Ragama

*Correspondence: adiliniw@yahoo.com

Introduction

Schizophrenia is a severe and chronic debilitating illness which results in functional impairment in social, academic, occupational and personal arenas. Due to the inherent nature of the illness, patient-reported disabilities are more likely to be unreliable. Thus the use of a proxy assessment which is expected to yield a balanced measurement of the prevailing disability.

Objectives

To validate the 36 item interviewer administered proxy version of the World Health Organization Disability Assessment Schedule 2.0 (WHO DAS 2.0-36) among the care givers of individuals with schizophrenia

Methods

WHO DAS 2.0-36 was translated to Sinhala using forward backward translation method. Two hundred and ninety care givers who accompanied individuals with schizophrenia for follow up treatment from the psychiatric clinics in the National Hospital Sri Lanka were selected by convenience sampling method. Judgmental validity was assessed by an expert panel using Delphi technique. Exploratory factor analysis was performed to assess construct validity for which principal axis factoring method was used as the extraction method. Kaiser's criteria, scree plot and the cumulative percentage of variance extracted were used in extraction of factors. Promax rotation was used for the factor rotation. Internal consistency (IC) and test re-test reliability were assessed with Cronbach's alpha and Kappa coefficient respectively.

Results

Judgmental validity was established. Final factor structure identified five factors. Ten items were removed and 75% of the variance of the variables was explained by the five factors. Cronbach's alpha of 0.85 (good IC) and the Kappa coefficient of 0.89 (perfect agreement) confirmed reliability.

Conclusions and/or Recommendations

The Sinhala translation of WHO DAS 2.0 interviewer administered proxy version is a valid and a reliable instrument to measure disability among schizophrenic patients.

Keywords: Disability, WHO DAS 2.0- 36 item proxy version, Psychometric properties

Prevalence of chronic stress and its social determinants among adults in the district of Colombo

M G B Senanayake^{1*}, C Arambepola²

¹ Senior Registrar in Community Medicine, South East Asian Regional Office for World Health Organization, New Delhi, India

² Senior Lecturer in Community Medicine, Faculty of Medicine, University of Colombo

*Correspondence : buddhikasena@yahoo.com

Introduction

High stress levels are common as a consequence of competitiveness seen across all strata in Sri Lankan society. While acute stress is increasingly becoming a part of life, 'chronic stress' has remained a relatively unfamiliar entity. Environment, in which people live and work, plays a key role in developing chronic stress. Chronic stress has several population specific facets, since it is tightly incorporated into the surrounding environment. Studying social determinants of chronic stress may shed light on its prevention.

Objectives

To describe the prevalence of chronic stress using a newly developed tool and its social determinants among adults in the district of Colombo

Methods

A cross-sectional, community-based study was conducted in the district of Colombo among 2410 adults aged over 18 years, selected using stratified, cluster sampling with probability-proportionate-to-size of its actual population. Trained graduates administered the newly developed and validated tool to assess chronic stress and social determinants via interviewer-administered questionnaires. Bivariate analysis followed by logistic regression analysis was carried out to identify the independent social determinants for chronic stress adjusted for confounding effect in the logistic regression model.

Results

The prevalence of high-level chronic stress among adults was 17.4% (95% CI: 15.9%-18.9%). Being a resident in highly urban: CMC and urban: non-CMC areas, being non-Buddhist, age, poor partner relationships, abuse by partner/self, parental death/separation during childhood and childhood traumatic experience were the social determinants of high-level chronic stress independent of confounding effects.

Conclusions and/or Recommendations

Nearly one in 6 adults showed high level of chronic stress, indicating an emerging public health problem in the district of Colombo. Owing to social determinants of chronic stress varying at area level, surveillance and psycho-social promotional activities should target vulnerable groups at multiple levels.

Keywords: Chronic stress, Social determinants, Adults

Factors associated with caregiver strain in children with Autism Spectrum Disorder attending autism clinics in Western province

V C Vithanage^{1*}, D Gamage²

¹ Medical Officer, Medical Officer of Health, Kelaniya

² Consultant Epidemiologist, Epidemiology Unit, Ministry of Health, Nutrition and Indigenous Medicine

*Correspondence: prabath.bandaranayaka.pb@gmail.com

Introduction

The primary caregivers of children with Autism Spectrum Disorder (ASD) are likely to experience more strain and stress than caregivers with other developmental disabilities. Although previous studies identified various predictors of caregiver strain, studies are lack in local context. Therefore, objective of this study was to assess the level of caregiver strain and associated factors to ensure well-being of both caregivers and care recipients.

Methods

A hospital based descriptive cross sectional study was conducted at autism clinics of Lady Ridgeway Hospital (LRH) and Faculty of medicine, Kelaniya. Consecutive sampling method was used to select 294 eligible caregivers and data was collected by an interviewer administered questionnaire. Chi square test was used to assess statistical significance of associated factors. A P value less than 0.05 was considered as statistically significant.

Results

In the study sample, majority (61.8%) of primary caregivers had moderate level of caregiver strain. Caregiver strain was significantly associated with age ($p < 0.001$), educational status ($p = 0.003$) and psychological distress ($p < 0.001$) of the primary caregiver, age of the autistic child ($p = 0.002$), number of siblings ($p = 0.002$) and distance to the hospital ($p = 0.001$).

Conclusions and/or Recommendations

There are number of factors associated with caregiver strain, which are important when developing long term care plan for children with Autism Spectrum Disorder (ASD). Further researches on this problem are needed in Sri Lanka to analyze the situation.

Keywords: Autism Spectrum Disorder (ASD), Caregiver Strain, Developmental Disorders, Psychological Distress

Treatment seeking behavior and factors associated with delayed presentation of Pulmonary Tuberculosis patients to Chest Clinic Kalutara

D S A Nilanja¹, N K C Gunarathna^{2*}, C M A Gunarathna³, A M D L Chandrasiri⁴,
H M A K C Wijesundara⁴

¹Medical Officer, District Chest Clinic, Kalutara

²Consultant Community Physician, National Institute of Health Sciences, Kalutara.

³Medical Officer, Base Hospital, Panadura

⁴Medical Officer, District Chest Clinic, Kalutara

*Correspondence : chintha.gunarathna@gmail.com

Introduction

Early diagnosis and treatment is very important to prevent transmission of tuberculosis

Objectives

This study was planned to describe the treatment seeking behavior and factors associated with delayed presentation of pulmonary tuberculosis (PTB) patients to Chest Clinic Kalutara (CCK).

Methods

A cross sectional study was conducted among all new PTB patients diagnosed at CCK for six months' duration from March 2015. The patient delay was analyzed as period between onset of symptoms to the first consultation and (Prolong Patient Delay (PPD) > 14 days) and health system delay was the period between first consultation to the diagnosis (Prolong Health System Delay (PHD) > 14 days).

Results

A total of 245 patients with mean age; 47.9 years (SD =16.3) were interviewed (male-73%, female- 27%). Eighty three percent of patients made first consultation within 14 days and only 12% delayed more than 28 days. Most of them (88%) visited General Practitioner or OPD doctor as first contact. Majority (76%) received treatment from more than one medical provider before came to CCK. Only 20% of patients referred to CCK within 14 days from first consultation and more than half of all referrals (58%) by specialists. Almost all the patients (98%) visited CCK within 7 days of referral. PPD was significantly associated with education level of patient ($\chi^2 =10.78,df- 4 p=0.029$) and employment status ($\chi^2 =12.01,df- 2, p=0.002$). PHD was significantly associated with sex ($\chi^2 = 4.1, df- 1 p=0.043$), number of visit to medical providers ($\chi^2 =30.5,df- 1, p<0.001$) and type of first contact ($\chi^2 =13.81,df- 2 p=0.001$).

Conclusions and/or Recommendations

Majority sought treatment from various health care providers before visited CCK. Health system delay was higher compared to patient delay and it was significantly associated with patient sex and type of first contact. Increase awareness on prevention need to be improved among both community and medical providers.

Keywords: Tuberculosis, Delayed presentation, Treatment seeking behaviour

Incidence and Sero-prevalence of Varicella: Situation in the Colombo district of Sri Lanka

H M Munasingha^{1*}, A Amarasinghe², G N Malavige³

¹ Senior Registrar, Epidemiology Unit, Ministry of Health, Colombo.

² Consultant Epidemiologist, Epidemiology Unit, Ministry of Health, Colombo

³ Immunologist, Department of Microbiology, University of Sri Jayewardenepura

*Correspondence : munasinghahathshya@gmail.com

Introduction

Varicella is an acute virus infection and a communicable disease. The primary infection of Varicella is called “Chickenpox” and the secondary infection Herpes Zoster, is called “Shingles”. Varicella is considered as a human disease, because there is no other identified reservoir. It can cause complications in high risk groups including pregnant women, and immune compromised patients.

Objectives

This study was carried out with the objectives of describing epidemiological profile of Varicella.

Methods

It was community based 12 months followed up a longitudinal study with sample size 25, 260. Multistage random sampling method was used to select 6313 households of 60 GN areas in the Colombo district. Interviewer administered structured questionnaire was used. Sero prevalence study was carried out in the same study setting by using multistage random sampling with probability proportionate to size. Sample size was 1230. Commercial IgG ELISA kit was used.

Results

Varicella new cases (187) were reported during the one year follow up period. An incidence density rate was 75.3 / 10,000 person years (95% CI 65.2 – 86.8) and calculated cumulative Incidence was 74.78 per 10,000 (95%CI 64.0– 86.0). Overall sero prevalence of Varicella was 54.21%[95% CI 51.46% - 56.96%].Age specific sero prevalence had increased from 9.78% in age 1- 4 years to 76.27% in 60 years or above.

Conclusions and/or Recommendations

Revealed incidence 75.3 / 10,000 person years (95% CI 65.2 – 86.8) of Varicella and sero prevalence (54.21%[95% CI 51.46% - 56.96%]) of Varicella are high in the Colombo district.

High population density with high incidence in the Colombo district supports to recommend and revitalized Varicella prevention activities including vaccination.

Keywords: Varicella, Varicella incidence, Sero prevalence

The effectiveness and feasibility of a Short Message Service (SMS) based notification system to strengthen the communicable disease surveillance system in Medical Officer of Health area, Beruwala

H W S R Rambukwella^{1*}, L S D De Silva¹, P P Jayasinghe¹, H N A Fonseka¹, T J Shivashankar¹, D C K Herath¹, S H P De Silva², S Nandasena², L Magodaratne², R Ferdinando²

¹ Registrar, Postgraduate Institute of Medicine, University of Colombo

² Consultant Community Physician, National Institute of Health Sciences, Kalutara, Sri Lanka

*Correspondence : Roshanrambukwella1@gmail.com

Introduction

Delay in disease investigation leads to occurrence of outbreaks. Global evidence on successful implementation of Short Message Service (SMS) based disease surveillance systems show their effects on improving timeliness, accuracy and completeness of surveillance data to monitor disease burden reliably and to guide efficient resource prioritization.

Objectives

To strengthen the current communicable disease surveillance system by introducing a SMS based notification system in Medical Officer of Health area, Beruwala

Methods

Disease notifications received via H544 and through Dengue Sentinel site Surveillance System (DenSys) were added to a common data base. A software was developed to process received notifications and disseminate them as a SMS to the mobiles of respective range Public Health Inspectors (PHII). PHII were instructed to reply with a SMS once the investigation process begins. A reminder message was sent on the fifth day for the delayed investigations. The effectiveness of the intervention was evaluated by measuring the average time taken to initiate investigation and percentage increase in diseases investigated within seven days of notification. Key informant interviews with stakeholders were carried out to evaluate the feasibility of the intervention.

Results

Response rate was 100% by PHIs during the first two weeks of implementation. The average time taken for disease investigation prior to intervention was 10.5 days (SD=5.01days) and post intervention 2.1 days (SD=1.1days) difference was statistically significant ($p<0.001$). Prior to the intervention only 58% (n=48) of cases were investigated within the first 7 days and post intervention that was 100% (n=11) improvement was statically significant ($p=0.003$). Key informant interviews showed the intervention was feasible, sustainable and promotes remote disease reporting. Although, PHIs were concerned whether it would create an additional work burden, satisfied with the broader image created among public on their job with the new intervention.

Conclusions and/or Recommendations

The SMS based notification system provides real time evidence for effective response in disease surveillance. The initial result warrant further evaluation with a view of scaling up to national level.

Keywords: Short message service, Surveillance, Communicable diseases

Prevalence and associated factors of risky sexual behaviours among undergraduates in state universities of Western Province

T A U A P Perera^{1*}, C Abeysena²

¹ Registrar in Community Medicine, District General Hospital Gampaha.

² Professor in Public Health, Faculty of Medicine, University of Kelaniya.

*Correspondence : upuliaruna@yahoo.com

Introduction

Sexual behaviors leading to unwanted pregnancies and sexually transmitted infections (STI) including Human immuno-deficiency Virus (HIV) and acquired immune-deficiency syndrome (AIDS) are defined as risky sexual behaviors (RSB). There are more than 105,000 youths studying in universities in Sri Lanka. For most of these youths, university life represents a shift towards greater independence from home and school settings, an opportunity to form new friendships, social mixing and an opportunity to experience many risk behaviors.

Objectives

To determine the prevalence and associated factors of RSB among undergraduates in state universities of Western Province.

Methods

A descriptive cross sectional study was conducted among 1575 second and third year undergraduates using stratified cluster sampling of the selected universities. Pretested self-administered questionnaire was administered to assess socio-demographic, knowledge on reproductive health and behavioral information. Prevalence and 95% Confidence Interval (CI) of RSB was calculated. Associated factors were determined by applying multiple logistic regression and the results were expressed as adjusted odds ratios (OR).

Results

Prevalence of RSB in last one year and three months periods were 12.4%, (95% CI: 11.8-12.7) and 12.1 % (95% CI 11.5-12.7) respectively. Sex specific prevalence of RSB in three months period was 19.1% (95% CI:16.1-22.2) and 7.2% (95% CI: 8.9-5.5) for males and females respectively. Attended night clubs more than once in last month (OR=3.61 95% CI: 1.31-9.97), alcohol consumption within last three months (OR=2.59, 95% CI: 1.82-3.70), good knowledge on condoms (OR=2.91, 95% CI: 2.00-4.24) and those who thought religion was very important to their lives (OR=0.67 95% CI: 0.48-0.95) were significantly associated with RSB. Knowledge on contraceptives, induced abortions, sexually transmitted infections, HIV/AIDs and sexual and reproductive health rights were not associated with RSB.

Conclusion and/or Recommendations

RSB was prevailing high among undergraduates. Attended night clubs, alcohol consumption were associated with RSB. Necessary measures should be taken to reduce other risk behaviors within university to reduce RSB.

Keywords: Sexually Transmitted Infections, Risky sexual behavior, Undergraduates

Preparedness of the government hospitals, knowledge and attitudes of Medical Officers for selected infectious diseases of international concern in the District of Colombo

R A N H Ranasingha¹, V Kumarapeli^{2*}

¹ Deputy Director, National Institute of Mental Health.

² Director (Training), ETR Unit, Ministry of Health.

*Correspondence : vindyalk@yahoo.com

Introduction

Infectious diseases of international concern (IDIC) have become a threat to public health security, best illustrated by outbreaks of SARS (2003), Influenza A (2009) and Ebola Virus Disease (2014).

Objectives

To assess preparedness of the government hospital, knowledge and attitudes of Medical Officers for selected IDIC in the district of Colombo

Methods

Descriptive cross sectional study with two components. Component I - among a random sample of tertiary, secondary, primary care level government hospitals (n=9) in district of Colombo, to assess preparedness (having an infection control unit, notification process, care/ isolation/ decontamination facilities, coordinated response, circulars/guidelines), using a check list. Component II- among a proportionate, random sample of 424 Medical Officers to assess knowledge (disease characteristics, management, prevention, notification, safety procedures) and attitudes on IDIC using a pre-tested, self-administered questionnaire. Good knowledge and favourable attitudes were assessed by a pre-determined marking scheme and a 5-point Likert scale respectively.

Results

Overall hospital preparedness was higher at tertiary level (80%) compared to secondary level (53%). Notification, infection control, waste disposal procedures were available at all levels (100.0%). Guidelines on decontamination/disinfection and care of a suspected/diagnosed patient with IDIC were not available and drills have never been conducted at any level.

Of the Medical Officers, 67.1% (n=276) belonged to Grade II. 56.4% (n=239) had post-graduate qualifications. Overall level of knowledge on IDIC was good among 78.5% (n=332), found gaps on uncommon symptoms, method of spread, diagnosis, isolation, transfer procedures. Attitudes on IDIC among majority (69%; n=293) of Medical Officers were satisfactory except on need to perform drills, means of updating knowledge, attending to patients with IDIC

Conclusion and/or Recommendations

Further improvements are needed in preparedness at secondary care level. Emphasis should be given on conducting drills. Specific gaps identified in knowledge and attitudes of Medical Officers should be addressed through regular in-service training.

Keywords: Infectious diseases of international concern, Hospital preparedness

Prevalence of radiologically confirmed Knee Osteoarthritis among an adult population in a suburban setting in Sri Lanka

N Gunawardena¹, I Atukorala¹, F Hassan¹, A Hettihewa^{1*}, E Naotunna², M Rajkaran³, I Lekange⁴, D Hunter⁵

¹Faculty of Medicine, University of Colombo, Sri Lanka

²Kotelawala Defense University, Sri Lanka

³Cerebral Palsy Foundation, Sri Lanka

⁴Natal Hospital Colombo, Sri Lanka

⁵Institute of Bone and Joint Research, Kolling Institute, University of Sydney and the Rheumatology Department, Royal North Shore Hospital.

*Correspondence : akalankahettihewa26@gmail.com

Introduction

Knee Osteoarthritis (KOA) is one of the commonest causes for persistent knee pain.

Objectives

This study estimated the prevalence of radiologically confirmed KOA among an adult population in a suburban setting in Colombo.

Methods

This community based, cross-sectional study was among a representative sample of 845 subjects aged 50 years or more living in Pitakotte MOH area. Clinical criteria of the American College of Rheumatologists (ACR) were used to determine the prevalence of symptomatic KOA. An interviewer-administered questionnaire with targeted physical examination by trained physiotherapy graduates confirmed the diagnosis of symptomatic KOA. Radiological evidence was obtained from antero-posterior and lateral x-rays of people with symptomatic KOA.

Results

The prevalence of symptomatic KOA of one or both knees was 20.1% (n=132) (95% CI 17-23.2). Radiographic evidence confirmed that 9.3% (95% CI: 7.4-11.3) had knee osteoarthritis, out of which 10.8% (95% CI 8.6-13.2) were females and 3.9% (95% CI 1.2-7.0) were males. Of those with radiographic confirmation, 81.9% had KOA in both knees, 1.1% left only and 2.1% right only. Low bone density was seen in 17%. Significant narrowing of joint space was seen in 8.5% and 62.8% had slight narrowing of joint space. Narrowing of joint space in both knees was seen in 54.3%. Osteophytes on both knees was seen among 69.1% while 13.8% were classified as significant osteophytes. Based on the features confirmed by radiographic data Kellergn & Lawrance (K & L) Grade was decided. When considering the left knee 74.5% had K & L grade below 3 and 20.2% were at grade 3. When considering the right knee, 72.4% had K & L grade below 3 and 24.4% were at grade 3 level.

Conclusions and/or Recommendations

Prevalence of radiologically confirmed KOA among the adult population in a suburban setting in Colombo revealed that the problem is of public health importance.

Keywords: Knee Osteoarthritis, persistent knee pain

Epidemiology of Unintentional School Injuries in Primary School Students in Kandy, Sri Lanka

S Navaratna^{1*}, S Dharmaratne², D B Nugegoda³

¹Lecturer in Community Medicine, Department of Community Medicine, Faculty of Medicine, University of Peradeniya

²Associate Professor in Community Medicine, Department of Community Medicine, Faculty of Medicine, University of Peradeniya

³Former Professor of Community Medicine, Faculty of Medicine, University of Peradeniya

*Correspondence : samidnavaratna@gmail.com

Introduction

Unintentional school injuries can be considered as a growing public health problem that needs urgent attention.

Objectives

To describe the epidemiology of school injuries in the Gangawatakorale education division, Kandy,

Methods

This study was carried out as a part of a larger study among the grade 4 students in the government schools of the Gangawatakorale education division, Kandy. A sample of 789 students was recruited using a multi stage cluster sampling method. A well-structured pre-tested interviewer administered questionnaire was used to gather information regarding school injuries that took place in the preceding 1 month. Analyses of injury incidence and injury characteristics were done using frequencies. To determine the factors associated with sustaining a school injury cross tabulations were generated between sustaining a school injury and relevant independent variables. The statistical significance was tested using chi-square test.

Results

The event- based injury incidence was 29.4 per 100 students per month (95% CI: 28.7-30.0). More males (30%) than females (28.5%) were affected by school injuries. Majority (21.6%) of the injury events occurred during recess. Injury events frequently took place in the playground (24.1%) and sidewalks/ stairs/ corridors (17.2%). Main mechanism of injury events was by 'tripping/ slipping' (28.4%). Most common personal contributory factors were 'overexertion' (25%) followed by 'starvation/ hunger' (19.8%). Most common environmental contributory factor was lack of maintenance of the premises (24.1%). Most frequently seen injury type was abrasions while the most commonly affected anatomical site was the lower extremities. Of all injuries reported in the primary school stratum 25.6% were recognized as major injuries. First aid at school had been given to 42.2% while 8.5% had been hospitalised.

Sleeping for ≥ 8 hours ($\chi^2=5.8$, $p=0.01$), watching television ≤ 1 hour per day ($\chi^2=6.5$, $p=0.01$), playing computer/ video/ phone games ≤ 1 hour per day ($\chi^2=4.4$, $p=0.03$), and after school studying ≤ 2 hours per day ($\chi^2=6.6$, $p=0.01$) were some of the statistically significant protective factors for school injuries identified through this study.

Conclusions and/or Recommendations

The event based school injury incidence was very high and only a small fraction of students had received proper first aid care at school.

Keywords: School health, Unintentional injury

Health related quality of life and its correlates among elderly in the Kaduwela MOH area

C R Wijesundara^{1*}, K T A A Kasturirathna²

¹ Registrar in Community Medicine, Postgraduate Institute of Medicine, University of Colombo

² Senior Lecturer in Community Medicine, Faculty of Medicine, University of Kelaniya

*Correspondence : chaturawijesundara@gmail.com

Introduction

Ageing is a universal phenomenon and enhancement of healthy life expectancy is an issue of immense public health importance.

Objectives

To determine the level of health related quality of life (HRQoL) and its correlates among elderly in the Kaduwela MOH area.

Methods

A community based descriptive cross sectional study was conducted on 460 elders (>60 years) selected through a cluster sampling method. WHOQOL-BREF questionnaire was the instrument used. t- test and multiple linear regression were used for the univariate and multivariate analysis respectively.

Results

The mean score for physical health domain was 58.84, and its individual correlates ($R^2=0.457$) were age ($p<0.001$), employment ($p<0.001$), morbidity ($p<0.001$) and ADL ($p<0.001$). The psychological domain had a mean of 46.75 and its individual correlates ($R^2=0.324$) were age ($p=0.013$), income ($p<0.001$), morbidity ($p<0.001$) and ADL ($p<0.001$) while co- residency ($p=0.029$) and standard of living were significant household correlates ($R^2=0.172$). The mean of the social relationships domain was 45.93 and civil status ($p=0.024$) and ADL ($p<0.001$) were determined to be its individual correlates ($R^2=0.185$), while co-residency ($p<0.001$) and standard of living ($p<0.001$) were the household correlates ($R^2=0.103$). Environment domain reported a mean of 50.02. Its individual correlates ($R^2=0.282$) were income ($p<0.001$), morbidity ($p<0.001$) and ADL ($p<0.001$), while the household correlates ($R^2=0.217$) were ownership of the house ($p<0.001$), co-residency ($p<0.001$) and standard of living ($p<0.001$).

Conclusions and/or Recommendations

The level of HRQoL among elders appears to be relatively low. The individual and household factors both seems to play a vital role for most of the facets of HRQoL, but the individual correlates varied according to the domains. These variations warrant a multi-sectoral, multi-disciplinary and a culturally relevant approach to create a suitable and a sustainable environment for the improvement of HRQoL.

Keywords: Health related quality of life, Elderly

Health related quality of life and associated factors among soldiers with permanent disabilities following traumatic limb injuries during the civil conflict in Sri Lanka

G D S Samanmalee^{1*}, C Arambepola²

¹Medical officer, Youth, Elderly and Disabled Persons unit, Ministry of Health Sri Lanka.

²Senior Lecturer, Department of Community Medicine, Faculty of Medicine, Colombo

*Correspondence : samanmalisamitha@gmail.com

Introduction

The relationship between permanent disability and health related quality of life (HRQoL) is complex. The purpose of this study was to assess the Health related quality of life and its association factors of soldiers with permanent limb disabilities.

Objectives

To describe the HRQoL and its associated factors among Army soldiers with permanent disability following traumatic limb injuries during the last year of internal ethnic conflict in Sri Lanka

Methods

Cross sectional analytical study conducted in 500 random sample of soldiers with permanent limb disability who were injured during the last year of ethnic conflict of Sri Lanka. Data were collected through postal questionnaire. HRQoL was assessed using SF 36 tool.

Results

Respond rate was 72 %.(360).Majority were age below 35 with mean age 30.9 years (± 5.7) living in home based settings (273, 80.3%), married (281, 78.9%), had completed secondary education (330, 91.7%) and currently in service (345, 96.7%). The commonest injuries were lower limb (85.8%) in site, amputations (55.5%) in type and following landmine (166, 47%).

Both physical component summary (mean= 57.1 \pm 19) and mental component summary (mean = 58.8 \pm 17.2) scores were more or less similar among the soldiers, indicating equal contribution to the overall HRQOL. Comparison better HRQoL was recorded in the Social Functioning domain (mean = 73.4 \pm 24.0) while the lowest was in the Vitality domain (mean=48.4 \pm 15.52).

Age above 35 years, needed support for their daily activities, were not assigned a duty in the army and had co-disabilities other than the limb disability were significantly associated with poor HRQOL.

Conclusions and/or Recommendations

HRQoL was low related to both components among soldiers with permanent limb disability. Both Individual factors (age, employment) and injury related factors (type of limb disabled, presence of co- disabilities) are associated to the HRQoL.

Keywords: Health related quality of life, permanent disability, traumatic limb injuries

Peripheral arterial disease: Public Awareness in Sri Lanka

J Weragoda^{1*}, R Seneviratne², M C Weerasinghe³, M Wijeyaratne⁴

¹ Senior Registrar in Community Medicine, Ministry of Health Sri Lanka

² Senior Professor in Community Medicine, Faculty of Medicine, General Sir John Kotelawala Defense University, Sri Lanka

³ Senior Lecturer, Department of Community Medicine, Faculty of Medicine, University of Colombo, Sri Lanka

⁴ Professor, Department of Surgery, Faculty of Medicine, University of Colombo, Sri Lanka

*Correspondence : janaka.weragoda@gmail.com

Introduction

Peripheral arterial disease (PAD) is an emerging problem in Sri Lanka. A considerable number of patients are detected at late stage with severe limb ischemia or chronic leg ulceration. Public awareness on a disease is an important in developing preventive strategies.

Objectives

This study was aimed to assess awareness of PAD among adults in Gampaha district.

Methods

A cross sectional study was conducted in Gampaha district among 2912 adults aged 40–74 years selected by multistage probability proportionate to size sampling technique. Data were collected using an interviewer-administered questionnaire. Those who had “heard about and could describe the disease” were classified as “aware” of the disease. The awareness of PAD was compared with awareness of myocardial infarction (heart attack) and cerebrovascular accidents (stroke) using paired-samples t-tests. Multivariate logistic regression analysis was used to assess the independent predictors of PAD awareness

Results

Response rate was 95.4% (n=2779). One hundred and fourteen (4.1%) were aware of PAD (95% CI: 3.4–4.8), which was significantly lower than the awareness of stroke (67.3%, n=1869) and heart attack (57.6%, n=1600) (family members/relatives (37.7%, n=43) and only 10.5 % (n=12) had received information from mass media.

Conclusion and/or Recommendations

There was a notable gap in awareness of PAD in general public and those who are already at risk for PAD. It is necessary to incorporate PAD to the major NCD prevention programme of the country to improve the awareness on the disease and to initiate corrective action.

Keywords: Peripheral arterial disease, Public awareness,

Self-medicating practices and misuse of selected oral allopathic medicine among mothers of children less than 12 years of age and associated factors: A study done in a teaching hospital, Sri Lanka

Y B P De Silva^{1*}, F H Hussain¹, H S Kannangara¹, A P M Kulathunge¹, G M Ginige¹, M Gamage², C S E Goonewardena³

¹ Faculty of Medical Sciences

² Senior Lecturer, Department of Paediatrics

³ Senior Lecturer, Department of Community Medicine, University of Sri Jayewardenepura

*Correspondence : bhagyadesilva26@gmail.com

Introduction

Self-medication and misuse of medicines is a growing trend in current society with advanced knowledge and education.

Objectives

To describe the self-medication practices and misuse of selected oral allopathic medication among mothers of children less than 12 years in an urban area of Colombo and factors associated.

Methods

A descriptive cross sectional study was carried among 350 mothers on self-medication of children less than 12 years in the preceding six months who attend Out Patient Department of Colombo South Teaching Hospital during March to April 2014. Data was collected by a pre -tested interviewer administered questionnaire and was analyzed using SPSS 15.0.

Results

Majority (85.1%) was between 25-44 years and mean age of mother was 33.1 ± 6.707 SD. Most of them (86.9%) are Sinhalese, 73.7% were only educated up to O/L s most (64%) were housewives. There were more female children (54%) and nearly half were between 1-4 years of age. Majority (N= 331, 95%) self-medicated their children. There was a statistically significant association between mother's higher education level (P=0.011), un-occupancy (P=0.005), father's higher education level (P =0.007), father's higher occupational category (P= 0.02), older child (P=0.004) and high parity (P=0.033) with self-medication. Paracetamol was the commonly used drug by majority of mothers (90%) and 37.7 % self-medicated with Chlorpheniramine, Salbutamol and Amoxicillin. Mothers had given larger dose than recommended of paracetamol (23.4%) and chlorpheniramine (12%). Significant association with misuse of paracetamol was observed among house wives (p=0,001), low educational level of mother and spouse (p =0.05), skilled occupations (p=0.02), age of child (p=0.000) and having nuclear families (p=0.05). Significant association of Chlorpheniramine overuse with sex of child and family type were observed (p=0.05).

Conclusions and/or Recommendations

Considerable proportion of mothers self-medicates their children. Risk of misusing over the counter medication and obtain them without prescriptions were high.

Keywords: Self-medication, Misuse of oral allopathic medication, Children under 12 years

Field testing for effectiveness and acceptability of the “adolescent sexual and reproductive health awareness package” among 15 – 19 aged female group in Panaduara MOH area.

S H P de Silva¹, M N Danansuriya², R B B S Ramachandra³, T K Kalubowila⁴, P D Kusumalatha⁵, C J Jayasundera^{6*}

¹ Consultant Community Physician, National Institute of Health Sciences.

² Consultant Community Physician, Family Health Bureau.

³ Registrar in Community Medicine, National Institute of Health Sciences.

⁴ Medical Superintendent, Base Hospital, Horana.

⁵ Public Health Nursing Tutor, Department of Research, National Institute of Health Sciences.

⁶ Medical Officer, Family Health Bureau.

*Correspondence : chamanthiwije@gmail.com

Introduction

An awareness package on “adolescent sexual and reproductive health” consisting of two storylines was developed using real life situations identified from youth, teenage mothers and Public Health Midwives groups in the Kalutara MOH area. Field testing was necessary prior to scaling up of the package. The package incorporated already published materials by the Family Health Bureau.

Objectives

To evaluate the effectiveness and acceptability of the “adolescent sexual and reproductive health awareness package” among 15 – 19 aged female group in Panaduara MOH area.

Methods

Some 15 Public Health Midwives selected randomly from Panadura MOH area were given a two day training including: scenario development, storytelling, the two storylines and continuation of the two storylines based on scenario building techniques, with demonstrations and practical sessions. The midwives conducted awareness programs during the following month. Evaluation was undertaken by non participatory observation of these sessions, qualitative evaluation of PHMs, the participants and the parents.

Results

Most of the mothers identified this as a ‘needy area’ they lacked expertise. Midwives identified the package as ‘simple’, ‘realistic’, and ‘easy to understand and implement’. They commented that training was essential and performance improved with practice. The parent’s response was ‘very encouraging’, had no problem in setting up venues and had no problem in ‘recruiting participants’. The Midwives also commented that they were able to incorporate their own experiences to the ongoing stories. The participants commented that the package was ‘simple’, ‘interactive’ and ‘interesting’ and ‘very educative’. They were willing to bring their friends to the second session.

Conclusions and/or Recommendations

The package is an easy to learn and easy to perform interactive awareness tool that incorporates already available materials published by the FHB, and has demonstrated its acceptability and effectiveness in short-term among urban and semi urban 15 – 19 aged females in the Kalutara District. Further evaluation in high risk areas may be needed prior to scaling up to the country.

Keywords: Adolescents, Sexual and reproductive health, Awareness package

World Health Statistics 2016: Analysing health priorities for sustainable development in Sri Lanka

M G B Senanayake^{1*}, D Jeyakumaran², S G Senanayake³, A De Silva⁴

¹ Junior Public Health Professional, South East Asian Regional Office for World Health Organization, New Delhi, India

² Junior Public Health Professional, South East Asian Regional Office for World Health Organization, New Delhi, India.

³ Regional Advisor - Health Systems and Patient Safety, South East Asian Regional Office for World Health Organization, New Delhi, India

⁴ Regional Advisor -Nutrition South East Asian Regional Office for World Health Organization, New Delhi, India

*Correspondence : buddhikasena@yahoo.com

Introduction

Sustainable Development Goals (SDGs) encompasses integrated socio-economic, environmental dimensions to eradicate poverty and inequity in 2030. World Health Organization has released World Health Statistics – 2016, providing a platform to monitor health for SDGs. This reflects current health status of Sri Lanka and provides opportunity to analyse health priorities for future.

Objectives

To identify health priorities for Sri Lanka using SDG indicators reported in World Health Statistics – 2016

Methods

All health and health related SDG indicators in World Health Statistics – 2016 were identified. Indicators used to assess universal health coverage were excluded; resulting 30 indicators tabulated and compared for Sri Lanka, South East Asian member countries, regional and global standards. Best performance value for each indicator within global, regional and member country level was compared with the Sri Lanka value. Indicators with poor performance were further compared with member states within the region.

Results

Most maternal, neonatal, child health indicators were above the regional and global standards except prevalence of wasting among under 5 children and use of modern methods of family planning. Probability of dying from any non-communicable disease between age of 30 – 70 is higher compared to Bangladesh, Maldives, Thailand. Per capita alcohol consumption and road traffic mortality rate is higher compared to other regional countries. Suicide mortality rate and mortality rate attributed to household and ambient air pollution is high compared to regional and global standards. Population with primary reliance on clean fuels is low and international health regulation core capacity score is well short of regional/ global level.

Conclusion and/or Recommendations

Childhood nutrition, family planning, prevention and control of acute and chronic non-communicable diseases and their risk factors, mental health, indoor – outdoor air pollution and international health regulations are identified as priority areas within the SDG framework. Health Master Plan for the next decade should address these issues to achieve SDGs in 2030.

Keywords: Health priorities, Sustainable development, World Health Statistics

Identification of delays in Diagnosis and Management of Acute Myocardial Infarction at Preliminary Care Unit of BH Panadura: an interim analysis

S H P de Silva^{1*}, R S W M U B Dassanayake², A T H E S Mahindadasa³, H M W Wijesekera³, G A M P Gajadeera³

¹ Consultant Community Physician, National Institute of Health Sciences

² Consultant Physician – BH Panadura

³ Medical Officer – BH Panadura

*Correspondence : padmaldes@gmail.com

Introduction

Ischemic heart disease including acute myocardial infarction (AMI) is the leading cause of deaths in Sri Lanka. Efficacy and speed are necessary for its effective management. Thrombolytic therapy has been shown to reduce early and long-term mortality and commenced within 1-2 hours has the greatest benefit.

Objectives

To identify the delays in diagnosis and management of AMI patients using a three delay model

Methods

A descriptive cross sectional study was conducted at BH Panadura among all patients diagnosed and managed for AMI from 1st of January 2016. Standard criteria were used to diagnose AMI. Time from onset of symptoms to initiation of management was assessed using a three delay model: time taken on deciding to seek medical care, to reach the hospital, and to diagnose and initiate thrombolytic therapy. A structured, pretested, interviewer administered questionnaire (first two durations) and an extraction sheet for the BHTs (3rd delay). Data was collected by a single medical officer. Delays were identified against minimum time durations reached by consensus.

Results

During first quarter of 2016, 117 participants had been recruited with 2 non-responders and 5 deaths. Only 43.5% (n=50) had decided to seek medical care within the first hour. Only 61.3% (n=60) had reached the hospital within 1 hour of decision, while 16% (n=28) had taken more than 2 hours. The median time taken to initiate treatment was 162 minutes with an Inter Quartile Range of 31 to 170 minutes. Only 38.2% (n=42) had received treatment within the first hour while 21.8% (n=24), 26.4% (n=29) and 13.6% (n=15) had received treatment within 1.01–2 hours, 2.01-5 hours and more than 5.01 hours respectively.

Conclusions and/or Recommendations

Considerable delays exist in all three areas. Awareness need to be done on the need for urgent medical referral. A system of emergency medical service would reduce the second delay and management protocols and standard operational procedures need to be strengthened at the PCU for AMI management.

Keywords: Acute Myocardial Infarction, Three Delay Model

Virtual Multi Disciplinary Team: The Hambantota experience

M D T Lakshan¹, U Eknayake², S H P de Silva^{3*}, M S D Wijesinghe⁴
R.B.B.S Ramachandra⁵

¹ Consultant ENT Surgeon, DGH Hambantota

² Consultant Oncologist, Teaching Hospital Karapitiya

³ Consultant Community Physician, National Institute of Health Sciences

⁴ Consultant Community Physician, Anti Leprosy Campaign

⁵ Senior Registrar, National Institute of Health Sciences

*Correspondence : padmaldes@gmail.com

Introduction

Patients with malignancies in head and neck area are referred from DGH Hambantota ENT Unit to TH Karapitiya Oncology Unit for specialized care. This had caused immense hardships due to the distance and cost to the patients as well as problems in follow up in several instances. A 'Virtual Multi Disciplinary Team' was developed and implemented between the ENT unit (DGH Hambantota) and the Oncology Unit (TH Karapitiya) on voluntary basis from November 2013 to July 2015. Already available hardware and freely available software such as 'Google Hangouts on Air' were used with a 4G internet connection.

Objectives

To assess 'efficacy and sustainability' of the virtual MDT system operational between the ENT unit (DGH Hambantota) & Oncology unit (TH Karapitiya)

Methods

The evaluation included a scenario based costing study to assess cost effectiveness and a qualitative study to assess the sustainability. Scenario based costing technique was used to estimate the cost incurred by the patients for referral to TH Karapitiya. The cost of setting up and maintaining the 'Virtual MDT' system was estimated based on real time costs incurred for the system. Qualitative interviews were done among team members to assess the sustainability.

Results

During the 20 months 15 video conference sessions were undertaken for 93 patients. The system included a laptop and a 4G internet connection at each end and was provided by the respective consultants. Replacement cost of the entire system was estimated to be under Rs. 200 000.00. Apportioned cost for the hardware considering a life span of three years was less than 30.00 rupees per session and cost for internet was less than 10.00 rupees per session. In contrast the patients would spend on average Rs. 2000.00 for transport and food and Rs. 1500.00 as indirect costs in lost earnings for self and the accomplice. All team members agreed that, it was "easy", "low cost to operate", "convenient to the patient as well as the unit", "acceptable to the patients" and "consultant driven and not currently systemized" and therefore "less sustainable".

Conclusions and/or Recommendations

'Virtual MDT' provides a low cost solution to patient referral with clear benefits to patients and the health system. Incorporation into routine system from the existing 'Consultant driven' model is necessary for sustainability.

Keywords: Virtual Multi Disciplinary Team, ENT Unit, Oncology Unit

Abstracts of poster presentations

PP 01

Awareness, attitudes and practices on cervical cancer and screening among married women in Udangangoda Ghrama Niladhari Division, Rathnapura District, Sri Lanka

H M R K G Nandasena^{1*}, E S J S K Ekanayaka²

¹Lecturer, International Institute of Health Sciences

²Lecturer, Faculty of Allied Health Sciences, University of Peradeniya

*Correspondence : renu88kalhari@gmail.com

Introduction

Cervical cancer is a major public health problem throughout the world. It is the second leading cause of cancer deaths among women in Sri Lanka.

Objectives

This study aimed to explore the awareness attitudes and practices among married women in age at or above 35 years in Udangangoda Grama Niladhari Division, Rathnapura District in Sri Lanka.

Methods

A descriptive cross-sectional interviewer administered questionnaire survey was conducted among 170 women.

Results

Mean age was 52.6, 54.7% (n=93) were passed O/L and 60% (n=160) were unemployed women. Almost 87.6% (n=149) had heard of cervical cancer (CC) and 87.1% (n=148) had heard cervical cancer screening (CCS).A very small proportion of participants had heard of risk factors, signs and symptoms and link between HPV (Human Papilloma Virus) and CC, that is 2.3% (n=4), 11.2% (n=19) and 2.9% (n=5) respectively. Electronic Medias and midwives play great role in providing information on CC and CCS. Even though majority of them heard the disease and screening method; screening uptake was very low among the participants 19.4% (n=33).

This findings highlighted busy schedule in life 43.5% (n=74) and lack of knowledge 30.6% (n=52) were the most common barriers toward uptake of screening services. Age and educational level played key roles in determining the awareness and attitude of the women. At the same time proper awareness and positive attitudes were affected to determine the screening behavior of the respondents.

Conclusion and/or Recommendations

Proper awareness programmers and attitude changing are required to overcome low attendance for screening services in Sri Lanka.

Keywords: Cervical cancer, Awareness, Screening, Attitudes and practices

Assessment of the knowledge of family planning among women between 20-35 years at Castle Street Womens' Hospital

I A T R Iddamallena^{1*}, S B J Y Udulabandara², S S Mayadunna³

¹Lady officer cadet (medical student), Kotelawala Defence University, Rathmalana

²Lady officer cadet (medical student), Kotelawala Defence University, Rathmalana

³Officer cadet (medical student), Kotelawala Defence University, Rathmalana

*Correspondence : teena.iddamallena@hotmail.com

Introduction

Even its said that Sri Lanka has achieved its goals on family planning women tend to have less knowledge on the matter.

Objectives

Aim of the study is to assess the knowledge about family planning methods among women in age 20-35 years attending the gynecology and obstetrics clinic at the Castle Street Womens' Hospital.

Methods

Descriptive cross sectional Study was conducted at Gynecology and Obstetrics clinic at Castle Street Womens' hospital with 150 participants in 2016 using a self-administered questionnaire.

Results

Who majority 41%(n=147) have heard about family planning.91.9%(n=138) had minimum knowledge about benefits. Study shows that male condom and COCP usage is more popular in society. Despite of modern methods still 26% (n=39) of them practice withdrawal method. Response rate for the question about COCP was 48%. Also 32%(n=48) of women lacks knowledge to decide which family planning method is suitable for them. They equally preferred COCP and male condoms. 20%(n=30) still have not met their need of family planning.

Conclusion and/or Recommendations

Majority have heard about family planning methods. The main drawback was women are only aware about pregnancy related health risk reduction as a benefit and some have not even heard about the other important benefits. The most popular contraceptive methods are male condom and COCP and the knowledge about those two are appreciable. Women have misbelieves about each specific family planning method. While some women clearly knew that they lack knowledge in specific areas. There is an unmet need for family planning.

Women should be empowered in decision making. Communication media should be a greater source of providing information passively. Knowledge on least popular family planning methods and benefits should be improved.

Keywords: Family planning, Knowledge, Combined Oral Contraceptive Pill, Condom

Pattern of injuries among patients admitted to Hospitals in Gampaha district

K A S Gunarathne¹, M P Wijeratne^{2*}

¹Medical Officer (Non Communicable Disease), Office of Regional Director of Health Services, Gampaha

²Consultant Community Physician, Office of Provincial Director of Health Services, Western Province

*Correspondence : monika.wijeratne@gmail.com

Introduction

Morbidity and mortality related to injuries causes a huge burden to the health system and economy of the country. Studying the pattern of injuries is useful to design interventions to prevent injuries.

Objectives

This study was carried out to describe the pattern and consequences of injuries among the patients admitted to Base and above hospitals in Gampaha district.

Methods

A descriptive cross sectional study was carried out in all Base and above Hospitals in Gampaha district. Data was collected using Indoor Morbidity and Mortality Return. Admissions due to injuries during first quarter of year 2016 were included in this study.

Results

During first quarter of year 2016, there were 10, 046 injury admissions to the Base and above hospitals in Gampaha district and 6816 (68%) admissions were males. One fifth of admissions (n= 2039) were due to animal bites and 19% (n=1915) due to road traffic accidents (RTA). A majority (79%) of RTA victims were males (n=1507) and 22 of them died. Seventeen percent (n=1728) of injuries were due to falls and seven died as a consequence. Fifteen percent (n=1503) of injury admissions were cut injuries and 9% (n=892) due to stuck by an object. Another 9% (n=881) caused by assault while 2% (n=210) caused by poisoning. Suicidal attempts caused 23 admissions and six of them died. All five victims admitted due to drowning died.

Conclusion and/or Recommendations

Main reasons for injuries were animal bites, RTA, falls and cuts. Self-inflicted injuries and homicides were also identified among injury admissions. Stray dog/cat population should be controlled to prevent animal bites. Law should be enforced to discipline road users. Accident prone places at home/work/road should be identified to intervene. Non-violent culture need to be inculcated to prevent intentional injuries.

Keywords: Injury, Morbidity, Mortality, Hospital admissions

PP 04

Prevalence of work related musculoskeletal disorders and ergonomic practices among crepe rubber factory workers in Kalutara district

P S Munasinghe^{1*}, S M Arnold²

¹Additional Medical Officer of Health, Office of Medical Officer of Health, Panadura

²Regional Director of Health Services Colombo, Office of the Regional Director of Health Services, Colombo

*Correspondence : pspmunasinghe@gmail.com

Introduction

Occupational musculoskeletal disorders have become an emerging health problem worldwide. Prolonged exposure to improper work practices leads to chronic musculoskeletal disorders and loss of work which deteriorates quality of work life and productivity.

Objectives

To determine the prevalence of musculoskeletal disorders and describe ergonomic practices among crepe rubber factory workers in Kalutara district.

Methods

A cross sectional study was conducted among 224 crepe rubber factory workers in all 17 factories in the Kalutara district. All fulltime manual workers engaged in crepe rubber production process for more than one year were selected. Interviewer administered questionnaire based on the Nordic Musculoskeletal Questionnaire assessed the prevalence of work related muscular skeletal disorders (WRMSDs) during the preceding one year period. Work related ergonomic practices were assessed through an interviewer administered questionnaire.

Results

The prevalence of work related muscular skeletal disorders for the past one year was 776 (95%CI: 722-830) per 1000 workers. Gender specific prevalence among females was 799 (95%CI: 735-863) and males 733 (95%CI: 633-833) per 1000 workers. The commonest body region affected was back (71.4%, n=160) followed by shoulder 50.9% (n=114), knee 49.1% (n=110), wrist/hand 37.8% (n=87). More than three body regions were affected in 40.2% (n=90). Majority (82.1%, n=184) were not practicing proper work related ergonomics. Work with awkward trunk postures(OR:2.310;95%CI:1.16-4.61;P=0.01), rapid repetitive movements of wrist(OR:2.095; 95%CI:1.079-4.069;P=0.027),frequent weight lifting(OR:1.829;95% CI:1.608-3.312;P=0.027) were significantly associated with WRMSDs.

Conclusions and/or Recommendations

High prevalence of work related muscular skeletal disorders and poor ergonomic practices recommends introduction of ergonomic standards, appropriate work place design and staffing to reduce work burden. Further longitudinal studies should be conducted to identify etiological factors and effective interventions.

Keywords: Work related musculoskeletal disorders, Crepe rubber industry,Ergonomics

Feasibility and cost-effectiveness of data collection to an online database using smart phones and tablets for a community survey on sexual dysfunctions

A W I P Ranasinghe^{1*}, A Pathmeswaran², V A De Silva³, S A P Senadheera⁴

¹ Regional Director of Health Services Office, Kegalle, Sri Lanka.

²University of Kelaniya, Sri Lanka.

³University of Colombo, Sri Lanka.

⁴Institute of Interactive Multimedia Development, Sri Lanka.

*Correspondence : prabhathaya@yahoo.com

Introduction

No recent community based studies undertaken to determine the prevalence and factors associated with sexual dysfunctions in Sri Lanka partly due to feasibility, cost and ethical constraints.

Objectives

This paper describes the feasibility and cost effectiveness of using smartphones and tablet devices for a community survey on sexual dysfunctions among men and women aged 21-60 years in Kegalle District.

Methods

A community based cross sectional study was conducted in Kegalle District. 1722 men and women were selected using probability proportional to size, multi stage cluster sampling procedure. Web based questionnaires were developed for male and female respondents. User interface was developed using HTML, jQuery and CSS while MySQL and PHP were used for the data bases. Pretesting of online data entry was done. Interviews were conducted by trained, pre-intern medical graduates of same sex of the respondent. Data entered to an online database using smart phones and tablet devices in real-time.

Results

Mobile broad band coverage was adequate in 95% (87/92) of Grama Niladhari (GN) divisions for online data entry. None of the 1722 participants objected the use of smart phones or tablets devices despite the sensitive nature of the study. Only 6 men inquired about confidentiality issues. Out of an estimated cost of Rs. 195000.00 for printing, consumables and data entry we spent only Rs. 60000.00 for software development saving 70% of the cost.

Conclusions and/or Recommendations

Research data collection using smart phones and tablet devices to an online data base is feasible and cost effective for community surveys. Availability of mobile broad band services is a prerequisite.

Keywords: Feasibility, Cost-effectiveness, Smart phones, Tablet computers, Community survey, Sexual dysfunctions

A survey on perception of child and maternal healthcare staff in selected healthcare facilities in Colombo district, on Breastfeeding Code in Sri Lanka.

R A K Chinthaka^{1*}, C Wickramasinghe², N Samarutilake³, I Dissanayake⁴

¹Acting Paediatrician, District General Hospital Monaragala

²Consultant Paediatrician, Teaching Hospital Kandy

³Statistician, Ministry of Health Colombo

⁴Medical officer, Sirimavo Bandaranaike Children's Hospital Peradeniya

*Correspondence : chinthakarajaksha66@yahoo.com

Introduction

The international code of marketing of breast milk substitutes was introduced by the World Health Organisation (WHO) in 1981 to regulate marketing of formula milk products. Sri Lanka was among 118 countries that voted in favour of adopting the international code. Though the breastfeeding code in Sri Lanka is the main legal instrument to protect breastfeeding practice and regulate marketing of infant formula, the awareness and practices of the code among healthcare staff is debatable.

Objectives

Our objectives were to assess knowledge, attitude, practices and their associated factors with breastfeeding code in Sri Lanka among maternal and child health care Staff in Colombo district.

Methods

A cross sectional descriptive study was conducted among 423 members of maternal and child healthcare staff in selected healthcare facilities in Colombo district. Study subjects were selected by stratified random sampling. Data collection by self – administered questionnaires. Descriptive statistics and chi-square tests for association were performed. Ethical clearance obtained from Sri Lanka Collage of paediatricians.

Results

The mean age of the respondents was 36.5 years (SD =9.4) with female majority(84.%). Among the participants 74% had satisfactory knowledge and attitude, only 30% practicing the breastfeeding code. Significant different associated with knowledge (p=0.001), attitude (p=0.001) and practice (p=0.001) demonstrated among different occupation category. Working section attached (p=0.001), Maternal and child health experiences (p=0.001) and institutions attached (p=0.011) were significantly associated with attitudes. However logistic regression models indicated that MOH had 3.68 higher odds of satisfactory knowledge on breast feeding code compared to the teaching level institutions.

Conclusions and/or Recommendations

Overall practices on breast feeding code was low among healthcare staff. The staff attached to the field institutions had better relevant knowledge compared to central level institutions. Training programmes aimed to improve knowledge, attitude and practice on the code among health care staff are recommended.

Keywords: Breast feeding code, Attitude, Knowledge, Practice, Health staff

Oral Healthcare during pregnancy: Implications for future practice

N Ranasinghe^{1*}, U S Usgodaarachchi², R D F C Kanthi³

¹Senior Registrar in Community Dentistry, Health Education Bureau, Colombo;

²Consultant in Community Dentistry, National Institute of Oral Health, Maharagama;

³Consultant in Community Dentistry, Health Education Bureau, Colombo.

*Correspondence : nirosandi1976@gmail.com

Introduction

An antenatal oral healthcare programme was introduced in Sri Lanka with the collaboration of existing Maternal and Child Health (MCH) programme in 2009. A discussion on sustenance of oral care in pregnancy will delineate the multiple and diverse factors that reflect the implications in future practice.

Objectives

To evaluate the sustainability of the National Oral Healthcare Programme for pregnant mothers in the district of Gampaha.

Methodology

A qualitative study was carried out using the evaluation technique of participatory SWOT analysis. Two focus group discussions were conducted among Dental Surgeons and Medical Officers of Health (MOH) followed by two key informant interviews with the Regional Dental Surgeon and Medical Officer - MCH care in the year 2014. The most common items identified were prioritized according to the preference of Dental Surgeons and MOHs in two separate public health forums.

Results

The main issues raised by the professionals were; lack of emergency management facilities and over-crowded nature of government dental clinics, lack of motivation and myths among mothers, Dental Surgeons' fear for the litigation issues, medically compromised mothers, delayed appointments by dental clinics, and risk of being treated by mal-practitioners.

The strengths emerged were; team work of the staff, dissemination of practice guideline, benefits gained by mother and child, importance of early detection of oral disease, health education focused on oral health and service rendered by Mobile Dental Service. Several opportunities as suggested were; appointing Community Dental Surgeons to look after the antenatal oral healthcare, review the programme with experts, active involvement of mass media, inclusion of oral healthcare in to the basic curriculum of midwife and obtaining extra-support from private dental clinics.

Conclusions and/or Recommendations

A community-based perinatal oral healthcare service with adequate oral health work force and infrastructure facilities would further strengthen the current oral health promotion efforts.

Keywords: Pregnancy, Oral health care

PP 08

Occupation related accidents and usage of safety equipment/methods among electrical linesmen in Colombo district of Ceylon electricity board.

I S Almeida^{1*}, A G C M Angulugaha², K R H S Anuradhika³, W Gunathunga⁴

¹Temporary Demonstrator, Department of Surgery, Faculty of Medicine, Colombo

²Research Assistant, Department of Obstetrics and Gynaecology, Faculty of Medicine, Colombo

³Preintern Doctor, Faculty of Medicine, Colombo

³Profesor, Department of Community Medicine, Faculty of Medicine Colombo.

*Correspondence : isuru12345@gmail.com

Introduction

The principal objective is to find out occupation related accidents & usage of safety equipment/methods among linesmen of Ceylon Electricity Board in Colombo district. There were only few research studies carried out on electrical linesmen regarding occupational accidents, knowledge and use of personal protective equipment (PPE) in worldwide. Majority was based on western society and no research has been found in Sri Lanka.

Objectives

The aim of our study was to describe occupation related accidents & usage of safety equipment/methods among linesmen of Ceylon Electricity Board in Colombo district.

Methods

A cross-sectional study was done in 120 linesmen of Colombo district. Self-administered questionnaire and checklist were distributed among randomly selected study population. Prevalence of occupational injuries was calculated and the association between accidents and using safety methods/equipment was analysed using chi-square test.

Results

This study has found 117(97.5%) linesmen were aware of PPE and all of the participants (n=120) were using PPE while working. Out of them, most of them (65.8%) were sharing PPE while working. Availability of PPE at workstation was 62.5%.The study has revealed that 44 (36.7%) linesmen had occupation related accidents and most of them were due to electrocution (n=23) while 16 workers had falls. Majority of the linesmen had fractures (n=12) & contusions (n=11). There was statistically significant association between frequency of usage of safety boots and electrocutions

Conclusion and/or Recommendations

Workers are sharing PPE among themselves rather than own a separate set. This could lead more accidents if they follow the same routine in the future. Relevant authorities should ensure that linesmen are well educated regarding correct usage of PPE to protect linesmen from preventable occupational hazards.

Keywords: Linesmen, Personal protective equipment (PPE), Ceylon electricity board

An insight to different pain relieving methods used by selected cancer patients attending National Cancer Institute Maharagama and their associated factors

P D K Kumari^{1*}, K D L Fernando¹, B W Jayani¹, M B L U Gunarathne¹, M S K Morawaka¹, R Ranwala², C S E Goonewardena³

¹Faculty of Medical Sciences, University of Sri Jayewardenepura

²Consultant Anesthetist, Asiri Central Hospital, Colombo 10

³Senior Lecturer, Department of Community Medicine, University of Sri Jayewardenepura.

*Correspondence: wijegunawardanepdkk@gmail.com

Introduction

Many cancer patients have become victims of pain and it affects normal day to day activities. Hence pain control is very important.

Objectives

To describe different pain relieving methods used and source of information by selected cancer patients attending the National Cancer Institute Maharagama and their associated factors.

Methods

A hospital based descriptive cross sectional study involving 250 patients with selected cancers, attending National Cancer Institute, Maharagama. Data was collected by a pre-tested interviewer administered questionnaire and a pain assessment scale. Statistical analysis was done using SPSS version 15.0.

Results

Commonest cancer among males was oral (43%) and breast cancer (55%) among females. Most effective pain relieving method was analgesics(97.6%, N=244).Alternative pain relief methods were meditation and religious activities (24%, N=61), ayurvedha (17%, N=42), massage (9%, N=23), music therapy (8%, N=21) and physiotherapy (6%, N=14). A statistically significant association was observed between meditation and extended families (p=0.006), higher age group (p=0.001) and longer duration of cancer (p=0.009).Patients who used massage for pain relief, extended families (p=0.031) and younger age group (P=0.006) showed a significant association. There was a significant association between use of physiotherapy with higher income (p=0.002).All patients were informed by doctors regarding pain relief methods and 14% and 12% received information from media and other patients. Numeric pain scale assessed the degree of pain relief. 21 patients reported 'none and mild 'level pain and 229 patients 'moderate and severe' level before using pain relief. Afterwards 33(14.4%) remained the same and 196(85.6%) reduced their pain to' none and mild' level. There was a statistically significant association (p=0.000) between analgesic usage and reduction in pain.

Conclusions and/or Recommendations

For pain relief analgesics is the most effective method, providing significant pain relief. It is evident that some patient factors were associated with selecting a pain relieving method.

Keywords: Different pain relieving methods, Cancer, Pain relief

PP 10

The knowledge and home remedies regarding adverse events following immunization of mothers with children below five years, attending vaccination clinics in Colombo Municipal Council.

D L Porawagamage^{1*}, V S Prabhashani¹, W D D Prasanni¹, M N Lucas²

¹Demonstrator, Faculty of Medicine, University of Colombo

²Senior Lecturer, Department of Paediatrics, Faculty of Medicine, University of Colombo

*Correspondence: dilulasith@gmail.com

Introduction

It is important for mothers to know about adverse events following immunization (AEFI) especially fever which is the commonest AEFI, occurring in 10% of vaccinations.

Objectives

To describe the knowledge and domiciliary care regarding AEFI by mothers with children below five years attending the vaccination clinics in the Colombo Municipal Council (CMC).

Methods

Descriptive cross-sectional study in July/August 2014 of 104 mothers via systematic random sampling from 2 vaccination clinics in CMC. Knowledge of AEFI (11 questions (Q)) identification (13Q) and management of fever (9Q) were assessed by offering 1 mark for each correct response. Chi Square Test was used for significance testing.

Results

100% response rate; mothers mean age was 29 years; 64.4% were Sinhala; 89 (85.6%) had completed O/L or above; 56 (53.8%) had monthly income between Rs 30000-59999 (middle income); 11.5% were trilingually-proficient and 62 (59.6%) were bilingual; 91 (87.5%) scored >70% for the knowledge on AEFI; 98% identified fever as an AEFI; 97.1% mothers informed healthcare workers if AEFI occurs, while 36 (34.6%) thought that AEFI increase if given multiple vaccines; 57.7% scored >70% for knowledge regarding identification of fever, while only 49% used the thermometer and only 30% knew the normal temperature; 76 (73.1%) scored >70% for domiciliary care of fever, while 103 (99%) gave paracetamol for fever; 86 (82.7%) knew the correct dose; 43 (41.3%) knew about the dose difference between syrup and drops and 83 (79.8%) knew the correct frequency of dosage. Knowledge on AEFI was higher in Sinhala ($p=0.004$), middle income ($p=0.005$) and with >1 child ($p=0.0001$), while knowledge on identification of fever increased with maternal educational level ($p=0.007$). Domiciliary care was higher in non-Sinhala ethnicity ($p=0.02$) and understanding more than 2 languages ($p=0.02$).

Conclusions and/or Recommendations

Majority of mothers scored >70% for knowledge of AEFI (87.5%), identification of fever (57.7%) and domiciliary care of fever (73.1%).

Keywords: Adverse event following immunization, Home remedies, Fever

Spousal communication and decision making on family planning among newly married couples in Medical Officer of Health area Mirigama

K A R N Jayawardena^{1*}, J A P W. Jayasooriya¹, H M A D M Wijesekara¹, B A Kumaradasa¹

¹ Additional medical officer of health, Office of Medical Officer of Health Mirigama
*Correspondence: nadeeka429@gmail.com

Introduction

After attaining a declining trend in fertility, Sri Lanka is mainly focussing for a better quality of reproductive services. Thus empowering to make informed decisions regarding reproductive health, considering intimate realities of their reproductive lives is identified as a priority.

Objectives

To assess the patterns of spousal communication and decision making on family planning among newly married couples in MOH area Mirigama

Methods

A cross-sectional study was conducted among the participants of the preconception sessions in MOH area Mirigama, with convenient sampling method, to enroll 245 couples, who had married within 1 year before the date of data collection. An interviewer administered questionnaire was used, which included personal details regarding the couple and the information on spousal communication and decision making of the couple.

Results

Majority (97%) of the newly married couples have discussed regarding family planning with their spouses. But only 37% of the couples have decided on the contraceptive method to use in the future. Of them 34%, the decision has been made by one or both of the couple while 2% of the couples have accepted the method offered by a health worker. Education level ($p=0.034$) and the religion ($P<0.001$) of the husband, occupation of the wife ($p=0.023$) are significantly associated with the decision making on contraceptives.

Conclusions and/or Recommendations

Preconception sessions should be modeled to empower newly married couples to arrive at decisions on family planning.

Keywords: Newly married couples, Family Planning, Spousal communication

PP 12

The use of healthy school bag and factors associated with it among grade four & five school children

G A D Jinadasa^{1*}

¹MO Public Health, Colombo South Teaching Hospital, Kalubowila

*Correspondence: gayan_med@hotmail.com

Introduction

The schoolbag worn over the shoulders is the most common type of bag used by Sri Lankan school children. Schoolbags contribute to the musculoskeletal (MS) pain in them. The Ministry of Education in collaboration with Ministry of Health introduced a healthy schoolbag (HSB) in 2011.

Objectives

This study was to determine the proportion of use of healthy schoolbag and factors associated, among grade four and five school children.

Methods

A cross sectional study was conducted among 512 participants aged between eight to 11 years in one boy school and one girl school in western province. Socio-demographic data, use of schoolbag and MS pain data were collected using an interviewer guided self-administered pre-tested questionnaire and to determine the HSBs features and correct usage, an observational check list was used.

Results

Among the males only 15% were using HSB currently, while 51% of females were using HSB currently, and among the study population only 23% were HSB users. 31% of HSB users carried an unsafe weight (more than 15% of their body weight) and the proportion among girls was higher (39%) compared to boys (17%). Most HSBs (70%) were found to be made with all recommended features. Only 52% of HSB users were adhering to the correct usage of it. Non use of HSB significantly contributed to musculoskeletal pain, odds ratio of 8.34 and 95% Confidence Interval of 7.616-9.064, $P < 0.05$. Incorrect use of HSB was associated with pain (OR 4.46 and 95% CI 3.35 - 5.56), $p < 0.05$.

Conclusions and/or Recommendations

The proportion of HSB users is low at present and therefore further research is needed to find facts on low usage of HSB. Since the study results show that MS pain is low among HSB users, I recommended to further improve standard of HSB and promote it among school children.

Keywords: Healthy schoolbag, Musculoskeletal pain, School children

Establishing a comprehensive waste management system at the health care institutions in Western Province

D C Perera¹, M P Wijeratne^{2*}, N K V Nanayakkara³, W A Y Wedisighe⁴, K D Mallikarachchi⁵

¹ Provincial Director of Health Service, Western Province, Office of Provincial Directors of Health Service

² Consultant Community Physician, Office of Provincial Directors of Health Service

³ Consultant Community Dentistry, Office of Provincial Directors of Health Service

⁴ Medical Officer-Vector Control, Office of Provincial Directors of Health Service

⁵ Developmental Officer, Office of Provincial Directors of Health Service

*Correspondence: monika.wijeratne@gmail.com

Introduction

Unavailability of safe waste disposal system at health care institutions in Western Province has caused several public health issues and environmental nuisance.

Objectives

This project was to establish a proper waste management system at health care institutions in Western Province.

Methods

A circular on proper waste management was designed at Provincial Director of Health Service (PDHS) level and distributed among all health institutions (Curative Healthcare Facilities= 123, Preventive Healthcare facilities = 42; Total=165) in March, 2015. A waste management committee was appointed at institutional level and staff was trained on waste management. Infrastructure for waste collection, separation and storage was developed. Incinerators were established to burn clinical waste. Memorandum of Understanding was signed with Recyclers' Association to collect recyclable waste. Health institutions in the province were mapped to develop a waste collection network, which was used to collect non-degradable waste to recycle and to collect clinical waste to incinerate. Composting and gardening were promoted while providing necessary equipment. A monitoring and evaluation system was established to identify issues of the waste disposal system and intervene early.

Results

By April, 2016, 94% of evaluated health institutions had started separating waste where it was only 5% before starting this project. Composting had been carried out at 51% of institutions while previously it was only 2%. Use of colored bags/bins to separate non-degradable waste had increased from 30 to 75% of institutions. Percentage institutions used compost for gardening increased from 2 to 40%. Institutions practiced safe disposal of clinical waste increased from 30 to 60%. Four hospitals had obtained Environment Protection License and Health Care Waste License where it was none earlier. More than half of staff members in 85% of health institutions had started proper waste disposal procedures at home.

Conclusions and/or Recommendations

This system has improved waste management in Western Province and has made a behavioral change among the health staff.

Keywords: Waste management, Safe waste disposal system

General safety preparedness in hotels in the Medical Officer of Health area Dehiwala

W M D H Jayatissa^{1*}, S Dhanapala², M D R Ranathunga³, H G Jayakody⁴

¹ Medical Officer, Family Health Bureau, Colombo

² Consultant Community Physician, Family Health Bureau, Colombo

³ Medical Officer, Family Health Bureau, Colombo

⁴ Registrar in Community Medicine, Faculty of Medicine, Colombo

*Correspondence: mudithahj@gmail.com

Introduction

General safety preparedness is one of the major requirements in emergency management. Hotels are public places and also serve as work stations for commercial food handlers.

Objectives

Aim of the study was to assess general safety preparedness in hotels and among commercial food handlers in the MOH area Dehiwala

Methods

A descriptive cross-sectional study using an interviewer-administered questionnaire and observational checklist was conducted. Data collection was done in November 2015. Study included all 73 hotels which were registered with Municipal Council in Dehiwala. Further 180 food handlers who were working at those hotels were interviewed.

Results

The level of general safety was unsatisfactory in majority of hotels where 95.3%(n=163) of food handlers were not aware about a fire response plan and 94.8%(n=163) were not trained on first aid. In majority of hotels (>84% of hotels), there were no fire safety measures including a fire response plan and proper fire extinguishers. In majority of places, there were no proper emergency exits (83.6%), no emergency lighting (72.6%) and access to electrical panels was difficult in 17.8% of the hotels. Only 31 hotels (42.5%) had a hospital identified in an emergency while most of the hotels (95.9%) had a first aid box but in majority (71.3%) first aid box items were not replenished after use.

Conclusions and/or Recommendations

The general safety of hotels was unsatisfactory and the awareness of food handlers on general safety was low since the management of the hotels was unaware about the subject. Most of the staff had not been trained on fire safety preparedness or first aid. Hotel management must be educated on general safety measures and disaster preparedness. All the hotels should ensure that general safety policy is adopted in reference to the national guidelines. Hotels should be encouraged to have a minimum of one fire extinguisher and a trained person to handle it.

Keywords: General safety preparedness, Commercial food handlers

Prevalence of Alcohol, Tobacco and Illicit Narcotic Substances usage and associated factors among patients attending mental clinics conducted by the Base Hospital Marawila

W H Bandara^{1*}, H T C S Abeysena²

¹ Post Graduate trainee in Community Medicine, PGIM, Colombo

² Professor in Public Health, Department of Public Health, Faculty of Medicine, University of Kelaniya

*Correspondence: harshanabandara80@yahoo.com

Introduction

Consumption of alcohol, tobacco and illicit narcotics affects the clinic visits and compliance among mental health patients.

Objectives

To describe prevalence of Alcohol, Tobacco and Illicit Narcotic substances usage and associated factors among patients attending mental health clinics.

Methods

A descriptive cross sectional study was carried out in out-reach clinics conducted by the Mental Health Unit of the Base Hospital Marawila during July to November in 2013. All mental health patients who had registered and followed up ≥ 1 year were the study population. Using systematic sampling, 404 patients were recruited. A pre-tested Interviewer administered questionnaire was used. Results were expressed as prevalence and 95% confidence interval (CI). Chi-squared test was applied for assessing the associations.

Results

Life time prevalence of alcohol usage was 53.7%, (95%CI=48.8-58.6), smoking was 24.3%, (95%CI=20.1-28.5) and illicit narcotic usage 5.9%, (95%CI=3.6-8.2).

Current alcoholics, smokers and narcotic uses were 42.6% (95% CI=38.2-47), 15.3% (95%CI=11.8–18.8) and 2.7% (95%CI= 1.1–4.3) respectively.

Statistically significant relationships was found between male psychiatric patients and current usage of alcohol (pf mental health patients (statistically significant relationships between number of clinic attendance ≤ 8 during last 12 months and consuming alcohol, tobacco and illicit narcotics substances, monthly income, age, education level, distance between clinic and residence, marital status and family members' or caregivers' substance usage.

Conclusions and/or Recommendations

Consuming alcohol, tobacco and narcotics substances were higher among mental health patients. However it was not significantly affect the clinic attendance. Conducting regular awareness and education programmes for mental health patients and care givers/family members to reduce usage of alcohol, tobacco and narcotics are recommended.

Keywords: Mental health patients, Alcohol, Tobacco, Illicit narcotics, Substance misuse

Characteristics and sputum conversion of tuberculosis (TB) patients attend to chest clinic – Kalutara

S Nandasena¹, W M C K Senavirathna², C S Munasinghe^{2*}, S S V Gunawardane², B P Wetthasinghe², C Wijesena³

¹ Consultant Community Physician, National Institute of Health Sciences

² Medical Officer, General Hospital, Kalutara

³ House Officer, Base Hospital, Panadura

*Correspondence: cschaminda1@gmail.com

Introduction

Tuberculosis is a globally and nationally important public health issue leading to considerable productivity lost and economic lost.

Objectives

To describe the characteristics and to assess the factors associated with sputum conversion of TB patients in Kalutara district

Methods

Data were extracted by investigators to a pre-printed format from all newly diagnosed TB patients (n = 687) in year 2013 at the chest clinic, Kalutara. Data were entered to Epi Data software and exported to SPSS for analysis. Chi-square test was used to assess the association between the variables. Administrative and ethical clearance was obtained prior to data collection.

Results

Out of the total number of records, 18 records (2.6%) were removed from analysis due to incomplete data. Majority of patients were males (n = 451, 67.4%) and in the age group of 36 to 60 years (n= 306, 45.7%). About 46% were smokers and 48.3% were consuming alcohol while prevalence of diabetes was 22% among the study population. Majority of the adult patients (61.4%) were underweight (Body Mass Index (BMI) < 18.5). About 55% (n = 366) were smear positive pulmonary TB, 15% were smear negative pulmonary TB and the rest were extra-pulmonary TB. Out of smear positive pulmonary TB, 83% (n = 303) reported to have sputum conversion at 2 - 3 months. Sputum conversion at 2 - 3 months after the treatment for smear positive pulmonary TB patients were high among normal or overweight adult patients (92.1%) compare to underweight adult patients (82.5%) (p = 0.034).Majority of the pulmonary TB patients (55.7%) were smokers while majority of the extra pulmonary TB patients (67.8%) were non-smokers (p = 0.001).

Conclusions and/or Recommendations

BMI of the TB patients is an important determinant of sputum conversion while smoking is significantly associated with pulmonary TB.

Keywords: Tuberculosis, Sputum conversion, BMI

Healthy behaviours for prevention of non-communicable diseases and associated occupational factors among private sector bankers in Colombo district

F R Niyas^{1*}, L D J U Senarath²

¹Postgraduate Trainee in Community-Medicine, Post-graduate Institute of Medicine, Colombo

²Professor in Community Medicine, Faculty of Medicine, University of Colombo

*Correspondence : rushda2000@gmail.com

Introduction

The demographic, nutritional and epidemiological transition and changing lifestyles have left the economically productive Sri-Lankan workforce vulnerable to high morbidity and mortality from Non-Communicable diseases (NCDs).

Objectives

To describe healthy behaviours and to determine occupational factors associated with healthy behaviours that prevent NCDs

Methods

Descriptive cross-sectional study was conducted in four selected private commercial banks in Colombo district. A sample of 520 bankers aged 35 years and above was selected using two stage cluster sampling, and a self-administered questionnaire was used to collect data on healthy behaviour and associated factors.

Results

The response rate was 88.8%(n=462).The majority were males (64.9%,n=300), aged between 35-44 years (85.9%,n=397), worked 15 years or less(70.1%,n=324), worked eight hours/or less daily (91.6%,n=423), did not work during weekends (61.3%,n=283) and were non-executives (51.7%,n=239).

In the study population, 13.8% (n=64) had smoked. Among males rate of 'current daily smoking' was 7% (n=21) and 'non-daily smoking' was 14.3%,n=43). Among females 97.5% (n=158) had never smoked. Among 'non- smokers' 14.9%(n=59) had been exposed to second hand smoke.

The rate of 'ever drinkers' was 47.6% (n=220) and 'current drinking' among males was 37.4% (n=112) while 'ever drinking' among females was 16% (n=26).

The recommended weekly level of physical exercises was not met by 92.2%(n=426), while 30.1%(n=139) were sedentary for more than six hours on a work day.

Work tenure of 15 years or more was significantly associated with being an 'ever drinker' (p=0.037), with increased physical inactivity (p=0.019) and with being more sedentary (p=0.002).

Working for more than eight hours daily was significantly associated with being a smoker (p=0.03) and ever-drinker (p=0.0001).

Working weekends was significantly associated with increased physical inactivity (p=0.023) and not working weekends with being a smoker (p=0.039).

Executive status was significantly associated with sedentary behaviour (p=0.002).

Conclusions and/or Recommendations

Unhealthy behaviours predisposing to NCDs are high among Colombo bankers. Interventions that promote healthy behaviours should be implemented for bankers in Colombo.

Keywords: Healthy workforce, Non-Communicable diseases, Healthy lifestyles

Compliance with antenatal classes, knowledge on maternal care among antenatal and postnatal mothers and their spouses in Sri Lanka

S S P Godakandage¹, S Dhanapala¹, N Hemachandra¹, H G Jayakody^{2*}, M R Ranathunga³, S Kumaravel⁴, N Lansakara¹, P Y S Jayasinghe³

¹ Consultant Community Physician, Family Health Bureau, Ministry of Health, Sri Lanka

² Registrar in Community Medicine, Faculty of Medicine, Colombo

³ Medical Officer, Family Health Bureau

⁴ Medical officer maternal and child health, RDHS office, Jaffna

*Correspondence: gayathri_hj@yahoo.com

Introduction

The revised maternal care package was implemented in 2012 throughout the country and it pays a special attention to providing health education during the antenatal period.

Objectives

To assess the compliance with antenatal classes and knowledge on antenatal and postnatal care delivered through the maternal care package in Sri Lanka among mothers and their spouses.

Methods

A cross sectional descriptive was conducted in all districts in Sri Lanka. There were three groups in the study namely antenatal mothers, post partum mothers 8 weeks after delivery and fathers of infants of two months of age. Sample size was 840 in each category. Multistage cluster sampling method was used to collect data. Data collecting instruments were two pretested questionnaires on antenatal and postnatal care and on antenatal classes. Knowledge score was assigned for each questionnaire, out of 100. Associations for the level of knowledge were explored with multivariate analysis.

Results

Response rate was 99.1% (n=832) among antenatal mothers and 96.1% (n=808) and 91.1% (n=765) among postnatal mothers and fathers respectively. Of the antenatal mothers, 19% (n=158) had attended all three classes and 26% (n=210) of postnatal mothers reported having attended for all classes while they were pregnant. Participation of fathers for the complete course was only 8.7% (n=56). Mean knowledge score for the questionnaire on antenatal care among mothers was 79.4 (SD=10.9) and among fathers it was 73.9 (SD= 14.2). Mean knowledge score for the questionnaire on postnatal care among mothers was 80.1 (SD=17.6) and among fathers it was 76.0 (SD=20). Observed differences in scores between mothers and fathers were statistically significant ($p < 0.001$) in both questionnaires. Knowledge score among postnatal mothers was statistically significant with level of education ($p < 0.001$) and employment status ($p = 0.002$). In addition to that, knowledge score among the postnatal mothers, significant association was observed with attending all antenatal classes ($p = 0.019$).

Conclusions and/or Recommendations

Even after two years of implementation participation for antenatal classes were low among mothers and fathers. Parents should be encouraged to participate in antenatal classes.

Keywords: Antenatal classes, Maternal care, antenatal care, pregnancy

Neonatal care cost of most prevalent neonatal conditions among term neonates in tertiary level neonatal care unit

D A Gunawardane^{1*}, S D Dharmarathna¹, D D S Rowel²

¹Faculty of Medicine, University of Peradeniya

² Consultant Community Physician, Intranatal and Newborn Care, Family Health Bureau, Ministry of Health

*Correspondence: damithagunawardane@gmail.com

Introduction

Proportion of term neonates who required admission to special neonatal care units due to adverse neonatal outcomes are vary from 10-15%. On the other hand, term neonates make up 40-45% of neonate who receives services of special neonatal care units.

Objectives

Aim of this study is to estimate the neonatal care cost of most prevalent neonatal conditions among term neonates.

Methods

A total of 175 term neonates admitted to neonatal care unit were recruited for the study through a non-random sequential sampling technique. Mainly the bottom up costing methodology was used rather than the top down costing principals due to the considerable variance in the neonatal care cost of term neonates with neonatal conditions. Top down costing approach was used in the analysis of overhead costs where bottom up approach is not feasible. At the end of every 24 hours until the time of initial discharge or death, neonates were followed up prospectively.

Results

Four most prevalent neonatal conditions among term neonates were bacterial sepsis of newborn (24%), respiratory distress of newborn (19.4%), neonatal jaundice from other and unspecified causes (14.9%) and birth asphyxia (9.7%). These four contributed to 69.59 % of the total cost of care for term neonates with neonatal conditions. Out of them respiratory distress syndrome is responsible for the largest proportion (25.29%) of the total neonatal care cost of term neonates with neonatal conditions at term followed by bacterial sepsis of newborn. When consider the median (per neonate) neonatal care cost, birth asphyxia is the most costly neonatal condition to manage (Rs.71278, IQR Rs. 51665, Rs.137753). Second highest median cost Rs.59589 (IQR Rs.41796, Rs.124085) was due to respiratory distress syndrome among term neonates.

Conclusions and/or Recommendations

Preventive measures needed to strengthen to reduce the burden of birth asphyxia, respiratory distress of newborn, bacterial sepsis of newborn and neonatal jaundice from other and unspecified causes among term neonates.

Keywords: Cost analysis, Neonatal care

Magnitude of HIV infection among TB patients attending the government chest clinics and the chest hospital in the Western Province of Sri Lanka.

S Beneragama^{1*}, G Pathirana², L Panapitiya³, C Hingalagoda⁴, H Jayalath⁵

¹ Consultant Epidemiologist, National STD/AIDS Control Programme

² Consultant Veneriologist, Kandy STD clinic

³ Consultant Medical Administrator, Medical Supplies Division

⁴ Medical Officer, National Respiratory Disease Control Programme

⁵ Oncology Registrar, Cancer Institute, Maharagama

*Correspondence: sbeneragama@hotmail.com

Introduction

Tuberculosis (TB) is a global epidemic with over 2 billion people affected. In Sri Lanka TB remains a public health issue with over 9000 new cases being detected annually. HIV infection is the most powerful known risk factor for TB.

Objectives

To assess the magnitude of HIV infection among TB patients attending the government chest clinics and hospitals in the Western Province of Sri Lanka.

Methods

A descriptive study was conducted using patient records and registers maintained at the government District Chest Clinics (DCC) of Western province and at the Chest Hospital, Welisara for year 2012. Records of all the registered TB patients during 2012 were scrutinized and the information on HIV testing and other demographic characteristics were extracted by the trained data collectors. Data on HIV positivity were validated with the National STD /AIDS control programme (NSACP) data as positive samples are re-tested at the NSACP. Ethical clearance was obtained prior to the data collection.

Results

A total of 1933 TB patients from the Western Province were registered in 2012. Mean age of the patients found to be 45.02years. HIV testing has been performed on 98.6% of the TB patients. Prevalence of HIV among TB patients was estimated as 0.2%, (Male 0.2% and Female 0.2%). Prevalence of HIV among Pulmonary TB patients was 0.15% and among Extra Pulmonary TB patients 0.19%.

Conclusions and/or Recommendations

The study revealed that HIV prevalence is low among TB patients in the Western Province, Sri Lanka and is similar to the HIV prevalence among the general population in the country. It is recommended that screening of the TB patients for HIV be continued nationally, to monitor the trend on HIV among TB patients.

Keywords: HIV and Tuberculosis, Chest clinics

Development and validation of an instrument to measure Chronic Stress in Sri Lanka

M G B Senanayake^{1*}, C Arambepola²

¹ Senior Registrar in Community Medicine¹, South East Asian Regional Officer for World Health Organization, New Delhi, India.

² Senior lecturer in Community Medicine, Faculty of Medicine, University of Colombo

*Correspondence: buddhikasena@yahoo.com

Introduction

Stress is a common term used by the general public to describe “strained emotions” in their day to day life. While acute stress is increasingly becoming part of life, ‘chronic stress’ has remained relatively unfamiliar entity. The concept of chronic stress has not yet been operationalized in the Sri Lankan context. Not only a valid definition, but also a sophisticated measurement tool is required to quantify chronic stress in vulnerable populations. The objective is to develop and validate an instrument for assessing chronic stress among Sri Lankan adults.

Methods

Validation study was conducted to develop a new tool known as “Chronic Stress Measurement Scale” (CSMS) to assess chronic stress among 350 adults using principal component analysis. Tool development consisted of six Steps: defining the construct, item generation, content analysis, item reduction, identification of response categories, translation and exploratory factor analysis. Construct validity was further performed for CSMS among another 350 adults using confirmatory factor analysis.

Results

Chronic stress was defined as “continuous state of arousal persisting for more than three months, as a response to repeated occurrence of stressors that cannot be controlled by adaptive coping mechanisms”. Newly developed CSMS tool is an interviewer-administered-questionnaire consisting of 48 items within 9 factors. The factors identified were: excessive demand, familial matters, excessive work, personal matters, chronic worrying, inter – personal tension, dissatisfaction with duties, societal responsibilities and lack of social recognition. It demonstrated acceptable construct validity (SRMR: 0.064, NNFI: 0.94, RMSEA: 0.069). The reliability of the CSMS was satisfactory (Cronbach’s alpha: 0.69 -0.84; test retest coefficient: 0.66 – 0.91).

Conclusions and/or Recommendations

Newly developed CSMS is a valid and reliable instrument to measure chronic stress among adults over 18 years of age living in urban and rural areas in Sri Lanka.

Keywords: Validation of instrument, Chronic stress, Chronic Stress Measurement Scale (CSMS)

Investigation of a Food Poisoning Outbreak at a Garment Factory, Boyagane, Kurunegala

N Rajapaksha^{1*}

¹ Postgraduate Trainee in Community Medicine, PGIM, University of Colombo

*Correspondence: rmnur2014@gmail.com

Introduction

Outbreaks of food poisoning commonly occur in closed communities such as garment factories, hostels, elderly homes, prisons, and hospitals. Investigation of such an outbreak is not only for elucidate the cause, but also to establish the causal circumstances.

Objectives

To conduct an investigation of a food poisoning outbreak at a Garment Factory to elucidate the cause and causal circumstances

Methods

A probable case of food poisoning was defined as a previously well individual who suddenly developed any two of the following symptoms after having the lunch on 1st of January 2015: diarrhoea (three or more loose stools in 24 h or less), vomiting, abdominal pain with cramps, faintishness or fever.

An epidemiological case sheet was developed for collecting the information on demographic particulars of individuals, date and time of onset of illness and time of reporting, food items eaten, presenting symptoms, and history of consumption of water or food outside the garment. All cases that occurred on 2nd of January were traced and relevant details were obtained. Search was also made for those who had taken the lunch in the function at the garment but had not fallen ill. All such individuals who admitted to wards were also interviewed and data on the epidemiological case sheet was recorded. Attack rate calculated for each food item to establish an association with the illness. An environmental survey was undertaken to assess the hygiene and sanitation of the cook premises at the garment. Details of food processing, food preparation and storage of prepared food pending consumption were ascertained by interviewing food handlers. Stool samples were collected from 20 patients and sent for culture.

Results

Of the 450 persons who had consumed the lunch on 1st of January 2015, at the garment, 94 were affected. Majority of the cases had abdomen pain with cramps, loose motions, vomiting and faintishness. The maximum attack rate (22.2%) was for those who had eaten chicken preparation. The mean incubation period was 10-11 hours (range 6 - 25 hours). The median incubation period was 15.5 hours. Bacteriological confirmation was not successful due to unaffordability. Investigation into food processing revealed that the chicken was procured from without tender procedure and without a recommendation from a PHI. These items were cooked in the garment and preparation was started on 31st of December 2014 mid night and completed by 10.30am on 1st of January 2015. The cooked food was kept on the table to be served between 3p.m. and 4 p.m.

Conclusions and/or Recommendations

The chicken curry was the epidemiologically incriminating food item responsible for the outbreak. Clinical and epidemiological features were suggestive of *Bacillus cereus* food poisoning.

Keywords: Outbreak investigation, Food poisoning, Food hygiene

Proportion of overweight/obesity and associated factors among patients attending the psychiatry clinic of Colombo South Teaching Hospital

B Jayawardena^{1*}, L D J U Senarath²

¹Additional Medical officer of health, Office of Medical Officer of Health, Maharagama.

² Professor in Community Medicine, Faculty of Medicine, University of Colombo

*Correspondence: buddhikajayawardena@yahoo.co.uk

Introduction

Prevalence of obesity is higher in psychiatric patients compared to general population. In some countries this rate is close to 60%. In Sri Lanka Prevalence of overweight/obesity had not been studied earlier. If the magnitude of the problem (proportion of obesity) and the associated factors are known, psychiatrists and other medical staff can pay more attention to this problem and there by effectively manage it.

Objectives

To assess the proportion of overweight/obesity and associated factors among patients (18 years and above) attending the psychiatry clinic of Colombo South Teaching Hospital.

Methods

This descriptive cross-sectional study was carried out on 430 randomly selected clinic attendees of the psychiatric clinic of Colombo South Teaching Hospital from 2nd of September to 3rd of October, 2014. Pre tested and validated interviewer administered questionnaire was used to gather socio-demographic data and physical activity, while anthropometric measurements were also recorded.

Results

Overweight/obese proportion is 35.3%. Proportion of overweight/obesity is higher among females (42.8%) compared to males (21.1%). Highest proportion (52.9%) of overweight/obesity is seen in Hindus. About half (46.5 %) of the study participants are Schizophrenics. Highest proportion (50%) of overweight/obesity is seen in patients with Anxiety disorders. Majority (67.6%) of the study participants belong to moderately physically active category. Highest proportion (44.2%) of overweight is seen in high physically active category while lowest proportion (27.9%) is observed in low physically active category. Moderate physically active category and high physically active category have more than double risk of being obese compared to low physically active category (Moderate active OR=2.31, 95% confidence interval 1.09-3.53, high physically active OR=2.83, 95% confidence interval 1.6-4.12).Over weight BMI 25 to 29.9, obese 30 and above. Level of activity was measured by IPAQ short form questionnaire validated to Sri Lanka.

Conclusions and/or Recommendations

Study participants who belong to moderate and high category have more than double risk of being obese compared to low physical activity category. These results highlight that more attention to be paid on prevention and control of obesity in psychiatric patients especially with BAD and anxiety disorders.

Keywords: Overweight, Obesity, Psychiatric patients

Identification of relevant areas of knowledge gaps on ‘Adolescent Sexual and Reproductive Health’ and their preferred delivery package to 15 – 19 year old aged females in the Kalutara MOH area

S H P de Silva¹, M N Danansuriya², R B B S Ramachandra³, W M C K Senevirathne⁴, S R Ferdinandez⁵, A N J Baranasuriya⁶, P C Poruthota⁷, H S G Wijesekera⁷, L T Gamlath⁸, T K Kalubowila⁹, P D Kusumalatha¹⁰, C J Jayasundera⁶

¹ Consultant Community Physician, National Institute of Health Sciences, ² Consultant Community Physician, Family Health Bureau, ³ Registrar in Community Medicine, National Institute of Health Sciences

⁴ Medical Officer, Department of Research, National Institute of Health Sciences

⁵ Medical Officer of Maternal and Child Health, National Institute of Health Sciences

⁶ Medical Officer, Family Health Bureau, ⁷ Medical Officer of Health, Kalutara,

⁸ Director, National Institute of Health Sciences, ⁹ Medical Superintendent, Base Hospital Horana

¹⁰ Public Health Nursing Tutor, Department of Research, National Institute of Health Sciences

*Correspondence: chamanthiwije@gmail.com

Introduction

Teenage pregnancy, sexual abuse, gender related issues and the risk of STD are some of the problems faced by the females 15 – 19 years of age. A specific awareness package to address sexual and reproductive health issues for this age group has been found lacking for the field level public health staff.

Objectives

To identify the relevant knowledge gaps and their preferred delivery package to 15 – 19 year old females in Kalutara.

Methods

Focus group discussions were conducted in three selected groups: adolescents, teenage mothers and Public Health Midwives. Some 15 Midwives and 15 teenage mothers were selected randomly and 28 youth participants were selected using a convenient sampling method. Focus Group Discussions were conducted by an experienced female researcher using a predefined focus group discussion guide. In-depth interviews were conducted with selected members from these groups. The discussions were transcribed verbatim and analyzed using a thematic analysis technique.

Results

15 midwives, 28 youth and 15 teenage mothers took part in the discussions. The main information provider on reproductive health was the mother. The adolescents were aware of hormonal changes and anatomy of sexual organs. Awareness on consequences of sexual relationships, avoiding adverse life situations, services availability and legal aspects were inadequate. Permission from the mother was considered necessary prior to taking part in any awareness programme. Most preferred group sessions conducted at home, among same age females by the public health midwife. Interactive, modern methods such as using videos, acting out real life scenarios were preferred to text or lecture based teaching. Getting permission from parents, organizing the sessions, mode of delivery of the content relation to sexual health, conflicts with the education system, follow up mechanism of evaluation were concerns of the midwives.

Conclusion and/or Recommendations

Need for sexual and reproductive health awareness for this group was evident. An interactive awareness package focusing on real life situations is needed with messages more focused on adverse consequences of sexual relationships, availability of services, legal aspects and avoiding adverse life situations.

Keywords: Adolescents, Sexual and Reproductive Health, Sexual knowledge

Effectiveness of Healthcare Leadership Training of Trainers (TOT) Programme in Colombo: A pre and post training study

V Murali^{1*}, N Hewageegana², V Rao³

¹Consultant Community Physician, Management, Development and Planning Unit, Ministry of Health, Colombo

² Deputy Director General, Management, Development and Planning Unit, Ministry of Health. Colombo

³ Senior Director, International Collaboration Office, Singapore Health Services, Singapore.

*Correspondence: vallipuranathan.murali@gmail.com

Introduction

A leadership TOT programme was conducted by the Ministry of Health, Sri Lanka in collaboration with Sing Health in March 2016 with the aim to develop trainers to improve leadership skills among healthcare providers.

Objectives

To assess the effectiveness of the TOT programme

Methods

Self-administered questionnaires were administered to volunteer participants before and after the training session. Six multiple choice questions were used to test the knowledge. At the end, participants were asked to rate development of new skills/knowledge during the training and their confidence to be a trainer at the next programme with two Likert scale questions. Chi squared tests (2X2) were used to test for differences in knowledge before and after training and analyzed at p=0.05 confidence levels.

Results

Among the 160 total registered participants response rate were 96.9% (N=155) and 73.8% (n=118) respectively for pre and post training. Though knowledge levels were improved for all the six multiple choice questions only 4 questions showed statistically significant improvement (P<0.05). At the end of the training 50% (n=59) of the participants stated that the training programme contributed to acquire new knowledge/skills and majority (79.7% n= 94) were confident to be trainers in the subsequent programmes.

Conclusions and/or Recommendations

Leadership Training programme was effective in increasing the knowledge of participants and made them confident to be trainers in the subsequent programmes. However, the knowledge in clinical governance though had increased significantly (p < 0.001) with training, respective values of pre (11.6%) and post (29.7%) knowledge levels show that more attention need to be given. This study highlights the importance of assessing the effectiveness of training programmes and the need to modify the subsequent training programmes according to the feedback and knowledge level of the participants.

Keywords: Training of trainers, Healthcare leadership training

Strengths, weaknesses, opportunities and threats to conduct research by government medical officers

A Padeniya¹, A H M P Anuruddha², D R D Ratnayake³, M D A Krishani⁴, E G D N Suraweera⁵, A P de silva⁶, C Epitakaduwa⁷, D Ranasinghe^{8*}, N Dharmakeerthi⁹, S Nandasena¹⁰

¹ Consultant Paediatric Neurologist, Lady Ridgeway Hospital, Colombo

² Consultant Surgeon, Wijaya Kumaranatunga Memorial Hospital, Seeduwa

³ Medical Officer, Blood Bank BH Panadura, ⁴ Medical Officer, District General Hospital Kalutara

⁵ Postgraduate trainee in Community Medicine, University of Colombo

⁶ Consultant Community Physician, National Intensive Care Surveillance, Colombo

⁷ Acting Consultant Histopathologist, TH Batticaloa, ⁸Senior House Officer - Medicine, Base Hospital, Panadura.

⁹ Senior House Officer Paediatric Neurology Lady Ridgeway Hospital Colombo

¹⁰ Consultant Community Physician, National Institute of Health Sciences, Kalutara

*Correspondence: dineshanrana2000@yahoo.com

Introduction

Provision of research allowance is a key step taken by the Ministry of Health to promote research by government medical doctors.

Objectives

To describe the strengths, weaknesses, opportunities and threats to conduct research by medical officers in their respective work place

Methods

Key informants were purposively identified from government health sector based on their experience and qualifications according to a pre-determined criteria. Key informant interviews were conducted among specialists (n = 6) and grade medical officers from curative sector (n = 6), Medical Officers of Health (n = 3) and administrators of health sector (n = 3). Interviews were conducted by investigators based on a guide questionnaire. All interviews were recorded after the consent. After digitalise the content, each text segment read and assigned codes. Codes were listed and similar codes were clustered and themes were developed under strengths, weaknesses, opportunities and threats.

Results

All respondents agreed that “workplace” of any medical professional brings many research opportunities. However, most of the respondents stated that there is no career achievements or rewards for research in Sri Lankan government health system other than the research allowance. This was considered as one of the key reasons for medical officers to stay away from research. Several specialists stated that most of the clinical information cannot be retrieved easily and this discourages even the most “enthusiastic researchers”. One of the key constraints highlighted by grade medical officers was “lack of knowledge to develop the research proposal with technical details”. One medical officer stated that “biggest challenge to initiate a research project is obtaining the ethical approval”.

Conclusions and/or Recommendations

Medical officers in the government health system should be guided and supported beyond the provision of research allowance. Obtaining the ethical clearance is a “dilemma”. There should be a reward system for medical officers based on the merit of their research.

Keywords: Strengths Weaknesses Opportunities Threats (SWOT), Research promotion

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Factors associated with compliance to a course of physical exercises for a selected group of primigravida mothers in Sri Lanka

N Herath^{1*}, A Balasuriya², S Sivayogan³

¹Senior Registrar in Community Medicine, Ministry of Health Sri Lanka, Colombo 10.

²Senior Lecturer/ Consultant Community Physician, Faculty of Medicine, General Sir John Kotelawala Defense University, Ratmalana.

³Professor in Community Medicine, Faculty of Medical Sciences, University of Sri Jayewardenepura, Nugegoda.

*Correspondence: nadeejaherath@yahoo.com

Objectives

To assess factors associated with compliance to a course of exercises for a selected group of primigravida mothers in second trimester.

Methods

Study designs were descriptive cross sectional and qualitative. Study setting was a Medical Officer of Health area in Kegalle district. Study participants were a group of postnatal mothers, who had taken part in a course of exercises during antenatal period, for 16 weeks. Sample size was 138 postnatal mothers which was calculated using statistical method for quantitative outcome (previous component). Study instruments were a self-administered questionnaire to obtain baseline data, psychological state and compliance to exercises, a diary, and, an interviewer administered questionnaire for views of husband and household members.

Results

There were statistically significant associations between maternal age being less than or equal to 30 years and increase regularity of exercises ($p < 0.05$), levels of education of husbands and the exercise regularity of pregnant mothers ($p < 0.05$) and absence of physical symptoms and increase participation in regular exercises ($p < 0.05$). No statistically significant association ($p > 0.05$) between psychological distress at six weeks postpartum and exercise regularity, however, a statistically significant association ($p < 0.05$) between regularity of exercise and reduced state of depression was present. Lethargy (41%; $n=57$), tiredness (20%; $n=28$), lack of time (16%; $n=22$), lack of privacy (13%; $n=18$) and absence of husband (11%; $n=15$) were reasons for not carrying out exercises regularly. Encouragement and motivation by family members (38%; $n=53$), husband (33%; $n=45$) and Public Health Midwife (27%; $n=37$) and feeling of good health after doing exercises (20%; $n=28$) were factors which promoted regular exercises.

Conclusions and/or Recommendations

Introduction of an antenatal exercise programme should be at the presence of husband or next of kin (living at home) for better compliance.

Keywords: Physical exercise, Primigravida, Postnatal care

Immunization coverage and its associations with selected socio-demographical factors among children in their second year of life in Vavuniya District.

A Lathaharan^{1*}, S Subashkaran², L Prashanthi³, M Mahendiran⁴, K Puwanediran³
S Ramesh⁶

¹ Registrar Community Medicine , Ministry of Health

² Senior registrar Community Medicine, Ministry of Health,

³ Medical Officers NHSL Colombo,

⁴ Regional Director of Health Services Vavuniya

⁵ Medical Officer Teaching Hospital Jaffna.

*Correspondence: lathaharan@yahoo.co.uk

Introduction

Children in Sri Lanka are expected to be vaccinated at birth and at recommended months according to the Expanded Programme of Immunization (EPI). Documented literature on the factors affecting the immunization coverage in Vavuniya district is not commonly found.

Objectives

To assess the immunization coverage and association of selected socio demographical factors among children between 12-24 months in Vavuniya District.

Methods

A descriptive cross sectional study conducted with a 30 by 7 cluster survey; the standard EPI coverage survey methodology, recommended by World Health Organization for developing countries. The study instrument was an interviewer administrated questionnaire answered by the parents or guardians of the child. Data collection was done by six trained research assistants with the principal investigator. Data were cross checked with the Child Health Development Record.

Results

The study comprised of 210 participants. Among the children, 52.3% (n=110) were boys. Majority of the study population belonged to Hindu religion (78.5%, n=165). Majority of the parents or guardians (66.7%, n=140) had studied upto G.C.E (O/L). Of the fathers (63.9%, n=134) were unskilled workers while majority of mothers (87.2%, n=183) were housewives. Nearly half of the families (48.7%, n= 102) had a monthly income less than Rs.15, 000. The age-related immunization coverage was 96.2%. Main reasons for non-immunization were; illnesses of the children, having a greater distance to clinics and lack of knowledge about the advantages of immunization. No significant associations were demonstrated between the up-to-date immunization status with mentioned socio demographic factors (p>0.05 for all factors).

Conclusions and/or Recommendations

The immunization coverage was satisfactory irrespective of the selected socio-demographic factors. Attempts which are made for the sustainability of the system must be strengthened.

Keywords: Immunization coverage, Expanded Programme of Immunization (EPI), EPI Survey

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