KERALA HEALTH SERVICES DEPARTMENT
DIRECTORATE OF HEALTH SERVICES

NCD CONTROL PROGRAM- REVISED GUIDELINES

1 Introduction

The state of Kerala has achieved better health indicators when compared to other states of India. But our health system is facing a new set of challenges due to the epidemiological and demographic transition undergone by the state. The high morbidity of the population due to Non Communicable Diseases (NCD), injuries, emerging and remerging communicable diseases, influx of migrant population, increase in older population and environmental degradation has to be addressed. The existing health care delivery system is not equipped enough to address the changing health needs of the population effectively and comprehensively; thus raising the out of pocket expenditure for health. Primary Health Centres, Family Health Centres (FHC) and CHCs are the best platform to converge the various dimensions of primary health care services viz. preventive, promotive, curative, rehabilitative and palliative.

NCDs are the emerging health challenge all around the globe. NCD control programs have gained more momentum than any other health programs in developed, developing and under-developed countries. In India, it is estimated that 42% of total deaths are due to NCDs. In Kerala, the situation is more serious as more than 52% of the total deaths between the productive age group of 30 and 59 are due to one or other NCD. Hypertension, Diabetes Mellitus, Cardio Vascular diseases, Stroke and Cancer are the major NCDs seen in Kerala.

Studies show that 27% of adult males in Kerala are having diabetes mellitus compared to national average of 15%. 19% of the adult female population is diabetic compared to the national average of 11%. This high prevalence of NCD has contributed to Kerala state being called as 'Diabetic Capital of India'. Genetic predisposition, dietary habits and sedentary lifestyle are considered to be the reason for this phenomenon. 40.6% of adult males and 38.5% of adult females in Kerala are hypertensive compared to national average of 30.7% and 31.9%. Prevalence of obesity, hyperlipidemia, coronary artery diseases and stroke are also high. Cancer mortality is extremely high in Kerala compared to the national average.

In this changing health scenario, it is essential to review the roles and responsibilities of each of the health care service providers who will have to perform a significant role to plan, implement and coordinate the primary health care activities which includes the five domains viz.

preventive, promotive, curative, rehabilitative and palliative care activities in their jurisdiction.

1.1 Evolution of NCD Control Program

Even though there were some pilot projects in Wayanad, Neyyattinkara and some other places there was no uniform program for NCD control in Kerala. In 2010, a centrally sponsored program National Program for Prevention and Control of Cancer, Diabetes, CVD and Stroke(NPCDCS) was started in Pathanamthitta district and later in 2011 was extended to Alappuzha, Idukki, Thrissur and Kozhikkode. In 2011 Kerala State Health services Department expanded the program to the entire state in order to extend the benefits to all. The program covers all Primary/Community Health Centres and up to the sub centre level in the state. In 2016 the program was extended to District Hospital and Sub District level Hospital in the state. Now both NPCDCS program and State NCD program (Amrutham Arogyam) are running simultaneously in the state covering all districts.

1.2 Objectives

- Prevent and control common NCDs through behaviour and life style changes,
- Provide early diagnosis and management of common NCDs.
- Strengthening of institution at various levels for NCD Management.
- Build capacity at various levels of health care for prevention, diagnosis and treatment of common NCDs,
- Establish and develop capacity for palliative and rehabilitative care

The program covers all 230 community health centres, 835 primary health centres and more than 5000 sub centres across the state.100 district and sub district level hospitals are also provided with NCD clinics.

a. Primary Prevention

This includes life style modification through health education to prevent the occurrence of NCDs and campaign against Tobacco and alcohol, advice on healthy food habits and emphasis on physical activities.

b. Secondary Prevention

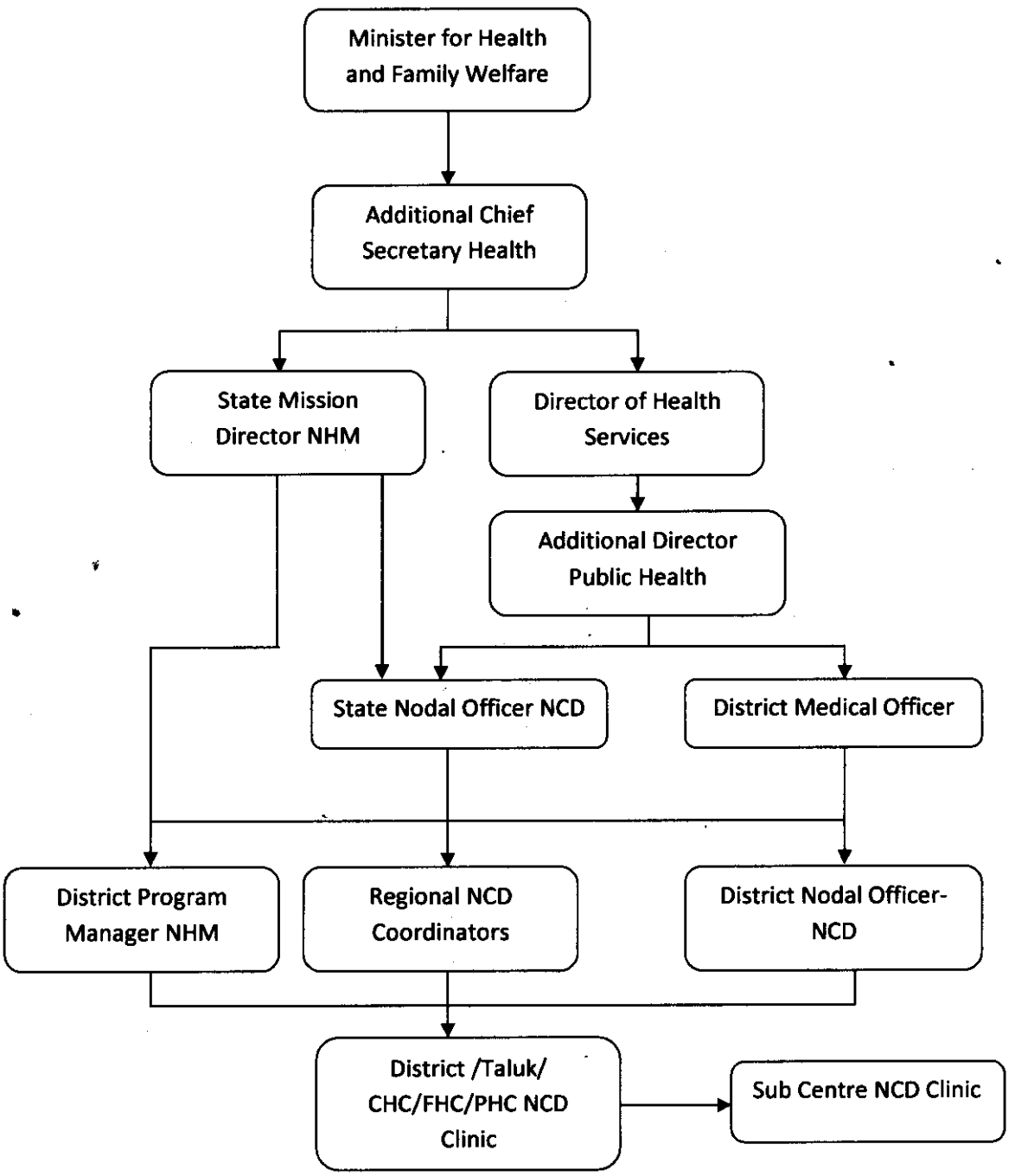
This includes early detection of NCDs. The entire population above 30 years should be screened for the diabetes, hypertension and obesity. The confirmed cases have to be initiated on treatment

according to the protocol developed for management of diabetes and hypertension.

c. Tertiary Prevention

Prevention of complications and strengthening of secondary and tertiary level hospitals are included in this level of prevention.

2. ORGANOGRAM



3. **NCD CLINICS**

Institution	Day	Team	Remarks
Sub Centre	Weekly once On Thursday	JPHN,JHI,ASHA	
PHC	Once or Twice* On Tuesday and Saturday	MO, Staff Nurse, HI/JHI, PHN, ASHA	*Depending on NCD case load (>100/Clinic)
FHC	6 Days	MO, Staff Nurse , HI, PHN, ASHA	One Staff Nurse dedicated to pre check up and post check counseling
CHC	Twice* on Tuesday and Saturday	MO, Staff Nurse, HI/JHI,PHN, ASHA	*One Staff nurse under NHM exclusive for NCD and Palliative Care will assist.
THQH / DH	6 Days*	NCD MO**, NCD Staff Nurse, NCD Dietician, PP Unit JHI/ JPHN, ASHA	*Physician of the hospital should monitor. If NCD Contract staff is not available, they should be managed by other permanent staff.**Depending on availability
District NCD Clinic	6 Days	NCD MO, NCD Staff Nurse, NCD Dietician, NCD Physiotherapist	Physician of the hospital should monitor. If NCD Contract staff is not available, they should be managed by other permanent staff.

3.1. General instructions for conduction of NCD clinics

- Timing of NCD Clinic- OP timings
- All persons 30 years and above should be screened for diabetes and all persons above 18 shall be screened for Hypertension.
- Those who voluntarily report for screening for NCDs should also be screened once a month irrespective of their age.
- Bidirectional screening for NCD and TB shall be done. All patients diagnosed with TB shall be screened for Diabetes and all diabetic patient with chest symptoms shall be screened for TB
- NCD clinic registration should start half an hour before the scheduled time.
- Patient should relax for 5 minutes before BP measurement. Ensure that patient has not consumed caffeine in the past hour or smoked in the past 30 minutes before BP Measurement.
- Patient should be seated comfortably with back supported, arm at heart level and legs uncrossed while measuring BP.
- For screening at least two BP readings should be taken at an interval of 2 minutes. If the BP readings differ by more than 5 mmHg take a third reading. The lower of the BP readings should be taken as the representative Systolic BP and Diastolic BP.
- BP Apparatus: Appropriate cuff size- length of bladder 80% of arm circumference and width 40% of arm circumference
- BP apparatus should be calibrated regularly.
- Glucometer strips may preferably be used for screening. Follow up treatment should ideally be based on FBS/PPBS values
- Treatment Passbook should be issued to all patients.
- The recording of parameters shall be entered in the treatment cards/client register and passbook by the concerned examiner. The passbook shall be updated by concerned examiner, pharmacist and medical officer. Passbook must be entrusted with the patient and shall be brought for every follow up.
- Regular IEC and BCC activities aiming towards healthy diet, tobacco cessation, alcohol abstinence, stress management, drug compliance and physical activity should be conducted on all Clinic days at all levels.
- The Medical officer is the team leader of NCD clinic and should ensure the smooth functioning of clinics (both sub centre and health institution) by delegating all categories of staff if necessary for the same.

- Medical officer should form a team for NCD prevention activities in tribal settlements, schools, institutions etc.
- The screening, referral, follow up and reporting shall be done through e Health tablets once e Health is established.

i. Case definition

- **New Case**: - A new case is defined as newly detected / confirmed case in the NCD clinic (the patient is detected of the disease for the first time in the clinic)
- **Follow up Case**: - Follow up case is the patient coming for the follow up evaluation after detection of the disease from NCD Clinic.
- **Old Case**: - Patient detected of the disease elsewhere other than the NCD clinic and coming for management and medicines.
- Screening and diagnosis should be as per protocol.
- If the patient is diagnosed, start treatment according to protocol. The patient should be registered in their respective sub centres. They should be followed up at PHC/CHC/FHC as per the protocol.

ii. Medicine distribution

- To increase the scope of distribution and ensure compliance of medicines, the NCD program was designed to deliver NCD medicines at the lowest health unit which is more accessible to the population. But honouring the High Court verdict on distribution of medicines, the medicines shall be dispensed by the pharmacist only.
- Patients whose blood pressure and blood sugar values are within normal limits, medicines may be dispensed for three months from the institution subject to patient's willingness for monthly follow up from the sub centre.
- These medicines may be entrusted to the JPHN of the sub centre for monthly distribution after follow up. On follow up if patients are found having abnormal blood pressure and blood sugar values values, they may be referred to Medical Officer.

Jurisdiction

If the parent institution (PHC/FHC/CHC) of patient is very far to get followed up and collect medicines, patient has the right to get medicines dispensed from the nearest health facility (irrespective of Panchayath the patients belongs to). But the patient should be registered in their own sub centre and transferred out to institution of their choice for registration (for patient based intend of drugs). Treatment card should be kept and updated at institution where the patient is followed up and get medicines.

iii. **Patient on Follow up**

- Reassess every patient on their follow up as per protocol.
- The patient pass book should be updated regularly at the institutional level.
- Treatment card entries should be regularly done. Referral and follow up services as per protocol should be ensured by the Medical Officer.
- Patients not reporting for treatment after screening and defaulters should be tracked.

iv. Follow up of defaulters

- Patients not reporting for follow up treatment in the institution after one week of scheduled follow up date should be retrieved with the help of treatment card/client register by the staff nurse.
- Health Inspector should maintain a register of defaulters by getting the data from staff nurse. This should be reviewed in IDSP meetings on Mondays.
- JHI should ensure tracking of these patients with the help of ASHA workers, anganwadi workers, arogyasena etc.

v. Registers to be maintained

NCD clinics should have the following registers as Hard copy/e-register.

- Clinic register.
- Client Register/ Patient treatment card.
- Defaulters register.
- Facility hypertension registers for IHMI in selected districts
- Registers for SWAAS Clinic, ASWASAM Clinic, Diabetic Retinopathy Clinic, Stroke clinic and other NCD Special clinics in selected institutions.

vi. Workplace interventions

- Periodic camps should be conducted in workplace for NCD Screening and follow up.
- HI/JHI is responsible for enlisting the workplaces, the eligible population and shall arrange for NCD camp at the worksite.
- It is the responsibility of JHI to ensure that all workers above thirty years are screened and followed up.
- They should report the total number of cases screened, followed up.

- JHI should be responsible for retrieving defaulters.
- JHI should ensure that patients who have abnormal blood sugar and BP values are brought to PHC for diagnosis and treatment.

vii. Schools and Colleges

- Medical Officer shall arrange Life style diseases awareness camps, physical exercise promotion activities, awareness classes on healthy diet and addictions etc at schools and colleges.
- Special emphasis of health education shall be on tobacco, alcohol and other substance abuse.
- Services of RBSK Nurse should be utilised for these activities wherever available

viii. Reporting

- The Consolidated report shall be sent from sub centre to PHC/FHC (Form 1), then PHC/FHC to Block PHC/CHC (Form 2), Block PHC/CHC to District NCD Cell (Form 3A & 3B)
- The reports from district and sub district hospitals shall be sent directly to district NCD Cell (Form 4)
- From district NCD Cell the report shall reach the State NCD Cell before 6th of every month. (Form 5 A& 5 B).
- The reporting of SWASS, PBS, IHMI and Quality Standards shall be done in the prescribed format monthly.

ix. Evaluation

Evaluation of NCD report shall be done at PHC level, CHC level, district level and state level.

Evaluation shall be based on the following indicators.

- Screening.
  - Total Number of people screened out of eligible target population.
- Detection.
  - Total number of cases detected out of total screened.
- Treatment.
  - Number of new patients put on treatment out of total screened.
- Patient Compliance
  - Number of defaulters out of total patient on treatment.
  - Number of retrieved patients out of total defaulters.

- Control.
  - Number of patients attained control after 6 months of treatment out of total number of patients put on treatment.

3. LEVELS OF NCD CARE

3.1. Sub Centre NCD Clinic

- All Thursdays, from 2 PM till 4 PM at Sub centres. The NCD clinic days shall not be changed or substituted even for National Holidays.
- The whole responsibility of organisation and conduction of NCD clinics in Sub centre goes to JHI/ JPHN
- JHI have to participate fully in the clinics in rotation if they have charge of more than one sub centre.
- The responsibility of arranging the venue, registration and reporting is vested upon JHI.
- JPHN is bound to participate in all NCD clinics without fail.
- In addition to routine screening the JPHN is also responsible for storage, distribution of drugs and other logistics.
- HI/PHN should manage to conduct NCD clinics in case of a contingency.
- PHN/HI/HS/PHNS should visit sub centres in random to verify that NCD clinics are being properly conducted and patients are receiving all services.
- They should furnish a supervisory report at the end of each month about the number of sub-centre NCD clinics supervised and comments regarding each visit.

i. Screening

- Height, weight to be measured and BMI to be calculated.
- Measure Blood pressure and RBS
- Ensure yearly conduction of Population based screening for NCDS and associated camps.
- Periodicity of screening should be as per the existing State guidelines.
- Patients with high blood pressure or high blood sugar values should be referred to PHC/FHC/CHC. They should be tracked by JHI/JPHN with the help of ASHA workers.
- The beneficiary flow from the field area should be ensured by the JHI/JPHN along with the active participation of ASHA, AWW and Arogyasena members.

ii. Registration of New Cases

- Registration of new NCD cases should preferably be done at the sub-centres, including the main centre.

iii. Referral guidelines

- If there is an elevation of BP or RBS from the normal values, the patient shall be referred to the PHC/FHC/CHC immediately and follow up should be ensured for the same.
- Patients with any symptoms/ signs suggestive of complications shall be referred to PHC/FHC/CHC in a timely manner.
- Patients with any Adverse Drug Reaction should be referred after proper documentation.

3.2. PHC NCD Clinic

- NCD clinics should be conducted on all Tuesdays and Saturdays. In centres where NCD case load is less than 100, a single day clinic may also be considered.
- Registration to be done by HI/JHI
- Blood pressure, RBS to be checked by Staff Nurse
- BMI to be calculated under supervision of HI/JHI with the support of ASHA.
- Passbook should be issued to all patients.
- The recorded parameters shall be entered in the treatment cards and passbook by the concerned examiner. The passbook shall be updated by concerned examiner, pharmacist and medical officer and entrust the same with the patient.
- The treatment cards after updating shall be stored in racks under the custody of pharmacist after dispensing the medicines. HI/JHI shall retrieve the cards from pharmacy before the start of NCD clinic.
- Any other followup investigations to be done as per treatment protocol.
- Patients requiring fasting blood examination may be permitted to do the test as per the prior instruction of the medical officer.

3.3. FHC NCD Clinic

- FHC NCD clinic will function on six days a week. One staff nurse will be exclusively in charge of NCD pre check and post Counselling.

- Registration, Recording of BP, Blood Sugar, BMI, Pulmonary Function Tests (SWAAS), Pulmonary Rehabilitation services and Diabetic Retinopathy screening shall be done by the staff nurse.
- The recording of parameters shall be entered in the treatment cards, passbook and registers by the concerned examiner. The passbook shall be updated by medical officer and pharmacist and entrust the same with the patient.
- Health education class on healthy diet, tobacco cessation, alcohol abstinence, stress management, drug compliance and physical activity should be conducted at regular intervals in the FHC Clinic for patient and bystanders.
- Demonstration of physical exercise, healthy cooking, and stress management methods should be conducted.
- Any other followup investigations including screening for complications to be done as per treatment protocol.
- Patients requiring fasting blood examination may be permitted to do the test as per the prior instruction of the medical officer.

3.4. CHC NCD Clinic

- NCD clinics should be conducted on all Tuesdays and Saturdays. .
- Registration to be done by HI/JHI
- A dedicated staff nurse is appointed on contract basis under NHM for assisting NCD and palliative care clinics. The responsibility of pre-check and post check counselling for NCDs rests with this staff nurse under the supervision of the existing staff nurse.
- BMI to be measured under supervision of HI/JHI with the support of ASHA
- The recording of parameters shall be entered in the treatment cards by the concerned examiner. The passbook shall be updated by medical officer and pharmacist and entrust the same with the patient.
- The treatment cards after updating shall be stored in racks under the custody of pharmacist after dispensing the medicines. HI/JHI shall retrieve the cards from pharmacy before the start of NCD clinic.
- Any other follow up investigations to be done as per treatment protocol
- Patients requiring fasting blood examination may be permitted to do the test as per the prior instruction of the medical officer.

3.5. Taluk Hospital & District Hospital NCD Clinic

- Taluk hospital NCD clinics should be conducted 6 days a week. In hospitals where dedicated NCD Staff are not sanctioned under NPCDCS, the NCD Clinic should be limited to two days per week.
- Other associated special clinics (SWAAS clinic, Diabetic Retinopathy clinic and Diabetic foot clinic etc) to be conducted along with NCD clinic on designated days.
- Registration to be done by NCD Staff Nurse/PP unit JHI/JPHN.
- The Physician of the hospital will be in charge of NCD Clinic.
- A dedicated staff nurse, dietician is appointed on contract basis under NHM for NCD clinic. Recording of BP, blood sugar, BMI, waist–hip ratio, pulmonary function tests (SWAAS), pulmonary rehabilitation services, diabetic foot clinic and diabetic retinopathy screening shall be done by the staff nurse. She shall be helped by the one hospital staff nurse (on rotation basis) on SWAAS, diabetic retinopathy and diabetic foot clinic days.
- The passbook shall be updated by concerned examiner, pharmacist medical officer and entrust the same with the patient.
- Any other followup investigations to be done as per treatment protocol.
- Patients requiring fasting blood examination may be permitted to do the test as per the prior instruction of the medical officer.
- The roles and responsibilities of NCD medical officer, staff nurse, and dietician and data entry operator under NHM are as per the NPCDCS guidelines.
- The staff appointed under NCD shall not be deputed for any other hospital duty including night shift unless in dire emergencies as per the direction of Hospital Superintendent.

3.6. District NCD Clinic

- The district NCD clinic will function 6 days a week with the support of contract staff appointed under NPCDCS program.
- The Physician of the hospital will be in charge of NCD Clinic.
- A medical Officer, staff Nurse, dietician and Physiotherapist who are appointed under the program will constitute the NCD team in the district NCD clinic.
- The Staff Nurse in the pre check area and will do the basic NCD screening. Random blood sugar, Blood pressure, BMI, spirometry and Retinopathy screening will be done at the pre check area.
- The medical officer shall examine the patients after the initial evaluation of staff nurse and shall start management according to

their condition. He shall also confirm the diagnosis and also do the evaluation for complications like Nephropathy, Neuropathy, Diabetic Foot, etc and refer accordingly.

- The dietician will counsel for diet and also for physical exercise, tobacco cessation and other NCD risk factor reduction.
- Physiotherapist attached to NCD clinic will do the stroke rehabilitation, pulmonary rehabilitation and other chronic disease morbidity rehabilitation services.
- The duties and responsibilities of the NPCDCS staff as per the operational guide lines of NPCDCS
- The passbook shall be updated by concerned examiner, Pharmacist and Medical Officer and entrust the same with the patient.
- Any other followup investigations to be done as per treatment protocol.
- Patients requiring fasting blood examination may be permitted to do the test as per the prior instruction of the medical officer.
- The staff appointed under NCD shall not be deputed for any other hospital duty including night shift unless in dire emergencies as per the direction of Hospital Superintendent.
- The NCD staff shall also serve in the CCUs and stroke clinics as per the need.

4. ROLES AND RESPONSIBILITIES

4.1. ASHA worker

i. Preventive and Promotive Activities.

- Ensure screening, registration and follow up of Target Population.
- Ensure treatment compliance by regular follow up visits to the patient's home and report defaulters to the JHI/JPHN.
- Support ward and panchayath level networks involving Arogyasena & volunteers for promoting NCD primordial and primary prevention activities
- Providing support/guidance for accessing rehabilitative services- Special foot wears, prostheses, wheel chair
- ASHA workers should be present on each subcenter/PHC/FHC clinic day on rotation
- They should assist the JHI/JPHN/Staff nurse for the smooth conduct of the clinic

ii. Population Based Screening (PBS)

- Identify the target population for population based screening.
- Conduct population enumeration using community based assessment checklist (CBAC). Ensure all women and men over 30 years and screened for hypertension and diabetes in their population.
- Mobilization of population with higher scores to PHC preceded by mobilization events(awareness classes for general public and work places) in the coverage area to enhance awareness and ensure high levels of community participation including service utilization

4.2. Junior Health Inspector(JHI)/ Junior Public Health Nurse (JPHN)

i) Prevention and Control of Diabetes and Hypertension

- Enrolment of new patients in NCD clinic
- The whole responsibility of organisation and conduction of NCD clinics in Sub centre jointly with JHI & JPHN
- JHI have to participate fully in the clinics in rotation if they have charge of more than one sub centre.
- The responsibility of arranging the venue, registration and reporting is vested upon JHI.
- The JHI should ensure that all people above 30 years of age(especially males due to poor turn out to NCD Clinics) are screened for NCD and should track the defaulters
- The responsibility of storage and distribution of dispensed drugs from FHC/PHC/CHC and maintenance of its records is with JPHN
- It is the responsibility of JPHN for ensuring the availability of equipments in working condition with periodic calibration and proper maintenance for the conduct of NCD clinics
- Blood pressure, RBS ,,Height, weight, etc and BMI to be calculated in the sub centre by JPHN
- Timely reference of detected cases to FHC/PHC/CHC.
- Regular follow up and identification of complications as per protocols.
- Health promotion and preventive measures for control of NCD
- Regular IEC and BCC activities aiming towards healthy diet, tobacco cessation, alcohol abstinence, stress management and physical activity should be conducted on all Clinic days.
- Support and supervise population based screening activities
- Implementation of other NCD programmes like IHMI, QS, Diabetic retinopathy, Tobacco cessation etc

ii) Prevention and Control of Asthma and COPD-SWAAS

- Identification of new patients with COPD / Asthma from community
- Refer to SWAAS Clinic at FHC/District Hospitals
- Enrolment in sub centre clinics.
- Ensure follow up of treatment through sub centre SWAAS clinic by conducting training on breathing exercise, inhaler usage techniques and counselling (Pulmonary Rehabilitation).
- Conduct sensitization and BCC programs on tobacco cessation.
- Health promotion and preventive measures for control of Asthma and COPD.

iii) Prevention and Control of Mental Illnesses

- Identification of cases in community having depression with the help of screening chart.
- Refer to ASWASAM clinic in FHC
- Sensitization and BCC programmes on substance abuse including alcoholism, suicide prevention etc
- Regular follow up of cases for drug compliance
- Converge with various departments/agencies for rehabilitation services

iv) Prevention and Control of Cancer

- Health promotion and preventive measures against cancer
- Organise and coordinate screening and early detection camps
- Refer suspicious cases to FHC/PHC/CHC during field visits
- Ensure follow up and rehabilitation services
- Sensitization, awareness and BCC programmes related to various malignancies

4.3. Staff Nurse

- The main duty of Staff nurse is to arrange and conduct NCD clinics at institutional level and coordinate all activities for the smooth running of the NCD clinic in all weeks. It is the responsibility of staff nurse for ensuring the availability of equipments in working condition with periodic calibration and proper maintenance for the conduct of NCD clinics at institutional level.
- Identification and arrangement of Pre check area in FHC, CHCs and DH/SDH Hospitals.
- Recording demographics and basic findings of patients coming to pre assessment area in FHCs and CHCs

- Blood pressure, RBS, Height, weight, and BMI to be calculated in the pre check area by staff nurse.
- Staff Nurse shall do PFT in SWAAS clinics and retinal imaging in Retinopathy Clinics
- Counselling of patient diagnosed to have hypertension/DM on lifestyle modification, drug intake, prompt follow up, identification of complications (e.g. hypoglycaemia)
- Ensure follow up of patient
- Implementation of other NCD programmes like IHMI, PBS, QS, Tobacco cessation etc.

4.4. Pharmacist

- Estimate demand for drugs as per protocol for management of hypertension and diabetes mellitus based on current numbers and total prevalence rates
- Dispensing and distribution of drugs at institution and camps
- Counselling patients regarding intake of drugs and compliance
- Health education- side effects of drugs , symptoms of hypoglycaemia and its management
- Manage the inventory to ensure uninterrupted supply of medicine
- Ensuring safe custody of treatment cards and updating of patient pass book.

4.5. HI/PHN/HS/PHNS

- Compiling details from NCD register and making reports on Hypertension/Diabetes Mellitus as per periodicity prescribed.
- PHN/HI/HS/LHS should visit sub centres in random to verify that NCD clinics are being properly conducted and patients are receiving all services.
- HI/PHN should help to conduct NCD clinics in case of a contingency.
- PHN/HI/HS/LHS should also supervise organisation of NCD screening campaigns and awareness programmes at the field level
- They should furnish a supervisory report at the end of each month about the number of sub-centre NCD clinics supervised and comments regarding each visit
- HI/HS should assist medical officer in developing LSGI projects for NCDs.
- Supervision of other NCD programmes like IHMI, PBS, QS, SWAAS, Diabetic retinopathy, Tobacco cessation etc.
- Weekly review of defaulter patients in IDSP meetings

4.6. Medical Officer

- The Medical officer is the team leader of NCD clinic and should ensure the smooth functioning of clinics (both sub centre and health institution) by delegating all categories of staff if necessary for the same.
- Ensure regular and adequate supply of NCD drugs and logistics in the institution
- Diagnosis of hypertension, diabetes Mellitus, COPD, primary cancers and other NCDs.
- Identification of early complications of NCDs
- Management as per protocol including investigations
- Identifying red flag signs and prompt referral of patients if required
- Counselling of patients
- Follow up of patients and monitoring the progress
- Weekly review of patients details to ensure treatment compliance
- Ensure training for all the health staff and supportive groups regarding NCD prevention and control
- Awareness programme in public and private institutions, schools, community settings and workplaces
- Measures to make wellness programmes mandatory in all workplaces and community in association with LSG
- Observation of national programmes
- Overall supervision of the NCD program, SWAAS, ASWAAS, population based screening, diabetic retinopathy screening and other NCD surveys.
- Implementation and monitoring of other NCD programmes like IHMI, PBS, QS, etc.
- Convergence with other departments/NGOs/Voluntary organisations etc for awareness and infrastructure development like Gyms, walkways, swimming pools etc

4.7. Regional Coordinators

i. Working Days

They will work for a minimum of 3 days per week, during which co-ordinators will engage in their assigned responsibilities in their respective districts. They have to prepare a work plan in advance. This has to be countersigned by the deputy DMO in charge of NCD, of the district in which their parent institution lies. A copy of this shall be submitted to the head of their institutions and also shall be mailed to

the deputy DMO (NCD) of their assigned districts. Their working days may vary as per the additional duties assigned by the DHS.

ii. Job Responsibilities

- To participate in the development of department strategic planning, monitoring and evaluation.
- To supervise the setting up of NCD clinics in district hospitals and monitor their functioning.
- To monitor the working of NCD clinics at the primary (including sub-centres), secondary and tertiary level- their regularity, timing, attendance, diabetic and hypertensive screening and awareness creation.
- To facilitate the conduction of training programs for various stake holders at the district level.
- To address various possible measures to ensure smooth drug distribution to multiple institutions in their respective districts.
- To create a separate systems data for the state that may help in policy decisions and systems renovation.
- To conduct studies on various factors related to NCDs in their field areas independently and also in partnership.
- To facilitate the implementation of multiple programs related to NCDs throughout the state.
- To facilitate the conduction of screening programs and health promotion activities at key points within their field areas.
- To develop communication messages for audio visual aids, print and social media.
- To represent DHS at interagency, international, regional. National and other technical meetings, conferences and workshops.
- Monitoring of other NCD programmes like IHMI,PBS,QS,SWAAS, Diabetic retinopathy, Tobacco cessation etc

5. NEW INITIATIVES UNDER NCD CONTROL PROGRAMME

i. INDIA HYPERTENSION MANAGEMENT INITIATIVE (IHMI)

Considering the high prevalence of Hypertension in the society and poor control rates even after management, a program for management of Hypertension was introduced in 4 districts (Thiruvananthapuram, Thrissur, Wayanad and Kannur). The program envisages protocol based management for Hypertension, screening for Hypertension at all health facilities for people above 18 years of age irrespective of their purpose of visit, follow up for at least one year for compliance of treatment and eventually raising the control rates to above 50%.

One Medical Officer (Cardiovascular Health officer) and 3 to 4 senior treatment supervisors were appointed on contract basis to monitor this program. Treatment cards and reporting forms for recording the patients have to be maintained at institution level.

ii. POPULATION BASED SCREENING (PBS)

So far the screening for NCDs is mostly opportunistic and the NCD status of a significant population is still unknown which makes it difficult to evaluate the actual prevalence rate of the population. Population Based Screening was first introduced in 4 districts and now expanded to 14 districts. The program envisages complete screening of eligible population in the districts and making a population based NCD registry.

- Step1. The ASHA volunteers will do a community based survey based on a CBAC form (Community Based Assessment Checklist) and motivates the population for screening at camps and clinics.
- Step2. The JPHN and JHI will assess the population to be screened and special camps shall be conducted at appropriate sites to attract more unscreened persons.
- Step3. Even after the conduct of camps and clinics if there are unscreened persons in the population, a home based screening shall be conducted with help of ASHA volunteers to complete the health profile of the population.

iii. QUALITY STANDARDS IN HYPERTENSION.

A programme for evaluation and monitoring hypertension management by training of doctors, paramedical staff on slandered procedures, and protocol *based management of hypertension is piloted in Alappuzha and Ernakulum* district. Project Manager (QS) will be coordinating the activities of program.

iv. Diabetic Retinopathy Program- NAYANAMRITHAM

A program for screening and management of Diabetic Retinopathy was introduced in the department considering the rise in irreversible blindness due to the disease. This program was introduced in 14 district hospitals as State initiative and selected FHCs as project mode.

Criteria for Screening:

- All Diabetic patients above 40 years of age
- All patients with H/o Diabetics for more than 5 years.
- All Diabetic patients with visual symptoms.

The designated staff nurse will do retinal photography using the non mydriatic camera and the images will be uploaded to Regional Institute of Ophthalmology, Thiruvananthapuram for the interpretation of images.

v. Kerala COPD Control Programme (SWAAS)

Stepwise Approach to Airway Diseases is a public health programme for the prevention and control of Chronic Obstructive pulmonary Disease. All COPD patients, Asthma patients above 18 years of age, high risk groups like smokers, those exposed to firewood smoke and occupational gases are the main beneficiaries of this programme.

Active screening, diagnosis using spirometry, standard treatment with inhalers and pulmonary rehabilitation are the important services provided under SWAAS Programme. SWAAS clinics will be functional in Family Health Centres and all District hospitals

vi. Stroke Management Program (SIRAS)

Stroke identification, rehabilitation, awareness and Stabilisation (SIRAS) program was introduced in selected district hospitals with the support of SCTIMST Thiruvananthapuram, AIIMS New Delhi and Amritha institute of medical Sciences, Ernakulam. The program aims at strengthening OF District Hospitals for management of Stroke, training of Health staff in stroke management, setting up of stroke ICUs, Thrombolysis using TPA and stroke rehabilitation.

Dr Bipin Gopal