



डॉ. हर्षवर्धन
Dr. Harsh Vardhan

माननीय केंद्रीय मंत्री
Hon'ble Union Minister

स्वास्थ्य एवं परिवार कल्याण मंत्रालय
Ministry of Health & Family Welfare



श्री अश्विनी कुमार चौबे
Sh. Ashwini Kumar Choubey

माननीय राज्य मंत्री
Hon'ble Minister of State

स्वास्थ्य एवं परिवार कल्याण मंत्रालय
Ministry of Health & Family Welfare

ANNUAL REPORT

2019-20

POPULATION RESEARCH CENTRE



Institute for Social and Economic Change (ISEC)

Dr V K R V Rao Road

Nagarabhavi, Bengaluru-560 072

Contents

Page No.

I INTRODUCTION

II (a) STUDIES COMPLETED DURING 2019-20

II (b) STUDIES PROPOSED FOR 2020-2021

III ACADEMIC ACTIVITIES DURING THE YEAR 2019-20

IV FACULTY AND STAFF

V PH.D STUDENTS ON ROLLS

APPENDIX: UTILISATION CERTIFICATE AND ANNUAL ACCOUNTS

ANNUAL REPORT 2019-20

POPULATION RESEARCH CENTRE

INSTITUTE FOR SOCIAL AND ECONOMIC CHANGE BANGALORE – 560 072

I. Introduction

Established in 1972, the Population Research Centre (PRC) at the Institute for Social and Economic Change (ISEC) is an interdisciplinary community of scholars engaged in population research and training. The major objectives of the PRC are to conduct and promote research in population studies and to assist the Ministry of Health and Family Welfare (MoHFW), Government of India, New Delhi, as well as the Government of Karnataka, with policy inputs and feedback on population and health issues. Capacity building is an important contribution of the Centre through the training of scholars in the doctoral programme, and through workshop and training programmes in population and health studies for mid-career professionals. The financial support for the centre comes from the MoHFW.

The PRC has been actively engaged in research relating to contemporary issues of demography and health since its inception. Currently, the major areas of research that the PRC staff are engaged in are: (1) demographic processes and demographic change, (2) gender and health, (3) population, development and environmental linkages and (4) data systems and data quality. Apart from this, the Centre monitors the various health programmes and plans implemented by the Ministry under the National Health Mission (NHM) and the quality of Health Management Information Systems (HMIS) and provides feedback.

During 2019-2020 faculty and staff from PRC were engaged in a number of research studies and projects. Faculty from the Centre collaborated with the Harvard TH Chan School of Public Health and Strand Life Sciences, Bangalore on a research project to validate the utilisation of Dried Blood Spots in whole genome sequencing. The findings of the study will be of use to large scale survey data collection at the population level for health research. In addition, faculty were involved in assessing several flagship programmes of the Ministry of Health and Family Welfare. A project titled the Assessment of Home Based New Born Care (HBNC) in Selected Districts of Karnataka

was aimed at understanding the strengths and weaknesses of the HBNC programme in the state and its role in reducing the number of deaths among infant. Another research study focused on the functioning of Non Communicable Disease (NCD) clinics in two districts of Karnataka and evaluated the NCD programme in the state. The study on the National Quality Assurance Standards (NQAS) certification of public health facilities was aimed at identifying the enablers and barriers in the certification process in the state of Karnataka.

One of the main activities of the PRC is to provide policy and programmatic inputs to the Union Ministry of Health and Family Welfare. In view of this, PRC has been actively involved in the monitoring of Programme Implementation Plan (PIP) activities under the National Health Mission. The monitoring of District-level implementation of PIPs in 35 districts covering 6 states including Karnataka, Puducherry, Telangana, Sikkim, Manipur and Meghalaya have been completed during the year. The PRC is also involved in ensuring the quality of the large scale data collected in India in the Health Management Information System (HMIS) under the aegis of the MoHFW.

The PRC has organised several conferences and seminars during the year 2019-2020. The Centre organised a dissemination seminar at the Institute in collaboration with the Department of Health and Family Welfare, Government of Karnataka. The objective of the seminar was to disseminate the findings of the research studies carried out by the faculty and staff of PRC to a wider audience which included programme managers and policy makers from Karnataka state government. A half-a-day seminar on Fertility Transition in Karnataka was organised in July 2019 in honour of Professor H. Rayappa, former Head of the Population Research Centre. A five day training workshop on 'Data Management and Analysis using SPSS and STATA' was organised with support from Ministry of Health and Family Welfare, New Delhi. The objective of this workshop was to familiarize the staff and faculty of various population research centres on data management and analysis using statistical packages. A two-day regional conference titled 'Towards Peace, Harmony and Happiness: Transition to Transformation' was organised in collaboration with the Pranab Mukherjee Foundation, New Delhi and the Centre for Research in Rural and Industrial Development (CRRID), Chandigarh.

The PRC maintains a strong relationship with the Department of Health and Family Welfare, Government of Karnataka. Regular meetings are held with the Directorate of Health and Family Welfare and Regional Director, MoHFW, Bangalore, to disseminate important findings from the studies undertaken at the PRC. The findings of the research conducted at the PRC have been disseminated through various publications by individual faculty members and staff as chapters in

edited books, articles in journals and as working papers. Members of the Centre have also attended and presented research papers at national and international conferences during the year.

II (a) Studies Completed During 2019-20

Sl.No.	Title	Researchers
1.	PIP Monitoring for Ten districts of Karnataka (Chikmagalur, Tumkur, Koppal, Udupi, Yadgir, Bangalore Urban, Bellary, Bijapur, Ramanagara, Shimoga)	All PRC Staff
2.	PIP Monitoring for Five districts of Telangana (Siddipet, Rajanna Sircilla, Medchal, Jangaon Yadadri)	All PRC Staff
3.	PIP Monitoring for Eleven districts of Meghalaya (East Garo Hills, East Jaintia Hills, East Khasi Hills North Garo Hills, Ri-Bhoi, South Garo Hills, South West Garo Hills, South West Khasi Hills, West Garo Hills, West Jaintia Hills, West Khasi Hills)	All PRC Staff
4.	PIP Monitoring for Two districts of Puducherry (Karaikal, Mahe)	All PRC Staff
5.	PIP Monitoring for Two districts of Sikkim (Sikkim South, Sikkim West)	All PRC Staff
6.	PIP Monitoring for Five districts of Manipur (Bishnupur, Imphal East, Imphal West, Tamenglong, Ukhrul)	All PRC Staff
7.	National Quality Assurance Standards Certification of Public Health Facilities in Karnataka: Enablers and Barriers	Lekha Subaiya, N. Kavitha and T.S. Syamala
8.	Functioning of NCD Clinics: A Comparative Study in Selected two Districts of Karnataka	C.M. Lakshmana and C. Yogananda
9.	Assessment of Home Based New Born Care (HBNC) in Selected Districts of Karnataka	T.S. Syamala, LekhaSubaiya P. Prabhuswamy

Abstracts of the Studies Completed

1. PIP Monitoring of Ten Districts of Karnataka (Chikmagalur, Tumkur, Koppal, Udupi, Yadgir, Bangalore Urban, Bellary, Bijapur, Ramanagara, Shimoga)

Karnataka has made significant progress in many demographic and health indicators in recent years. The performance of Karnataka is far above the national average while it lags behind other southern states. The fertility level has declined to replacement level and the infant mortality has shown drastic decline during the last decade. As per the Ministry guidelines, the PIP monitoring was carried out in ten districts of Karnataka, viz., Chikmagalur, Tumkur, Koppal, Udupi, Yadgir, Bangalore Urban, Bellary, Bijapur, Ramanagara and Shimoga. The major objective of the study is to understand the functioning of different components of National Rural Health Mission (NHM) in the selected districts. Separate reports have been prepared for each district after analysing data

collected from the district offices as well as based on the field observations, discussions with the health personnel and the beneficiaries.

Although the visited districts have adequate health facilities as per the norms laid down, the major problem observed was with respect to the shortage of manpower. This was particularly true in case of secondary and tertiary care hospitals than primary health centres. The shortage was more pronounced in case of doctors, especially, specialists, other para-medical staff and technicians. The shortage of health staff and beds in SNCU is also observed in several districts. The shortage of Group D staff was also quite noticeable in the districts of Karnataka. The concept of e-hospital is operational in several districts of Karnataka. It is a work flow management based on ICT solutions. There is a generic software which covers major functional areas like patient care, laboratory services, human resource, medical records management etc.

Overall, the ASHA programme is running smoothly in visited districts of Karnataka. However, a few issues like dropout of ASHAs after receiving the required training, problems in refilling the ASHA kit etc needs attention. Though the institutional deliveries are increasing all-over Karnataka, the deliveries conducted through C-section are alarmingly high. The working of JSY and JSSK programme in the districts are more or less satisfactory barring some complaints regarding the delay in getting the money, poor quality of food supplied in the facilities and issues with respect to delay in getting referral transport. Free referral transport for delivery cases is found to be underutilized due to long waiting time for getting ambulance services and inaccessible call response. Although the major aim of the JSSK programme is to make delivery cashless, some of beneficiaries incurred expenditure mainly on transport, on diagnostic tests and also on drugs. Some of the essential drugs were also in short supply in many of the districts. Although HMIS coverage was comparatively better, the data quality needs improvement as there were several errors spotted while verifying the HMIS data quality. The biomedical waste management at District Hospital and FRUS have been outsourced to private agencies and has been successful. On the other hand, in the case of PHCs, the waste management is done at the premises itself. *Arogya* Karnataka Health Scheme of the state Government has now been integrated with the centrally sponsored “Ayushman Bharat” scheme.

2. PIP Monitoring of Five Districts of Telangana (Siddipet, Rajanna Sircilla, Medchal, Jangaon, Yadadri)

The main aim of the studies was to review and appraise the health system on important dimensions such as health infrastructure, human resources and various other inputs into the health service delivery system at the district level in Telangana state. The districts of Siddipet, Rajanna Sircilla, Medchal–Malkajgiri, Yadadri Bhuvanagiri and Jangaon were covered in the study. In each district the team visited one Sub-Centre, one PHC, one CHC, one Taluk Hospital and the District Hospital, respectively, and gathered statistical data as well as insights through discussions with district and facility level personnel.

Telangana has made large strides in improving the demographic and health indicators of the population. The total fertility rate of the state is below replacement level, and in 2016 the Infant Mortality Rate (IMR) was 31 deaths to infants per 1000 live births while the Maternal Mortality Rate (MMR) was 81 deaths per 100000 live births (NitiAayog). According to NFHS-4, in 2015-16, about 92 percent of the deliveries in the state took place in institutions and about 75 percent of mothers in the state had received at least four antenatal checkups and about 68 percent of children aged 12 to 23 months were fully immunized. However, there is variation across districts in the state with some districts being more economically and socially developed than other districts.

A recent bifurcation of districts, in 2016, has had a temporary effect on health infrastructure and supply of human resource in newly carved districts. Thus, the health system in new districts is only in the process of being fully established as per norms which is reflected in the performance of the visited facilities. In general, the studies found that plans to upgrade the physical infrastructure and manpower supply in the health system were in place, and that currently facilities are managing national and state health programmes with given staff and the help and coordination from other districts. The discussions with health officials revealed that there are some good practices and innovations in the districts which are helping to improve health service delivery. Some schemes which are benefiting the districts are the Arogya Sree Telangana State Insurance programme, the establishment of the palliative care department with the guidance of Tata Trust, Dialysis units run by DMed, and the KCR Kit for maternal health and child immunisation.

3. PIP Monitoring of Eleven Districts of Meghalaya (East Garo Hills, East Jaintia Hills, East Khasi Hills, North Garo Hills, Ri-Bhoi, South Garo Hills, South West Garo Hills, South West Khasi Hills, West Garo Hills, West Jaintia Hills, West Khasi Hills)

NHM-PIP monitoring was carried out in all the eleven districts of Meghalaya, namely, East Khasi Hills, West Khasi Hills, East Jaintia Hills, West Jaintia Hills, Ri-Bhoi, West Garo hills, East Garo hills, South West Garo hills, North Garo Hills and South Garo Hills, as assigned to PRC, ISEC by the Ministry of Health and Family Welfare. Field visits for the PIP Monitoring was undertaken during the month of November, 2019. In each district, one district hospital, one CHC, one PHC and one SC were visited by a team of two members from PRC, ISEC for monitoring the PIP activities in each district.

Meghalaya state has made significant progress in many demographic and health indicators over the years. Despite this progress, the fertility level appears to be high in Meghalaya. However infant mortality has declined to a larger extent. It was observed that the health service delivery has improved over the years but there are many challenges in delivering the health services in the state as most of the regions are hilly and many villages are situated in interior places. Sometimes health workers have to walk for several hours to reach villages. Most of the health facilities visited were in poor condition. Heavy rains, floods and landslides during rainy season are common and these make the conditions worse. Lack of housing arrangements at the interior facilities for the staff is a serious concern as they have to walk for long hours and the condition of roads is very poor. Lack of space and human resource in health facilities observed to be major problems in most the districts of Meghalaya. Public-Private Partnership model is adopted for the services such as laboratory diagnostics and maintenance of medical equipments. Though there is drastic decline in home deliveries, still home deliveries occur particularly in hilly districts. Some of the districts have developed their own programs to reduce home deliveries and thereby maternal and infant mortality. One such example is the SANGRAA application developed by the district authorities of South-West Garo hills, which appears to be a successful application in tracking pregnant women. In most of the SCs, deliveries are conducted.

Overall, the quality of HMIS data appears to be good in most of the districts of Meghalaya and HMIS data is used by the district and state authorities for planning and other purposes. However, intermittent power supply and slow or no internet connection is a serious concern for uploading HMIS data in many districts. There is also a requirement for more data entry operators in the state. In many facilities, it was reported that the quality of drugs supplied is not good. In most of the districts, it was reported that there is delay in receiving funds from the state and therefore the implementation of programs is delayed. It is also evident that although many districts have been bifurcated, sufficient human resource has not been provided for the new districts. Many of the

newly formed districts lacks MCH and RCH officers and other programme officers, particularly with respect to all vertical programmes such as malaria, TB and leprosy control. These officers are with the parent district and they are responsible for running these programmes in both the districts and this becomes a barrier in providing the health services effectively.

It was observed that Pradhan Mantri Matru Vandana Yojana (PMMVY) program is running successfully in the state and encourages women to go for institutional deliveries. Under this program, Rs.5000 cash incentive is given for pregnant and lactating mothers. Overall, ANC coverage, institutional deliveries and immunization coverage is good in certain districts and it is not so good some of the hilly districts. JSSK and JSY schemes are functioning reasonably well. There is severe shortage of ambulances in certain district. Adequate functional ambulances are very essential as many of the districts are hilly and there are several hard to reach areas. Megha Health Insurance Scheme (MHIS) of the state Government has been integrated with the centrally sponsored ‘Ayushman Bharath’ scheme as the initiative of State government. Due to this insurance scheme there is high turnover of patients now in the District Hospital. However, many of the beneficiaries have to go to Shillong to avail these facilities as civil hospitals in some districts do not have all the necessary facilities for higher level treatment. Overall, monitoring brought out some issues that require attention as well as several positive aspects of the implementation of the NHM programme in Meghalaya state.

4. PIP Monitoring of Two Districts of Puducherry U.T. (Karaikal, Mahe)

The monitoring of PIP activities under the National Health Mission (NHM) for Mahé and Karaikal districts in the Union Territory of Puducherry were undertaken during December 2019 and January 2020. The District Hospital, Palloor Community Health Centre, Pandakkal Primary Health Centre and Cherukallayi Sub Centre at Mahé, and the Government General Hospital, Thirunallar CHC, Kottuchery PHC and Karukankudy SC at Karaikal were selected for the field visit.

During the field visit it was found that Mahé district has a severe shortage of infrastructure and human resource as against that which is required given the population. In Mahé district, all the health facilities including DH and CHC are functioning in old buildings. Health officials in the district report that funds under VHNDK for maintenance of facilities have not been received since March 2018. In fact only salaries are being paid, as other NHM funds have not been received since March 2019. Due to the problems with receiving funds many health programmes have been impacted. JSY and JSSK schemes are not running smoothly due to the delay in funds being transferred from the HQ. Medicines are also in short supply. Funds have not been received by Mahé district health administration to buy medicines under the NCD programme. The shortage of man power was observed at Karaikal district also, and in particular, there were shortages for doctors and specialists. Further, key positions such as DHO, DLO, RCH officer etc. are vacant in Karaikal district.

The region is prone to waterborne and airborne diseases in the monsoon season due to heavy rainfall, and the incidence of vector borne diseases is high once the waters recede. Camps are conducted on a regular basis to prevent and control vector borne diseases. TB is under control, and it is not an endemic region for filariasis. Mahé region has a specific problem of high usage of alcohol by the population. Due to the unique licensing nature in the district alcohol outlets abound. Thus there is a demand for health services required as a result of alcohol abuse such as due to road accidents, conflict etc.

AYUSHMAN BHARAT has not yet been established in Mahe, but orders had been given for rolling out the programme by May 2020, and it is in the process for PHC and sub-centres to follow the protocols as outlined in the programme. On the other hand, the programme is running smoothly in Karaikal district. Under the RBSK programme, children from government schools and anganwadi centres are being screened, and health problems identified, including cardiac anomalies, dental problems, measles, skin problems, learning disabilities, mild anaemia, stress related problems, etc. The Bio-medical Waste Management was reported to be good in both the districts, with measures in place for proper disposal of waste including recycling of plastic and paper waste. HMIS coverage in both the districts is satisfactory.

5. PIP Monitoring of Two Districts of Sikkim (Sikkim South, Sikkim West)

In the context of Sikkim, the available human resource, in terms of physical infrastructure both in the south and west Sikkim districts is sufficient and, in fact, quite impressive. Extended ANC services provided free-of-cost in all the public health facilities visited during the field work has helped to increase full coverage of ANC among pregnant women. Adolescent-friendly health clinics', working at various levels, is relatively good. In the entire district, the existing health facilities are functioning in a government building. All health facilities, in the visited health institutions, were well-furnished with adequate upgraded modern equipment. Supply of essential drugs, contraceptives, medical kits, etc., at the visited facilities, was found adequate. Availability of overall laboratory service for diagnostic is quite satisfactory.

However, there was shortage of MOs at the PHCs. PHCs needs meeting hall, space for garage and building needs repair. In recent times, drugs supply is not properly managed besides inadequate. Except for mini Lap, NSSK, training status among health staff is quite satisfactory. There are funding delays. There is shortage of manpower to handle OPD in CHCs. Due to non-availability of specialist doctors, C-section deliveries are not being done, causing heavy rush at the district hospital. No NBSU, Newborn care corner at the CHCs and has drawn attention of the concerned health department. CBC service is not available at CHCs due to non-availability of laboratory equipment. But, overall, diagnostic and laboratory tests, at the visited health facilities, are quite good. SCs had all necessary health equipment, but access was an issue because of long distance from villages.

Due to non-availability of anaesthesia as well as other specialist's doctors in CHCs, C-section deliveries are not being done which needs to be addressed by the Department of Health & Family Welfare. The availability of vaccines and TT injections are adequate in the visited and Family Welfare. Available reproductive and child health services in both the districts is quite satisfactory. However, Health Department needs to concentrate on is providing NBSU, especially to PHCs and SCs. Majority of the PHCs require quarters, renovation, besides delivery tables. Available ARSH and AYUSH service is satisfactory.

No issues were observed regarding Malaria in the region, however, the number of TB cases is increasing. The concerned health department has taken the necessary steps to control the same. Ratio of population and health facilities in the districts is balanced given that it is sparsely populated and health facilities available is adequate. However, some human resource needs to be provided, especially to CHCs.

Overall cleanliness and bio-medical waste management has been managed well and protocols are followed. All health staff in the visited health facilities are aware of the segregation of solid waste management. By and large, the posters and IEC display, were displayed. Available ASHA workers in the visited districts is quite sufficient, there are no dropouts.

The overall coverage of uploading MCTS and HMIS information to the web portal is seems to be improved over time. Record maintenance, regarding OPD, IPD, JSY, JSSK, and ANC register etc., at the visited health centres, is also well managed. Based on the above facts, it is important note here that there is no single private health facility in the south Sikkim district. Hence, there is a need to strengthening the public health facilities, though, people are depending on public health care service delivery.

6. PIP Monitoring of Five Districts of Manipur (Bishnupur, Imphal East, Imphal West, Tamenglong, Ukhrul)

The monitoring of PIP activities under the National Health Mission (NHM) for Imphal West, Imphal East, Bishupur, Tamenglong and Ukhrul districts in the state of Manipur was undertaken during the month of October 2019. In each district the two study teams visited one PHC, one CHC, one SC and the District Hospital, respectively. The appraisal provides a review of key population and demographic indicators as well as important dimensions of the health system such as health infrastructure, human resources and other inputs into the health services delivery system of the district.

Manipur is largely rural with about 70 per cent of the population living in rural areas. According to Census 2011 the sex ratio is 985 females per 1000 males which is higher than the national average. However, the child sex ratio (below the age of 6 years) in 2011 was only 930 girls per 1000 boys. About 34 per cent of the population belongs to Scheduled Tribe Groups. The total literacy rate of the state is high at approximately 77 percent. The total fertility rate is below replacement in the state and stands at 1.5 children per woman. The Maternal Mortality Rate was between 64 and 80 deaths per 100,000 live births in 2011-2012 and the infant mortality rate (IMR) was 12 per 1000 live births in 2017.

While Manipur state as a whole shows significant improvement in demographic and health indicators in the recent decade, there is wide variation across districts reflecting the uneven development within the state. Data from NFHS 2015-16 show that about 70 percent of mothers had received at least four ante natal checkups (ANC) on average in the state, but that figure was 82 percent in Imphal East, 78.8 percent in Imphal West, 87 percent in Bishupur and only 33 percent in Tamenglong and 27 percent in Ukhrul. The percentage of births taking place at health institutions was 69 percent in the state, 82.1 percent in Imphal East 91.4 percent in Imphal West, 87 percent in Bhushupur but only about 33 percent in Tamenglong and Ukhrul respectively. Similarly, the percent of mothers who received post natal care from health personnel within two days of delivery was 65 percent in Manipur, 72.8 percent in Imphal East, 82.8 percent in Imphal West, 83.8 in Bishupur but only 32 percent in Tamenglong and 33.6 percent in Ukhrul. In Manipur, 66 percent of children between 12 to 23 months of age were fully immunized that figure is only 44 percent in Tamenglong and 42.4 percent in Ukhrul.

During the field visits the study teams found that both Tamenglong and Ukhrul districts require substantial intervention with regard to health service infrastructure and support. In general, a shortage of human resource is found in the all posts such as Specialists, MOs, SHNs, ANMs, HIs, and Radiographers, including those recruited under NHM. Human resource appointments are not always adhered to as many staff transferred to health facilities in these districts find a way to get transferred back to head quarters in Imphal, sometimes even before taking up position in the district. The major issue with the human resource in the state is that clustering of doctors and other staff in the facilities of plain areas and shortage of health staff at the facilities of hilly regions. The health infrastructure in Tamenglong and Ukhrul districts is in need of upgradation. There is no medical college hospital in the districts, and no paediatric services including SNCU and NRC. An Early

Intervention Centre is yet to be established. There is no incinerator in the districts to dispose of biomedical waste from the public health facilities. During the visit, it was reported by personnel in the visited facilities that the funds for JSY was exhausted as funds had not been received since May 2019. The facilities try to manage by providing benefits for JSY beneficiaries from other sources.

The primary reason for poor health service is that, since Tamenglong and Ukhrul districts are predominantly hilly in nature, lack of mobility is a serious issue, with access to health facilities a challenge for the population and access to many villages a challenge for health personnel. There is poor development of transportation infrastructure in the district and in particular, roads in the area are not motorable during the long rainy season. Most health service campaigns and drives have to be planned for the dry season which only lasts 3 months – December, January, and February. Another challenge has been that bifurcation of districts took place in 2016 and the development of the health system in the newly formed districts is in limbo with no infrastructure being provided. It is likely that the bifurcation will help in better administration in the future.

In order to improve the health care delivery system in the state, Government have converted most of the Sub-centres into health and wellness centres. Yoga appears to be very popular in the district and most of the health and wellness centres have a yoga instructor. Many of the visited health facilities were organising yoga classes, the instructors were either existing staff or volunteers.

7. National Quality Assurance Standards Certification of Public Health Facilities in Karnataka: Enablers and Barriers

The goal of the NQAS programme is to ensure that public health facilities are able to provide assured quality of services. To this extent the aim of the public health system is that all health facilities achieve the standards that will enable NQAS certification. However, not all facilities have been able to meet the standards and it is necessary to understand the reasons. What are the factors which facilitate a facility to improve its standards, and what factors hinder the process. This study is aimed at understanding the certification process and identifying the factors which contribute to enabling NQAS certification and those which act as barriers. The main objectives are to identify the enablers and barriers of NQAS certification; to study the impact of NQAS Certification on performance of health facilities. The study was conducted in three districts of Karnataka: Bellary, Koppal, and Tumkur. The selected health institutions included three DHs, three SDHs, three CHCs and six PHCs since quality assurance standards are maintained at these levels.

The study highlights that the implementation of quality assurance in public health facilities depend on dynamic leadership and a committed team of personnel at the individual facility and the availability of appropriate physical and human resource infrastructure. The study also observed that motivation from higher officials as well as proper and comprehensive training are essential factors in implementing quality assurance standards and sustaining them. A major challenge in quality assurance certification is the shortage of human resource. On the other hand, the improvements in standards in various dimensions of health care service delivery has positive impact on performance of the facility as well as morale of staff

8. Functioning of NCD Clinics: A Comparative Study in Selected two Districts of Karnataka

Over a period, Non-communicable diseases (NCDs) have become a major public health challenge worldwide, especially in low-and-middle-income countries (LMICs). Non-communicable diseases (NCDs) are defined as diseases of long duration and are generally slow in progression. NCDs are

replacing communicable diseases, maternal and child health challenges as well as malnutrition as the leading cause of death.

The global pandemic of NCDs is a threat to sustainable development. The Sustainable Development Goals (SDGs) include reducing premature deaths from the four main NCDs by one-third by 2030. Furthermore, three of the nine health targets in SDGs also focus on NCD-related issues. Despite encouraging developments on the overall economic front, the demographic, epidemiological and social transitions potentially pose serious challenges not only at household level, but also at health system and macroeconomic level. While on the one hand the demographic transition has led to increase in the productive workforce, it has also resulted in an increase in the aged population. This aged population has contributed to an increase in the burden of non-communicable diseases. In view of the above, this study has been approved by the Ministry of Health & Family Welfare to investigate the functioning of NCD clinics in selected districts of Karnataka as part of the annual work plan of PRCs for the year 2019-20. Two districts viz: the southern district of Mysuru and the northern district of Yadgir have been selected for the study. These two districts are different in terms population and health indicators in Karnataka.

The major purpose of the study was to investigate the existing health infrastructure at NCDclinics in the district of Yadgir and Mysuru in terms of human resource as well as the physical infrastructure is concerned. The study also examines the Outpatient Department (OPD) and In-Patient Department (IPD) load in the existing NCDclinics. To report on various health service delivery aspects such as availability of drugs, laboratory, diagnostic facilities, and equipment facility at NCDclinics. To understand the perception of healthcare service delivery at the OPD and IPD by the beneficiaries at the visited health facilities in Yadgir and Mysuru districts of Karnataka to enable policy prescriptions to strengthen the NCDclinics in order to deliver healthcare services to the public.

The data for the study have come from both primary and secondary sources. Basic information pertaining to the establishment of NCD clinics and their status in Karnataka by district has been collected from the Department of Health & Family Welfare services, Government of Karnataka, through the State Programme Officer, National Health Mission (NHM). Further field data has been collected from the selected health institutions in Yadgir and Mysuru districts in Karnataka. Appropriate checklists and questionnaires have been used to get primary data from each NCD clinic in the visited health facilities. Similarly, the opinion of the patients on the available screening and necessary healthcare services provided at OPD and IPD healthcare service delivery in the selected NCD clinics has been investigated. Detailed information has been collected on the accessibility, physical infrastructure in terms of building, laboratory, equipment (in terms of availability, functionality and usability), supply of essential drugs, human resource (in terms of sanctioned, in position and vacant), information on training skills among health staff and other services like laboratory and additional support services. Information on OPD and IPD has been collected from the selected health facilities in Yadgir and Mysuru. Apart from the checklists, three types of personal questionnaires have been used to get the information on NCD clinics and interviews have been conducted with the respective District Health Officer (DHO), District Surgeon and the head of the NCD i.e. in-charge health staff at the selected NCD clinics in Yadgir and Mysuru districts.

Further, to get the perception on the available health facilities to the public at NCD clinics, personal interviews had been conducted with the in-patients and out-patients. At the outset, understanding the strengths and weakness of the NCD clinics, the study has drawn some policy suggestions to improve the healthcare service delivery at the NCD clinics in the study area to strengthen the public health facility at NCD clinics as per the GoI guidelines under the National Health Mission (NHM).

Major Findings

The study reveals that the available health infrastructure both in terms of physical as well as human resource in the district of Mysuru could be stated as good. However, there are a lot of issues regarding physical infrastructure, availability of drugs and diagnosis facility at the visited health facilities in Yadgir. The overall cleanliness and the maintenance of building at the visited health facilities in Yadgir were quite poor compared to the district of Mysuru. Most of the tests and diagnosis services for NCD patients were not available in the visited health facilities, whereas Mysuru district is quite different from Yadgir, and except at the CHC, all health facilities prescribed under NCD were made available to the public.

Overall, the functioning of the NCD clinic at Gurmitkal CHC was rated as poor. There was a lack of coordination between health professionals and the higher authorities. The given financial support to run the NCD clinic at CHC of Gurmitkal was inadequate. It is important to note that most of the existing health staff available at the NCD clinics in Yadgir do not have knowledge on NCD programme and the guidelines implemented by the Ministry.

The interviewed out-patients at the visited health facility in Yadgir confirmed that only 7 per cent out of 30 had knowledge on referral services, and knowledge about the IPD was zero. But around 14 per cent of the interviewed OPD patients in Mysuru have knowledge on the above. Knowledge of NCDs among interviewed patients was highest among ANMs and health workers. By and large in both the districts, the public know about the availability of drugs and the screening facility which is available free of cost at the NCD clinic.

NCD clinic is working as a full-fledged Centre which has been providing and acquiring all necessary health infrastructure in terms of physical as well as human resource in Mysuru. It requires hemoglobin meter, and the given budget is not sufficient to extend the healthcare services to people. Hence, annual maintenance fund needs to be increased. All health staff working at NCD clinic are contract staff, and hence, their monthly salaries need to be increased. Further, an issue of salary has drawn attention by the concern department for NCD staff, which certainly strengthens the NCDs.

9. Assessment of Home Based New Born Care (HBNC) in Selected Districts of Karnataka

Infant mortality rate in India has declined considerably over the years. However, the decline in the neonatal mortality rate has been rather slow in the last two decades. Any further reduction in infant mortality is possible only if there is acceleration in the reduction of neonatal mortality rates (NMR) as around 68 percent of the total infant mortality rate is currently the contribution of neonatal mortality. For reducing the neonatal deaths, the Government of India has initiated Home-Based Newborn Care (HBNC) programme in 2011 aimed at providing a continuum of care to the new born and their mothers till 42 days post-delivery. While its coverage has steadily improved across states, equally desirable are a considerable level of quality improvements across the states and their districts. An assessment of HBNC Programme in this context has been undertaken in five selected districts of Karnataka. At the facility level, discussions were held with ASHAs, mentors, ANMs, medical officers and the district programme officers to understand functioning of the HBNC programme. Further, mothers who are beneficiaries of the programme were also interviewed.

This study has found that the ASHAs have a fair understanding of maternal health as they are frequently trained for visiting pregnant and lactating women. However, good quality home-based care of the new-born is a cause of concern as ASHAs lack sufficient skills and knowledge required for the identification of the sick neonates. Further, their knowledge about standard physical growth of low birthweight babies, their referral as well as follow up and management of babies discharged from Special Newborn Care Units (SNCU) are major areas of concern. Although ASHAs do make

HBNC visits, the quality of visits requires improvement. The interviews with the beneficiaries have also brought out that many a times the ASHAs do not adhere to all the activities they are expected to do during a home visit. Further, ASHAs also do face several problems such as problems with respect to delay in getting their incentives, non-recharge of ASHA kits, lack of supportive supervision. In addition, ASHAs also have to deal with the existing caste hierarchies in the villages. Many a times, the ASHAs belonging to lower caste groups were denied entry into the upper caste households to the extent of being even not allowed to touch the new-born babies. The IEC component on HBNC also must be strengthened and through the IEC activities mothers must be educated on the basics of the new-born care and thereby leading to an early detection of high-risk symptoms.

II. (b) Studies Approved for the Year 2020-21

Sl.No.	Title	Researchers
1.	Effects of Urban Growth on Resource Degradation and its Impact on Environment: Issues and Challenges in India	C M Lakshmana
2.	Children's Migration and Health of their Older Parents in India	T.S.Syamala and Madhu Bidari
3.	Adolescent Marriages in India: Trends and Patterns	T S Syamala and N Kavitha
4.	Contraceptive Use Among Young Women in India	Lekha Subaiya
5.	Factors Associated with Hypertension and Diabetes among Women in India	Lekha Subaiya and N Kavitha
6.	The Prevalence of Tuberculosis: A Comparative Study in India using NFHS Data	C M Lakshmana and Madhu Bidari
7.	Coverage and Quality of HMIS Data in the Context of COVID-19 Pandemic: A District Level Analysis in Karnataka	P. Prabhuswamy and T.S.Syamala
8.	District Level Variations in Utilisation of maternal and Child Health (MCH) services in Karnataka: A Study Based on HMIS Data	C. Yogananda

III. Academic Activities during the year 2019-20

Seminars/Conferences/Training Programme Organized by PRC

One-Day Dissemination Seminar on Population and Health Studies

The Population Research Centre (PRC) conducted the First Dissemination Seminar on 'Population and Health Studies' on June 27, 2019 with financial support from the Ministry of Health and Family Welfare Services, Government of Karnataka. The purpose of the seminar was to disseminate the findings from research studies conducted during the year to a wider audience which included policy makers, researchers and students. Professor M G Chandrakanth, Director, and other dignitaries inaugurated the seminar by lighting a lamp. Shri D S Ramesh, IAS Mission Director, National Health Mission (NHM), Directorate of Health & Family Welfare Services, GoK, and Dr K Ravi Kumar, Senior Regional Director (Health & Family Welfare), Regional Office for Health & Family Welfare, GoI, graced the occasion. The other dignitaries present at the seminar were Dr B G Prakash Kumar, Deputy Director (MVBDCP) and I/c State Programme Manager, NHM, Directorate of Health & Family Welfare Services, Shrimathi S Prameela, Joint Director (State Demographer), Directorate of Health and Family Welfare Services, GoK, Professor P M Kulkarni, Retired Professor, JNU and former faculty of PRC, and Professor K N M Raju, retired Professor and head, Population Research Centre, ISEC. There were about 45 participants, including the faculty and staff of PRC

Seminar on Fertility Transition in Karnataka in Honour of Professor P. Hanumantha Rayappa

A seminar was organised on July 26, 2019 at ISEC by the Population Research Centre (PRC) to felicitate Professor P Hanumatha Rayappa, former Head of the Centre for his significant contribution to the study of Demography. Professor Rayappa completed his Ph.D. in Economics from Florida State University, Tallahassee in 1974 and worked as a Research Associate at the Institute for Social Research, Florida State University, for two years. He joined the Population Research Centre at the Institute for Social and Economic Change in 1976 and was appointed as Professor in 1981. Subsequently, he was Head of the PRC till his retirement on February 28, 1998.

Professor M G Chandrakanth was the chairperson of the seminar and delivered his remarks. Professor C M Lakshmana, Head of PRC, and the programme coordinator, welcomed the gathering. Professor Rayappa was felicitated by the current and former faculty, staff and students of PRC, ISEC who were present in the gathering. Further, former students, friends and acquaintances shared their reflections on Professor Rayappa's distinguished career and mentoring. Professor P M Kulkarni, well-known Demographer and former Professor, JNU, New Delhi, discussed his findings on the "Fertility Transition in Karnataka". Professor K N M Raju, former Professor and Head of PRC, ISEC, presented "Some Interesting Findings of Census Industrial Classifications of Occupation." Dr Lekha Subaiya proposed a vote of thanks.

Training Workshop on Data Management & Analysis Using SPSS and STATA

The Population Research Centre (PRC), ISEC, conducted a Training Workshop on Data Management and Analysis using SPSS and STATA during September 16-21, 2019 with support from Ministry of Health and Family Welfare, New Delhi. The objective of this workshop was to familiarize the staff and faculty of various population research centres across the country on data management and analysis using statistical software.

The programme was inaugurated with Prof. M.G. Chandrakanth Director, ISEC dignitaries and participants lighting a lamp. Shri B K Tiwari, Statistic Division (PRC), Department of Health & Family Welfare, Ministry of Health & Family Welfare, Government of India and Ms Pooja Verma, Assistant Director, Statistic Division, Department of Health & Family Welfare, Ministry of Health & Family Welfare, Government of India graced the occasion and delivered the inaugural address. The other dignitaries present in the Training Workshop were Prof P M Kulkarni, retired Professor, JNU and former Faculty of PRC, and Prof K N M Raju, retired professor and head Population Research Centre, ISEC. There were about 24 sessions in the Training Workshop on Data Management and Analysis using SPSS and STATA. The participants were drawn from nine Population Research Centres across the country. Resource persons included Professor S Madheswaran, Ms BP Vani, Dr Indrajit Bairagya and Dr A V Manjunatha, as well as PRC faculty and staff. The workshop received positive feedback from all the participants.

Two-Day Regional Conference entitled Towards Peace, Harmony and Happiness: Transition to Transformation

Population Research Centre (PRC), ISEC, Bengaluru organised Two-Day Regional Conference on Towards Peace, Harmony and Happiness: Transition to Transformation Jointly with Pranab Mukherjee Foundation, New Delhi, Centre for Research in Rural and Industrial Development (CRRID), Chandigarh. The objective of the seminar was to understand the different dimensions of violence free transitions and discuss larger issues of issues of peace, harmony and happiness.

The inaugural session was graced by dignitaries including Prof. M.G. Chandrakanth, Director, ISEC, Prof. R.S. Ghuman, Programme Co-ordinator, CRRID, Chandigarh, Prof. Jeevan Kumar, Hon. Professor, Karnataka State Rural Development and Panchayat Raj University, Gadag, Prof. V.R. Venugopal, Vice Chancellor, Bangalore University and Dr Gurinder Kaur, CRRID, Chandigarh. The other dignitaries present were Prof. Saumen Chattopadhyaya, Zakir Husain Centre for Educational Studies, School of Social Sciences, JNU, New Delhi; Prof. A. S. Seetharamu (Former Professor and Head, Department of Education, ISEC, Bengaluru), Prof. Manohar Yadav, Professor & Head, CSSCD, ISEC; Prof. G. K. Karanth, Director, Karnataka State Labour Institute and Retd. Professor and Head, CSSCD, ISEC; Prof. K. N. M. Raju (Former Professor and Head, Population Research Centre, ISEC; Prof. M.V. Nadkarni (Former Vice Chancellor, Gulbarga University, Gulbarga, Dr. M. Mahadeva, Secretary, Dr. Ambedkar Institute Of Technology, Bengaluru and former Member, KPSC, Bengaluru and Prof. C.M. Lakshmana, Local Organizing Secretary, PRC, ISEC. There were about 40 participants including the faculty and staff of PRC.

The Conference was organized into four sessions: (a) Education Transition and Transformation, (b) Socio-cultural Transition and Transformation, (c) Economic Transition and Transformation, (d) Health Transition and Transformation. Renowned academicians presented their paper under these themes. The outcome of the conference brought the relevant discussion on the above themes which have been positively help to policy implications. In the valedictory session, Prof. Giridhar R Babu, Public Health Foundation of India, Bengaluru has delivered the valedictory address.

C M Lakshmana

Publications

1. Published a paper "Utilisation of Janani Suraksha Yojana (JSY) Incentive Under Maternity Benefit Scheme: A Study in Karnataka" in the Compendium of Studies conducted by the

Population Research Centres (PRCs) during 2017-18, under the theme “The contemporary Issues of Health and Development in India, Ministry of Health & Family Welfare, GoI, New Delhi, August, 2019.

Papers Presented in National and International Seminars /Workshops /Conferences

1. Attended and presented a paper on “Utilisation of Jananai Suraksha Yojana incentive under maternity benefit scheme: A Study in Karnataka” in the 3rd Dissemination Workshop of PRCs, jointly organised by the Ministry of Health & Family Welfare, GoI & Population Research Centre, IEG, Delhi.
2. Presented a Paper on “Utilisation of JSY under Maternity Benefit Scheme: An Evaluation Study in Karnataka” in the first Dissemination Seminar organised by Population Research Centre, ISEC on 27th June 2019.
3. Presented a Paper on “Functioning of AYUSH Centres in Karnataka: An Overview” in the first Dissemination Seminar organised by Population Research Centre, ISEC on 27th June 2019.
4. Presented a Paper on “Monitoring of NHM-Programme Implementation Plan (PIP) in Selected Districts of Karnataka in the first Dissemination Seminar organised by Population Research Centre, ISEC on 27th June 2019.
5. Presented a Paper on “Utilisation of JSY under Maternity Benefit Scheme: An Evaluation Study in Karnataka” in the first Dissemination Seminar organised by Population Research Centre, ISEC on 27th June 2019.
6. Presented a paper: “Population Change, Urbanisation and Economic Development: Experience of China and India” in the 8th China-India Forum, on the theme China-India: Humanities, Economy and People’s Welfare, organised by Sichun Academy of Social Sciences (SASS) and ISEC, Chengdu, China, 17th and 18th October, 2019.
7. Presented a Paper in the Seminar on “Population Change, Urbanisation and Economic Development: Experience of China and India” at ISEC on 28th October, 2019.
8. Attended and presented a paper “A Study on Utilisation of free benefits under Janani Suraksha Karyakram (JSSK), for institutional deliveries in Chamarajnagar District of Karnataka, at the 4th Knowledge Dissemination workshop of Population Research Centre, held at Patna University, Patna, Bihar, during 16th to 17th January, 2020.

Seminars/Conferences /Workshops Conducted /Attended and Lectures Delivered

1. Participated in the 1st Orientation workshop of Population Research Centres on 30th and 31st May, 2019, organised by the Ministry of Health & Family Welfare, Statistical division, GoI.
2. Participated in the discussions on special health programmes with the State Programme Manager and Deputy Director, National Health Mission, Directorate of Health & Family Welfare Services, GoK, Bangalore, 7th June, 2019.
3. Organised 1st Dissemination Seminar on Population and Health studies conducted by Population Research centre, ISEC, on 27th June 2019 at ISEC, Bangalore.

4. Organised a seminar on “Fertility Transition in Karnataka” in honour of Prof P H Rayappa, 26th July, 2019.
5. Organised and coordinated the Training workshop on “Data Management and Analysis Using SPSS and STATA” for PRCs staff at ISEC from 16th to 21st September, 2019.
6. Chaired a Session on the theme “Multiple Dynamics of Decentralised Governance” in the National Seminar on “Social Justice and the Working of Panchayats in India- Revisiting the concern of Dr B.R. Ambedkar School of Thought, organized by Shri Ramakrishna Hegde Chair on Decentralisation Development, ISEC on 19.09.2019- C.M. Lakshmana
7. Organised Two day Regional Conference on “Towards Peace, Harmony and Happiness: Transition to Transformation” at ISEC during 23rd and 24th Jan, 2020, collaboration with CRRID, Chandigarh. .
8. Discussant at the 20th Indian Association of Social Science Institutions (IASSI) Conference, organised at ISEC from 27th February 2020 to 29th February 2020, coordinated by Prof. Parmod Kumar, Professor, ADRTC and Dr. Sobin George, Assistant Professor, CSSCD. .

Miscellaneous

1. Nominated as Member, Board of Studies in Development Studies (Post Graduation), Institute of Development Studies, University of Mysuru for the period of three years (2019-2022)
2. Attended the annual meeting of Board of Studies (BOS) at the institute of Development Studies, Manasagangothri, University of Mysore on 30th Dec, 2019
3. Review of article : An Exploratory Analysis of Gender Attitudes in Kerala, Springer, 21st May, 2019
4. Delivered special speech in College Day function at Government First Grade College, Hosakote, Bangalore Rural District, 17th May, 2019.
5. Participated in the discussions on special health programmes with the State Programme Manager and Deputy Director, National Health Mission, Directorate of Health & Family Welfare Services, GoK, Bangalore, 7th June, 2019.
6. Guided an intern during May and June, 2019 under the aegis of the ISEC Summer Internship programme, 2019-20
7. Book review: Population Geography, Springer, Switzerland, 1st July, 2019
8. Review of Article: Age, period and birth cohort effects on prevalence of obesity among reproductive age, women in India, journal-SSM-Population Health, Elsevier, The Netherlands, 5th July 2019
9. Book review: "Population, Land use-Land cover and Environment: Scenario of Top Seven Indian Metro Cities", Springer, New Delhi, 27th August, 2019

10. Published a paper “Utilisation of Janani Suraksha Yojana (JSY) Incentive Under Maternity Benefit Scheme: A Study in Karnataka” in the Compendium of Studies conducted by the Population Research Centres (PRCs) during 2017-18, under the theme “The contemporary Issues of Health and Development in India, Ministry of Health & Family Welfare, GoI, New Delhi, August, 2019.
11. Evaluated M.Phil. Dissertation on “Female Labour Participation Rate in Odisha: A District Level Analysis” submitted by Baijayanti Rout, a Research Student for the award of Philosophy in Economics, Centre for Studies in Economics and Planning, School of Social Sciences, Central University of Gujarat, Gandhinagar, India (Dec, 2019).

T.S. Syamala

Publications

(a) Articles

1. T.S.Syamala (2019) “Mental Health and its Linkages with Household Economic Status among the Older Persons in India in the Compendium of Studies conducted by the Population Research Centres (PRCs) during 2017-18, under the theme “The contemporary Issues of Health and Development in India, Ministry of Health & Family Welfare, GoI, New Delhi, August, 2019.
2. N. Kavitha and T.S Syamala (2019) “Young Maternal Age and its implications on Birth Outcomes, jointly with Dr N. Kavitha in the Compendium of Studies conducted by the Population Research Centres (PRCs) during 2017-18, under the theme “The contemporary Issues of Health and Development in India, Ministry of Health & Family Welfare, GoI, New Delhi, August, 2019
3. Lekha Subaiya and T.S.Syamala (2019) The Ageing of Populations in Asia. *Geography and You*, April 1-15 & 16 - 30, Vol. 19, Issue 19 & 20, No. 130 & 131.

(b) Working Papers

1. N. Pautun Thang and T.S.Syamala (2020). Single Child Families in Tripura: Evidences from National Family Health Surveys. Working Paper No 459. Institute for Social and Economic Change, Bangalore
2. Prem Shankar Mishra and T.S.Syamala (2020). Multiple Vulnerabilities in Utilising Maternal and Child Health Services Across Regions of Uttar Pradesh, India. Working Paper No 473. Institute for Social and Economic Change, Bangalore

Papers Presented in National and International Seminars /Workshops /Conferences

1. Participated in the National seminar on understanding Child Malnutrition in India and presented a paper on double burden of malnutrition at household level: Factors associated

with undernourished child and overweight mother pair in India. On 4-5 November 2019 at Centre for Social Studies Surat

2. Presented a Paper on “Increasing Caesarean Section Deliveries in India: An Investigation” in the first Dissemination Seminar organised by Population Research Centre, ISEC on 27th June 2019
3. Presented a Paper on “Older Persons and Care Needs: A Study among Urban Middle Class Senior Citizens in Bangalore” in the first Dissemination Seminar organised by Population Research Centre, ISEC on 27th June 2019
4. Presented a Paper on “Monitoring of NHM-Programme Implementation Plan (PIP) in Selected Districts of Andhra Pradesh” in the first Dissemination Seminar organised by Population Research Centre, ISEC on 27th June 2019

Seminars/Conferences /Workshops Conducted /Attended and Lectures delivered

1. Participated in the 1st Orientating workshop of Population research Centres on 30-31st May 2019 organised by Ministry of Health and Family Welfare, Statistics division, Government of India
2. Participated in the seminar on 'Fertility Transition in Karnataka' in honour of Professor P Hanumantha Rayappa and read the Felicitation on 26th July 2019 at ISEC, Bengaluru
3. Attended the international conference on Population Nutrition and Development from 12th to 14th December at University of Kerala Trivandrum and Chaired a session on Reproductive and Sexual Health
4. Participated in the National seminar on understanding Child Malnutrition in India and presented a paper on double burden of malnutrition at household level: Factors associated with undernourished child and overweight mother pair in India. On 4-5 November 2019 at Centre for Social Studies, Surat
5. Discussant for a session on Child Development : A fair chance to every Child at the 20th Indian Association of Social Science Institutions (IASSI) Conference, organised at ISEC from 27th February 2020 to 29th February 2020
6. Participated in the 4th Knowledge dissemination Workshop of Population Research Centres held at Patna University, Patna, Bihar, during 16th to 17th January, 2020. and received a consolation prize for her paper titled Dynamics of Labour Force Participation in India: Issues and Concerns.

Miscellaneous

1. Managing Editor for the Journal of Social and Economic Development, published by Springer
2. Ph. D. Coordinator at Institute for Social and Economic Change

3. Participated in a discussion with a study team from Piramal Foundation conducting a landscape study on urban health in India to understand the challenges thereof, the administration and governance structure of urban health, map innovative interventions within this space, and different health financing models on 19th February, 2020 at ISEC, Bengaluru.
4. Gave a joint lecture on "Health Care Utilisation Pattern in Karnataka " for the participants of the Public Policy and Governance Programme on 14th June, 2019 at ISEC
5. Guided an intern during May and June 2019 under the aegis of the ISEC Summer Internship programme 2019
6. Participated in a meeting with Prof. David Bloom to discuss the publication of papers from the March 2019 International Conference on Ageing in Asia on 8th August, 2019 at ISEC, Bengaluru
7. Attended a meeting for the Validation of Dried Blood Spots project on 3rd August, 2019 at Strand Life Sciences, Hebbal, Bengaluru
8. Attended the Management Committee meeting and the Annual General Body meeting of Praxis India on 1st September, 2019, at Chennai, Tamil Nadu.
9. Dr.T.S.Syamala was a mentor for the group working on a policy brief on mental health issues during the executive education programme on public policy and governance from January 21st to February 2nd 2020 at ISEC, Bangalore.

Lekha Subaiya

Publications

Articles

1. Lekha Subaiya and T. S. Syamala (2019) The Ageing of Populations in Asia. *Geography and You*, April 1-15 & 16 - 30, Vol. 19, Issue 19 & 20, No. 130 & 131.

Seminars/Conferences /Workshops Conducted /Attended and Lectures delivered etc.

1. Served as panelist and moderator for a one day national conference titled 'A Multidisciplinary Approach to Culture and Gender Roles' at St Claret College, Bengaluru on 11th April, 2019.
2. Participated in the 1st Orientation Workshop of Population Research Centres at Vigyan Bhawan, New Delhi during 30th and 31st May, 2019.
3. Gave a joint lecture on "Health Care Utilisation Pattern in Karnataka" for the participants of the Public Policy and Governance Programme on 14th June, 2019 at ISEC.
4. Participated in the seminar on 'Fertility Transition in Karnataka' in honour of Professor P Hanumantha Rayappa and gave the vote of thanks on 26th July 2019 at ISEC, Bengaluru.
5. Gave a lecture during the training workshop on "Data Management and Analysis Using SPSS and STATA" conducted at ISEC from 16th to 21st September, 2019.

6. Attended a one day workshop on “**Visual Research Methods**” organized by the Transdisciplinary Centre for Qualitative Methods (TCQM), Prasanna School of Public Health, MAHE on 12th January, 2020 at Manipal.
7. Attended a seminar on “**The ‘Southern Tilt’ in the Urban: Embedded Wisdom and Cultural Specificity as Pathways to Planning**” organized by the Institute of Public Policy and URBAM (EAFIT University, Medellín) from 13-15th February, 2020 hosted by the Institute of Public Policy, National Law School of India University, Bengaluru.
8. Participated in the workshop to launch the EQUIMOB project at ISEC on 26th and 27th September, 2019
9. Participated in a discussion with a study team from Piramal Foundation conducting a landscape study on urban health in India to understand the challenges thereof, the administration and governance structure of urban health, map innovative interventions within this space, and different health financing models on 19th February, 2020 at ISEC, Bengaluru.
10. Taught a class on “**Feminist Methods in Research**” on 9th March 2020 to participants of the ICSSR sponsored Research Methodology Course for SC and ST students held at ISEC from 9th March to 18th March, 2020.

Miscellaneous

1. Served as Coordinator of ISEC Biannual Newsletter.
2. Guest edited the Special Issue on Ageing for Journal of Social and Economic Development.
3. Reviewed a manuscript proposal on population and development for Springer, New Delhi, March 28, 2019.
4. Guided an intern during May and June 2019 under the aegis of the ISEC Summer Internship programme 2019.
5. Reviewed an article submission for Social Science and Humanities Open journal, June 2019.
6. Reviewed a journal article for Demography India 2nd August, 2019
7. Participated in a meeting with Prof. David Bloom to discuss the publication of papers from the March 2019 International Conference on Ageing in Asia on 8th August, 2019 at ISEC, Bengaluru
8. Attended Pre Registration Colloquium of student on 24th August at Sociology Department, Mysore University, Mysore
9. Reviewed a paper for Social Science and Medicine – Population Health.
10. Served as Guest Editor for a Special Issue on Ageing to be published by the Journal of Social and Economic Development, Springer India

C. Yogananda

Publications

1. Published a paper “Utilisation of Janani Suraksha Yojana (JSY) Incentive Under Maternity Benefit Scheme: A Study in Karnataka” jointly with Dr CM Lakshmana in the Compendium of Studies conducted by the Population Research Centres (PRCs) during 2017-18, under the theme “The contemporary Issues of Health and Development in India, Ministry of Health & Family Welfare, GoI, New Delhi, August, 2019.

Seminars/Conferences /Workshops Conducted /Attended and Lectures delivered

1. Attended a Two-day Regional Conference on “**Towards peace, Harmony and Happiness: Transition to Transformation**” Jointly Organised by Pranab Mukherjee Foundation, New Delhi, Centre for Research in Rural and Industrial Development (CRRID), Chandigarh and Population Research Centre (PRC) ISEC, Bangalore 23rd and 24th January 2020– C.Yogananda

P. Prabhuswamy

Papers Presented in National and International Seminars /Workshops /Conferences

1. Presented a Paper on “Role and Functions of ASHA Workers in Rural Karnataka: A Case Study” in the first Dissemination Seminar organised by Population Research Centre, ISEC on 27th June 2019.
2. Presented a Paper on “Coverage and Quality Data Captured by HMIS: A Facility Level Analysis in Karnataka” in the first Dissemination Seminar organised by Population Research Centre, ISEC on 27th June 2019.

N. Kavitha

Publications

1. Published a Paper “Young Maternal Age and its implications on Birth Outcomes, jointly with Dr T S Syamala in the Compendium of Studies conducted by the Population Research Centres (PRCs) during 2017-18, under the theme “The contemporary Issues of Health and Development in India, Ministry of Health & Family Welfare, GoI, New Delhi, August, 2019.

IV. Faculty and Staff

1. C M Lakshmana, Professor
2. T S Syamala, Associate Professor
3. Lekha Subaiya, Assistant Professor
4. P Prabhuswamy, Research Analyst
5. C Yogananda, Research Analyst
6. N Kavitha, Field Investigator

7. A N Ravi Shankar, Superintendent
8. B H Chandrasekhar, Stenographer
10. B Suresh, Typist/LDC
11. Madhu Bidari, Data Assistant
12. Devindra S, Data Assistant
13. V Venkatahanumaiah, Driver
14. Ramamani, Peon

V. PhD Students on Rolls

Sl No	Name of Student	Batch	Discipline	Tentative/Finalised Topic of Research	Guide
1	N. Prajwal	2017	Sociology	Moving together: Equitable Access to Mobility Infrastructure for Older Adults and Persons with Disabilities in Bengaluru	Dr. Lekha Subaiya
1.	Mr Prem Shankar Misra	2015	Population Studies	Achieving Universal Health coverage in India: A Study Based on Equity and Access to MCH Services	Dr T S Syamala
2.	Mr Pautaun Thang	2015	Population Studies	Demographic Transition and Familial Changes: A case of Single Child Families in India	Dr T S Syamala
3.	Ms Anamika Das	2015	Population Studies	Domestic Violence against Women and its Impact on Women and Child Health: A Study in West Bengal	Dr C M Lakshmana
4.	Mr Kinkar Mondal	2015	Population Studies	Childhood Morbidity in India: A Comparative Analysis	Dr Lekha Subaiya
5	Mr Raju Sarkar	2014	Population Studies	Linkages of Urbanization and Demographic Behaviour in India	Dr C M Lakshmana
6	Mr Ankit Anand (Part-time)	2014	Population Studies	Quality of Life, Social Networks and Health of Elderly Living in Old-Age Homes	Dr T S Syamala
7	Mr Nikhil P N	2013	Population Studies	Institutional Care, Belonging and Migration: Lived Experiences of the Elderly in Old-Age Homes	Dr K S.James
8	Mr Allen Prabhaker Ugargol (Part-time)	2012	Population Studies	Ageing and Exchange of Care in Emigrant Households: Case Studies from Kerala and Goa	Dr K S James

Appendix: Utilisation certificate and annual Account

