

Activity Report 2021-2022 Indian Institute of Public Health Shillong



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1. Introduction

1.1 About IIPH-Shillong

India and in particular its North East Region (NER) continues to be confronted by the unfinished agenda of infectious diseases, nutritional deficiencies and unsafe pregnancies while faced with the emerging challenge of escalating epidemics of noncommunicable diseases. This composite threat to the nation's health and development needs a concerted public health response that can ensure efficient delivery of cost-effective interventions for health promotion, disease prevention and affordable diagnostic and therapeutic health care. Covid-19 is not the only public health crisis that we are dealing with, nor will it be in the future. Almost every year there are communicable disease outbreaks of swine flu, Japanese encephalitis, scrub typhus, typhoid and brucellosis in the NER. Just as importantly, there is a persistent need for disease prevention in multiple domains involving nutrition, environmental exposures, maternal and child health, injury/violence prevention, mental health and more.

The Indian Institute of Public Health Shillong (IIPHS) was established by the PHFI in collaboration with the Government of Meghalaya in 2014 as a regional public health institute. IIPHS is intended to redress the limited institutional and systems capacity in public health in the North East Region of India. In Aug 2020, the legal status of the institute changed and it became an independent entity under the IIPH Shillong Society.

On 19 August 2020, the Indian Institute of Public Health Shillong Society was registered under the Meghalaya Societies Registration Act XII of 1983. The objects of the Society are: to promote health and wellbeing in all communities including tribal peoples and the weaker sections of society, establish, develop and maintain teaching and research Institute/s including a University. So as to promote research, education, capacity building and cost-effective health delivery systems, in the northeast region. The affairs of the society is overseen by the Governing Body comprising the Principal Secretary, Health and Family Welfare Government of Meghalaya, President of PHFI, Director of IIPH-Shillong, public health specialists from Meghalaya and other experts from North-East India.

Public health challenges in the northeast region are myriad and often require varied approaches taking into account differences in ethnicities, culture, food and lifestyle as compared to the other parts of India.

2. Academics

The courses offered by IIPH Shillong in collaboration with the MLC University are:

- i. Bachelor of Public Health (BPH)
- ii. Masters of Science in Biostatistics
- iii. Master of Public Heath (MPH)
- iv. PhD

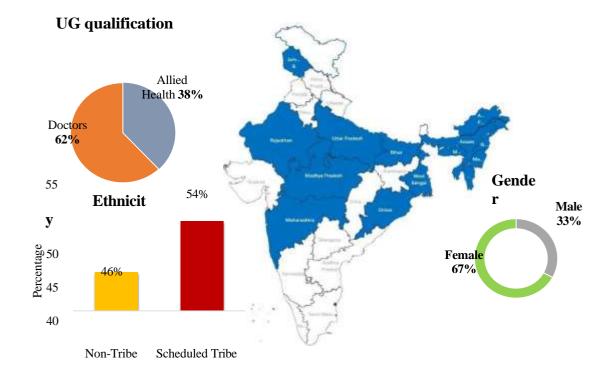


 $1^{\rm st}$ batch MPH graduation ceremony: The graduation ceremony of the first batch of MPH students was held on the $16^{\rm th}$ of November, 2022 at IIPHS campus, Lawmali in the presence of Shri James K Sangma, Hon'ble Health Minister, Shri Sampath Kumar, Principal Secretary, Health, officials from the department of health and family welfare, government of Meghalaya and the Registrar of MLC University



Formal launch of MPH by the Hon' Chief Minister and the Health Minister, Govt. of Meghalaya, Sept 11, 2019

Distribution of our MPH Students 2019-2021



3. Faculty at IIPH Shillong

The following faculty are based in Shillong:

- I. Prof. Sandra Albert, MD DrPH
- II. Dr. Rajiv Sarkar, PhD
- III. Dr. Eliza K Dutta, PhD
- IV. Dr. Melissa Glenda Lewis, PhD
- V. Dr. Tiameren Jamir, MBBS, MBA
- VI. Dr Melari Shisha Nongrum, PhD
- VII. Ms Bindya Sara Babu, MPhil
- VIII. Ms Uniqueky Gratis Mawrie MPH (PhD)
 - IX. Ms Phiban Lyngdoh, MPH
 - X. Mr T Bikram, MPH

2.2 Adjunct Faculty:

- i. Richard Heller, Emeritus Professor, University of Manchester, UK.
- ii. Dr. Laura Downey, Senior Research Fellow, George Institute for Global Health and Imperial College London, UK.
- iii. Prof. Mark L. Wilson, Epidemiologist, Michigan University, USA
- iv. Dr. Nanda Kishore, University of Hyderabad, Telangana.
- v. Prof. Rajan Madhok, MBBS, MSc, FRCS, FFPHA, UK.
- vi. Prof. Anura Viswanath Kurpad, St John's Medical College, Bengaluru.
- vii. Dr. Aritra Das MBBS, PhD (Epidemiology)
- viii. Dr. V. Selvaraju, Economist
- ix. Dr. Suveera Prasad, Consultant Psychiatrist, UK
- x. Dr. Shaibya Saldanha, Obstetrician & Gynecologist, MD, Enfold & NHM, Govt of Meghalaya
- xi. Dr Mayur Trivedi PhD
- xii. Dr Ritu Rana PhD3.

4. Research Centers / Projects at IIPHS

IIPH-S has been successful in generating research grants from local and international funders for research and training in the northeast region. Thematic areas of work we have undertaken include: maternal and child health (immunization), adolescent health, sexual and reproductive health, epidemiology, nutrition, cancer, epidemiology and mitigation, malaria, health economics and genetics.

4.1. Regional Resource Hub for Health Technology Assessment in India (RRH-HTAIn) Funded by DHR under RRH-HTAIn

i. Assessment of Megha Health Insurance Scheme (MHIS) in Meghalaya

ii. Assessment of PMJAY in Manipur:

Proceeding events/ activities:

A Stakeholder conference was conducted in Manipur on 23rd March, 2021 hosted by the SHA team, Manipur. The guests of the event are as follows:

- Dr Sapam Ranjan Singh, MLA and Advisor (Health) to Chief Minister, Manipur
- Shri Vumlunmang Vualnam, Principal Secretary (Health & Family Welfare)
- Smt. Smt. Mercina R Panmei (Chief Executive Officer, SHA Manipur)
- Prof. Sandra Albert, Director, IIPH- Shillong & Regional Resource Hub HTAIn

The meeting participants included the Managing Directors, Medical Superintendents, Administrative officers etc. of the selected seven hospitals for the costing study (from both public and private) from Manipur which are as follows:

- a. Public hospitals
 - Jawaharlal Nehru Institute of Medical Sciences (JNIMS)
 - Thoubal District hospital
 - Churachandpur District hospital
 - Tamenglong District hospital
- b. Private hospitals
 - Shija hospital and Research Institute (SHRI)
 - Sky hospital and Research centre (SHRC)
 - Raj medicity
- An online orientation program for the participating hospitals was conducted on 27th August, 2021 which emphasized on costing exercise, roles and responsibilities of the RA's and the hospitals. (Shija hospital, Thoubal, Tamenglong and Churachandpur District hospital).
- A two-day training session was conducted (2nd-3rd September, 2021) for the team of Research Assistant's by PGIMER Chandigarh Chandigarh lead by Dr Maninder Pal Singh, Research Officer (PGIMER) via an online zoom meet in collaboration with IIPH-Shillong.

 Data collection for the participating hospitals was initiated on 20th September, 2021. The data collection for the following hospitals (Shija hospital, Churachandpur, Tamenglong and Thoubal District hospitals) was completed on 25th June, 2022



Research assistance compiling and analysis data at Imphal, Manipur

- iii. Thiamine deficiency and cost effectiveness analysis of thiamine
- iv. Cost-effectiveness of inducing therapeutic hypothermia using phase changing material (mira cradle) to reduce mortality and neuro-developmental morbidity in moderate and severe hypoxia ischaemic encephalopathy (HIE)
- v. Estimation of cost-effectiveness threshold (CET) for India
- vi. Cost-effectiveness of Pradhan Mantri Bhartiya Janaushadhi Pariyonjana (PMBJP) and its impact on Financial Risk Protection in India

4.2. The Centre for the Study of Complex Malaria in India (CSCMI)

CSCMI is a collaborative initiative with NYU, USA, NLHMB, IIPHS and other partners. The aims of the Centre for the Study of Complex Malaria (CSCMI) are to develop the knowledge, tools, and evidence-based strategies needed to support Indian malaria intervention and control programs, and to build research capacity in India. With the aim to address the imbalance of epidemiological and transmission surveillance data for field sites in the state of Meghalaya. Community based epidemiology, entomology and molecular level studies are planned. The CSCMI lead collaborator is Prof. Jane Carlton (PI), New York University, USA along with researchers from the University of Manchester (Dr Cathy Walton), UK and NIRTH- ICMR (Dr Aparup Das) India.

Funder: National Institutes of Health, USA (through a collaborating institution (NLHMB)

Three major studies are currently being conducted by CSCMI in Meghalaya:

- i. Epidemiology studies
- ii. Entomology studies
- iii. Social and behavioral studies in malaria







Data Collection

Anthropometric measurements

Larval collection from field







Observation of IRS preparation, spraying and wall marking

4.3 Epidemiological risk profile of gallbladder cancer study in North, East and North-East India

Funder: India Alliance DBT/Wellcome Trust under Early Career Fellowship

4.4. Address delays in cancer healthcare seeking in Meghalaya

Funder: NCDIR- Indian Council of Medical Research

4.5. Zoonotic and Vector Borne Diseases Research & Training Centre

Funder: DBT/Wellcome Trust India Alliance

4.6. COVID-19 related studies

- **4.6.1.** Knowledge, attitude & practices towards hand hygiene, respiratory etiquette & community quarantine
- **4.6.2.** Vaccine hesitancy among health care workers and general population in Meghalaya
- **4.6.3.** Seroprevalence of SARS-CoV-2 antibodies in Meghalaya: A facility- based cross-sectional survey
- **4.6.4** Effectiveness of step-up treatment using the combination of antihistamines and steroids for treatment of COVID-19

4.7. Completed projects:

- Exploring the reasons behind refusal of vaccines in Meghalaya- with support and funding from Directorate of Health Services (MCH&FW), Government of Meghalaya (2017-18)
- Cost effectiveness analysis of hypothermia detecting devices, Funded by DHR under RRH-HTAIn
- 3. Economic evaluation of i-Stat (point of care testing device), Funded by DHR, under RRH-HTAIn
- 4. Impact assessment of the SALT (Stimulate, Appreciate, Learn, and Transfer) approach of community engagement to increase immunisation coverage through ownership a mixed methods study in Assam, India (2016-18). The project was led by (PI) Prof Sandra Albert, Director and Professor, IIPH-S, Funder: International Initiative for Impact
- 5. A situational analysis and exploratory study of disease burden based on data from tertiary care hospitals in Shillong, Meghalaya. Funded by Government of Meghalaya (2015-2016).

- 6. Schools as a setting for Comprehensive Health Promotion: Preventive, Promotive, Curative, Referral and outreach services. (2015-16). Funded by WHO (grant awarded to PHFI for 3 states, IIPH Shillong undertook the northeast activities).
- 7. Voices for health. Public Engagement Seminar on Cancers in the Northeast (2016). Funded by Wellcome Trust.
- 8. Opportunities of poor urban women to engage with health policies in an indigenous context-Strengthening Evidence-based Policy. A Case Study of Shillong, Meghalaya, India. As part of the Empowerment of Women and Girls project. Collaborative work with IDS. (2014-2015). Funded by DFID.
- 9. Medical Pluralism among the indigenous peoples of Meghalaya, Northeast India Implications for health policy. Funded by Wellcome Trust, UK (2012-2014).

4.8 Workshops/training/consultation

- 1. CME on Economics of Health And Health Care held on March 9, 2021
- 2. Workshop of the Global Thiamine Alliance held on March 9 and 12, 2021
- 3. Costing for Economic Evaluation held on 24-25 March, 2021
- 4. Training for the Health System Costing: Primary Data Collection held on September 2 and 3, 2021
- 5. Journey of NICE-UK and its support to NHS-UK held on September 3, 2021
- 6. Health Outcome Measurement held on October 5 and 6, 2021
- 7. International Symposium on Health Technology Assessment held on December 10, December 2021
- 8. Basic Training Workshop Series- Introduction to Priority Setting and HTA held on February 16, 2022
- 9. HTA training series -2nd Workshop on Systematic Literature Review and Targeted Literature Review held on Feb 16, 2022
- 10. Training on Estimation of Willingness to Pay for Health held from March 9-12, 2022
- 11. Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) Training Workshop held on March 30 and 31, 2022
- 12. Topic: HTA training series -2nd Workshop on Systematic Literature Review and Targeted Literature Review held on March 29, 2022

4.9 Other training:

Training and mentorship through internship have been provided to over 15 interns from the region.

In addition to this, continuous capacity building is encouraged in the institute. Till date 67 (current and new employees) of IIPHS have attended 22 different

courses such as:

Decision analytic modelling for economic evaluations in HTA,

Winter School in Statistical Genetics, and Integrated Bioethics

Curriculum in Health Sciences Workshop by UNESCO India,

Public health analytics and disease modelling,

Responsible Conduct of Research for Research Administrators, Good Clinical practice etc.

5. Activities supporting Government during COVID-19 by IIPH-S team

5.1 Data analysis:

Our team extended support to the States' IDSP team in analyzing data and in assessing significance of higher numbers of fever and or respiratory infections observed in some districts in Meghalaya; calculating the sensitivity and specificity of rapid antibody test kits; and generating projections for the Covid cases in Meghalaya and comparing the disease trajectory with the other Indian states.

5.2 Mathematical modelling:

We have also developed predictive models for health system planning in collaboration with (lead by Dr Rajiv Sarkar) in collaboration with researchers from the Indian Statistical Institute and IIT Rourkee. The Dept of Health, GoM has used these figures for their Covid planning and preparations.

6. Research:

On the request of the Govt of Meghalaya, the following studies were conducted or supported by IIPH Shillong:

- 1. A cross-sectional study to assess knowledge, attitude and practices towards hand hygiene, respiratory etiquette and community quarantine in Meghalaya (see Section 4.6.1 for details).
- 2. A mixed methods study on vaccine hesitancy among health care workers and general population in Meghalaya (see Section 4.6.2 for details).
- 3. A retrospective data analysis of the effectiveness of step-up treatment in severe COVID-19 infections: a real-world retrospective cohort study (see Section 4.6.3 for details).
- 4. Seroprevalence of SARS-CoV-2 antibodies in Meghalaya: A facility-based cross-sectional survey.

Publications on COVID-19:

A series of articles and bulletins on Covid were published in the Shillong Times newspaper (Established 1945); one of the oldest and widely read newspapers in the northeast region of India. This was done to promote general awareness, for education and as a means to reduce the general panic that was griping the populace

7. Membership in Expert Committees /Task force/working groups

- a. Prof Sandra Albert is a member of the Working group on Epidemiology Survey and Documentation constituted by the Interdisciplinary AYUSH Research and Development Task Force on Covid-19. Notification No. A.17020/1/2020-E.1 of Ministry of AYUSH
- b. Dr Rajiv Sarkar, and Uniqueky Mawrie are members of the technical support group of the State response team for COVID-19, Government of Meghalaya
- c. Prof Sandra Albert is a member of the Medical Expert Committee on COVID-19 constituted by the Government of Meghalaya

8. Publications

(i) Journal Articles

- Dutta EK, Kumar S, Venkatachalam S, Downey LE, Albert S (2022) An analysis of government-sponsored health insurance enrolment and claims data from Meghalaya: Insights into the provision of health care in North East India. PLoS ONE 17(6): e0268858. https://doi.org/10.1371/journal.pone.0268858
- 2. Dutta EK, Lewis MG, Albert S. Risk factors associated with gall bladder cancer in high incidence areas in India: a systematic review protocol. BMJ Open 2022;12:e056849. doi:10.1136/bmjopen-2021-056849.
- 3. Sarkar R, Kessler A, Mawkhlieng B, Sullivan SA, Wilson ML, Carlton JM, Albert S. Household and individual level risk factors associated with declining malaria incidence in Meghalaya, India: implications for malaria elimination in low-endemic settings. Malar J. 2021. 20: 460. PMID: 34895233.
- 4. Ajjampur SS, Kaliappan SP, Halliday KE, Palanisamy G, Farzana J, Manuel M, Abraham D, Laxmanan S, Aruldas K, Rose A, Kennedy DS, Oswald WE, Pullan RL, Galagan SR, Ásbjörnsdóttir K, Anderson RM, Muliyil J, Sarkar R, Kang G, Walson JL. Epidemiology of soil transmitted helminths and risk analysis of hookworm infections in the community: Results from the DeWorm3 Trial in southern India. PLoS Negl Trop Dis. 2021. 15: e0009338.
- 5. Kaliappan S, Ramanujam K, Manuel M, Farzana J, Janagaraj V, Laxmanan S, Muliyil J, Sarkar R, Kang G, Walson J, Ajjampur S. Soil-transmitted helminth infections after mass drug administration for lymphatic filariasis in rural

- southern India. Trop Med Int Health. 2021. 27: 81-91. PMID: 34704320.
- Kynsai Ria C. Kharkongor, Sandra Albert & Glenn Kharkongor. Presumed courtship or territorial behaviour of the White-capped Redstart Chaimarrornis leucocephalus. Indian Birds. 2021; Vol. 17: No. 3. https://indianbirds.in/pdfs/IB_17_3 KharkongorETAL WhitecappedReds tart.pdf
- 7. Kynsai Kharkongor, Glenn CK and S Albert: Brood parasitism on Red-billed Leothrix Leiothrix lutea in Meghalaya. Indian Birds 2020; Vol. 16 No. 4; https://indianbirds.in/pdfs/IB 16 4 KharkongorETAL RedbilledLeothrix.pdf
- 8. Kessler, A., Shylla, B., Singh, U. S., Lyngdoh, R., Mawkhlieng, B., van Eijk, A. M., ... & Albert, S. (2021). Spatial and temporal village-level prevalence of Plasmodium infection and associated risk factors in two districts of Meghalaya, India. Malaria Journal, 20(1), 1-17.
- 9. Kessler, A., van Eijk, A., Jamir, L., Walton, C., Carlton, J., & Albert, S. (2018). Malaria in Meghalaya: a systematic literature review and analysis of data from the National Vector-Borne Disease Control Programme. Malaria Journal, 17(1). doi: 10.1186/s12936-018-2563-3.
- 10. Pramanik, S., A. Ghosh, R. B. Nanda, M. de Rouw, P. Forth and S. Albert (2018). "Impact evaluation of a community engagement intervention in improving childhood immunization coverage: a cluster randomized controlled trial in Assam, India." *BMC Public Health* 18(1): 534
- 11. Sandra Albert, John Porter & Judith Green. Doktor Kot, Doktor Sla book doctors, plant doctors and the segmentation of the medical market place in Meghalaya, northeast India. *Anthropology & Medicine Nov 2017*
- 12. Dandona L, Dandona R, Kumar GA, Shukla DK, Paul VK, Balakrishnan K, Prabhakaran D, Tandon N, Salvi S, Dash AP,....Albert S... et al. Nations within a nation: variations in epidemiological transition across the states of India, 1990–2016 in the Global Burden of Disease Study. *The Lancet*. 2017; 390(10111):2437-60.
- 13. Albert S, Porter J, Green J. Sap and the Traditional Healer: A Tribal (Khasi) Understanding of the Human Potential. Indian Journal of Career and Livelihood Planning. 2015;4(1):52-61.

 http://www.iaclp.org/yahoo_site_admin/assets/docs/6_Sandra_Albert.731156
 54 pdf
- 14. Albert, S. and J. Porter (2015). "Is 'mainstreaming AYUSH' the right policy for Meghalaya, northeast India?" *BMC Complementary and Alternative Medicine* 15(288). DOI 10.1186/s12906-015-0818-x PMC4539927
- 15. Oosterhoff P, Dkhar B, <u>Albert S</u>. Understanding unmet contraceptive needs among rural Khasi men and women in Meghalaya. Culture, Health & Sexuality, 2015. http://dx.doi.org/10.1080/13691058.2015.1042918
- 16. Albert S, Nongrum M, Webb EL, Porter JD, Kharkongor GC. *Medical pluralism among indigenous peoples in northeast India-implications for health policy.*Tropical Medicine & International Health. 2015:20(7): 952-960, doi: 10.1111/tmi.1249

- 17. Das T and Choubey M. Do the heterogeneous determinants of life satisfaction affect differently across borrowers of diverse credit sources? A propensity score approach. International Journal of Social Economics. 2018: 45 (8): 1142-1158
- 18. Das T. Does credit access lead to expansion of income and multidimensional poverty? A study of rural Assam, International Journal of Social Economics. 2018: https://doi.org/10.1108/ IJSE-12-2017-0592
- 19. Guha P and Das T. Inequality and Incidence of Poverty among Labourer of Tea Plantation Sector: A Study of Dibrugarh District of Assam. Journal of Economic Policy and Research. 2018: 12 (2): 43-56
- 20. Das T. Direction of Uneven Health Care Expenditure: Evidence from India's North East. Indian Journal of Public Health. 2017: 61 (3): 61-81
- 21. Sharma, D., Rohilla, L., Bagga, R., Srinivasan, R., Jindal, H.A., Sharma, N., Kankaria, A., Jamir, L., Suri, V., Singh, R.K., & Duggal, M. (2018). Feasibility of implementing cervical cancer screening program using smartphone imaging as a training aid for nurses in rural India. Public Health Nursing.2018: 1-8.
- 22. Shridhar K, Shrivastava A, Mitta S, Dutta E, Bumb D, Maranganty P, et al. Computer-Aided Diagnostic Tool: A Supervised Machine Learning Model for Early Detection of Oral Pre-cancer and Cancer (communicated to Cancer Prevention Research, under review).

(ii) Book Chapters

- R J War, Albert S, Kharkongor GC. Shame, Sin and Guilt: The influence of Christianity on Sexuality, among Khasi Youth in Meghalaya, Northeast India. In Gender, Sexuality & Society in Northeast India. Contextual studies of tribal communities. 2021. MLCU press, Shillong India. 261-276
- 2. Albert S. Indigenous peoples, food, and the environment in northeast India. In: Rawlinson MC, Ward C, editors. The Routledge Handbook of Food Ethics. NY: Routledge; 2017. p. 113-24.
- 3. Kharkongor GC, Albert S. Career Counseling Among Indigenous Peoples. In G. Arulmani, A.J. Bakshi, A.G Watts, & F. Leong (Eds), Handbook of Career Development: International Perspectives. New York: Springer.2014: 539-554

(iii) Reports

- A situational analysis and exploratory study of disease burden based on data from tertiary care hospitals in Shillong, Meghalaya 2016. Submitted to Government of Meghalaya
- Oosterhoff P, Saprii L, Kharlyngdoh D, Albert S. When the Hen Crows:
 Obstacles that prevent indigenous women from influencing health-care
 policies A case study of Shillong, Meghalaya, India. England: The Institute
 of Development Studies, Indian Institute of Public Health, & UK Aid, 2015.
 Available at: http://www.ids.ac.uk/publication/when-the-hen-crows-obstacles that-prevent-indigenous-women-from-influencing-health-care-policies-a-case study-of-shillong-meghalaya-indiahttp://interactions.eldis.org/urbanisation- and-

health/country-profiles/india/digital-stories

- 3. Ghosh R, Pde Y, Jana I, Das T, Jain S, Chauhan A, Albert S. Cost Effectiveness Analysis of Hypothermia Detection Devices (BEMPU, ThermoSpot and Fever Watch) for Premature and Low Birth Weight Neonates in India. Indian Institute of Public Health Shillong and Department of Health Research, Ministry of Health and Family Welfare, Government of India. 2019
- Hazarika J, Parveen S, Lyngdoh P, Albert S. Reasons behind Refusal of Vaccines in Meghalaya - report of an exploratory study. Indian Institute of Public Health Shillong and Directorate of Health & Family Welfare, Government of Meghalaya, India. 2018

9. Public engagement activities

9.1 Articles in Newspapers:

- Rajiv Sarkar. Medical Experts speak on inevitable third COVID wave in Meghalaya https://thenortheasttoday.com/tntvideos/features/impending-thirdwave-in-meghalaya/cid3485031.htm
- ii. Rajiv Sarkar: Alarming rise in COVID cases: Is State prepared enough? https://theshillongtimes.com/2021/04/21/alarming-rise-in-covid-cases-is-state-prepared-enough/
- iii. Rajiv Sarkar. Vaccination only protection against COVID, experts say https://theshillongtimes.com/2021/04/21/vaccination-only-protection-against-covid-experts-say/
- iv. Sandra Albert. Novel Corona virus Covid-19 infection: A pragmatic approach http://epaper.theshillongtimes.com/epapermain.aspx?pgno=6&eddate=2020-03-19&edcode=820009
 - v. Sandra Albert and Dr Glenn Kharkongor. Covid-19
- vi. Bulletin
 http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=2020-03-19&edcode=820009
- vii. Sandra Albert and Glenn Kharkongor. Stages and life span of a pandemic: India and the world by http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=2020-03-20&edcode=820009
- viii. Sandra Albert and Glenn Kharkongor Testing for Covid-19 during stage 3http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=2020-03-21&edcode=820009
- ix. Sandra Albert and Glenn Kharkongor. Vaccines and medicines for COVID-19http://epaper.theshillongtimes.com/epapermain.aspx?pgno=10&eddate=20 20- 03-22&edcode=820009
 - x. Sandra Albert and Glenn Kharkongor. Scenarios and strategy building for Meghalaya

 http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=2020-03-23&edcode=820009
- xi. Sandra Albert and Glenn Kharkongor. Science must drive the

Covid-19 decision making

http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=202 0- 03-24&edcode=820009

- xii. Sandra Albert. TB remains top infectious killer worldwide

 http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=2020-3-26&edcode=820009
- xiii. Sandra Albert and Glenn Kharkongor. Now is the time to prepare for the post-lockdown phase http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=2020-03-31&edcode=820009
- xiv. Sandra Albert and Glenn Kharkongor. Meghalaya's Covid strategy is on the right track

 http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=202
 http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=202
 http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=202
 http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=202
 http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=202
 http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=202
 http://epaper.theshillongtimes.com/epapermain.aspx?pgno=7&eddate=202
- xv. Meban A Kharkongor and Sandra Albert. What about the others? Has health care for other patients been compromised http://epaper.theshillongtimes.com/epapermain.aspx?pgno=6&eddate=2020-04-30&edcode=820009
- xvi. 'Trajectory of pandemic in state one of the lowest in India' Interview of Rajiv Sarkar and Eliza Dutta published by The Shillong Times https://theshillongtimes.com/2020/09/15/trajectory-of-pandemic-in-state-one-of-the-lowest-in-india/
- xvii. Sandra Albert Public health and medicine is there a difference? https://theshillongtimes.com/2020/05/14/public-health-and-medicine-is-there-a-difference/
- xviii. Anirban Goswami. Encouraging community ownership for childhood immunization. The Sentinel April 29, 2018

 https://www.sentinelassam.com/editorial/encouraging-community-ownership-for-childhood-immunization/

9.2. Newspaper articles on other public health related issues

- xix. Anirban Goswami. Community ownership and immunization. Eastern Chronicle April 29, 2018
- xx. Sandra Albert, Are medical colleges the answer for good health? Shillong Times, 16th March 2018
- xxi. Jahnabi Hazarika and Phibansuk C. Lyngdoh. Optimal child feeding practicesneed of the hour for Meghalaya. Shillong Times, 6 October 2017
- xxii. Karter Lombi. Challenges of Hepatitis in the North East. The Arunachal Times, 28 July 2017
- xxiii. Samina Parveen. Blood Donation: The gift of Life. Shillong Times, 14 June 2017
 xxiv. Jahnabi Hazarika and Sandra Albert. Tobacco the silent killer in
 Meghalaya. Shillong Times, 31 May 2017
 - xxv. Anirban Goswami and. Jahnabi Hazarika. Myths about immunization

- hampering children's health. Shillong Times, 2 May 2017
- xxvi. Sandra Albert. State tops list of malaria cases in India. Shillong Times. April 25, 2017
- xxvii. Anirban Goswami. Encouraging community ownership for childhood immunization. The Sentinel April 29, 2018
- xxviii. S Albert. The Protection of Children from Sexual Offences (POCSO) Act. Shillong Times January 23, 2017.
- xxix. Why are the women of Meghalaya so anaemic? Shillong Times. June 16, 2016.

9.4. Media Reports

- xxx. https://theshillongtimes.com/2021/11/03/malaria-related-morbidity-and-mortality-rates-plummet-in-state/
- xxxi. https://youtu.be/yPiFenc5FZc IIPH event covered by DD news Meghalaya as headline and full story
- xxxii. Malaria study centre launched in City, by Guardian News Bureau, Monday, September 25, 2017, The Meghalaya Guardian.

 Event: Stakeholder engagement and launch event, State Convention Centre, Shillong, 22nd September 2017. Organized by the Indian Institute of Public Health Shillong (IIPH) in collaboration with the Department of Health & Family Welfare, Govt. of Meghalaya

 http://mg.glpublications.in/index.php?mod=1&pgnum=3&edcode=1&pagedate=2017-09-25&type
- xxxiii. Meghalaya: Breakthrough in Malaria Research through Shillong's Centre for Study of Complex Malaria soon! by Reporter, Tuesday, September 24, 2017, The Northeast Today

 Event: Stakeholder engagement and launch event, State Convention Centre, Shillong, 22nd September 2017. Organized by the Indian Institute of Public Health Shillong (IIPH) in collaboration with the Department of Health & Family Welfare, Govt. of Meghalaya
 - https://thenortheasttoday.com/meghalaya-breakthrough-in-malaria-research-through- shillongs-centre-for-study-of-complex-malaria-soon/
- xxxiv. News Clip by reporter in The Shillong Times on 23 September 2016 of Samina Parveen as a speaker.
 - Event: Programme on Health and Personal Hygiene as part of Swachh Bharat Pakhwada at NEEPCO Corporate Office Shillong
- xxxv. East Khasi Hills among areas with highest cancer cases in country, by Reporter, Wednesday, July 27, 2016, The Shillong Times.

 Event: Voice for Health: Cancer in the North East Public engagement event, State Convention Center, Shillong, 26th July 2016. Organized by Indian Institute Public Health, Shillong and Wellcome Trust/ DBT India Alliance
- xxxvi. Imbalanced diet a cause of concern in M'laya, by Reporter, Wednesday, 10 August, 2016, The Shillong Times,

Event: State level Consultation on Accelerating Progress toward Good Nutrition for All in Meghalaya Insights from the India Health Report: Nutrition 2015; State Convention Center, Shillong, 9th August 2016. Organized by Government of Meghalaya, Social Welfare Department, State Resource Centre for Women, Public Health Foundation of India (PHFI) and India Institute of Public Health Shillong (IIPH). Read more at http://www.theshillongtimes.com/2016/08/10/imbalanced-diet-a-cause-of-concern-in-mlaya/#jkXXSezk64poBjvB.99

xxxvii. Consultation programme on good nutrition held. Reporter, Guwahati, 10 August 2016, The Sentinel of this land, for its people

Event: State level Consultation on Accelerating Progress toward Good Nutrition for All in Meghalaya Insights from the India Health Report: Nutrition 2015; State Convention Center, Shillong, 9th August 2016. Organized by Government of Meghalaya, Social Welfare Department, State Resource Centre for Women, Public Health Foundation of India (PHFI) and India Institute of Public Health Shillong (IIPH). Read more at: http://www.sentinelassam.com/meghalaya/story.php?sec=2&subsec=8&id=2770048

277324& dtP=2016-08-10&ppr=1Wednesday

Meghalaya among states with most number of stunted children under 5 yrs, Staff Reporter, Shillong August 9 2016, Meghalaya Times

Event: State level Consultation on Accelerating Progress toward Good Nutrition for All in Meghalaya Insights from the India Health Report: Nutrition 2015; State Convention Center, Shillong, 9th August 2016.

Organized by Government of Meghalaya, Social Welfare Department, State Resource Centre for Women, Public Health Foundation of India (PHFI) and India Institute of Public Health Shillong (IIPH). Read more at: http://www.meghalayatimes.info/index.php/front-page/35491-meghalaya-among-states-with-most-number-of-stunted-children-under-5-yrs

State fares poorly in child nutrition, Guardian News Bureau Shillong, Aug 9 2016, The Meghalaya Guardian

Event: State level Consultation on Accelerating Progress toward Good

Event: State level Consultation on Accelerating Progress toward Good Nutrition for All in Meghalaya Insights from the India Health Report: Nutrition 2015; State Convention Center, Shillong, 9th August 2016. Organized by Government of Meghalaya, Social Welfare Department, State Resource Centre for Women, Public Health Foundation of India (PHFI) and India Institute of Public Health Shillong (IIPH).

- xI. Child stunting declines in Arunachal, Itanagar, Aug 12 2016, Echo of Arunachal Event: State level Consultation on Accelerating Progress toward Good Nutrition for All in Meghalaya Insights from the India Health Report: Nutrition 2015; State Convention Center, Shillong, 9th August 2016. Organized by Government of Meghalaya, Social Welfare Department, State Resource Centre for Women, Public Health Foundation of India (PHFI) and India Institute of Public Health Shillong (IIPH).
- xli. Arunachal better in feeding practices: NFHS, Shillong, 12 Aug 2016,

Independent Review (Arunachal Pradesh)

Event: State level Consultation on Accelerating Progress toward Good Nutrition for All in Meghalaya Insights from the India Health Report: Nutrition 2015; State Convention Center, Shillong, 9th August 2016. Organized by Government of Meghalaya, Social Welfare Department, State Resource Centre for Women, Public Health Foundation of India (PHFI) and India Institute of Public Health Shillong (IIPH).

xlii. Workshop on sexual abuse held in city, by Reporter, July 29 2016, The Shillong Times

Event: Workshop on Medico - Legal aspects of Management of Sexual Assault Victims, Conference Hall, Directorate of Social Welfare, 28 July 2016. Organized by the State Resource Centre for Women (SRCW) in collaboration with the Indian Institute of Public Health (IIPH) Shillong and The Society for informed, conscious and responsible existence (ICARE). Read more at:

http://www.theshillongtimes.com/2016/07/29/workshop-on-sexual-abuse-held-in-city/#G4u7wlUkYrQ8w9ve.99

- xliii. Sensitization on sexual abuse underlined, GUARDIAN NEWS BUREAU SHILLONG, AUG 1 2016, The Meghalaya Guardian Event: Workshop on Medico Legal aspects of Management of Sexual Assault Victims, Conference Hall, Directorate of Social Welfare, 28 July 2016. Organized by the State Resource Centre for Women (SRCW) in collaboration with the Indian Institute of Public Health (IIPH) Shillong and The Society for informed, conscious and responsible existence (ICARE)
- xliv. Why are the women of Meghalaya so anaemic? by Sandra Albert,
 Thursday, June 16, 2016, The Shillong Times:
 http://www.theshillongtimes.com/2016/06/16/why-are-the-women-of-meghalaya-so-anaemic/#bv1pMSw8icQJj8l9.99
- xlv. Meghalaya: Alternate models to address Shortage of medical specialists in the state, 25th Jan 2019, South Asia views:

 Event: Final signing and handing over of MoU regarding implementation of ADARSH, between the State Government and Indian Institute of Public Health

Read more at: http://southasiaviews.com/2019/01/25/meghalaya-alternate-models-to-address-shortage-of-medical-specialists-in-the-state/

Conference/workshop presentations by IIPH-S Research team

10.1 Oral:

- Kessler A, Lyngdoh P, Das A, Walton C, Carlton JM, S Albert. Malaria in Meghalaya- evidence review, decadal data and new research initiatives. The 21st International Conference on Emerging Infectious Diseases (EID) in the Pacific Rim. 26th March 01st, 2019 in Vietnam by the Ministry of Health of Viet Nam and the CMSP.
- Kessler A, Jamir L, Lyngdoh P, Mawkhlieng B, Khongwir CN, Nongdhar J, Marbaniang PJ, Manar C, Suting E, Challam M, Siangshai W, Sangriang I, Lamin O, Kshiar A, Singh US, Shylla B, Sullivan SA, Das A, Walton C, Carlton JM, Albert S. Malaria in Meghalaya: Analysis of existing literature and state control programme data with real-time surveillance. 14th International Conference on Vectors and Vector Borne Diseases. Bhubaneswar. 9-11 January 2019.
- 3. Das T. Estimation of Rural Credit Demand: A Study of Lower Brahmaputra Valley Of Assam, Two Day International Conference on Interdisciplinary: Contemporary Research in Humanities, Social Sciences and Management Studies (COIN-2017), Meghalaya, 22nd July 2017.
- 4. Albert S. Impact assessment of the SALT (Stimulate, Appreciate, Learn, and Transfer) approach of community engagement to increase immunisation coverage through ownership a mixed methods study in Assam, India,. 3ie workshop Delhi, 2017.
- 5. S Albert. Process Monitoring. 3ie learning workshop Delhi, 2017.
- 6. S Albert. Overview Meghalaya its people and health systems. Washington DC 2017
- 7. Hazarika J, Pramanik S, Ghosh A, Parveen S and Albert S. Impact assessment of the SALT (Stimulate, Appreciate, Learn, and Transfer) approach of community engagement to increase immunisation coverage through ownership a mixed methods study in Assam, India, Community Health in the North East by Society for Community Health Awareness Research and Action (SOCHARA) and the Fellows Collective-Northeast, Shillong Meghalaya, 19th August 2016.
- 8. Kharlyngdoh D, Saprii L, Oosterhoff P, and Albert S. Digital Story Telling (DST) A qualitative method for documenting lived experiences, 5th Annual Public Health Foundation of India Research Symposium, New Delhi 2015.
- 9. Khyriem T, Kharlyngdoh D, Saprii L and Albert S, Compilation and ICD-10 coding of patient data from a Public sector tertiary care hospital in Meghalaya, 6th Annual Public Health Foundation of India Research Symposium, New Delhi. 2016
- 10. Albert S. Health policy for heterogeneous populations. 5th PHFI Annual Research Symposium March12, 2015, New Delhi.
- 11. Albert S. Integrating different medical systems for northeast India. At regional workshop on 'Health Assurance in India: The Road Ahead' on 12th August,

- 2015, Bhubaneshwar, Orissa.
- 12. Albert S. Integrating different healthcare systems for northeast India. 2nd Annual Health Care Expansion Summit, North East Region 3rd–4th September 2015, Guwahati, Assam.
- 13. Albert S. Introduction to operational research. Operational Research in Public Health- Why, What, Role, Relevance. North East Zonal Operational Research Workshop NEIGRIHMS, Shillong, Meghalaya 05-06 Feb 2016.
- 14. Albert S. Panellist at seminar 'Trick or Treat' the future of healthcare access. Wellcome Trust, at British Council, New Delhi 22 Jan 2016.
- 15. Albert S. Discussant at Panel on LHT and AYUSH linkages: Epistemological and Institutional. Dialogue on Revitalization of Local Health Traditions. January 20-21, 2016, Azim Premji University, Bangalore.
- 16. Albert S. Public Health education and research in Northeast. Northeast health care summit. July 8-9, 2016, Guwahati, Assam.
- 17. Albert S. Chair public engagement seminar, Voice for Health: Cancer in the North East. Shillong, 26th July 2016. Organized by Indian Institute Public Health, Shillong and Wellcome Trust/ DBT India Alliance.
- 18.Das T. Session Chair- Economics, Two Day International Conference on Interdisciplinary: Contemporary Research in Humanities, Social Sciences and Management Studies (COIN-2017). 21st July 2017. Organized by Department of Humanities and Social Sciences, National Institute of Technology, Meghalaya.
- 19. Albert S. Workshop on rape and child sexual abuse. Chaired panel discussion on the way forward. Shillong July 27, 2016.
- 20. Albert S. co-facilitator workshop on Medico Legal aspects of Management of Sexual Assault Victims, Directorate of Social Welfare, 28 July 2016. Organized by the State Resource Centre for Women (SRCW) in collaboration with the Indian Institute of Public Health (IIPH) Shillong and The Society for informed, conscious and responsible existence (ICARE).
- 21. Albert S. Relevance of research in the postgraduate course. DERMACON-2015: National Conference of the Indian Association of Dermatology, Venereology & Leprology (IADVL); 2015 12th-15th February; Mangalore, India.
- 22. Kharlyngdoh D, Saprii L, Oosterhoff P, Albert S. Engaging with state and indigenous institution experiences and challenges of dissemination in Meghalaya. ResUp MeetUp symposium and training exchange; 2015 09th-12th February; Nairobi, Kenya.
- 23. Roshan Ronghang. Assessing the pattern of enrolment and claims in Megha Health Insurance Scheme (MHIS). International Seminar, Using Evidence for Decision-Making in Health Benefits Package Design, 25th- 26th February 2019; Guwahati, Assam, India

10.2 Posters

- Albert S et al. Malaria in Meghalaya- evidence review, decadal data and new research initiatives. The Gordon Research Conference on Malaria held June 30, 2019 - July 05, 2019 at Les Diablerets Conference Center in Les Diablerets, Switzerland
- 2. Badondor Shylla, Epidemiology of Malaria in Meghalaya, 7th Annual Public Health Foundation of India Research Symposium, New Delhi 2018
- 3. Phibansuk Lyngdoh. Exploring the reasons behind refusal of immunization in Meghalaya, 7th Annual Public Health Foundation of India Research Symposium, New Delhi 2018
- 4. Parveen S, Saprii L, Kharlyngdoh D and Albert S, (Poster) Descriptive analysis of secondary data from tertiary care hospitals in Shillong India, 6th Annual Public Health Foundation of India Research Symposium, New Delhi 2016
- Saprii L, Oosterhoff P, Kharlyngdoh D and Albert S, Participation of Indigenous Women in Influencing Sexual and Reproductive Health Policies: A Case Study of Shillong - Meghalaya, India 5th Annual Public Health Foundation of India Research Symposium, New Delhi 2015

10. Financial Statements

INDIAN INSTITUTE OF PUBLIC HEALTH SHILLONG LAWMALI: PASTEUR HILLS: SHILLONG

CONSOLIDATED BALANCE SHEET AS AT 31.03.2022

	Schedule	Current Year	Previous Year
CORPUS/CAPITAL FUND AND LIABILITIES: CORPUS/CAPITAL FUND	1	20512333.53	6043022.17
RESERVE AND SURPLUS	2	-	
EARMARKED/ENDOWMENT FUNDS	3		
SECURED LOANS AND BORROWINGS	4		
UNSECURED LOANS AND BORROWINGS	5		
DEFERRED CREDIT LIABILITIES	6		-
CURRENT LIABILITIES AND PROVISIONS	7	(6,641.00)	
TOTAL ₹	_	20505692.53	6043022.17
ASSETS FIXED ASSETS	8	879955.00	187531.00
INVESTMENTS - FROM EARMARKED/ENDOWMENT FUNDS	9		
INVESTMENTS - Fixed Deposits with Scheduled Bank	10		
CURRENT ASSETS, LOANS, ADVANCES ETC.	11	19625737.53	5855491.17
MISCELLANEOUS EXPENDITURE (To the extent not written off or adjusted)			
TOTAL ?		20505692.53	6043022.17
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

Place : Shillong Date : 23.05.2022

In terms of our report of even date for KIRON JOSHI & ASSOCIATES Chartered Accountants (FRN: 313048E)

KIRON JOSHI (Membership No. 051046)

CHARTERED ACCOUNTANTS

10.1 Income and Expenditure Statement

INDIAN INSTITUTE OF PUBLIC HEALTH SHILLONG LAWMALI: PASTEUR HILLS: SHILLONG

CONSOLIDATED INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31.03.2022

INCOME	Schedule	Current Year	Previous Year
Income from Sales/Services	12	*	
Grants/Subsidies	13	23675956.00	9400839.00
Fees/Subscriptions	14	4455810.00	953560.00
Income from Investments (Income on Invest, From earmarked/endow. Funds Transferred to Funds)	15	X : 	
Income from Royalty, Publication etc.	16		
Interest Earned	17	133740.00	4616.00
Other Income	18	3.00	4.00
Increase/(decrease) in stock of Finished goods and works-in-progress	19	96	4
TOTAL (A) ₹		28265509.00	10359019.00
EXPENDITURE:			
Establishment Expenses	20	10447865.00	3420013.00
Other Administrative Expenses etc.	21	3087869.64	1094559.00
Expenditure on Grants, Subsidies etc.	22	62555.00	
Bank Charges	23	1888.00	1273.83
Depreciation	8	196020.00	27928.00
TOTAL (B) ₹		13796197.64	4543773.83
Balance being excess of Income over Expenditure (A - B)		14469311.36	5815245.17
Transfer to Special Reserve (Specify each)		-	
Transfer to / from General Reserve		4.1	J. 1
BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO CORPUS/CAPITAL FUND		14469311.36	5815245.17
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

In terms of our report of even date for KIRON JOSHI & ASSOCIATES Chartered Accountants

FRN: 313048E)

(Membership No. 051046) UDIN:22051046AJLOJV2183

Place : Shillong Date : 23.05.2022