AIIMS, New Delhi - PGI, Chandigarh

Fourth South East Asia Regional Course on

Public Health Approaches to Non-Communicable Diseases

20th – 24th March, 2018

Course Coordinators

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Venue

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PARTNERS:

World Health Organization, India Office

World NCD Federation, Chandigarh

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ORGANIZATION OF THE COURSE

There is a huge capacity gap in the initiation and implementation of Non-Communicable Diseases (NCDs) programs in the South East Asia (SEA) Region. This is affecting effective planning and implementation of various NCD programs in the region adversely. In order to bridge this gap, Centre for Community Medicine, All India Institute of Medical Sciences (AIIMS), New Delhi and School of Public Health, Postgraduate Institute of Medical Education and Research (PGIMER) Chandigarh jointly organized a five day South East Asia Regional Course on Public Health Approaches to Non Communicable Diseases (NCDs) from 20th to 24th March, 2018 in Delhi. This course is conducted annually alternatively at PGI and AIIMS. The partners for the course were World Health Organization (WHO), India Office and World NCD Federation. The course was accredited with Delhi Medical Council.

Objectives of the workshop:

1. To understand the epidemiologic, socio-economic burden of chronic, non-communicable diseases in South East Asia Region.
2. To understand the evidence-base for population level and health system interventions for NCDs.
3. To strengthen capacity for surveillance and monitoring of progress towards Sustainable Development Goals related to NCDs.
4. To share global best practices and lessons in NCD prevention and control

Course Content:

The SEAR Course on Public Health Approaches to Non-Communicable Diseases focused on prevention and control of NCDs including mental health in the Indian and regional context. Its course content included epidemiology, burden and impact and determinants. It derived knowledge from sharing best practices and lessons from the experience of implementing NCD prevention and control program covering a wide variety of areas like health promotion, evidence based public health interventions, health system strengthening, standard treatment guidelines, multi-sectoral actions, disease registry, surveillance, monitoring and evaluation. It also covered National NCD programs and challenges of integration. The course included lectures, panel discussions and group work. The diverse nature of the group enabled interaction between NCD program managers and public health experts in academic institutions, public health professionals working in non-governmental organizations sector and those working in non-health sector. The detailed agenda of the workshop is provided in Annexure I.

Participants:

There were a total of 47 participants (List of Participants provided in Annexure II) that included:

1. 3 International Participants
2. 15 State sponsored Candidates
3. 5 WHO Sponsored Candidates
4. 7 Faculty in Medical Colleges
5. 13 Post Graduate Students
6. 5 Public health professionals

Faculty:
A total of 37 guest faculty speakers facilitated the course and included experts from AIIMS, PGI, Ministry of Health, ICMR, WHO and other important institutions. A complete list of faculty is provided in Annexure III.

The full detail of the workshop is provided with day wise sessions in next section.

DAY 1 (20TH MARCH): THE CHALLENGE OF NCDS IN SOUTH-EAST ASIA REGION

INAUGURAL SESSION

The NCD course started with a simple inaugural session with an introductory speech by Dr. Anand Krishnan and Dr. Baridalyne N. from AIIMS, New Delhi, Dr. J.S. Thakur from PGIMER, Chandigarh and Dr. Manju Rani from WHO, SEAR Office.

Dr. Krishnan apprised the participants of the justification and evolution of the workshop and its format. Dr. J.S. Thakur spoke about the history of the course. The first course was held in PGI Chandigarh in March 2015 and was planned to be held every year alternately in PGI and & AIIMS. Consequently, the present course makes the fourth edition in this joint effort by the organizational bodies. Moreover, it has evolved from being conducted nationally to currently hosting participants from South East Asia region. It was made apparent that the focus of the course is to sensitize and enable programme managers & academicians to use public health approaches to NCD prevention & control in the South East Asia region.

MONITORING PROGRESS IN NCD PREVENTION AND CONTROL

The first technical session for the day was conducted by Dr. Manju Rani. The session covered NCD surveillance, monitoring and evaluation. Burden of the NCDs at global, regional and national levels was discussed. Thereafter, the participants were asked about the factors that need to be monitored for the purpose of NCD Prevention and Control. The responses were limited to prevalence and incidence of NCDs and associated risk actors. It was clarified that there is a need to monitor 25 Tracer indicators that can be classified into the following:

1. Indicators for Health system (8)
2. Indicators for 10 Risk Factors (15)
3. Indicators for Cancer (1)
4. Indicators for (premature) NCD mortality (1)

Voluntary global targets in the form of 2013-2020 Global Action Plan by WHO, and Sustainable Development Goals (SDGs) by United Nations were explained to the participants that will contribute to improvement in health status of the people. Furthermore, the challenges faced for adequate monitoring, such as, Diagnosis Gap and Asymptomatic Cases were emphasized upon by the speaker. The speaker concluded with a discussion on potential Health Information Platforms that may be utilized for data collection regarding NCDs along with their pros and cons. These are the following:

1. Health Facility Based Information System
2. Civil Registration and Vital registration System
3. Population Census
4. Population Based Sample Household Surveys

BURDEN AND SOCIAL DETERMINANTS OF NCDS

Dr. J.S. Thakur's session covered "Regional and National Burden of NCDs and its risk factors". Different types of transitions observed in the society, that is, Demographic, Epidemiologic, Nutrition, Economic and Social Transitions were introduced to the participants. Global

Burden of Disease of NCDs and associated Risk Factors were discussed in detail. The participants were also informed regarding the various WHO steps surveys conducted/completed in the States of Punjab and Haryana as well as the driving factors in the NCD epidemic. The session concluded with emphasis on the three pillars that can effectively address NCDs. These are Surveillance, Prevention and Management.

Dr. Anand Krishnan introduced "Social determinants of Health" through the Causal Chain such as, Social Exclusion and Discrimination, Poverty, Healthy Behaviours, the Built Environment, Workplace. The Analytical Framework for Social Determinants in Health was introduced to the participants. Thereafter, the framework was used to explain alcohol use, cardiovascular diseases, diabetes respectively. The interventions that may be planned to target different levels in the framework for each of the above risk factor and diseases were also dealt in detail. The session concluded with a discussion on the interventions on social determinants that may be planned and implemented at three important levels, that is, health policy, health system and community.

RISK ASSESSMENT AND COMMUNICATION

Dr. Binod Patro's session addressed "Risk Assessment of NCD using WHO/ISH charts". Different measures of risk, which are, absolute risk, relative risk, odds ratio, population attributable risk were introduced briefly to the participants. Concepts of risk assessment were discussed. These entailed principle of continuous risk, population wide risk, multiple risk and comprehensive risk. Emphasis was placed on the idea that most of the risk factors of NCDs were in a continuum and the cut offs were chosen arbitrarily. Another salient feature highlighted was that most of the events occurred in people with average risk factors. Furthermore, the risk factors were not distinct but always interacting and co - existing. Pros and cons of different risk reduction strategies were discussed, ranging from, high risk approach, population wide approach to comprehensive community based approach. The participants were asked to consider whether screening for diabetes on World Diabetes Day would be a High-Risk Approach or Population Wide Approach. It was clarified that such a screening comes under high risk approach. Different Risk Assessment Tools were discussed wherein it was found that Framingham Risk assessment tool was most robust. The session concluded with a detailed explanation of WHO/ISH Risk Prediction Charts. The session was accompanied with a small participatory exercise where in the participants were asked to do a risk assessment for a hypothetical case. A variety of questions were raised during the exercise and clarified satisfactorily. Some of those questions are provided in Box 1.

Box 1
Question & Answer Round at the end of Participatory Session

1. Q: Why diastolic BP not taken?
   A: Systolic BP is a better measure and more practical approach for risk prediction
2. Q: BMI which cut off to be considered for risk prediction?
   A: The overweight cut-off of BMI 23 for Indians is not for individual but for public health action.
3. Q: Same weightage for all factors in the chart?
   A: No (Modelling)
4. Q: Socioeconomic deprivation, how does it underestimate?
   A: It can indirectly lead to risk factors.

Dr. Baridalyne N.'s session on "Introduction to PEN package in Primary Care Facilities" started on an interesting note with a story that depicted the present health scenario. The journey of a hypertensive patient ending up with stroke was described. The reasons for the occurrence of such an event were discussed. This led to an informative session on the challenges faced by the health system and the patients in the management of NCDs. The evolution of PEN package was provided along with objectives, protocols for various NCDs, essential medicines, tools and technologies for their management. Risk prediction charts were also shown. It was emphasized that the protocols in place were for the purpose of standardization.

The day ended with allocation of participants to different groups for Group Activities through the next four days. The participants were then taken to Lodi Gardens where the participants took long walks and performed their daily dose of physical activity. This was followed by Dinner at India International Centre.

DAY 2 (21ST MARCH): POPULATION LEVEL INTERVENTIONS

CHALLENGES IN MULTISECTORAL ACTION AND POLICIES

Dr. Sadhana Bahgwat started the session for Day 2 with "Challenges in Implementing Multi-Sectoral Action Plans: National and Regional Experience". The need for multi-sectoral action in NCDs was explained. This entailed all the risk factors that need intervention outside the health sector. Helsinki Statement Framework for Country Action" by WHO was discussed. It was noted that India and Myanmar were two countries that have not implemented the Multi-sectoral Action Plan. That said, the guidelines were prepared for India and are being taken forward for approval. It was also announced that the national level framework was approved in 2017 by Ministry of Health and Family Welfare and Cabinet Secretary. The charge had fallen on the State to prepare their guideline using the current document as a blueprint according to the necessity.

This was followed by a panel discussion chaired by Prof. K.R. Thankappan who discussed his experience in Kerala. Dr. J.S. Thakur discussed about the successes of Public health development society and women skill development and health promotion centre. These initiatives brought together all the stakeholders on a common platform. These also served as a grievance redressal mechanism, a good example of multi-sectoral action.

Dr. Monika Arora discussed "Healthy Public Policies". It was emphasized that every policy should have a health audit and health impact assessment component. As private players were into product diversification for example, tobacco companies entering into food processing, there was a risk of conflict of interests for which partners needed to be chosen very carefully while discussing health agendas.

Dr. Atul Ambekar's session on "Alcohol Prevention Strategies" highlighted that apart from being a risk factor for various NCDs, alcohol dependence was itself a NCD which affected the society disproportionately much more as compared to the number of people suffering from negative health effects of alcohol dependence. Addiction is a complex illness and demand reduction, supply reduction and harm reduction (reducing consequences), all these three strategies should be applied together to combat this issue. It was also suggested that Prohibition was not a good solution because it had various negative spill over like criminal black market, policy displacement, geographical displacement, substance displacement and marginalisation of alcohol users from society. These effects were very well evidenced in Bihar which recently implemented prohibition.

Dr Jagadish Kaur, through video conferencing, spoke about "Tobacco Control in SEAR" and how socio-cultural acceptance of smokeless tobacco in this region had led to high tobacco consumption. India was the first country in world which had laws for making movies free from smoking.

Meenu Singh, from Food Safety & Standards Authority of India, discussed the various rules and regulations regarding labelling of food products, their nutrient value and statement of exact ingredient for which claims are being made.

It was followed by a session on "Promoting Physical Activity" by Dr. Roopa Shivanshankar wherein she discussed a few evidences showing that even in persons with high BMI and good physical activity could lead to lesser NCDs as compared to their counterparts having a

sedentary lifestyle. It was emphasized that cities should be NCD friendly, that is, environment for physical activities should be in-built in urban designing.

The last session of forenoon was taken by Mr. Nisar Ahmed on "Communicating Health Messages" in which appropriate methods of interacting with community were demonstrated. The theory of diffusion of innovation was discussed, which states that if something new happened there would be early adopters, late adopters and nearly 3% would be resistors. The need for health professionals to understand each stage of behaviour change viz. pre contemplation, contemplation, preparation, action and maintenance was noted and emphasized while concluding the session.

HEALTHY SETTINGS APPROACH

Dr. K.R. Thankappan's session comprised his experience working with "Panchayats in Kerala". The decentralized nature of Kerala government where power had been given to local bodies for planning and implementation for development purposes was explained. Thereafter, efforts for NCD risk reduction strategies in Kerala were detailed. Most of the action was directly at panchayat level including sensitization programs in Panchayati Raj Institutions and schools, trainings of healthcare workers in health facilities. The highlight was the release of separate music videos for each of the risk factors. Such music videos, meant for public display, made a great impact among the public and created more awareness about NCDs in the State of Kerala. Vision of the government regarding NCD Prevention & Control was explained wherein Family Health Centres take a central role for NCD Control. The goal is to make such Centres models of excellence that may be scaled up and replicated elsewhere.

Dr. J.S. Thakur conducted the session on "Workplace/school interventions". The Global Framework for Healthy workplace (WHO, 2010) was briefed to the participants. The salient features were discussed. The five principles required to plan a healthy workplace program, i.e. comprehensive, participatory and empowering, multi sectoral and multidisciplinary co operations, social justice and sustainability, were put forth to the participants. Thereafter, the burden of NCDs indifferent workplace environments were presented along with the framework for developing a healthy workplace. Findings from studies on school based NCD interventions done in Chandigarh where appropriate accreditation was awarded to schools based on the emphasis of physical activity in school children was the highlight. The session concluded with an observation on the inadequate budget allocation and spending by the State Governments of Punjab and Haryana on Information, Education & Communication/ Behaviours Change Communication

Dr. Shyamla Mani's informative session on "Urban planning and NCDs" was widely appreciated by many participants. Air pollution, its quality, its source and negative effects in India was greatly focused upon while planning cities. It was imperative to note that household fuels contributed to around 30% of primary particle in India. This impaired air quality in turn acted as a hindrance for physical activity. The following key points were highlighted regarding the development of smart cities:

1. Indore Swacch Bharat Mission and its newly imported machines for sweeping the roads at night with jet washing facilities.
2. The development of Surat smart city and easy to use bus stations
3. Jaipur smart city projects and its features concentrating on the Metro Transport System.

Other factors hindering physical activity and/or walking were poor design and encroachment of pavements, poor illumination and safety concerns. Key solutions suggested were promoting mixed land use, creation of enabling environment for walking and cycling to encourage walking amongst the people. The ecological effects and different examples were detailed to promote physical activity. The problems, challenges and key points to note while planning urban areas were discussed in conclusion as well as opportunities through community action.

Dr. Bachani conducted the session on "Building Healthy Cities" wherein, rapid urbanization and unhealthy practices of urban people were discussed. The concept of Rainbow Model of Health by Dahlgren and Whitehead was explained. The concept of building healthy city, its principles and key players were introduced. It was imperative to note that building a healthy city did not only involve government health officials, but also, transport system officials; those officials that maintained environment checks, Non-Governmental Organizations, civil societies, among many others. Initiatives for Indore smart city were mentioned that included, GPS based vehicle tracking and monitoring system, smart schools, air quality check and building smart toilets for the urban poor. Future projects for urban cities could entail Smart Ambulances and Trauma Care Services, Periodic Screening for Lifestyle Diseases, Safe and Healthy Food Establishments, Universal Health Coverage among others.

Dr. Anand Krishnan's session on "Community Based Strategies for NCD Prevention" was informative, wherein the concept of Community readiness model was explained. This concept draws upon the need to integrate a community's culture, resources and level of readiness so as to effectively address the issue at hand. The 9 stages of community readiness and adoption were detailed along with factors that assess a community's readiness; and the importance and concept of community awareness. Experience in Community Based Interventions with Ballabgarh community was cited, along with the challenges and lessons learnt in the process.

Dr. Baridalyne supervised group work. All the participants were divided into 5 groups with a group coordinator. The themes for group work ranged from school, workplace, health facility, community to medical college in a hypothetical district. The aim was to do a situation analysis of the given district and plan effective NCD interventions for their group. This group work would continue for the next three days and culminate with a presentation by each of the group's representative.

HEALTH SYSTEM STRENGTHENING

Dr.Gampo Dorji commenced the first technical session of the day on "Regional Experience with Implementation of WHO Package of Essential NCD Interventions (PEN) Approach" under Health System Strengthening theme. This approach addressed care of patients suffering from NCDs in a community. The intervention areas and approaches for WHO PEN Approach were discussed. Furthermore, it was noted that the most important and most essential step, that is, considering the rationale behind PEN approach in low resource setting, should be followed for chronic diseases. The concept of PEN was based on foundation of public health approach, that is, population wide prevention, individual prevention and treatment and lastly, surveillance and monitoring. The goal was to achieve universal access to NCD care while protecting poor and vulnerable populations, providing effective and affordable prevention & treatment. It was noted that all the SEAR countries were currently implementing or trying to implement PEN or PEN like programs. The outcome envisioned was reversion of the pyramid i.e., decreasing the load on tertiary care centre by strengthening the health systems. This would include targeting Leadership/Governance, Health Financing, Medical Products & Technologies, Information Systems, Health Workforce, Service Delivery and the People. Among the many advantages, it was reported to be cost effective. Certain misconceptions of PEN were clarified and the participants were requested consider PEN as a holistic approach starting from screening to treatment care. New initiatives like SEAR training modules were mentioned in conclusion and emphasized that the out of pocket expenditure for NCD Management needed to be reduced.

Box 2
Brief on Activities using PEN Approach in SEAR

- Myanmar and Timor Leste: currently implementing PEN
- India implementing modified PEN as a part of NPCDCS.
- Provision of financial protection in the form of health insurance would be the biggest leap forward to ensure PEN

Myanmar country representative participating in the course, Dr. Kyaw Myint Myat Thein presented the experiences in PEN implementation by their country. The initial step was developing and framing PEN like manual for the country. Thereafter, the field workers were trained, mobilized to all the remote villages and, thereby, successfully covering the whole population. The constant support from health system was a bonus wherein, the community field workers would refer the people diagnosed with NCDs during screening in the field to the nearest health centre.

Dr Frederico Bosco, participant from Timor Leste, presented about the country's experience on PEN implementation. PEN like programme was prepared according to the status of country. The population of the country was successfully covered by a team comprising of 3 members. Concept of "Saunde na Familia" (Health in Family) was covered. It is a part of comprehensive primary healthcare package. In this concept, healthcare was made available by referrals to Health Posts, which are similar to Primary Health Centres.

Dr.MV Padma's session on "Acute Stroke Care" in India shed light on rising burden of NCDs. Deaths due to Stroke occur once in every 20 seconds and case fatality rate was 20-30% due to stroke. Stroke was the biggest cause of disability. Rising risks for Cardiovascular Diseases (CVD), Diabetes Mellitus (DM) and stroke and % DALYs attributable to risk factors in India were a cause of concern for public health professionals. There has been an increase in life expectancy of Indians. With respect to this rise, changes in the policy in terms of inter-sectoral co-ordination, universal health coverage and increase health finance, health system and resources were expected. She discussed about the current scenario in India and her personal experience from hospital in tertiary care AIIMS. She discussed two different case studies in which the treatment outcome was better and early for the case that had early consultation and treatment. Further discussion brought to light the current status of stroke care in India and lack of health promotional activities and health facilities in terms of treatment gaps. "Tele stroke in resource-poor developing country model" at Himachal Pradesh in 2014 is one of the success stories in the country for management of acute stroke care. The trained medical officers and established primary stroke centres were linked with tertiary care centres. Expert opinion was sought and treatment modality was discussed through WhatsApp 24*7 via phone. The same approach was similarly implemented in other States like Rajasthan, Uttar Pradesh and Punjab. The highlight of the session would be the emphasis on regular treatment and rehabilitation for stroke and about stroke app were said. It was emphasized that behaviour change is the most important aspect in treatment.

Meenakshi Sharma's session on "Acute Coronary Syndrome Registry" started with introduction of the first registry in India to the participants. This registry was for cancer established in 1980 and second registry for Rheumatic heart disease from 2000-10. ICMR reported state-wise CVD mortality for the first time i.e. estimation of state level disease burden initiative started in 2016. Comparison between states in burden of NCDs was made apparent to the participants. Stroke was the most common cause of death in North-Eastern states and CVD for the South and STEMI is more common than NSTEMI. Overall in India there were 60% of STEMI but in Kerala it is 37% (STEMI) that could be attributed to different level of development and controlled level of risk factors. Other registries like CREATE, MACE are used to track outcome of CVDs, whereas, stroke clinical network is used for Stroke.

Dr. Sharmila's session on "Organizing Cancer Care Services including Palliation" commenced with a discussion on changing trends of cancer globally and in India. For example, it was noted that Indians had low incidence of colorectal cancer because 70% live in rural and diet might be a protecting factor. At the same time, there was a rising trend of lung cancer in non-smokers, mostly due to air pollution. The stigma and discrimination level to cancer disease was very high. The challenges in the cancer conditions like facility, delivery of affordable and accessible care along with the overwhelming economic burden it could be for the cancer patient's family. Also, it was made clear that awareness regarding policy perspectives and advocacy was needed. The three tier model, wherein each state should have one regional cancer centre and simultaneously efforts to strengthen cancer care facilities were the need of the hour. The session was concluded with a discussion on cancer control plan, prevention strategies, screening, diagnosing, treating and also palliative or supportive or end life care.

"Health Rise Project" was presented by Ms. Komal Khanna who talked about the integrated approach of health system strengthening in NCD care. HealthRise was a district level integrated decentralised model, wherein the objective was to screen the community using NPCDCS guidelines. Emphasis was placed on the continuum of care and patient centric care. The need for IT system for NCDs and consequently, the use of E-health cards that captured data at sub-centre level were discussed. The dashboard with real time status of screening or any activities was presented to the participants. Usage of the e- health card was also demonstrated with audio-visual aids. The project also involved conducting talks, skit and street plays for health education in the community. Furthermore, accessibility to healthcare was improved via e-clinics, especially in those areas where access to health facility was difficult. In conclusion, the project established a link between all the levels of care and their innovative tools for real time patient tracking.

Dr. Sailesh Mohan's session "Working with private sector-PHFI Sonepat Study" was based on their project at Public Health Foundation of India (PHFI). The mandate by UNHLM 2011 was to improve health care outcomes for underserved people suffering from diabetes. In view of this, PHFI developed an operational framework. It had a comprehensive and integrated population based approach to improve care. Thereafter, the program was transformed to research by including other co-morbidities like hypertension and CVD. The purpose was to observe whether a multi-component, multi-level comprehensive intervention program would improve the disease, that is, Diabetes and Hypertension, morbidities in Sonipat & Vizag. The methodology which involved innovative method of data collection using tablet, GIS mapping of health sectors and e-screening by health workers was explained. The session concluded with the note that the innovative community based sustainable approach for prevention and control of NCD is essential for reducing the burden of such diseases.

"Hypertension Management Programme" session by Dr. Alka Singh, from Vital Strategies, revolved around the India Hypertension Management Initiative. The rationale for such initiative provides two factors play an important role in the decision. The first being the epidemiological transition the country was experiencing currently. The second, and of significant concern, was the fact that Cardiovascular disease (CVD) was the major cause of death in India 2016 and control of hypertension was the major key in reducing it. Key players in the initiative were informed to the participants and included, Ministry of Health and Family Welfare, WHO, ICMR, State Governments and Vital Strategies. The initiative also aligned with the Global HEARTS initiative, where in the goal was to reduce deaths due to CVD. The initiative targeted two aspects of public health closely. The first was the Clinical aspect, where efforts were made to strengthen the CVD component of NPCDCS and add continuum care to the screening activities. The second was the Policy aspect, where efforts were made to reduce the consumption of artificial trans-fat and sodium. The technical packages like MPOWER, SHAKE and HEARTS would have a major impact on improving health. The process of designing treatment protocol and universalised to whole population was explained to the participants. The need for standard treatment protocol for hypertension by reviewing the hypertension service delivery system in 10 NPCDCS districts in India (2015-16) was made apparent further on during the session. The challenges such as, monitoring blood pressure, control status, monotherapy and out of

Box 3
Hypertension Management Programme

- Hypertension control is a cost effective method to prevent CVDs
- Needs to be scaled up
- Need to strengthen Primary Health Care programme.

pocket expenditure were detailed. Overview of IHMI in 25 districts in the first year was provided. Additionally, State wise treatment protocol based on national framework was already prepared. The organization supports the government in the programme's implementation and technical support.

NCD PROGRAMME IN THE REGION

Dr Pradeep Joshi's session was on "Assessment of Health Care Delivery for NCDs in Urban Areas". Important factors such as rationale or need for such an assessment and its main objective were discussed. This assessment enabled them to understand the capacity of the health system to deliver quality NCD care in the urban areas with special focus on vulnerable groups. The various domains assessed were provided in the assessment framework along with the key stakeholders to be involved in the exercise. The NUHM structure in West Bengal & Maharashtra was discussed with the participants. Activities of an NGO- SNEHA in Maharashtra, involved in training the ASHAs, were emphasized. The multiple challenges that will be faced by the health system due to leadership problem, financing, human resources and drug availability were made known. One clear challenge was the lack of a clear financial guideline, thereby; people remained unaware of any such funds to NCDs that may be utilized. The session concluded by the speaker noting that while the assessment in important for delivery quality health care for NCDs, however, performing the exercise need not be done in the whole country due to similar findings across wider regions.

Dr. Chinmoyee Das's session on "NCD Programme Experience in India" commenced by mentioning the 11 national health programmes related to NCDs. It was appropriately noted that the elderly population which didn't die of communicable disease, will ultimately die of non-communicable disease. Currently, in India, 60% of all deaths are due to NCDs. The National Monitoring Framework on NCD and the 10 targets that are to be attained by 2025 were also discussed. The progress on the ever increasing coverage of districts, infrastructure under NPCDCS was presented along with the programme components of NPCDCS. The participants were briefed regarding the challenges faced in the management of various NCDs along with future possible areas of integration of NPCDCS with other health programmes.

Dr. G.C. Sharma presented Chhattisgarh State experience of NCD Programme. The challenges faced in NCD management in their state were discussed. Some activities conducted in the year of 2017-2018 were detailed. This included population-based screening for NCDs conducted on World Diabetes day. Moreover, the speaker also mentioned the benefits accrued by the patients suffering from Juvenile diabetes. These included provision of free insulin of three types, under the Mukhyamantri Bal Madhumeh Suraksha Yojana.

Dr. Vikram Katoch presented the Himachal State Experience of NCD Programme. An overview of the health system of Kullu district was provided to the participants. The new health initiatives, such as the electronic health card, were discussed. It records the data on risk factor entered by the Auxiliary Nurse Midwife (ANM). Health-related helpline numbers like 102- Janani Express and 104- helpline have also been introduced. The best practices in the district of Kullu regarding health promotion were also mentioned.

Dr. Hanuman Singh presented the overview of the Haryana Health System for implementation of NCD Programme and managing NCDs.

Dr. Garima Gupta's session covered Universal screening of NCDs. Comprehensive Primary HealthCare was explained, from its rationale to its organisation and the package of services given under it. The speaker also discussed Ayushman Bharat Programme, which had two major health sector initiatives i.e. Establishment of Health and Wellness centres and National Health Protection Scheme. List of services for NCDs at various levels of health system were also discussed. The utilisation of the ANMs for screening the NCDs was mentioned. It was emphasised that the screening of NCDs needed to be conducted by the ANMs. That said, ASHAs need to help them with such activities. A brief was also provided for the assessment of system preparedness for implementing Universal screening of NCD. She also discussed the challenges faced in the implementation of this programme.

Dr. Binod Patro's session on Integrating NCD Services in a Tertiary Hospital covered NCD prevention clinic, which was established in 2014 at AIIMS, Bhubaneswar. The patient in-flow in the clinic and the personnel working there (1 senior resident, 1 trained nurse and interns) was explained. The nursing officer is responsible for Risk assessment. It was noted that nearly 40,000 patients (old & new visits) had availed services from the clinic. Moreover, patients from other departments are also referred to this clinic. The Chronic Care Model of Wagner was also described. It seemed significant to note that a majority of attendees to this clinic come for management of diabetes. After this session, participants worked on their group activity.

DAY 4 (23RD MARCH): SURVEILLANCE, SURVEILLANCE AND MONITORING OF NCDS

QUALITY CARE IN NCDS

Dr. Nikhil Tandon provided a perspective on clinical care in his session on "Ensuring Quality Care for in Non-Communicable Diseases". The speaker started with important points that encompass quality healthcare such as, Patient education, caregiver support and continuity in care. The session, then, moved on to a brief discussion on the rationale for quality improvement in NCD Care. Successful examples, in the form of, pilot studies and randomized trials were provided to the participants. These included CARRS Trial, mPower Heart Study and Sim-Card Trial. The session concluded with emphasis on the need to translate knowledge into practice and developing an optimum therapy and monitoring plan.

Dr. Rachana Kucheria discussed the importance of home based care in elderly management during the session "Organizing Home based NCD and Geriatric Care". Technology was an important medium to deliver the same. The current scenario was that the country was experiencing a boom of mobile phones. This boom made the task easier as well. The private sector like FORTEA entered the market of home based and geriatric care. The speaker's own experiences as home care physician in 2009 were discussed. Examples of effective home care were demonstrated and case study was presented to the participants. Proposed solutions for home healthcare included healthcare delivery with smart devices or Bluetooth connected systems that may be coordinated by Asha, Nurses or doctors. The need for motivated and supportive staff and collaboration with IT sector was, emphasized by the speaker, as the two secrets to quality home based healthcare.

REGIONAL EXPERIENCE IN NCD SURVEILLANCE

Dr. Sharmila Pimple from Tata memorial Hospital introduced NCD programme learning's from other countries in the beginning of her session "What can India learn from developed countries experience on NCD Screening". Low resource setting and point of care were discussed as important points to be considered for such screening programs. Challenges in screening program were also noted. Limitations of implementing Cytology –based screening programme on a large scale in the country were brought to the table. The session concluded with examples of successful adaptions in States of Tamil Nadu state and Bangladesh. In addition, a case was also made for vaccination and screening as complementary cancer control strategies.

Dr. Anand Krishnan's session on "Approaches to NCD Surveillance and NCD Surveillance tools" commenced with the National system response in view of Indian setting in detail. The targets and indicators under global monitoring framework were listed along with a brief on the process of target setting. India was the first country to set their target just after global framework. The nine set of voluntary global targets were told in view of mortality and morbidity reduction, risk factor reduction, and National systems responses. The SARA tool, used in Myanmar was adapted in India as well.

Dr. Meesha Chaturvedi, conducted her session on Cancer Registries in India via zoom telecommunication from National Centre for Disease Informatics and Research, Bangalore.

The session consisted of definition of cancer registration, type of cancer registries that were available to study the trends in India. Retinoblastoma registries were examples of special registries under National Cancer Registry Programme and were utilized as example for the session. Data from various places such as hospital based and populations based activities would be integrated in the future projections. This registry programme had been functioning since 1982, although it was important to take cognizance of the rising trend in usage of these registries. The speaker concluded by demonstrating the website called Cancer Samiksha which gave all figures at a glance.

Dr. Harshal Salve covered the session on "National NCD Survey in India". The core Institutes involved in survey planning included All India Institute of Medical Sciences (AIIMS, New Delhi) National Institute of Epidemiology (NIE, Chennai), National Centre for Disease Informatics and Research (NCDIR, Bangalore). The sampling strategy and methodology including tools were discussed. Open data Kit was used for data collection digitally. Micro plan of organization of work within a cluster was shared. NNMS Dashboard was demonstrated with troubleshooting and real time monitoring. It was noted that the time required to cover one PHC was five days and 5 human resources would work one sampling unit. The session was concluded by conveying the Working Group's vision and expectations from survey as output. Dr. Baridalyne shared new information regarding NNMS and how it could be adopted at a state level and help could be rendered.

Dr. Ayush discussed on "Health Monitoring Information System" for monitoring NCD's. It was noted that indicators such as, control rates for hypertension or diabetes mellitus, can be used to access the NCD Management system. However, it was noted professionals were not aware of how to derive this type of information when the necessary data is not collected. The participants were made aware that only the State of Kerala has this information for their state, but it is just 13%. So, it was emphasized that data on the control rate for hypertension and diabetes and its associated complications was necessary to track patients suffering from such diseases and for follow up for effective management of NCDs. S-module of WHO HEARTS package was explained to the participants as well as the various indicators for monitoring the different parameters used to get the control rate. The excel data spreadsheet to get the control rate for hypertension, diabetes and complications was shared with the participants and explained its functioning in detail. The excel spreadsheet, currently, was being used in JIPMER to get the control rates already.

Dr. Gopal Chauhan talked about "Community based screening for NCD's in Himachal Pradesh". An overview of the profile of Himachal Pradesh was provided along with the State's evolution of NCD Programme. Till 2017, there was opportunistic screening for NCDs. Since then, more than 40% of their population was screened for NCD's risk factors in the State's Community based screening programs. The hub and spoke model used for management of stroke was also discussed. Training was also provided to doctors for chemotherapy follow up for cancer patients. The speaker also claimed Himachal Pradesh to be a healthy state. The session was concluded with the practical challenges faced during the process by the State Ministry of Health and Family Welfare.

DAY 5 (24TH MARCH): MENTAL HEALTH AND ENVIRONMENTAL HEALTH

USE OF TECHNOLOGY IN MANAGEMENT OF NCDS

The day started with pace setting lecture by Dr Prabhakaran who is the Director, Centre for Chronic Condition and Injuries and Vice President, Public Health Foundation of India. The session was on "Use of Technology in the Management of NCDs". The idea of using technology had been a recurring theme in most of the lectures of this NCD course. The presentation opened the world of fast moving digitalization of health sector right from simple data collection tools to complex analysis of Big data. Some of the striking examples of using technology include, models for air pollution which is otherwise an elusive task, making algorithm to identify oral cancer with help of simple phone camera, point of care testing devices and educational purposes. The speaker also talked about the CARRS (Centre for Cardio-metabolic Risk Reduction in South-Asia) Surveillance Study, which has the potential to provide Framingham like data.

MENTAL HEALTH

Dr Rajesh Sagar, Professor in Department of Psychiatry, AIIMS New Delhi started the lecture with the epidemiology of mental health. The paucity of studies in psychiatric epidemiology was highlighted and emphasized the need for it, especially how it is important to NCD management. The fact that depressive disorder and anxiety are amongst the top 15 NCDs leading causes of DALYs lost, shows that significant attention must be given for mental disorders when NCD management is considered. The history of evidence on mental disorders, both global and Indian data as well as the challenges faced in data collection was discussed. Common issues in getting the data and how to overcome the difficulties is generating quality data was specifically highlighted and discussed.

Dr. Harshal Salve continued the theme with a session on mental health gap. The idea that mental health management is not a specialised care but a decentralised approach with integration of specialised and non-specialised care is the best way forward has been emphasised. Audience were made aware of the mhGAP intervention guide by WHO which can be used in non-specialized health setting for understanding the mental disorders, management protocol and wide variety of interventions both pharmacological as well as advice and counselling. The talk also mentioned about district mental health program, and mental health care act 2017. The need to stand up against stigma of mental disorder has been identified as need of the hour.

The next session dealt with air pollution, both indoor and outdoor. Ms Meena Sehgal from TERI took the session on "Addressing air pollution". The fact that rural areas are also very much affected by air pollution especially the indoor air pollution was highlighted. Different air pollutants, health burden of air pollution as well as the gaps in evidence regarding effects of pollution on health was discussed. The second speaker on air pollution was Dr Anuradha Shukla, Chief scientist and head of environment division, CSIR. This talk gave a comprehensive idea on the different air pollutants, its effect on heath and the current state of affairs regarding the levels of air pollution. The newer evidence regarding harmful effects of particulate matter and the pathway leading to diseases like cancers, COPD etc were discussed. Moreover, on an academic level, the different ways with which one can measure

the effects of air pollution gave a unique perspective to the participants. Different solutions to the current crisis of air pollution such as regulations and control were also discussed. Lastly, some state of the art innovations to measure air pollutions such as balloons, wearable devices were introduced to the audience. The talk ended with a note on the responsibility of health professional to take up the fight against air pollution. Dr. Arindam Dutta spoke specifically on air pollution in India. The dangers of indoor air pollution specifically in Indian context were highlighted. The session added on to the knowledge base of ongoing discussion regarding health effects due to air pollution.

Dr. Anand Krishnan spoke about "Integration of management of NCD's in emergencies". The Sendai framework for emergency preparedness and the disaster cycle was explained. The United Nations-endorsed Hyogo Framework for Action and the International Strategy for Disaster Reduction (ISDR) recognized NCDs as a threat to achieve their expected outcomes to reduce losses related to disasters. The various pathways affecting NCD's during emergencies and implications of emergency care due to NCD were discussed with the participants. The difference between minimum response and comprehensive response was briefed. The inter agency emergency health kit provided by WHO, in which one pack will provide medicines for 10000 people for 30 days was presented to the participants. Important point to note was that during emergencies, for all calculations the denominator would be considered as 10,000. It was noted that the guidelines and tools are being developed globally for integration of NCDs into emergency services.

The next session was on "Injury prevention and Control" taken by Dr. Neeti Rustagi. The class opened by describing a road traffic collision scene and asking the audience to come up with ideas on different public health approaches to tackle such incidents. Use of Haddon matrix in such situations was highlighted. The class focused on the magnitude of injuries, risk factors and preventions of road traffic accidents. The interventions that can be applied and the research that is needed were emphasized. AIIMS Jodhpur pre-hospital trauma care program was also introduced to the audience.

STRENGTHENING PUBLIC HEALTH CAPACITY FOR NCD PREVENTION AND CONTROL

Dr. Ratna Devi, CEO of DakshamA Health, spoke on strengthening patient involvement in NCD care. The importance of patient being a part of decision making and their empowerment was the major theme of presentation. This talk enabled the audience to see NCD from a patient point of view and description of stages of chronic illness was explained in detail.

Ms. Cheena Malhotra discussed the role of NGO in NCD prevention and control. The idea that NCD was not just about treating the disease but the prevention and control could only be effective when multiple sectors both medical and non-medical are involved was resonating throughout the day.

Dr Radhika Srivastava, working as Director of Health Promotion in HRIDAY-SHAN Foundation, covered the final session for the day. She discussed the need of building an alliance and multi sectoral coordination between civil society organisations. This need was identified as an important factor for the fight against NCD.

At 3:00 PM the NCD course came to an end. A final session on feedback about the program was kept and audience voiced their opinion. They highlighted the need for increasing the time limit for each speaker. In the end, valedictory function took place where Dr. Anand Krishnan and Dr. Baridalyne N. awarded the certificates to each participant. The participants shared the ideas and feedbacks over a cup of tea and bid farewell to each other.

WORKING GROUPS

As mentioned in the report for Day 1, participants were allotted groups for activity. The Course concluded with each of the five groups presenting the work done. The objective was to design interventions for certain important areas and sections of community for NCD Prevention and Control. All the groups presented their analysis and recommendations summarizing the brain storming done in the previous three days. A summary of each group's presentation can be read below.

GROUP A: NCD PREVENTION AND CONTROL IN COMMUNITY

Group A was mandated to strategize NCD Prevention and Control in a community setting. They briefed the participants of the current scenario (prevalence) Hypertension and Diabetes in the community.

Many intervention activities were chosen, such as, Health Promotional Activities in the form of skits, culturally appropriate yoga, and Screening. Six process indicators were also detailed for monitoring and evaluation.

GROUP B: NCD PREVENTION AND CONTROL THROUGH HEALTH SYSTEM

Group B chose to analyse working of a health Centre for the given prevalence of hypertension (25%) in 1 Primary Health Centre.

Objectives and methodology, including In-Depth Interviews and Focus Group Discussions were detailed. Thereafter, they briefed the participants on the interventions determined, that included, Capacity Building of Community Health Worker, Sensitization & Mobilization of the community, Training of Health Centre Professionals, and maintenance of the facility and a database. Potential indicators for monitoring were listed, out of which, Control Rate was determined to be the best indicator.

GROUP C: SCHOOL INTERVENTION FOR NCD PREVENTION AND CONTROL

Group C was mandated to design interventions for NCD Prevention and Control in Schools, wherein the target audience is school going children. The objectives were detailed along with the findings from the situational analysis exercise.

The plan is to screen school going children to determine prevalence of Obesity and Overweight, after which, intervention to control the same would be designed. Resources needed for the exercise were detailed along with findings from the study. Interventions such as, physical activity, access to play ground, dance classes, diet counselling were suggested with the required budget. Indicators used to identify prevalence would be used to monitor.

GROUP D: ROLE OF MEDICAL COLLEGES IN NCD PREVENTION & CONTROL

Group D was mandated to explore different intervention areas and implement one on the behalf of a medical college. Situational Analysis was conducted and Gaps were identified for

which more information was needed. Possible intervention areas such as Research, Service Delivery and Capacity Building were suggested.

The chosen intervention was Establishment of NCD Clinic for Urban and Rural Centres of the Medical College. Resources, such as, personnel and materials were determined. Strategy for its implementation and provision of services was provided along with the monitoring indicators.

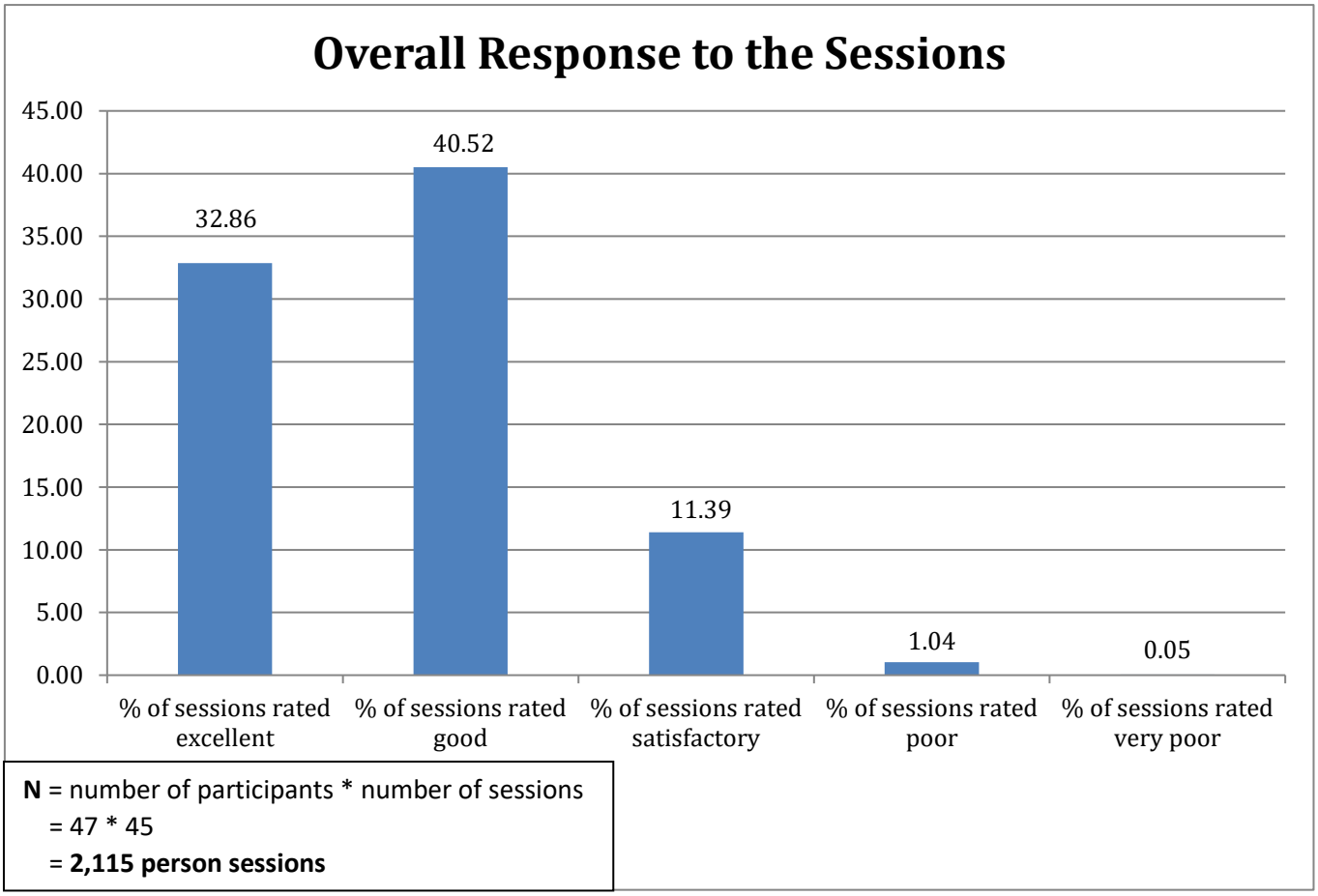
GROUP E: NCD PREVENTION AND CONTROL IN WORK PLACE

Group E was mandated to design interventions for NCD Prevention and Control in work place. The Work place chosen was School and target audience was school teachers & other staff.

They suggested conducting an exercise for the purpose of Situational Analysis, on the basis of which interventions and recommendations will be suggested. The interventions included mandatory physical activity in the form of yoga, aerobics, gym during both working and non-working hours, diet and substance abuse counselling, and appropriate support to avail treatment for NCDs. The budget and monitoring indicators were also provided.

Participants' feedback

Feedback from the participants was taken at the end of each day where the participants were asked to grade the sessions in five categories- very poor, poor, satisfactory, good, and excellent. The feedback forms were drafted on Google Forms and the link for grading the sessions was shared at the end of each day. The results show 32.86% and 40.52% of sessions were rated excellent and good, respectively. The overall response to the sessions is presented below.



N = number of participants * number of sessions
= 47 * 45
= **2,115 person sessions**

The participants were also asked to give an overall feedback of the course, along with suggestions for future programmes. The major responses are shown in the table below:

10 Best sessions	Least important	Suggested topics to be added
1. Regional and National Burden of NCDs and its risk factors	1. Building Healthy Cities	1. Chronic Obstructive Pulmonary Disorders
2. Introduction to Community Based Strategies for NCD prevention	2. Working with private Sector – PHFI Sonepat study	2. Preparation of PIP
3. Regional Experience with Implementation of PEN Approach	3. Injury Prevention & Control	3. Palliative Care
4. Challenges of addressing NCDs in urban areas- results of an assessment	4. Role of NGO Partners in NCD Prevention and Control	4. Advocacy for Policy Makers
5. Integrating NCD care with other Health Programs- MCH, Tuberculosis & NUHM		
6. Ensuring Quality Care for NCDs		
7. National NCD Monitoring Survey		
8. Use of technology in the management of NCDs		
9. Addressing Indoor-air pollution		
10. Planning NCDs care during Emergencies		

ANNEXURES

ANNEXURE I: PROGRAM SCHEDULE

Time	Theme	Facilitator/ faculty
Day 1. The Challenge of NCDs in SEAR (20th March 2018, Tuesday)		
9.30-10.00	Inaugural remarks Introduction of participants	
10.00-10.45	***Pace setting Lecture 1- Monitoring progress in NCD Prevention and Control***	Manju Rani, WHO (SEARO)
10.45-11.00	Group Photograph	
11.00-11.15 Mobility Break		
Burden and Social Determinants of NCDs		
11.15-12.00 12.00-13.00	Regional and national Burden of NCDs and its risk factors Framework of Social Determinants and NCDs	Dr. J.S. Thakur, PGIMER Dr. Anand Krishnan, AIIMS ND
13.00-14.00 Lunch Break		
Risk Assessment and communication		
14-00-15.00	Risk Assessment of NCDs using WHO/ISH charts followed by practical Exercise on Risk Assessment	Dr. Binod Patro
15.00-15.15 Mobility Break		
15.15-16.15	Introduction to PEN Package in Primary Care Facilities	Dr. Baridalyne, AIIMS ND
17.00 onwards	Heritage Walk and Dinner at IIC	
Day 2 – Population Level Interventions (21st March 2018, Wednesday)		
Population Level Interventions for NCDs Chair Person: Mr. Rajiv Kumar		
9.15–9.45 9.45-10.00	***Pace setting Lecture 2 – Challenges in Implementing Multi-Sectoral Action Plans –Subnational/National and Regional Experience*** Panel Discussion	Dr. Sadhana Bhagwat Panel Discussion from provincial and national governments Dr. K.R. Thankappan (Chairperson) Dr. Sadhana Bahgwat Dr. J.S. Thakur Dr. Monika Arora, PHFI One State Representative One Country Representative
10.00- 10:30	Healthy Public Policies	Dr. Monika Arora, PHFI
10.30-10.45 Mobility Break		
Addressing major NCD Risk Factors		
10.45-11.05 11.05-11.25 11.25-11.45 11.45-12.10	Tobacco control in SEAR Alcohol Prevention Strategies Fiscal & Regulatory measures in Diet Promoting Physical Activity	Dr. Jagdish Kaur, WHO (SEARO) Dr. Atul Ambekar, NDDTC Ms. Meenu, FSSAI Dr. Roopa S.
12.15-13.00	Communicating health messages to public	Mr. Nisar Ahmed
13.00-14.00 Lunch Break		

Time	Theme	Facilitator/ faculty
	Healthy settings approach.	
14.00-14:25 14.25-14.50 14.50-15.15 15.15-15.40	Urban Planning & NCDs Working with Panchayats – Kerala Experience Building Healthy Cities Workplace/school interventions	Dr. Shyamla Mani Dr. KR. Thankappan, SCTIMST Dr. D. Bachani Dr. J.S. Thakur
	15.40-15.55 Mobility Break	
16.00-16.15	Introduction to Community Based Strategies for NCD prevention	Dr. Anand Krishnan
16.15 Onwards	Group Work	Dr. Baridalyne
	Day 3 – Health System Strengthening (22nd March 2018, Thursday)	
9.00- 9.30 9.30-10.30	**Pace setting Lecture 3 – Regional Experience with Implementation of PEN Approach** Country Experiences in PEN Implementation	Dr. Gampo Dorji, WHO Country Representative (Timor Leste and Myanamr)
	10.30-10.45 Mobility Break	
	Best Health System Practices in Addressing NCDs. Chairperson: Dr. Nikhil Tandon	
10.45-11.10 11.10-11.35 11.35-12.00	Stroke Care model Acute Coronary Syndrome Registry – ICMR Organizing Cancer Care Services Including Palliation	Dr. MV Padma, AIIMS ND Meenakshi Sharma, ICMR Dr. Sharmila Pimple, TMCH
	Experiences from Operational Projects.	
12.00-12.20 12.20-12.40 12.40-13.00	Health Rise project Working with private Sector – PHFI Sonepat study Hypertension management Program	Komal Khanna, HealthRise Dr. Sailesh Mohan, PHFI Dr. Alka Singh, Vital Strategies
	13.00-14.00 Lunch Break	
	NCD Program Experience in the Region. Chairperson: Dr. Shaukat (MoHFW)	
14.00-14.30 14.30-15.10	India experience State Experiences (10 minutes for each state)	Dr. Chinmoyee , MOHFW State Representatives (Punjab, Haryana, Himachal Pradesh, Chattisgarh)
	15.30-15.45 Mobility Break	
15.45-16.15	Integrating NCD care with other Health Programs- MCH, Tuberculosis & NUHM	Dr. Chinmoyee
16.15-16.45 16.45-17.15	Experience with Community based screening for NCDs in India Integrating NCD services in a Tertiary Hospital Experience with	Dr. Garima Gupta Dr. Binod Patro
17.15 onwards	Group Work	
	Day 4 – Screening, Surveillance & Monitoring of NCDs (23rd March 2018, Friday)	
9.30-10.15 10.15-10.50 10.50-11.15	***Pace Setting Lecture 4: Ensuring Quality Care for NCDs*** Organizing Home based NCD and Geriatric Care Challenges of addressing NCDs in urban areas-results of an assessment	Dr. Nikhil Tandon, AIIMS, ND Rachna Kucheria Dr. Pradeep Joshi, WHO (India)
	11.15-11.30 Mobility Break	
Time	**Theme**	**Facilitator/ faculty**
	Regional Experience in NCD Surveillance.	
11.30-12.00 12.00-12.30 12.30-13.00	Approaches to NCD Surveillance & NCD Surveillance tools Cancer Registries National NCD Monitoring Survey	Dr. Anand Krishnan Meesha Chaturvedi, NCDIR- via Zoom Dr. Harshal Salve
	13.00-14.00 Lunch Break	
14.00-14.30	What can India learn from developed countries experience on NCD screening	Dr. Sharmila Patil, TMCH
14.30-15.30	Using HMIS for monitoring NCD Programs	Dr. Baridalyne

15.30-15.45	Demonstration of some HMIS examples Himachal Pradesh Experience	Dr. Chauhan OSD-NHM, HP
15.45-16.00 Mobility Break		
16.00 onwards	Group Work	
Day 5 (24th March 2018, Saturday)		
9.00– 9.45	***Pace setting Lecture 5:*** ***Use of technology in the management of NCDs***	Dr. Prabhakaran, PHFI
9.45-10.20	Epidemiology of mental disorders	Dr. Rajesh Sagar, AIIMS
10.20-11.00	Regional Initiatives in Reducing m-Health Gap	Dr. Harshal Salve
11.00-11.15 Mobility Break		
Environmental Health.		
11.20-11.55	Addressing Indoor-air pollution	Dr. Meena Sehgal
11.55-12.30	Addressing Out-door air Pollution	Dr. Anuradha, CRRI
12.30-13.00	Planning NCDs care during Emergencies	Dr. Anand Krishnan
13.00-13.30	Injury Prevention & Control	Dr. Neeti Rustagi, AIIMS, Jodhpur
13.30-14.30 Lunch Break		
Strengthening Public Health Capacity for NCD prevention and Control.		
14.30-14.55	Strengthening Patient involvement in NCD care	Dr. Ratna Devi
14.55-15.20	Role of NGO Partners in NCD Prevention and Control	Ms. Cheena Malhotra, Project Hope
15.20-15.45	Building NCD Alliance	Dr. Radhika Srivastava
15.45-16.00 Mobility Break		
16.00-17.00	Presentation of Group Work	
17.00-17.30	Valedictory session	

ANNEXURE II: LIST OF PARTICIPANTS

State Sponsored Participants

S. No.	Name	Profile	State
1	Dr. Himani Yadav	District Program Officer, NPCDCS, Rewari	Haryana
2	Dr. Bhupender Singh	District Program Officer, NPCDCS, Palwal	Haryana
3	Dr. Namita Gupta	District Program Officer, NPCDCS, Kaithal	Haryana
4	Dr. Vikram Katoch	District Health Officer, NPCDCS, Kullu	Himachal Pradesh
5	Mr. Vasiur Rahman	District Program Officer, NPCDCS, Sarguja	Chhattisgarh
6	Dr. Vikram Shankar	District Program Officer, NPCDCS, Bangalore	Karnataka
7	Dr. Vikas Gupta	District Program Officer, NPCDCS, Bhiwani	Haryana
8	Dr. S.R. Banjare	District Program Officer, NPCDCS, Balodabazaar	Chhattisgarh
9	Dr. G.C. Sharma	District Program Officer, NPCDCS, Bastar	Chhattisgarh
10	Dr. Manoj Kumar	District Program Officer, NPCDCS, Jhajjar	Haryana
11	Dr. Hanuman Singh	District Program Officer, NPCDCS, Fatehabad	Haryana
12	Dr. Sunita Sood	District Program Officer, NPCDCS, Solan	Himachal Pradesh
13	Dr. Rajiv Mittal	District Program Officer, NPCDCS, Rohtak	Haryana
14	Dr. Bhabani Shankar Mallik	District Program Officer, NPCDCS, Jashpur	Chhattisgarh
15	Dr. Shrikant Chandrakar	District Program Officer, NPCDCS, Gariyaband	Chhattisgarh

International Participants

S.No.	Name	Profile	Country
1	Dr. Kyaw Myint Myat Thein	Project Coordinator, University of Medicine-2, Myanmar	Myanmar
2	Dr. Frederico Bosco	Department of Control of Non-Communicable Diseases, Ministry of Health	Timor Leste
3	Dr. Domingos Soares	Trainer, National Institute of Health, East Timor	Timor Leste

WHO Sponsored Participants

S.No.	Name	Profile	State
1	Dr. Priscilla Kayina	Faculty, Jawarharlal Institute of Medical Sciences	Manipur
2	Dr. Bishwalata Rajlumari	Faculty, Jawarharlal Institute of Medical Sciences	Manipur
3	Dr. Senilo Magh	District Program Officer, NPCDCS	Nagaland
4	Dr. Legia Lyngdoh	District Nodal Officer	Meghalaya
5	Dr. Kemhieneinuo Linyu	District Program Officer, NPCDCS	Nagaland

Public Health Professionals

S.No.	Name	Profile	State
1	Dr. Shweta Sharma	Scientist-B, ICMR	Delhi
2	Ms. Cheena Malhotra	ProjectHope	Delhi
3	Dr. Astha Chugh	Hriday Foundation	Delhi
4	Dr. Surbhi	Hriday Foundation	Delhi

Faculty

S.No.	Name	Institute	State
1	Dr. Shalini Srivastava	Sharda University	Uttar Pradesh
2	Dr. Harsh Mahajan	Sharda University	Uttar Pradesh
3	Dr. Madhurjya Baruah	Tezpur Medical College, Tezpur, Assam.	Assam
4	Dr. Prasanna	AIIMS, Jodhpur	Rajasthan
5	Dr. Anita S. Acharya	Lady Hardinge Medical College, Delhi	Delhi
6	Dr. Ravneet Kaur	AIIMS, New Delhi	Delhi
7	Dr. Manish Rana	GMERS Medical College, Sola, Ahmedabad	Gujarat
8	Dr. Limalemla Jamir	Indian Institute of Public Health (IIPH), PHFI, Shillong, Meghalaya	Meghalaya

Post-Graduate Students

S.No.	Name	Institute	Country
1	Dr. Neeti Purwar	BHU- IMS, Varanasi	Uttar Pradesh
2	Dr. Nisha Meshram	NA	Chhattisgarh
3	Dr. Sudhir Kr. Jha	BHU- IMS, Varanasi	Uttar Pradesh
4	Dr. Varuna Seethanna	BHU- IMS, Varanasi	Uttar Pradesh
5	Dr. Manisha Mandal	AIIMS, New Delhi	Delhi
6	Dr. Roy Daniel	AIIMS, New Delhi	Delhi
7	Dr. Aparna P.	AIIMS, New Delhi	Delhi
8	Dr. Arjun MC	AIIMS, New Delhi	Delhi
9	Dr. Muthathal	AIIMS, New Delhi	Delhi
10	Dr. Alok Misra	AIIMS, New Delhi	Delhi
11	Dr. Dhruv Agarwal	NA	Delhi
12	Dr. Kalpana	BHU- IMS, Varanasi	Uttar Pradesh

ANNEXURE III: LIST OF GUEST FACULTY SPEAKERS

LIST OF FACULTY MEMBERS FOR THE COURSE		
S. No	**Name**	**Designation and Affiliation**
1	Dr. J.S. Thakur	Professor, Dept. of Community Medicine, School of Public Health, PGIMER, Chandigarh
2	Dr. Roopa Shivashankar	Senior Consultant – Cardiovascular Health, Resolve to Save Lives
3	Dr. Binod Patro	Additional Professor, Community Medicine, AIIMS, Bhubaneswar
4	Dr. K.R. Thankappan	Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, India
5	Dr. Sharmila Patil	Professor, Tata Memorial Cancer Hospital
6	Dr. Damodar Bachani	Country Project Manager, John Snow India Private Ltd.
7	Dr. Manju Rani	Regional Advisor, World Health Organization, SEARO
8	Ms. Meenu	Food Safety and Standards Authority of India
9	Mr. Nisar Ahmed	CEO, Envisions Institute of Development
10	Dr. Atul Ambekar	National Drug Dependence Treatment Centre
11	Meenakshi Sharma	Indian Council of Medical Research
12	Dr. Shyamala Mani	Professor, National Institute of Urban Affairs, New Delhi
13	Dr. Baridalyne	Professor, CCM, AIIMS, New Delhi
14	Dr. Prabhakaran	Executive Director, Centre for Chronic Disease Control, New Delhi
15	Dr. Nikhil Tandon	Professor, Department of Endocrinology, AIIMS, New Delhi
16	Ms. Komal Khanna	Project Director, HealthRise Project
17	Dr. Alka Singh	Country Lead, Vital Strategies
18	Dr. Chinmoyee	DDG, Ministry of Health and Family Welfare
19	Dr. Gampo Dorji	Technical Officer, World Health Organization, SEARO
20	Dr. Anuradha Shukla	Chief Scientist, Council of Scientific & Industrial Research
21	Dr. M.V. Padma	Professor, Neurology, AIIMS New Delhi
22	Dr. Radhika Srivastava	Director- Health Promotion, Hriday Shan Foundation
23	Dr. Pradip Joshi	Technical Officer, WHO India
24	Meesha Chaturvedi	NCDIR, Bangalore
25	Dr. Monika Arora	Director- Health Promotion & Additional Professor, Public Health Foundation of India, New Delhi
26	Dr. Jagdish Kaur	Regional Advisor, World Health Organization, SEARO
27	Dr. Anand Krishnan	Professor, CCM, AIIMS, New Delhi
28	Dr. Neeti Goswami	Asst Professor, Dept of Community and Family Medicine, AIIMS Jodhpur
29	Dr. Harshal Salve	CCM, AIIMS, New Delhi
30	Dr. Sadhana Bhagwat	National programme Officer, World Health Organization, India
31	Dr. Rajesh Sagar	Professor, Psychiatry, AIIMS, New Delhi
32	Dr. Rachna Kucheria	Independent Consultant, Geriatric and Home Care
33	Dr. Ratna Devi	CEO, DakshamA Health
34	Dr. Sailesh Mohan	Associate Professor, Public Health Foundation of India
35.	Dr. Meena Sehgal	Scientist, TERI
36	Ms. Cheena Malhotra	Project HOPE
37	Dr. Garima Gupta	National Health Systems Resource Centre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