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ABSTRACTS

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Editorial Committee
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Abstract 01

Falls and risk factors for falls among elderly patients with type 2 diabetes mellitus in the Colombo District

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Objective
To assess the incidence of falls, risk factors among elderly with diabetes and its correlates.
Methods
Cohort study was carried out among diabetics, 65 years and over attending six primary care clinics in Colombo using an interviewer administered questionnaire. Personal and environmental fall risk factors, medications, neuropathy, visual acuity, postural-hypotension, renal function, glucose control, timed-up-and-go-test (TUGT), balance and activities of daily living were assessed. Participants (430) were followed up for 6 months (response rate n=394, 91.6%) and occurrence and circumstances related to falls were recorded.
Results
Two thirds of the participants were females (n=290), 78% were less than 75 years. Incidence of falls was 1228 per 1000 person-years with a total of 242 falls in 394 participants (61.4%), 57% had two or more falls. Falls incidence was higher among females (73.8%) and in elderly with diabetes over 10 years. During previous year, 31% reported falls. Predictors of falls were, falls in the previous year, polypharmacy, insulin use and fear of falls [OR 2.20(95% CI 1.41-3.43), 2.02 (95% CI 1.19-3.43), 1.90 (95% CI 1.11-3.23) and 1.88 (95%CI 1.21-2.92) respectively]. Positive TUGT was a significant risk factor (OR 1.63; 95% CI 1.06-2.53). Increasing age, physical inactivity and high BMI were not associated with falls [OR 0.98 (95% CI 0.59 -1.64), 0.70 (95% CI 0.33-1.49), 0.9 (95% CI 0.63-1.54) respectively]. Fear of falls seen in above 75 years, in females and in less physically active. Thirty nine percent of falls occurred in the morning and 57% occurred indoors. Six reported serious injuries (laceration, fracture) and head injury(n=12).
Conclusion
Falls were common in elderly with diabetes. Falls in the previous year, polypharmacy, insulin use, fear of falls were important predictors and positive TUGT was a significant risk factor for falls. Risk assessment and falls prevention programs should be initiated for elderly patients with diabetes in primary care.

Abstract 02

Prevalence and distribution pattern of congenitally missing maxillary lateral incisors among school children in the Colombo District.

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Introduction
Missing teeth, especially in the anterior region, could be a challenge to the Dentist and cause considerable distress to the patient. The missing lateral incisor tags along with it several problems. Early diagnosis will enable to plan treatment accordingly and keep future treatment options open. Here lies the importance of prevalence studies, to help identify the magnitude of the problem, plan and prioritise treatment and perhaps even influence the allocation of resources.

Objective
To describe the prevalence and distribution pattern of missing upper lateral incisors (MLI) in a sample of 10-year-old school children in the Colombo district.

Methods
A cross sectional study of 20 randomly selected schools in the Colombo district with a population of 2000 school children aged 10 years. Screening was done at these schools and necessary referrals were done to IOH Maharagama.

Results
The overall prevalence of MLI was 1.17%, of which 62.5% were found in females and 37.5% in males. 70.8% had a bilateral distribution, 29.2% were unilateral, of which majority were missing the right sided lateral incisor. Where only one upper lateral incisor was present, it was mainly diminutive. Even though it was too early to decide on treatment, tentatively most cases may require space closure in the future.

Conclusion
The overall prevalence of MLI in this study too was in accordance with globally quoted figures of 1-2%, though there is great variation among populations. Taking into consideration only one district and a limited sample are limitations of this study. More research is needed in this aspect with a larger sample size of all the districts of the country.

Abstract 03

An audit on endoscopic findings of colorectal malignancies in a tertiary care centre

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Introduction
Colorectal carcinoma (CRC) is the fourth leading cancer among men and the sixth leading cancer in women in Sri Lanka. Lower gastrointestinal endoscopy (LGIE) plays a major role in the diagnosis of CRC.

Objective
This study aimed to analyse the LGIE findings and trends in the presentation of CRC.

Methods
An audit was performed on 55 consecutive patients who presented with CRC from April 2021 to July 2021 to the National Hospital, Kandy. The trends in the presentation in relation to age, sex, presenting complaint, site of tumour and stage of the tumour were analysed.

Results
Out of 55 patients, 28 were males with a male: female ratio of 1:0.9. The mean age of presentation was 64.91 years with a standard deviation of 10.99. 10 patients (18.18%) had right-sided malignancies while 45 (81.81%), had left colonic malignancies. Anaemia and lower abdominal pain were the main presenting complain (60%) in right-sided tumours and per rectal bleeding (62.2%) was the main complaint in left-sided tumours respectively. 25.45% of patients had near-total obstruction at the time of presentation.

Conclusion
CRC was known to be a disease of the elderly with a mean age at presentation of 60 – 70 years. Though recent studies showed rising incidence in younger age groups, our study is on par with conventional figures. A significant number of patients (18.18%) had right-sided malignancies which highlight the importance of colonoscopy over flexible sigmoidoscopy in the first assessment of suspicion of CRC.

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Abstract 04

Characteristics of employees screened for non-communicable diseases at a health corner at a government ministry office

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Introduction
Population screening for Non-communicable Diseases (NCD) is currently being carried out at Healthy Lifestyle Centers (HLC) in Sri Lanka. But the participation of the working population for this program is very low mainly due to the unavailability of HLC outside duty hours. Creating a working environment that is conducive to healthy living is important for the prevention and control of NCD. Study aims to describe the prevalence of NCDs and their risk factors among staff of the head office of the Ministry of Health through a health corner established at the Ministry of Health

Methods
A descriptive cross-sectional study was conducted by using anonymized secondary data collected at staff screening among 700 employees by the health corner established at the head office of the Ministry of Health by using consecutive sampling techniques. Data were analysed by using descriptive statistics.

Results
Of the staff screened aged 35 years and above (n= 468), 52.8% (n=247) males, 37.61% (n=176) over weight, 14.53% (n=68) obese, 42.06% (n=188) had high Blood pressure, 8.89% (n=40) had raised blood sugar, 36.53% (n=164) had high total cholesterol, 7.69% (n=36) tobacco smokers, 21.3% (n=100) alcohol users and 7.27% (n=32) had cardiovascular disease (CVD) risk ≥20%. Of those screened aged 20-34 years (n=232), 59.5% (n=138) females, 8.2% (n=19) tobacco smokers, 15.95% (n=37) alcohol users, 28.9% (n=67) overweight, 7.33% obese (n=17), 16.43% (n=34) had high Blood pressure, 1.9% (n=4) had high blood sugar and 32.21% (n=67) had high total cholesterol.

Conclusion
One-third of the employees aged 35 years and above were overweight, had high blood pressure and blood cholesterol levels. Among employees aged 20-34 years, nearly one-third had high blood cholesterol levels.

Abstract 05

Factors affecting the quality of life among cancer patients attending the Thellipallai Trail cancer hospital, Jaffna

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Introduction

The incidence of cancer in Sri Lanka has increased from 20,246 in 2008 to 23,105 in 2014. The assessment of Quality of Life and its contributing factors are important in the management of cancer patients because early identification may help to implement appropriate intervention to those with poor Quality of Life.

Objective

To determine the factors associated with Quality of Life among cancer patients attending the Thellipallai Trail cancer hospital in Jaffna.

Methods

This is a hospital based descriptive cross - sectional study. According to the equation, $n = ((\sigma2 \times z2)/\omega2)$ the sample size(n) 185 was calculated. Participants were interviewed by researcher using interviewer administered questionnaire. Quality of life was measured by the EORTC QLQ-C30 questionnaire. Data analysis was done with SPSS statistical software 22.

Results

The mean age of the patients was 58.10 (±12.20) years and male patients were relatively higher. Majority of the patients were married. Only 38 (20.5%) patients had the secondary education. Majority of the patients 100 (54.1%) were not employed. Only 15.6% of patients received a monthly family income more than Rs. 20,000/-. Out of the 185 patients, 118 patients did not feel alone even though the remaining patients had felt alone. Relatively the same percentage of patients felt that they had enough family support. The most prevalent sites of cancer were oral and Head and Neck. The mean functional scale score 35.71(±23.08) and global health scale score 49.21 (±32.79) were poor. Also, the mean symptom scale score 61.78 (±20.74) was high. Overall, the study participants had poor Quality of Life. Age (p<0.001), educational level (p<0.001), employment status (p<0.001), monthly family income (p<0.001), feeling alone (p<0.001), family support (p<0.001), and presence of other chronic diseases (p<0.001) significantly affected the Quality of Life of the cancer patients at the Thellipallai trail cancer hospital, Jaffna.

Conclusion

Overall, the study participants had poor quality of life. It is essential, to improve their quality of life by focusing on the factors which affected their quality of life.

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Abstract 06

Covid-19 preparedness of medical clinics of the government sector health care institutions: an island-wide survey

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Keywords: Covid-19, island-wide, medical clinics, NCDs, preparedness

Introduction

Nearly 80% of the annual deaths in Sri Lanka are estimated to be resulted from Non-Communicable Diseases (NCD). Continuation of the regular health services for patients with NCDs, amidst the COVID-19 pandemic, is a challenge. Guidance and training to continue services in medical clinics are being provided by the Ministry of Health to government Healthcare institutions continuously.

Objective

To describe the Covid-19 preparedness of medical clinics in government sector healthcare institutions to provide NCD services.

Methods

A descriptive cross-sectional study was carried out involving 700 Government Healthcare institutions from all health districts of Sri Lanka, recruited by purposive sampling technique prior to the third wave. Data collection was done with a self-administered questionnaire distributed among heads of the institution in google form format. Data were analysed by using descriptive statistics and associations were determined by using the chi-square test.

Results

The response rate was 97.4% (682). Out of the respondents, 41.2 % (n=281), 49.9% (n=340), and 8.9% (n=61) were primary, secondary, and tertiary healthcare institutions respectively. More than 60% (n=415) of the healthcare institutions had updated clinic patient databases, 70.4% (n=480) had appointment systems to minimize overcrowding of patients, 71.7% (n=489) patients waiting for areas with adequate distancing and ventilation, and 77.9% (n=531) drug dispensing mechanisms for a longer duration. Out of the recruited healthcare institutions, 68.9% (n=470) had triage of patients on Covid-19 symptoms before entering the medical clinic. Only 15.1%(n=103) of Healthcare Institutions had telemedicine facilities and 43.0% (n=293) has digital blood pressure apparatus. There was a statistically significant association with status of preference for postal drug delivery and level of care which includes 47.6% (n=191) secondary & tertiary care institutions preferred postal drug delivery systems in comparison to 36.3% (n=109) of primary care institutions.

Conclusion

Medical clinics of government healthcare institutions in Sri Lanka have satisfactory preparedness regarding the prevention of Covid-19.

Abstract 07

Out-patient non-communicable diseases related services during an island-wide lock-down period

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Keywords: All-island, Covid-19, lock-down, NCD-related services, out-patient

Introduction

Non-Communicable Diseases (NCD) was accounted for nearly 80% of the deaths in Sri Lanka. The presence of NCDs in an individual is one of the main contributing factors for having severe COVID-19 disease and for Covid related death. Therefore, the provision of health services for patients with NCDs, during prolong lockdown periods is essential.

Objective

To describe the status of out-patient NCD-related services at government sector healthcare institutions (GHI) in Sri Lanka.

Methods

A descriptive cross-sectional study was carried among 1063 Government Healthcare institutions from all health districts of Sri Lanka, recruited by consecutive sampling techniques during the island-wide lockdown period from 20/08/2021 to 31/10/2021. A pretested self-administered questionnaire was administered to the heads of the institution as a google form. Data was analysed using descriptive statistics.

Results

The response rate was 65.2% (694). Out of the respondents 49.6%(n=344), 39.9%(n=277), 8.2%(n=57), 1.7%(n=12) and 0.5%(n=4) were Divisional Hospitals (DH), Primary Medical Care Units (PMCUs), Base Hospitals (BH), District General Hospitals (DGH) and Provincial General Hospital (PGH)/Teaching Hospital (TH)/National Hospitals (NH) respectively. Nearly 60%(n=416) of GHI had started delivering medicines to the doorstep of the patients, from that 58.4%(n=243), 26.7%(n=111), and 14.9%(n=62) had used postal services alone, field public-health staff alone, and both methods respectively. Nearly 75%(n=527) of GHI had conducted their routine clinics, 88.6%(n=615) had kept open a special counter for patients daily, 78.1%(n=542) had issued medicines for two months duration, and 82% (n=569) had reserve phone lines to NCD related inquiries. Out of the respondents, 81.7%(n=567) had the habit of checking the COVID-19 vaccination status of patients, and 78.5% (n=545) had a mechanism in place to refer for Covid-19 vaccination. There is a statistically significant association between type of hospital and status of delivering drugs to patients' doorstep (p=0.007) with 35.8%(n=149) and 64.2%(n=267), PMCU and above PMCU level hospitals respectively.

Conclusion

Out-patient NCD related services were at a satisfactory level during the lockdown period.

Abstract 08

Knowledge and practices regarding expanded program of immunization among medical officers in Sri Lanka

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Introduction

The national immunization program provides its services through a wide network of services delivery points to ensure easy accessibility to the public. Vast majority of the public get their immunization services free of charge through the state hospitals and clinics.

Objective

To describe knowledge attitude and practices regarding Expanded Program of Immunization among medical officers in Sri Lanka.

Methods

Descriptive cross-sectional study was conducted among 246 Medical officers registered in Sri Lanka Medical council. 500 medical officers were selected randomly from the SLMC Registry and self-administered questionnaire was sent to each through post. 246 were responded. Frequencies and percentages were calculated according to the variables.

Results

All the study participants had an accurate knowledge regarding administration of BCG vaccine at birth. But none of the study participants had precise knowledge regarding vaccination of an infant at 2,4 and 6 months of age. Correct antigen according to the age was mentioned as below. MMR-65%(N=160), JE-73.2%(N=180), DPT/OPV-2.4%(N=6), DT-18.7%(N=46), school immunization schedule was accurately mentioned by 21.1% of the participants(N=52). Proper knowledge regarding implementation of the EPI programme was observed among 43.9% of the participants(N=108). Majority of the study participants believed that quality of the EPI vaccines is less(N=156:63.4%). 25.2% of the participants thought that immunization at private sector is more reliable than the government sector schedule. 25.2% of the participants believe that present EPI schedule is less rational. 86.2% (n=212) of the study participants had not followed the EPI schedule to immunize their children.

Conclusion

Less trust is demonstrated regarding the EPI schedule and vaccines among medical officers during vaccinating their children. Medical officers demonstrate a significant knowledge gap regarding the EPI programme and vaccines. Therefore, it is essential to pay more attention on periodical Inservice training programmes regarding childhood immunization during policy making movements.

Abstract 09

Nutritional status and associated factors among end stage renal failure patients on haemodialysis

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Introduction

End stage renal failure (ESRF) patients on haemodialysis are at a high risk of developing malnutrition. Nutritional status is a key predictor of clinical outcome of haemodialysis patients including morbidity and mortality.

Objective

The aim of the study was to assess the nutritional status and associated factors among ESRF patients on maintenance haemodialysis at National Institute of Nephrology, Dialysis and Transplantation (NINDT) Sri Lanka.

Methods

A cross sectional study was carried out among the patients who were on maintenance haemodialysis at NINDT. Nutritional status was assessed using a 7-point subjective global assessment and anthropometric, functional, and biochemical parameters were also included. Frailty was defined according to Fried frailty phenotypic criteria and was assessed in five main domains including unintentional weight loss, weakness, slowness, poor endurance, and low physical activity. Chi square test, t test or one way ANOVA test, as appropriate, was performed to test the association of nutritional status with other factors.

Results

A total of 212 patients were recruited. Mean age was 51.1 ± 12.6 years and 66.5% (n=141) were males. Mean body mass index (BMI) was 22.9±4.3 kg/m2 and mean serum albumin was 39.3± 5.5 g/l. Prevalence of severe malnutrition, mild-moderate malnutrition and well-nourished state was 17%, 53.3% and 29.7% respectively. Frail, pre frail and non-frail status were 45.3%, 35.8% and 18.9% respectively. There is a significant association between nutritional status and gender, frailty, hand grip strength, serum albumin and current employment state (p<0.01). However, there is no statistically significant association between nutritional status and age, ethnicity, smoking, haemoglobin level, frequency, or duration of dialysis.

Conclusion

Prevalence of malnutrition among haemodialysis patients is 70.3% and the risk is higher among a few subgroups in our study. Future research should focus on targeted interventions with preventive strategies in this patient population.

Abstract 10

Population based survey of blood pressure at Fort railway station, Colombo

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Keywords: blood pressure, hypertensive, normotensive, population-based survey

Introduction

Hypertension is one of the major Non-Communicable Diseases (NCD) that lead to adverse outcomes if not attended. To commemorate World Heart Day-2020, the Directorate of NCD conducted screening of public for hypertension.

Objective

To describe the blood pressure levels and associated factors of public attending Fort-Railway Station, Colombo.

Methods

A descriptive cross-sectional study was conducted as a population-based survey among individuals attending the Fort railway station for three consecutive days by using a purposive sampling technique among 1518 persons. Their blood pressure was measured by using a calibrated BP apparatus and basic information was obtained by using a questionnaire. Blood-pressure was classified as normotensive (120/80 mmHg or less); prehypertensive (SBP 121-139 and/or DBP 81-89) and hypertensive (SBP 140 and above and/or DBP 90 mmHg). Data was analysed by using descriptive statistics and Chi square test.

Results

Of the participants, 85.2% (n=1293) were males and 14.8% (n=224) were female. Of the total 87.1% (n= 1321) were aged 35 years or above, with a mean age of 50.9 (SD = 12.45) years. Majority of participants (34.7%; n=526) were employed in managerial/clerical grade. Approximately 35% (n=527), 29% (n=440) and 36% (n=551) were normotensive, prehypertensive and hypertensive respectively. Nearly 39 % (n= 551) and 17 % (n=33) were hypertensive among persons aged 35 years or above and those less than 35 years respectively. Out of males 32.9% (n= 426), 29.2% (n= 377) and 37.9% (n=490) were normotensive, prehypertensive and hypertensive respectively. But in contrast, majority of the females (44.6%, n=100) were normotensives. Statistically significant associations were found between age (p<0.001) and gender (p=0.004) with the status of blood pressure. No statistically significant association between status of employment and status of Blood-pressure (p=0.226).

Conclusion

Higher percentages were found to be hypertensive among persons aged more than 35 years or more and among males. These associations were significant.

Abstract 11

Training needs assessment of health care workers attached to healthy lifestyle centers in Sri Lanka

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Keywords: healthy lifestyle centers, PHNO, primary care settings, modified Hennessy Hicks, training needs assessment

Introduction

Healthy Lifestyle Centers (HLC) are centers established mainly in primary care settings throughout Sri Lanka, dedicated to the screening of non-communicable diseases (NCD). Service provision at HLC is carried out by Medical Officers (MO), Public Health Nursing Officers (PHNO), Nursing Officers (NO), and other categories.

Objective

To identify the requirements related to training amongst health care workers (MO, PHNO, NO and other categories) in relation to HLC.

Methods

Recruitment of participants for this study was carried out by simple random sampling. A self-administered questionnaire which included a modified Hennessy Hicks Training Needs Analysis was disseminated and conducted. Data was analysed using SPSS22, descriptive statistics. The training need was identified by identifying the mean difference between the importance score and performance score for each training area considered. Ranking and prioritization of the training needs of each category of staff was based on this magnitude of differences in average.

Results

A total number of 120 health care workers participated in this study (response rate of 91%) The breakdown of staff categories who participated in the study were: 76 (63.3%) MO, 21 (17.5%) NO, 19 (15.8%) PHNO, and 4 (3.4%) from 'other' category. Conducting special programs to clients on a healthy diet, physical activity, and conducting oral examination were common areas prioritized for training by MOs, NOs, and PHNOs. Training on conducting brief interventions for tobacco cessation was identified as a priority training need by both MOs and PHNOs. Whilst training in logistic management was considered a priority need by NOs and PHNOs. In addition, MOs required training in conducting health education sessions and NOs in conducting breast examination. When comparing with other staff the training need of conducting health education session among MO was statically significant $p<0.001$.

Conclusion

Training needs were identified in the areas of brief interventions for tobacco cessation, logistic management, health education and breast examination.

Abstract 12

Health information management system for screening of non-communicable diseases: Health care worker response for a distant training

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Keywords: evaluation, HIMS, healthy lifestyle centers, NCD, post-training

Introduction

Increasing incidence of non-communicable diseases (NCD) has become a public health challenge in Sri Lanka. Healthy lifestyle centers (HLCs) which were established about a decade ago for screening of NCDs and related risk factors, mainly placed in primary healthcare institutions. A web based HIMS-HLC module was developed to collect screening data from these HLCs.

Objective

To evaluate the after-training status of Health care workers (HCW) conducting HLCs, those who have completed HLC-HIMS module.

Methods

A descriptive cross-sectional study was conducted among 119 HCW using simple random sampling, who followed HLC-HIMS module in June 2021. A questionnaire was developed, referring to Kirkpatrick model. It covered four domains i.e., reaction, learning, behaviour, and result. It was shared via online platforms, e mail, WhatsApp, and Viber. Descriptive statistics and chi square test were used for analysis of knowledge.

Results

The response rate was 87.3% (n=104). Mean age 40.4 years (SD = 8.0 years). Among trainees, 73.1% (n=76) were females, 70.2% (n=73) were nurses and 61.5% (n=64) had good computer literacy. About one third had a good knowledge (37.5%, n=39) regarding the module used. Majority of 74.0% (n=77) reported favourable reactions, 78.8% (n=82) had favourable behaviour and 83.7% (n=87) had favourable results after training. Younger age and good computer literacy showed a significant ($P<0.05$) association with favourable reactions, behaviour, and results.

Conclusion

HIMS training has produced favourable outcomes among majority of trainees especially in reaction, behaviour, and results areas. The concept of e-training can be adopted effectively for in-service trainings of HCW including those working at primary care level to conquer practical difficulties in conducting physical trainings during a pandemic. Concentrating on age and computer literacy of participants could produce good outcomes in designing and conducting this type of trainings.

Abstract 13

Demographic characteristics and disease pattern among patients admitted to medical units of Teaching Hospital Batticaloa, Sri Lanka during COVID-19 pandemic

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Keywords: COVID-19, demographic characteristics, lockdown, medical units, teaching hospital

Introduction

COVID-19 is a new viral infection spreading almost all over the world as pandemic. First case of COVID-19 was confirmed on 11th March 2020 in Sri Lanka. Long days of lockdown imposed almost all parts of the world including Sri Lanka due to the rapid spread of this illness.

Objective

To determine the demographic characteristics such as the prevalence of age, sex, number of patients and the disease pattern among patients admitted to medical units of Teaching Hospital Batticaloa during COVID-19 Pandemic.

Methods

A cross sectional descriptive study among patients admitted to medical wards and intensive care units (ICU) of Teaching Hospital Batticaloa. They were studied over a period of one month during lockdown (11.03.2020 to 10.04.2020) and compared with the patients admitted one month prior to the lockdown (11.02.2020 to 10.03.2020). All the patients admitted to the above units were included.

Results

Total admission before the lockdown was 2340 (52.5% males) and during lockdown was 1376 (56.2% males). This reduction in admission is statistically significant (p-value is < 0.05, df = 3715). Patients admitted to the wards before lockdown was 2283 (97.6%) and during lockdown was 1309 (95.1%). ICU admissions were 57 (2.4%) before lockdown and 67 (4.9%) during lockdown. Common age distribution before the lockdown showed 26.4% were 31-50 and 41.5% were 51-70 years. Similarly, during lockdown, 28.9% were between 31-50 years of age and 42.9% were between 51-70 years. Disease pattern demonstrated before lockdown majority of patients admitted for routine haemodialysis (13.2%), to get an injection (9.9%), ischaemic heart disease (8.4%), chronic kidney disease (7.3%) and viral fever including dengue (7.2%). Likewise, during lockdown more patients admitted for routine haemodialysis (10.7%), viral fever including dengue (9.3%), ischaemic heart disease (8.8%), to get an injection (8.5%), and chronic kidney disease (5.9%).

Conclusion

There was significant reduction in number of admissions during the period of lockdown. There was no much difference in the proportion of admission according to gender, age and disease pattern. More patients were males under the age group of 51-70 years and admitted for routine haemodialysis before and during lockdown. However slightly higher number of patients admitted to ICU during lockdown.

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Abstract 14

Adverse reactions to first line anti tuberculosis drugs and its contributory factors among "new" TB patients attending district chest clinics in Colombo

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Keywords: adverse drug reactions, anti-tuberculosis drugs, contributory factors

Introduction

Adverse drug reactions (ADR) to anti tuberculosis drugs (ATT) are increasing globally. It causes significant morbidity and may lead to discontinuation, modification, prolongation of treatment or hospitalization. Early identification of contributory factors to ADR would be helpful to prevent ADR and mitigate the harm caused by it.

Objective

To determine the proportions of adverse drug reactions to first line ATT and to assess the factors contributing to ADR among "New" TB patients attending chest clinics in Colombo.

Methods

A Descriptive cross-sectional study was carried out among 384 "New" TB patients who were registered during the 3rd quarter 2020. Patients below 15 years, followed up in other districts, diagnosis changed and previously treated were excluded. Data was collected using an interviewer administered questionnaire, symptom check list and a data extraction sheet. SPSS version 26 was used for data analysis. ADRs were given in proportions and associations were analysed using Chi square test. Results Out of 404 eligible patients, 384 (95%) "New" tuberculosis patients were participated. Among them, 197 patients (51.3%) were experienced ADR. Majority (n=184, 93%) were presented with minor ADR while 12 patients (6%) were presented with major ADR. Majority (n=118 ,60%) had gastrointestinal problems. Commonest symptoms were burning chest pain, mild nausea, and vomiting. Statistically significant associations were found between, ADR with female sex(p=.02), among Sinhalese(p=.05), unemployment(p=.01), having hypertension and heart diseases(p=.01) and use of other medications(p=.03).

Conclusion and Recommendations

Proportions of ADRs were high among the study participants. Special attention should be provided for the patients with risk factors for ADR. Comorbidities should be identified early and regularly monitored. Further research needed to identify the contributory factors and the outcomes of ADR.

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Abstract 15

Effects of pulmonary rehabilitation on psychological morbidity in patients with chronic respiratory disease at Colombo South chest clinic

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Introduction
Chronic respiratory diseases have significant impact on physical and mental well-being. Pulmonary rehabilitation (PR) has been recognized as a therapeutic tool in dealing with psychological issues along with improving quality of life.
Objective
Evaluate effects of pulmonary rehabilitation on psychological morbidity and severity of dyspnoea with various lung diseases.
Methods
Prospective study was done at CSCC over a period of 6 months from August 2018 to February 2019. 30 people who participated in the programme were recruited and data collected using interviewer administered questionnaires. Severity of dyspnoea was graded according to Modified Medical Research Council MMRC scale and depression grading was done using Geriatric Depression Scale (GDS). Patients were assessed prior to commencing PR and after therapy.
Results
COPD was the most prevalent disease (57%) whilst 36% had bronchiectasis and 7% has interstitial lung disease. MMRC score and GDS did not reveal a significant inter-disease difference (p=0.548 and 0.381 respectively) GDS score compared with age Sex marital status, educational level, occupation, economic stability, family support, comorbidities, recent hospitalizations, frequent use of symptom relievers did not reveal significant associations for depression. When pre-treatment and post treatment MMRC and GDS scores were compared, the differences were statistically significant (p =0.048 and 0.001 respectively). There was no significant correlation between improvement in GDS score with improvement in MMRC score (Pearson correlation coefficient (r value) 0.34, p = 0.066).
Conclusion
PR programme provides significant symptom relief and reduce psychological morbidity in patients with chronic respiratory diseases.

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Abstract 16

An assessment on island wide distribution of biomedical equipment for COVID-19 case management in government hospitals in Sri Lanka

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Keywords: COVID-19, information, biomedical equipment, oxygen, WHO

Introduction

According to the WHO report the critically ill COVID-19 patients require mechanical ventilation. Therefore, oxygen is an essential requirement for COVID-19 management. Hence all COVID-19 treatment centers should be equipped with pulse ox meters, functioning oxygen supply systems including single use oxygen delivery interfaces. However, correct actual number of available equipment lists was not available in the Ministry of Health.

Objective

To collect information related to medical equipment related to management of COVID- 19 patients efficiently and effectively.

Methods

A web-based software (HIUS) was introduced connecting all hospitals in the country. A password and a username were introduced to each institute. The system was updated regularly by a designated focal point in each hospital. The information related to oxygen therapy for COVID-19 patients were collected.

Results

At the beginning of June 2021, there were 566 ICU beds, 544 ventilators, 228 portable ventilators, 3064 oxygen ports, 151 high flows, 5125 Jumbo cylinders, 52182L liquid oxygen, 3346 multipara monitors and 2673 pulse oximeters available in hospitals across the country to manage oxygen dependent patients. At the end of August this was increased up to 743 ICU beds, 873 ventilators, 429 portable ventilators, 4534 oxygen ports, 466 high flows, 7322 Jumbo cylinders, 105566L liquid oxygen, 5113 multipara monitors and 3901 pulse ox-meters, 392 CPAP and 301 BIPAP machines available in all hospitals to manage oxygen dependent patients. This audit information was efficiently and accurately collected with the help of the HIUS software.

Conclusion

Audit information was useful to develop COVID-19 treatment centers with essential equipment and oxygen. More than 3500 oxygen dependent patients were managed in the peak time without interruption of oxygen supply. It is recommended to continue the audit to future development of COVID treatment centers to face future COVID-19 challenges.

Abstract 17

Data management during a pandemic: proposing a minimal data set and an open database using COVID-19 experience

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Introduction

COVID-19 pandemic has compelled governments around the world to take drastic measures of control. High quality, real-time data is of utmost importance for planning, management, and implementation of these control measures and healthcare operations at local, national and global levels. However, the absence of a common Minimum Data Set (MDS) and an open database have led to difficulties in global information sharing related to COVID-19. This study aims to explore the use of an MDS with an open database at a global scale for use in pandemics and epidemics.

Methods

Literature review was conducted to explore the use of an MDS and an open database for data sharing of pandemics/ epidemics. The extracted information was evaluated by focus group discussions with health informaticians, clinicians, public health specialists, researchers, medical statisticians, and ICT professionals.

Findings

An MDS was built with 39 data elements in five categories. Each data element was defined with standard data structures (4), custom data structures (12) and interoperability standards. Eight key characteristics were identified for the open database for data sharing.

Conclusions

An MDS and an open database is proposed for data management for pandemics/ epidemics. Further, the subsets of MDS are recommended to be used in different aspects of an epidemic management. The defined data structures and standards are recommended to enable efficient data exchange. Further emphasis is drawn upon the importance of an open database, appropriately managed by a world authority such as the World Health Organization.

Abstract 18

Development and validation of quality of work life scale - elderly worker

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Introduction
Quality of Work Life (QoWL) is the fulfilment of personal and working needs of the worker while achieving the goals of the organization. Good QoWL develops healthy, safe workplaces and improves health of the workers. Global labour force participation of elderly workers will exceed 18% by 2030. In Sri Lanka elders above 60 years comprise 26% of the total labour force and assessing and ensuring their QoWL is a priority. However, there are no QoWL measuring tools in the world that specifically capture the intricacies of work life relevant to elderly workers.

Objective
To develop and validate a tool to assess the QoWL among the elderly working population in Sri Lanka.

Methods
Definitions of 'elderly worker' and 'QoWL of elderly worker' were operationalized with consensus of experts. Items were generated through literature review, key-informants, and in-depth-interviews. After item reduction, the draft QoWLS-E tool was formulated and translated into Sinhala. Face, content, and consensual validity was assessed. A sample of 525 elderly workers selected from Colombo district using multi-stage purposive sampling, were administered the pretested QoWLS-E tool. Principal-Component-Analysis (n=275) was conducted using SPSS-20 to identify the scale structure, which was later confirmed through Confirmatory-Factor-Analysis (CFA) using LISREL-8.8 (n=250). Reliability was assessed through internal consistency and test-retest assessment.

Results
Newly developed QoWLS-E tool comprised 35 items in 9 domains, identified as Physical health, Psychological, Facilities, Safety, Job content, Co-workers, Supervisors, Flexibility and Autonomy. Model fit indices of CFA showed acceptable fit (CFI=0.96, PGFI =0.51, PNFI=0.58, RMSEA =0.07, SRMR=0.1) of the nine-domain structure. Cronbach's alpha coefficient was 0.76 and test-retest correlation coefficient was 0.82

Conclusion
Newly developed QoWLS-E tool comprised 35 items in 9 domains, identified as Physical health, Psychological, Facilities, Safety, Job content, Co-workers, Supervisors, Flexibility and Autonomy. Model fit indices of CFA showed acceptable fit (CFI=0.96, PGFI =0.51, PNFI=0.58, RMSEA =0.07, SRMR=0.1) of the nine-domain structure. Cronbach's alpha coefficient was 0.76 and test-retest correlation coefficient was 0.82

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Abstract 19

Risk factors affecting primary subfertility and preferred treatment options among women seeking treatment at subfertility clinics in teaching hospitals in the Colombo District

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Keywords: subfertility, risk factors, treatment options

Introduction

Subfertility is a condition trending as a public health issue on a global scale including in Sri Lanka. Hence knowing the significant risk factors affecting subfertility and treatment preferences are important.

Objective

To determine the risk factors affecting primary subfertility and the preferred treatment options among women seeking treatment at subfertility clinics in teaching hospitals in the Colombo district.

Methods

An unmatched hospital clinic-based case control study was carried out including 114 cases with primary subfertility and 228 primi-mothers in the first trimester as controls chosen using a systematic sampling technique. An interviewer-administered questionnaire including validated tools to assess diet, physical activity and level of stress were used. Data analysis evaluated odds ratios and statistical significance using chi square and independent sample t tests followed by logistic regression analysis. Significance was taken as p <0.05.

Results

Mean(SD) age among cases and controls were 32.35(0.539) and 28.27(0.38) respectively. Statistically significant socio-demographics factors were age more than 35years and been employed. Significant biological factors were prolonged duration of marriage, duration of subfertility and prior abdominal surgery. Significant lifestyle factors included a low protein, fat, and fiber diet, low & moderate physical activity, abnormal BMI (< 18.5 or > 25kg/m2), waist circumference > 80cm and increase total and visceral body fat. Multivariate regression analysis showed age more than 35 years (adjusted OR=3.3;95% CI=1.72–6.34,p<0.05), been employed (adjusted OR=2.38; 95% CI=1.36–4.16,p=0.002) and prior abdominal surgery (adjusted OR=3.45;95% CI=1.71–6.95,p=0.001) were significant risk factors for subfertility. Most preferred treatment option was ovulation induction (53.5%). Socio-economic factors had no significant association with the preference of treatment.

Conclusion

Factors affecting subfertility in our context is contrary to those of some societies (high fat/calorie diet, vigorous physical activities), needs to be addressed in a holistic manner using the life-cycle approach.

Abstract 20

Tuberculosis deaths in Colombo district, 2020 and their associated factors

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Keywords: associated factors, continuation phase, death, intensive phase, tuberculosis

Introduction

Tuberculosis (TB) had been the second commonest communicable disease before the Covid 19 pandemic and the commonest course of death from a single infectious agent in Sri Lanka. Tuberculosis death is defined as a death of a patient while on treatment or before stating the treatment of tuberculosis. Colombo district is having the largest burden of TB cases as well as the TB deaths. Identifying associated factors for TB deaths are important in disease control.

Objective

Aim of this study was to analyse the TB deaths in Colombo district which occurred in 2020 and identify the associated factors of TB deaths.

Methods

We analysed all the TB deaths reported in the Colombo district, during the year 2020. The information of the deaths was obtained from the Central Chest Clinic Colombo. The demographic factors and comorbidities of the deceased persons are summarized as percentages. Associated factors were analysed through the survival analysis and presented with the p value.

Results

Total number of deaths in 2020 was 123. Out of them 80 (65%) were males and 43 (35%) were females. Mean, median and mode ages of deceased persons were 61.6, 62, and 62 years respectively. Among them, proportion of having diabetes, hypertension, chronic lung diseases and chronic renal diseases were 36.6%, 26%, 13. % and 12.2% respectively. Mean, median and mode time from the diagnosis of TB to death are 10, 7 and 1 week respectively. Of them 49.6% had died during intensive phase (IP) while 48% died during continuation phase (CP). Mean time periods from diagnosis to death were 0.8 months in IP and 4 months in CP and this difference was found to be significant in survival analysis (p< 0.001). Comorbidities or age of patients were not significantly associated with time to death.

Conclusion

Patients who presented late had died early and it is important to increase the public awareness about TB.

Abstract 21

The prevalence of work stress and its associated factors among field public health midwives in Matara district

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Introduction

Occupational stress is affected by various individual and organizational factors. Health staff including field public heath midwives is at greater risk of facing these stressors due to their work conditions. Their job role has increased in capacity and the workload in recent past and work under stressful work environment.

Objective

To assess the prevalence of work stress and its associated factors among field public health midwives in Matara district.

Methods

A descriptive cross-sectional study was carried out among 244 PHMs in all 17 MOH areas Matara district. This study was conducted before the Covid pandemic. An interviewer administered questionnaire consisted of socio-demographic characteristics and a work stress questionnaire (WSQ).

Results

Rate of participation is 94.5%. Majority (56%) of them were 41years old or more and 73% were having more than 10 years of service period in ministry of health. Overall, 15.6% (CI=11.1-20.5) midwives were having work stress. Prevalence of stress is highest among the midwives who had only Advanced level qualification (62.3%, 95 % CI 62.3-74.2). There was a significant increase in prevalence of stress among 51 to 60-year-old category (31.1%). Stress is lowest among midwives whose income is lowest (Rs.15000-25000) (0.8%) and whose economy level is week (2.9%, 95% CI 0.8-5.3). There is a significant association between low level of education, low level of income, married midwives and poor general health with the presence of higher stress among PHMM ($\chi2$=14.57, df=2, p=0.001, $\chi2$ = 12.07, df=1, p=0.005, $\chi2$ = 35.08, df=2, p< 0.1, $\chi2$ = 11.71, df=4, p=0.02).

Conclusion

Considerable number of field Midwives in Matara district were having work stress and more stress presents with younger age groups. Association between Low level of education and low level of income with stress is significant. More effort should be put to reduce stress levels in field midwives.

Abstract 22

Tobacco smoking behaviours and the extent of brief intervention in rural primary care settings in Puttalam district

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Keywords: brief intervention, primary care, smoking-cessation, tobacco smoking

Introduction
Tobacco smoking increases the risk of many diseases. Primary care providers can help the smoking cessation process.

Objective
To assess the smoking behaviour, related factors, and extent of brief interventions among adult males presenting to rural primary care settings.

Methods
Descriptive cross-sectional study was conducted in 6 rural primary care centers in state and private sector; 40 participants per center; aged ≥18 was recruited using systematic sampling to achieve the sample of 240. Interviewer-administered questionnaire from Global Adult Tobacco Survey was used.

Results
Out of 240 datasheets, 3 discarded and 237 used for analysis. Of them, 16% (n=37) were current smokers (5% daily-smokers); 26% were former smokers; 58% had never smoked. Majority commenced daily smoking during 15-24years (mean 21). 81% current smokers used manufactured cigarettes. Current daily smokers smoked mean 5 pack-years and, were low (50%) and low to moderate nicotine dependent. 31% of smokers (n=73) quitted during last year. Of them, family doctor checked for smoking from 34% and advised 55% to quit whereas other health care providers checked from 36% and advised 67% to quit. 60% of current smokers tried smoking-cessation during last year, of them, 68% maintained last cessation for 1-6 months; 18% attended counselling or cessation clinics; 5% tried nicotine replacement; 27% switched to smokeless tobacco and the rest did not follow any methods. 57% of current smokers intended to quit within next month. Information on media and cigarette packages influenced 80% to think of cessation. >90% of participants were aware of ≥2 serious illnesses caused by smoking.

Conclusion
Approximately, 1/6 participants were current smokers; 15 to 24 was the vulnerable age to start smoking; majority was willing to quit within the next month. Family physicians' role on brief intervention seemed inadequate compared to other health care providers. Use of supportive services to manage smoking were lacking in the community.

Abstract 23

Assessment of patient satisfaction on provision of services at COVID 19 intermediate care centers during 3rd Wave in Sri Lanka

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Keywords: COVID 19, health, intermediate care center

Introduction
In 3rd wave from 15.04.2021 - 31.05.2021 the COVID 19 patient were suddenly increased compared to 1st and 2nd wave due to high infectivity of delta variant. Hospital capacity was unable to accommodate all the patient since only 7500 patient beds were allocated for COVID 19 patient within government Hospital. Therefore, capacity of intermediate care centers was increased to 154 centers to accommodate 30074 COVID 19 positive asymptomatic and mild symptomatic patient. All the facilities including meals and transport were provided by the government throughout the treating period. Therefore, this audit was conducted by the ministry of health to assess the patient satisfaction to improve the health care service.

Objective
The objective of this audit is to assess the Patient satisfaction on health care service given at COVID 19 intermediate care centers during 3rd wave to improve the service

Methods
Descriptive cross-sectional study. Four hundred nineteen patients treated at ICCs were selected randomly representing all district. Patient were interviewed by researcher through telephone using questioner developed at Google form. Excel sheet was developed automatically, and it was analysed to find the result.

Results
From all the patient 53% were male and rest of the 47 were female. Majority were 30 to 60 age group (88%) and rest were above 60 years. Thirty-three percent of them were asymptomatic and most of the patient were suffering from mild cough, cold and fever, headache, and muscle pain. More than 90% of patient were satisfied on non-health services like meals, cleanliness, and toilets facilities. More than 75% of patients were satisfied on the medical care given by doctors, Nursing officers and health care assistance.

Conclusion
Majority of the patient were satisfied on the health care service given at ICCs. It is recommended to conduct the supervision by the higher authority to further increase the health care services.

Abstract 24

Assessment of preparedness of the health sector for an outbreak of malaria in Sri Lanka

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Keywords: health sector, malaria, outbreak, preparedness

Introduction

Sri Lanka is in the prevention of reintroduction phase following elimination of malaria in 2016. However, annually around 50 imported malaria cases are being recorded. In the current phase, even one locally acquired case of malaria of any species is defined as an outbreak. Until global eradication is achieved, health sector should be more vigilant of the disease.

Objective

The aim of the study was to assess the preparedness of the health sector for an outbreak of malaria.

Methods

A descriptive cross-sectional study was conducted at four hospitals in Badulla district, Regional Malaria Office and Anti Malaria Campaign from March 2021 to assess the preparedness for malaria outbreak. Self-administered questionnaire and checklists were used to collect data from 303 Medical Officers and the staff of malaria program. Checklists were designed based on the nine key components of preparedness as given in the National Strategic Plan for malaria in Sri Lanka 2018-2022.

Results

Majority of the responders were Medical Officers/ Senior House Officers (n=180, 59.4%) and 229 (75.6%) had no experience in treating malaria. Most (n=212, 70.0%) did not have prior training on malaria and 59.7% (n=181) did not consider malaria as differential diagnosis in febrile patients. Majority had poor knowledge on malaria (n=170, 56.1%). A significant association observed between the knowledge on malaria and their training ($\chi2=18.967$, df=1, p=0.001). Overall preparedness of hospital sector and Regional Malaria office of Badulla were unsatisfactory, Anti Malaria Campaign headquarters had a satisfactory preparedness.

Conclusion

This study demonstrated considerable gaps in preparedness in hospitals and malaria control program in district level. Proper training of Medical Officers and adequate buffer stocks maintenance of anti-malarial drugs along with proper infrastructure is recommended.

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Abstract 25

Variation of serum trace element levels in patients with hypertension, acute coronary syndrome, and heart failure – A hospital-based cohort study in Sri Lanka

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Introduction
Cardiovascular diseases (CVDs) contribute to significant mortality and morbidity where serum elements can affect their pathogenesis.

Objective
This study aims to identify the variation of trace elements on CVDs, including hypertension (HTN), acute coronary syndrome (ACS), and heart failure (HF).

Methods
We did a case-control study at the Teaching Hospital, Peradeniya, from January 2017 to August 2017. A trained interviewer was used to collect the patient information and the blood samples; analysis was carried out at the Geochemical Laboratory, Faculty of Science, the University of Peradeniya using Inductively Coupled Plasma Mass Spectrometry.

Results
Seventy-six individuals were included in the study consisting of 21 HTN, 11 ACS, 20 HF, and 24 controls. The mean age of the patients with HTN, ACS, HF, and the control group were 64.86 ± 7.89, 63.09 ± 11.91, 67.15 ± 9.78, and 49.79 ± 11.71, respectively. In HTN patients Mg, Cu, Cd, and Pb, showed a significantly high serum level and V, Cr, Mn, Fe, Ni, Zn, Sr, Ba, and Tl showed a significantly low serum level compared to the control group ($p<0.050$). In ACS patients Al, As, Cd, and Tl showed a significantly high serum level, and V, Mn, Fe, Zn, Rb, Sr, and Ba showed a significantly low serum level compared to the control group ($p<0.050$). In HF patients Al, As, Cd and Tl showed a significantly high serum level, and V, Mn, Zn, Sr, Ba, and Pb, showed a significantly low serum level compared to the control group ($p<0.050$). Multivariate apportionment of the elements using cluster analyses showed mutual solid clusters among elements, with the primary source being groundwater and food contaminants separately.

Conclusion
This study concludes that elements in the human body show a heterogeneous variation throughout CVD. Further large-scale studies are vital to establishing the cause-and-effect relationship of these elements to CVD.

Abstract 26

Awareness and perspectives of government medical practitioners on primary health care reformation and institutional readiness for implementation in Colombo District

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Introduction
Sri Lanka provides primary health care (PHC) through preventive and curative arms. Medical Officers of Health covering defined areas that coincide with the politico-administrative divisions provide preventive care. An extensive network of Divisional Hospitals, and OPDs of secondary and tertiary care institutions which are not confined to specific administrative divisions provide curative care. The private sector contributes mainly for curative care. Underutilization of Primary Medical care institutions (PMCI) and overcrowding of secondary and tertiary care institutes are the results of bypassing and non-unavailability of a proper referral system. The concept of "family doctor" and the "shared care cluster" are the key elements of the PHC reformation.

Objective
To assess the level of awareness and perspectives of the government medical practitioners towards the PHC reformation and describe the level of readiness to implement the principles of PHC in selected PMCIs in Colombo district.

Methods
Awareness and perspectives of the Medical Practitioners were assessed cross-sectionally using a self-administered questionnaire among 281 Medical Practitioners who were working full time for > one year in the selected PMCIs in Colombo district. Readiness was assessed by conducting in-depth interviews with a minimum of five from Medical Practitioners, Nursing staff, Paramedical officers, and minor staff of the above institutions using an interviewer guide. Facility survey was conducted using a checklist.

Results
Majority had poor awareness (scored<40%) on how PHC improves NCD care. However, their perspectives towards the PHC reformations were positive (scored>4). Institutional readiness in relation to infrastructure, laboratory facilities, availability of essential drugs and manpower were inadequate.

Conclusion
To achieve the expected outcome the level of awareness of Medical Practitioners as key role players needs to be enhanced and physical resources should be strengthened.

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Abstract 27

Effect of COVID-19 on the economy of tea plantation owners in Balangoda, Sri Lanka and its association with the prevalence of chronic and acute diseases during lockdown and access to healthcare services

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Introduction

The COVID-19 pandemic has affected the economy of tea plantation sector and access to healthcare services for other diseases. Prevalence of acute and chronic diseases are affected by the economic status of patients and vice versa.

Objective

Describe the effect of COVID-19 on economy of tea plantation owners in Balangoda, Sri Lanka and its association with prevalence of diseases during lockdown and access to healthcare.

Methods

In this cross-sectional study, 85 tea plantation owners of Tea Estate Development Society in Sri Lanka, were selected using simple random sampling. Data was collected using a self-administered questionnaire consisting of participant's sociodemographic information, effect of COVID-19 on economy, acute and chronic diseases, and the difficulties in accessing health care services during the lockdown. The effect on economy was classified as positive/negative, based on parameters of economy such as change in average monthly sales, income, expenses, market price and number of tea workers from March to August 2020 compared to 2019.

Results

Majority (n=47, 56.0%) had a positive effect on economy. Hypertension (n=12, 14.1%) and common cold (n=19, 22.4%) were the predominant diseases. Majority of those who developed common cold had a negative effect on economy due to COVID-19, with a statistical significance of p=0.015. Statistically significant association was also found between the presence of gastritis (p=0.040) and the negative effect of COVID-19 on economy. 76.9% (n=20) and 90.5% (n=19) with chronic and acute diseases respectively faced difficulties in accessing healthcare services in lockdown such as transport issues, unavailability of medicines, fear of contracting COVID-19 and inaccessibility of hospitals. Transport was the major problem in 57.7%(n=15) and 57.1% (n=12) of patients with chronic and acute diseases respectively. 60% (n=12) and 63.2% (n=12) of those with chronic and acute diseases respectively, who faced difficulties in accessing health care services during the lockdown had a statistically significant (p=0.032) negative effect on economy due to COVID-19.

Conclusion

Even though majority of those with diseases, who faced difficulties in accessing healthcare services had a poor effect on economy due to COVID-19, access to health care in terms of lockdowns should be made more operative. Restrictions should be imposed in such a way as to enable the tea owners to sustain their economy during the pandemic, to prevent development of acute diseases/ worsening of pre-existing chronic diseases.

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Abstract 28

Do doctors exercise enough? prevalence of physical activity among doctors in two Teaching Hospitals, Sri Lanka.

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Keywords: doctors, physical activity

Introduction

Physical inactivity is recognized as the fourth leading risk factor for mortality that leads to 3.2 million deaths globally and it is estimated that 31% of adults (men 28% and women 34%) are simply inactive. Doctors are the representatives of the core of the health care system. Their personal physical activity influences exercise counselling to patients.

Objective

Current study was undertaken to assess the prevalence and patterns of physical activity among doctors in Sri Lanka.

Methods

This cross-sectional study conducted at Teaching Hospitals Kandy and Kegalle involving 100 volunteering doctors. Data were collected using a semi-structured self-administered questionnaire. The adequacy of physical activity was determined according to WHO global recommendations. Data was analysed using SPSS Version-24.

Results

The response rate was 87% and mean age and the BMI of was 45 years and 24.2kg/m2 respectively. Males comprised of 50.5% and females 49.5% of the study population. Among the study participants, 9.19% were adequately physically active (males=100%, females=0%), 54.02% had inadequate physical activity levels (males=42.55%, females=57.45%) and 35.63% were physically inactive (males=48.39%, females=51.61%). Half (50%) of adequately physically active subjects belonged to the age group 41-50 years. The most common physical activities found were jogging (64.29%) and cycling (12.5%).

Conclusion

Most doctors evaluated were physically inactive with a female predominance. Possible barriers associated with this inactivity should be explored and professional environment should be tailored to promote desirable physical activity among Sri Lankan doctors.

Abstract 29

Nutritional status among under five children in Southern Province, Sri Lanka: evidence from the demographic and health surveys – 2016

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Keywords: malnutrition, stunting, underweight, wasting

Introduction

Child malnutrition is a critical public health concern, and it is one of the main reasons for the higher morbidity and mortality of children in developing countries like Sri Lanka. The causes of child malnutrition are numerous and multifaceted.

Objective

The objective of study was to investigate the nutritional status and to assess the factors associated with malnutrition in children under five years age in Southern Province of Sri Lanka.

Methods

Sample of 972 children aged 0–59 months in Southern province from the Demographic and Health Survey-2016, with complete anthropometric measurements were included in the study. The malnutrition among children under five years old were assessed using indicators, Stunting (low height-for-age), Wasting (weight-for-height) and Underweight (weight-for-age) as proxy measures. Description of the sample by frequency tables and bar graphs were depicted. Bivariate and logistic regressions were used to examine the association between selected household, maternal-socio-demographic characteristics, fathers' characteristics, and child level variables and three indices of child nutritional status.

Results

The prevalence of stunting, wasting and underweight among under-five children in Southern province were 13.8%, 18.2% and 20.9% respectively. Presence of 2-3 children compared to have a single child is a risk factor while birth weight of the child more than 2500g is a protective factor for child being stunted. Children whose mothers Body Mass Index (BMI) between 18.5 to 24.9, BMI 25 to 29.9, BMI more than 30 kg/m2 are protective factors for wasting among under five children compared to the mother having BMI less than 18.5 kg/m2. Wealth index of the family being rich, mothers BMI between 25 to 29.9, birthweight more than 2500 grams are protective for children being underweight.

Conclusion

The study suggests that mother's low BMI level and birth weight should be focused more on preventing child malnutrition to reduce the burden of malnutrition.

Abstract 30

Prevalence of oral cancer related lifestyle practices and awareness on oral cancer and oral potentially malignant disorders among rice mill workers in Polonnaruwa District

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Keywords: betel quid chewing, lifestyle, oral cancer awareness, prevalence, rice mill workers

Introduction

Betel quid chewing, consumption of processed areca nut products, smoking and alcohol consumption are contributory factors for oral cancer and Oral Potentially Malignant Disorders (OPMDs). Identification of high-risk groups engaged in these practices is a cost-effective strategy for oral cancer prevention in "lower middle-income countries" like Sri Lanka.

Objective

To determine the prevalence and associated factors of selected oral cancer related lifestyle practices and awareness on oral cancer and OPMDs among rice mill workers in Polonnaruwa district.

Methods

A descriptive cross-sectional study was conducted among 630 rice mill workers in Polonnaruwa district using multistage cluster sampling technique and an interviewer-administered questionnaire. Relationships between lifestyle practices and associated factors and level of oral cancer awareness were assessed using Chi-square test.

Results

Prevalence of current betel quid chewing was 61.9% (365) out of 590 participants who consented for the study. Prevalence for current chewing of processed areca nut products, alcohol consumption and smoking were 5.7% (34), 49.1% (290) and 35.4% (209) respectively. Statistically significant differences were observed between gender and ethnicity with betel quid chewing status: gender, level of education and total monthly income with smoking status: gender, age group, occupational category, and total monthly income with alcohol consumption status. Of the work environment factors only peer usage of quid was statistically significant with betel chewing status (p=.001). Though oral cancer awareness was satisfactory in most respondents (56.6%; n=334), it was poor among those engaged in the lifestyle practices assessed and this observed difference was statistically significant.

Conclusion

This study revealed a high prevalence of oral cancer related lifestyle practices among rice mill workers compared to national figures. Therefore, it highlights the need to integrate oral cancer screening into conventional screening programmes conducted at rice mills.

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Abstract 31

Presenting complaint and daytime somnolence in determining the risk of obstructive sleep apnoea

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Introduction
Although studies have been conducted worldwide on factors related to Obstructive Sleep Apnoea (OSA), only a few such studies have been carried out in a South Asian setting like Sri Lanka which has differences in socioeconomic stability and lifestyle when compared to the rest of the world thus questioning about their applicability to Sri Lanka. To relieve of this burden, this research was conducted to understand the presenting complaint and degree of daytime somnolence of OSA.

Objective
To describe the presenting complaint and degree of daytime somnolence in determining the risk of OSA among patients attending the Specialized Sleep Clinic at Central Chest Clinic, Sri Lanka.

Methods
A descriptive cross-sectional study was conducted among clinic records of 101 patients aged 18-85 years who attended the sleep clinic from January 2019 to January 2021. Participants were recruited using simple random sampling and data was collected using a pre- designed record sheet. The risk of OSA was determined based on the comprehensive clinical assessment conducted at the sleep clinic. Inferential statistics was used to analyse associated factors using chi squared test for categorical variables and the t-test for continuous variables.

Results
Among 101 participants, 76.2% (n=77) had a risk of OSA. A majority of those with a risk of OSA (n=69; 89.6%) and without a risk (n=16; 66.7%) had snoring as the initial presenting complaint with a statistically significant difference (p<0.05). Epworth Sleepiness Scale (ESS) assessing the degree of daytime somnolence revealed that amongst those with a risk of OSA, 79.2% (n=61) had excessive daytime somnolence and it was significantly higher (p<0.05) than those without a risk (n=13; 54.2%).

Conclusion
Snoring as an initial presenting complaint and excessive daytime somnolence were significantly higher among those at risk of OSA.

Abstract 32

Prevalence of unplanned pregnancies and their associated factors among antenatal clinic attendees and their family planning preferences, in Thimbirigasyaya divisional secretariat division

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Keywords: antenatal clinic attendees, Colombo municipal council, family planning preferences, unplanned pregnancies

Introduction

Unplanned pregnancies are a major public health issue globally causing poor maternal and fetal outcomes and family planning is an important step to minimise the burden.

Objective

To determine the prevalence of unplanned pregnancies & their associated factors among antenatal clinic attendees & their family planning preferences.

Methods

A cross-sectional study was conducted in three randomly selected antenatal clinics of the Thimbirigasyaya Divisional Secretariat Division of the Colombo Municipal Council. Four hundred and twenty-five antenatal mothers were included in the study. Prevalence was calculated based on the timing of the current pregnancy. Statistical analysis was done using the Chi-Square test. The strength of association was assessed using odds ratio. Family planning practices and preferences were calculated as percentages.

Results

Prevalence of unplanned pregnancies was 32.7% (95 % CI: 28.26 – 37.39). Being married (OR = 3.08), the mother being employed in the preceding 12 months (OR = 4.18), number of past conceptions being two or less (OR = 2.1) & intake of folic acid before pregnancy (OR = 2.27) had statistically significant associations with planned pregnancies (p < 0.05). Marital age less than 20 years (OR = 0.3), education level of mother being less than Grade 11 (OR = 0.42), monthly household income of less than LKR 25,000 (OR = 0.47), interpregnancy interval of less than 24 months (OR = 0.25) had statistically significant associations with unplanned pregnancies (p < 0.05). Thirty-three per cent of antenatal mothers had used a modern family planning method in the past while side effects were the major reason for not using a method among non-users. Sixty per cent had decided to use a family planning method in the future.

Conclusion

One-third of the pregnancies were unplanned pregnancies. Twelve variables were statistically significant with the planning status. One-third of the mothers had used a contraceptive method in the past. More than half were planning to use a contraceptive method in the future.

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