CHiLD

A new generation Newsletter from
CHILD DEVELOPMENT CENTRE
(An Autonomous Centre under Government of Kerala)
MEDICAL COLLEGE CAMPUS, THIRUVANANTHAPURAM

Cdc Health Initiative and Learning Division

VOLUME 01 | ISSUE 01 | JULY 2018

Event of the Month

An assessment report of children trained in Magic at Magic Academy prepared by CDC team in association with Kerala Social Security Mission was released by Hon Minister of Health and family welfare and social justice Smt P K Shylaja teacher on 7th June. 23 children were trained in magic by the eminent magician Shri Gopinath Muthukad. The different team members of CDC assessed the various aspects of these children including their cognitive assessment, behaviour assessment, functional status, overall health status and overall improvement using qualitative and quantitative methods. The report indicated the improvement in various aspects.

Experts who visited CDC

`Dr PSN Menon who is one of the senior paediatric endocrinologists and former professor of paediatrics at AIIMS, New Delhi visited CDC on 20th June 2018 and he spoke about the 'Interesting cases of Paediatric Endocrinology'

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Greetings from Child Development Centre.

It has long been an aim of our Centre to create a Newsletter and now I am happy to launch the Newsletter of Child Development Centre (CDC), Thiruvananthapuram. It essentially carries the information with regard to the major initiativesof CDC and the scientific information meant for students, researchers and clinicians. We plan a monthly schedule with print and electronic version. The name 'CHiLD' is an abbreviation derived from CDC Health Initiative and Learning Division, and is a publication under the agies of Information, Documentation and Dissemination Unit of the Centre. The e-version can be downloaded from the website www.cdckerala.org.

Your feedback and suggestions are highly solicited and this would definitely help in modifying the contents. I hope this publication would be a welcome addition to know the current developments in this scenario

Dr. Babu George
Director

Reader's Corner

Impact Factor Of a Journal

Babu George, Liss Maria Scaria

Eugene Garfield (1925-2017) first wrote about impact factor in Science magazine in 1955. In 1961 Science Citation Index was published. Sher and Garfield created the journal impact factor to select journals for the new Science Citation Index (SCI). The 'impact factor' (IF) refers to statistics calculated and published by Thomson Reuters as Journal Citation Reports (JCR). Calculation of an impact factor (IF) requires the total number of citations to the articles (the numerator) and the total number of articles published (the denominator) within specific time periods.

JCR gives a two-year impact factor and uses very specific time periods of publications and citations. The citation window here is the impact factor year, and the publication window refers to the two previous years.

The 2017 JCR impact factors (to be released in 2018) would be calculated as: Number of citations in 2017 to articles published in 2015 and 2016 in Journal ANumber of articles published in 201 5 and 2 016 in Journal A

The factors that have a huge impact on impact factors are as follows:

1. There are subject variations. Different subjects may have diverse levels and patterns of citation activity. History, Economics, Mathematics or Sociology journals may not have same levels of citations as medicine, chemistry or cell biology.

2. Within related subjects, for example, medicine, oncology, orthopaedics, dentistry also may have variations in their impact factors. The impact factor for New England Journal Of Medicine in 2016 was 72.406 and for CA-A Cancer Journal For Clnicians was 187.040

3. IFs are biased towards journals which publish review articles since review articles are read more and cited more. The availability of a particular journal influences IFs. The availability of journals as open access also may have a role to play in journal IFs.

4. Contentious or scientifically poor papers may increase the IF since scientifically poor articles or controversial papers are remembered more.

5. Larger and older journals generally have higher IFs because of their data base of articles and smaller journals also tend to have higher percentage change in impact factor even if there is a minor change in the number of citations received.

6. Language also creates issues with IFs. Non-English journals are generally cited less than English journals.

7. IFs are available only for journals covered by the SCI database. The citations in journals not in SCI data base are left out. Citations in books are not included in any IF calculation

IF is not available for all indexed journals. In fact, not all journals indexed in Index Medicus/ MedLine/ PubMed are indexed in the Thomson Reuters Journal Citation Reports. Similarly, not all journals indexed in Thomson Reuters Journal Citation Reports and consequently have an IF are listed in Index Medicus/PubMed/MedLine.

References: **Balhara YPS.** Indexed journal: What does it mean? Lung India. 2012;29(2):193. **Eugene Garfield**, Journal impact factor: a brief review, CMAJ, 1999; 161 (8):979-980.

Autism Spectrum Disorders Aetiopathogenesis

Babu George | ML Leena | MKC Nair

ABSTRACT Autism Spectrum Disorders (ASD) are characterised by a range of clinical features that can vary from individual to individual in both degree of severity and variability of the clinical presentation. The aetiology or causation of ASD has been a widely debated issue for several decades; however, the exact cause of autism is still unknown. Research has suggested that ASD may be caused by genetic and/or environmental factors. Among those, children with low genetic susceptibility, some maternal and obstetric factors have an independent role in autism aetiology, whereas among genetically susceptible children, these factors appear to play a lesser role. It was observed that there is an increased risk of ASD due to: (i) advanced maternal age; (ii) advanced paternal age; (iii) duration of gestation; (iv) intrapartum hypoxia; and (v) birth weight. Recent evidence also suggests potential links of immune dysfunction, dietary, metabolic and gastrointestinal factors.

20th Child Development Oration – 31st January 2018

Dr. Valsamma Eappen who is the Chair, Infant Child and Adolescent Psychiatry, University of New South Wales; Head, Academic Unit of Child Psychiatry, South West Sydney (AUCS)
Stream Director, Early Life Determinants of Health, Sydney Partnership for Health, Education, Research and Enterprise (SPHERE) and Director, Program 1, Co-operative Research Centre for Autism (CRC) delivered the oration on 'Autism - A Neurodevelopmental Journeyfrom Genes to Behaviour'

Early detection of Autism Spectrum Disorder among 2-6 year old children by community health workers

Babu George | Prasanna GL
Leena ML | Liss Maria Scaria

ABSTRACT :Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder and early identification of ASD is a crucial aspect in early intervention. This study was done to assess the feasibility of screening ASD among 2-6 year old children by trained Anganwadi workers. All children between the ages of 2- 6 yrs residing in the ICDS Urban - I project area were screened for ASD using the tool Trivandrum Autism Behavior Checklist (TABC). Atotal of 7394 children were screened by Anganwadi workers and 48 children were found to be positive. All screen positives were further evaluated by a trained developmental therapist and 14 children were confirmed as having ASD. Prevalence of ASD in this study was 1.8 per 1000 children and the male female ratio of ASD was found to be 4:1, which was similar to the findings from other reports. Early identification of autism among children using simple screening tools like TABC by trained community health workers was found to be a feasible strategy

Dr. M Zulfikar Ahamed

GENETICS, CONGENITAL HEART DISEASE AND CARDIAC SURGERY

Baby I

A 12 month old baby has Congenital Cyanotic Heart Disease. Diagnosed to have Tetralogy of Fallot (TOF) and is undergoing open heart surgery. Because of the slightly abnormal facies, a genetic study was ordered. The FISH test was positive for Di-George Syndrome 22Q11.2(CATCH 22). The surgeon was alerted to the genetic diagnosis.

Note

Di George syndrome can occur in 15% of TOF. It is associated with immune deficiency, thymus hypoplasia and hypocalcemia. The baby has to be given irradiated blood for transfusion. Otherwise graft versus host disease can occur due to the inherent immune disorder. Hypocalcemia can occur post operatively, which has to be prevented/ treated. Post-operative infection has to be watched for. Di George Syndrome can present with significant heart disease in infancy, frequent infections, Hypocalcemia, learning problems and behavioural problems. Other CHD in Di-George syndrome are Truncus Arteriosus and interruption or Aortic arch. CDC is getting the facility for the specialized test-FISH, this year, so all these CHD undergoing surgery can be evaluated at CDC itself.

Baby Two:

A funny looking baby of 4 months was having severe heart failure and was diagnosed to have AtrioventricularSeptal Defect (AVSD), Karyotyping revealed Down syndrome (21 trisomy). AVSD is the most common CHD in Down syndrome. CHD is present in 40% of Trisomy 21. The other CHD are VSD, TOF and Ostium ASD. Post operatively the baby can have pulmonary hypertensive crisis. This has to be anticipated in all AVSD with Down syndrome and has to be aggressively treated.

CDC is regularly doing the karyotyping for the diagnosis of Down syndrome and other chromosomal disorders.

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Congratulations

`**Dr Santhi Sarojam** for winning the first prize in poster presentation in the SALSD symposium conducted from 20-22nd April 2018, at New Delhi, on the topic—'Spectrum of mutations in GBA gene in Indian Population'

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