

## Scientist Profile

<b>Name</b>	Dr Leeberk Raja. I
<b>Designation</b>	Scientist - E
<b>Date of Birth</b>	15 June 1985
<b>Date of Joining :</b>	01 July 2021
<b>Date of joining present post :</b>	01 July 2021
<b>Discipline</b>	Dept. of. Clinical Research
<b>Address (off.) including Contact Number*</b>	ICMR- National Institute for Research in Tuberculosis No.1, Mayor Sathyamoorthy Road, Chetpet, Chennai – 600031 Phone : 044 – 28369500 ; Fax : 044-28362525
<b>Email address*</b>	<a href="mailto:leeberk2003@gmail.com">leeberk2003@gmail.com</a> / <a href="mailto:leeberk.r@nirt.res.in">leeberk.r@nirt.res.in</a>

### Educational Qualifications

DEGREE	INSTITUTION AND LOCATION	YEAR(s)	FIELD OF STUDY
MD	Christian Medical College,Vellore	2011 -14	Community Medicine
MBBS	Christian Medical College,Vellore,	2003-09	Bachelor of Medicine and Surgery

### 1. Research Experience

- **April 2011 to April 2014** - Post graduate Registrar, Dept. of Community Health, Christian Medical College, Vellore
- **May 2014 to June 2021** – Consultant, Division of Community Health, Family Medicine & Palliative Care, Bangalore Baptist Hospital, Bangalore.

### Studies conducted as a Principal investigator

1. Gut microbial profiles and nutritional status of adults in rural and urban areas in Bangalore (Funded by Nottingham Biomedical center, National institute for Health Research, UK)
2. Measuring the impact of Cardiovascular disease prevention program by verbal autopsy in Bangalore rural district
3. Sero prevalence of Varicella zoster virus (VZV) and factors associated with immunity among urban and rural pregnant women in South India

4. Incidence of Unintentional childhood injuries and risk factors for mortality and severe disability among children between 0-14 yrs of age in a rural block of South India
5. A Study on Altruism among the nursing students and professionals in an nursing institute attached to a tertiary care set up of Bangalore Baptist Hospital

**Studies conducted as a Co – Principal investigator & Co-investigator**

1. Seroprevalence of Covid-19 in an urban slum and Bangalore rural district : a population based cross sectional study
2. Nasal Calcium Salts for Clearing Exhaled Bio-aerosols in healthy volunteers and in asymptomatic and mildly symptomatic SARS Co-V- 2 patients
3. Challenges, experience and coping of health professionals in delivering healthcare in an urban slum in India during the first 40 days of COVID-19 crisis: a mixed method study
4. Serial Covid -19 serosurveys among healthcare workers from a tertiary hospital in south India
5. Anti-SARS-CoV-2 binding antibody response in fully vaccinated Health Care Workers : a cross sectional study in Bangalore
6. Vaccine hesitancy and it's predictors among adult population in an urban slum in Bangalore
7. A Pilot Study on feasibility of improving TB Detection using an AI software for CXR screening along with GeneXpert.
8. Do junior doctors “kidnap” literature? - A study on plagiarism
9. Prevalence of Complaints of arm, neck and shoulders (CANS) and stress and the efficacy of behavior modification on CANS among software professionals in Bangalore, India
10. Effectiveness of Carica Papaya leaf extract in increasing the platelet count in cases of dengue fever with thrombocytopenia” - A double blind placebo randomised controlled trial
11. Feeding practices and paternal involvement in feeding among children between 6 months to 2 years in an urban slum of Bangalore
12. Validity of urine dipstick test in predicting urinary tract infection in Primary care setting in Bangalore city: a diagnostic accuracy study
13. Risk factors for relapse of alcoholism after a community based intervention in a rural district of Karnataka
14. Quality of diabetic care in a tertiary center - A cross sectional study
15. Prevalence of erectile dysfunction among patients with diabetes mellitus among patients attending primary care health centers.
16. Quality of life among migrant construction workers in Bangalore City
17. Prevalence of tobacco consumption among middle and high school children in Bangalore rural district: A cross sectional study

18. Exploring the reasons for refusal of Insulin therapy among Type 2 Diabetes Mellitus patients in an urban population in North Bangalore
19. Prevalence, quality of life and health seeking behavior of Lower Urinary Tract Symptoms (LUTS) among men presenting to a health
20. Profile and outcome of referrals from primary care clinics of a tertiary care hospital in Bangalore- An observational study
21. Prevalence and contributing factors for social media addiction among adolescents in Bangalore: A cross Sectional study
22. Morbidity, risk factors and outcome of unintentional injuries among adolescents in Bangalore- a cross sectional study
23. Perceptions of farmers' and farm workers' wives on the use and hazards of agrochemicals in rural Vellore.
24. Perception and awareness of unintentional childhood injuries among primary caregivers of children (0-14 years) in Vellore, South India: a community-based cross-sectional study using photo-elicitation method
25. A community based cross-sectional study on knowledge, attitude and perceptions about Asthma among healthy adults in rural south India

## 2. Membership/Fellowship of Professional Societies/Associations

- Collaborator, Global Burden of Diseases
- Academic Editor, Editorial Board, PLoS One
- Member, Women & Health taskforce, The Network : Network towards Unity for Health
- Life Member, Indian Medical Association
- Life Member, Indian Association of Preventive and Social Medicine
- Life Member , Christian Medical Association of India
- Life Member , Indian Association of Occupational Health
- Life Member, Indian Association of Public Health
- Reviewer – BMJ Open, BMJ Injury prevention, BMC injury epidemiology, PLoS Journals.

## 3. Workshops/Conferences/Symposiums

### Conference presentations

1. Presented a poster on “*Homeless women in South India*’ at the annual conference of The Network:Towards Unity for Health (TUFH) in *Ghent, Belgium* ,2006.
2. Presented a poster on “*Knowledge and Perception on Agrochemicals among wives of the farmers in rural south in India*” at *Rendez-Vous in Thunder Bay, Canada* ,2012.

3. Resource person in a Mini-workshop themed “*Access to healthcare for pregnant women, women who recently gave birth and their newborns*” at the Annual Conference of The Network:Unity for Health (TUFH) in *Ayuthaya, Thailand, 2013*.
4. Oral presentation on “*Perception on Unintentional injuries among rural mothers*” and won Best Oral Presentation award in 60th Annual Conference of Indian Public Health Association in March 2016 in *Dehradun*
5. Presented a paper titled “*Incidence, impact, medical consequences of unintentional childhood injuries in a rural block in South India*” in 12th World Conference on Injury Prevention and Safety Promotion (Safety -2016) in September 2016, *Tampere, Finland*
6. Guest speaker on Research Methods- CME for Academy of Family Physicians, Bangalore- July 2016
7. Resource for a Panel discussion on “*Diabetic management in Rural areas*” at 12<sup>th</sup> Wonca world Rural Conference in April 2018, New Delhi
8. Presented a paper titled “*Reducing alcohol-related injury: experiences from an alternative model from rural south India*” in 13<sup>th</sup> World Conference on Injury Prevention and Safety Promotion (Safety - 2018) in November 2018, Bangkok, Thailand.
9. Guest speaker for a session on “*Art and science of Publishing*” in Practical session on Research methodology for Practicing Physicians , a pre-conference workshop of 4<sup>th</sup> National Conference on Family Medicine in Primary care, *Bangalore ,2019*

#### **Workshops attended**

1. Clinical Trials, October 14th to 19th 2013 at the Dept.of Community Health, Christian Medical College, Vellore
2. Case-control Study Designs, October 21st to 26th 2013 at the Dept.of Community Health, Christian Medical College, Vellore
3. Principles and Practice of Epidemiology, July 9th to 21<sup>st</sup> 2012, at the Dept. of Community Health Christian Medical College, Vellore.
4. Developing a protocol for Cochrane Systematic Review in April 2017 conducted by Cochrane South Asia in Christian Medical College, Vellore.
5. Obtained in Certificate from National Institute after completing course on Health on Protecting Human Research Participants
6. Economic Basis of Health Care Intervention, July 9th to 21st 2013, at the Dept.of Community Health, Christian Medical College, Vellore.
7. National Faculty Development Workshop Conducted by National Board of Examinations in February 2016 at the Christian Medical College, Vellore.

#### **Workshop conducted**

- Faculty for National research methodology workshop for Diplomate of National Board students February 2019
- Faculty for approaching OSCE exam for Diplomate of National Board residents in Family Medicine, April 2018

- Resource person for CME on Research Methodology conducted by Academy of Family Physicians of India, July 2017
- Faculty for “Research in primary care” Pre-conference workshop of 4<sup>th</sup> National Conference of Family Medicine and Primary care

**4. Awards/Achievements :**

1. Student Fellowship awarded by GHETS ( Global Health Education Training and Service) to attend the annual Conference of The Network : Network towards Unity for Health ( TUFH) annual conference in Ghent Belgium (2006)
2. Second Certificate of Honour in Community Medicine awarded by Christian Medical College, Vellore
3. Student Fellowship award to attend Rendez – Vous ( annual Conference of TUFH & GHENT) in Thunder Bay, Canada (2012)
4. Travel grant awarded by GHETS ( Global Health Education Training and Service) to attend the annual Conference of The Network : Network towards Unity for Health ( TUFH) annual conference in Aythuya, Thailand ( 2013)
5. Partial fellowship to attend 12<sup>th</sup> World Conference on Injury Prevention and Safety Promotion ( Safety 2016) in Tampere, Finland ( 2016)
6. Won the best oral presentation award in 60<sup>th</sup> Annual conference of Indian Public Health Association in Dehradun, India (2016)

**5. Publications**

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<b>PubMed indexed</b>	<b>Number</b>	<b>Non- PubMed indexed</b>	<b>Number</b>
International	22	International	2
National	16	National	1
Total			41
<b>Conference Presentations</b>			
International	6	<b>RG score</b>	<b>33.81</b>
National	3	<b>h-index</b>	<b>12</b>

**Publications as first or corresponding author in indexed Journals**

1. **Inbaraj LR**, George CE, Chandrasingh S. Seroprevalence of COVID-19 infection in a rural district of South India: A population-based seroepidemiological study. *PLoS One*. 2021;16(3):e0249247

2. **Inbaraj LR**, Chandrasingh S, Arun Kumar N, Suchitra J, Manesh A. High susceptibility to varicella among urban and rural pregnant women in South India: a brief report. *Epidemiology and Infection*. 2021;149:e63.
3. Mehta O, **Inbaraj LR**, Astbury S, et al. (2021) Gut Microbial Profile Is Associated With Residential Settings and Not Nutritional Status in Adults in Karnataka, India. *Front. Nutr*. 8:595756.doi: 10.3389/fnut.2021.595756 (Joint first & corresponding author)
4. George CE, **Inbaraj LR**, Chandrasingh S, de Witte LP. High seroprevalence of COVID- 19 infection in a large slum in South India; what does it tell us about managing a pandemic and beyond?. *Epidemiol Infect*. 2021;149:e39. doi:10.1017/S0950268821000273
5. **Inbaraj LR**, Sindhu KN, Ralte L, et al. Perception and awareness of unintentional childhood injuries among primary caregivers of children in Vellore, South India: a community-based cross-sectional study using photo-elicitation method. *Inj Epidemiol*. 2020;7(1):62.
6. George CE, **Inbaraj LR**, Rajukutty S, de Witte LP. Challenges, experience and coping of health professionals in delivering healthcare in an urban slum in India during the first 40 days of COVID-19 crisis: a mixed method study. *BMJ Open*. 2020;10(11):e042171.
7. **Inbaraj LR**, Khaja S, George CE, Norman G. Paternal involvement in feeding and its association with nutritional status of children in an urban slum in a low-resource setting: A cross-sectional study. *Nutrition*. 2020;74:110735. doi:10.1016/j.nut.2020.110735
8. Daniel J, **Inbaraj LR**, Jenkins S, Ramamurthy PH, Isaac R. A community-based cross-sectional study on knowledge, attitude, and perceptions about asthma among healthy adults in rural South India. *J Family Med Prim Care*. 2021;10(5):1956-1962.
9. Kant P, **Inbaraj LR**, Franklyn NN, Norman G. Prevalence, risk factors and quality of life of Lower Urinary Tract Symptoms (LUTS) among men attending Primary Care slum clinics in Bangalore: A cross-sectional study. *J Family Med Prim Care*. 2021;10(6):2241-2245.
10. **Inbaraj LR**, Rose A, George K, Bose A. Perception of unintentional childhood injuries among mothers in rural South India. *Indian journal of public health* 61(3):211-214 .
11. **Inbaraj LR**, Rose A, George K, Bose A. Incidence and Impact of Unintentional Childhood Injuries: A Community Based Study in Rural South India. *Indian Journal of Pediatrics*. 2017 Mar;84(3):206-210
12. **Inbaraj LR**, Haebbar OJ, Saj F, Dawson S, Paul P, Paul Prabhakar AK, et al. Prevalence of musculoskeletal disorders among brick kiln workers in rural Southern India. *Indian J Occup Environ Med* 2013;17:71-5

13. Bhansali AJ, **Inbaraj LR**, George CE, Norman G. Can urine dipstick test be an alternative to detect urinary tract infection in limited-resource setting? - A validity study from Bangalore, India. *J Family Med Prim Care*. 2020 Feb;9(2):561-566.
14. Raghavendran S, **Inbaraj LR**, Norman G. Reason for refusal of insulin therapy among type 2 diabetes mellitus patients in primary care clinic in Bangalore. *J Family Med Prim Care*. 2020 Feb;9(2):854-858. doi: 10.4103/jfmpc.jfmpc\_973\_19
15. Rampure R, **Inbaraj LR**, Elizabeth CG, Norman G. Factors contributing to alcohol relapse in a rural population: Lessons from a camp-based de-addiction model from rural Karnataka. *Indian J Community Med* 2019;44:307-12.
16. Zabeer S, **Inbaraj LR**, George CE, Norman G. Quality of life among migrant construction workers in Bangalore city: A cross-sectional study. *J Family Med Prim Care* 2019;8:437-42.
17. Vijay Mohan, **Inbaraj LR**, Carolin Elizabeth George, Gift Norman. Prevalence of complaints of arm, neck, and shoulders among computer professionals in Bangalore: A cross-sectional study. *J Family Med Prim Care* 2019;1: 171-77
18. Raghavendran S, **Inbaraj LR**. Do family physicians suffer an identity crisis? A perspective of family physicians in Bangalore city. *J Family Med Prim Care* 2018;7:1274-8 [Pub Med]
19. **Leeberk Raja Inbaraj**, Carolin Elizabeth Georg, Nan Lin Kham, Gift Norman. Prevalence, perceptions, and practices associated with non-adherence to diabetes medications in primary care setting: A cross-sectional study in urban Bangalore. *Asian Journal of Medical Sciences* Vol.7(5) 2016 106-109
20. Celina LJ, **Inbaraj LR**, George JO Pinto. Pre-operative Indicators of Ossicular Necrosis in Tubotympanic CSOM. *Indian Journal of otolaryngology and Head & Neck Surgery*. Dec;68(4):462-467.
21. Veena B, Samal R, **Inbaraj LR**, George CE. Sublingual Misoprostol (Pge1) Versus Intracervical Dinoprostone (Pge2) Gel For Induction Of Labour: A Randomized Control Trial, *J Obstet Gynaecol India*. 2016 Oct;66(Suppl 1):122-8

### **Publications as a co-author**

22. Raj JP, Venkatachalam S, Amaravati RS, Siby N, Oommen AM, Jose JE, George M, Ramraj B, Penumutsa VS, Bodda DR, Rajad R, Reshmi R, Inbaraj LR, Rajiv S, Bhandare B, Aiyappan R, Mathew P, Saleem AK, Shetty R, Bhuvanewari G, Suresh Kumar T, Prasanna BL, Manderwad GP. Extent of awareness and attitudes on plagiarism among post-graduate resident doctors and junior medical faculty in India: a cross-sectional, multicentric study. *BMJ Open*. 2021 Jun 16;11(6):e046904

23. George CE, Salzman J, **Inbaraj LR** et al. Airway Hygiene in Children and Adults for Lowering Respiratory Droplet Exposure in Clean and Dirty Air. *Molecular Frontiers Journal*. 2020 December;
24. GBD 2019 Under-5 Mortality Collaborators (**Author: Leeberk Raja Inbaraj**). Global, regional, and national progress towards Sustainable Development Goal 3.2 for neonatal and child health: all-cause and cause-specific mortality findings from the Global Burden of Disease Study 2019. *Lancet*. 2021 Sep 4;398(10303):870-905.
25. GBD 2019 Tobacco Collaborators (**Author: Leeberk Raja Inbaraj**). Spatial, temporal, and demographic patterns in prevalence of smoking tobacco use and attributable disease burden in 204 countries and territories, 1990-2019: a systematic analysis from the Global Burden of Disease Study 2019. *Lancet*. 2021 May 27:S0140-6736(21)01169-7.
26. GBD 2019 Chewing Tobacco Collaborators (2021). (**Author: Leeberk Raja Inbaraj**) Spatial, temporal, and demographic patterns in prevalence of chewing tobacco use in 204 countries and territories, 1990-2019: a systematic analysis from the Global Burden of Disease Study 2019. *The Lancet. Public health*, S2468-2667(21)00065-7.
27. Bhattacharjee, N. V., Schaeffer, L. E., Hay, S. I., & Local Burden of Disease Exclusive Breastfeeding Collaborators (2021) (**Author: Leeberk Raja Inbaraj**). Mapping inequalities in exclusive breastfeeding in low- and middle-income countries, 2000-2018. *Nature human behaviour*, 10.1038/s41562-021-01108-6.
28. GBD 2019 Viewpoint Collaborators (**Author: Leeberk Raja Inbaraj**) . Five insights from the Global Burden of Disease Study 2019. *Lancet*. 2020 Oct 17;396(10258):1135- 1159.
29. GBD 2019 Diseases and Injuries Collaborators (**Author: Leeberk Raja Inbaraj**) Global burden of 369 diseases and injuries in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2020 Oct 7;396(10258):1204-1222
30. GBD 2019 Risk Factors Collaborators (**Author: Leeberk Raja Inbaraj**) Global burden of 87 risk factors in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2020 Oct 17;396(10258):1223-1249.
31. GBD 2019 Universal Health Coverage Collaborators. (**Author: Leeberk Raja Inbaraj**) Measuring universal health coverage based on an index of effective coverage of health services in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019 [published online ahead of print, 2020 Aug 27]. *Lancet*. 2020;S0140-6736(20)30750-9. doi:10.1016/S0140-6736(20)30750-9
32. LBD Double Burden of Malnutrition Collaborators. (**Author: Leeberk Raja Inbaraj**) Mapping local patterns of childhood overweight and wasting in low- and middle-income countries between 2000 and 2017 [published correction appears in *Nat Med*. 2020 Jul 2;:]. *Nat Med*. 2020;26(5):750-759.

33. Local Burden of Disease Diarrhoea Collaborators. (**Author: Leeberk Raja Inbaraj**) Mapping geographical inequalities in childhood diarrhoeal morbidity and mortality in low-income and middle-income countries, 2000-17: analysis for the Global Burden of Disease Study 2017. *Lancet*. 2020;395(10239):1779-1801.
34. Franklin RC, Peden AE, Hamilton EB, et al. (**Author: Leeberk Raja Inbaraj**) The burden of unintentional drowning: global, regional and national estimates of mortality from the Global Burden of Disease 2017 Study [published online ahead of print, 2020 Feb 20]. *Inj Prev*. 2020;injuryprev-2019-043484.
35. Local Burden of Disease Vaccine Coverage Collaborators (**Author: Leeberk Raja Inbaraj**). Mapping routine measles vaccination in low- and middle-income countries. *Nature*. 2020 Dec 16:1-10.
36. Nicole Solvig, **Leeberk Raja**, Carolin Elizabeth George, Bethesda O'Connell, Priya Gangadharan, Gift Norman. Analysis of Knowledge of Menstruation, Hygiene Practices, and Perceptions in Adolescent Girls in India. *Modern Health Science*; Vol. 2, No. 1; 2019
37. James SL, Castle CD, Dingels ZV et al. (**Author: Leeberk Raja Inbaraj**). Estimating global injuries morbidity and mortality: methods and data used in the Global Burden of Disease 2017 study [published online ahead of print, 2020 Aug 24]. *Inj Prev*. 2020;injuryprev-2019-043531. doi:10.1136/injuryprev-2019-043531
38. James SL, Castle CD, Dingels ZV et al. (**Author: Leeberk Raja Inbaraj**). Global injury morbidity and mortality from 1990 to 2017: results from the Global Burden of Disease Study 2017 [published online ahead of print, 2020 Apr 24]. *Inj Prev*. 2020;injuryprev-2019-043494.
39. Victor A, George CE, **Inbaraj LR**, Norman G. Benefit or Harm? A study on impact of collusion on the quality of life among palliative care patients. *Indian J Palliat Care* 2018;24:61-6.
40. Mark RF, **Leeberk R**, Esther I, Harsh R, Joel N, Nitin P, et al, Perceptions of farmers' and farmworkers' wives on the use and hazards of agrochemicals in rural Vellore. *New Solutions: A Journal of Environmental and Occupational Health Policy* Vol. 23(4) 625-642, 2013.
41. **Leeberk Raja**, John KR, Homelessness in Vellore Town. *Alumni Journal* 2009, Christian Medical College, Vellore