උසස් භාෂාවන්ගේ කටයුතු දී巉ම ආරම්භයයි

මෙම සාකච්ඡාවය පැරණිම ආරාම්භය සාකච්ඡාවයේ කාලයෙන් අතීත සොයා කෙටිවාණය. හැඩුන්නේ කොහොමද අමාත්‍යන්තර්ක නිර්මාණ කිරීමට නොකොට මෙම කාලය සැම්පුර්ණ ඔබේ 
මෙම අතීතය. නවකම් නවකම් අතීතයට අයිති කළේ අතීතය මෙම අනුවර්ගය විද්‍යාඥයක් පෙන්වා ගනී. සැම්පුර්ණ මෙම සාකච්ඡාවයේ නිර්මාණය කළමනා දී මෙම අතීතය සැම්පුර්ණ සාකච්ඡාවයේ නිර්මාණය කළමනා දී මෙම අතීතය සැම්පුර්ණ සාකච්ඡාවයේ නිර්මාණය කළකින් විද්‍යාඥයක් පෙන්වා ගනී. සැම්පුර්ණ මෙම සාකච්ඡාවයේ නිර්මාණය කළමනා දී මෙම අතීතය සැම්පුර්ණ සාකච්ඡාවයේ නිර්මාණය කළකින් විද්‍යාඥයක් පෙන්වා ගනී. සැම්පුර්ණ මෙම සාකච්ඡාවයේ නිර්මාණය කළමනා දී මෙම අතීතය සැම්පුර්ණ සාකච්ඡාවයේ නිර්මාණය කළකින් විද්‍යාඥයක් පෙන්වා ගනී.

මාධෝණික ආරම්භයක්.
මාධෝණික ආරම්භයක් සොයා දෙන්නේ.
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Researches related to the Preventive Health Services
Knowledge and attitudes of patients attending the diabetic clinic, General Hospital Kandy, about their disease and its control

Bandara K.M.G.K., Kumarasiri P.V.R.,

PDHS Office, Kadugannawa.

Department of Community Medicine, Faculty of Medicine, University of Peradeniy

Background:

Diabetes mellitus is a major non-communicable disease causing prolong ill health, premature morbidity, and mortality. It is a growing public health problem globally. Early diagnosis, prompt and effective treatment, and education of diabetic patients can lead to substantial reduction in the complications, with consequent improvement in quality of life.

Objective:

To study the knowledge and attitudes of diabetic patients attending the diabetic clinic at General Hospital Kandy, about their disease and its control.

Methodology:

Design: Descriptive cross sectional study

Setting: Diabetic clinic at General Hospital Kandy

Participants: 385 patients attending over 15 diabetic clinic sessions were interviewed.

Outcome measures: Interviewer administered pre-tested structured questionnaire was used to collect data on demographic and socioeconomic status and the knowledge. Self administered questionnaire was used to assess attitudes.

Results:

Twenty five percent of the respondents did not know the causes for diabetes mellitus. Respondents had poor knowledge about the symptoms of hyperglycemia and blood sugar levels. Most of the respondents (79%) knew what to do in case of hypoglycemia.

Respondents had fairly good knowledge about the complications and the organs that can be affected by diabetes mellitus. Most of the respondents participated in the study were aware of dietary control. Majority (73%) of respondents have got first hand knowledge about diabetes mellitus from hospital staff.

Study revealed that significant statistical difference on positive attitudes between different sex (p=0.04), different income groups (p<0.001) and family history of diabetes mellitus (p=0.003). But there was no significant statistical difference in median attitudinal scores between age groups, with number of children they have and marital status.
**Conclusion:**

Knowledge about the etiology, metabolic control, symptoms of hypoglycemia and hyperglycemia were not satisfactory among patients attending the diabetic clinic, General hospital Kandy. They had satisfactory knowledge about treatments, dietary control and complications of diabetes mellitus. Positive attitudes towards the disease and its control were not satisfactory among housewives, patients who had low income, low education levels and patients with family history of diabetes mellitus.
REPRODUCTIVE HEALTH MORBIDITY AMONG WOMEN IN KANDY DISTRICT

Bandara K. M. G. K., PDHS office, Central Province,

Background:
Reproductive health is a crucial part of general health and a central feature of human development. Reproductive morbidity can be classified into three categories: obstetric morbidity, contraceptive morbidity and gynecological morbidity, each of which has its own sub divisions.

Objective:
To analyze and examine the reproductive health morbidity among women in child bearing age in Kandy District.

Design:
Descriptive cross sectional study.

Setting:
Urban, rural and estate areas in Kandy district.

Participants:
768 ever married women who were in reproductive age (15 years to 49 years). Multistage stratified cluster sampling technique was used to obtain the sample of women.

Outcome measures:
Interviewer administered pre-tested structured questionnaire was used to collect data on demographic and socioeconomic status and reproductive morbidity.

Results:
Obstetric morbidity: Twenty one percent of fertile women had health problems during present or last pregnancy. Among them pregnancy induced hypertension was reported in 28.4% of mothers, 14.2% had bleeding during pregnancy and 9.0% of mothers had sever anemia. 14.2% of mothers who underwent cesarean sections had infected cesarean scars, 13.3% had infected episiotomy, 11.7% had post partum hemorrhages and 6.7% had purulent vaginal discharges in their post partum period.

Gynecological morbidity: Twenty seven percent of participants had gynecological morbidities. Among them, 33.8% of women reported irregular menstrual periods and 14.1% had bad odor vaginal discharges and itching around vagina.

Contraceptive morbidity: Seventy three percent of participants were using a family planning method and 30.3% among them had health problems related to it. Irregular menstrual periods were the symptom reported highest (41.3%) among family planning users. 31.4% had cessation of menstruation and 13.4% had excessive bleeding during menstruation.
Conclusion:

A considerable number of women in reproductive age in Kandy district had obstetric, gynecological or contraceptive morbidity. Health policy makers, program planners and service providers in public and private sector should pay their attention on reproductive health morbidity.
වාස්තාවීකරණය ආසන්න සමාජ ගොඩාර්ම අවිනිෂණය ලබා කිරීම සර්වමය කිරීම අනුවර්තනය කළ ෍නාස්තය මෙහෙයේ විද්‍යාව සඳහා එකක් විශේෂ කාලයක් ඉදිරිපත්‍ය පායිය 2002

1. අපුරුෂ් සමාජයන්
2. ඉංග්‍රීසි සමාජය

විධානය විශේෂ සමාජයන්
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- යාගයන්, මිහිමින්නය

මුහුදු

මෙම ශර්තයේ උත්සාහය කොටස් කරන්නේ අංකයන් ගැසීමේ අදහස් ලබා ගනා ඇත. මෙම ශර්තයේ අංකයන් අත්පම්පාණය කිරීම සඳහා එකක් විශේෂ කාලයක් ඉදිරිපත්‍ය පායිය. මෙම ශර්තයේ අංකයන් අත්පම්පාණය කිරීම සඳහා එකක් විශේෂ කාලයක් ඉදිරිපත්‍ය පායිය.

මුහුදු

මෙම ශර්තයේ උත්සාහය දෙකක් විශේෂ කාලයක් ඉදිරිපත්‍ය පායිය (රා.ම.ම. නිකරණය). මෙම ශර්තයේ උත්සාහය දෙකක් විශේෂ කාලයක් ඉදිරිපත්‍ය පායිය (රා.ම.ම. නිකරණය). මෙම ශර්තයේ උත්සාහය දෙකක් විශේෂ කාලයක් ඉදිරිපත්‍ය පායිය (රා.ම.ම. නිකරණය).

මුහුදු

97.8% වන අත්පම්පාණය නිකරණයේ ආදානය වී. මෙම ශර්තය අක්ෂය වන්නේ 7.3% ආදානය වී. 34.7%වන අත්පම්පාණය නිකරණයේ ආදානය වී. මෙම ශර්තය අක්ෂය වන්නේ 39%වන ආදානය වී. 6%වන අත්පම්පාණය නිකරණයේ ආදානය වී. මෙම ශර්තය අක්ෂය වන්නේ 34%වන ආදානය වී. මෙම ශර්තය අක්ෂය වන්නේ 34%වන ආදානය වී. 39%වන අත්පම්පාණය නිකරණයේ ආදානය වී. 6%වන අත්පම්පාණය නිකරණයේ ආදානය වී. 7%වන අත්පම්පාණය නිකරණයේ ආදානය වී. 6%වන අත්පම්පාණය නිකරණයේ ආදානය වී. 7%වන අත්පම්පාණය නිකරණයේ ආදානය වී. 6%වන අත්පම්පාණය නිකරණයේ ආදානය වී.

මුහුදු

මෙම ශර්තයේ උත්සාහය 1/3 වන්නේ අත්පම්පාණය නිකරණයේ ආදානය වී. 7%වන අත්පම්පාණය නිකරණයේ ආදානය වී. 6%වන අත්පම්පාණය නිකරණයේ ආදානය වී. 7%වන අත්පම්පාණය නිකරණයේ ආදානය වී. 6%වන අත්පම්පාණය නිකරණයේ ආදානය වී.
Identify the challenges in implementation and suggest ways and means of collaboration between tuberculosis and HIV/AIDS programmes in South Asian Association for Regional Cooperration (SAARC) member states

Ajith Weerakoon; Consultant Community Physician, Consultant Epidemiologist, Central Province, Nilani Fernando, Regional Director of Health Services, Kandy District

Background:

Addressing HIV associated Tuberculosis is an important component of the new “stop TB Strategy”. SAARC is an association of eight countries. Some SAARC countries have initiated some TB/HIV collaborative activities. However, TB/HIV collaboration is yet to take off in a big way in SAARC member countries. Some of the reason are barriers due to the differences in programme implementation like fully decentralized DOTS services and issues related to stigma and discrimination associated with both the diseases, more so with HIV/AIDS. Hence, the study was carried out to assess strengths, opportunities, barriers and threats to TB/HIV collaboration in SAARC member countries and to provide provide pragmatic recommendations according to national and international guidelines.

Methods:

An institution based qualitative study was carried out at different levels of TB and HIV/AIDS programme implementation units in Afghanistan, Bangladesh, Maldives, Nepal, Pakistan, and Sri Lanka. Data was collected by trained interviewers using an interviewer administered questionnaire. Data was analyzed making SWOT analysis.

Results:

National coordination committee, policy and strategy, focal person and guidelines for implementing TB & HIV collaborative activities currently exist in Sri Lanka, Bangladesh, Afghanistan and Pakistan. Diagnosis and treatment of active TB among HIV infected is not being carried out routinely by all study countries except in Maldives. MDR-TB is not a major concern for all the studies SAARC countries. None of the countries implemented INH and co-trimoxazole therapy routinely, majority stated lack of trained man power, lack of research and weak monitoring and evaluation were the major obstacles for TB HIV collaborative activity Negative attitudes among health care workers towards PLHA were the major threat for collaboration activities in the SAARC Member countries.

Conclusions:

The study identifies opportunities for TB and HIV programmes collaboration and barriers that need to be overcome for effective implementation of TB/HIV collaboration.
Trends of tuberculosis related deaths in SAARC region

Ajith Weerakoon; Consultant Community Physician, Consultant Epidemiologist, Central Province, Nilani Fernando, Regional Director of Health Services, Kandy District

Aim:

Tuberculosis is among the top 10 causes of deaths worldwide, and one of the United Nations Millennium Development Goals is to halve TB mortality by 2015, compared with 1990 levels. TB mortality is an important indicator of the success of TB control, as most of the TB burden, as measured in disability-adjusted life – years (DALYs), is the result of premature deaths among young adults. The aim of the study was to describe trend of TB related deaths in SAARC region from 2000 to 2007.

Methods:

A record based descriptive study was carried out. Data was collected from the world Health Organization-Global TB control reports and Annual Reports of SAARC member states which were published from 2000 to 2008.

Results:

Mortality rates due to TB have been reduced over the years (from 2000 to 2007) in all the SAARC member states. In year 2007, highest death rate was reported in Bhutan (44 per 100 000 population) and lowest rates reported from Maldives (4 per 100 000 population) and Sri Lanka (8 per 100 000 population).

Conclusions:

By adopting DOTS strategy, this region has started to show success in TB control with the achievement of global target of 8.5% treatment success rate of new smear positive cases and reducing the mortality rates. MDR-TB and HIV/AIDS are the main hurdles for TB control. The members states need to focus their attention to strengthen management of MDR-TB and HIV associated TB to further reduce the TB related mortality.
An Epidemiological study to find out risk factors for Multi Drug- Resistant Tuberculosis

Ajith Weerakoon; Consultant Community Physician, Consultant Epidemiologist, Central Province

Introduction:
Drug resistant tuberculosis is a threat to tuberculosis control worldwide. Previous anti-tuberculosis treatment is a widely reported risk factor for multi drug resistant tuberculosis (MDR-TB), whereas other risk factors are less well described. In Nepal National tuberculosis control programme initiated DOTS-PLUS pilot project from September 2005 using standardized treatment regimen. Study of the risk factors for development of MDR-TB in the local context is likely to provide clues for strengthening treatment of MDR-TB.

Objective:
To explore the potential risk factors for MDR-TB in Nepal.

Methodology:
A matched case control study with a case: control ratio of 1:2 was carried out in three regions of Nepal. Fifty five cases and 110 controls were selected. Current MTR-TB patients on treatment from DOTS-plus clinic were enrolled as cases. Controls were age, sex matched cured TB patients and who had completed treatment.

Results:
The significant risk factors found in matched analysis were, HIV sero positivity, travel cost more than 50 NRs per day, contact history of TB, living in a nuclear family, non adherence to DOTS, distance to treatment centre more than 5 km, previous history of TB, living in a rural area, unmarried, unemployment , living in a rented house, single bed room. In multivariate analysis except living in a rented house and single bed room other variables were positive significant predictors for MDR-TB in Nepal.

Conclusions:
Many risk factors were related to the DOTS. Strengthening of DOTS services to tackle the identified risk factors can reduce the MDR-TB burden in Nepal. Association of HIV as a risk factor for development of MDR-TB needs to be further studied.
Immunity to hepatitis A when outbreaks of infection in men who have sex with men (MSM) are rare

Weerakoon Ajith, Consultant Community Physician, Consultant Epidemiologist, Central Province,

Background:
Epidemics of hepatitis A among men who have sex with men (MSM) have decreased significantly in recent years although the level of immunity that is required to prevent epidemics has not been studied. Our aim was to determine the level of immunity to hepatitis A among MSM.

Methods:
This was a retrospective study conducted using notifications of hepatitis A in Victoria from 1991 to 2010, serological testing for hepatitis A among MSM attending Melbourne sexual health centre (MSHC), and vaccination records among MSM attending MSHC.

Result:
Hepatitis A notifications declined from 370 to 47 and the male to female ratio declined from 4.2 to 0.9 in Victoria between 1991 to 2010. Between 2002 and 2011, there were 12,064 individuals MSM seen at MSHC of whom 3055 (25%) were tested for hepatitis A antibodies and 1180 (39%) had antibodies. The proportion of MSM who were tested for hepatitis A rose significantly over time (p<0.01), but the proportion of these with hepatitis A antibodies did not (p=2.8). Hepatitis A antibodies were more common in MSM over 30 (54%) compared to those 30 or less (32%), (crude odds ratio 2.5 (95% confidence interval 2.1-2.9) and were uncommon in MSM under 20 (19%). Vaccination against hepatitis A was recorded in 49% of 660 clinical files of MSM who attended the centre between 2003 and 2011 and did not change over time (p=0.42) but was significantly more common in those over 30 years of age (p<0.005).

Conclusions:
Hepatitis A is rare in MSM in Victoria where levels of immunity are about 40-50%. As outbreaks have occurred when levels of immunity were around 30%, maintaining vaccination levels over 40-50% is important if outbreaks are to be prevented. The lower levels of immunity in younger MSM create the potential for outbreaks in this sub-group.
Efficacy of Polydimethylsiloxane (Aquatain mosquito formulation) against immature stages of the dengue vectors in Sri Lanka

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²Regional Office of the Anti Malaria Campaign, Dutugemunu Mawatha, Watapuluwa, Kandy

Three laboratory studies were carried out at the regional office of the Anti malaria campaign in Kandy to determine the efficacy of “aquatain mosquito formulation” (AMF), a monomolecular film, against immature stages (larvae and pupae) of *Ae. aegypti*. In the first laboratory study, *Ae. aegypti* larvae were exposed to two dosages (1ml/m² and 2ml/m²) of AMF and daily percent immature mortality was observed for 5-7 days. Since there was no considerable percentage of immature mortality/pupation within 5 days, a second study was carried out using the same methodology, but, with an observation period of 15 days. In the third study, *Ae. aegypti* pupae were exposed to 1ml/m² and 2ml/m² dosages of AMF and daily percent pupal mortality was observed. In the first study, the day 1 and day 5 larval mortalities were 50% and 60.7% in 1ml/m² and the day 1 and 5 mortalities were 60.7% and 72.0% in 2ml/m² of AMF respectively. In the second study there was over 50% larval mortality on day 4 and over 88% on day 11 in both dosages of AMF. There was 100% larval mortality on day 14 and 15 in 2ml/m² and 1ml/m² dosages respectively. The third study showed that there was 100% pupal mortality within 2 hours of exposure to both dosages of AMF. In all studies, there was neither larval nor pupal mortality in the controls. These studies showed that AMF is efficacious against *Ae. aegypti* immature, however, further studies are encouraged to determine its effectiveness in field situations as a dengue vector control tool.
Risk communication and evidence based vector control interventions could control dengue epidemics

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A retrospective study was carried out in the Kandy district in 2012 to investigate the impact of risk communication and application of evidence based vector control interventions (intervention) on dengue incidence in the district. Pre and post intervention data on annual dengue fever (DF) and dengue haemorrhagic fever (DHF) incidence in the district was collected from records at the Regional Director of Health Services (RDHS) in Kandy. This data was analysed to identify DF/DHF trends over the years from 2001 – 2012 and to determine the percentage contribution of the Kandy district to the total incidence of DF/DHF in Sri Lanka for the corresponding period. It was observed that Sri Lanka experienced dengue epidemics at 2-3 year intervals from 2001 to 2009, with the severe epidemic in 2009 (34,896 cases). The number of DF/DHF cases was not considerably declined after 2009, instead, there was an increase in the number of cases in 2012 (44,456 cases). From 2001 – 2009 (pre intervention period), Kandy district followed the country DF/DHF trend with the contribution of 5.2- 25.9% (mean 11.8% ± 6.2) to the country’s DF/DHF incidence. After intervention (2010 to 2012) the district contributed 4.8 - 5.7% (mean 5.4 ± 0.52) to the total DF/DHF incidence in the island. In the post intervention period, of the 23 Medical Officers of Health (MOH) areas in the Kandy district, 21 areas prevented/ controlled dengue epidemics. Identification of dengue transmission risk based on entomological and epidemiological data, risk communication and application of evidence based vector control interventions could prevent/ control dengue epidemics successfully.
මූරියක් සහ දුන් විශේෂ මණ්ඩල මණ්ඩල විසින්

මනාකාරක් 1. පැරණි මාදුර කයෞ
මනාකාර කෙනෙක නිවස කටයුතු - පැරණි

1. මාදුරක් කටයුතු

2. විස්තර

02මාදුරක් කටයුතුවන්

විදියක් මනාකාර කළ මාදුරක් කටයුතු - මාදුරක් කටයුතු කළ කළ මාදුරක් කටයුතු - මාදුරක් කටයුතු

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මාදුරක් කටයුතුවේ මෙන්දු මාදුරක් කටයුතුවන් මෙන්දු මාදුරක් කටයුතුවන්

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මාදුරක් කටයුතුවන් මෙන්දු මාදුරක් කටයුතුවන්
Use of post exposure prophylaxis in Human Rabies control: Are we on the right track?

Jayakody K.W.G.G:

Consultant Community Physician, Central Province

Introduction:
Over 90% of animal rabies cases have been reported among dogs in Sri Lanka. Out of Rabies positive animal brains tested in Medical Research Institute, 88% were belonged to dogs, 8.5% to cats, 1.2% to wild animals and 2.3% to other domestic animals in 2011. In 2011, 548 dog brain samples were reported positive for rabies compared to 579 positive in the previous year at the Medical Research Institute of Colombo. In addition 53 cats, 1 squirrel, 1 rock squirrel, and 14 farm animals were also tested positive.

In spite of Anti Rabies Vaccine coverage among dogs was more than 60% and dog sterilization programme conducted during last 3 years in the Central province usage of post exposure Anti Rabies Vaccine is not reduced in Health institutions in Kandy district.

Objective:
To assess the usage of Anti Rabies Vaccine for post exposure prophylaxis in Kandy Teaching Hospital

Methods:
This is a descriptive study using secondary data. Randomly selected 1804 post exposure vaccination cards from teaching hospital Kandy in 2011 were used.

Results:
Almost 30% (n = 1804) of the post exposure prophylaxis provided for humans was due to cat bites or scratch. When considered the nature of the bite 72.2% were superficial, 16.5% deep while 21.6% were multiple bites. Completeness of the record keeping was poor as only 32.2% of the cards mentioned whether animal is stray or domestic. Of those mentioned 68% (n = 580) were stray animals.

Conclusions & Recommendations:
Considerable proportion of post exposure prophylaxis used for humans due to cat bite or scratch. More than two-thirds of the cards did not mentioned whether the animals were stray or domestic.

Expand anti rabies vaccination programme for cats in addition to dogs. Need to strengthen record keeping at out-patient department.
A Green Initiative for Improved Sanitation and Hygiene for Rural Hospitals in Central Province - Rain Water Harvesting

Gamini Jayakody, Provincial Epidemiologist, Office of the Provincial Director of Health Services Central Province, Kandy Kusum Athukorala, Chair, Sri Lanka Water Partnership & NetWwater c/o International Water Management Institute, Palawatta, Battaramulla Sunil Shanthasiri, Senior Sociologist, National Water Supply & Drainage Board, Peradeniya

Since 425 B.C. rain water harvesting (RWH) for domestic and institutions purposes were common in ancient Sri Lanka with the Sigiriya fortress having several rain water collection devices. In modern times up till the last century there was little interest in rain water collection but recent climate change impacts impacting on institutions have promoted a resurgence of interest. Recently many organizations, primarily the Lanka Rain Water Harvesting Forum has promoted the use of rain water as a supplementary option for institutional purposes.

Central Province has 90 rural hospitals and 65 Primary Medical Care Units which cover a population of 2.4 million. Types of water supply for government hospitals in Kandy districts varies from one institution to other, the sources being pipe borne water from National Water Supply & Drainage Board (NWSDB) and Local Government (LAs), Community Water Supply Schemes and their own gravity and pumping water supply schemes. Due to various reasons majority of these institutions do not have adequate and uninterrupted water supply for daily usage; especially during dry seasons they face acute water shortage affecting hospital authorities and the general public who seek their services. Many of these hospitals suffer from limited access to water. As a result it was difficult to maintain desired levels of hygiene and sanitation. In search of a sustainable response, Provincial Health Department, Central Province with collaboration with a civil society entity NetWwater, a founder member of the Women for Water Partnership (WFP) and the Lions Club Pilimatalawe initiated a pilot RWH project in 3 rural hospitals in Yatinuwara, Kandy, Central Province in 2010. The primary goal was to improve hygiene levels by provision of water for specific purposes of toilet cleansing and ward hygiene. As this pilot initiative showed positive results while also reducing electricity and water bills for some extent, NetWwater with partner organizations accessed through WFP expanded the activity to 24 rural hospitals. Technical assistance for construction was given by the National Water Supply and Drainage Board (NWSDB) which recommended dual purpose systems. NetWwater gave training on operation and maintenance of systems to staff emphasizing the need for regular cleansing.

In early 2013, the Provincial Health Dept of the Central Province carried out a monitoring of the usage and functionality of the RWH systems. The results shows majority of heads of the institutions welcomed and appreciated provision of RWH tanks to their institutions and in fact requested supplementary tanks. Out of 25 tanks provided 2 tanks are not use - one tank has been damaged; other has been disconnected temporarily as the staff wished to relocate it. In one case the RWH tank was the sole source of supply.

Methods of use of RWH tanks vary from one institution to other. Provision of RWH tanks helped majority of institutions to improve their storage facilities and maintain continuous water
supply to their institutions for purposes of improving hygiene. Maintenance of the RWH tanks were done extremely well in 06 institutions while others also maintained tanks according to the given guidelines. It is noteworthy that, there is no complaint about the quality of the rain water from the public or from health staff as they have used it even for drinking and cooking purposes in two institutions. In particular cleanliness of the wards and toilets are reported as improved in almost all institutions according to the information gathered.

Due to usage of RWH tanks, the water bills of 40% of the institutions were reduced by 5 – 10% while electricity bills were also reduced by 5 – 10% in 18%. This shows provision of RWH tanks to those institutions had positive impact on services provided by them. As finding of this assessment shows positive benefits to the health institutions and public the provision of RWH tanks to the rest of the rural hospitals in the Central Province could be recommended.

### Nutritional status of the elderly in the Matale district

**Gamini Jayakody, Consultant Community Physician, Provincial Director of Health Services, Central Province**

**Objective:** To determine the nutritional status of the elderly by sector in the district of Matale.

**Methodology:** A community based descriptive comparison study was carried out to assess the nutritional status among the elderly aged 60 year age and over in the district of Matale using a stratified multistage cluster sampling method. A sample of 3194 subjects was selected (urban-1200, rural-1163 and estate- 831). Of the selected sample 95.2% participated in the study. Information was obtained by using an interviewer administered structured questionnaire conducted by Public Health Midwives. Anthropometric measurements (Weight, Height, Arm span and mid upper arm circumference [MUAC]) were measured by the principle investigator according to the standardized protocol.

**Results:** Prevalence of under nutrition according to BMI (Body Mass Index) in the estate, rural and urban sectors was 58.3%, 40.1% and 22.3% respectively, with an overall prevalence of 38.4%. In all three sectors females (14.3%) had a higher prevalence of obesity than males (7.3%). Prevalence of under nutrition among the elderly in the three sectors increased with advancing age. Prevalence of over weight was higher (22.9%) among elderly in the urban sector.

**Recommendations:** More emphasis should be made on population-based programmes using IEC to prevent elders becoming under nourished. Awareness on prevention, promotion and intervention programs to improve nutrition of the elderly, among the health care personal as well as general population needs to be addressed.

According to the present study majority of estate elders were undernourished, hence special attention should be paid to the estate elders.

Special attention should be paid to overcome the problem of overweight among the urban elders.
Rabies Vaccination of Domesticated Dogs in Central Province

I.N.G.Perera-Supervising Public Health Inspector-Kandy District

A descriptive cross sectional study was conducted to determine the vaccination coverage of domesticated dogs, the quality of dog vaccinations against rabies and to determine the knowledge, attitudes and practices of the vaccination teams of the rabies control programme in the Central Province of Sri Lanka.

Nine hundred sixty houses were selected randomly from six MOH areas representing the three districts of the Central Province, Kandy, Matale and Nuwara Eliya. In the surveyed houses there were 898 dogs. In 139 of the houses there were no dogs while in 60 houses there were two or more dogs. This gives a dog to human ratio of 1 is to 5 which is higher than 1 is to 8, the average dog to human ratio calculated for the country. Vaccination coverage was 87% among the sampled dog population according to the verbal response of the owner alone. However, when documentary evidence of vaccination was considered, the coverage dropped to about 70%, indicating that the rabies vaccination coverage of domesticated dogs in the central province is below the national target of 80%.

In assessing the quality of vaccination services, 25 vaccinating clinics were observed. In 4% of the clinics, sterilized equipment, vaccination cards and dog collars were not available. In more than 90% of the clinics adequate number of syringes and kidney trays for the clinic session was not available. The majority of the clinics did not start on time (80%), did not have enough space (56%) and was conducted under direct sunlight (68%). The vaccination procedure was observed in each of the 25 centers when the first 12 consecutive vaccinations were performed and a total of 300 such procedures were observed. The study found that in most of the clinics the recommended procedures were not carried out as per the guidelines issued by the Department of Health.

In assessing knowledge of rabies control among vaccination teams the study results showed that the knowledge was poor on many aspects and also that knowledge varied widely among the vaccinators. Attitudes of the vaccinators were satisfactory with regard to elimination of rabies. Of the practices with regard to elimination of rabies, most vaccinators satisfactorily disposed their garbage both at home and work place. However, feeding of stray dogs at home and in the work place was a common practice even among the vaccinators.

In general, the coverage and quality of dog vaccinations against rabies in the Central Province needs to be improved. Dog owners should be made aware about the importance of maintaining records of dog vaccinations. The range PHI should take steps to organize the clinics better and the vaccinators should be encouraged to follow the recommended procedures.
LEVEL OF VISION AMONG PUBLIC TRANSPORT DRIVERS AND ROAD TRAFFIC ACCIDENTS

Cooray Pramica, Medical Officer, Maternal and Child Health, Kandy District, Dharmaratne S. Department of Community Medicine, University of Peradeniya

The objectives of the study was to find out the prevalence of subnormal visual activity among public transport drivers in city of Kandy, Sri Lanka and proportion of drivers who met with road traffic accidents. This descriptive cross sectional study was done using a stratified random sample of 401 drivers with a non response rate of 5.2%.

9.6% of SLTB and 4% Private bus drivers did not have the required level of vision. 9.6% of SLTB and 4.7% of Private bus drivers had accident record during the 2 year period preceding the survey.

Regulations and procedures for screening and correction of substandard vision among drivers can be easily clarified or set to improve and maintain good vision among drivers.

Health promotion tool to reduce the tobacco consumption in men through their children in low socio-economic groups in Kandy district, Sri Lanka.

Nayana D. Dhanapala, Shanika Malagoda, C. Snevirathne

Regional Director of Health Services, Kandy District, Sri Lanka, Child Protection Unit, Plan Sri Lanka, Kandy, Sri Lanka, Diabetes Research Unit, Faculty of Medicine, Colombo.

Introduction - Tobacco smoking is one of leading causes of premature death and disability in worldwide, and over 80% of the world’s smokers live in low- or middle- income countries. It is estimated that annual mortality from tobacco-related illness is about 20,000 deaths.

Objectives - To determine the effectiveness of a health promotion tool in reducing cigarettes consumption among men in low socio economic communities through participation of their children.

Methods - This community based intervention was conducted through assigning two children’s groups as “intervention” (n=76) and “control” (n=69) in four divisions including two tea estates, Kandy district. Socio economic characteristics were similar in both groups. Intervention group was given health promotion tool to facilitate the reduction of tobacco consumption among smokers. Smokers were encouraged by their children, to reduce “one cigarette” out of their daily consumption and save that money for utilizing on children’s necessaries. Children were given a training to use the tool through role play model. Regular follow-up were carried out strength the programme. Pre and post data were collected through children using a specific format.

Results - After six months, 85% of intervention group (n=65) and 79% of children (n=55) in control group have successfully completed the study. There was no significant difference (p=0.081 95% CI) for the mean number of cigarettes consumed by both groups before intervention; cigarettes per day.
by intervention and control were 9.22 (SD=3.61) and 9.07 (SD=3.69) respectively. After the intervention, interventional group was significantly able to reduce their daily cigarette consumption (mean - 7.2 cigarettes) with compared to control group (mean – 8.36 cigarettes ) (P<0.025,95%CI). Independent samples t-test showed that the health promotional tool was an effective method to lower the tobacco use among smokers in low socio economic groups (p=0.025,95%CI)

**Conclusion**- Children based interventions through health promotional approach and proposed tool can be used to reduce the tobacco consumption among smokers in low socio-economic communities.

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**Knowledge and Practices on contraception among married female school teachers in Udunuwara MOH area and the use by them of available family planning services**

*Nilani Fernando Regional Director of Health Services, Kandy District*

A cross sectional survey was carried out in the Medical Officer area Udunuwara to determine the knowledge and practices on contraception among married female school teachers and to identify sources from which current users obtain family planning services with reasons for doing so. The data were collected using a pretested self-administered questionnaire. A multistage stratified sampling method was used and the sample was selected on probability proportionately to different grades of schools and ethnic differences. Only the data collected on pre-menopausal women were analysed. Data of Tamil respondents were not interpreted, as the number was very low.

Contraceptive Prevalence Rate was only 52% among teachers, which was lower than the national prevalence and non-user rate was high among the teachers above 45 years of age. Of the current users 41.4% practices natural and traditional methods of contraception while 58.6% use modern methods. Contraception prevalence rate among the Muslim teachers was higher (61.4%) while prevalence among Sinhalese teachers was only 49.7%.Sinhalese teachers recorded a significantly higher knowledge on modern permanent methods than Muslim teachers did, either the subject they teach or the academic qualifications they possess did not show any significant association with knowledge. The teachers’ knowledge on natural and traditional methods was better than the knowledge they had on both modern temporary and modern permanent methods. Ever users’ knowledge was significantly higher than that of the non-users. Although it appears that the teachers who had been exposed to training on family planning and reproductive health have a better knowledge, it was not statistically significant. A majority of teachers in the sample who used contraceptive methods are practised modern temporary methods. Ever user’s knowledge was significantly higher than that of the nonusers. Although it appears that the teachers who had been exposed to training on family planning and reproductive health have a better knowledge, it was not statistically significant. A majority of teachers in the sample who used contraceptive methods are modern temporary methods. Forty three per cent of the current acceptors obtained their services from non governmental services, while 40 % did not use services from either governmental or non governmental services. The presence of a medical officer in the clinic, conducting clinic day on weekday afternoon and reducing overcrowding were important factors to increase the credibility of the governmental family planning services among the school teachers.
මෙම සටහන් අභිජනය අනුවෙන් මට්ටමේ ප්‍රමාණවල් ආකාරය දැනීමට පැහැදිලිව එහේරුවමේ සිදුවීමට අනිවාර්ථක අවස්ථාවක් මෙම සටහන් පිළිතුරුව.

මෙහෙවත් විශේෂයෙන්ම මනුභා මෙහෙළ පිළිතුරු අපේක්ෂාව පිළිතුරු කියන්න.

පෙළමුවෙන් සමගේ අතරින් කිහිපයක් තේක කාලට අදාල් බලා.

මෙහෙවත් අපේක්ෂාවක් ලද 18 ක් වසර පිළිතුරු ඇතිවරුණි පිළිතුරු මෙම 18 ක් වසර පිළිතුරු ආවරණය ඔක්කාලයේ මෙම 18 ක් වසර පිළිතුරු ආවරණයක් ලෙස සිදුවීමට අනිවාර්ථක අවස්ථාවක්.

මෙවතුම 78 පිළිතුරු අපේක්ෂාවක් ලෙස 2013 වසර 46 පිළිතුරු ආවරණයක් ලෙස පිළිතුරුකින් බරලා.

උළු මරණ ලක්ෂණ පුළුලින් (උළු මරණ ලක්ෂණ සීතා 300 පන්ද 0775 පුළුලින්)

විශේෂය

මෙවතුම ආහරය කොටසය මනුභා පරික්ෂණය වලින් දෙම ප්‍රමාණ පරික්ෂණ සිදුවීමට මෙම සටහන් අනුවෙන් කිහිපයක් තේක කාලට අදාල් බලා හැකිය යි. මෙම සටහන් පිළිතුරු කිහිපයක් තේක කාලට අදාල් බලා තිබී පිළිතුරු ආවරණය විශේෂය පිළිතුරුකින් සිදුවීමට අන්වාර්ථක අවස්ථාවක් මෙම 18 ක් වසර පිළිතුරු ආවරණය ඔක්කාලයේ පිළිතුරු ආවරණයක් ලෙස සිදුවීමට අන්වාර්ථක අවස්ථාවක්.
මහින්දය සහ මහින්දය දේශපාලනය කිය හැකිය වේසන්න මීටර් කෙරේ දක්වන්නේ එක්කම් පිටතටමින් විශේෂ විශේෂයක් කළමනා කොහොමදේ.

1. මහින්දය මහින්දය දේශපාලනය කිය හැකිය වේසන්නේ මීටර් දේශපාලනය කිය හැකිය වේසන්නේ එක්කම් පිටතටමින් විශේෂ විශේෂයක් කළමනා කොහොමදේ.
2. මහින්දය මහින්දය දේශපාලනය කිය හැකිය වේසන්නේ එක්කම් පිටතටමින් විශේෂ විශේෂයක් කළමනා කොහොමදේ.

මාධ්‍යමාව

මහින්දය 50% සහ මහින්දය සහ 15,000 අ මිට්ටය පිටතටමින් එක්කම් පිටතටමින් විශේෂ විශේෂයක් කළමනා කොහොමදේ. මහින්දය මහින්දය 11.5% සහ 15,000 අ මිට්ටය පිටතටමින් එක්කම් පිටතටමින් විශේෂ විශේෂයක් කළමනා කොහොමදේ. 83.3% සහ 83.3% සහ 15 – 20 අ මිට්ටය පිටතටමින් විශේෂ විශේෂයක් කළමනා කොහොමදේ. මහින්දය 5% සහ 15 – 20 අ මිට්ටය පිටතටමින් විශේෂ විශේෂයක් කළමනා කොහොමදේ. 66.6% සහ 66.6% සහ මහින්දය දේශපාලනය කිය හැකිය වේසන්නේ එක්කම් පිටතටමින් විශේෂ විශේෂයක් කළමනා කොහොමදේ. 25% සහ මහින්දය සහ මහින්දය දේශපාලනය කිය හැකිය වේසන්නේ එක්කම් පිටතටමින් විශේෂ විශේෂයක් කළමනා කොහොමදේ. ප්‍රදේශ සමගේ මහින්දය දේශපාලනය කිය හැකිය වේසන්නේ එක්කම් පිටතටමින් විශේෂ විශේෂයක් කළමනා කොහොමදේ.
ప్రశ్నలు

1. ఎందుకంది కాబట్టి దొరికిన మూలము మరియు కలపతైన పదాన్ని ఎందుకంది తెలుసు?

2. ఎందుకంది కాబట్టి రూపలు మరియు తరఫులు మరియు పదాన్ని ఎందుకంది తెలుసు?

3. ఎందుకంది కాబట్టి సంఖ్యలు మరియు విధానాలు మరియు పదాన్ని ఎందుకంది తెలుసు?

మాధ్యమాలు

ప్రశ్నలు

1. మూలము మరియు కలపతైన పదాన్ని ఎందుకంది తెలుసు?

2. మరియు రూపలు మరియు తరఫులు మరియు పదాన్ని ఎందుకంది తెలుసు?

3. మరియు సంఖ్యలు మరియు విధానాలు మరియు పదాన్ని ఎందుకంది తెలుసు?

మాధ్యమాలు

ప్రశ్నలు

1. మూలము మరియు కలపతైన పదాన్ని ఎందుకంది తెలుసు?

2. మరియు రూపలు మరియు తరఫులు మరియు పదాన్ని ఎందుకంది తెలుసు?

3. మరియు సంఖ్యలు మరియు విధానాలు మరియు పదాన్ని ఎందుకంది తెలుసు?
මොටර් ස්යාවක වල්පෙළ පුළුල් පාවැති පළාතේ පිළිබඳ කොටස සැදුම් වරටම් වැටිංගේ පෙළමුභාගින් වන්නේ ප්‍රශ්නය කරන කොටසේ මෙමේ විධිව

විද්‍යාලය විශේෂයෙන් මෙමේ විධිව

මොටර් ස්යාවක වල්පෙළ පුළුල් පාවැති පළාතේ පිළිබඳ කොටස සැදුම් වරටම් වැටිංගේ ප්‍රශ්නය කරන කොටසේ මෙමේ විධිව

කොටසේ

01 අදහස් මොටර් ප්‍රශ්නය සඳහා 2007/21 දෙවන දිනයේ 24 අපුරුෂී 24 වන දිරීම
02 අදහස් මොටර් ප්‍රශ්නය සඳහා 2007/21 දෙවන දිනයේ 24 වන දිරීමේ මොටර් ප්‍රශ්නයක්
03 මොටර් ප්‍රශ්නය සඳහා මොටර් ප්‍රශ්නයක්
04 මොටර් ප්‍රශ්නය සඳහා මොටර් ප්‍රශ්නයක්

විද්‍යාලය විශේෂයෙන් මෙමේ විධිව

විද්‍යාලය විශේෂයෙන් මෙමේ විධිව

උපන්නත්වය සඳහා

• අදහස් ක්‍රමය මොටර් ප්‍රශ්නයක්
• මොටර් ප්‍රශ්නයක්
• අංක 10
• අංක 08
• අංක 06
• අංක 24
• අංක 12
• අංක 12
• අංක 24
Local Efforts to control Tuberculosis in Medical Officer of Health Area, Yatinuwara.

Nimal Jayawardana, Medical Officer of Health Reginal Health Training Centre Yatinuwara Ajith Weerakoon Medical Officer(Training) of Health Regional Health Training Centre Yatinuwara, Wimal Dissanayaka, Planning and Programming Officer, Regional Health Training Centre Yatinuwara

Introduction

Tuberculosis is still a public health problem in Sri Lanka. According to the NPTCD, in year 2008, 10,500 new Tuberculosis cases were reported in Sri Lanka. Reported new cases of Tuberculosis in Yatinuwara in year 2008, 2009 and 2010 were 42, 35 and 20 respectively. In 2011 yatinuwara MOH office has carried out special coordinated TB control programme with NPTCD.

Objectives

To relive the burden of Tuberculosis in Yatinuwara MOH area through coordinated control efforts.

To elaborate with actions have been taken to control Tuberculosis in Yatinuwara.

Method

General control measures have been routinely carried out.

Research team has visited and observed PHIS officers, Hospitals, DOTS Centers, and also conducted focus group discussions with health care providers and school community to understand. Tuberculosis control activities in Yatinuwara MOH area. Special partnership programme with community, education sector and other health institutes was conducted to celebrate World TB Day on 22nd March 2011.

This special programmes included Quiz programme, Poster Competition, Street Drama, Exhibition, Wold TB Day publication and World TB Day function. Data on Tuberculosis were obtained from perusal of past record, returns and World TB Day publication

Results

Incidence rate of Tuberculosis in MOH area Yatinuwara has dropped from 42 per 100,000 population to 20 per 100,000 population from 2008 to 2010. Even though it is too early to comment the success of World TB Day programme in 2011, focus group discussions with health and education sector authorities, political leaders, school children and teachers emphasized and appreciated the coordinated control efforts carried out by MOH area Yatinuwara.

Conclusion

Coordinated control measures will be a good weapon to control Tuberculosis and it could be applied to all MOH area in the country.
Reasons for the low utilization age of 35 women in well women clinic at Udadumbara MOH area.


Introduction
Well women clinic services were established in Sri Lanka in 1996 for improving the women reproductive health. Reproductive health is more clients centered and service oriented. Well women services mainly focus on overcoming the burden of cervical cancer; a common gynecological malignancy among Sri Lankan females and early detection of risk factors for non communicable diseases by screening tests.

In the MOH area Udadumbara well women clinic has been conducting once a month since 2000. According to the statistics for the last 3 years Udadumbara had a low coverage of clinic participation of 35 years age women.

Doing this simple research, I hope identify reasons for the low utilization of 35 years age women in well women clinic at Udadumbara MOH area.

Methodology
Selected PHM areas which have low coverage in Udadumbara area.

Study population-
1) Medical officer of health in Udadumbara MOH area.
2) Ten 35 years clients-not clinic participated
3) PHMMs working in Udadumbara MOH area.
4) Returns

Data collection
- In-depth interview with Medical officer of health in Udadumbara. (30 minutes).
- Focus group discussion with clients who are not participated.(½ hour).
- Focus group discussion with PHMMs (1 hour)

Summery
I analyzed data of 509 quarterly returns data 2012 in Udadumbara MOH area. I selected some indicators to be strengthen. I priorities these low coverage indicators and selected the most prominent and feasible problem. After that I write a proposal and obtain permission from medical officer of health in Udadumbara to concocted simple research regarding selected topic. I formulated general and specific objectives, selected methodology and decided the data collection methods.

I formulated four specific objectives to fulfill my simple research. Medical officer of health in Udadumbara, 10 PHMMs, clients of target group and returns are my study population in this event. I selected one in-depth interview, three focus group discussion as data collection methods. I mentioned about ethical consideration in my research proposal.

I gathered data and analyzed. After that, I identified some underline causes for low utilization by 35 age women for WWCs. Finally I give my recommendations to increased utilization of target group. I identified underline causes are in three aspects .There are management, PHMMs, and community. Finally I give my recommendation according to findings for improving utilization by 35 age women for WWC services.
অনুষ্ঠানের চর্চায় আলোকন করলেন

নৃত্য মঞ্চের আলোকন গল্প এবং আলোকন মঞ্চ কর্তা

অনুষ্ঠানের চর্চায় আলোকন করলেন নানা শিল্পী কলাকার নিবন্ধ. এই নিবন্ধে আলোকন করা হলো চর্চায় একটি শিল্পী কলাকার নিবন্ধ ও একটি শিল্পী কর্তা নিবন্ধ। এই নিবন্ধে আলোকন করা হলো চর্চায় একটি শিল্পী কলাকার নিবন্ধ ও একটি শিল্পী কর্তা নিবন্ধ।

তিনি মঞ্চের আলোকন করলেন নিবন্ধের বিভিন্ন কলাকার নিবন্ধ ও একটি শিল্পী কর্তা নিবন্ধ। তিনি মঞ্চের আলোকন করলেন নিবন্ধের বিভিন্ন কলাকার নিবন্ধ ও একটি শিল্পী কর্তা নিবন্ধ। তিনি মঞ্চের আলোকন করলেন 29 নভেম্বর মঞ্চের আলোকন করলেন নিবন্ধের বিভিন্ন কলাকার নিবন্ধ।
A COMMUNITY SURVEY ON THE OCCURRENCE OF INJURIES AMONG RESIDENTS IN GANGAWATAKORALE MEDICAL OFFICER OF HEALTH (MOH) AREA, SRI LANKA

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Background:
Injuries were the leading cause of hospital admissions in Sri Lanka for the past two decades. Common causes for injuries in Sri Lanka are road traffic crashes, occupational trauma, violence and humanitarian crisis. However, the epidemiology of injuries is not well documented at present in Sri Lanka.

Objectives:
Aim of this study was to assess the epidemiology of injuries among residents in Gangawatakorale MOH area, Kandy in the Central Sri Lanka.

Methods:
A community-based descriptive cross sectional study was conducted to describe the epidemiology of injuries occurring during the past six months among 707 households including 3,110 residents of all ages, selected by simple random sampling in Gangawatakorale MOH area. An interviewer administered structured questionnaire was used to obtain data.

Results:
The prevalence of injuries among all age groups was 1.8% (n=55, 95% CI: 1.4-2.3). Age of the participants with injuries ranged from 2-83 years (Mean=33.8, SD=21.8). The majority were less than 30 years (49.1%, n=27). The mechanism of injury reported were fall from height (38.2%, n=21), road traffic crashes(29.1%, n=16), animal bites (9.1%, n=5), occupational accidents (7.3%, n=4), home accidents (7.3 %, n=4), poisoning (5.4%, n=3) and burns (3.6%, n=2). Injuries were experienced by 25.5% (n=14) in more than one site. Commonest site of injury was legs (41.8 %, n=23) while 58.2 % (n=32) had experienced minor injuries. More males (63.6%, n=35) were injured than females (36.4%, n=20). There was a statistically significant difference between the proportions of males and females according to injury occurrence (p<0.05). The majority were of low income families (56.4%, n=31). Disabilities were reported following injuries by 69.1% (n=38) and the commonest type of disability was restriction of body movements (60%, n=33). Majority (70.9%, n=39) had received Western treatment, 14.5% (n=8) while 12.7% (n=7) had taken Ayurvedic treatment and 21.8% (n=12) had taken both Western and Ayurvedic treatment.

Conclusion:
Considering the high prevalence of injuries related to falls from heights, road traffic crashes and animal bites across all age groups, interventions in the form of targeted injury prevention programs for different age and sex groups, based on local epidemiology are needed for this population.
EXTRA – CURRICULAR ACTIVITIES: TYPES AND EXTENT OF PARTICIPATION BY A GROUP OF ADOLESCENT SCHOOL CHILDREN IN AN URBAN SETTING OF SRI LANKA

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C.S.E. Gunawardana

Background:

Extra-curricular activities (ECA) in schools are important in improving health of school children. Majority of the adolescents in a country are in the school going population and as it is a period of transition from childhood to adulthood. Although there are minimal physical illnesses during this period there is a higher tendency of acquiring problems associated with mental health such as violence, suicide, alcohol, drug abuse and sexual problems. Participation in ECA is beneficial in reduction of acquiring such problems as well as improving physical health by giving opportunities in engaging in exercises and reducing stress. Therefore enhancement of student participation in ECA is important for a country. Further knowledge on extent of participation and types of ECA is needed for implementation of ECA programmes among school children. As there are scarce studies in the country on this issue this study is aimed at describing the available ECA and extent of participation in varied types of ECA by students.

Method:

A cross sectional descriptive study was done among all grade ten students of Sinhala medium government schools in Matale Municipal council area of Sri Lanka from July to November 2006. A total of 620 students were selected using cluster sampling technique from nine schools for the study. A self-administered questionnaire and a data extraction sheet were used. Data collection was done by the principal investigator.

Results:

The highest number(n=60) of types of ECA was in Type 1 AB schools while Type 1C schools had a lesser number of types and Type 2 schools(n=18) had the least number of ECA types(n=13). Overall participation in ECA by students was 405(65.3%) while 287(46.3%) in sports, 115(18.5%) clubs and associations, 69(11.1%) in aesthetics and 185(29.8%) in leadership activities. Among those who participated in ECA majority were involved in one type of ECA (n=229, 56.6%), while 100(24.7%) participated in two types of ECA, 41(10.1%) in three types of ECA and 35(8.6%) in all four types of ECA. Males had a higher level of sports participation than females (p = 0.0001). Students in Boys’ schools had a higher participation in sports (n = 92; 62.6%) than Girls’ (n=40; 35.4%) and Mixed (n=155; 43.1%) schools [p < 0.001]. Similarly Boys’ schools had a higher participation in aesthetics (n=27; 18.4%) than Girls’ (n = 12; 10.6%) and Mixed (n=30; 8.3%) schools [p < 0.025]. However, Mixed schools had a higher participation in clubs and associations (n=76; 21.1%) than Boys’ (n=17; 11.6%) and Girls’ (n=22; 19.5%) schools [p = 0.04]. Overall participation of ECA was higher among students in Boys’ schools than Girls’ and mixed schools (p = 0.002). Further, more male students than females were involved in ECA for more than 10 hours per week (p = 0.02).

Conclusion:

Types of ECA available differ according to school type. Participation in ECA is less than the levels of developed countries. Therefore school based ECA need to be further strengthened and ECA facilities need to be made available in all schools with emphasis to less costly ECA.
AN EPIDEMIOLOGICAL STUDY OF THE PATTERN OF ALCOHOL CONSUMPTION AMONG ESTATE LABOURERS IN THE KOTHMALE MOH AREA, NUWARAELIYA DISTRICT


Introduction

Alcohol consumption among the estate population is considered to be high. However, the published evidence regarding the prevalence of alcohol consumption and its impact on their families and the details regarding the alcohol consumption is few in estate laborers in Sri Lanka. The aim of this study was to find out the prevalence of alcohol consumption among male and female estate laborers and impact to their family lives.

Methodology

A community-based cross-sectional study was carried out with a sample of 400 estate laborers. Data was collected by trained field public health midwives using an interviewer-administered questionnaire. Demographic data and alcohol consumption will be cross-tabulated using SPSS.

Results

Results are in the process of analysis and will be presented at the symposium.
2011 මූලික දිනස්ථානය 2012 මූලික දිනස්ථානය

මුලිකස්ථාන අණුවම ක්‍රමය අතර පිහිටි දිනස්ථානය ඉන්දියාවේ කොළඹ අරාබ් මාරාව

1. අංකිකව

මුලිකස්ථාන ක්‍රමය කාලයේ දිනස්ථානය අයිතියක් කපක්ෂ මුලිකස්ථානය 50 මුරු අතර එක් මට්ටමේ 30% අතර පිහිටි.

2. ගණනය

- දිනස්ථානය සාමාන්‍ය දින තුරුමු 10% දැක්විට පිහිටියේ මුලික මුලිකයක.
- දිනස්ථානය පාද්‍ය සාමාන්‍ය දින තුරුමු 60% දැක්විට පිහිටියේ මුලිකයක.
- වසර 07 පරම්පරාව සාමාන්‍ය දින පාද්‍ය දිනස්ථානයක.
- මාසංකීල හා කෝජා සාමාන්‍ය දින තුරුමු පාද්‍ය දිනස්ථානයක.
- පරිපාලනය සාමාන්‍ය දින කෝජා තුරුමු බිහිපත්තියක.
- පාද්‍ය සාමාන්‍ය දින පාද්‍ය තුරුමු බිහිපත්තියක.
- පාද්‍ය සාමාන්‍ය දින කෝජා තුරුමු බිහිපත්තියක.

3. ගණනය

- පාද්‍ය දිනස්ථානය කෝජා සාමාන්‍ය දිනස්ථානයක.
- පාද්‍ය සාමාන්‍ය දින කෝජා සාමාන්‍ය දිනස්ථානයක.
- සාමාන්‍ය දින කෝජා සාමාන්‍ය දිනස්ථානයක.
- කෝජා සාමාන්‍ය දින කෝජා සාමාන්‍ය දිනස්ථානයක.
- කෝජා සාමාන්‍ය දින කෝජා සාමාන්‍ය දිනස්ථානයක.

4. සාර්ථකය

මුලිකස්ථාන සාර්ථක දිනයේ දිනස්ථානය 20% කුමාර් සාර්ථකව නම් දිනස්ථානයක.
Validation test on the use of malaria Rapid Diagnostic Kits in a non endemic setting

H.M. Faizal, Reginal Malaria Officer, Matale

Introduction -

WHO recommends prompt parasite based diagnosis in all patients suspected of malaria before treatment administered. Malaria Rapid diagnostic tests (RDT) have the potential to greatly improve the quality of management of malaria infection especially in remote areas with limited access to good quality microscopy services. RDT’s are relatively simple to perform and interpret. They rapidly provide results require limited training and allow for the diagnosis of malaria at community level. Malaria RDT detect specific antigen produced by malaria parasites that are present in the blood of infected individuals. RDT’s detect plasmodium parasites in blood by antibody-antigen reaction on a nitro cellulose strip. Validation of this test kits were performed to see the usefulness.

Methods -

A questionnaire is prepared in two types of format A and B. Format A used for febrile patients and format B used for non febrile persons with any other chronic illnesses. Samples collected from OPD and in ward patients from medical institution and field mobile malaria clinics conducted in previously endemic areas. Diagnosis of RDT followed by immediate microscopy reading by senior public health laboratory technician. All rapid diagnostic tests were performed according to the instruction of the manufacturer. Reading were carried out at day light assisted by two subsequent blinded observers. RDT kits were kept at normal room temperature 22 c° - 26 c°

Results-

A total of 52 samples were included in this study, representing all age groups. 21 samples collected from medical institutions 31 from malaria mobile clinics. While 85% of individuals reported with malarial signs and symptoms other than intermittent fever ,15% were with all clinical symptoms. All the samples were subjected immediately for microscopy which is gold standard of diagnosis of malaria found all negative, also cross checked by a senior PHLT.

Conclusion -

Sensitivity is not counted since there were no positive cases encountered during entire study period. But this study confirmed malaria negative sample correctly identified ,the specificity remains as 98%.
A REVIEW OF THE USE OF NATIONAL HIV OCCUPATIONAL POST EXPOSURE MANAGEMENT GUIDELINES AT A PERIPHERAL STD CLINIC, SRI LANKA

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Introduction:
Health care workers are at higher risk of HIV infection through accidental exposure to infected blood and other material. Thus appropriate management of occupational exposures and regular monitoring of such procedures become important elements of work place safety. Ministry of Health has introduced a standard exposure report to record the incidents of occupational exposures.

Objectives:
To describe types of occupational exposures and categories of health care workers who sought post exposure care. To evaluate the use of National HIV occupational post exposure management guidelines at the STD Clinic.

Methodology:
A descriptive study was conducted at the STD Clinic Kandy. Exposure reports of all health care workers who sought occupational post exposure care at the STD Clinic between 1st of January and 31st of December 2007 were analyzed.

Results:
Of the total (60) there were 11 males and 49 females. Majority of them were nurses (31) followed by labourers (12), medical students (8), doctors (6), and others (3). The largest exposure type was percutaneous injuries (52). All Source persons (49) and exposed persons (57) who underwent HIV testing at the time of initial consultation were HIV negative. Exposure cord was not marked in 43 (72%) and incorrectly marked in 9 (15%) exposure reports. None of the exposed individuals had been received post exposure prophylaxis and undergone HIV testing after 6 months of exposure.

Conclusion:
Nurses are the largest category of health care workers who seek occupational post exposure care. Exposed persons should be motivated to attend follow up HIV testing. Doctors should be encouraged for proper documentation of exposure reports and follow up exposed persons
Researches related to the Curative Health Services
FACTORS AFFECTING PATIENT TRANSFER FROM PRIMARY HEALTH CARE INSTITUTIONS IN NUWARAELIYA DISTRICT

Weerakoon Chaminda, Medical Superintend, District Base Hospital, Teldeniya

1.4.1 General Objective

To evaluate the factors affecting patient transfer from Primary Health Care Institutions in Nuwaraeliya District.

1.4.2 Specific Objectives

1. To determine the available facilities for transferring patients in Primary Health Care Institutions in Nuwaraeliya District.
2. To identify reasons for transferring patients from Primary Health Care Institutions to secondary/tertiary health care institution in Nuwaraeliya District.

To estimate time taken to complete a transfer of a patient from a Primary Health Care Institution to a secondary/tertiary health care institution. Inequalities in the distribution of health services will forever dictate that patients are transferred from one hospital to another in search of better services. Centralization of services, recruitment issues, high patient expectations and inadequate funding of the health sector are major constraint in the application of principles of patient transfer by Divisional Hospitals in Nuwaraeliya District.

However, sufficient attempts have not been made to bring our ambulance service to be in par with those of developed countries. Increasing the “number of ambulance” has been the only step taken so far to improve this very important service. Therefore, studying the factors affecting the patient transferring is useful to improve the quality of health care in the Nuwaraeliya District.

This study was carried out to evaluate the factors affecting patient transfer from Primary Health Care Institutions in Nuwaraeliya District. This study was a descriptive cross sectional study with prospective and retrospective components. The study was composed of two components, a facility survey and a descriptive study on factors affecting patient transfer from Primary Health Care Institutions (PHCI) in Nuwaraeliya District. The PHCI and the patients transferred from PHCI to other hospital formed the study populations in this research.

All the PHCI in the district were selected for the facility survey. For the 2nd component, sample size was calculated assuming 50% of the transfers will be delayed. Accordingly 430 transfers were included in the second component of the study. Two study instruments were used in the study, a check list and an interviewer administered questionnaire.

The study has shown some important findings. In Nuwaraeliya District a fair percentage of ambulances are past their useful age. Only basic facilities were available in the ambulance for monitoring and resuscitation of transferred patients. There are no additional drivers in the Nuwaraeliya District for ambulances. Transfer arranging time and patient handing over time were considerably high due to unavailability of proper communication facilities. Average time for a transfer was 403.41 minutes. Out of this most of time goes for handing over the patient at
receiving hospital. Average speed of transfer out was 32.4Km/h and average speed of return back was 28.15Km/h.

The study makes following recommendations to improve quality of this important services. The technological supports for communication should be used to align and adjust the timing of communication, such as information technology, email, mobile phones. Old ambulances should be replaced with new ambulances and improvement of the basic facilities in the ambulances at least to cover requirements of basic life support will improve outcome of the transfers.

Staff cadre should be revised to improve quality of the services. Periodic medical checkup must be done for drivers to assess their health status.

Guidelines must be developed regarding patient transfer and to reduce handing over time by giving priority to transferred patients.

CLINICAL WASTE MANAGEMENT AND THE KNOWLEDGE AMONG SANITARY HEALTH CARE WORKERS IN DISTRICT GENERAL HOSPITALS OF THE CENTRAL PROVINCE.

W.K.W.S Kumarawansa Deputy Provincial Director, Central Province, S.T.G.R. De Silva, Deputy Director General (MS1), Ministry of Health, Sri Lanka

A cross sectional study was conducted January by interviewing 341 sanitary health care workers at District General Hospitals, Central Province. The study aimed to study the current practices of clinical waste management and the knowledge among sanitary health care workers on clinical waste management. The instrument used to collect data were two check list and an interviewer administered questionnaire.

The studied hospitals were same level located in three district of the province, but bed numbers and the number of workers were different in each institution. The study group represented equal number of male and female and their mean service duration was 10.9 yrs.

The result showed that DGH Mathale had relatively good practices than other two hospitals and therefore it was leveled under Level 1 while other two hospitals came under Level 0. The median total score among sanitary healthcare workers from DGH Mathale than other two hospitals. It was observed that health care workers who had less years of service had higher knowledge than those who had more years of services.

It was found that more than 90% of health care workers from all three hospitals had excellent knowledge on risk of clinical waste and 80% of them were aware about the personal protection in all three institutions based on the questionnaire. But knowledge on waste segregation, transport and final disposal was poor and majority of health care workers from DGH Mathale is higher than the other two hospitals.

Study found that leveling of current practices according to the standards is statistically proven by observing different median scores of those hospitals far with the levels which was statistically significant. Anyway it is necessary to implement planned clinical waste management in healthcare institutions and motivate towards standard practices. It is also necessary to provide
A cross sectional study was conducted on March 2006 by interviewing 281 secondary students at Mahidol Wittayanusorn School, Nakhon Pathom, Thailand. The study aimed to identify safe sex intentions and their determinants (and assess the characteristics of socio demographic variables, attitudes, subjective norms and safe sex intention to prevent HIV/AIDS). The instrument used for data collection was a self-administered questionnaire.

The study group represented an age range 13-19 years and comprised an almost equal number of males and females. The majorities of students were living in dormitories and were studying in mathayom 5 and mathayom 6.

The results showed that 70 percent of students had high level of attitude towards HIV/AIDS prevention. Students had high level of attitude to being abstinence and stay with single known partner to prevention HIV/AIDS, relatively low attitude to use condom and avoid premarital sex. The attitude has statistically significant positive relationship with safe sex intention.

The result also revealed that nearly 70 percent of respondents had good subjective norms and high level of good respond to their parents and teachers norms than friends. 60 percent of students had good intention to prevent HIV/AIDS, only 4 percent had poor intention.

The study found a statically significant positive association between safe sex intentions and age, gender and mathayom. It is necessary to provide appropriate sex education in secondary schools and create a good environment in which students are able to discuss sexual and related problems with their teachers and parents. It is also important to encourage them to practice safe sex for HIV/AIDS prevention since they already have good attitude and intention.
DETERMINANTS OF JOB SATISFACTION AMONG NURSING OFFICERS IN GENERAL HOSPITAL, KANDY

Arjuna Thilakarathna, Medical Superintend, GH Matale

As job satisfaction is defined “the favorableness or unfavorableness with which employees view their work”, some recent research would suggest that the job satisfaction of employees within an organization is related to productivity and quality of service.

In this research, determinants of job satisfaction among nurses in General Hospital, Kandy were surveyed as a descriptive cross sectional study and covered all categories of nurses attached in different sections. Understanding the level of job satisfaction among nurses, the socio-demographic factors which affect the nurses’ job satisfaction and the hierarchical order of factors that determine job satisfaction are the other concomitant objectives of the study. The General Hospital, Kandy is the studies setting for this study where 1550 nurses were employed and a sample of 422 nurses were drawn based on multistage approach. Data was collected by the researcher and using close ended self administrated questionnaire. The data was analyzed using SPSS 13.0 statistical software.

The findings revealed that the majority, 64.2% of nurses were unsatisfied with their job, 3.6% of nurses were neither satisfied nor dissatisfied and 32.2% of nurses were satisfied with their job.

The differences observed between the level of job satisfaction and factors including age, period of service, grade, preference of appointment and residential quarters showed statistically significant relationship at the 0.05 confidence level.

CAUSES OF POSTPONEMENT OF ELECTIVE SURGERIES IN DGH MATALE

Arjuna Thilakarathna, Medical Superintend, GH Matale

Cancellation of operations in hospitals is a significant problem with far reaching consequences. This study was planned to evaluate reasons for cancellation of elective surgical operation on the day of surgery in District general hospital- Matale. This study period was one month. All the patients scheduled to undergo elective surgery in main operation theater of Matale hospital were included in this prospective study. The number of operation cancelled and reasons for cancellations were documented. 186 patients were scheduled for surgery during the study period. 159 (85.5%) patients were operated upon. 27 (14.5%) operations were cancelled out of which 10 (37.03%) were cancelled due to shortage of time, 7 (25.92%) were cancelled due to emergency surgeries, 4 (14.11%) were cancelled due to medical reason, 4 (14.11%) were cancelled due to non-availability or non-functioning of equipments, 2 (7.4%) were cancelled due to miscellaneous reasons. Cancellations of patients on operation lists occupy a substantial population (14.5) of cases. Majority of cancellation were due to reasons other than patients’ medical conditions. Better management could have avoided most of these cancellations.
RETROSPECTIVE ANALYSIS OF OUTPATIENT PRESCRIPTION INDICATORS IN THREE SELECTED HOSPITALS DURING THE LAST QUARTER OF 2011

Shashikala Jayarathna

There is only a limited number of research carried out on prescribing pattern in Sri Lanka. Therefore, data on prescribing pattern is not adequate to make decisions on drug prescribing for the country. At least partly to fulfill this, out-door patient prescription indicators of three selected hospitals in three selected provinces of the country were studied to get an idea about prescribing pattern of out-patient department (OPD)s of government hospitals. The selected hospital were, District Hospital Kadugannawa (DHK), teaching hospital Anuradhapura (THA) and a hospital from the Kurunegala district (KH) to represent central, north central and the north western provinces respectively. The study was a retrospective study during the last three months of the year 2011 involving one hundred randomly selected prescriptions per month. Data was analyzed using World Health Organization (WHO) prescribing indicators. According to the results, the average number of drugs per encounter in out-patient department prescriptions was higher than 3 in all hospitals studied. The percentage of generic prescribing was appreciable and all were above 70 percent (70%), while in THA it was above 80%. Percentages of drugs prescribed from essential drug list (PDPEDL) and drugs prescribed from hospital formulary (PDPHF) were higher than 89% in OPDs of all three hospitals. The percentage of antibiotics in OPD prescriptions was above 50% in all studied hospitals and values of THA and HK were approximately similar (51% and 53%) but in DHK the value was 63%. Injection usage in OPD prescriptions was very low in all three hospitals. This study opens the path for further research on evaluating, the usage of antibiotics, differences of antibiotic usage and practice of polypharmacy, in OPDs. Further, this study tells that there are possibilities for further improvements in OPD prescriptions, including generic prescribing.

Organizational culture of a hospital and its association with patient safety management system

S. Rajkumar (Ministry of Health), Medical Superintendent, District Base Hospital, Rikillagaskada, P. Jayawardana (University of Sri Jayawardenapura), S. Sridharan (Quality Secretariat)

Introduction and objectives

The problem of errors in patient care is a critical issue facing hospitals today. This study describes how organizational culture and the Patient safety management system (PSMS) relate to each other in reducing medical error.

Method

This is a hospital based descriptive cross-sectional study based on a self administered questionnaire. This had two components, to assess the Patient safety management system (PSMS) and the organizational culture of the Castle Street Hospital for Women (CSHW) as perceived by its major clinical staff. The
perceptions of the components of PSMS were analyzed using binominal nonparametric test of significance. The statistical test ANOVA was used to compare the means of organizational culture and the Pearson’s correlation coefficient was used to determine the association between organizational culture and the components of PSMS.

**Results**

Leaders’ commitment to patient safety, team work and, participatory decision making practices were being felt as important by the majority of the respondents. With regard to incident reporting procedure values of employee encouragement, mutual trust, convenience, confidentiality and feedback were being felt as important. This study reveals that the organizational culture profile of CSHW is dominated by the group culture and the hierarchical culture. And the patient safety management system shows a statistically significant strong positive correlation with group culture \((r = 0.553, p<0.001)\) and developmental culture \((r = 0.539, p<0.001)\).

**Conclusions**

Building and promotion of group culture along with the developmental culture could appropriately address the shortcomings of the patient safety management system.

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**Current Practices of Hazardous Waste Management in Central Province and Development of Proposal for Effective Management**

*I.L.M. Nifraas, A.H. Abthullah, M.M.M. Ajmal Faaique, K.B.S.N. Jinadasa*

This study is purposed to provide the necessary information on hazardous wastes specially generated in households and healthcare institutions in the central province of Sri Lanka, and the way how these hazardous wastes are managed. Questionnaire survey was carried out in randomly selected households in several local municipalities, three major government hospitals and some private clinic centres, to study the current practices of hazardous waste management in the central province. Stratified random sampling method was used to analyse the data to obtain estimated results in both quality wise and quantity wise.

Healthcare wastes

Assessment was carried out in the following places in the central province:

1. Matale District General Hospital
2. Kandy General (Teaching) Hospital
3. Nawalapitiya General Hospital
4. Private clinic centres in Kandy

Following details were obtained from the assessment in the above hospitals and clinic centres:

1. Amount of healthcare wastes produced in each hospital per day.
2. Current waste management systems for separate waste types.
3. Knowledge level on hazardous wastes among the labourers or waste handlers

Also, assessment was carried out to find the following further aspects of the current practices and issues related with hazardous wastes among the inhabitants in the central province:

- Problems due to hazardous wastes
- Knowledge on hazardous waste
- Source of knowledge
Results

Household hazardous wastes

Table 1: Household hazardous waste amounts in central province

<table>
<thead>
<tr>
<th>Hazardous waste type</th>
<th>Amount (Tons/Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-wastes</td>
<td>4202</td>
</tr>
<tr>
<td>Chemical, corrosive &amp; Toxic</td>
<td>653</td>
</tr>
<tr>
<td>Ignitable</td>
<td>646</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5500</strong></td>
</tr>
</tbody>
</table>

These hazardous wastes were disposed and handled in the following methods:

![Figure 3: Current Disposal Practices](image)

**Conclusion:**
According to the analysis, most of the hazardous wastes (more than 75%) were handled in a haphazard way without a proper management system. But, most of the healthcare wastes were managed in an effective way in government hospitals where, self-management systems with treatment facilities available and some handed over to the waste management agencies out site the hospital with a cost to treat infectious and pathological wastes. In case of private clinic centres, the waste management system needs to be improved as most of the healthcare wastes were sent with municipal solid wastes.

Also, it is important to make awareness among the public about the hazardous wastes and the severe problems due to this wastes.