

South Asian Evidence Summit - SES 2018

**Theme: ‘Converging
Disciplines for Public
Health’**

2nd - 3rd February 2018

Abstracts

Pre-conference workshop

Keynote addresses

Panel discussions

Oral platform

Poster presentations

Organized by:

Public Health Evidence South Asia (PHESA)

Prasanna School of Public Health, Manipal Academy of Higher Education

Public Health Evidence South Asia (PHESA)

Includes South Asian Satellite of Cochrane Public Health

Prasanna School of Public Health (PSPH)

Manipal Academy of Higher Education

South Asian Evidence Summit – SES 2018

‘Converging Disciplines for Public Health’

2nd – 3rd February 2018

Venue: 2a- Interact building

Manipal Academy of Higher Education, Manipal

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Inauguration Program

Date: February 2, 2018

Time: 9.00 AM- 10.00 am

Venue: 2a- Interact building,
Manipal Academy of Higher Education (MAHE), Manipal

Chief Guest

Dr. Juan Pablo Peña-Rosas

Coordinator, Evidence and Program Guidance, Department of Nutrition
for Health and Development, World Health Organization, Geneva

Guest of Honor

Dr. Poornima Baliga

Pro Vice Chancellor (Health Sciences), MAHE, Manipal

Presided by

Prof. Helmut Brand

Director, Prasanna School of Public Health (PSPH), MAHE, Manipal

In the presence of

Dr. N. Sreekumaran Nair

Professor and Head, Department of Biostatistics,
Jawaharlal Institute of Postgraduate Medical Education and Research,
Puducherry

&

Dr. Anju Sinha

Deputy Director General, Division of Child Health,
Scientist E, Indian Council of Medical Research, New Delhi

INVITED PLENERY TALKS/SESSIONS

Plenary Session	Speaker
Food Safety Risks and their Management	Dr. Ramesh V Bhat <i>International Food Safety Specialist, Centre for Science, Society & Culture, Hyderabad</i>
Adolescent and Sexual Health	Dr. Shirish Darak <i>Senior Researcher, Prayas Health Group, Pune</i>
Evidence Gaps and Maps	Dr. Ashrita Saran <i>Evidence Synthesis Specialist, Campbell Collaboration, New Delhi</i>
Policies for Nutrition	Dr. Juan Pablo Peña-Rosas <i>Coordinator, Evidence and Programme Guidance, Nutrition for Health and Development, World Health Organization, Geneva</i>
Meta-analysis: Guides or Misguides	Dr. N Sreekumaran Nair <i>Professor & Head, Department of Biostatistics (Biometrics), Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER) Puducherry</i>
Evidence synthesis from demographers perspective	Dr. Tobias Vogt <i>Assistant Professor for Healthy Ageing, Faculty of Spatial Sciences, University of Groningen, The Netherlands.</i> <i>Dr. TMA Pai Endowment Chair for Health Demography, MAHE, Manipal</i>

ABSTRACTS OF ORAL PRESENTATIONS

Imputation of missing values in aggregate level spatial data

Amitha Puranik¹, Binu V.S², Seená Biju³

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Background: Missing data is a common problem in spatial analysis especially at aggregate level. Missing can either occur in covariates or in response variable or in both in a given location. Many missing data techniques are available to estimate the missing data values but not all of these methods can be applied on spatial data since the data are auto-correlated. Hence there is a need to develop a method that estimates the missing values in both response variable and covariates in spatial data by taking account of the spatial autocorrelation.

Objective: The present study aims to utilize the Spatial Lag Model, Spatial Error Model and Spatial Durbin Model in multiple imputation technique to impute missing data points at aggregate level in spatial data by accounting for spatial autocorrelation property present in the data.

Methodology: The study will be based on the simulated data in the following situations: (1) Data with low, moderate and highly auto-correlated dependent and independent variables (2) Data with different proportion of missing values in Y. i.e. 5%, 20%, 50%...etc (3) Data with different correlations between response variable and covariates. A few regions will be randomly chosen and we assume that the values of variables in these regions are missing even though the correct values are available for these regions. The missing values will be estimated using all the 3 models and comparison between the models will be done on the basis of Root Mean Square Error (RMSE). The above process will be tested on a real data.

Conclusion: Estimating the missing values of spatial data requires model that explicitly account for the spatial autocorrelation. The proposed mechanism will result in optimal imputation of missing values which can yield complete data to be further used in clinical research.

Keywords— *Missing data estimation, Spatial autocorrelation, Spatial regression, Spatial Durbin Model, Multiple Imputation*

Effect of reproductive health education intervention on awareness and decision making among parents and caregivers of girls with cerebral palsy: a systematic review

Dr P Arathi Rao¹, Dr Navya Vyas², Mrs Ratheebai Vijayamma³, Dr Ravishankar N⁴

Background: Among girls with cerebral palsy, parents have concerns related to their child's reproductive health issues like menstrual hygiene, pelvic infection, temporary

or permanent methods of contraception due to fear of sexual abuse. A systematic review will help gain evidence and plan a contextual intervention to address the needs.

Objective: Will reproductive health education intervention affect the awareness and impact decision making regarding reproductive health issues among parents of girls with cerebral palsy?

Methodology: Studies conducted among (P) Parents and immediate family member caring for cerebral palsy girls were included. Exclusion criteria was studies among parents of boys with cerebral palsy, parents of autistic children and other developmental delays, home nurses. Health care service providers of organised sectors. The type of studies planned to be included were Cohort, RCT, pre-test and post- test, Controlled before and after studies, Quasi- experimental. Qualitative studies of the above topic were excluded. (I) Parental Education intervention in the form of training, lectures, films, role plays, group discussions, workshops, counselling, and health education material, family centred services, mass media. (C) From our preliminary search and expertise, we believe that there would be no studies with an unexposed control group due to ethical reasons. We would mainly focus to include studies which have compared two or more different education intervention packages. They may include any of the above mentioned intervention. (O) The primary outcomes looked for were level of knowledge and awareness, attitude towards reproductive health issues, health seeking behaviour for reproductive health issues.

Databases searched were: PubMed, Cochrane database, CINHAL, Scopus, Science Direct, Springer, Web of science, Google Scholar, Oxford Journals (Medicine and Health), PROQUEST Health and Medical Complete (Proquest Medical Library), GreyNet Online. Limitations: Human subjects only. Keywords used were girls with cerebral palsy, reproductive health education, parents and care givers, health communication, cerebral palsy. Data extraction was planned to be carried out using standardised data extraction tool. Details regarding the objective of the study, methodology, intervention details, outcome details and results will be independently extracted by two review authors. In case of discrepancy a third author will be involved

Results: A total of 1228 articles were retrieved in preliminary search. Following removal of duplicates it was to 1204. Independent title screening by two different authors yielded a total of 41 articles which was followed by abstract screening done independently which yielded a total of 14 articles which were found to be relevant. Full text screening independently and following discussion yielded only 2 articles found to be relevant to the review question in hand. Out of which 1 article full length could not be retrieved even after communicating with the corresponding author.

Can Diabetes Mellitus Lead to Voice Changes? A Systematic Review of Literature

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Background: Diabetes Mellitus affects a large number of the population and its prevalence is increasing at an alarming rate due to the present lifestyle. Patients with diabetes report of a higher prevalence of gastrointestinal symptoms as compared to the general population. Further, since diabetes has an effect on the neurologic, vascular and muscular systems, there might be an impact on the phonatory system as well.

Objective: A systematic review of literature was conducted to identify the influence of diabetes on voice.

Methods/Design: A systematic literature search was carried out on PubMed, Scopus and Cochrane databases. The keywords ‘diabetes mellitus’, ‘voice’ and ‘phonatory system’ were used in different combinations. Articles that discussed the effect of diabetes mellitus on voice were included in the review.

Results and Conclusion: Five studies were identified to be suitable for inclusion in the review. There is limited literature available on the effect of diabetes mellitus on voice. The studies pointed out at a higher prevalence (12.5%) of voice problems among individuals with diabetes mellitus as compared to general population. Higher gastro-oesophageal reflux disorder related symptoms. Further, higher reflux symptom index and voice handicap index scores have been reported in these individuals. The other voice related changes reported across the studies include presence of laryngeal involvement, hoarseness, and increased strained voice. Even though there is limited literature available on voice changes among persons with diabetes mellitus, it points towards the presence of voice problems among them. The findings of the present review draw attention towards the need to have additional research in this population. This would help in designing suitable voice assessment and management strategies for persons with diabetes mellitus.

Factors associated with neonatal Healthcare-Associated Infections (HAIs) in India: A systematic review and planned meta-analysis

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Background: Neonatal healthcare associated infections (HAIs) is one of the major leading cause of the preventable neonatal mortality in developing nations. Considering the dearth of research evidences in the area, this systematic review aims to critically appraise and consolidate the list of risk factors associated with neonatal HAIs in India.

Methods: Outbreak/ surveillance/ risk factor/ determinants reporting HAIs among neonate using CDC or WHO driven diagnosis either analytical or descriptive type carried in India and published in only english language will be included. Comparison group may be present or absent is not the criteria to determine the study. Intervention with or without comparator will be included. Outcome will include risk factors related to the patient, healthcare worker, ICU environment, parent, health-system, iatrogenic procedures, and process, etc. Electronic searches will be conducted on PubMed, Scopus, Web of Sciences, CINAHL, MedLine (Ovid), POPLINE and Google Scholar. Two independent authors will screen the title, abstract and full text database and will assess the risk of bias using NIH, National heart, lung and blood institute criterias. We will use descriptive statistics for narrative synthesized data, will adopt a random effects model for meta-analysis anticipating a substantial heterogeneity among the studies. If number of studies are more (>10), we will assess publication bias using funnel plot and degree of symmetry by Egger's test.

Discussion: The burden of neonatal HAIs in South Asian countries is high and in India it is one of the leading cause on neonatal mortality. The detriments leading to neonatal HAIs is unexplored in India. Microbiological spectrum in India compared to other South Asian countries might be different, it is indeed requirement to explore the risk factors of neonatal HAIs. To best of our knowledge this is the first systematic review listing and categorizing the risk factors causing neonatal HAIs. The protocol provide the detail methodology to search and include the suitable articles in the review followed by precise appropriate statistical analytical tool that will be used for further analysis. The protocol shall also give rise to new further area of research in neonatal HAIs and may also stimulate further reporting of such articles in the journals.

Systematic review registration: PROSPERO CRD42017072861

Associations of Information and Communication Technology (ICT) and Complex Health Communication Tasks for Positive Health Outcomes

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Background: Advances in Information and Communication Technology (ICT) has hosted new ways to communicate predominantly in the field of 'health communication,' for attaining progressive health outcomes. Largely, media capacity theories state that effective communication is more likely to be achieved by matching media potentialities with communication tasks. Therefore, this research aims to resolve questions if there is any associations between ICT characteristics and perceived

complexity in health communication tasks that influence actual ICT usage by doctors to important parties involved in the healthcare process primarily, the patients, and to fellow practitioners using quantitative methods.

Methods: Responses of 529 doctors practising in Chennai and Coimbatore using a survey tool. Two cluster of respondents (OMPG, YALL) were derived using Principal Component Analysis (PCA). Older (≥ 40 yrs.), Male, Post Graduates - OMPG; Younger (< 40 yrs.), Male and Female, Post Graduates - YALL

Results: Majority of respondents perceive all the health communication tasks as moderate neither complex nor simple. Sending customised health awareness messages to remote patients and sending timely medication reminders to patient were regarded 'very complicated' than other tasks. Mobile calls and WhatsApp were most often used for sharing patient health records and test images for obtaining expert opinion rather than it's used for direct patient communication. There is difference between communication with patients and communication with peer doctors/para-medical experts in terms of task complexity and actual usage. The correlations coefficients however, were small. Actual usage was higher with peer doctors than with patients (t-67.34, $p < 0.0001$). The complexity was statistically significantly different ($p < 0.001$) between OMPGs seem to use it 'rarely' while actual usage was 'rarer' among YALL.

Conclusion: Whether the task is complex or simple has no profound effect on actual usage. Actual usage was higher with peer doctors than with patients. OMPGs were more likely to influence ICT usage for health communication.

A systematic review on barriers to exclusive breast feeding

Divya Sussana Patil¹, Vijay Shree Dhyani², Prachi Pundir³, Sherize Merlin Sequeira⁴,
Jisha B Krishnan⁵, Vishnu Renjith⁶

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Background: The benefits of Exclusive Breast Feeding (EBF) is acknowledged widely. Yet we see that there are various factors which are seen as barriers to EBF. Eliminating the barriers to EBF will help in reducing the mortality and morbidity. The main objective of this review is to identify the barriers to exclusive breastfeeding.

Methodology: The articles were identified by searching the PUBMED, CINAHL, ProQuest, Web of Science and Scopus databases. The study included qualitative, quantitative and mixed methods studies which focused on barriers to EBF. The review is expected to yield barriers like- lack of knowledge, sociocultural factors, issues with lactation and employment related issues. All studies were screened based on their titles and abstracts first by two review authors independently. After that, the full text will be reviewed and eligible studies will be selected for data extraction. Potential disagreements will be resolved by discussion with a third reviewer.

Results: A total of 12,035 articles were identified through electronic search, out of which 9,737 articles were included for title screening after removing duplicates. 2,136

articles were included for abstract screening out of which 252 articles were included for full text screening.

Conclusion: By identifying the barriers to EBF, we will be able to develop new strategies to help mothers to exclusively breast feed their babies for the initial six months of life and achieve the global target for EBF.

Concept of caregiving and caregiver: Women diagnosed with breast cancer in India

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Background: People suffering from chronic diseases such as breast cancer often require regular care and assistance from others. Battle of the cancer is fought together by the survivors and their caregivers. Due to which there is tremendous pressure on the caregivers. There are no qualitative studies being undertaken among this population in India. This makes it imperative to understand the perception of being a caregiver and investigate the concept of caregiver and caregiving among this group of people.

Methods: Qualitative study design with in-depth interviews were conducted separately among breast cancer patients and their caregivers with semi-structured qualitative interview guide. Purposive and convenient sampling was being used to recruit patients and caregivers, respectively. Ethical clearance and permission from tertiary hospital was obtained. After obtaining list of breast cancer diagnosed cases, patients and caregivers were contacted in person and their willingness to take part in the study was taken. About 39 caregivers and 35 patients belonging to different stages were recruited. Interviews were recorded with prior permission. Data was managed by Atlas.ti software. The recordings were transcribed, translated and coded. Themes were identified through these codes.

Findings: Attempt was made to answer the following questions: What is caregiving? Who is a caregiver? What are the different activities/tasks managed by caregiver?

Factors associated with neonatal pneumonia in India: a systematic review and planned meta-analysis

Dr. N. Sreekumaran Nair, Dr. Lesli Edward Lewis, Dr. Shruthi Murthy, Dr. Myron Godinho, Dr. Vijayshree Dhyani

Introduction There is a lack of consolidated evidence from India regarding the factors associated with neonatal pneumonia. A systematic review and meta-analysis was thus

conducted to consolidate and appraise the evidence on risk factors and determinants of neonatal pneumonia in India.

Methods: Observational studies conducted among Indian neonates were included. Disease of interest was pneumonia. Studies on neonatal sepsis were also searched for to verify the presence or absence of a 'pneumonia' subgroup. Outcomes of the review were risk factors and determinants of neonatal pneumonia in India. Electronic searches were conducted on 10 databases and websites in addition to hand searching, snowballing and contacting experts/authors. Two authors independently screened records in title, abstract and full-text stages (EndNote), extracted data (MS Excel) and assessed risk of bias (MS Excel, using QATSO tool). A meta-analysis with random-effects model was performed (STATA). Reporting was done using forest plots, PRISMA flowchart, tables and narrative summaries.

Results: A total of 10,499 citations were identified consisting of 1,745 duplicate records. After excluding 7,084 titles, 1,670 records were taken forward to the abstract screening stage. At this stage, 624 abstracts were found eligible to be included in the full text screening stage. After screening, two studies were included in the systematic review and meta-analysis, with data from a total of 194 neonates. Both were longitudinal studies investigating ventilator-associated pneumonia on hospitalized neonates requiring mechanical ventilation for at least 48 hours. A total of 11 risk factors were studied from the studies, of which six were common across both studies. Available data made it possible to conduct meta-analysis for two risk factors- very low birth weight (pooled odds ratio (OR) 5.61, 95% CI 1.76 to 17.90, I² = 4.4%, p=0.306) and prematurity (pooled odds ratio (OR): 2.76, 95% CI 0.98, 7.73, I² = 49.1%, p=0.161).

Registration: PROSPERO 2016:CRD42016044019

A systematic review on how effective are public works programmes (PWPs) in stimulating local economic transformation in low- and middle-income countries (LMICs)

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Objective: To find how effective PWPs are in stimulating local economic transformation in LMICs. To find the factors responsible for improving or reducing the efficacy of PWPs on local economic transformation in LMICs and to find if community involvement in PWPs improve the effectiveness of the programmes on local economic transformation in LMICs.

Methods: A two-stage systematic review with data from qualitative and quantitative studies elucidated in a narrative format using framework synthesis approach. Meta-analysis was used for generating evidence from quantitative studies. Population: All sections of the society targeted by PWP in LMICs which included men, women, children, youth, rural/ urban community, households, and other vulnerable population like unemployed, older people, differently abled, extremely poor and landless labourers etc. Interventions: were included after deciding the scope at the first stage of review. Outcomes: Studies were examined for income and poverty outcome, social outcome, environmental outcome, employment outcome and macro-economic outcome.

Results and discussion: Rural employment programme and cash transfer programmes were the two interventions included in stage two of the review with 88 studies giving evidence for answering the research questions. Both the interventions had a positive impact on the local economic transformation in LMICs. Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in India was the most common rural employment programme globally. Majority of the studies revealed that MGNREGS has been effective in improving the welfare and livelihood security of the rural poor through increase in employment opportunities, increased income and wages, reduction in poverty, improved food and nutritional security, financial inclusion, reduction in migration and improved educational attainment. Twenty-two Cash transfer programmes across 16 LMICs globally, reported an overall increase in quality of food intake, consumption expenditure and earnings. Both has contributed a major role in the empowerment of women both financially and socially. The main factors which improves the efficacy of PWPs in local economic transformation were women's participation in the Programme, provision of off-seasonal employment, flexible and functional grievance redressal mechanism and credible relationship with the government. The factors which were reducing the efficacy of PWPs in local economic transformation were corruption, financial & administrative mismanagement, scarcity of worksite facility, non-availability of regular works and lack of knowledge and awareness of the programme. Through community involvement in PWPs, MGNREGS enhanced employment to tribal and backward class and helped them to earn significantly more income and it contributed to women empowerment.

Halakki Medicine (What? and Why?): A Description

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This article has produced as a part of Ph. D. thesis entitled “A study on Health Seeking Behaviour among Halakki Vokkalu community of Uttara Kannada District, Karnataka”. Halakki medicine popularly known as Ankola Medicine. This medicinal practice has at least 200 years' tradition. Started from Bommu Govind Gouda, succeeded by Shivu Bommu Gouda and then Bommu Shivu Gouda. Presently Sri Vaidhya. Hanumanth Gouda, son of Sri Vaidya. Bommu Shivu Gouda; belongs to 4th generation of the traditional medicine practice in Halakki Vokkalu family. He has been

rendering the services to the paralysis, joint and body pain patients from different parts of the state Karnataka and the world. This medicinal practice based in Belambara Village in Ankola taluk of Uttar Kannada District, Karnataka. Belambara situated in distance of six km from the taluka center and one km from the coast of Arabian Sea.

Risk factors for neonatal pneumonia: A Pan-India qualitative study of stakeholder perceptions

Dr. N. Sreekumaran Nair, Dr. Lesli Edward Lewis, Dr. Shruthi Murthy, Dr. Myron Godinho, Dr. Vijayshree Dhyani

Aim: The aim of this study was to understand the perception and experience of various stakeholders involved in neonatal care to get a holistic view of the risk factors associated with neonatal pneumonia.

Methods: A qualitative study was performed. Purposive sampling was employed to select a total of 69 participants from 21 districts in 10 states across four Indian regions. 51 in-depth interviews and 4 focus group discussions were conducted. Data was transcribed verbatim. Thematic analysis was conducted on ATLAS.ti. Different codes were explored. Next, similar codes were grouped and categorized that led to generation of important categories and concepts related to the main themes.

Results: Most of the stakeholders found it difficult to ascertain risk factors for neonatal pneumonia separately and found it difficult to consider pneumonia as separate entity. The following themes emerged on risk factors for neonatal pneumonia: related to pregnancy and birth, socio-cultural factors and environmental factors. Except birth anomalies no other risk factor was found as rare.

Conclusion: Present qualitative study revealed a complex interplay of the very apparent risk factors such as prematurity and low birth weight along with sociocultural factors and environmental factors that predisposes infant and mother to factors that eventually leads to neonatal infections such as pneumonia. Embarking on these factors should be an important step towards preventing neonatal infections such as pneumonia to occur.

Effect of Food Fortification on Nutritional Status of Women: An Evidence Summary Protocol

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Background: Malnutrition is one of the most serious public health problem in the world. Micronutrient deficiency is a form of malnutrition that affects the health and development of vulnerable population such as children and pregnant women in the low-

income countries. Food fortification and supplementation have been used as a successful intervention for controlling micronutrient deficiencies viz. vitamin A, vitamin D, iodine, iron, vitamin B (thiamine, riboflavin, niacin). In the proposed overview, we aim to produce evidence about the effect of food fortification and supplementation on nutritional status of reproductive age women.

Objective: To assess the effect of food fortification and supplementation on nutritional status of women in reproductive age group (15-45 yrs.)

Methodology: Systematic reviews of randomized trials, experimental studies and cohort studies involving women of reproductive age group (15-45 yrs.) will be included in the overview. Reviews including food fortified with Vitamin A, D, Iron, Calcium, Folic acid either individually or food fortified by a combination of all these micronutrients along with supplementation, will be included.

Cochrane Database of Systematic Reviews (CDSR), EPPI centre, Campbell Collaboration, PubMed, Web of Science and Scopus databases will be searched. Keywords will be identified before initiation of the search. Result of search strategy will be imported to Endnote X7 reference manager software. Two review authors will independently assess for inclusion of all the potential reviews (Titles, abstracts and full texts), we identify as a result of the search strategy. Any disagreement will be resolved by discussion or with a third review author. Screening will be based on type of study, intervention, participants and language. Revised-'Assessment of multiple systematic reviews' will be used for methodological quality.

Data will be extracted independently by two reviewers, based on the systematic review characteristics, bibliographic details, information about the objectives and research questions of the reviews, participants, interventions, and outcome related information. If meta-analysis is performed then data pertaining to that will be extracted. The data will be summarized based on the outcomes, intervention and comparisons. The results will be reported based on the effect of food fortification and supplementation on the outcome measures.

Treatment options and barriers to case management of neonatal pneumonia in India: a scoping review

Dr. N. Sreekumaran Nair, Dr. Lesli Edward Lewis, Dr. Shruthi Murthy, Dr. Myron Godinho, Dr. Vijayshree Dhyani

Aim: In order to reduce burden of neonatal pneumonia in India it is imperative to synthesize evidence on different treatment guidelines existing for neonatal pneumonia and the barriers hindering effective case management of neonatal pneumonia in the Indian context.

Methods: Studies eligible for inclusion had to be conducted among neonates with pneumonia in the Indian context. Since neonatal pneumonia is usually considered under the umbrella of neonatal sepsis, studies on neonatal sepsis were also searched for to verify the presence or absence of a 'pneumonia' subgroup. Outcomes of interest were (a) specific and supportive treatment of- and (b) barriers to case management of neonatal pneumonia in Indian context. A comprehensive search was done on 9 online

databases and performed hand-searching for articles not included in electronic databases. Two authors independently screened articles at title, abstract and full text level (endnote) and extracted data on Microsoft Excel 2007.

Results: A total of 18,349 citations were identified from the search conducted in published and grey literature sources. After removing duplicates, title, abstract and full text screening, and a total of 19 studies were included for data extraction for treatment options and 2 for barriers to case management.

A total of 7 studies on management guidelines and 13 for treatment options which mentioned the treatment or management of “neonatal pneumonia” were included. The main approaches to management of neonatal pneumonia were supportive care, anti-microbial therapy and adjunctive therapy. All guidelines used similar definitions of neonatal sepsis and specified neonatal pneumonia as its component. Only one study provided treatment algorithms which made explicit mention of neonatal pneumonia. The first line treatment corresponded to community-acquired pneumonia and where resistance was unlikely. The second and third line treatments corresponded to hospital-acquired infections with some and significant resistance likely. Most of the studies recommended Ampicillin/ Penicillin and Gentamicin as the first line treatment where as Cefotaxime and Amikacin were preferred choice for third line treatment however NCDC recommended it as second line treatment in severe disease. Barriers to case management were categorised as related to patient, caregiver and healthcare delivery system.

Conclusion: Research studies which looked specifically at neonatal pneumonia alone were rare, and like the neonatal pneumonia-specific management guidelines, tended to be older. More recent studies looked at neonatal pneumonia as a component of the larger disease entity, neonatal sepsis.

Interventions for the control and prevention of anaemia among children and adolescents: An Overview of Systematic Review

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Background: Seventy per cent of children in India aged between 6–59 months are anaemic. The prevalence of anaemia is also higher among adolescents. This overview of systematic reviews would help to identify the knowledge gaps, generate a research agenda and inform the policy makers regarding appropriate and context specific interventions for childhood and adolescent anaemia.

Objectives:

1. To map the interventions available for addressing childhood and adolescent anaemia in both poor resource settings and developed countries.

2. To study the effectiveness of interventions for improving childhood and adolescent anaemia, as concluded in systematic reviews

Methods: This overview included Cochrane as well as non-Cochrane SRs that have evaluated the effect of various interventions to prevent, control, treat or improve childhood and adolescent anaemia irrespective of language.

Population: The age group of the study subjects included children (6 months to 10 years) & adolescents aged up to 19 years. SRs evaluating any one or combination of interventions for preventing, controlling, treating and improving childhood and adolescent anaemia with or without any interventions for the comparison group were included.

Intervention: Interventions ranged from iron supplementation, iron fortification, food diversification, behavior change communication, health education, Water, Sanitation, and Hygiene (WASH) interventions, treatment / chemoprophylaxis for malaria, anti-helminthic treatment and/or combination of interventions.

Comparison:

- Any one intervention or combination v/s placebo or no treatment
- One intervention/combination verses another intervention

Outcome:

- The primary outcomes included reduction in Anaemia (defined using haemoglobin (Hb) level) and improvement in Haemoglobin concentration (g/dl)

Search Strategy: A search strategy and search terms were finalized by consensus after discussion and brainstorming in consultation with an Information Scientist. A total of nine databases were searched. Screening of the title & abstracts of the articles was done using COVIDENCE software with two stage screening process. Methodological quality of the individual SRs was assessed using R-AMSTAR [Assessing the Methodological Quality of Systematic Reviews] checklist. Data synthesis and Compilation of Reports was done using RevMan 5.3 (Review Manager) for overview of SRs.

Main results: The overview included 46 SRs which described several interventions towards the control, treatment and/or prevention of anaemia in childhood and adolescence. Among the included SRs, 9 were published in Cochrane Database of Systematic reviews. Across all the groups, for the treatment and/or control of anaemia and Haemoglobin - 11 of 15 SRs reported the improvement in anaemia with iron supplementation. With fortification, most of the SRs reported mixed results. Uniformly, multi-nutrient interventions had better outcomes related to anaemia. Home fortification with MNP was reported to improve the anaemia status among children. WASH interventions - available evidence is suggestive for growth in children under five years of age and not anaemia. R-AMSTAR score range - 17 to 43 (possible range 11 to 44). We assessed the quality of included reviews as high. Mean score for R-AMSTAR tool was 35.4 (SD: 6.5). Since the SRs included overlapping age groups, we did not do sub group analysis with respect to the participants' age. Quality of evidence was moderate for the interventions.

Conclusion: We conclude that the SRs evaluating iron supplementation uniformly reported improvements in anaemia, haemoglobin and blood parameters among children. Also multi nutrient supplementation improved the outcomes better than a single micronutrient. However with respect to food fortification, the studies showed mixed results.

**Gender-Responsive Policing’ initiatives designed to enhance confidence,
satisfaction in policing services and reduce risk of violence against women in
Low and Middle Income Countries – A systematic review**

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Background: GBV is a global issue. Overall, 35% of women worldwide who have experienced either physical and/or sexual intimate partner violence or non-partner sexual violence [WHO, 2013]With this high proportion of violence, they frequently require services for justice and security including policing services.Their disadvantaged social position, fear of victimization and gender insensitivity in care acts as hindrance in seeking appropriate support

Objectives: 1.To identify and thematically classify interventions related to Gender Responsive Policing to address violence against women in Low and middle income countries and to synthesise the existing evidence on effectiveness of different ‘gender-responsive policing’ interventions

Methodology: 2 stage approach was carried out, stage 1, Mapping of Literature on Gender Responsive Policing and in stage 2 we synthesized the effectiveness of the GRP interventions. A standard Cochrane methodology was adapted, eppi-centre software was used for the data management and the analysis of the results.

Results: Gender Responsive Policing is influenced by various factors including the socio-cultural factors, gender disparities, religious factors and infrastructural availability, In Pakistan, increasing the role of women in policing seems an important component for dealing with VAW. Attitudinal change, training and involvement of community in policing services are important to increase gender responsiveness and accountability in policing services. Overall, the GRP interventions seem to be applicable in South Asia region including Pakistan. However, there are implementation challenges with each of these interventions that needs to be addressed to gain the desired results.

ABSTRACTS OF POSTER PRESENTATIONS

Mothers' knowledge and practice towards diarrhoeal management in children under five

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Background: The diarrhoeal diseases are the major public health problems especially in children of the developing countries. And globally diarrhea remains the second most common cause of death among children under five.

Objective: The aim of the study was to assess mothers' knowledge and practice in the management of diarrhea in under five children.

Methodology: The study was conducted in Institute of Child health and Children's hospital (ICH), Gandhinagar, Kottayam, which was a cross sectional study for 7 days. 100 mothers who have children under 5 years were selected for the study. Convenience sampling method and a well- structured interview schedule was used for data collection. Mothers' knowledge was assessed by using scoring technique. Percentage and frequencies were reported.

Results: The study reveals that 85% of mothers have good knowledge about diarrheal management, 13% mothers have average knowledge and only 2% have poor knowledge about diarrheal management. The socio demographic variables such as age, economics status, education has an impact on mother's knowledge and practice towards diarrheal management.

Conclusion: The mother's knowledge and practice towards diarrheal management is influenced by various factors such as age, education, economics status and religion.

Common health problem among the children of age group below five years

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Background: Young children seem to be constantly catching diseases that includes with cold, coughs, fever and gastro-relates are common issues for the children. The health problems faced by children include low birth weight, malnutrition and parasitosis, accidents and poisoning and behavioral problems.

Aim: The aim of the study was to assess the Common Health Problems among the Children of the Age Group below Five Years.

Methodology: The study was conducted at Institute of Child Health and Children's Hospital (ICH), Gandhinagar, Kottayam, from 8th to 10th November 2017. The study was a cross- sectional study. Hundred mothers were selected for the study, who have children under five years of age. Interview schedule was used for collecting data. Convenient sampling technique was used. Percentages were reported and hypothesis was tested.

Result: Most commonly health problems were respiratory infections 52% of children, diarrhea 13% and other diseases like urinary infection, skin allergy, and malnutrition 35%. The study reveals that the socio-demographic variables such as age, sex,

economic status, area of residence, education of mother have great impact in children's health.

Conclusion: Respiratory infection is the most common health problem among the children and it includes chest infections to fever. Children from rural area are more affected by respiratory infection and mother's education above higher secondary shows decline the respiratory infection of children.

The risk factors of respiratory tract infection among children under five years of age

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Background: Respiratory tract infection (RTI) constitutes the major causes of mortality and morbidity among under- five children. Respiratory tract infection refers to any of a number of infectious diseases involving the respiratory tract. They further classified as an upper respiratory tract infection and lower respiratory tract infection. These are very common disease in childhood.

Aims: The study was aimed to determine the risk factors of respiratory tract infection among children under five years of age.

Methodology: Institute of Child Health And Children's Hospital (ICH), Gandhinagar, Kottayam, Kerala. Cross sectional study was conducted. Hundred mothers who have children under five years were selected for the study. Interview schedule was used for the collection of data. Percentages were reported.

Result: 74% of children were affected by RTI, among the sample 54% males and 46% females. From this study it was clear that the RTI was reported more among the males. 80% of Children belong to rural area. 40% of RTI was affected from Dust. The study reveals that socio demographic variables such as age, sex, economic status, area, education of mother's knowledge have a great impact on RTI.

Conclusion: The risk factors of RTI were high among the children under five years of age, which was common cold and cough. High risk factors of RTI were seen among rural area. Most of the children under study had history of acute respiratory tract infection.

A study on nutritional status among children in the age below five years in an anganwadi in Ayarkunnam Grama Panchayath, Kottayam

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Background: The present nutritional status of the children in the age group under five years in an Anganwadi in Ayarkunnam Grama Panchayath, Kottayam.

Aim: The aim of the study was to assess the nutritional status among children in the age below 5 years.

Methodology: Different Anganwadies in Ayarkunnam Grama Panchatath, Kottayam District were taken for the study. Cross-sectional study was conducted in the month of November. The study samples consisted of 50 children under five years of age. A well-structured Interview schedule was used. Anthropometric measurement of the children was measured using properly calibrated equipment. Interviewer was used for taking measurements and administering the questionnaire. Nutritional status was determined by computing weight for age and grading nutritional status was done using IAP classification. Percentages were reported and hypothesis testing was performed.

Result: The data reported that 16% are low birth weight and 84% are normal birth weight. The data interpreted that 66% of children are normal, 28% have mild under nutrition, 6% have moderate under nutrition. The study reveals that 100% of the children are immunized up to their age.

Conclusion: The birth weight had a positive relationship with the current under nutrition status of the child. Maternal educational status was not associated with the prevalence of under nutrition. Breast feeding and complementary feeding practices were satisfactory.

The study on awareness about immunization of under five children among mothers attending outpatient department in Institute of Child Health (ICH) hospital in Kottayam, Kerala

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Background: Immunization is the most cost effective public health intervention to reduce childhood morbidity and mortality. Thousands of children can be saved from vaccine preventable diseases each year by immunization. The knowledge of mothers is an important factor for better immunization coverage. Less knowledge affects decision making regarding immunization.

Aim: To assess the knowledge about immunization of under five children among mothers.

Methodology: A cross-sectional study was done among mothers of under five children attending the OPD of pediatrics in ICH hospital in Kottayam. Hundred mothers who have children under five years were selected for the study. A well-structured interview schedule was used. Mother's knowledge was assessed by using scoring technique.

Results: 93.8% of mothers know that vaccines are beneficial for their child. From the study it is clear that mothers belonging to high economic status have good awareness about immunization schedule. 92.9% were aware about side effects of vaccine. 56% of mothers acquired knowledge regarding immunization through health workers.

Conclusion: The present study focuses on knowledge of immunization among mothers of under five children. There are several gaps in mother's knowledge regarding availability of vaccines for specific disease especially optional vaccines.

Behavioural changes due to technical gadgets and its health impact among the college students in the age group of 18-22 at Vaikom, Kerala

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Background: In the present era, the introduction of modern technological gadgets has captured the attention of global population. The dependency of people on these technical gadgets and services provided by these has reached at such level, without these they can't think a step forward in the direction of their growth. The degree of dependency is leading to addiction of technological devices and services. Youth is the most vulnerable group among the population to be addicted to technology. The study was designed to examine the use of technological devices by youth.

Objectives: Mainly the focused objectives are to study the behavioural changes in teenagers due to their gadget, to assess the health impact due to behavioural pattern by the use of tech-gadgets, to study the health impact and behavioural changes with the time duration of use of gadgets and to identify the frequency of addictive.

Methodology: Among the college students in the age group of 18-22 at Vaikom, Kottayam. Cross sectional study in the month of November 2017. A stratified number of samples from the specified college were included in the study. A structured questionnaire was used and the responses were evaluated and graded. Proportions, percentages and chi-square test were used for analysis.

Results: From the total sample 58% reported health impact and 59% had behavioural changes due to technical gadgets. In the case of behavioural changes and health impact, there were 22% of students showing health impact due to behavioural changes. Comparing between Arts and Science, the arts students showed both behavioural change and health impact which was more than science students. The duration of the use of gadgets affected behavioural changes and health impact significantly.

Conclusion: As the technology is developing faster and faster, which have advanced function to facilitate, improve and even change the life of the whole society. The use of mostly advanced technological gadgets are mostly using by youth, who are students. The focused use is making changes in lifestyle from their family to society inadequately. So the family and society care is must needed precaution for behavioural changes due to the use of technological gadgets.

A study on prevalence and risk factors of diabetes mellitus in Vijayapuram Gram Panchayat, Kottayam, Kerala.

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Background: Diabetes Mellitus is a commonly seen non communicable disease affecting majority of the world population.

Aim: To study find the prevalence and risk factors of Diabetes Mellitus based on various factors like demographic details, heredity, food habits, physical activities, bad habits etc.

Methodology: The population selected for the study were the people residing in Vijayapuram Gramapanchayat, Kottayam in the age group of above 30 years. The study was conducted in November 2017. Data was collected through simple random sampling method with the help of structured interview schedule. The sample consisted of 100 people belonging to the age group 30 and above. Frequencies and percentages were reported

Results: From the sample population 34% were found to be diabetic. 38.23% belonged to 60 and above age group, 94.11% used mixed diet, 17.64% used alcohol, 55.88% did not have physical activities, 82.35% of diabetic patient were having family history of diabetes, 44% had excessive thirst and 32.35% had educational qualification up to degree.

Conclusion: The study revealed that among 100 samples 34 people had diabetes and 66 people did not have Diabetes Mellitus. The study revealed that males suffered from diabetes at a rate higher than females.

A study on prevalence of hypertension among the age group of 45-65 years in Vijayapuram Grama Panchayath, Kottayam district, Kerala.

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Background: High blood pressure or hypertension occur when blood pressure increases to unhealthy levels.

Aim: To study the prevalence of hypertension among 45- 65 age group.

Methodology: The people residing in Vijayapuram Grama Panchayath in Kottayam district, Kerala were included in the cross-sectional study. Primary data were collected with the help of structured interview schedule and simple random sampling method was used for the selection of sample. Frequency and percentages were reported.

Results: The study reveals that hypertension level found to be increased in males (58.33%) than females. Hypertension was high among people who consumed whole egg (41.66%) and users of reused oils (41.66%). People with less physical activity were more prone to hypertension (55.55%).

Conclusion: In the study it was found that 36% people had hypertension and 64% people did not have hypertension. In this study, males were more hypertensive than females.

Knowledge about blood donation among higher secondary school students among the age group of 15 to 17 at Erattupetta, Kottayam

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Background: Blood donation is one of the most significant contributions that a person can make towards the society. It is not harmful for an adult person to donate blood. The body of the donor can regenerate the blood within few days. It poses no threat to the metabolism of the body.

Aim: To study the knowledge and interest among students higher secondary school.

Methodology: Convenient sampling was used for the study. Sample was obtained directly from the higher secondary school students in this sampling a structured self-administrated questionnaire which was used to assess knowledge and interest of blood donation. The study was conducted in the month of November 2017

Results: From the study, in case of gender, 59.94% of male had average knowledge about blood donation. In case of all study streams, science students that were 77.41% had the average knowledge about blood donation. Among total sample, 78% of students willing to donate blood and 73% had knowledge about anaemia.

Conclusion: The main objective of the study is to assess the knowledge of higher secondary school students regarding the blood donation. Mainly the blood donation is influenced by certain factors such as age, health status and knowledge regarding blood donation. In this study it is clear that the students have an idea about blood donation and their blood group but they denote idea about whom to donate blood.

Health and Psycho-Social impact on Menstrual Hygiene Management among adolescent girls in the age group of 12 to 14 at Kottayam, Kerala.

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Background: Menstruation is an integrated part of human life and menstrual hygiene is fundamental to the dignity and wellbeing of women and girls.

Aim: To study Health and Psycho-Social impact on Menstrual Hygiene Management among adolescent girls.

Methodology: A cross-sectional study was conducted at a Girls Higher Secondary School, Kottayam, Kerala. The study was conducted in the month of November, 2017. The study was intended to find out the impact of health and psycho-social factors on menstrual hygiene management by assessing the usual hygiene practices, health and psycho-social factors affecting the menstruation. A self-administrated, open-ended questionnaire was used for the data collection. A sample of 100 adolescent school girls in the age group of 12 to 14, were included in the study. Frequencies, percentage and graphs were reported.

Results: 61% of girls using both cloth and pad as menstrual management material. 78% of girls had pre-menstrual syndrome and 79% of girls had menstrual pains. 94% of girls faced avoidance from family and friends during menstruation. 84% of girls hesitated to speak about menstruation. **Conclusion:** Social and cultural restrictions, hesitation to speak about menstruation, pre-menstrual and menstrual complications and avoidance from family and friends are the main problems related to menstruation among adolescent girls.

Perceptions regarding tobacco cessation counselling among dental students and graduates: a cross-sectional questionnaire survey

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Background: Tobacco usage is a global concern and it is essential to curb its usage and increase awareness among patients. Dental professionals' contribution in tobacco cessation will definitely make a stark difference. Thus it is important to assess dental students' and graduates' knowledge, attitude and practice towards Tobacco cessation counselling (TCC).

Materials and methods: The descriptive, cross-sectional survey was carried out among 286 students of a dental college in South India. A well-structured, pretested, self-administered questionnaire consisting of 17 close-ended questions was employed to assess knowledge, attitude and practice towards TCC.

Results: Almost all study participants agreed that tobacco cessation counselling is under the scope of dental practice and admitted that it is the responsibility of dental professionals to educate the patients for the same. Majority of graduates responded that they have done tobacco cessation counselling whereas less than two-third of the undergraduates have done the same. This difference between two groups was statistically significant ($p < 0.001$). A significantly higher number of graduates (79%) were aware of 5A's and 5R's protocol for TCC as compared to undergraduates (50%). But less than one-fifth of study population have actually applied this protocol for TCC.

Conclusion: There is a need to motivate young graduates and students about TCC. This will develop a more professional competence and helps to encourage the dental professionals in developing a preventive mind set about tobacco use. Thus, it will help in enhancing the long-term rates of quitting tobacco among patients, which will prove beneficial in controlling tobacco related diseases in near future.

Assessment of awareness regarding cardiovascular diseases among college students

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Background: Cardio vascular disease includes all the disease of the heart and circulation including coronary heart disease, heart failure, congenital heart disease and stroke.

Aim: The aim of the study was to assess the awareness regarding cardiovascular disease among college students.

Methodology: The study was conducted at St. Xavier's College, Vaikom, Kottayam and School of Medical Education, Gandhinagar, Kottayam. It was a cross-sectional study, 100 college students were selected for the study. The convenience sampling method and a well-structured interview schedule was used for data collection. Student's awareness was assessed by using scoring technique. Percentage and frequencies were reported and chi- square test was used for data analysis.

Results: The study revealed that 69% of students had good awareness, 31% of students had average awareness and none of the sample had poor awareness. Among the study subject highest awareness belonged to professional students i.e. 57.97%.

Conclusion: The awareness of the students towards cardio vascular disease is influenced by socio- demographic variables and stream of education.

Lifestyle disease among women in the age group of 30-60 years: A study conducted at Arpookkara Grama Panchayath, Kottayam, Kerala

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Background: Inadequate physical activity and unhealthy dietary patterns may increase risk for chronic diseases such as coronary heart disease, cancer, diabetes etc.

Aim: To study the lifestyle associated risk factors for non-communicable disease among women (30-60 years).

Methodology: Arpookkara Grama Panchayath Kottayam in the month of November 2017. Convenience sampling was used for the study. Samples of 100 women residing in the area were included in the study. A self-administrated schedule was used. Responses were evaluated and graded. Two way tables, percentages, graphs and chi-square test were used for analysis.

Results: About 64% of women had lifestyle diseases. 55% of unemployed women had lifestyle diseases and also seemed that menopause women had lifestyle diseases.

Conclusion: The highest frequencies of the studied subject their lifestyle regarding dietary pattern, physical exercises and hereditary factors. The study showed that people were spending their leisure time in an unhealthy way.

A study on personal hygiene among High School girls: A study conducted at govt. Girls high school, Ettumanoor and St. Marcellinas Girls High School, Kottayam, Kerala

Sreelatha J

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Background: Personal hygiene may be described as the principle of maintaining cleanliness and grooming of the external body. Personal hygiene is important for health especially in adolescent girls.

Aims: The aim of the study was assess the menstrual hygiene and general hygiene practice of girls in school.

Methodology: The study was conducted on Government Girls High School, Ettumanoor and St. Marcellinas High School, Kottayam, Kerala. It was a cross sectional study. 100 students were selected for the study. Convenience sampling method and well structural interview schedule was used for data collection. Assess the hygiene practice of the girls. Frequency distribution, two way table, Chi-square test, graph and percentage were used for data analysis.

Results: The study reveals that 92% girls used soap and water for bathing purpose. 80% had the habit of cut short nails. 83% used sanitary pad for menstruation.

Conclusion: The sample study indicates that students take twice a day bath whose mothers were SSLC educated. Girls had habit of brushing after meals. Students who take daily bath reported absence of disease. By testing of bathing and skin disease, there is no significant relation between them. The study revealed that girls use sanitary pad during menstruation.

A study on prevalence and risk factors of cardiovascular diseases (above 45 years) in Apropokara Grama Panchayat, Kottayam district, Kerala

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Background: The cardiovascular disease (CVD) is a class of diseases that involve the heart or blood vessels. Cardiovascular diseases are the leading cause of death globally.

Aims: Aim of the study was to assess the prevalence and risk factors of cardiovascular diseases in above 45 years.

Methodology: The cross-sectional study conducted on Arpookara, GramaPanchayat, Kottayam, Kerala. The cross-sectional study. The data collection was through convenient sampling. The sample consists of 100 people belonging to age group above 45 years. The data was collected through interview schedule. Percentage and frequencies were used and chi-square test was used.

Results: The study reveals that 36% of sample population have cardiovascular diseases. 59% of samples are affected by hereditary factors, 69% of samples have diabetics.

Conclusion: The study gives the importance to the significant changes in the lifestyle and food pattern with growing affluence in recent years in the setting of chronic diseases.

An assessment on the factors affecting food choices among school students [Age group of 11-16] – a study conducted at St. Micheal’s Higher Secondary School Kaduthuruthy, Kottayam district

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Background: Food choice is affected by the individual’s difficulty in obtaining that food, the alternative reinforces available to the subject, and the degree to which the subject has deprived of that food.

Aim: The study is aimed to assess factors affecting food choices among school students [age group of 11-16]

Methodology: The study was conducted in St. Micheals Higher Secondary School Kaduthuruthy, Kottaym district. It was a cross-sectional study. Hundred school students (age group of 11-16) were selected for the study. Interview schedule was used for collecting sample. Frequency distribution table, percentage forms, different graphs and charts were reported.

Results: From the study it is clear that, out of 100 students, 68% of the students consumed junk foods. The food preferences of the sample population revealed that 65% of the students prefer homely meals. Among the sample population 85% of the students did not skip their breakfast.

Conclusion: The study shows that most of the students did not consume junk foods. The food preferences of the students shows most of the students’ preferred homely meals. The behavior pattern of the students showed majority of the students did not skip their breakfast.

A study on the effects of substance abuse among adult males in an age group of 20 – 50 years at Vellavoor and Manimala panchayat

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Background: Substance abuse is a worldwide problem that affects millions of people. The effects of substance abuse is increasing day by day.

Aims: to study the social, biological and psychological effects of substance abuse in adult males.

Methodology: The sample collected from two panchayat of Kottayam District, Kerala. The study was conducted in the month of November, 2017.

Materials and methods: The data collection was through convenient sampling method. The sample consists of 100 numbers of adult males in an age between 20 to 50 years. The sample was taken from two panchayats. The data was collected through interview schedule. Graphs, chi – square test, percentage and frequencies were used.

Result: among the substance abusers 43% of individuals had education up to SSLC. 56% of substance abusers were from low income levels. 62% of individuals were alcohol abusers. Among the sample 67% of substance abusers had health problems and 55% of substance abusers had health problems due to the use of various substances. 69% of substance abusers did not have psychological problems due to the use of substances.

Conclusion: The individuals are suffering from various physical, social, and psychological problems at increased levels due to the use of various substances like alcohol, tobacco, pan masala etc. They know the effects of substance abuse but they cannot control by themselves.

To study the knowledge of alcoholic liver cirrhosis among young adults – a study conducted in a professional college, Kottayam district, Kerala

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Background: Chronic liver disease is closely associated with lifestyle, and public enlightenment of the lifestyle factor is important in reducing prevalence of liver cirrhosis.

Aim: The aim of the study was to assess the knowledge of Alcoholic Liver Cirrhosis among young adults.

Methodology: A cross sectional study was done among young adults, study conducted in a professional college, Gandhinagar, Kottayam.. A sample of 100 students was selected as sample for the study. A well- structured interview schedule was used. The student's knowledge was assessed by using scoring technique.

Results: 46% of students had good awareness about Alcoholic liver cirrhosis, 37 % of students had average awareness, 17% students had poor awareness. The study reveals that 17% of adults used alcohol, 15% were smokers, 26% were tobacco users and the remaining 42% were not having any bad habits.

Conclusion: The present study focuses on knowledge of alcoholic liver cirrhosis among young adults. The students have good knowledge about alcoholic liver cirrhosis. Majority of the students have good knowledge about alcoholism and its side effects.

Dysmenorrhea severity and its associated symptoms among high school girls a study conducted at government girl's high school and St. Marcellinas Girls High School in Kottayam district.

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Background: Dysmenorrhea, also known as painful periods, or menstrual cramps, is pain during menstruation. Its usual onset occurs around the time that menstruation begins. Symptoms typically last less than three days. The pain is usually in the pelvis or lower abdomen.

Objectives: In this study, it is aimed,

1. To study the prevalence of dysmenorrhea.
2. To study the evidence of severity of the problem.
3. And also to study the dietary and menstrual history related to the problem.

Materials and Methods: Research done in the month of November 2017 at Govt. G. H. School and St. Marcellinas Girls' High School, Kottayam, Kerala. Interview schedule method was used to collect the data, and 116 samples were taken from the population of 420 students.

Result: According to the findings, the prevalence of dysmenorrhea was very high with 72% . 45% of the students who experienced pain rating their pain as moderate. The average age of menarche was 12-13 years (86.7%).The average menstrual cycle duration of the participants reported to have number of days of menstruation was 5-6 days (51.8%).The most of the participants were using mixed diet (96.78%).In dietary history 86.75% of the participants were using fast food, 83% of the participants were using fruits and 97.59% of them using sweets in their diet. The participants reported to have dysmenorrhea associated symptoms.

Conclusion: The Dysmenorrhea severity and associated symptoms are depends with dietary pattern of the students in order to reduce this ,school authorities are required to give an effective health education, encourage their students to increase the use of vegetables in their diet, reduce the use of fast food and sweets.

Keywords: Dysmenorrhea, Awareness, Interest.

Knowledge about organ donation among higher secondary School students in Erattupetta Govt.High Secondary School

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Background: Organ donation is where a person offers their organs for transplant. Their organs are given to someone who has damaged organs that need to be replaced. An organ transplant may save a person's life, or it may significantly improve their health and quality of life.

Aim: to study the knowledge and interest among students higher secondary school.
Methodology: Convenient sampling is used for the study. The sample is obtained directly from the higher secondary school students in this sampling a structured self-administrated questionnaire which was used to assess knowledge and interest of blood donation. The study was conducted in the month of November 2017.

Results: From the study, in case of gender, 64.5% of male had good knowledge about organ donation. In case of all stream, commerce students which is 42.93% had average knowledge about organ donation. Among total sample, 88% of students were willing to donate organs.

Conclusion: A donor can save a life. In this study it is clear that the students have an idea about organ donation and relevance. And also in this study revealed that the average level of awareness on organ donation in higher secondary school students.

A cross-sectional study to assess the epidemiological profile of Childhood Tuberculosis in Udupi taluk

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Background: Tuberculosis (TB) is a highly infectious disease, caused by Mycobacterium tuberculosis, especially in underdeveloped nations. One of the important determinant of TB in children after primary infection is age, as immune system of child is immature in (<3 years of age). Diagnosing TB in children is difficult because bacteriological confirmation is rarely achieved.

Materials & Methods: A cross- sectional study was carried out in the rural areas of Udupi taluk covering different PHCs among the age group of 0-14 years of both genders who were undergoing DOTS treatment in year 2014-15. A peer reviewed and validated questionnaire was developed and data was collected related to the epidemiological profile of childhood tuberculosis.

Results: Around 8 out of 14 participants were of age more than 5 years and most of them were females. Around 5 participants did not have cough and fever for more than 2 weeks. Out of 14, 4 were in intensive phase and others completed their treatment. All the participants were under category 1.

Interpretation & conclusions: In conclusion, it was found that mostly participants belonged to age more than 5 years and most of them were females. Among the family members having TB, mothers had more prevalence of TB. Out of 14, 6 participants weight decreased gradually. All the 14 participants were under Category1. All the parents encouraged their children for treatment. There was no case of relapse and defaulter.
