"ASSESSMENT OF NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF CANCER, DIABETES, CARDIOVASCULAR DISEASES AND STROKE (NPCDCS) WITH RESPECT TO INDIVIDUALS SCREENED POSITIVE FOR DIABETES AND HYPERTENSION AT SUB-CENTRE LEVEL CAMPS IN BELAGAVI TALUKA IN KARNATAKA – A CROSS SECTONAL STUDY"

Submitted by
(REG. NO. BD0116006)

Dissertation

Submitted to the

KLE Academy of Higher Education and Research, Belagavi, Karnataka

In partial fulfilment

of the requirements for the degree of

M. D. (Doctor of Medicine)

in

COMMUNITY MEDICINE

DEPARTMENT OF COMMUNITY MEDICINE,

Jawaharlal Nehru Medical College, KAHER,

Belagavi – 590010

Karnataka, India.

APRIL – 2019

KLE Academy of Higher Education and Research, Belagavi, Karnataka

ENDORSEMENT BY THE HOD & PRINCIPAL / HEAD OF THE INSTITUTION

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LIST OF ABBREVIATIONS USED

ANM	-	Auxiliary Nurse Midwife
ASHA	-	Accredited Social Health Activist
BMI	-	Body Mass Index
BP	-	Blood Pressure
CBC	-	Complete Blood Count
CCU	-	Cardiac Care Unit
CD	-	Communicable Diseases
CHC	-	Community Health Centre
CHF	-	Congestive Heart Failure
CPI	-	Consumer Price Index
CRD	-	Chronic Respiratory Disease
CVA	-	Cerebro-Vascular Accidents
CVD	-	Cardiovascular Diseases
DALY	-	Disability-Adjusted Life Years
DGHS	-	Director General of Health Services
DH	-	District Hospital
DHO	-	District Health Office
DLC	-	Differential Leukocyte Count
DM	-	Diabetes Mellitus
DSO	-	District Surveillance Office
ECG	-	Electrocardiogram
FBS	-	Fasting Blood Glucose
FCTC	-	Framework Convention on Tobacco Control
GCM	-	Global Coordination Mechanism

GNM	-	General Nursing and Midwifery
GOI	-	Government of India
HTN	-	Hypertension
ICMR	-	Indian Council of Medical Research
IDSP	-	Integrated Disease Surveillance Project
IEC	-	Information Education Communication
IFG	-	Impaired Fasting Glucose
IFMSA	-	International Federation of Medical Students' Associations
IGT	-	Impaired Glucose Test
IHD	-	Ischaemic Heart Disease
IPD	-	In Patient Department
IPHS	-	Indian Public Health Standards
ITI	-	Industrial Training Institute
IW	-	Industrial Workers
JNMC	-	Jawaharlal Nehru Medical College, Belagavi
KAHER	-	KLE Academy of Higher Education and Research
KFT	-	Kidney Function Tests
LFT	-	Liver Function Tests
LHV	-	Lady Health Visitor
LT	-	Lab Technician
MDG	-	Millennium Development Goals
MHW	-	Male Health Worker
MO	-	Medical Officer
MOHFW	-	Ministry of Health and Family Welfare
NCD	-	Non-Communicable Diseases

NCRP	-	National Cancer Registry Programme
NFHS	-	National Family Health Survey
NGO	-	Non-Government Organization
NPCDCS	-	National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Disease and Stroke
OPD	-	Out Patient Department
PG	-	Post-Graduation
PHC	-	Primary Health Centre
PPBS	-	Post Prandial Blood Glucose
PUC	-	Pre-University College
RBS	-	Random Blood Sugar
RFT	-	Renal Function Test
SC	-	Sub-centre
SEAR	-	South East Asian Region (WHO)
SES	-	Socio-Economic Status
SN	-	Staff Nurse
THO	-	Taluka Health Office
TLC	-	Total Leukocyte Count
UPHC	-	Urban Primary Health Centre
USG	-	Ultrasonography
WHO	-	World Health Organization

Abstract

Introduction:

Deaths due to Non-Communicable Diseases (NCDs) have increased worldwide since 2000 A. D., and according to the World Health Organization (WHO) report in 2012, 56 million deaths occurred worldwide, of which 38 million (68%) were due to NCDs and in India, deaths due to NCDs in 2008 were 5.3 million, prevalence per 1,000 population of diabetes was 62.47, hypertension was 159.46, Ischemic Heart Diseases (IHD) was 37 and stroke was 1.54. A rapid health transition is being experienced in India, with large, rising burdens of chronic non-communicable diseases. The first point of contact of patients with health services are Primary Health care facilities, which are the most appropriate places for patient screening, early detection, provision for continuous care for uncomplicated patients and patient referral to specialists. The Government of India had launched "The National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke" (NPCDCS) in 2010 and the programme was launched in Belagavi district on 29th September 2015. Periodic evaluation helps us to understand the problems a programme is facing in managing, implementing and utilizing service, so that appropriate modifications can be suggested.

Objectives:

1. To assess the Knowledge, Attitude and Utilization practices of the beneficiaries screened positive for Diabetes and Hypertension who had attended 'National Programme for Prevention and Control of Cancer,

Diabetes, Cardiovascular diseases and Stroke (NPCDCS)' camps held at Sub-Centre level in Belagavi taluka.

2. To assess the implementation of NPCDCS at District Hospital (DH), Community Health Centre (CHC), Primary Health Centres (PHCs) and Selected Sub-Centres (SCs) in Belagavi taluka.

Materials and Methods:

A Cross sectional study was conducted in Belagavi taluka of Belagavi district in Karnataka state from 1st January 2017 to 31st December 2017. The list of PHCs and SCs was obtained from the District Health Office, Belagavi and District hospital (DH), one Community Health Centre (CHCs), 12 Primary Health Centres (PHCs) were selected. Multistage random sampling method was used and three Sub-centres (SCs) from each PHC were selected, accounting to 36 sub-centres and 10 beneficiaries from each sub-centre accounting to 360 beneficiaries were selected. The concerned Medical Officers at the DH, CHC and PHC, the concerned ANMs of the selected Sub-centres were contacted. Written informed consent was obtained and the data was collected using a pre-tested pre-designed structured questionnaire in personal interview by the investigator. 10 beneficiaries from each Sub-centre were selected from the NPCDCS register, who had attended the NCD camps six months prior to the visit of the interviewer. In case of non-availability of the concerned staff, another two repeat visits were made for complete data collection by the investigator.

Results:

The NPCDCS was implemented 100% at District Hospital, Community Health Centre and 12 Primary Health Centres and in all selected 36 Sub-Centres with the activities of opportunistic screening of individuals above the age 30 years and above

and health promotion at all health care facilities. The district NCD clinic was established with adequate man power in the district hospital, but the Cardiac Care Unit was not yet established and the necessary investigations were available. In the CHC though the NCD clinic was established, the manpower was inadequate with vacant posts and the necessary investigations were partially available (37.5%). The PHCs covered a population of 4, 77,805 with 70 Sub-Centres, mean population covered by each PHC being 39,817 and mean population per SC being 6,825. The activities of out-patient care, in-patient care were rendered 100% and the necessary equipment were available in all 12 PHCs of Belagavi taluka.

The selected 36 SCs covered a population of 2,48,753 with mean SC population of 6,909. 63% of the SCs were conducting the NCD camps weekly, with average number of NCD camps conducted per SC being 30 per year and the population screened for NCDs across all 36 SCs was 64, 096 accounting to 25.77% of the population coverage. The prevalence of diabetes was found to be 4.87% and prevalence of hypertension was found to be 4.99% and 69% of the ANMs had received training regarding NPCDCS and all the necessary equipment was adequate except for referral cards.

Out of the 360 beneficiaries, 58.33% were females, 89.72% were married, 82% were Hindus by religion, 45.83% belonged to nuclear family, 40.83% of them had completed primary schooling, 56.67% were BPL ration card holders and 63% of them belonged to Class IV and V socio-economic status. Overall awareness about NCDs was 43.11%, Anganwadi workers and ASHAs were the informants about NCD camps for 56% of the participants. 72.22% of them were aware about NCD camps, 58.89% of them approached nearest PHC for health care and 85% of the participants

visited the doctor for confirmation of the disease, 74.44% were compliant for prescribed medications, 67.22% of them were on regular follow up and only 48.61% of them received medications for free from the government health facilities.

Conclusion:

It was observed in the present study that there was 100% implementation of NPCDCS and screening activities at all levels of health care. The NCD clinic was established in the district hospital, Belagavi with 100% manpower and at CHC with no adequate manpower and equipment. NCD screening camps were being conducted at all SCs and only two third of ANMs had received training for NPCDCS and the necessary equipment and IEC materials were available at all selected SCs for conduction of NCD camps.

Knowledge and awareness about NCDs was not sufficient among the beneficiaries under NPCDCS and it was observed that ASHAs and Anganwadi workers played the key role of informants for public about conduction of sub-centre NCD camps. Though the beneficiaries were referred to their respective PHCs for confirmation and treatment of the disease, many participants were ignorant and compliance for prescribed medications and follow up care was poor. It was also seen that the participants who visited the doctor for confirmation of the disease had better treatment compliance for medications and follow up care than those who did not visit the doctor at PHC.

Keywords:

NPCDCS, sub-centre, NCD clinic, Diabetes, Hypertension

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Introduction

"A good assessment measures development and outcome of the activity"

"*….The Japanese smoke a lot and suffer fewer heart attacks than Australians or New Zealanders; The French eat a lot of fat and also suffer fewer heart attacks than Australians or New Zealanders; The Italians drink a lot of wine and also suffer fewer heart attacks than Australians or New Zealanders….*", rapid urbanization, industrialization, modernization, has left the society with a tremendous load of "Non - Communicable" diseases (NCDs) or often known as "Lifestyle Diseases".[1]

Deaths due to NCDs have increased worldwide since 2000. According to World Health Organization (WHO) in 2012, 56 million deaths occurred worldwide, of which 38 million (68%) were due to Non-Communicable diseases, three fourth of these deaths (28 million) occurred in low- and middle-income countries, leading causes being cardiovascular diseases (46.2%), cancers (21.7%), respiratory diseases (10.7%) and diabetes (4%).[2]

Estimated deaths due to NCDs in India in 2008 were 5.3 million. Prevalence per 1000 population of diabetes was 62.47, hypertension was 159.46, Ischemic Heart Diseases (IHD) was 37 and stroke was 1.54. The National Cancer Registry Programme (NCRP) of Indian Council of Medical Research (ICMR) in 2006 estimated that, about 28 lakh cases of different type of Cancers were prevalent in India with 11 lakh new cases and 5 lakh deaths annually with most common cancers being breast, cervical and oral cancer.[3]

According to 2015-16 National Family Health Survey-4 (NFHS-4), in India, 11% of women and 15% of men aged 15-49 years were hypertensive, 30% of women and 43% of men aged 15-49 years were pre-hypertensive. Prevalence of hypertension in women aged 30-39 years was 13% and among women aged 40-49 years was 23%. Prevalence of hypertension among men aged 30-39 years was 18% and among men aged 40-49 years was 27%. Reading of Random Blood Sugar (RBS) of more than 140 mg/dl was seen in 6% of women 8% of men aged 15-49 years. Women aged 15-49 years who had undergone specific health examination for cervix were 22%, breast examination by 9.8% and examination of oral cavity by 12%.[4]

According to 2015-16 National Family Health Survey-4 (NFHS-4), in Karnataka, 9.8% of women and 15.5% of men aged 15-49 years were found to have blood pressure reading of more than 140 mmHg systolic and more than 90 mmHg diastolic blood pressure. Reading of Random Blood Sugar (RBS) more than 140 mg/dl was seen in 9.5% of women and 12% of men aged 15-49 years. Women aged 15-49 years who had undergone specific health examination for cervix were 15.6%, breast examination by 12.8% and examination of oral cavity by 16.8%.[5]

According to 2015-16 National Family Health Survey-4 (NFHS-4), in Belagavi district, 9.3% of women and 10.6% of men aged 15-49 years were found to have blood pressure reading of more than 140 mmHg systolic and more than 90 mmHg diastolic blood pressure. Reading of Random Blood Sugar (RBS) more than 140 mg/dl was seen in 8.1% of women and 12.5% of men aged 15-49 years. Women aged 15-49 years who had undergone specific health examination for cervix were 26.3%, breast examination by 23.7% and examination of oral cavity by 20.5%.[6]

A rapid health transition is being experienced in India, with large, rising burdens of chronic diseases.[1] WHO STEP-wise approach for surveillance of risk factors for NCDs was carried out in five Indian states in 2003, which showed that 60-80% led a sedentary lifestyle. The Word 'Lifestyle' was coined by Austrian psychologist Alfred Adler in 1929, meaning the way a person lives. Individual lifestyle has become the cause of his/her illness. The 20th century is evidence for witnessing people leading sedentary lifestyle, eating fast and energy rich food, which has now become one of the causative factor for diabetes, metabolic syndrome, cardiovascular diseases, stroke, liver diseases and cancers, etc.[7]

Demographic transition, increase in life expectancy, shift towards modern trends of living, changing family dynamics will lead to further increase in disease burden in coming years. Successful management pertains to persistent adherence to prescribed medications and recommended lifestyle modifications, and the extent to which a person's behaviour, e.g., taking medication, following a diet, and/or executing lifestyle changes, corresponds with agreed recommendations from a health care provider.[8]

The first point of contact of patients with health services are Primary Health care facilities, which are the most appropriate places for patient screening, early detection, provision for continuous care for uncomplicated patients and patient referral to specialists. NCD's management at primary care level has additional advantages, as it provides equivalent level of care, it is closer to the patient physically as well as socio-culturally, imposes lower cost to both patients and health system and facilitates effective follow-up for monitoring, compliance and control.[9]

Community characteristics along with individual and household idiosyncrasies, along with availability of health services are important determinants of healthcare utilization. Poor, who live with hardships of life and have been denied access to most basic facilities like clean water and sanitation, may neglect benefit of long-term treatment towards NCDs, which will not be immediately endangering their health.[10]

The existing health systems in India needs reorganization, reorientation and recruitment for expanded delivery of health care, focusing on prevention, surveillance and management of chronic diseases, requiring sustainability of preventive interventions over coming years for acute and chronic care of NCDs. Surveillance of NCDs along with their risk factors must be made an integral function of health systems.[11]

In response to the increasing toll of morbidity, disability and premature mortality related to noncommunicable diseases, WHO has intervened time and now and laid strategies and goals to combat them. In the year 2000, a special session was held by the WHO to have "Global Strategy for Prevention and Control of Non-Communicable diseases". Later in the year 2004, importance was given to diet, life style modifications by having "WHO Global strategy on Diet, Physical activity and Health". They developed "WHO 2008-13 Action Plan for Global Strategy for Prevention and Control of Noncommunicable Diseases". Now WHO has laid "2013-2020 Global Action Plan for Prevention and Control of Non-Communicable Diseases".[12]

As a founding member state of WHO, India has committed itself to implement an appropriate action plan and to take necessary steps to meet the objectives of Global Action Plan within suggested timeline. The Government of India had launched "The National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke" (NPCDCS) in 2010 by merging the 'National Cancer Control Programme' and the 'National Programme for Prevention and Control of Diabetes, Cardiovascular diseases and Stroke'. In the year 2013, Government of India (GoI) agreed to reach an agreement on 'National NCD Monitoring Framework' with the 'WHO Global Action Plan and Monitoring Framework', which included 21 indicators and 10 targets.[13]

The NPCDCS programme was implemented all over the country in a phase manner during 11th five year plan and 12th five year plan.[10] In Karnataka State, the programme was implemented in phased manner from 2010 to 2016 covering 14 districts and the NPCDCS programme was launched in Belagavi district during the financial year of 2014-15.[14] The Programme was launched in Belagavi district on 29th September 2015 on the occasion of "World Heart Day" as stated by the District Surveillance Officer of Belagavi.

Periodic evaluation helps us to understand the problems a programme is facing in managing, implementing and utilizing service, so that appropriate modifications can be suggested.[15] One of the objective of the NPCDCS programme is opportunistic screening at all levels of health care delivery system for early detection of Diabetes, Hypertension and common Cancers, which will be possible if done routinely with planning and public being aware of it.[3]

The present study was under taken for understanding the extent of implementation, management and service utilization by beneficiaries, also addressing the difficulties faced by service providers and service utilizers in order to make necessary recommendations or modifications in the NPCDCS programme, so as to bring in an effective service provision by health care settings in betterment of the community health in relation to noncommunicable diseases in Belagavi district of Karnataka state in India.

Objectives of the study

1. To assess the Knowledge, Attitude and Utilization practices of the beneficiaries screened positive for Diabetes and Hypertension who had attended National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke (NPCDCS) camps at Sub-Centre level in Belagavi taluka.

2. To assess the implementation of NPCDCS at District Hospital (DH), Community Health Centre (CHC), Primary Health Centres (PHCs) and Selected Sub-Centres (SCs) in Belagavi taluka.

Review of literature

Non-Communicable Diseases:

World Health Organization (WHO) states that Non-communicable diseases (NCDs) or chronic diseases are diseases of long duration and generally slow progression and includes four main types of non-communicable diseases which are, cardiovascular diseases, cancer, chronic respiratory diseases and diabetes, which are the leading cause of death worldwide representing 63% of all annual deaths (2013).[16]

Diabetes: History and burden

The word 'diabetes' means 'flow through'-excessive urine and the description of diabetes was documented as early as in 1500 BC in the writings of Hindu scholars, which they described it as "*a mysterious disease causing thirst, enormous urine output, and wasting away of the body with flies and ants attracted to the urine of people.*" Early research linked diabetes to glycogen metabolism and later led to discovery of the islet cells of pancreas.[17] According to WHO, from 1980 to 2014, number of people with diabetes has risen from 108 million to 422 million. Prevalence of diabetes among adults over 18 years has risen from 4.7% to 8.5% from 1980 to 2014, with the prevalence of diabetes more rapidly rising in middle and low income countries. In 2012 over 2.2 million deaths were attributable to high blood glucose and in 2015 diabetes was responsible for 1.6 million deaths directly. World Health Organization projects that diabetes will be the 7th leading cause of death by 2030.[18]

Hypertension: History and burden

The word 'hypertension' means over-stretching, a hybrid of Greek and Latin origin. In 1836 Bright postulated that, the hypertrophied hearts found in certain post-mortem examinations, where no evidence of valvular disease was found, might be an increased resistance to peripheral blood flow. From then till 1950's, in the span of 80 years, hypertension has grown to occupy as a leading etiological cause of disease processes.[19] The WHO defines hypertension as a systolic blood pressure equal to or above 140 mmHg and/or diastolic blood pressure equal to or above 90 mmHg and according to them, hypertension contributes to the burden of heart disease, stroke, kidney failure, premature mortality and disability affecting disproportionately populations in low- and middle-income countries. Hypertension was responsible for about 45% of deaths due to heart disease and 51% due to stroke as in 2008 and approximately 40% of adults aged 25 and above were diagnosed with hypertension. The number of people with hypertension rose from 600 million in 1980 to one billion in 2008.[20]

Cardiovascular Diseases: History and burden

Studies have shown that Egyptian mummies, about 3,500 years old had evidence of cardiovascular disease, specifically atherosclerosis and out of 16 mummies studied, nine of them had the evidence of cardiovascular disease. Leonardo da Vinci (1452-1519) investigated coronary artery, William Harvey (1578-1657) discovered that blood moves in circulatory manner around the body from heart and Friedrich Hoffmann (1660-1742) noted that coronary heart disease was due to reduced passage of blood with in coronary artery. In 1948, under the direction of National Heart Institute, USA, researchers initiated first major study, the

'Framingham Heart Study' to understand heart disease. Later on many researchers have identified various risk factors for developing cardiovascular diseases, various diagnostic measures and treatment modalities.[21] According to WHO, cardiovascular diseases are the number one cause of mortality globally with an estimated 17.7 million deaths in 2015, representing 31% of all global deaths and over three quarters of these deaths took place in low and middle income countries. Out of 17 million premature deaths that occurred among people less than 70 years of age due to non-communicable deaths in 2015, 82% occurred in low and middle income countries and 37% of those deaths were due to cardiovascular diseases.[22]

Cancer: History and burden

The word 'cancer' originates from a Greek word 'karkinos', by a physician Hippocrates to describe carcinoma tumors. Earliest evidence of human bone cancer was found in ancient Egypt in mummies and as per ancient manuscripts dated about 1600 B.C. The world's oldest recorded breast cancer case hails from ancient Egypt in 1500 BC. By the middle of the 20th century, scientists began to solve complex problems of chemistry and biology behind cancer and learned how genes work and how mutations could damage them. They identified that chemicals, carcinogens, radiation, viruses could cause cancer and also inherited from ancestors. During 1970s, scientists discovered two important families of genes and as of today more than 100 carcinogens (chemical, physical and biological) have been identified.[23] According to WHO, Cancer is the second leading cause of mortality globally and responsible for 8.8 million deaths in 2015, of which 70% occurred in low and middle income countries. One in six deaths are due to cancer and one third of the deaths are due to five leading behaviour and dietary risk factors like, high body mass index, low fruit

and vegetable intake, lack of physical activity, tobacco and alcohol use. Tobacco consumption alone is responsible for 22% of cancer deaths and the economic impact of cancer is significantly increasing.[24]

Stroke: History and burden

2400 years ago, Hippocrates the 'Father of Medicine' recognized 'stroke' and termed the condition as 'apoplexy', which in Greek meant 'struck down by violence'. Centuries later in 1600s, Jacob Wepter discovered that the cause for apoplexy was disrupted blood supply to brain and decades later, after the recent advances apoplexy has been termed as stroke and Cerebro-Vascular Accidents (CVA).[25] According to WHO, stroke was responsible for 6.7 million deaths worldwide and contributed to 11.7% of global deaths and 37.8% of cardiovascular deaths.[22]

Etiological or Risk factors of Non-Communicable diseases:

Non-Communicable Diseases are underlined by most common, preventable risk factors and most of the NCDs are the result of four particular human behaviours like use of tobacco, physical inactivity, unhealthy diet consumption and harmful use of alcohol, which in turn lead to metabolic changes like raise in blood pressure, raise in blood glucose, obesity or overweight and raise in cholesterol, which ultimately leads to development of cardiovascular diseases and stroke.[26]

Tobacco: WHO terms tobacco use as tobacco epidemic and is one of the biggest public health challenge the world has ever faced, which kills more than 7 million people each year, of which 6 million deaths are due to direct use of tobacco and about 890,000 deaths are among non-smokers due to exposure to second hand smoke. Nearly 80% of the tobacco smokers live in low and middle income countries and smoking is responsible for 22% of the cancers.[27]

Alcohol: Harmful use of alcohol is known to be a causal factor for more than 200 diseases and there is a strong established causal relation between harmful alcohol use and mental, behavioural disorders, injuries and non-communicable diseases. Worldwide 3.3 million deaths occur every year due to harmful use of alcohol, which contributes 5.1% of (Disability Adjusted Life Years) DALY and 5.9% of global deaths. 25% of the deaths in the age group of 20-39 years are attributable with harmful use of alcohol and they bring significant social and economic loss individually and to society as well.[28]

Overweight and obesity: They lead to metabolic effects like rise in blood pressure, triglycerides and cholesterol and insulin resistance. With steady raise in Body Mass Index (BMI) there is increase in risk of Coronary Heart Disease, Ischaemic stroke, type 2 diabetes mellitus and also increase in risk of cancer of breast, colon, prostate, endometrium, kidney and gall bladder. In the year 2014, 39% of men and 39% of women aged 18 years and above were overweight (BMI > 25kg/m^2) and 11% of men and 15% of women aged 18 years and above were obese (BMI > 30kg/m^2) representing more than 2 billion of adult population worldwide who were overweight and of those, more than a half a billion were obese.[28]

Unhealthy diet: Estimation of prevalence of consumption of unhealthy food is not possible, hence specific elements of unhealthy diet are considered. Consumption of fruits and vegetables are known to decrease the risk of cardiovascular diseases, stomach cancer, colorectal cancer and approximately 16 million DALY (disability adjusted life years) and 1.7 million deaths worldwide are attributed to low fruit and vegetables consumption (less than five servings or 400 grams of fruits and vegetables per day). Salt intake of 5 grams per day, high content of saturated fatty

acids (more than 40% of total fat intake) and trans-fatty acids are known to substantially increase the risk of raise in blood pressure and cardiovascular diseases.[30 & 41]

Physical activity: Adequate physical activity as recommended by WHO refers to engagement in moderate intensive physical activity or its equivalent for at least 150 minutes per week. Regular physical activity is known to reduce the risk of ischemic heart disease, diabetes, breast cancer, colon cancer, stroke, blood pressure and depression. Insufficient physical activity is one of the top 10 leading cause of mortality globally and increases the risk of all-cause mortality by 20% to 30%. In the year 2010, 20% of men and 27% of women worldwide aged 18 years and above were insufficiently active and the prevalence of insufficient physical activity was seen more in high income countries compared to low income countries. [31]

Global scenario: Changing trends

No major health threats that has emerged, has challenged the foundations of public health as profoundly as the rise in chronic non-communicable diseases. Once they were linked to only affluent societies, but now are global and the poor are suffering the most. At the beginning of the century, NCDs were not recognized as a barrier for development and they were not included in the Millennium Development Goals (in the year 2000). NCDs were always overshadowed by the devastating epidemics of HIV, tuberculosis, malaria and the large number of maternal and childhood deaths. The United Nations (UN) Political Declaration finally acknowledged that the threats of non-communicable diseases constitutes major challenges for development, undermining social and economic progress throughout the world and made the World Health Organization the principal agency to lead and

work on challenges for prevention and control in the year 2013. The NCDs share common four risk factors, all of which lie in non-health sectors and control of these diseases needs multisectoral collaboration with whole-of-government and whole-of-society approach.[32]

In the year 2011, a regional meeting of WHO-SEAR (World Health Organization South East Asian Region) was held at Jakarta, where the issue of health and development challenges of non-communicable diseases was discussed and according to it South-East Asia Region is in the middle of an epidemiological transition, where infectious diseases are still prevalent accounting to 34.7% of deaths and non-communicable diseases (NCDs) accounting for about 55% of deaths and are emerging as the most common causes of mortality. NCDs have enormous negative impact on the health and also pose serious social, economic and developmental challenge and are closely linked to poverty. High rates of illiteracy, poverty and low allocation of budget by the governments on health persists in many member states of the region and also inadequate capacity of workforce in terms of quality as well as quantity to address NCDs by the health systems is of concern. Poverty increases the risk of diseases due to high exposure to risk factors, especially of NCDs and hampers accessibility to diagnosis and treatment, further worsening the condition of the disease resulting in higher disabilities, reduced work output, premature mortality and along with high treatment costs, results in catastrophic health expenditure.[33]

Prevention and Control of Non-Communicable Diseases:

WHO Global Strategy for Prevention and Control of Non-communicable diseases, 2000: In response to the rapid rise in deaths due to non-communicable diseases, which contributed almost 60% (31.7 million) deaths worldwide and 43% of global burden in the year 1998, impact being more especially on the low and middle income countries (about 85%), the World Health Organization (WHO) came with "Global Strategy for the Prevention and Control of Non-Communicable Diseases" in the year 2000. Four major non-communicable diseases (Cardiovascular diseases, Cancer, Chronic Obstructive Pulmonary Disease and Diabetes) were addressed, as they were linked by common preventable risk factors linked to life style behaviour, which were tobacco use, unhealthy diet and physical inactivity. The goal of the strategy was to, "support member states in their efforts to reduce the toll of morbidity, disability and premature mortality related to non-communicable diseases".[34]

The main objectives of the WHO Global Strategy of 2000 were,

1. To map the emerging epidemics of non-communicable diseases and analyse social, economic, behavioural and political determinants with reference to poor and disadvantaged populations, in order for provision of guidance for policy, legislative and financial measures.
2. To reduce the level of exposure of individuals and populations to common risk factors for non-communicable diseases, namely tobacco consumption, unhealthy diet, physical inactivity and their determinants.

3. To strengthen health care for people with non-communicable diseases by development of norms and guidelines for cost-effective interventions, with priority given to cardiovascular diseases, cancer, diabetes and chronic respiratory diseases.[34]

The WHO STEP-wise approach to Surveillance of non-communicable diseases (STEPS), 2002: The 21st World Health Assembly in 1968, described surveillance as "systematic collection and use of epidemiologic information for the planning, implementation, and assessment of disease control". Primary prevention is the key for the control of the global epidemics of NCDs and the aim is to avert epidemics reverse them to where they have begun. The basis is to identify the major risk factors and their prevention and control. Information on risk factors helps to guide the development and implementation of prevention strategies and to measure their impact. So WHO came up with STEP-wise approach to Surveillance (STEPS) of NCDs based on sequential levels of surveillance of different aspects of NCDs, allowing flexibility and integration by maintaining standardized questionnaires and protocols at each step to ensure comparability over time, across locations and defines core variables for population-based surveys, surveillance and monitoring instruments. The goal was to achieve data comparability over time and between countries. Of the leading 12 risk factors as causes of burden of disease, seven were included in the STEPS surveillance system which were tobacco use, alcohol consumption, low fruit and vegetable intake, physical inactivity, blood pressure, cholesterol and body mass index.[35]

WHO Framework Convention on Tobacco Control, 2003: It was developed in response to the globalization of the tobacco epidemic, the spread of which was facilitated through various complex factors like trade liberalization, direct foreign investment, global marketing, transnational tobacco advertising, promotion and sponsorship, international movement of contraband and counterfeit cigarettes. Various measures like price and tax measures, regulation of the tobacco contents, labelling, packaging and public awareness were undertaken for reduction tobacco epidemic.[36]

The WHO Global Strategy on Diet, Physical activity and Health, 2004: Recognizing the heavy, growing burden of non-communicable diseases, the Member States requested the WHO Director-General for developing a global strategy on diet, physical activity and health and the strategy addressed two of the main risk factors for NCDs namely, diet and physical activity as unhealthy diets and physical inactivity are risk factors for developing cardiovascular diseases, type 2 diabetes and certain types of cancer contributing substantially to the global burden of disease, mortality and disability. The goal of the 'Global Strategy on Diet, Physical Activity and Health' was, to promote and protect health by development of an environment for sustainable actions at individual, community, national and global levels, so that together it will lead to reduced disease and death rates.[37]

The WHO Report on implementation of Global Strategy for Prevention and Control of NCDs, 2008: Epidemiological evidence indicated that four NCDs made the largest contribution to mortality in the majority of low and middle income countries which were cardiovascular disease, cancer, chronic respiratory disease and diabetes and they also shared same underlying preventable risk factors. The report

intended to consolidate the then existing strategies and plans laid by WHO across individual diseases, risk factors and geographical areas and the ultimate aim was to provide an overall direction for offering support for the operationalization of national strategies, regional strategies and action plans. The report came up with six objectives for national and international stakeholders: [38]

1. To raise awareness of non-communicable diseases and advocate for their prevention and control.
2. To establish or strengthen, as appropriate, national policies and plans for the prevention and control of non-communicable diseases.
3. To promote specific measures and interventions to reduce the main shared risk factors for non-communicable diseases: tobacco use, unhealthy diets, physical inactivity and harmful use of alcohol.
4. To promote research for the prevention and control of non-communicable diseases.
5. To promote partnerships for the prevention and control of non-communicable diseases.
6. To establish systems for tracking global progress in the prevention and control of non-communicable diseases.[38]

The WHO Global strategy to reduce the harmful use of alcohol, 2010: The harmful use of alcohol, a significant contributor to the global burden of disease was listed as the third leading risk factor for premature deaths and disabilities worldwide and as one of the four leading risk factor for development of non-communicable diseases. In 2004, it was estimated that around 2.5 million people worldwide died of alcohol-related causes which included 3,20,000 young people between 15 and 29

years of age, harmful use of alcohol was responsible for 3.8% of all deaths worldwide in 2004 accounting to 4.5% of the global burden of disease. The strategies were to raise global awareness about harmful use of alcohol, to enhance commitment by governments to address the harmful use of alcohol and to improve systems for monitoring and surveillance.[39]

The WHO 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Non-communicable Diseases: This Action Plan highlighted the need for investing in NCD prevention as an integral part for sustainable socioeconomic development and that it is government responsibility. It further stressed all stakeholders to intensify and harmonize their efforts to avert the preventable conditions and save them from suffering needlessly and dying prematurely. The Action Plan had set six objectives and actions to be implemented over the six-year period of 2008–2013 and also performance indicators to guide the work of WHO at national, regional and global levels with more focus on low and middle income countries and vulnerable populations.[40]

The WHO Global Action Plan for the Prevention and Control of Non-communicable Diseases 2013-20: The vision was for a world free of avoidable burden of non-communicable diseases and the goal was for reduction in the preventable and avoidable burden of morbidity, mortality and disability which were due to non-communicable diseases, by means of multisectoral collaboration and cooperation at national, regional and global levels. Objectives were to strengthen national capacity, leadership, governance, multisectoral action and partnerships to accelerate country response for the prevention and control of non-communicable

diseases and to monitor the trends and determinants of non-communicable diseases and evaluate progress in their prevention and control.[41]

The WHO Non-Communicable Diseases Progress Monitor 2017: The updated technical note on prevention of non-communicable diseases by WHO was released in 2017 as Non-Communicable Diseases Progress Monitor 2017, based on latest data tracked against 10 progress indicators enabling developing nations to chart progress responses. To promote accountability, the WHO defined ten national progress indicators to show the progress achieved in countries in the implementation of selected national commitments.[42]

Indian scenario: changing trends

Suzanne Nethan, Dhirendra Sinha and Ravi Mehrotra in their systematic review article published in 2017, have mentioned that in India about 5.87 million deaths, accounting to about 60% of all deaths are attributed to NCDs. Being a populous country with about 1.3 billion population, India contributes more to than two thirds of the total deaths in the South-East Asia Region attributable to NCDs. Various periodic surveys both at national and state levels have been conducted in India which directly or indirectly target NCDs, but associated with a number of shortcomings, which needs to be addressed for improving NCD control. Tobacco consumption from 2005 to 2016 has seen a significant decline among both males and females, the prevalence of which has decreased from 34.6 to 28.6%. Surveys have recorded that the prevalence of alcohol consumption from 2005 to 2016 has witnessed an overall decline among both males and females. Increase in prevalence of Physical inactivity was seen in all states and also increase in prevalence of obesity.

They concluded saying that surveillance and procurement of details regarding risk factors for NCDs was essential for health programs, policy planning and implementation. Lack of adequate risk factor data, inadequate coverage and absence of a standardized methodology were the major deficiencies noted and which needs to be addressed.[43]

In the year 2004 with the assistance of World Bank, The Government of India through the Ministry of Health & Family Welfare initiated a decentralized, state based non-communicable disease risk factor survey. The main objective of the NCD risk factors survey was to improve the information available on a set of high-priority risk factors to the Government health services and care providers, with a view to improve the quality health care and services and also to establish baseline database of NCD risk factors, thus providing evidence for evolving strategies and interventions for the identified risk factors. The percentage of current daily smokers ranged from 9% to 42% and percentage of smokeless tobacco use varied from 32% to 48%. Percentage of current alcohol consumers varied from 11% to 20% and a declining trend with advancement of age was noted. Percentage of respondents consuming less than five servings of fruits and vegetables per day ranged from 76% to 99% and in a week people consumed vegetables for 4 to 7 days and fruits for only 2 to 3 days across all states, Physical activity ranged from 42% to 81%. By categories of hypertension, 17% to 21% of the respondents across all the states were found to be in stage I or stage II hypertension. Population with overweight ranged from 7% to 22% and obesity from 2% to 5%. Raised blood sugars was seen among 6% of the population and the compliance for treatment was about 58%.[44]

Prevention and Control of Non-Communicable Diseases:

National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke (NPCDCS): This programme was launched in 2010 in 100 districts across 21 states of India as a pilot phase by the Government of India for the purpose of prevention and control of NCDs. The main focus of the programme was health promotion, early diagnosis, management and referral of cases, strengthening the infrastructure and capacity building.[45]

The objectives of the NPCDCS were: [46]

1. To prevent and control common NCDs through behaviour and life style changes.
2. To provide early diagnosis and management of common NCDs.
3. To build capacity at various levels of health care for prevention, diagnosis and treatment of common NCDs.
4. To train human resource within the public health setup, which is doctors, paramedics and nursing staff to cope with the increasing burden of NCDs.
5. To establish and develop capacity for palliative & rehabilitative care.

The strategies adopted for achievement of the objectives were,

1. Prevention through behaviour change
2. Early Diagnosis
3. Prompt treatment
4. Capacity building of human resources
5. Surveillance, Monitoring & Evaluation

Package of services as per the NPCDCS operational guidelines: [46]

For Sub-centres (SCs), the package of services to be made available were,

1. Health promotion for behaviour change
2. 'Opportunistic' screening using blood pressure measurement and blood glucose by strip method
3. Referral of suspected cases to Community Health Centres (CHCs)

Activities to be performed under NPCDCS at Sub-centres were,

1. Health promotion
2. Opportunistic screening of persons at and above 30 years of age
3. Measurement of blood sugar by glucometer strip method
4. Referral of suspected cases of diabetes and hypertension to CHC or higher centres for further diagnosis and management
5. Data recording and reporting [46]

For Community Health Centres (CHCs), the package of services to be made available were:

1. Prevention and health promotion including counseling
2. Early diagnosis through clinical and laboratory investigations (Common lab investigations like blood sugar, lipid profile, ECG, Ultrasound, X-ray etc.)
3. Management of common CVDs, diabetes and stroke cases (out- patient and in-patients.)
4. Home based care for bed ridden chronic cases
5. Referral of difficult cases to District Hospital/higher health care facility

Activities to be performed under NPCDCS at CHCs were,

1. Opportunistic screening of persons at and above 30 years of age
2. Prevention and health promotion, to convey key messages to public which include,
    - Increased intake of healthy foods
    - Increased physical activity through sports, exercises
    - Avoidance of alcohol and tobacco
    - Stress management
    - Warning signs of cancer
3. Basic laboratory investigations (mentioned in package of services)
4. Diagnosis and management
5. Home based care for bedridden cases
6. Referral services of complicated diabetes and hypertension cases
7. Data recording and reporting
8. Establishment of NCD clinics with a role to,
    - Provide opportunistic screening
    - Investigate for blood sugar, ECG, blood cholesterol etc.,
    - Diagnose and treat diabetes and hypertension
    - Provide education to patients
    - Referral of difficult and complicated cases to district hospital [46]

For District Hospitals (DHs), the package of services to be made available were,

1. Early diagnosis of diabetes, CVDs, Stroke and Cancer
2. Investigations: Blood Sugar, lipid profile, Kidney Function Tests, Liver Function Tests, ECG, Ultrasound, X-ray, colposcopy, mammography etc. (if not available, to be outsourced)
3. Medical management of cases **(**outpatient, inpatient and intensive Care)
4. Follow up and care of bed ridden cases
5. Day care facility
6. Referral of difficult cases to higher health care facility
7. Health promotion for behaviour change

Activities to be performed under NPCDCS at district hospitals were:

1. Establishment of NCD clinic to provide emergency care and management of cancer, diabetes, hypertension and acute cardiovascular diseases.
2. Opportunistic screening of persons at and above 30 years of age for diabetes, hypertension, cardiovascular diseases and individuals at risk of developing them.
3. Women in the age group of 30-69 years to be screened for cervical and breast cancer.
4. Detailed investigation (mentioned in package of services)
5. Outsourcing of investigations that are not available at district hospital including mammography.
6. Out-patient and in-patient care.
7. Day care chemotherapy facility.
8. Home based palliative care for chronic, debilitating and progressive patients.
9. Referral and transport facility to serious patients.

10. Health promotion, to convey key messages to public which include,
    - Increased intake of healthy foods
    - Increased physical activity through sports, exercises
    - Avoidance of alcohol and tobacco
    - Stress management
    - Warning signs of cancer
11. Training to health personnel.
12. Data recording and reporting.
13. Establishment of Cardiac Care Unit (CCU).[46]

For Tertiary Cancer Centres, the package of services were:

Comprehensive cancer care including prevention, early detection, diagnosis, treatment, minimal access surgery after care, palliative care and rehabilitation.[46]

In the revised NPCDCS operational guidelines, released in 2013, the package of services for the PHC were included and they were:

1. Health promotion for behaviour change and counseling
2. 'Opportunistic' screening of Diabetes using glucometer kits and Blood Pressure measurement.
3. Clinical diagnosis and treatment of common CVDs including Hypertension and Diabetes
4. Identification of early warning signals of common cancers
5. Referral of suspected cases to CHC.[3]

Revised Indian Public Health Standards (IPHS) guidelines, 2012 for District Hospitals: The guidelines have mentioned that the district hospitals must be capable of conducting screening, investigations, diagnosis and treatment of Cerebrovascular Accidents (CVA), common cardiac problems like chest pain, giddiness indicating hypertension and Ischaemic Heart Disease, diabetes, diabetes with hypertension, nephropathy, retinopathy, neuropathy with foot care and emergencies like hypoglycaemia, ketosis and coma. They are also supposed to do health promotion and counselling regarding life style modification and dietary changes for the illnesses like diabetes, coronary heart disease and substance abuse.[47]

Revised Indian Public Health Standards (IPHS) guidelines, 2012 for Community Health Centres (CHCs): In the guidelines under NPCDCS section for the purpose of cancer control, the essential components mentioned were that, facilities must be available for early detection and referral of suspected cancer cases, screening facilities for Cervical, Breast and Oral Cancers, education about self-breast examination and self-oral examination, PAP smear for Cancer Cervix screening and desirable components would be availability of basic equipment like Magna Visualizer, Indirect Laryngoscope, Punch biopsy forceps and Public private partnership for laboratory investigations and microbiological, tumour markers, mammography etc., related to cancer diagnosis. With respect to stroke, diabetes and cardiovascular diseases, Focus was to be on healthy population by modify individual, group and community behaviour through interventions like, promotion of healthy dietary habits, physical activity, avoidance of tobacco and alcohol use and stress management. Treatment and timely referral of complicated cases of diabetes, hypertension, Ischaemic Heart Disease, Congestive Heart Failure. To assure investigations like Urine Albumin and Sugar, Blood Sugar, Blood Lipid Profile, Renal

Function Tests (Blood urea, creatinine) ECG and also desirably early detection by population survey.[48]

Revised Indian Public Health Standards (IPHS) guidelines, 2012 for Primary Health Centres (PHCs): Essential components would be IEC services, early detection of cancer with warning signals like change in bladder/bowel habits, bleeding per rectum, blood in urine, lymph node enlargement, lump or thickening in breast, itching and/or redness or soreness of the nipples of breast, non-healing chronic sore or ulcer in oral cavity, difficulty in swallowing, obvious change in wart/mole, hoarseness of voice etc., and referral of suspected cancer cases for confirmation of the diagnosis and desirable to have PAP smear facility. Other essential services are health promotion to modify individual, group and community behaviour through, promotion of healthy dietary habits, physical activity, avoidance of tobacco and alcohol use, stress management, early detection, management and referral of diabetes, hypertension, CVDs and stroke and to survey population for identification of high risk population and those suffering from disease.[49]

Revised Indian Public Health Standards (IPHS) guidelines, 2012 for Sub-Centres (SCs): Essential services to be provided are IEC activities for promotion of healthy lifestyle, to sensitize the community about prevention of Cancers, Diabetes, CVD, Strokes and early detection through awareness about warning signs, appropriate and prompt referral of the suspect cases.[50]

According to WHO Non-Communicable Diseases Progress Monitor Country wise Report 2017, India with an estimated population of 1,309,000,000 witnessed 61% of deaths due to NCDs accounting to 5,817,000 deaths and 23% risk of premature deaths from target NCDs. National NCD targets were fully achieved, Mortality data was partially available, Risk factor surveys were partially achieved and

National integrated NCD policy/strategy/action plan was not fully achieved. With respect to tobacco demand-reduction measures, increase in excise taxes and prices not achieved, smoke-free policies partially achieved, large graphic health warnings/plain packaging fully achieved, ban on advertising, promotion and sponsorship partially achieved, mass media campaigns partially achieved. With respect to harmful use of alcohol reduction measures, restrictions on physical availability partially achieved, advertising bans or comprehensive restrictions not achieved and increase on excise taxes not achieved. With respect to unhealthy diet reduction measures, salt/sodium policies partially achieved, saturated fatty acids and trans-fats policies fully achieved, marketing to children restrictions not achieved, marketing of breast-milk substitutes restrictions fully achieved. Public education and awareness campaign on physical activity is fully achieved, Guidelines for management of cancer, CVD, diabetes and Chronic Respiratory Diseases (CRD) fully achieved and Drug therapy/counselling to prevent heart attacks and strokes partially achieved.[42]

According to the perspectives of Marie Hauerslev and Luke Allen in 2018, NCDs (Cancer, diabetes, chronic lung disease, and cardiovascular diseases) are crucial issues for younger generation. More than two thirds of preventable adult deaths related to NCDs are associated with risk behaviour that would have started in adolescence. The risk of suffering is increased by tobacco use, alcohol abuse, unhealthy diets and physical inactivity. Globally more than 150 million young people use tobacco, 84% and 78% of adolescent girls and boys are physically inactive, 11.7% of adolescents take part in binge drinking, and 41 million children under 5 years of age are overweight or obese. In 2004, the mortality of young men aged 15–24 years was two to three times higher than that of boys aged 1–4 years. [51]

The International Federation of Medical Students' Associations (IFMSA) gathered 800 medical students for an NCD youth caucus, co hosted with World Health Organization (WHO) Global Coordination Mechanism for NCD (GCM/NCD) in March 2017. They expressed their envisioned actions for a better future through the adopted "The Budva Youth Declaration: A Call to Action on NCDs". They mentioned that in 75% of medical students from 120 countries, NCD related medical education was insufficient.[51]

A cross-sectional study conducted by Kantinath Ainapure, Kumar Sumit and Sanjay M. Pattanshetty in 2018 on study of implementation of NPCDCS in Udupi district of Karnataka, reported that, the NPCDCS had achieved initial success and its successful implementation needs to be observed in the coming years, the health staff posts which were critical in implementation of NPCDCS were vacant in many of the healthcare centres and awareness about the programme was relatively low in the community. They also said that it was necessary to conduct regular awareness and screening campaigns with follow-up services to sensitize the community about the programme and regular supply of medicines should be ensured for the effective implementation of the programme so as to achieve its goal in reducing the burden NCDs.[52]

The (Indian Council of Medical Research - India Diabetes) ICMR-INDIAB-5 (phase-I) study conducted by R. M. Anjana et.al., published in 2014 on physical activity and inactivity patterns in India reported that, out of the 14,227 individuals studied, 54.4% (n = 7737) were inactive (males: 41.7%) and subjects were more inactive in urban (65%) compared to rural areas (50.0%; $p < 0.001$). They also said

that a large percentage of people in India are inactive with fewer than 10% engaging in recreational physical activity and therefore urgent steps need to be initiated to promote physical activity to control epidemics of diabetes and obesity in India.[53]

The (Indian Council of Medical Research - India Diabetes) ICMR-INDIAB-5 (phase-I) study conducted by R. M. Anjana et.al, published in 2011 on prevalence of diabetes and prediabetes reported that, out of the 14,277 participants the prevalence of diabetes was 10.4% in Tamilnadu, 8.4% in Maharashtra, 5.3% in Jharkhand and 13.6% in Chandigarh and the prevalence of prediabetes (impaired fasting glucose and/or impaired glucose tolerance) were 8.3%, 12.8%, 8.1% and 14.6% respectively. They also said that age, male sex, family history of diabetes, urban residence, abdominal obesity, generalized obesity, hypertension and income status were significantly associated with diabetes and significant risk factors for prediabetes were age, family history of diabetes, abdominal obesity, hypertension and income status.[54]

A cross-sectional study conducted by Rajmohan Panda, Sandeep Mahapatra and Divya Persai published in 2018 on health system preparedness in non-communicable diseases in Odisha and Kerala of India reported that, both the states had NCD preparedness structure, but needed strengthening at various levels and the present human resource was inadequate and over-burdened and lack of workforce adversely affected the service delivery. They also said that there was a gap in the timely release of funds and also lacked evidence-based application and there was need for more in-depth and large-scale studies, thereby assisting the policy makers and program managers with relevant and scientific evidence to bring reforms in the health system.[55]

Material and Methodology

Belagavi district is situated in Northern part of Karnataka having a population of 47, 79,661. Belagavi district has ten taluka, including Belagavi taluka having a population of 9, 57,373 divided into urban (6, 43,862) and rural Belagavi (3, 13,511), as per the details availed from the District Health Office of Belagavi. Belagavi Taluka has one District Hospital (DH), one Community Health Centre (CHC), 12 Primary Health Centres (PHCs), ten Urban Primary Health Centres (UPHCs) and 70 Sub-centres (SCs) as per the details collected from the District health Office (DHO), Belagavi (personal communication on 22nd July 2016), out of which two UPHCs, two PHCs and 13 SCs are the field practice area under the administrative control of Department of Community Medicine, Jawaharlal Nehru Medical College, KAHER, Belagavi.

Source of Data:

For Primary objective: Beneficiaries of NPCDCS,

Ten selected beneficiaries under each selected sub-centre, who were screened positive for Diabetes and Hypertension, who had attended NPCDCS camps conducted at sub-centre level in the preceding six months.

For Secondary objective: Facilities implementing NPCDCS,

One District Hospital, One Community Health centre, 12 Primary Health Centres and selected Sub-centres under each PHC in Belagavi Taluka.

Study Design: A facility based Cross Sectional study.

Study Period: The study was conducted from 1st January 2017 to 31st May 2018 (17 months).

Sample size and Sampling method:

The District Hospital, Community Health Centre, Primary Health Centres in Belagavi taluka were selected. The Sub-centres and beneficiaries were selected by multi stage random sampling technique.

In first stage, one District Hospital, One CHC and all 12 PHCs were included in the study.

In second stage, 36 Sub-centres were included in the study by selecting three Sub-centres from each PHC by random sampling technique.

In third stage, a total of 360 beneficiaries were included by selecting ten beneficiaries from each Sub-centre from the NPCDCS registers who had attended the NPCDCS screening camps conducted in the respective Sub-centres six months prior to the visit of the interviewer by simple random sampling technique.

Finally the sample size came up to one District Hospital, One CHC, 12 PHCs, 36 Sub-centres and 360 beneficiaries in Belagavi taluka.

The Urban Primary Health centres (UPHCs) were excluded in the study as no Sub-centres were attached to them in the urban area.

The list and map of selected Primary Health Centres and Sub-centres is given in Annexure VIII and Figure 1 respectively.

Method of Data Collection:

Permission was obtained from the Principal, Jawaharlal Nehru Medical College, KAHER, Belagavi. Ethical Clearance was obtained from the Institutional Ethics Committee for Human Subjects' Research, to conduct the study on 17th October 2016 (Annexure I). Then written permission to conduct the study in Belagavi taluka was obtained from the District health Officer (DHO) of Belagavi along with the written permission of the District Surveillance Officer (DSO) of Belagavi (Annexure II) to collect data in government health care facilities.

List of the details of District hospital, Community Health Centre, Primary Health Centres and their Sub-centres of Belagavi taluka were obtained from the District Health Office of Belagavi. On personal communication with the District Surveillance Office staff and NPCDCS Belagavi District Coordinators, details of the NPCDCS implementation and its functioning in Belagavi Taluka were obtained.

In the District Hospital, the Medical Officer of NCD cell was interviewed by the investigator using a pre-tested, pre-designed questionnaire based on the Operational Guidelines for NPCDCS (revised 2013-17) and Indian Public Health Standards (IPHS) guidelines for District Hospitals (Revised 2012) after obtaining written informed consent from the Medical Officer.

In the Community Health Centre, the Medical officer was informed about the study and after obtaining the permission, Lab Technician was interviewed by the investigator using a pre-tested, pre-designed questionnaire based on the Operational Guidelines for NPCDCS (revised 2013-17) and Indian Public Health Standards (IPHS) guidelines for Community Health Centres (Revised 2012) after obtaining a written informed consent.

In the selected Primary Health Centres, the Medical officer was informed about the study and after obtaining the permission, any available PHC staff (MO/Staff Nurse/Lab Technician/ANM) were interviewed by the investigator using a pre-tested, pre-designed questionnaire based on the Operational Guidelines for NPCDCS (revised 2013-17) and Indian Public Health Standards (IPHS) guidelines for Primary Health Centres (Revised 2012) after obtaining written informed consent.

In the selected Sub-centres, after informing the concerned PHC Medical Officer, The ANM/MHW of the selected Sub-centres were interviewed by the investigator using a pre-tested, pre-designed questionnaire based on the Operational Guidelines for NPCDCS (revised 2013-17) and Indian Public Health Standards (IPHS) guidelines for Sub-centres (Revised 2012) after obtaining written informed consent.

In the SCs, the concerned ANM is supposed to screen 40% of SC population, by screening individuals 30 years and above for diabetes and hypertension, by conducting NCD screening camps in their SCs every week, preferably on Friday's to achieve the target, as told by the Belagavi district NPCDCS coordinators. The individuals are to be screened for diabetes by blood glucose strip method using glucometer and for hypertension using BP apparatus of their choice, preferably mercury sphygmomanometer in sitting position and taking an average of three to four readings and also the height in metres and weight in Kg will be recorded and BMI will be calculated. The individuals who will be screened positive for diabetes or hypertension or both will be referred to their respective PHCs for confirmation of the disease and initiation of the treatment. Irrespective of the disease outcome, the ANM has to counsel the individuals attending the NCD camps for health promotion by

advising them for diet modification, physical activity, and stress management, avoidance of tobacco and alcohol and about warning signs of cancer.[46]

In case of non-availability of the Medical Officer or the concerned staff, two repeat visits were made to the respective facility with prior intimation and the data was collected by the investigator.

Ten beneficiaries from each Sub-centre were randomly selected from the NPCDCS register, who had attended the NPCDCS screening camps six months prior to the visit of the investigator. They were contacted at their homes with the help of ASHA or in the Sub-centre camps and they were interviewed by the investigator using a pre-tested, pre-designed structured questionnaire for assessment of their knowledge, attitude and utilization practices of services provided under NPCDCS along with their socio-demographic details after obtaining a written informed consent.

In case of non-availability of the selected beneficiary, another beneficiary was selected from the NPCDCS register from the respective sub-centre and was interviewed by the investigator on the same day.

During the visit, the investigator assessed the records and registers maintained by the ANMs at their respective sub-centres and noted them. No physical examination or laboratory investigations of study participants were conducted by the investigator.

Inclusion criteria:

Beneficiaries aged 30 years and above who had attended NPCDCS screening camps conducted at the Sub-centre level camps six months prior to the visit of investigator.

Exclusion criteria:

-Beneficiaries aged 30 years and above who were known cases of Diabetes, Hypertension and were on treatment at the time of their visit to NPCDCS screening camps at SC level camps.

-Individuals aged less than 30 years were excluded, as they were not being screened in the NPCDCS camps at SCs.

Data Analysis plan:

The data collected using the questionnaire were coded and entered in to Microsoft Excel sheet. Separate data sheets were used to enter data of the District Hospital, the Community Health Centre, the Primary Health Centres, selected Sub-centres and the beneficiaries. Tables and charts were prepared. Rates, ratios and percentages were calculated. Statistical analysis was done using chi square test.

Definition of study variables:

The study variables used in the questionnaire were standard definitions and terminologies derived from the Operational Guidelines for NPCDCS, published by the Director General of Health Services, Ministry of Health and Family Welfare, Government of India.[3, 46]

Non-Communicable Diseases (NCDs) in this study refer to Cancer, Diabetes and Hypertension, Cardiovascular Diseases and Stroke and associated illnesses.[3]

NCD clinic: establishments at all districts (District Hospitals, Community Health Centres) for regular screening, management, counselling and awareness generation for non-communicable diseases (NCDs), where comprehensive

examination of patients referred by lower health facility /Health Worker as well as of those reporting directly will be conducted for ruling out complications or advanced stages of common NCDs.[3]

Health promotion activities focuses on: [3]

1. Increased intake of healthy foods
2. Salt reduction
3. Increased physical activity/regular exercise
4. Avoidance of tobacco and alcohol
5. Reduction of obesity
6. Stress management
7. Awareness about warning signs of cancer etc.
8. Regular health check-up

Opportunistic screening: During camps / designated ANM /Male Health Worker will record history of persons at and above the age of 30 years for alcohol and tobacco intake, physical activity, blood sugar and blood pressure, also recorded height in metres and weight in Kg of the individuals to calculate their Body Mass Index (BMI).[3]

Overweight or obesity is assessed by measuring body mass index (BMI), which is calculated as weight in kg / (height in meter) ^{2}. For Indian population 18.5 to 22.9 BMI is normal, 23 to 24.9 is considered as overweight and BMI of ≥25 is considered as obesity (according to WHO guidelines for Asian population).[56]

Criteria for diagnosing diabetes mellitus: [3, 56]

Diagnosis	**Fasting Glucose (mg/dl)**	**2-hour Post-Glucose load (mg/dl)**
Diabetes Mellitus	≥126	≥200
Impaired Glucose Tolerance	<110	>140 to <200
Impaired Fasting Glucose	≥110 to < 126	-----

Criteria for suspected Diabetes case: blood glucose reading of 140 mg/dl by glucostrip.[3]

Criteria for diagnosing hypertension: (JNC VII criteria is used) [56]

Diagnosis	**Systolic (mmHg)**	**Diastolic (mmHg)**
Normal	Less than 120	Less than 80
Pre-hypertension	120-139	80-89
Hypertension stage I	140-159	90-99
Hypertension stage II	160 or higher	100 or higher

Referral: ANM/ Male Health Worker will refer the suspected case of Diabetes and Hypertension to the CHC or higher health facility for further diagnosis and management.[3]

Data recording and reporting: Data was collected in prescribed formats and reported monthly to the District NCD Unit of the programme. (Annexure X, figure 5a, 5b and 5c).[3]

Age: As stated by the beneficiary in completed calendar years, as on last birthday.

Educational Qualification:

1. Illiterate: beneficiary who cannot read or write with understanding in any language.

2. Primary: beneficiary who had completed one to five years of schooling.

3. Secondary: beneficiary who had completed six to ten years of schooling.

4. PUC/ ITI/ diploma: beneficiary who had completed education up to PUC or any diploma or ITI.

5. Degree/PG: beneficiary who had completed any graduation degree course or any post-graduation course.

Occupation [57]**:** the source of their income, as self-reported by the beneficiaries, who would earn his or her living by means of it.

1. Farmer: owns his land or on a contract basis.

2. Labourer/daily wage: who works at any place including agricultural fields on a daily wage basis.

3. Self-employed: beneficiary who is not an employee under any agency or society like carpenter, plumber, painter, provision store, etc.

4. Government employee: beneficiary who is a permanent or contract worker in any government agencies.

5. Private employee: beneficiary who is a permanent or contract worker in any private companies or factories or NGOs.

6. Retired/pensioner: beneficiary who is currently not working and is receiving pension from any means.

7. Unemployed: beneficiary who is currently not working or is receiving any monitory benefit of any kind.

8. Home maker: beneficiary who looks after home, children and currently not working in any of the kind.

Type of the family [58]:

1. Nuclear: The family consisting of married couple along with their dependent children.

2. Joint: It consists of number of married couples and their children who live in the same household.

3. Broken: A family consists of widow/ widower/ divorcee living with or without their dependent children.

Socio-economic Status [59]: Modified B. G. Prasad's classification was used which was obtained by:

The B.G. Prasad's scale was introduced in 1961 considering the base of Consumer Price Index (CPI) for 1960 as 100.

Consumer Price Index for January 2017 was 274

Multiplication factor = Current index value (274) = 2.74

Base index value in 2001 (100)

The new income value is calculated using the following equation:

= multiplication factor × old income value × 4.63 × 4.93.

Here 4.63 and 4.93 are the linking factors given by the Labour Bureau of India.

So, after substituting the values, the new scale is,

Socio-economic status: class	**B. G. Prasad's classification of 1961 (monthly income in rupees)**	**Revised B. G. Prasad's classification for 2016 (monthly income in rupees)**
I	100 and above	6254 and above
II	50-99	3127-6253
III	30-49	1876-3126
IV	15-29	938-1875
V	Below 15	Below 938

Section I: District Hospital:

According to the information collected from the District Health Office (DHO), the District Hospital situated in Belagavi city is the only hospital serving as a government tertiary hospital for ten talukas covering a population of around 47, 79,661 as in 2011. The Medical officer of the NCD clinic informed that the implementation of National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke (NPCDCS), NCD clinic and the services of opportunistic screening of the individuals aged above 30 years is being done in this district hospital since 6th April, 2016. Patients who were screened for diabetes and hypertension in the peripheries were referred to this NCD clinic for further confirmation and management of complicated, emergency cases. All the records related to patient screening with respect to NPCDCS were available and the data was reported on a monthly basis and the staff did not know as to whom the data was reported.

Table 1: Activities performed in the District Hospital, Belagavi under NPCDCS.

Sl. No	Activities performed	Response
1	Establishment of CCU (4 bedded)	No
2	Out-patient and In-patient care	Yes
3	Health promotion	Yes
4	Day care chemotherapy	No
5	Palliative care	No
6	Training facilities for other staff	Yes
7	Referral services for emergency cases	No

Cardiac Care Unit (CCU) was not yet established in this hospital. Out-patient Services (OPD), In-patient Services (IPD), health promotion activities were rendered, but day care chemotherapy and palliative care services for cancer were not available in this hospital. The activities of training other staff with respect to NPCDCS was done and there was no established referral services for the patients requiring emergency treatment services that were not available at this district hospital.

Table 2: **Manpower requirement in the District Hospital, Belagavi as per NPCDCS.**

Sl. No	Manpower/ Staff for NCD clinic	Required	Available
1	General Physician	1	1
2	GNM	2	2
3	Technician	1	1
4	Physiotherapist	1	1
5	Counselor	1	1
6	Data entry operator	1	1
7	Specialist (Cardiologist/ General Physician)	1	0
8	GNM for CCU	4	0

The availability of manpower for NCD clinic was 100% as per the norms of NPCDCS comprising of a general physician, GNMs, technician, physiotherapist, counselor and data entry operator. The required staff of specialist and GNM for CCU were not available.

Table 3: **Availability of necessary investigations in the DH, Belagavi as per NPCDCS**.

Sl. No	Laboratory investigations	Availability
1	Hb%, TC, DC, Platelet count (CBC)	Yes
2	Bleeding time, Clotting time	Yes
3	Blood sugar (FBS, PPBS)	Yes
4	Lipid profile	Yes
5	Liver Function Test (LFT)	Yes
6	Kidney Function Test (KFT)	Yes
7	Urine routine, Urine sugar	Yes
8	Pap smear	Yes
9	X-Ray	Yes
10	Ultrasound (USG)	Yes
11	ECG	Yes
12	Echocardiography	Yes
13	CT Scan	Yes
14	MRI	No
15	Mammography (desirable)	No

Almost all the investigations that were recommended as per NPCDCS were available in the district hospital, Belagavi except for the MRI and mammography.

Table 4: **List of equipment required in the District Hospital, Belagavi as per NPCDCS.**

Sl. No	Equipment	Availability
01	ECG machine computerized	No
02	ECG machine ordinary	Yes
03	12 Channel stress ECG test equipment Tread Mill	No
04	Cardiac monitor with defibrillator	Yes
05	Cardiac monitor	Yes
06	Defibrillator	Yes
07	Ventilators (adult) -4	Yes
08	Ventilator (pediatric)	Yes
09	Pulse Oximeter	Yes
10	Pulse Oximeter with NIB	Yes
11	Infusion pump	Yes
12	BP apparatus stand model	No
13	BP apparatus table model	Yes
14	Stethoscope	Yes
15	Portable X-ray machine	No
16	Central patient monitoring station	No
17	Intubation kit, Bronchoscope, Laryngoscope	Yes
18	Portable USG machine	Yes
19	Medical gas pipeline	Yes

As per the NPCDCS guidelines, the required equipment like ECG computerized machine, Tread mill, BP apparatus stand model, portable X-ray machine and central patient monitoring station were not available in the district hospital, Belagavi.

When the question was asked about suggestion for improving the programme, the answer given by the staff was, "*requirement of staff to be fulfilled and to make pneumococcal vaccines available for diabetic patients*".

Section II: Community Health Centre:

This CHC, Hirebagewadi in Belagavi taluka covered a population of around 1,00,000 as per the staff nurse and the programme was implemented two months before the visit of the investigator (May 2017) and the establishment of NCD clinic and opportunistic screening of individuals above the age of 30 years started during the same time. Patients who were screened for diabetes and hypertension in the peripheries were referred to this NCD clinic for further confirmation and management of uncomplicated cases. All records related to patient screening with respect to NPCDCS were available and the data was reported on a monthly basis and the staff did not know as to whom the data was reported.

Table 5: Activities performed in the CHC, Hirebagewadi under NPCDCS.

Sl. No	Activities performed	Response
1	Out-patient care	Yes
2	In-patient care	Yes
3	Health Promotion	Yes
4	Diagnosis and treatment of diabetes, hypertension	Yes
5	Identification of high risk cases for Cardiovascular diseases	Yes
6	Screening of oral, breast and cervical cancer	Yes
7	Referral services for complicated/emergency cases	Yes

Out-patient Services (OPD), In-patient Services (IPD), health promotion activities were rendered, treatment for diabetes and hypertension, identification of high risk cases for cardiovascular diseases and screening of breast, oral and cervical cancer were being done. There was established referral services for the patients requiring emergency treatment services and they were referred to district hospital, Belagavi.

Table 6: Manpower requirement in the CHC, Hirebagewadi as per NPCDCS.

Sl. No	Manpower/ Staff for NCD clinic at CHC	Required	Available
1	General Physician	1	0
2	GNM	2	1
3	Technician	1	1
4	Physiotherapist	1	0
5	Counselor	1	1
6	Data entry operator	1	0

The availability of manpower for NCD clinic for the posts of general physician, physiotherapist and data entry operator were vacant and there was only one GNM while the requirement was for two (50%) in the CHC, Hirebagewadi.

Table 7: Availability of necessary investigations in CHC, Hirebagewadi as per NPCDCS.

Sl. No	Laboratory investigations	Availability
1	Blood sugar (FBS, PPBS)	Yes
2	Total cholesterol	No
3	Lipid profile	No
4	Blood urea	No
5	X Ray	Yes
6	ECG	Yes
7	Ultrasound (USG)	No
8	Pap smear	No

The available investigations were estimation of blood sugar (FBS, PPBS), X-ray and ECG, while most of the required investigation like total cholesterol, lipid profile, blood urea, USG and pap smear were not available and there was no outsourcing of unavailable investigations.

Table 8: List of equipment required for CHC Hirebagewadi as per NPCDCS.

Sl. No	Equipment	Availability
01	ECG machine ordinary	Yes
02	Cardiac monitor	No
03	Defibrillator	No
04	Pulse Oximeter	No
05	Infusion pump	No
06	Stethoscope	Yes
07	BP apparatus stand model	Yes
08	BP apparatus table model	Yes
09	Weighing scale adult	Yes

The ECG machine and basic equipment like stethoscope, BP apparatus and weighing scale were available while equipment required to manage emergencies like cardiac monitor, defibrillator, pulse Oximeter and infusion pump were not available in the CHC, Hirebagewadi.

When the question was asked to the CHC staff nurse about suggestion for improving the programme, the answer given was, "*the quality of screening will not improve if there is a target based approach, as to reach the given target specific population are being missed*".

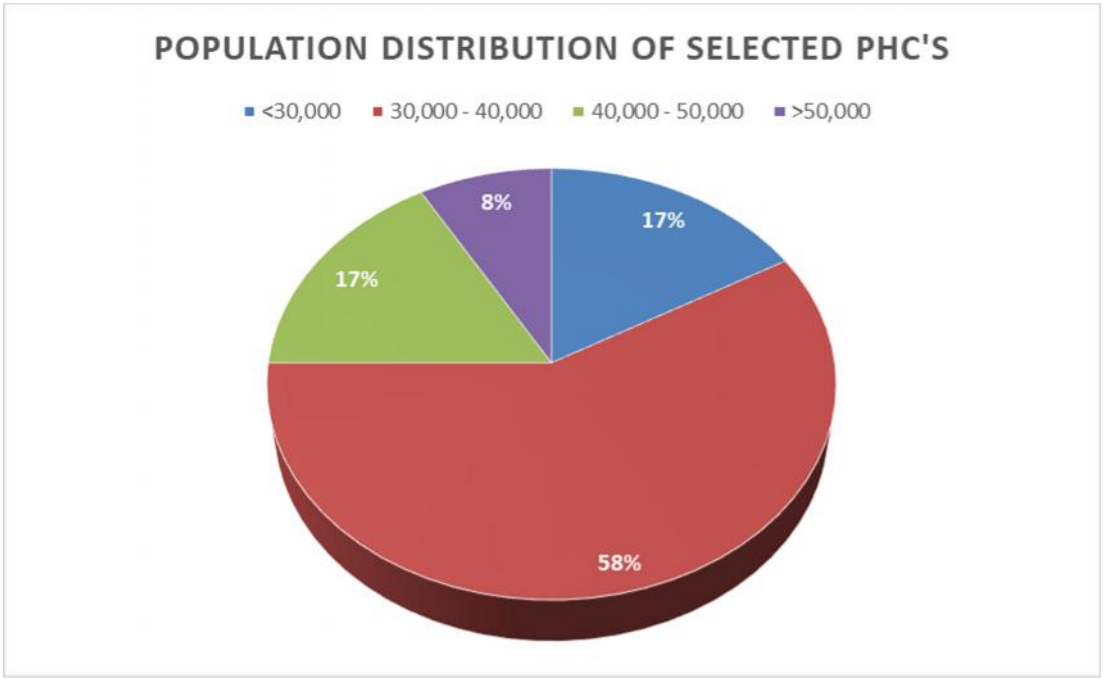
Section III: Primary Health Centres:

Table 9: Population distribution of the selected PHCs of Belagavi taluka. (n=12)

Sl. No	Population of PHC	No of PHCs	Percentage
1	< 30,000	2	16.67
2	30,000 to 40,000	7	58.33
3	40,000 to 50,000	2	16.67
4	>50,000	1	8.33
Total		**12**	**100**

The selected PHCs covered a total population of 4, 77,805 with mean population being 39,817 ± 12,226.89 (range: 29,442 – 73,864) having 70 sub-centres with mean number of sub-centre being 6 ± 1.1 (range: 5 – 9), with each sub-centre covering an average population of 6,825.

Graph 1: Population distribution of selected PHCs in Belagavi taluka.



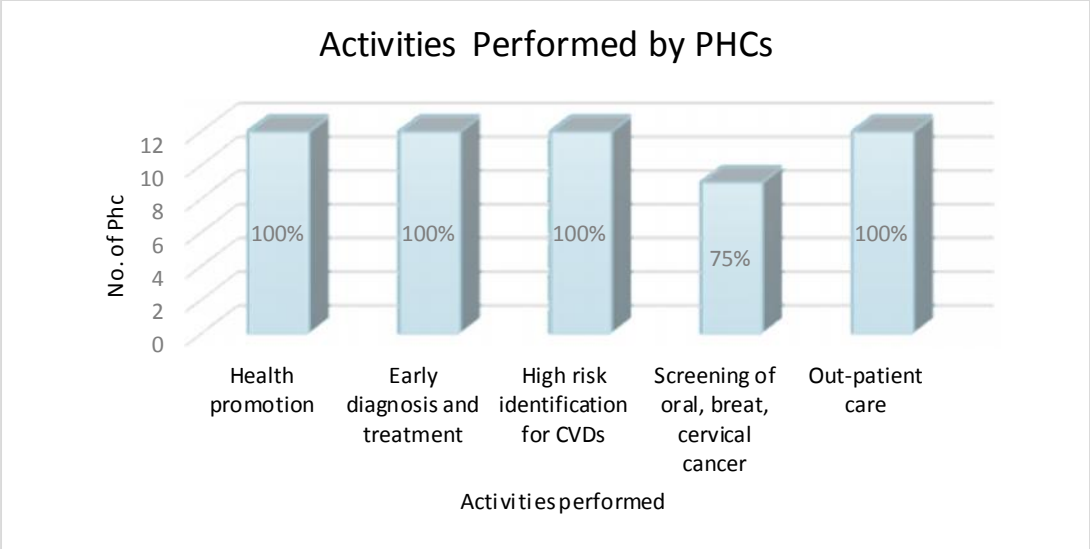
Out of the total 70 sub-centres under 12 PHCs, total number of working ANMs were 60 and the number of working male health workers were 41. There were only three 24 X 7 working PHCs and there was active implementation and opportunistic screening of individuals above 30 years of age being done in all 12 PHCs. Patients who were screened for diabetes and hypertension in the sub-centres were referred to their respective PHCs, except for in two PHCs, and the records related to patient screening with respect to NPCDCS were available in all 12 PHCs. The data was reported on a monthly basis in ten PHCs, while the rest two PHCs were reporting weekly and the data was reported to the Taluka Health Office by 11 PHCs while the remaining PHC was reporting it directly to the District Surveillance Office.

Table 10: Activities performed in PHCs of Belagavi taluka under NPCDCS. (n=12)

Sl. No	Activities performed	Number	Percentage
1	Health promotion	12	100
2	Early diagnosis and treatment	12	100
3	Identification of high risk cases for CVDs	12	100
4	Screening for oral, breast and cervical cancers	9	75
5	Out-patient care	12	100

Health promotion activities, early diagnosis and treatment of patients with diabetes and hypertension, identification of high risk individuals for cardiovascular diseases and out-patient care services were being provided in all 12 PHCs, while screening for oral, breast and cervical cancer was being done in nine PHCs (75%) in Belagavi taluka.

Graph 2: Activities performed in selected PHCs in Belagavi taluka under NPCDCS.



The complicated and emergency patients were being referred in all 12 PHCs and were referred to district hospital by 10 PHCs and the remaining two PHCs referred them to either district/civil hospital or KLE hospital, which is a tertiary care centre. All the 12 PHCs had the IEC material like banners/pamphlets with respect to NPCDCS.

Table 11: Availability of laboratory investigations in PHCs of Belagavi taluka. (n=12)

Sl. No	Investigations	Number	Percentage
1	Hemoglobin	12	100
2	Blood Sugar (FBS, PPBS)	11	91.67
3	Blood urea	2	16.67
4	Lipid profile	1	8.33

Basic investigation hemoglobin was available in all 12 PHCs, while blood sugar estimation was available in 11 PHCs, whereas blood urea measurement was being done in only two PHCs and lipid profile in only one PHC among the selected 12 PHCs of Belagavi taluka.

Graph 3: Availability of laboratory investigations in selected PHCs of Belagavi taluka. (n=12)

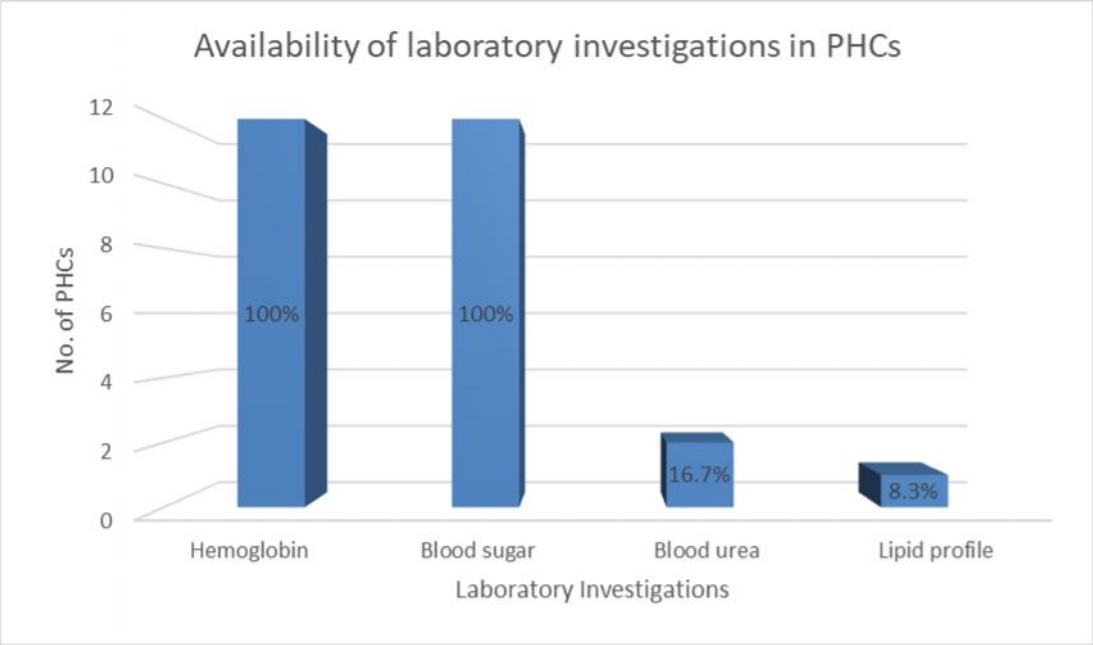
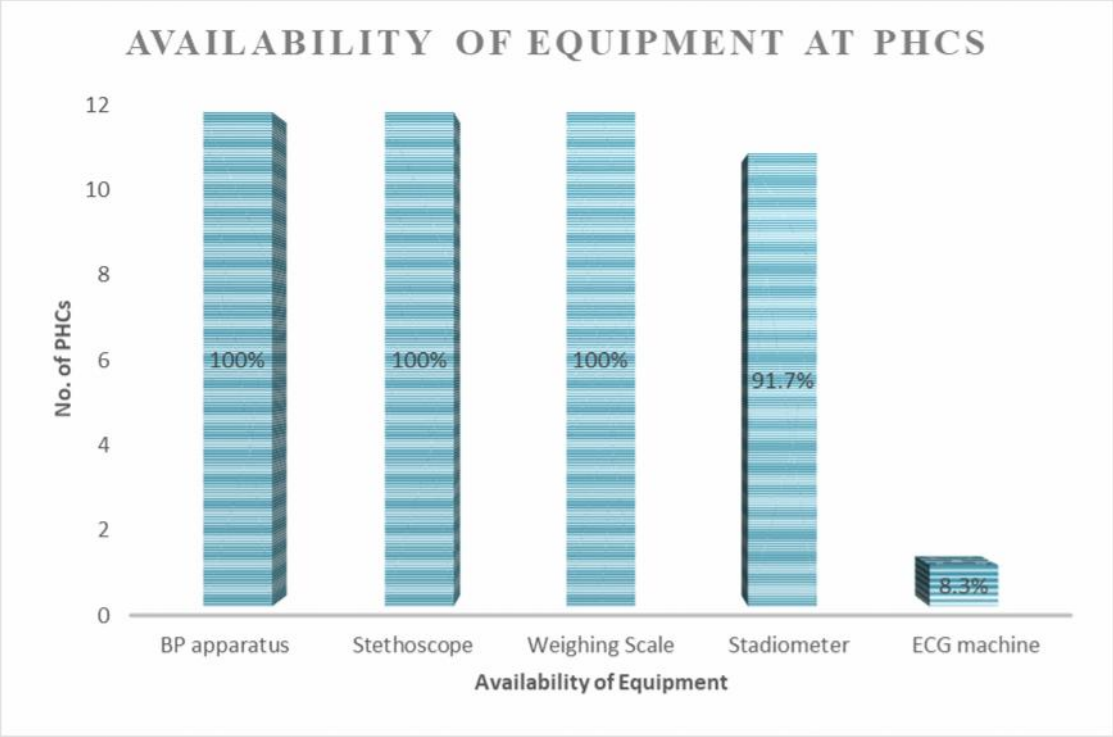


Table 12: Availability of equipment at selected PHCs in Belagavi taluka. (n=12)

Sl. No	Equipment	Number	Percentage
1	BP apparatus table model	12	100
2	Stethoscope	12	100
3	Weighing scale (adult)	12	100
4	Stadiometer	11	91.67
5	ECG machine (ordinary)	1	8.33

BP apparatus, stethoscope and adult weighing scales were available in all 12 PHCs, while stadiometer was available at 11 PHCs and ECG machine was available in only one PHC among the 12 selected PHCs in Belagavi taluka.

Graph 4: Availability of equipment at selected PHCs in Belagavi taluka. (n=12)



When the question was asked to the staff in the selected 12 PHCs about suggestion for improving the programme, five of them said they had no suggestions and the rest of seven PHCs gave the following multiple suggestions:

"*Clarity regarding checking blood sugar of already screened positive diabetes patients and follow up care is required*", was the opinion by five of the respondents.

"*Each PHC should have two Medical Officers, one for curative purpose at the centre and the other for preventive and promotive purpose*", was the opinion by three of the respondents.

"*Sensitization of the community towards NCDs is essential and must be stressed*", was the opinion by two of the respondents.

"*Counsellors must be made available at the PHC level*", was the opinion by two of the respondents.

"*Target approach has decreased the quality of the screening programme*", was the opinion by two of the respondents.

"*HbA1c investigation to be made available at the PHC for confirmation and treatment of diabetes patients*", was the opinion by one of the respondents.

"*Strict supervision and monitoring is required and also integration with specialist care must be made*", was the opinion by one of the respondents.

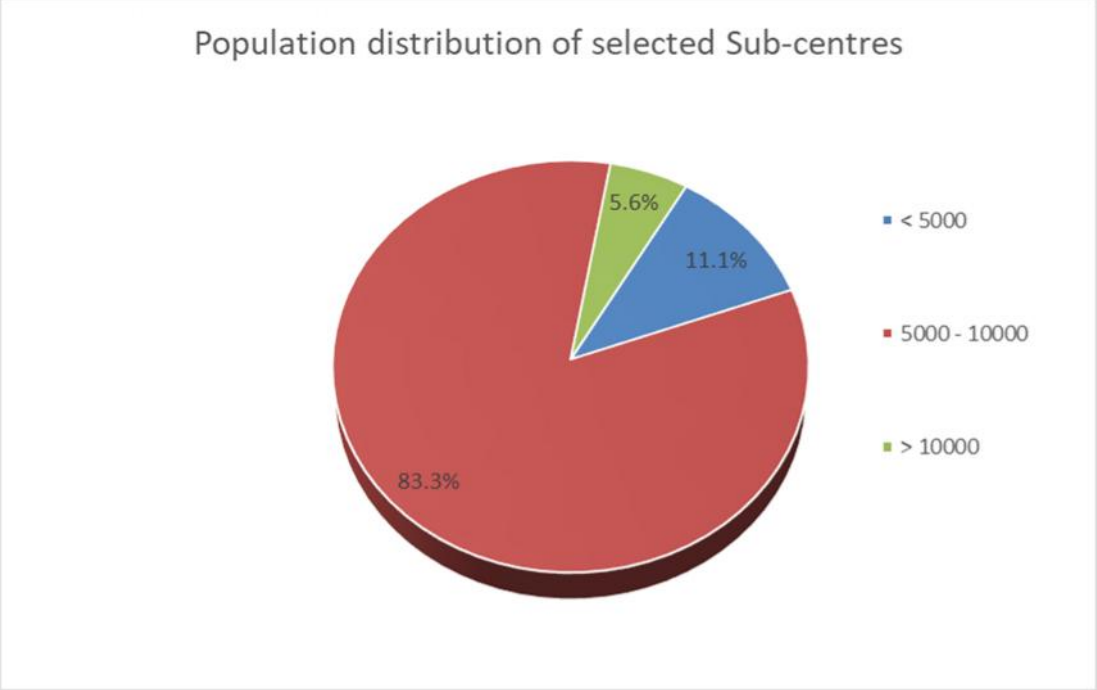
Section IV: Sub-centres:

Table 13: Population distribution of selected Sub-centres in Belagavi taluka. (n=36)

Sl. No	Population served by the Sub-centre	Number	Percentage
1	< 5,000	4	11.11
2	5,000 – 10,000	30	83.33
3	>10,000	2	5.56
Total		**36**	**100**

The selected Sub-centres in Belagavi taluka covered a population of 2, 48,753 with each SC covering a mean population of 6,909 ± 1,836.5 (range: 4,471 – 13,868). Out of the selected 36 sub-centres, 30 (83.33%) of them covered a population in the range of 5,000 to 10,000, four (11.11%) sub-centres covered population of less than 5,000 and two (5.56%) of the sub-centres covered a population of more than 10,000.

Graph 5: Population distribution of selected Sub-centres in Belagavi taluka. (n=36)



The implementation of the NPCDCS was 100% at all selected sub-centres and the health checkup camps for screening of individuals aged 30 years and above were conducted at all Sub-centres in Belagavi taluka.

Table 14: Implementation of the NPCDCS at selected Sub-centres. (n=36)

Sl. No	Implementation of NPCDCS (year)	Number	Percentage
1	Before 2013	2	5.56
2	2013 – 2014	4	11.11
3	2014 – 2015	15	41.67
4	2015 – 2016	4	11.11
5	2016 – 2017	3	8.33
6	2017 – 2018	0	0
7	Don't know	8	22.22
Total		**36**	**100**

Among the 36 respondents working in the selected sub-centres of Belagavi taluka, 15 (41.67%) of them told that the NPCDCS started during 2014-15, 8 (22.22%) of them didn't know when it was started, 4 (11.11%) of them said that the programme was started during 2013-14 and 2015-16, 3 (8.33%) of them said it started during 2016-17 and 2 (5.56%) of them responded that it started before the year 2013.

Graph 6: Implementation of NPCDCS at selected Sub-centres. (n=36)

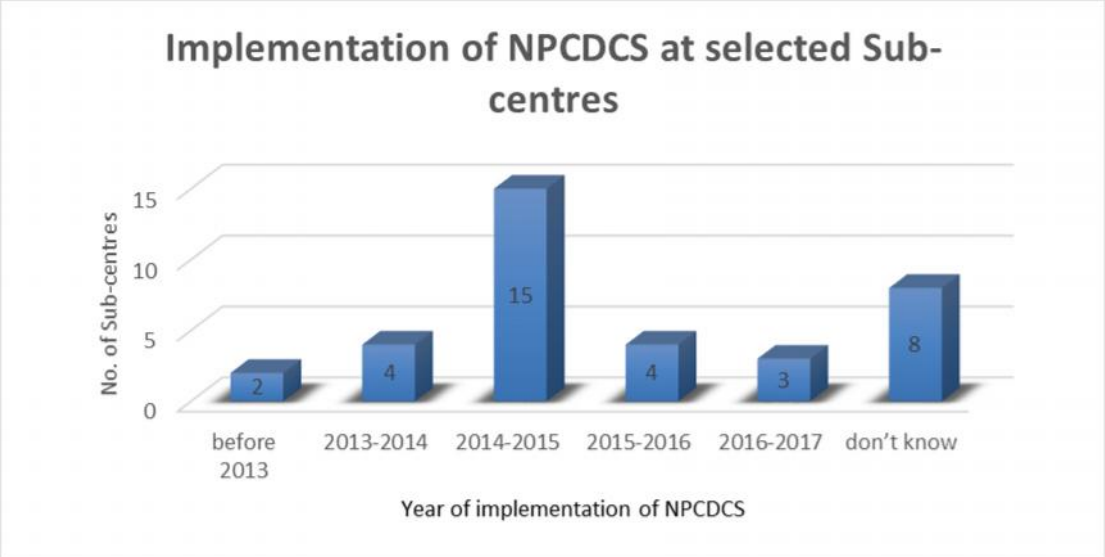


Table 15: Frequency of conduction of NCD camps at selected Sub-centres of Belagavi taluka. (n=36)

Sl. No	Frequency of conduction of NCD camps	Number	Percentage
1	Weekly	23	63.89
2	Monthly	11	30.56
3	Randomly	2	5.55
Total		**36**	**100**

Among 36 respondents, 23 (63.89%) of them conducted NCD camps on weekly basis, 11 (30.56%) of them on monthly basis and 2 (5.55%) of them conducted NCD camps randomly at selected sub-centres in Belagavi taluka.

Graph 7: Frequency of conduction of NCD camps at selected Sub-centres of Belagavi taluka. (n=36)

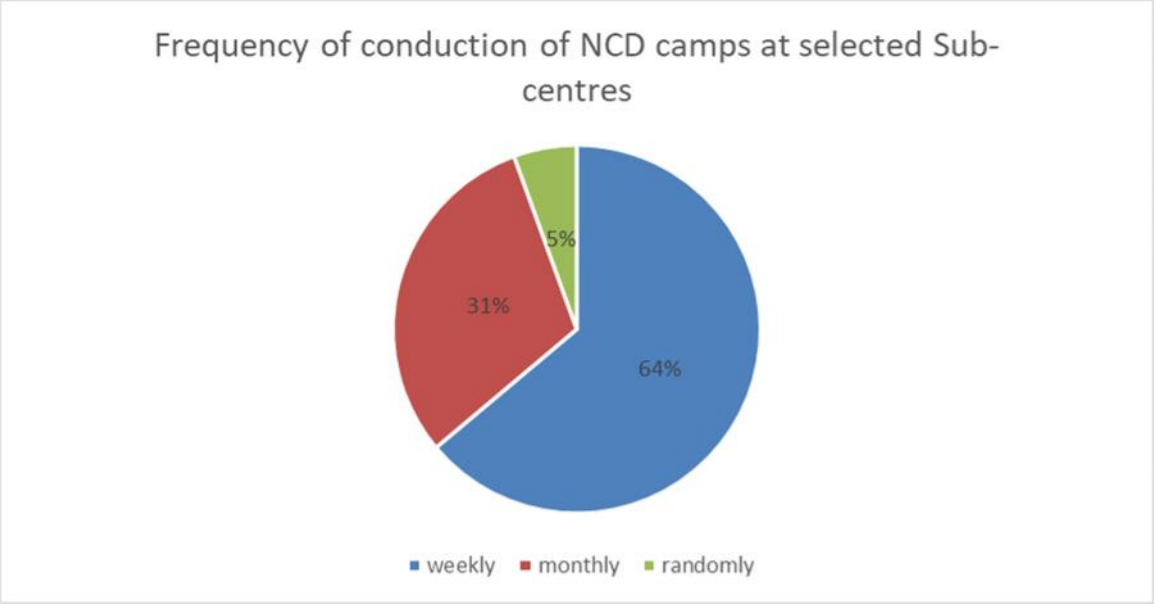


Table 16: Number of NCD camps conducted in the past one year in selected Sub-centres of Belagavi taluka. (n=36)

Sl. No	No. of NCD camps conducted/year	Frequency	Percentage
1	< 20	13	36.11
2	20 – 30	6	16.67
3	30 – 40	9	25
4	>40	8	22.22
Total		**36**	**100**

Though the NCD camps were being conducted in the sub-centres, the frequency varied and among 36 sub-centres, 13 (36.11%) conducted less than 20 camps per year, 9 (25%) of them conducted camps between a range of 30-40, 8 (22.22%) of them conducted camps more than 40 per year and 6 (16.67%) of them between the range of 20-30 per year.

The total number of NCD camps conducted across all selected sub-centres in Belagavi taluka was 1,076 in the past year with a mean of 30 $\pm$ 14 (range: 10-52) NCD camps conducted per sub-centre per year.

Graph 8: Number of NCD camps conducted in the past one year in selected Sub-centres of Belagavi taluka. (n=36)

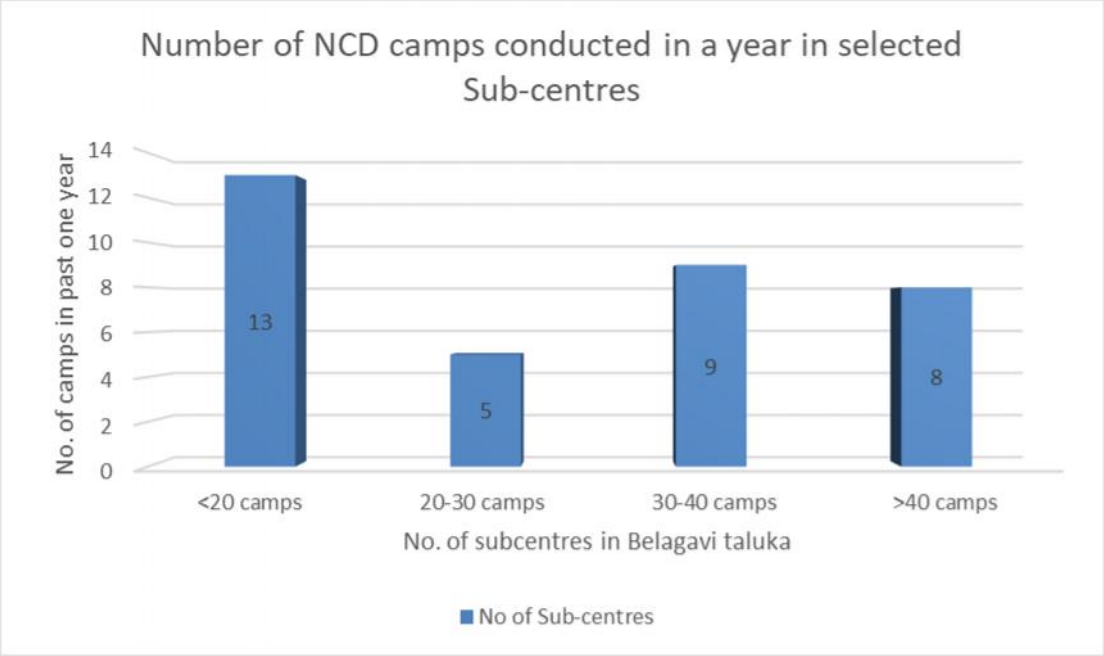


Table 17: Population covered by screening at NCD camps during the previous year in selected sub-centres of Belagavi taluka. (n=36)

Sl. No	Percentage of population screened in a year under NPCDCS	Number of SC	Percentage
1	< 10%	2	5.56
2	10-20%	10	27.78
3	20-30%	13	36.11
4	30-40%	4	11.11
5	>40%	7	19.44
Total		**36**	**100**

Out of 36 selected sub-centres, the total population above the age of 30 years screened across all sub-centres in the preceding year was found to be 64,096 of the total 2, 48,753 which was 25.77% of the total population screened, with a mean of 1,780 ± 749 population screened in the last year per sub-centre. Out of 36 sub-centres 13 (36.11%) of them screened about 20-30% of population, 10 (27.78%) of them screened 10-20% of the population, 7 (19.44%) of them screened more than 40% of the population, while 4 (11.11%) of them screened around 30-40% of the population and 2 (5.56%) of the sub-centres screened less than 10% of the population.

Graph 9: Population covered by screening at NCD camps during the previous year in selected sub-centres of Belagavi taluka. (n=36)

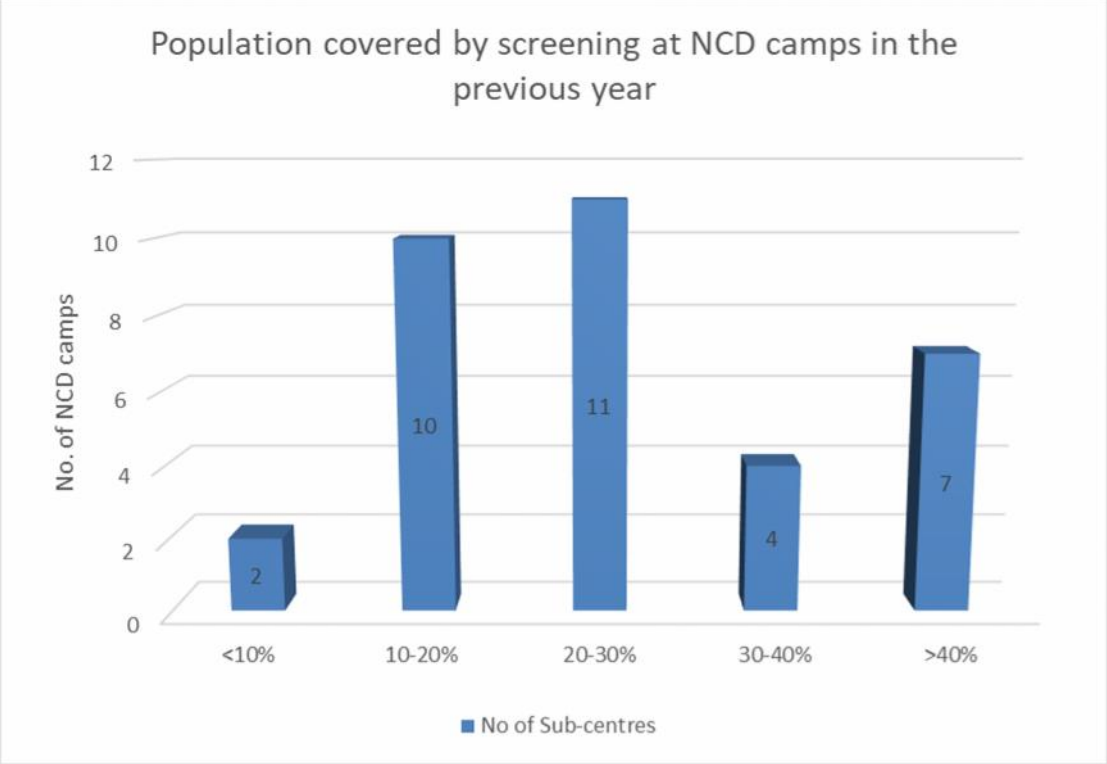


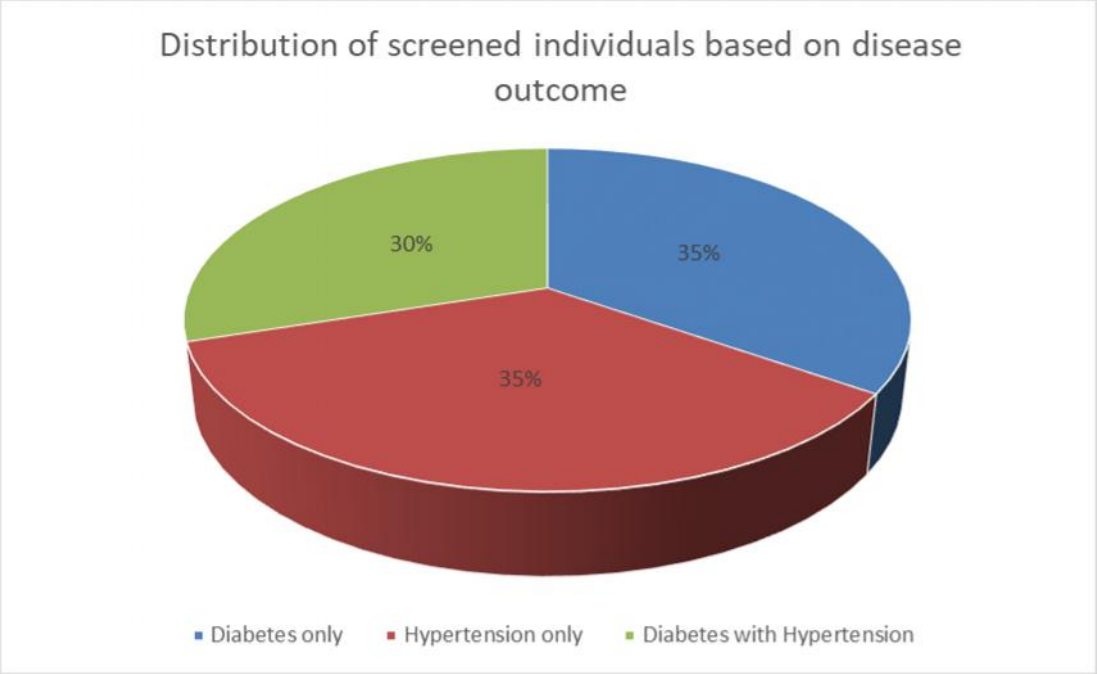
Table 18: Distribution of screened individuals based on disease outcome at NCD camps in selected Sub-centres of Belagavi taluka. (n=64,096).

Sl. No	Disease outcome	Number	Percentage
1	Diabetes only	1608	2.51
2	Hypertension only	1680	2.62
3	Diabetes with hypertension	1516	2.37

Out of the 64,096 individuals screened across all 36 SUB-CENTRES, 1,608 of them were screened positive for diabetes only with prevalence of diabetes only being 2.51%. 1,680 individuals of 64,096 were screened positive for hypertension only with prevalence of hypertension only being 2.62%. 1,516 individuals were screened positive for both diabetes and hypertension with prevalence of diabetes and hypertension being 2.37%.

Out of 64,096 individuals screened at NCD camps across all 36 selected Sub-centres in Belagavi taluka in the preceding year, a total of 3,124 individuals were screened positive for diabetes, with prevalence of diabetes being 4.87% and a total of 3,196 individuals were screened positive for hypertension, with prevalence of hypertension being 4.99%.

Graph 10: Distribution of screened individuals based on disease outcome at NCD camps in selected Sub-centres of Belagavi taluka. (n=64,096 in 36 sub-centres).



Out of the total 64,096 individuals screened, 4,804 were screened positive for either diabetes, hypertension or both and among those 4,804 screened positive individuals 2,564 (53.38%) were referred to their respective PHCs or higher centres for confirmation and further management of the disease.

Follow up of all the individuals screened positive for diabetes and hypertension was being done at all 36 sub-centres, as well as the data recording and reporting was 100%, while the reporting was done monthly in all 34 (94.44%) sub-centres, except 2 (5.56%) who were doing it weekly.

Table 19: Pattern of NCD camps data reporting of selected subcentres of Belagavi taluka. (n=36)

Sl. No	Data reporting	Number	Percentage
1	Medical Officer of PHC	17	47.22
2	LHV	16	44.44
3	Taluka Health Officer	3	8.34

The reporting of the compiled data of the conducted NCD screening camps was done to the concerned PHC Medical officer in 17 (47.22%) of the sub-centres, to Lady Health Visitor (LHV) in 16 (44.44%) of Sub-centres and to the Taluka Health Officer in 3 (8.34%) of the Sub-centres.

Graph 11: Pattern of NCD camp data reporting of selected Sub-centres of Belagavi taluka. (n=36).

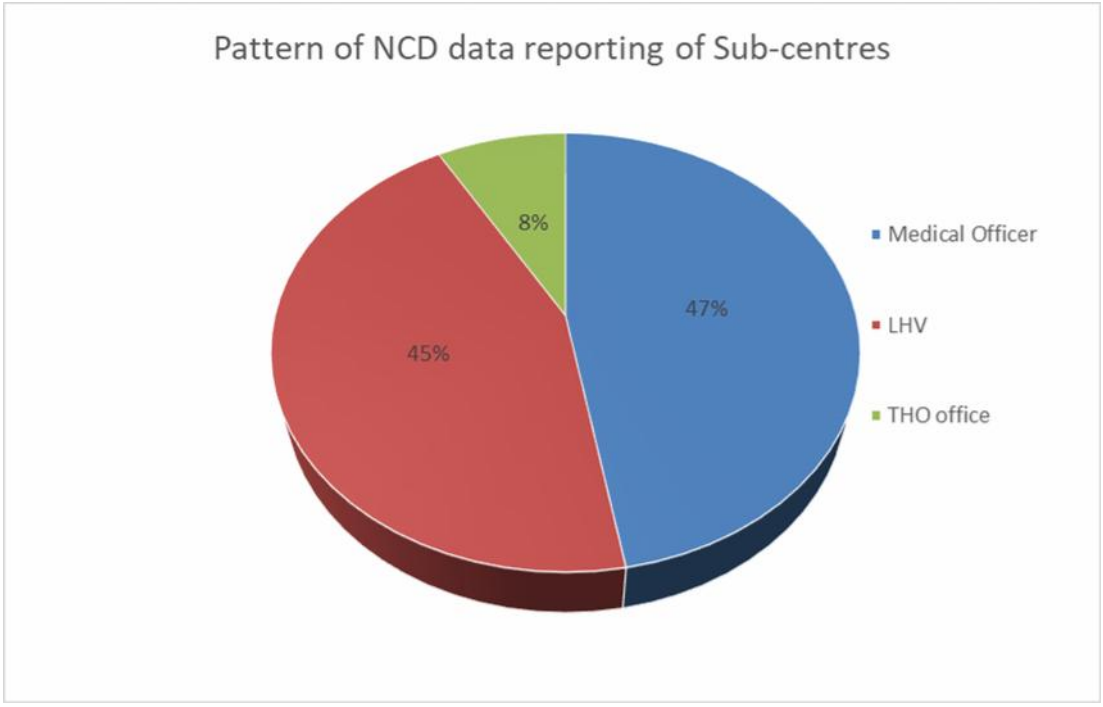


Table 20: Status of NPCDCS training of the health care staff of selected Sub-centres of Belagavi taluka. (n=36)

Sl. No	NPCDCS training status of health care staff	Number	Percentage
1	Received	25	69.44
2	Not received	11	30.56
Total		**36**	**100**

Among the 36 sub-centre ANMs interviewed, 25 (69.44%) of them had received training for NPCDCS while 11 (30.56%) of them had not received training for the same.

Graph 12: Status of NPCDCS training of the health care staff of selected Sub-centres of Belagavi taluka. (n=36)

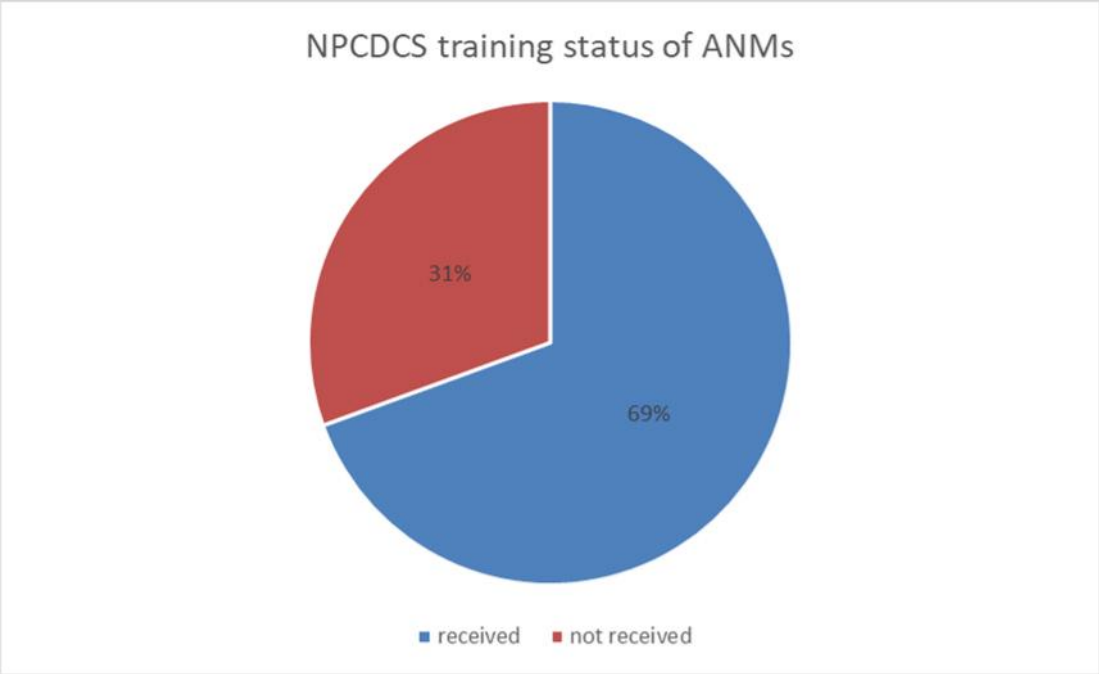


Table 21: Reasons given by Sub-Centre ANMs for not being trained for NPCDCS. (n=11)

Sl. No	Reasons for not receiving training	Number	Percentage
1	Leave	4	36.37
2	New joining	3	27.27
3	Doesn't remember	2	18.18
4	Maternity leave	2	18.18

Out of total 36 ANMs, 11 respondents (ANMs) had not received NPCDCS training, reason given by 4 (36.37%) of them were that they were on leave, 3 (27.27%) of them had joined newly, 2 (18.18%) of them were on maternity leave and the remaining 2 (18.18%) of them didn't remember the reason for not receiving the training.

Graph 13: Reasons given by Sub-Centre ANMs for not being trained for NPCDCS (n=11)

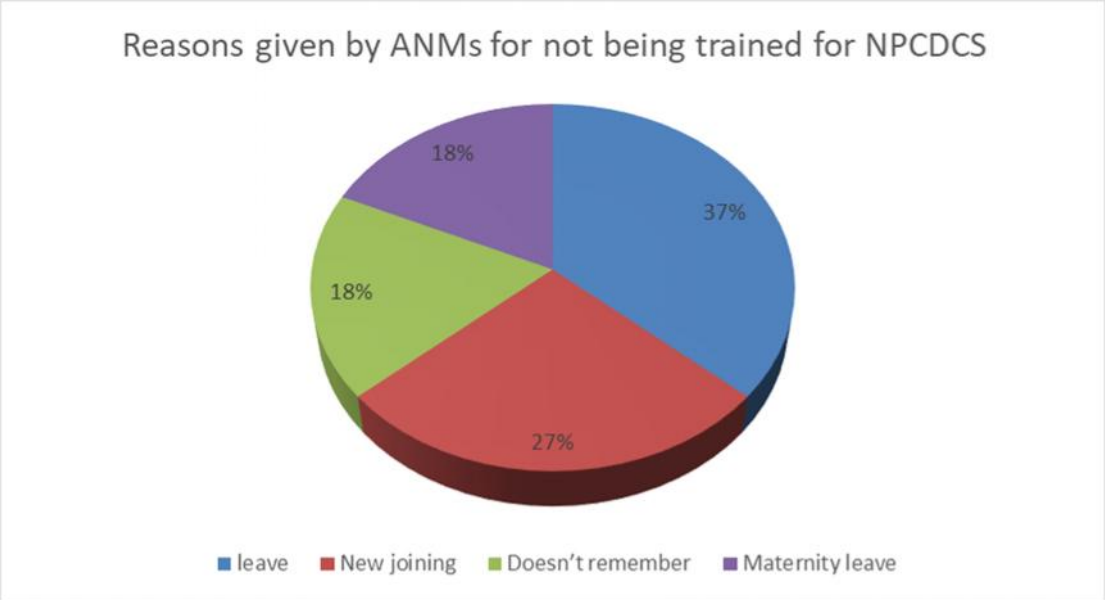


Table 22: Availability of necessary equipment for conduction of NCD camps at selected sub-centres of Belagavi taluka. (n=36)

Sl. No	Availability of equipment	Number of SC	Percentage
1	NPCDCS register	36	100
2	IEC materials	30	83.33
3	Referral cards	7	19.44
4	BP apparatus	36	100
5	Glucometer	36	100
6	Glucometer strips	36	100
7	Stethoscope	34	94.44
8	Weighing scale (adult)	34	94.44
9	Stadiometer	28	77.78

All 36 (100%) sub-centres in Belagavi taluka had NPCDCS register, BP apparatus, glucometer and glucometer strips, whereas availability of stethoscope and weighing scale was seen in 34 (94.44%) sub-centres, IEC materials were available in 30 (83.33%) sub-centres, stadiometer was available in 28 (77.78%) sub-centres and only 7 (19.44%) of sub-centres had referral cards specific for NPCDCS.

Graph 14: Availability of necessary equipment for conduction of NCD camps at selected sub-centres of Belagavi taluka. (n=36)

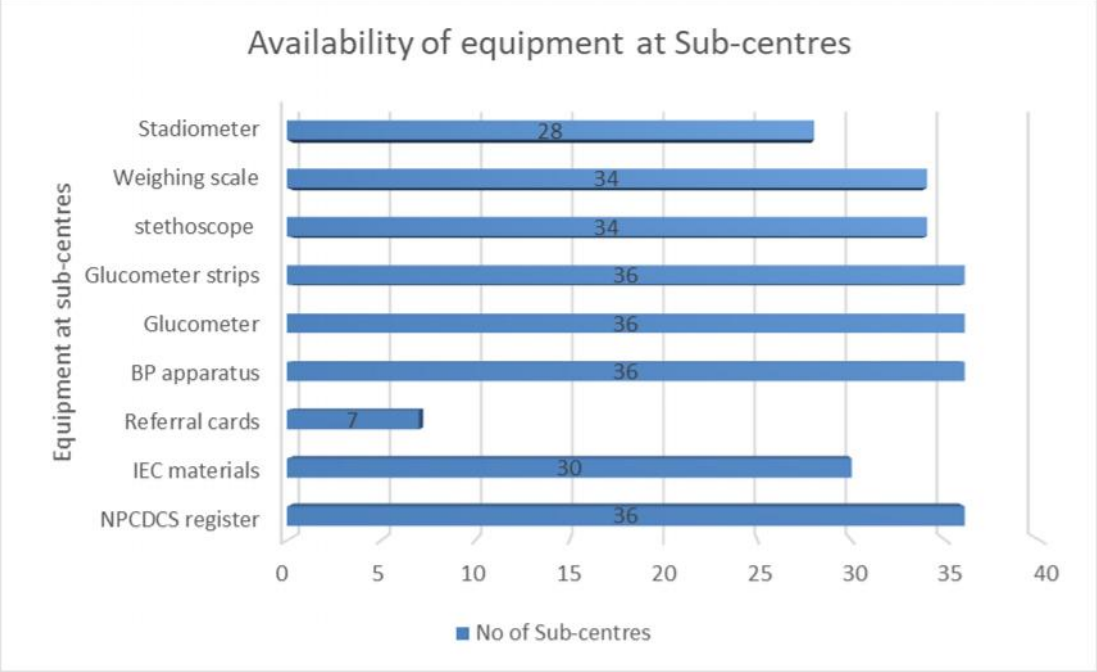


Table 23: Parameters asked/looked/checked during the NCD camps held at selected Sub-centres in Belagavi taluka. (n=36)

Sl. No	Parameters	Number	Percentage
1	Height	36	100
2	Weight	36	100
3	Blood Pressure	36	100
4	Blood sugar	36	100
5	History of alcohol	34	94.44
6	History of smoking/tobacco	36	100
7	Precancerous lesions	25	69.44

The parameters of the individuals like height, weight, blood pressure and blood sugar were checked in all the 36 (100%) sub-centres. History of tobacco consumption/smoking was asked in 36 (100%) sub-centres, history of alcohol consumption in 34 (94.44%) sub-centres and precancerous lesions were checked in 25 (69.44%) of the sub-centres of Belagavi taluka.

Graph 15: Parameters asked/looked/checked during the NCD camps held at selected Sub-centres in Belagavi taluka. (n=36)

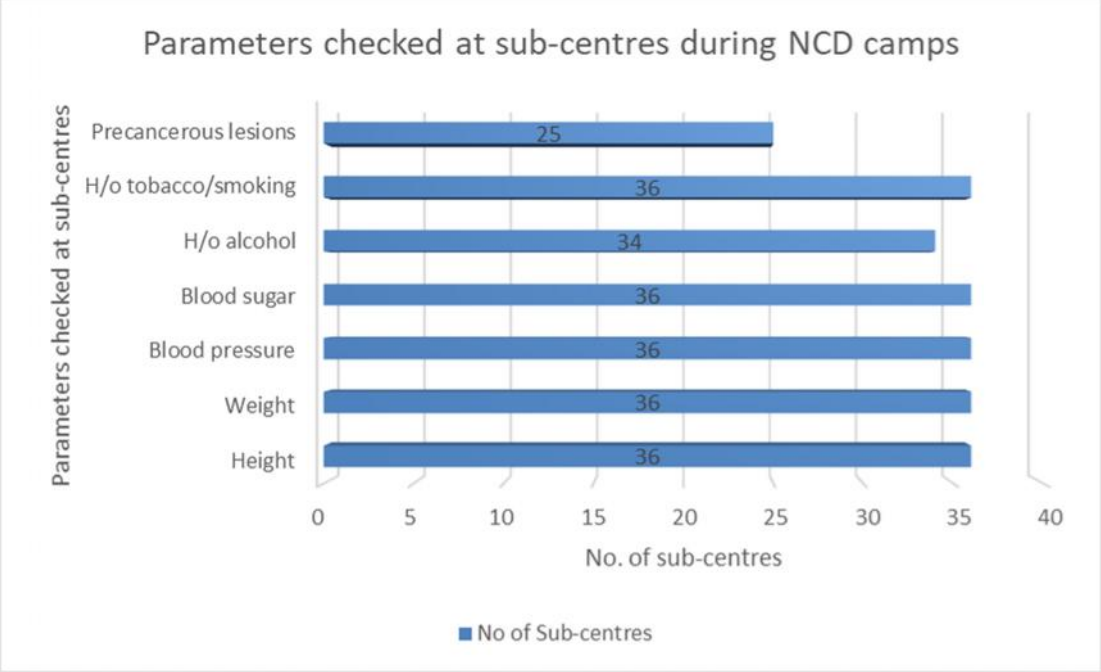
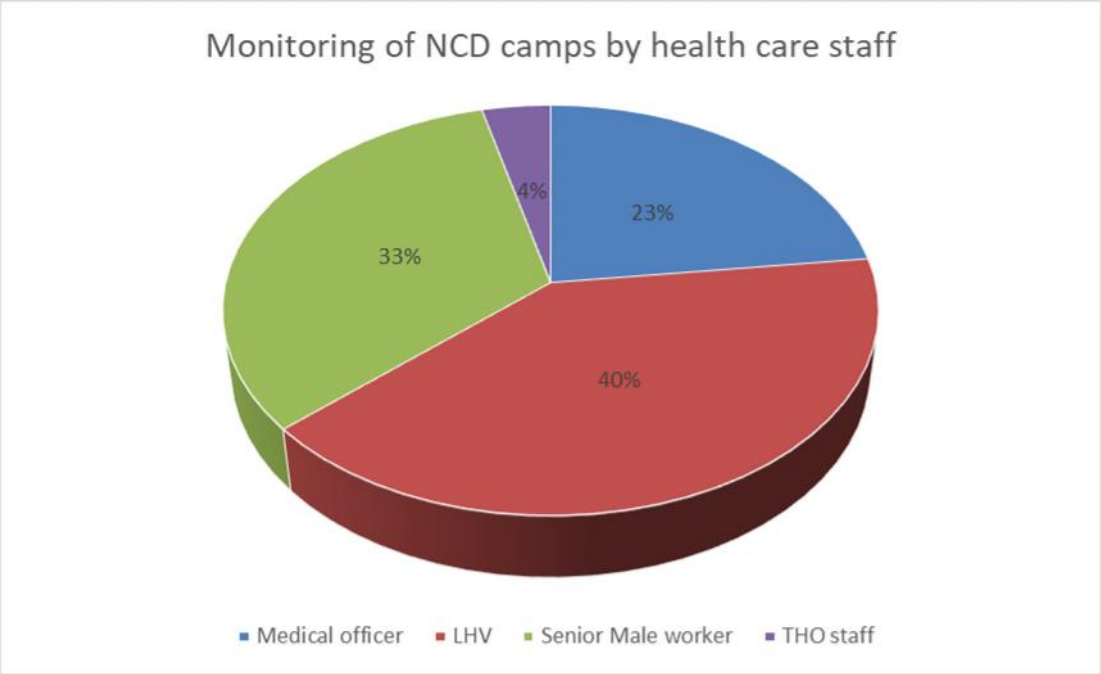


Table 24: Monitoring of selected SC camps by health care staff in Belagavi taluka. (n=36)

Sl. No	Monitoring by staff	Number	Percentage
1	Medical Officer	12	33.33
2	Lady Health Visitor (LHV)	21	58.33
3	Senior Male health worker	17	47.22
4	Taluka Health Office staff	2	5.56

The NCD camps at sub-centres were being monitored by senior health care staff, of which 58.33% of the times it was by LHV, followed by senior male health worker (47.22%), PHC Medical Officer (33.33%) and by Taluka Health Office staff (5.56%).

Graph 16: Monitoring of selected sub-centre NCD camps by health care staff in Belagavi taluka. (n=36)



When the question was asked to the interviewed staff (ANM) in the selected Sub-centres about suggestion for improving the programme, eight of them said they had no suggestions and the rest of 28 staff/ANM gave the following multiple suggestions:

"*Recruitment of human resource is necessary for effective functioning*", was the response given by 15 of the respondents.

"*Burden of many programmes has decreased the quality of services being provided, an integrated approach is necessary*", was the opinion of 11 of the respondents.

"*Medicines for treatment of NCDs must be made available at the Sub-centres to enhance follow up care and adherence to medication*", was the opinion of eight of the respondents.

"*Laboratory technician and doctor must be present during the NCD camps to make it more successful*", was the opinion of five of the respondents.

"*Most of the target population will not be available during the time of NCD screening camps due to their work, which needs to be addressed*", was the response of five of the respondents.

"*Adequate supply of IEC materials must be ensured to educate the public and for health promotion*", was the opinion by five of the respondents.

"*Sensitization of the public towards NCDs is required and essential*", was the opinion by four of the respondents.

"*Periodic training is necessary for the health care staff to provide better health care to the community*", was the opinion given by three of the respondents.

Section V: Knowledge, Awareness and Utilization of NPCDCS services by beneficiaries at selected sub-centres in Belagavi taluka

Totally 360 beneficiaries were interviewed across selected 36 Sub-centres in Belagavi taluka.

A] Sociodemographic details:

Table 25: Age wise distribution of the study participants (n=360)

Sl. No	Age of the study participants (in years)	Number	Percentage
1	30-40 years	162	45
2	40-50 years	84	23.33
3	50-60 years	36	10
4	More than 60 years	78	21.67
Total		**360**	**100**

Out of the selected 360 beneficiaries, the mean age of the study participants was 46 $\pm$ 12, (range 30-89 years), 162 (45%) of them were in the age group of 30-40 years, 84 (23.33%) of them were in the age group of 40-50 years, 78 (21.67%) of them were more than 60 year old and 36 (10%) of them were in the age group of 50-60 years.

Graph 17: Age wise distribution of the study participants (n=360)

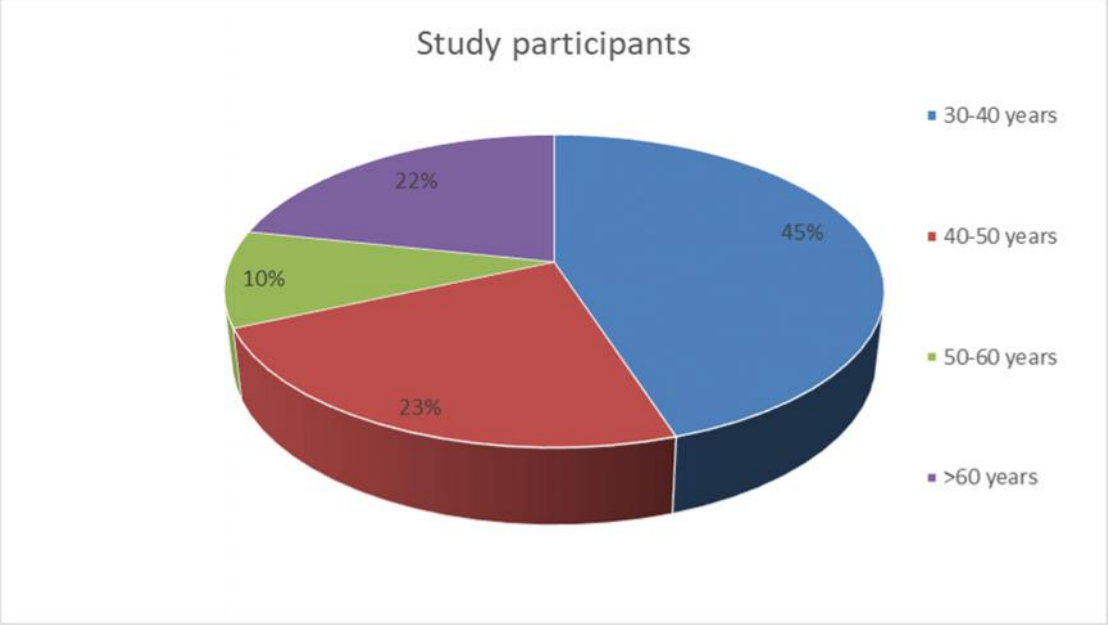


Table 26: Gender wise distribution of the study participants. (n=360)

Sl. No	Gender	Number	Percentage
1	Male	150	41.67%
2	Female	210	58.33%
Total		**360**	**100**

Out of 360 study participants, 210 (58.33%) of them were females and 150 (41.67%) of them were males.

Graph 18: Gender wise distribution of study participants (n=360)

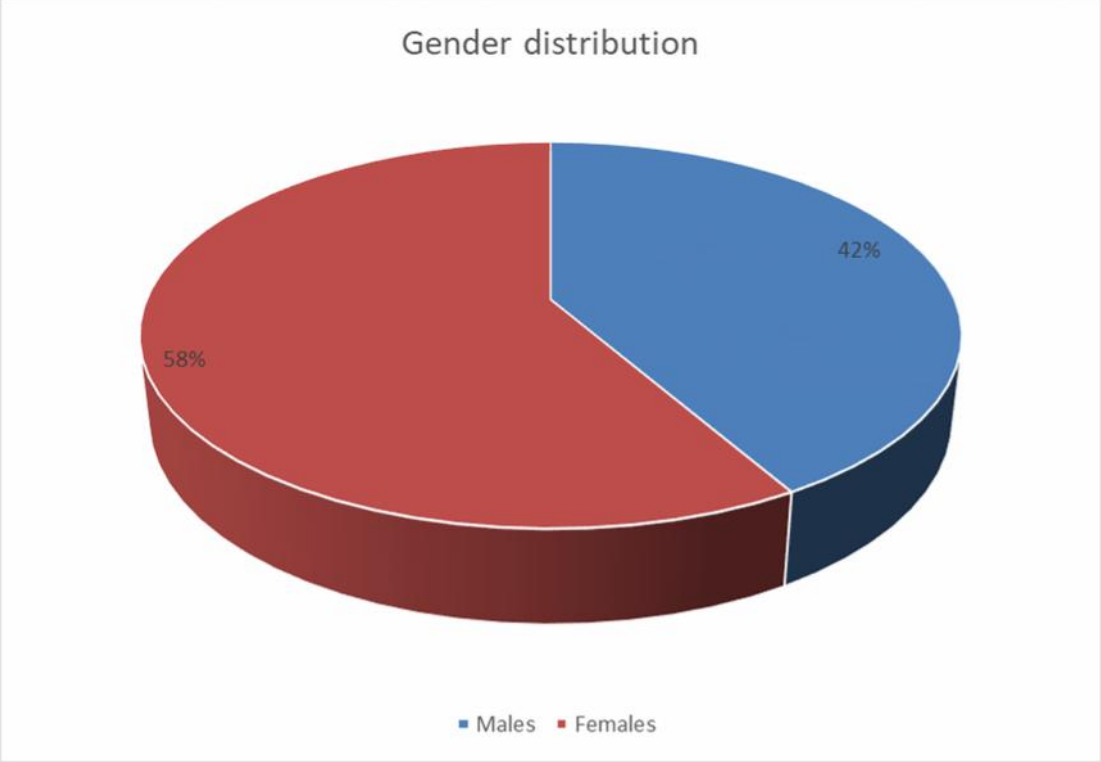


Table 27: Marital status of the study participants (n=360)

Sl. No	Marital status	Number	Percentage
1	Single	11	3.06
2	Married	323	89.72
3	Divorced	5	1.39
4	Widow/Widower	21	5.83
Total		**360**	**100**

Out of the 360 study participants, 323 (89.72%) of them were married, 21 (5.83%) of them were widow/widower, 11 (3.06%) of them were single and 5 (1.39%) of them were divorced.

Graph 19: Marital status of the study participants (n=360)

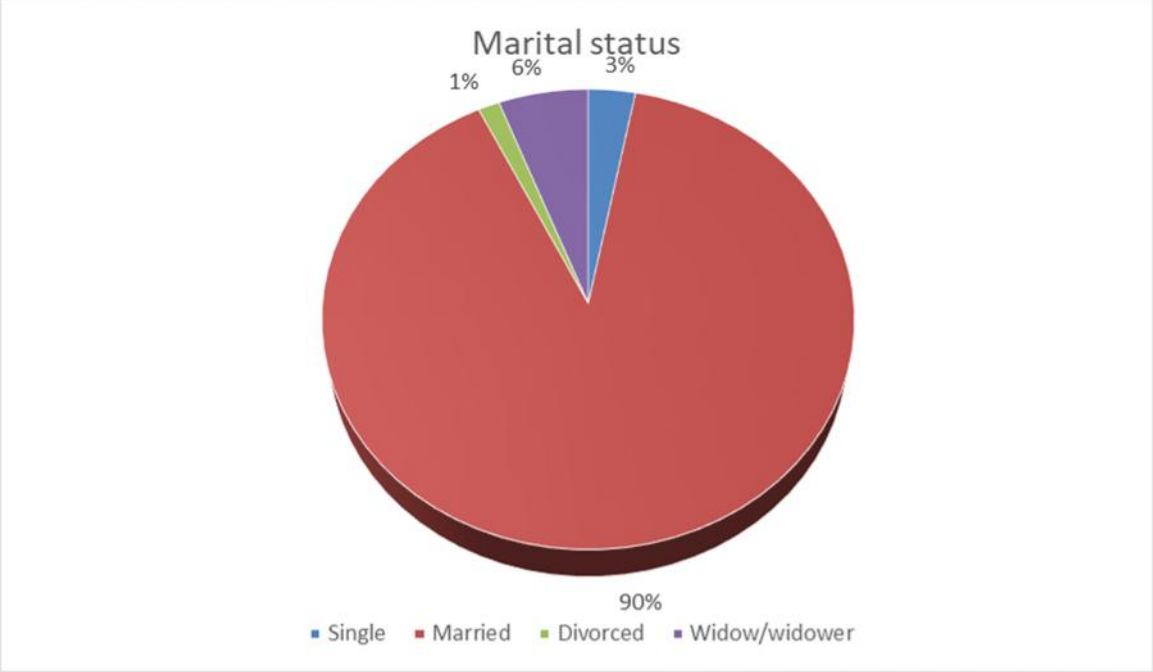


Table 28: Distribution of study participants based on their religion. (n=360)

Sl. No	Religion	Number	Percentage
1	Hindu	295	81.94
2	Muslim	45	12.50
3	Christian	10	2.78
4	Others	10	2.78
Total		**360**	**100**

Out of the 360 study participants, 295 (81.94%) of them were Hindus, 45 (12.50%) of them were Muslims, 10 (2.78%) of them were Christians and remaining 10 (2.78%) of them belonged to other religion.

Graph 20: Distribution of study participants based on their religion. (n=360)

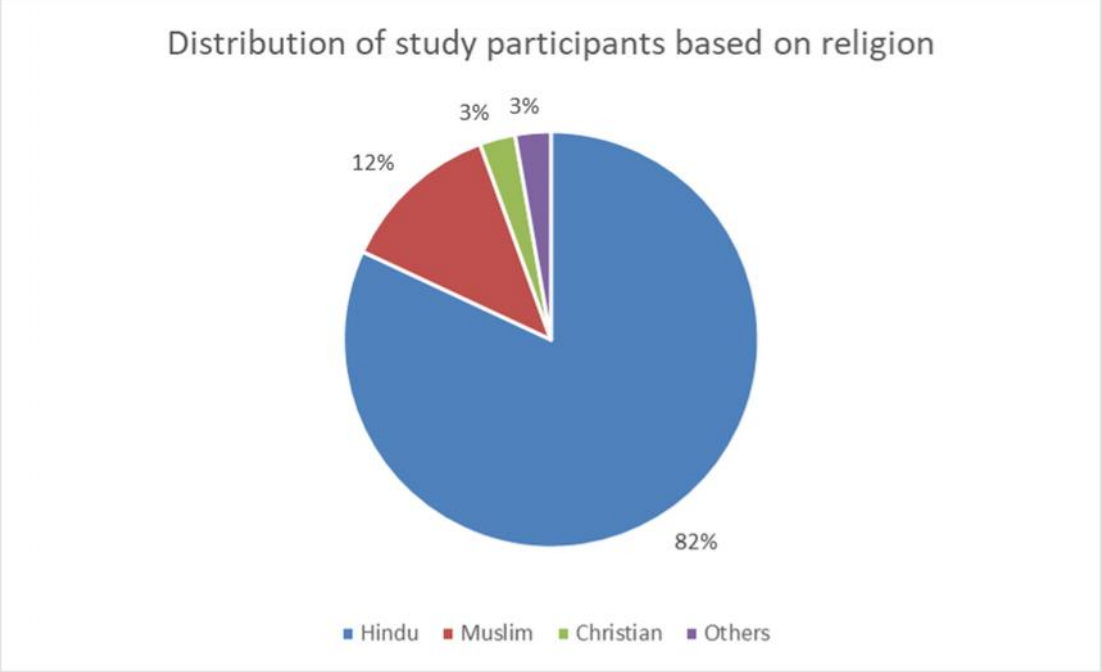


Table 29: Distribution of the study participants based on type of the family. (n=360)

Sl. No	Type of family	Number	Percentage
1	Nuclear	165	45.83
2	Joint	141	39.17
3	Broken	54	15
Total		**360**	**100**

Out of the 360 study participants, 165 (45.83%) belonged to Nuclear families, 141 (39.17%) of them belonged to Joint family and the remaining 54 (15%) of them belonged to broken family.

Graph 21: Distribution of the study participants based on type of the family. (n=360)

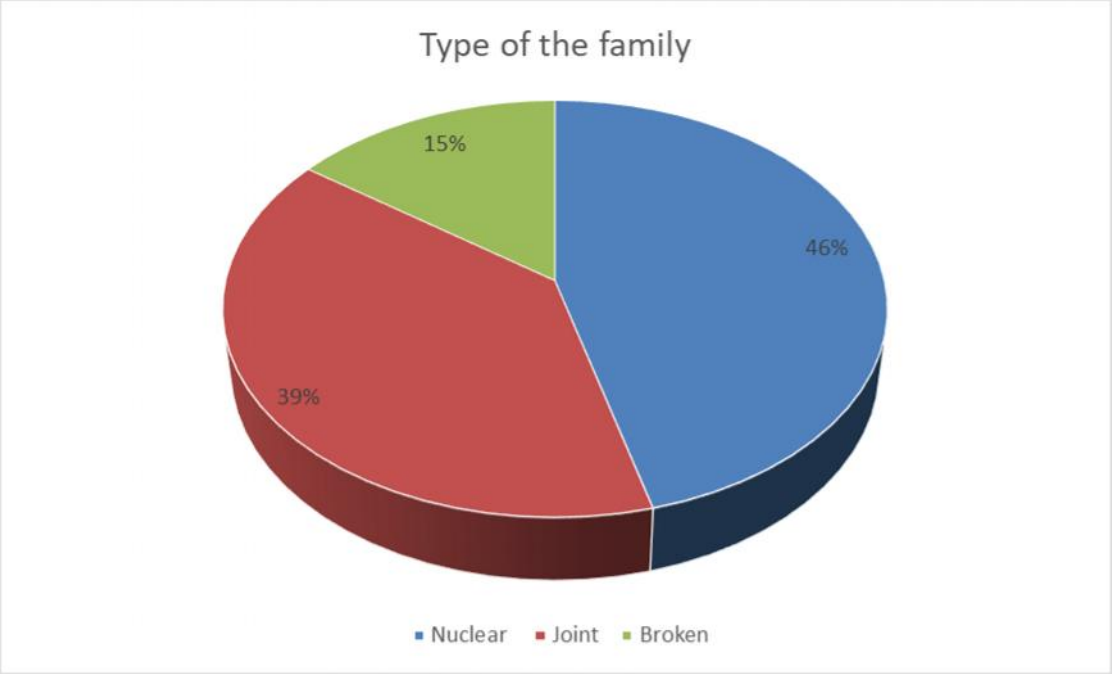


Table 30: Distribution of study participants based on educational qualification (n=360)

Sl. No	Educational qualification	Number	Percentage
1	Illiterate	95	26.39
2	Primary (1-5 years of schooling)	147	40.83
3	Secondary (6-10 years of schooling)	97	26.94
4	PUC (11^{th} & 12^{th})/ITI/Diploma	11	3.06
5	Graduation (Degree/PG)	10	2.78
Total		**360**	**100**

Out of 360 study participants, 147 (40.83%) of them had received primary education, 97 (26.94%) of them had received secondary education, 95 (26.39%) of them were illiterate, 11 (3.06%) of them had completed education up to PUC, and 10 (2.78%) of them had finished education up to graduation course.

Graph 22: Distribution of study participants based on educational qualification (n=360)

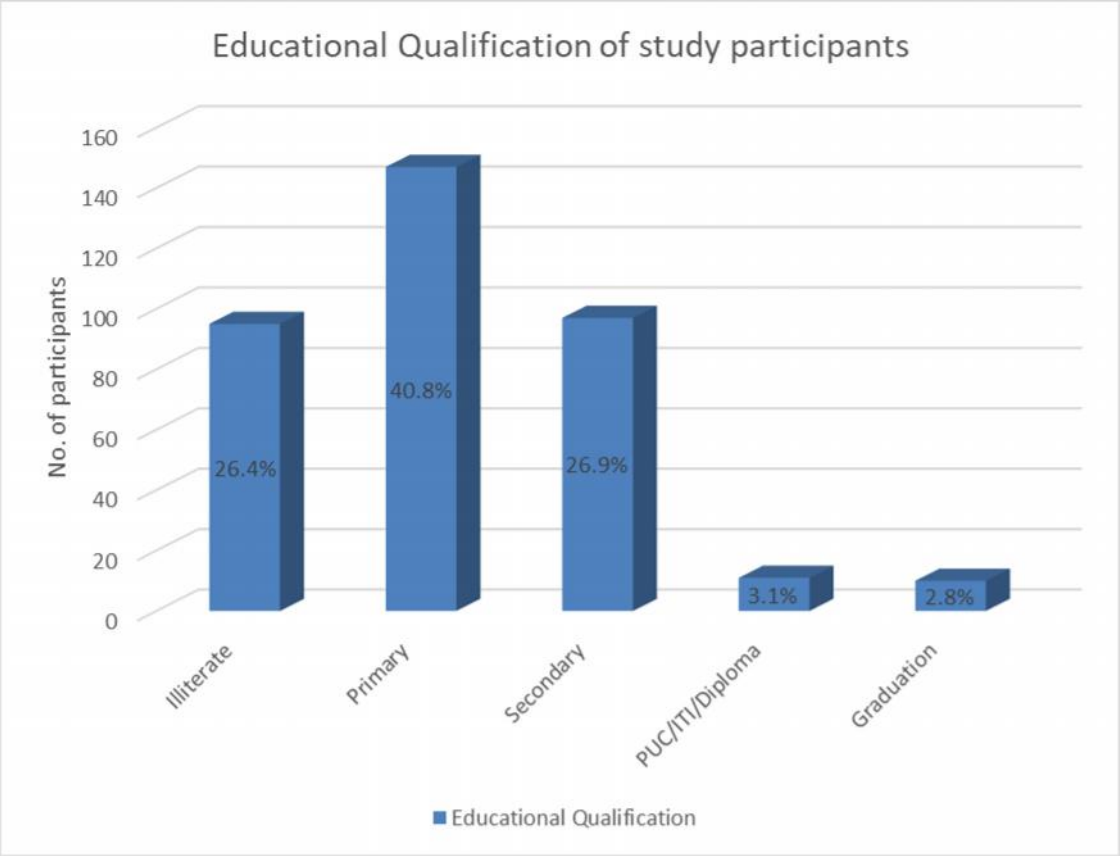


Table 31: Distribution of study participants based on their occupation. (n=360)

Sl. No	Occupation	Number	Percentage
1	Farmer	69	19.17
2	Labourer/daily wage	86	23.89
3	Self-employed	58	16.11
4	Government employee	5	1.39
5	Private employee	17	4.72
6	Retired / pensioner	11	3.05
7	Unemployed	22	6.11
8	Home maker	92	25.56
Total		**360**	**100**

Out of 360 study participants in Belagavi taluka, 92 (25.56%) of them were homemakers, 86 (23.89%) of them were labourers or working on daily wage basis, 69 (19.17%) of them were farmers by occupation, 58 (16.11%) were self-employed, 22 (6.11%) of them were unemployed, 17 (4.72%) of them were employed in private sector, 11 (3.05%) of them were retired and the remaining 5 (1.39%) of them were employed in government sector.

Graph 23: Distribution of study participants based on their occupation. (n=360)

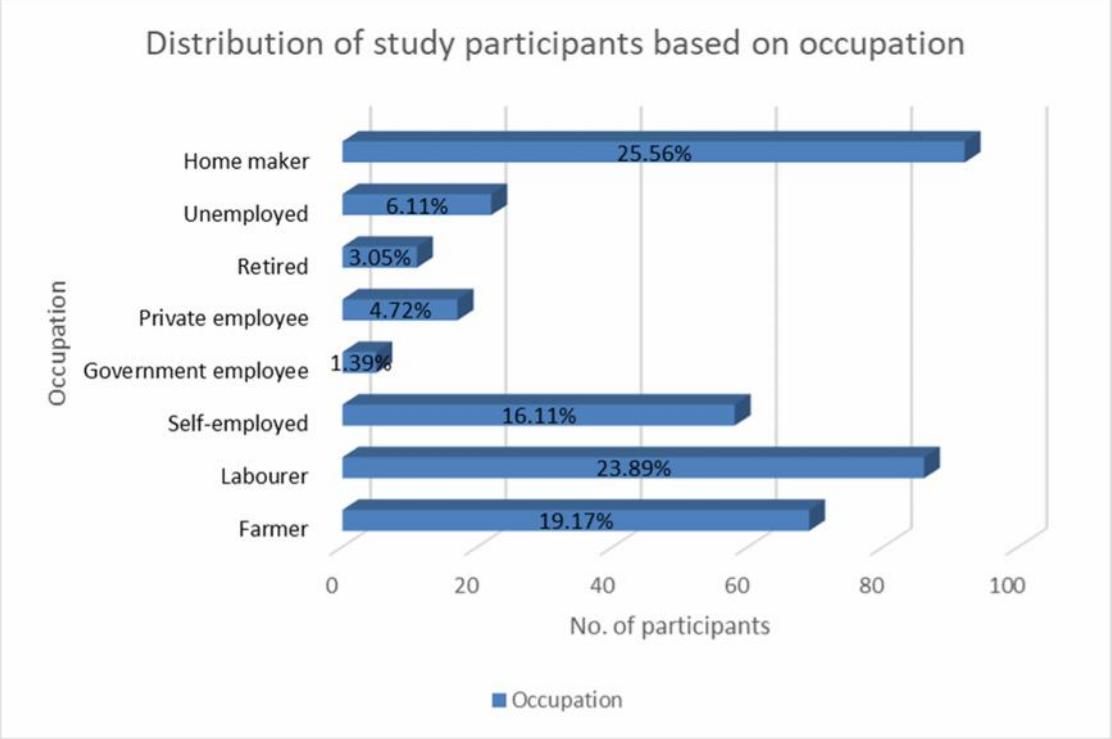


Table 32: Distribution of the study participants based on possession of ration card (n=360)

Sl. No	Possession of ration card	Number	Percentage
1	Below Poverty Line (BPL) card	204	56.67
2	Above Poverty Line (APL) card	60	16.67
3	No Ration card	96	26.66
Total		**360**	**100**

Out of the 360 study participants in Belagavi taluka, 204 (56.67%) of them had BPL ration cards with them, 96 (26.66%) of them did not have any ration card with them and remaining 60 (16.67%) of them had APL ration card with them.

Graph 24: Distribution of the study participants based on availability of ration card (n=360)

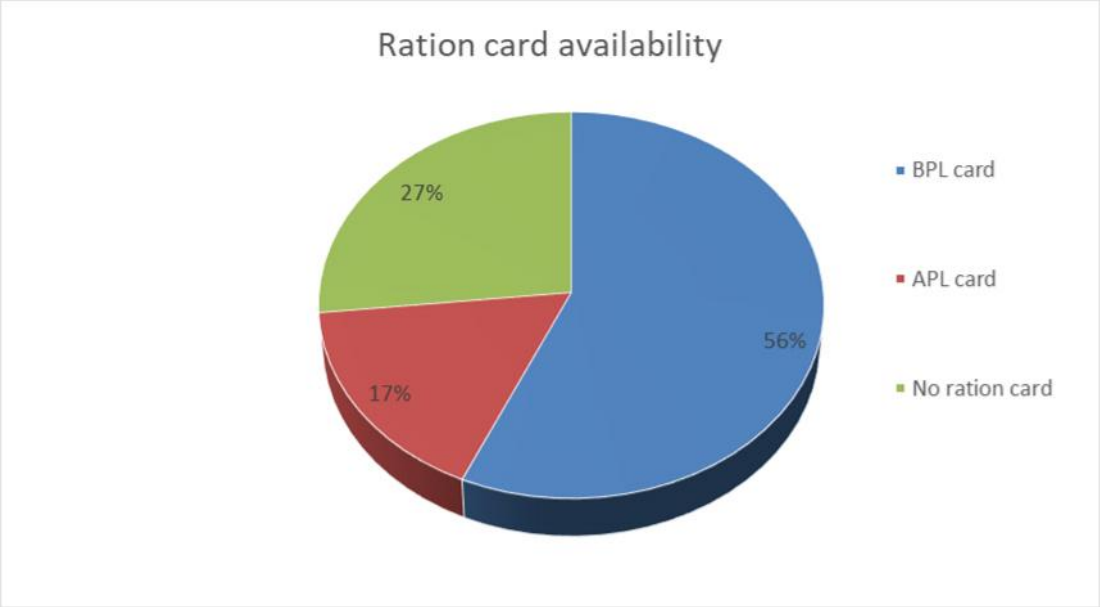
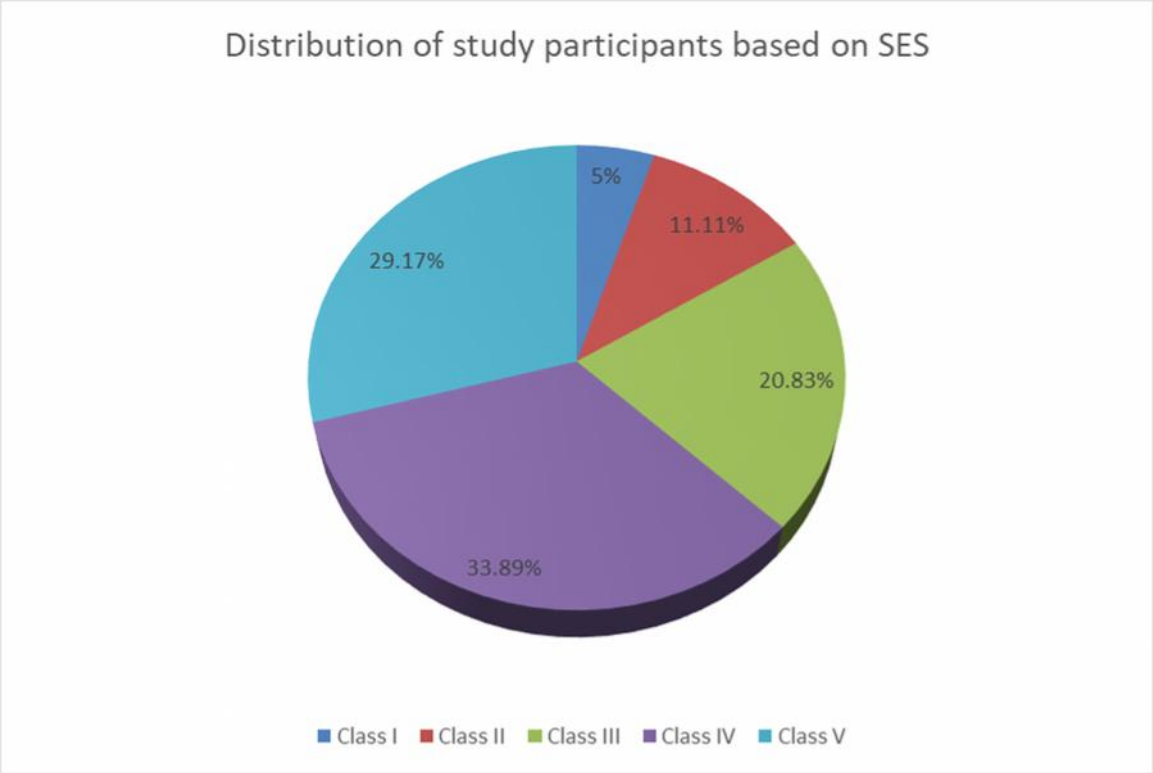


Table 33: Distribution of study participants based on Socio-economic status (n=360)

Sl. No	Socio-economic Status	Number	Percentage
1	Class I	18	5
2	Class II	40	11.11
3	Class III	75	20.83
4	Class IV	122	33.89
5	Class V	105	29.17
Total		**360**	**100**

Out of the 360 study participants in Belagavi taluka, 122 (33.89%) of them belonged to Class IV Socioeconomic status (SES), 105 (29.17%) belonged to Class V, 75 (10.83%) of them belonged to Class III, 40 (11.11%) belonged to Class II and the rest 18 (5%) of them belonged to Class I Socioeconomic status according to Modified B. G. Prasad's classification.

Graph 25: Distribution of study participants based on Socio-economic status (n=360)



B] Knowledge, Awareness and Utilization of NPCDCS services by the beneficiaries:

Table 34: Distribution of study participants based on their awareness about common Non-communicable diseases (n=360)

Sl. No	Awareness about NCDs	Aware (percentage)	Not aware (percentage)	No response (percentage)	Total (percentage)
1	Hypertension	182 (50.56)	165 (45.83)	13 (3.61)	**360 (100)**
2	Diabetes	193 (53.61)	140 (38.89)	27 (7.5)	**360 (100)**
3	Cardiovascular Diseases	92 (25.56)	209 (58.06)	59 (16.38)	**360 (100)**
4	Cancer	217 (60.28)	115 (31.94)	28 (7.78)	**360 (100)**
5	Stroke	178 (49.44)	147 (40.83)	35 (9.73)	**360 (100)**

Out of the 360 beneficiaries in Belagavi taluka, 182 (50.56%) were aware about the disease hypertension, 165 (45.83%) were not aware and 13 (3.61%) of them didn't give any response, 193 (53.61%) of them were aware of diabetes, 140 (38.89%) were not aware and 27 (7.5%) didn't give ant response, 92 (25.56%) of them were aware about cardiovascular diseases, 209 (58.06%) were not aware and 59 (16.38%) didn't give any response, 217 (60.28%) were aware about cancer, 115 (31.94%) were not aware and 28 (7.78%) didn't give any response, 178 (49.44%) were aware about stroke, 147 (40.83%) were not aware and remaining 35 (9.73%) were not aware. Overall 47.89% of the study participants were aware about NCDs, 43.11% were not aware and the remaining 9% didn't give any response.

Graph 26: Distribution of study participants based on their awareness about common Non-communicable diseases (n=360)

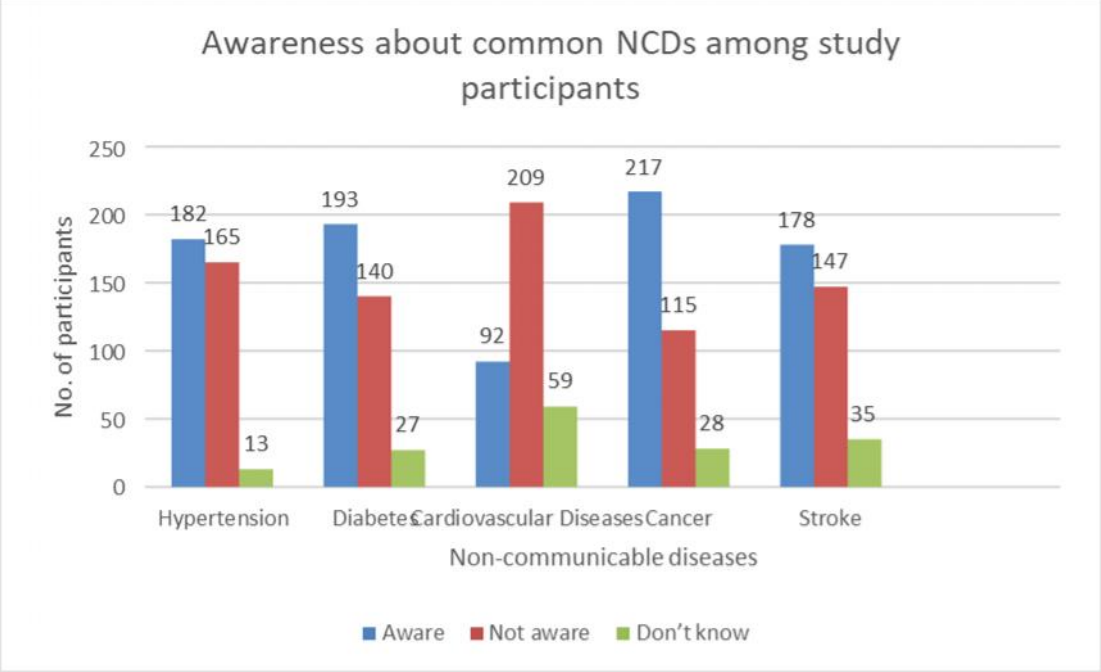


Table 35: Distribution of study participants based on the family history of hypertension (n=360)

Sl. No	Family history of NCDs	Father (%)	Mother (%)	Sibling (%)	No history (%)	Don't know (%)
1	Hypertension	38 (10.56)	34 (9.44)	38 (10.56)	193 (53.61)	59 (16.39)
2	Diabetes	30 (8.33)	30 (8.33)	28 (7.78)	248 (68.89)	27 (7.5)
3	Cardiovascular Diseases	28 (7.78)	23 (6.39)	28 (7.78)	245 (68.06)	39 (10.83)
4	Cancer	38 (10.56)	21 (5.83)	31 (8.61)	269 (74.72)	4 (1.11)
5	Stroke	24 (6.67)	18 (5)	24 (6.67)	279 (77.5)	16 (4.44)

Out of the 360 study participants in Belagavi taluka, 38 (10.56%) of participant's fathers had history of hypertension, 34 (9.44%) of participant's mothers had history of hypertension, 38 (10.56%) of participant's siblings had history of hypertension, 193 (53.61%) of participant's family had no history of hypertension and 59 (16.39%) of them didn't know about their family history of hypertension. 30 (8.33%) of participant's fathers had history of diabetes, 30 (8.33%) of participant's mothers had history of diabetes, 28 (7.78%) of participant's siblings had history of diabetes, 248 (68.89%) of participant's family had no history of diabetes and 27 (7.50%) of them didn't know about their family history of diabetes. 28 (7.78%) of participant's fathers had history of CVDs, 23 (6.63%) of participant's mothers had history of CVDs, 28 (7.78%) of participant's siblings had history of CVDs, 245 (68.06%) of participant's family had no history of CVDs and 39 (10.83%) of them didn't know about their family history of CVDs. 38 (10.56%) of participant's fathers had history of cancer, 21 (5.83%) of participant's mothers had history of cancer, 31 (8.61%) of participant's siblings had history of cancer, 269 (74.72%) of participant's family had no history of cancer and 4 (1.11%) of them didn't know about their family history of cancer. 24 (6.67%) of participant's fathers had history of stroke, 18 (5%) of participant's mothers had history of stroke, 24 (6.67%) of participant's siblings had history of stroke, 279 (77.50%) of participant's family had no history of stroke and 16 (4.44%) of them didn't know about their family history of stroke.

Overall 8.87% of participant's fathers had history of NCDs, 7% of participant's mothers had history of NCDs, 8.28% of participant's siblings had history of stroke, 68.56% of participant's family had no history of NCDs and 8.05% of them didn't know about their family history of NCDs. Overall, 10.19% of participant's

family had history of hypertension, followed by 8.33% with family history of cancer, 8.15% with family history of diabetes, 7.32% with family history of CVDs and 6.11% with family history of stroke.

Graph 27: Distribution of study participants based on the family history of hypertension (n=360)

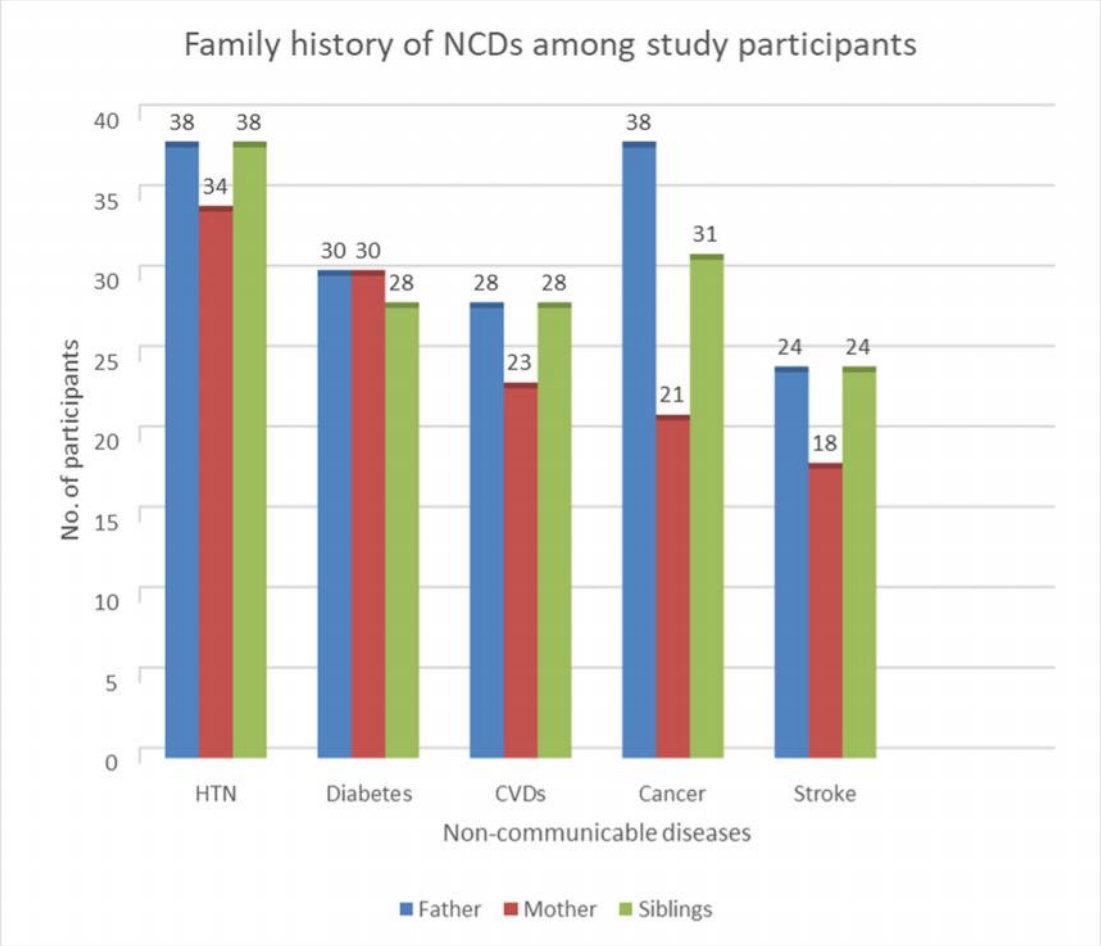


Table 36: Distribution of study participants based on informant about NCD camps (n=360)

Sl. No	NCD camp informant	Number	Percentage
1	Anganwadi worker	84	23.33
2	ASHA	122	33.89
3	Routine check up	45	12.5
4	Neighbour	35	9.72
5	Friend	23	6.39
6	Male Health Worker	24	6.67
7	Auxiliary Nurse Midwife	21	5.83
8	Don't remember	6	1.67
Total		**360**	**100**

Out of the 360 participants in Belagavi taluka, 122 (33.89%) of the participants received the information about the NCD camp through the ASHA workers, 84 (23.33%) of them received from Anganwadi workers, 45 (12.5%) of them received through routine health check-up, 35 (9.72%) of them received through neighbours, 23 (6.39%) of them got to know through their friends, 24 (6.67%) of them got to know through Male Health Workers, 21 (5.83%) of them got to know by Auxiliary Nurse Midwives and the remaining 6 (1.67%) didn't remember through whom they had got the information.

Graph 28: Distribution of study participants based on informant about NCD camps (n=360)

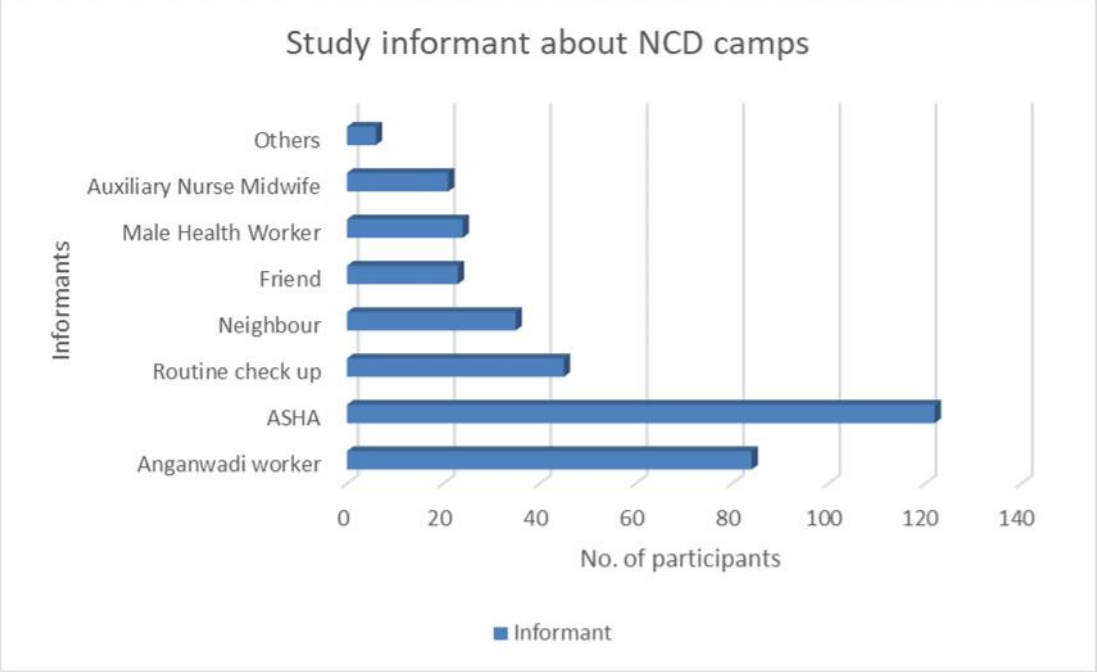


Table 37: Distribution of study participants based on their awareness about free check-ups at NCD camps (n=360)

Sl. No	Awareness about free NCD camps at sub-centre	Number	Percentage
1	Aware	260	72.22
2	Not aware	42	11.67
3	Don't know	58	16.11
Total		**360**	**100**

Out of 360 study participants in Belagavi taluka, 260 (72.22%) of them were aware that the NCD camps were conducted free of cost, 42 (11.67%) of them were not aware that camps are free of cost and the remaining 58 (16.11%) of them didn't know about the NCD camps.

Graph 29: Distribution of study participants based on their awareness about free check-ups at NCD camps (n=360)

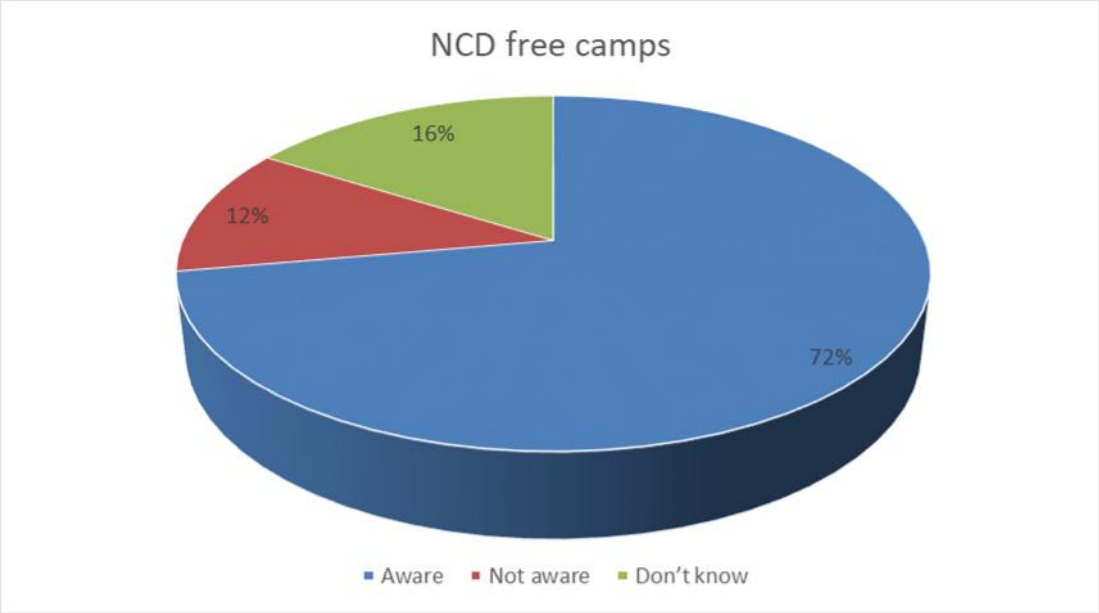


Table 38: Distribution of study participants based on their approach to health care (n=360)

Sl. No	Approach to health care for NCDs	Number	Percentage
1	PHC	212	58.89
2	Sub-centre	15	4.17
3	Belagavi district Hospital	26	7.22
4	Private hospital	107	29.72
Total		**360**	**100**

Out of 360 study participants in Belagavi taluka, 212 (58.89%) of them approached nearby PHC for health care, 107 (29.72%) of them went to private hospitals/clinics, 26 (7.22%) of them approached Civil hospital and the remaining 15 (4.17%) approached the nearby Sub-centres.

Graph 30: Distribution of study participants based on their approach to health care (n=360)

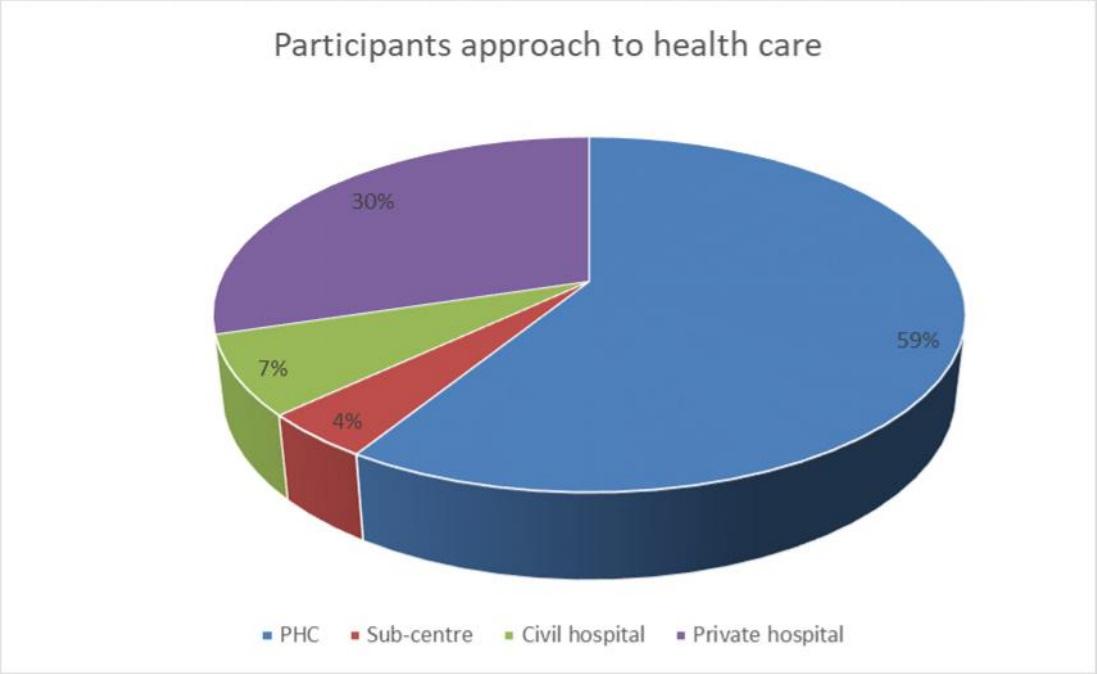


Table 39: Distribution of study participants based on their personal habits (n=360)

Sl. No	Habits	Yes (%)	No (%)	Total (%)
1	Habit of smoking	42 (11.67)	318 (83.33)	360 (100)
2	Habit of alcohol consumption	44 (12.22)	316 (87.78)	360 (100)
3	Habit of chewing tobacco	63 (17.50)	297 (82.50)	360 (100)

Out of the 360 study participants in Belagavi taluka, 42 (11.67%) of the participants had the habit of smoking, 44 (12.22%) of them had the habit of alcohol consumption and 63 (17.50%) of them had the habit of chewing tobacco.

Graph 31: Distribution of study participants based on their personal habits (n=360)

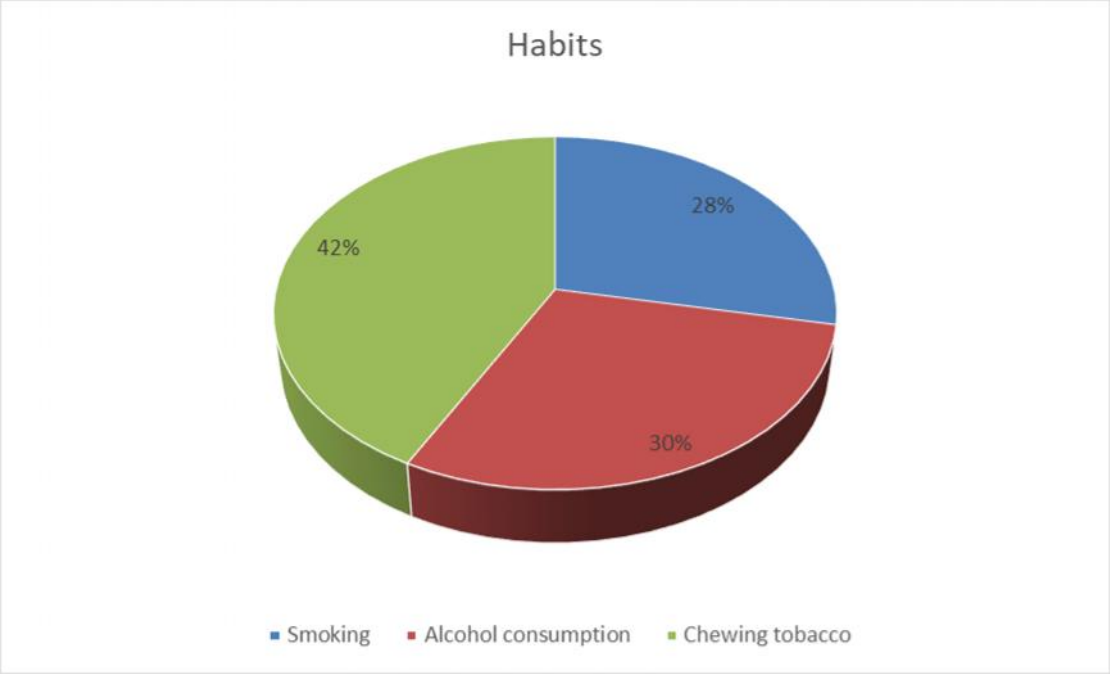


Table 40: Distribution of study participants based on their visit to doctor for confirmation of the disease (n=360)

Sl. No	Visit to doctor for confirmation of disease	Number	Percentage
1	Visited	306	85
2	Did not visit	54	15
Total		**360**	**100**

Out of 360 study participants in Belagavi taluka, 306 (85%) of the participants visited doctor for confirmation of the disease after being screened at NCD camps at Sub-centres and 54 (15%) of them did not visit any doctor for confirmation of the disease.

Graph 32: Distribution of study participants based on their visit to doctor for confirmation of the disease (n=360)

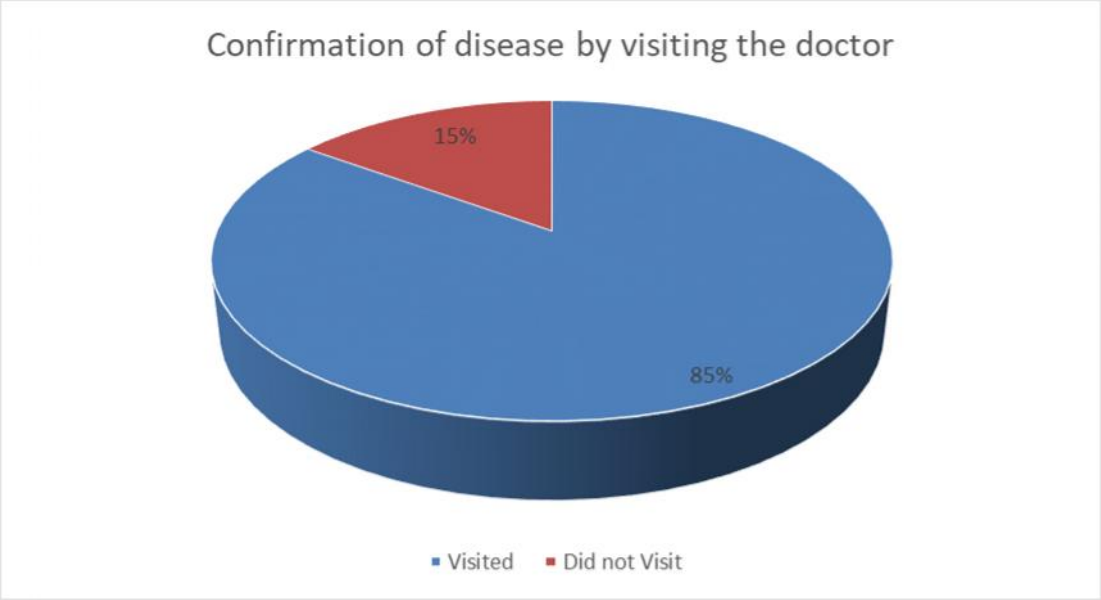


Table 41: Distribution of study participants based on reason for not visiting the doctor for confirmation of disease (n=54)

Sl. No	Reason for not visiting	Number	Percentage
1	Busy at work	33	61.11
2	Far away from PHC	11	20.37
3	No one advised to visit the doctor	5	9.26
4	I don't have any illness	5	9.26
Total		**54**	**100**

Out of the 54 participants in Belagavi taluka who didn't visit the doctor for confirmation of the disease, 33 (61.11%) of them said they were busy at work, 11 (20.37%) of them said the PHC was far away from their place, 5 (9.26%) of them said that no one advised them for confirmation of disease and remaining 5 (9.26%) said they had no illness for confirmation of disease.

Graph 33: Distribution of study participants based on reason for not visiting the doctor for confirmation of disease (n=54)

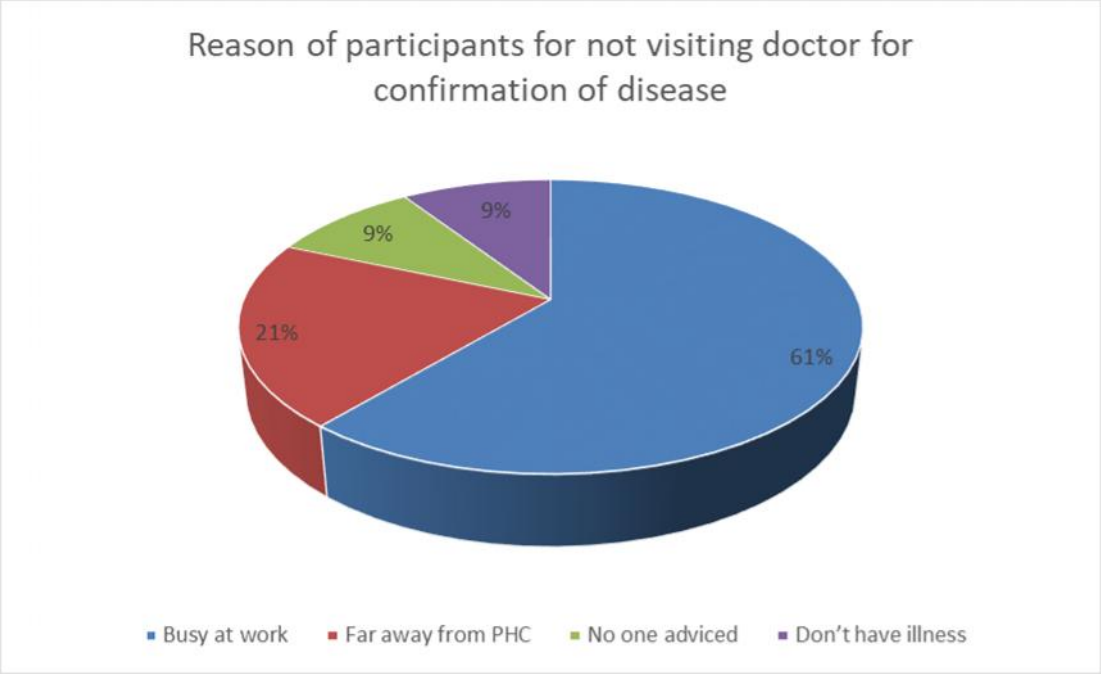


Table 42: Distribution of study participants based on their compliance to medications (n=360)

Sl. No	Compliance to medications	Number	Percentage
1	Compliant	268	74.44
2	Non-compliant	92	25.56
Total		**360**	**100**

Out of the 360 beneficiaries in Belagavi taluka, 268 (74.44%) of the participants were taking treatment/medication regularly while 92 (25.56%) of them were not taking medications.

Graph 34: Distribution of study participants based on their compliance to medications (n=360)

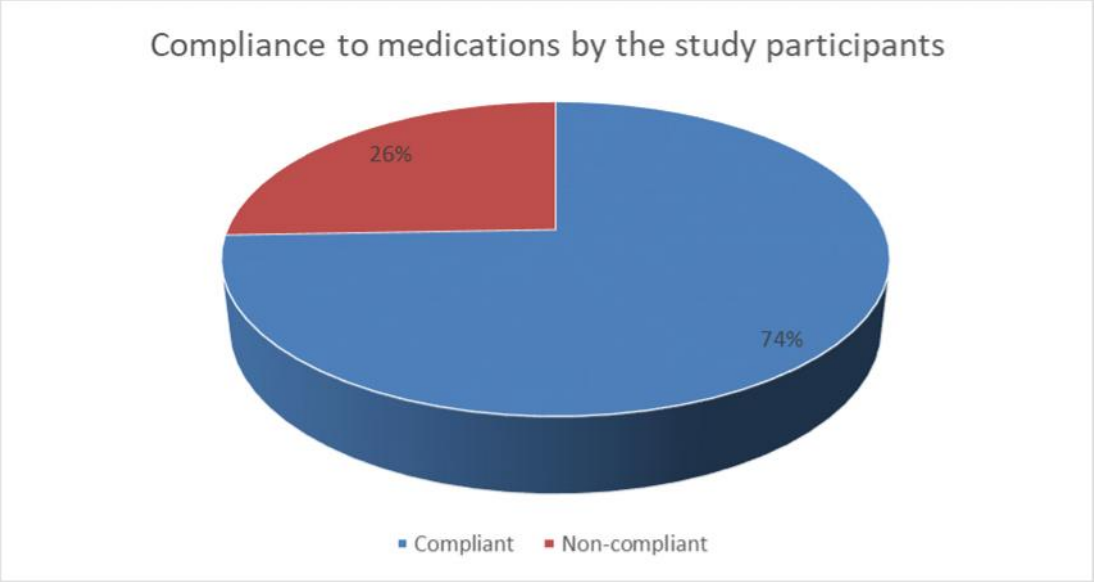


Table 43: Distribution of study participants based on the reason for non-compliance to medications (n=92)

Sl. No	Reason for non-compliance to medications	Number	Percentage
1	Costly medications	30	32.61
2	Not available at PHC	32	34.78
3	Health centre far away	12	13.04
4	I don't have any illness	9	9.78
5	Can treat/take care of myself	9	9.79
Total		**92**	**100**

Out of the 92 study participants in Belagavi taluka, who were non-compliant to prescribed medications, 32 (34.78%) of them gave the reason that the medications were not available at PHC, 30 (32.61%) of them said that the medications were costly, 12 (13.04%) said that the PHC was far away to take medications, 9 (9.78%) of them

were of the opinion that they were having no illness and the remaining 9 (9.79%) felt that they could treat themselves without any medications.

Graph 35: Distribution of study participants based on the reason for non-compliance to medications (n=92)

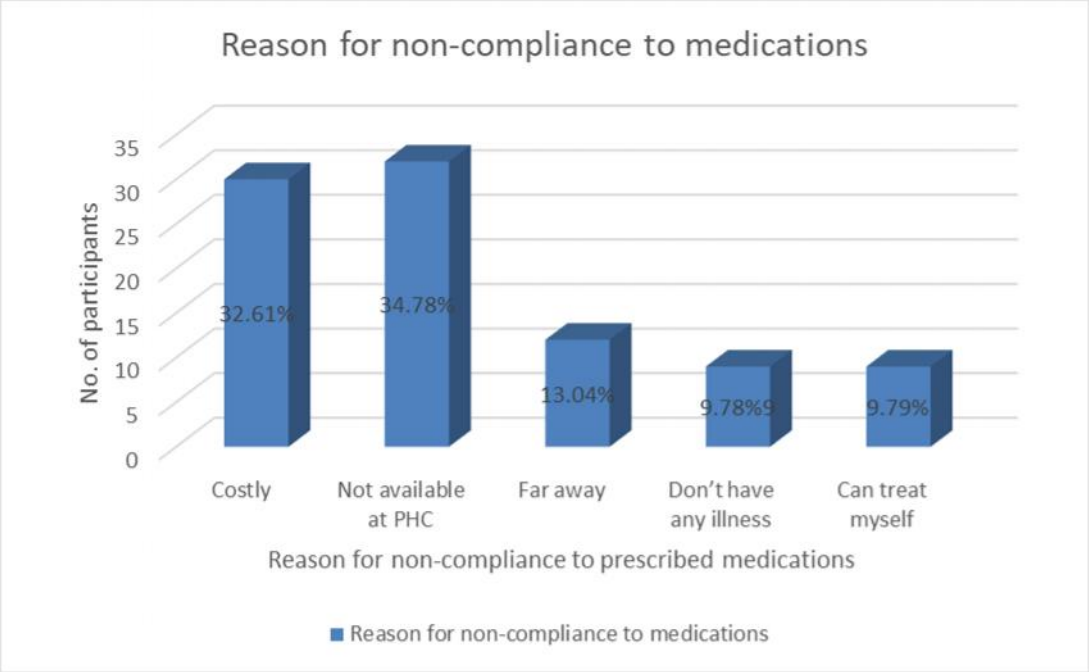


Table 44: Distribution of study participants based on their follow up for treatment (n=360)

Sl. No	Follow up for treatment	Number	Percentage (%)
1	Regular Follow up	242	67.22
2	No follow up	118	32.78
Total		**360**	**100**

Out of the 360 study participants in Belagavi taluka, 242 (67.22%) of them were on regular follow up and the remaining 118 (32.78%) were not on follow up after confirmation of the disease.

Graph 36: Distribution of study participants based on their follow up for treatment (n=360)

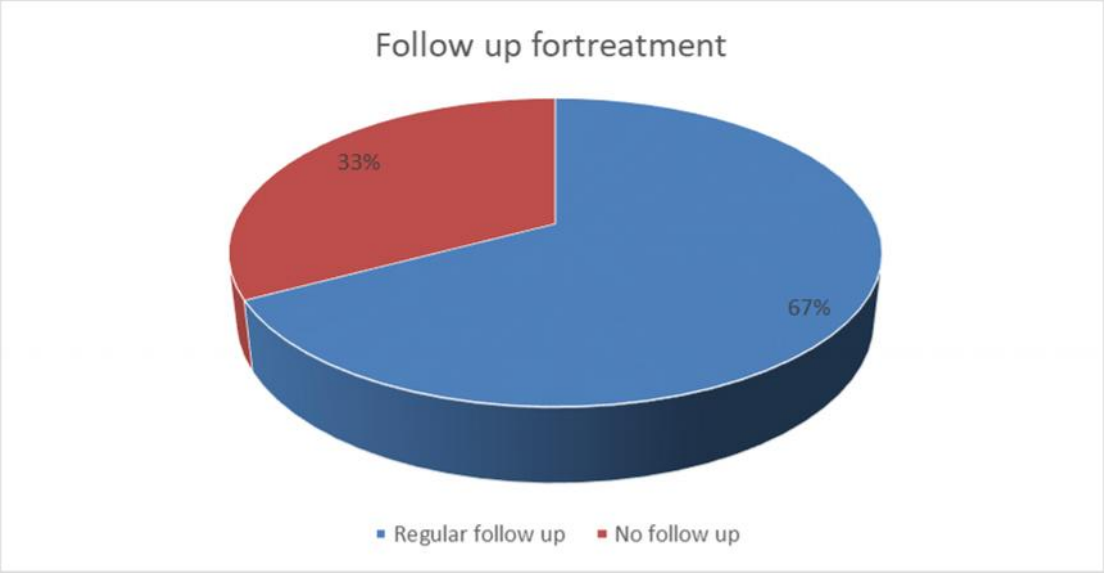


Table 45: Distribution of study participants based on reason for not going to follow up (n=118)

Sl. No	Reason for non-follow up for treatment	Number	Percentage
1	Busy	49	41.53
2	Health centre far away	38	32.20
3	No one to take me to doctor (escort)	20	16.95
4	Didn't know to go to follow up	11	9.32
Total		**118**	**100**

Out of the 118 study participants in Belagavi taluka, who were not on regular follow up, 49 (41.53%) of them gave the reason that they were busy, 38 (32.20%) said that the PHC was far away, 20 (16.95%) of them said that there was no one to take them to PHC for follow up and 11 (9.32%) of them were not aware that they were supposed to go to the follow up for future treatment.

Graph 37: Distribution of study participants based on reasons for not going to follow up (n=118)

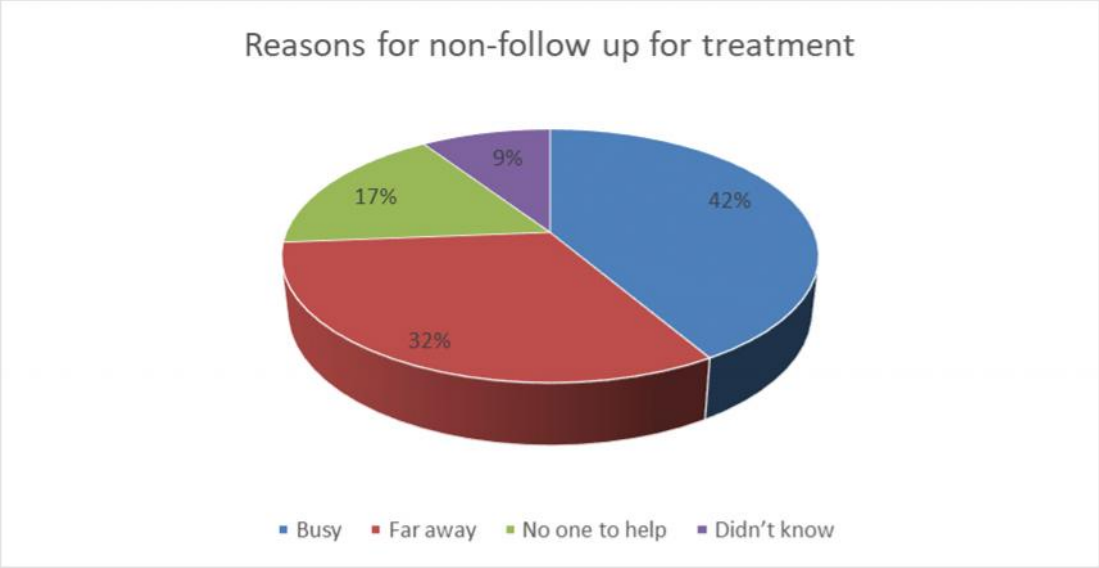


Table 46: Distribution of study participants based on reception of health education at NCD camps (n=360)

Sl. No	Health Education	Received		Not received		Don't remember		Total	
		N	%	N	%	N	%	N	%
1	Physical activity	110	30.56	180	50	70	19.44	**360**	**100**
2	Consumption of fruits and vegetables	119	33.06	178	49.44	63	17.50	**360**	**100**
3	Stress management	77	21.39	215	59.72	68	18.89	**360**	**100**
4	Avoidance of alcohol/smoking	115	31.94	177	49.16	68	18.89	**360**	**100**
5	Signs of cancer	57	15.83	235	65.28	68	18.89	**360**	**100**

Out of the 360 study participants in Belagavi taluka, 110 (30.56%) of them said they received health education regarding physical activity, while 180 (50%) of them didn't receive and the remaining 70 (19.44%) didn't remember. In the similar way 119 (33.06%) of them said they received health education regarding consumption of fruits and vegetables, while 178 (49.44%) of them didn't receive and the remaining 63 (17.50%) didn't remember. 77 (21.39%) of them said they received health education regarding stress management, while 215 (59.72%) of them didn't receive and the remaining 68 (18.89%) didn't remember. 115 (31.94%) of them said they received health education regarding avoidance of alcohol and smoking, while 177 (49.16%) of them didn't receive and the remaining 68 (18.89%) didn't remember. 57 (15.83%) of them said they received health education regarding signs of cancer, while 235 (65.28%) of them didn't receive and the remaining 68 (18.89%) didn't remember. Overall only 26.56% of the study participants received the health education at the NCD camps conducted at Sub-centres.

Graph 38: Distribution of study participants based on reception of health education at NCD camps (n=360)

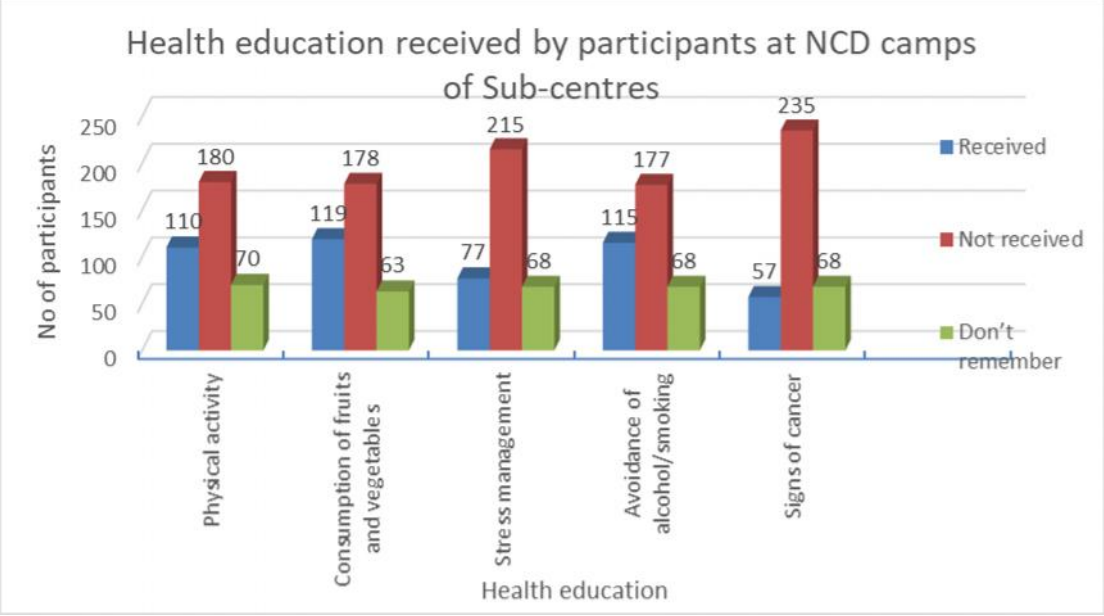


Table 47: Distribution of study participants based on their referral to higher centre (n=360)

Sl. No	Referral to higher centre	Number	Percentage
1	Referred	308	85.56
2	Not referred	52	14.44
Total		**360**	**100**

Out of the 360 study participants interviewed in Belagavi taluka, 308 (85.56%) of them were referred to higher centre for confirmation of disease at NCD camps at Sub-centres and 52 (14.44%) of them were not referred.

Graph 39: Distribution of study participants based on their referral to higher centre (n=360)

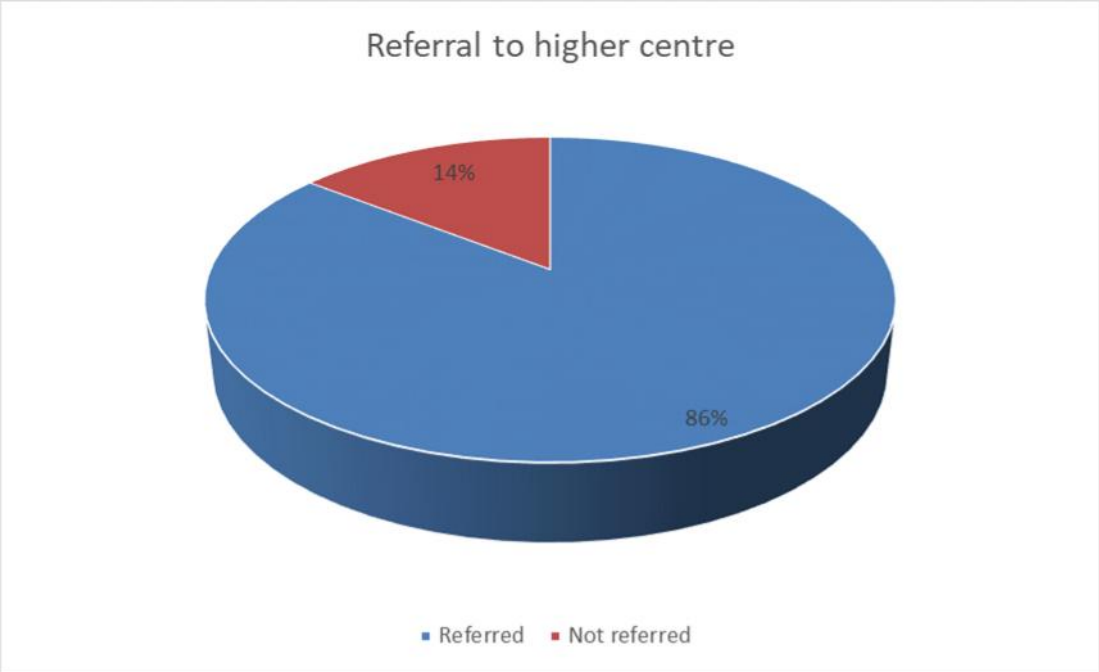


Table 48: Distribution of study participants based on reception of medications/treatment free of cost (n=360)

Sl. No	Reception of treatment/medications	Number	Percentage
1	Free of Cost	175	48.61
2	Not free of cost	185	51.39
Total		**360**	**100**

Out of the 360 study participants interviewed in Belagavi taluka, 175 (48.61%) of them said they were receiving medication free of cost, while 185 (51.39%) of them were not receiving them for free of cost.

Graph 40: Distribution of study participants based on reception of medications/treatment free of cost (n=360)

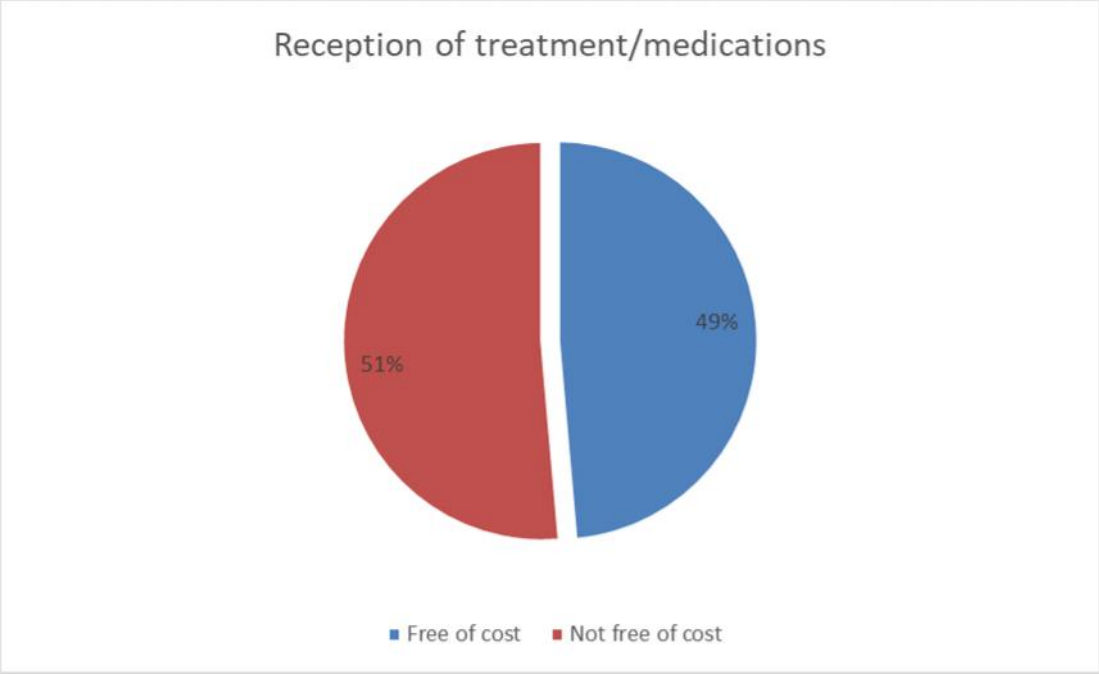


Table 49: Distribution of study participants based on their opinion about NPCDCS (n=360)

Sl. No	Opinion about NPCDCS	Number	Percentage
1	Useful programme	133	36.94
2	No use for the community	37	10.28
3	Don't know	190	52.78
Total		**360**	**100**

Out of the 360 study participants interviewed in Belagavi taluka, 133 (36.94%) were of the opinion that the programme was beneficial for the society, while 37 (10.28%) didn't feel so and the remaining 190 (52.78%) didn't know whether the programme was beneficial or not.

Graph 41: Distribution of study participants based on their opinion about NPCDCS (n=360)

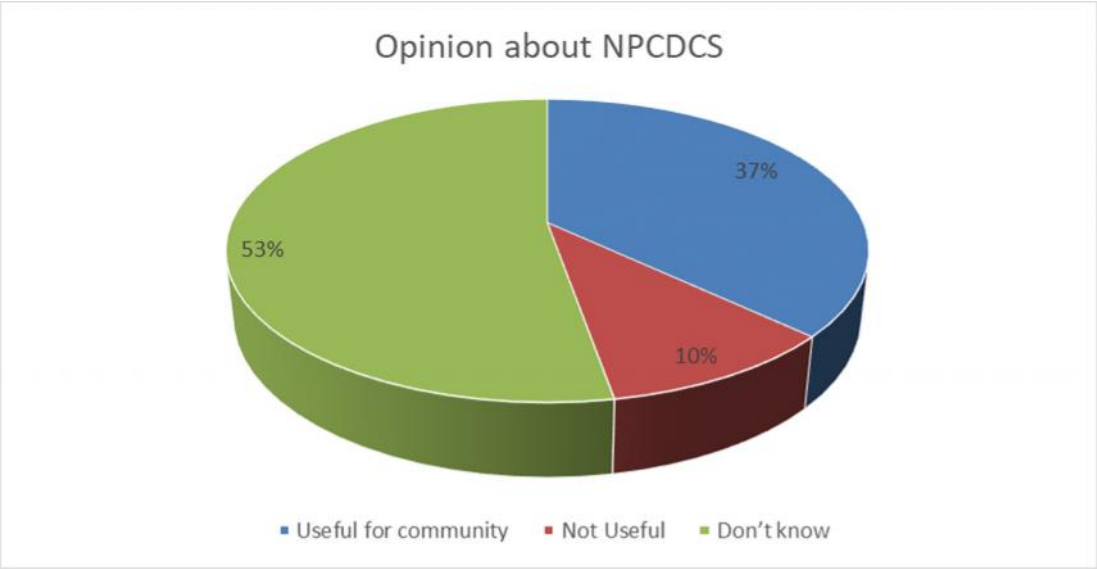


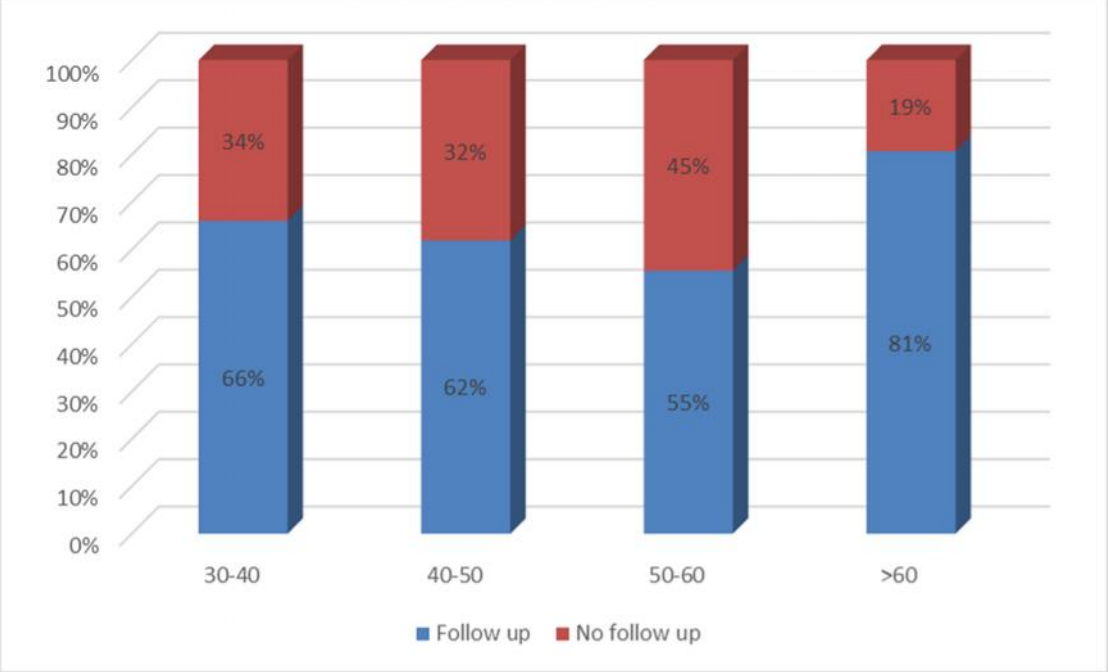
Table 50: Association between age of participants and follow up for treatment (n=360)

Sl. No	Age distribution (years)	Follow up		No follow up		Total (%)	
		N	%	N	%	N	%
1	30-40	107	66.05	55	33.95	**162**	**100**
2	40-50	52	61.90	32	38.10	**84**	**100**
3	50-60	20	55.56	16	44.44	**36**	**100**
4	>60	63	80.77	15	19.23	**78**	**100**
Total		**242**	**67.22**	**118**	32.78	**360**	**100**
$\chi^2 = 9.8996$		d.f.: 3		p value 0.0194			

Association between the age of the study participants and follow up for treatment was found to be statistically significant indicating that the follow up care improved as the age of the participants advanced.

The association between the age of the study participants with the visit to doctor for confirmation of disease and with compliance towards prescribed medications/treatment was found not to be statistically significant.

Graph 42: Association between age and follow up by participants (n=360)



.Table 51: Association between Socio-economic status and follow up by participants (n=360)

Sl. No	SES	Follow up		No follow up		Total	
		N	%	N	%	N	%
1	Class I	16	88.89	2	11.11	**18**	**100**
2	Class II	28	70	12	30	**40**	**100**
3	Class III	53	70.67	22	29.33	**75**	**100**
4	Class IV	72	59.02	50	40.98	**122**	**100**
5	Class V	73	69.52	32	30.48	**105**	**100**
Total		**242**	**67.22**	**118**	**32.78**	**360**	**100**
$\chi^2 = 8.3597$		d.f.: 4		p value 0.0792			

The association between socio-economic status of the study participants and follow up for treatment was found not to be statistically significant, but trends indicated that the follow up was regular and better in the higher socio-economic status as compared to lower socio-economic status.

The association between socio-economic status of the study participants and them visiting doctors for confirmation of the disease, with compliance to prescribed medications and with utilization of free medications/treatment was found not to be statistically significant.

Table 52: Association between education of the study participants and visiting doctor for confirmation of disease (n=360)

Sl. No	Education qualification	Visited doctor		Did not visit doctor		Total	
		N	%	N	%	N	%
1	Illiterate	77	81.05	18	18.95	**95**	**100**
2	Primary	126	85.71	21	14.29	**147**	**100**
3	Secondary	84	86.60	13	13.40	**97**	**100**
4	PUC/ITI	9	81.82	2	18.18	**11**	**100**
5	Graduation	10	100	0	0	**10**	**100**
Total		**306**	**85**	**54**	**15**	**360**	**100**
$\chi^2 = 3.266$		d.f.: 4		p value 0.5143			

Association between educational qualification of the participants and them visiting the doctor for confirmation of the disease was found not be statistically significant, though the trends indicated that, participants visited the doctor as their education qualification improved.

Table 53: Association between education of the study participants and compliance to prescribed medication (n=360)

Sl. No	Education qualification	Compliant		Non-compliant		Total	
		N	%	N	%	N	%
1	Illiterate	68	71.58	27	28.42	**95**	**100**
2	Primary	113	76.87	34	23.13	**147**	**100**
3	Secondary	72	74.23	25	25.77	**97**	**100**
4	PUC/ITI	8	72.73	3	27.27	**11**	**100**
5	Graduation	7	70	3	30	**10**	**100**
Total		**268**	**74.44**	**92**	**25.56**	**360**	**100**
$\chi^2 = 0.9882$		d.f.: 4		p value 0.9115			

Association between the educational qualification of the study participants and their compliance towards medications was found not be statistically significant, but the trends indicated that the compliance improved with education qualification.

Association between the educational qualification of the study participants and their follow up for prescribed treatment/medication and with utilization of free medicines and treatment by the participants was found not to be statistically significant.

Table 54: Association between ration card and utilization of free treatment/medication by participants (n=360)

Sl. No	Ration card possession	Utilized service		Not utilizing		Total	
		N	%	N	%	N	%
1	Below Poverty Line (BPL)	98	48.04	106	51.96	**204**	**100**
2	Above Poverty Line (APL)	28	46.67	32	53.33	**60**	**100**
3	No ration card	49	51.04	47	48.96	**96**	**100**
Total		**175**	**48.61**	**185**	**51.39**	**360**	**100**
$\chi^2 = 0.3445$		d.f.: 2		p value 0.8417			

The association between the type of ration card holders and utilization of free services by the participants was found not to be statistically significant, though the table showed that the BPL card holders were not utilizing the free services of the programme.

The association between the informants of the NCD camps and the participants visiting doctor for confirmation of the disease was found not to be statistically significant. The association between the awareness of the NCD camps by the study participants visiting doctor for confirmation of the disease was found not to be statistically significant.

Table 55: Association between participant visiting doctor for confirmation of disease and compliance to medication by participants (n=360)

Sl. No	Visit to doctor for confirmation of disease	Compliant		Non-compliant		Total	
		N	%	N	%	N	%
1	Visited doctor	268	87.58	38	12.42	**306**	**100**
2	Did not visit doctor	0	0	54	100	**54**	**100**
Total		**268**	**74.44**	**92**	**25.56**	**360**	**100**
$\chi^2 = 185.064$		d.f.: 1		p value <0.00001			

The association between the participants who visited the doctor for confirmation of the disease and compliance to medication was found to be statistically significant, indicating that participants who visited the doctor had better compliance.

Graph 43: **Association between participant visiting doctor for confirmation of disease and compliance to medication by participants (n=360)**

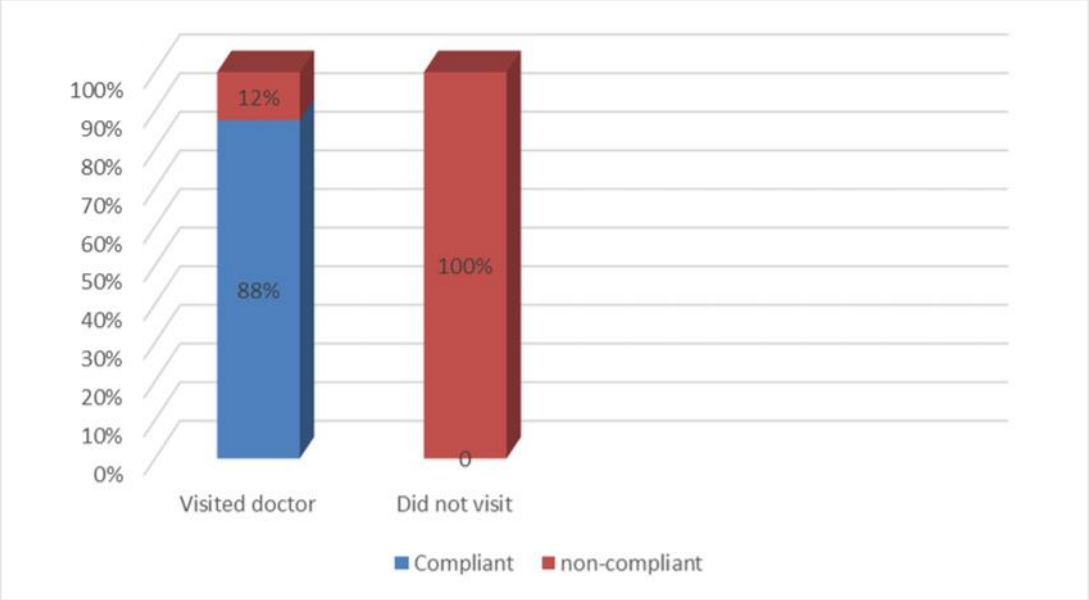


Table 56: Association between study participants visiting doctor for confirmation of disease and follow up by participants (n=360)

Sl. No	Visit to doctor for confirmation of disease	Follow up		No follow up		Total	
		N	%	N	%	N	%
1	Visited	242	79.01	64	20.91	**306**	**100**
2	Did not visit	0	0	54	100	**54**	**100**
Total		**242**	**67.22**	**118**	**32.78**	**360**	**100**
χ^2 = 126.4995		d.f.: 1		p value <0.00001			

The association between the participants who visited the doctor for confirmation of the disease and further follow up was found to be statistically significant, indicating that participants who visited the doctor were on a regular follow up.

Graph 44: **Association between study participant visiting doctor for confirmation of disease and follow up by participants (n=360)**

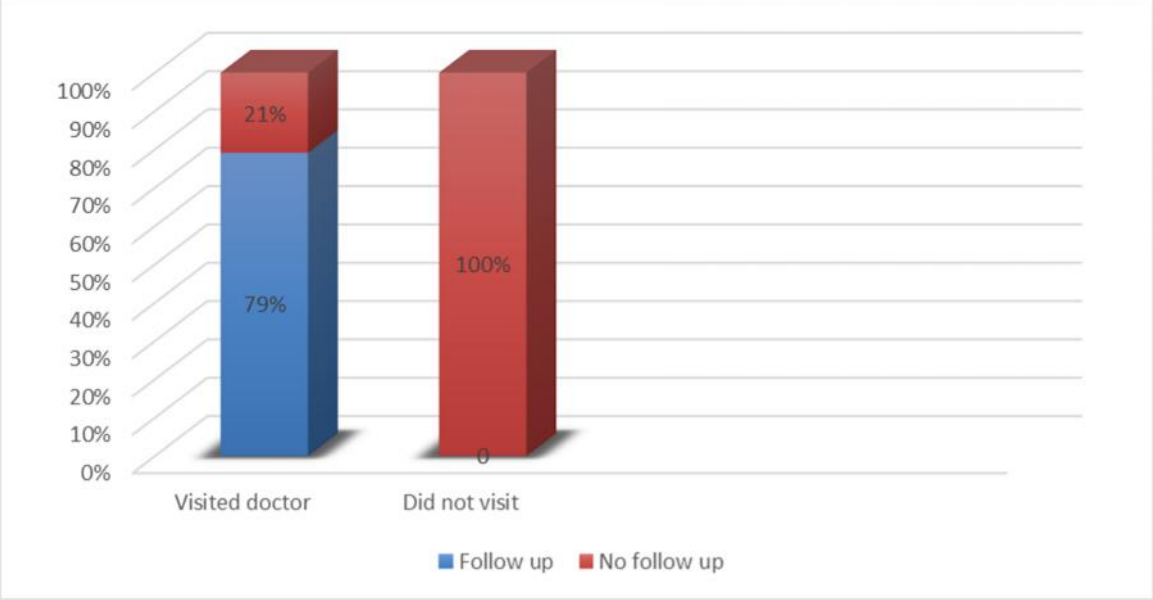
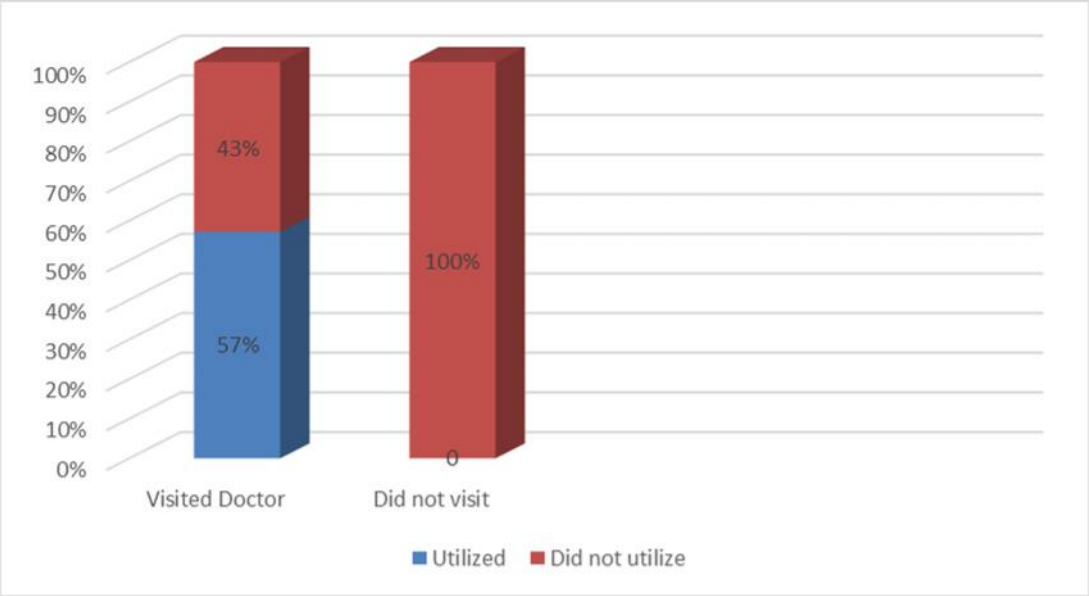


Table 57: Association between study participant visiting doctor for confirmation of disease and utilization of free treatment/medication (n=360)

Sl. No	Visit to doctor for confirmation of disease	Utilized		Did not utilize		Total	
		N	%	N	%	N	%
1	Visited doctor	175	57.19	131	42.81	**306**	**100**
2	Did not visit doctor	0	0	54	100	**54**	**100**
Total		**175**	**48.61**	**185**	**51.39**	**360**	**100**
$\chi^2 = 57.2107$		d.f.: 1		p value <0.00001			

The association between the participants who visited the doctor for confirmation of the disease and utilization of free services of medications and treatment was found to be statistically significant, indicating that participants who visited the doctor also utilized the services.

Graph 45: Association between participant visiting doctor for confirmation of disease and utilization of free treatment/medication (n=360)



Discussion

This study was conducted in Belagavi taluka of Belagavi district in Karnataka, which covered the District Hospital, one Community Health Centre, 12 Primary Health Centres, selected Sub-centres and selected beneficiaries under each sub-centre. The implementation of National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke (NPCDCS) in the health care facilities and the utilization of the services by the beneficiaries was assessed in this study.

District Hospital:

In this study, the Belagavi District Hospital covered a population of around 47, 79,661 according to 2011 census and the NPCDCS was launched on September 2015 in Belagavi district with establishment of NCD clinic at the district hospital at the same time and providing services of opportunistic screening of individuals aged 30 years and above and services of emergency treatment for the referred patients from the peripheries. The Out-patient care, in-patient care, health promotion activities and training of health care professional were being carried out while the Cardiac Care Unit (CCU) was not yet established in 2017 and also chemotherapy and palliative care for cancer patients were not available at the time of the visit by the investigator (Table 1). The manpower required for NCD clinic were appointed and was 100%, while specialist for treating emergency cases and management of patients in CCU was not available and also the referral services for emergency cases were not yet established in 2017 (Table 2). Most of the laboratory investigations were available, except for MRI and Mammography (Table 3) and most of the necessary equipment required for managing emergency NCD cases were available except for ECG machine

with Tread Mill, portable X-ray machine and central patient monitoring station (Table 4).

As per the operational guidelines on NPCDCS issued by the Ministry of Health and Family Welfare, Government of India in 2013, every District hospital must have implemented the programme by establishment of NCD clinic and CCU for treatment of emergency patients and also provision of necessary investigations and equipment for the same.[3]

In a study conducted in Surendranagar district of Gujarat in 2015, reported that there was no recruitment of doctor, oncologist at the NCD clinic and even though other staff were recruited, they had not undergone the training for NPCDCS and they had all the necessary equipment, but CCU was not yet established and the activities of in-patient care, day care chemotherapy and palliative care was not available, similar finding compared to the present study.[15] In the present study, though NCD clinic was established with adequate manpower as per the operational guidelines of NPCDCS, CCU was not yet established.

In a study conducted on NCD preparedness in Kerala and Odisha in 2018, reported that the respondents in both the states were screening NCDs particularly hypertension and diabetes at the health facilities in their districts and mentioned that there was a lack of adequate workforce in NCD program in both the states which included lack of doctors, counsellors, physiotherapists and laboratory technicians and also mentioned that in a district in Odisha, 26% of sanctioned posts for physicians were vacant, which was contrary to the findings of the present study where the workforce was adequate in the NCD clinic.[55]

Community Health Centre:

In this study, the CHC at Hirebagewadi in Belagavi taluka was covering a population of around one lakh and the NCD clinic was established just three months before to the visit of the investigator. The opportunistic screening of individuals above the age group of 30 years and the activities of health promotion, OPD, IPD and screening of common cancers, which included oral cancer, cervical cancer and breast cancer was being done (Table 5). But the manpower required for NCD clinic was inadequate, where the posts of General Physician, physiotherapist and data entry operator were vacant (Table 6), with non-availability of specialized care and emergency services, though referral services was established for emergency cases of NCDs. Almost half of the necessary laboratory investigations were not available at this CHC (Table 7) and even the necessary equipment for the management of emergency cases was partially available (Table 8).

As per the guidelines on NPCDCS issued by the Ministry of Health and Family Welfare of Government of India of 2013, every Community Health centre must have implemented the programme by establishment of NCD clinic for OPD, IPD care and treatment of emergency patients, along with necessary investigations and equipment.[3]

In a study conducted in Surendranagar district of Gujarat in 2015, reported that out of the five NCD clinics evaluated at CHCs, the manpower recruitment was 100% at all CHCs, except for availability of nurse which was only 20%, they had all the necessary equipment, but not IEC materials and all the activities as per the guidelines were carried out, except for inpatient care and the follow up care was provided in only 20% of the CHCs and palliative care was not yet available in any of the CHCs.[15]

In the present study, NCD clinic was established, but with no manpower and the necessary investigations were not available as per the guidelines.

In a study conducted by Kantinath Ainapure et al., on implementation of NPCDCS in Udupi district of Karnataka in 2018, stated that there was a separate NCD clinic in each of the CHC and consisted a Medical officer, staff nurse, counsellor, lab technician and one data entry operator and the results have shown that the most crucial missing link in the implementation of the programme was the unavailability of medical officers and other staffs.[52]

Primary Health Centres:

In the present study which included 12 PHCs of Belagavi taluka, the mean population covered by each PHC was 39,817 $\pm$ 12,226 (Table 9), with mean number of sub-centres per PHC being 6 $\pm$ 1.1 and the population covered by the PHCs were more than the requirement as per the revised Indian Public Health Standards (IPHS) guidelines of 2012.[49]

Each Sub-Centre was covering a mean population of 6,825 + 1,836 and the 12 PHCs had 70 sub-centres, but man power was inadequate with 60 Auxiliary Nurse Midwife (ANMs) and 41 Male Health workers (MHWs). The activities of health promotion, early diagnosis and treatment of the uncomplicated NCDs, identification of the risk factors for NCDs and out-patient care was provided 100% in all PHCs (Table 10) and availability of basic investigations was partial (Table 11), where investigations like blood urea and lipid profile was not available in 11 of the PHCs. The availability of necessary equipment was 100%, except for ECG machine, which was available in only one PHC (Table 12).

In this study, it was noticed that the activities, basic investigations and the necessary equipment were adequate and were as per the NPCDCS operational guidelines, while manpower and few laboratory investigations were unavailable, contradictory to the requirement as per the guidelines of NPCDCS.[3]

In a qualitative study by Jai P Narain on PHC approach for NCD services in 2011 has stated that, primary health care (PHC) approach for NCD prevention and control helps in delivering a prioritized set of cost-effective interventions of acceptable quality, but is suffering from serious workforce shortages which was in acceptance in the present study where man power was inadequate.[60]

Sub-Centres:

In this study, the selected 36 sub-centres covered a mean population of 6,909 $\pm$ 1836.5 (Table 13), which was slightly more than the requirement as per the revised Indian Public Health Standards (IPHS) guidelines of 2012, where ideal population served by a sub-centre was 5,000.[50]

The NPCDCS was implemented in all the selected 36 sub-centres, though their knowledge about the programme initiation at their district and respective PHCs varied (Table 14). More than half of the SC staff were conducting the NCD camps weekly (63.89%), followed by monthly (30.56%) and few were conducting randomly (5.55%), though there was no guidelines from the National and State NCD Cell for frequency of conduction of the NCD camps at Sub-centres, the Belagavi district NPCDCS coordinators had set the guidelines to conduct the NCD camps weekly, which was not being practiced at all Sub-Centres (Table 15).

As per the instructions by the Belagavi district coordinators for NPCDCS of conducting NCD camps weekly, it accounted to 52 camps per year, while in the

present study it was observed that 13 (37%) of the Sub-Centres were conducting the NCD camps less than 20 per year and only 8 (22.8%) of them were conducting the NCD camps more than 40 per year (Table 16).

As per the Operational guidelines of NPCDCS, each Sub-centre is supposed to screen 40% population for NCDs in a year, but in the present study it was noted that only 11 (32%) SCs covered a population of 40% or more and on an average the population screened across all 36 SCs was only 24.2% (Table 17).[3]

In the present study, the population screened for diabetes, hypertension or both was 64,096 out of which, 3,124 of the individuals aged 30 years and above were screened positive for diabetes, with prevalence being 4.87% (Table 18), which was less compared to the global prevalence of diabetes of 8.5% among individuals aged 18 years and above as per the WHO in 2014.[18] According to the study conducted in 15 states of India (ICMR-INDIAB) published in by 2017, the prevalence of diabetes in India was seen to be 7.3%, while in rural areas it was 5.2%, which was similar finding compared to our study.[61] In a study conducted in rural parts of Hubballi of Karnataka in 2016 reported that the prevalence of diabetes was 22%, which was quite high compared to the present study.[62]

In the present study, out of the screened 64,096 individuals, 3,196 individuals aged 30 years and above were screened positive for hypertension, with prevalence being 4.99% (Table 18), which was very less compared to the global prevalence of hypertension of 22% among individuals aged 18 years and above as per the WHO in 2014.[2] According to the NFHS-4 reports of India, the prevalence if hypertension for Indians aged 15 years and above was 12.9% and in Karnataka it was 14.15% which was comparatively very high compared to the present study.[4]

A study conducted in Maharashtra on 280 adults aged 18 years and above in, 2016 reported that the prevalence of hypertension was 26.8% which was very high compared to the present study results.[63]

In the present study, 25 (69.44%) ANMs had received training for NPCDCS out of selected 36 Sub-Centres and the remaining 11 (30.56%) had not received training for the same (Table 20) and similar response was reported in a qualitative study conducted in Udupi district of Karnataka in 2017 that many of their participants opined they had low awareness towards NPCDCS and a health worker had stated that after an initial training there were no further training programme.[52]

The necessary equipment required for conduction of NCD camps were available in all 36 Sub-Centres (100%) except for referral cards which was available in only 20% of the SCs (Table 22). All the parameters required for screening high risk individuals for NCDs were being checked in all 36 SCs (100%) except for screening of precancerous lesions, which was being done in 70% of the SCs, which may be due initial stages of implementation of the programme where the cancer component is yet to be sensitized in Belagavi district (Table 23).

In a study conducted in Surendranagar district of Gujarat in 2015, they reported that out of the ten Sub-Centres evaluated, only data monitoring and referral services were being done in all SCs (100%), but the supply of IEC materials and screening activities was carried out in only 20% of the SCs, which was quite low when compared to the present study.

Beneficiaries of NPCDCS who were screened at NCD camps held at Sub-centres:

In this study, a total of 360 study participants were selected, ten each from the selected 36 SCs who had attended the NCD camps conducted at the Sub-Centres.

In the present study 162 (45%) of the participants belonged to the age group of 30-40 years, 210 (58.33%) of the participants were females, 323 (89.72%) of them were married and 295 (81.94%) of them were Hindus. 165 (45.83%) of them belonged to nuclear family and 141 (39.17%) of them belonged to joint family. 147 (40.83%) of them had completed primary education and only 10 (2.78%) of them had completed educational qualification up to graduation/degree course and 86 (23.89%) of them were daily wage workers. 204 (56.67%) of the study participants were BPL ration card holders and 227 (63%) of the participants belonged to Class IV and Class V socio-economic status according to modified B. G. Prasad's classification.

In this study, it was observed that overall 47.89% of the study participants were aware about NCDs, while remaining 43.11% were unaware about it. 193 (53.61%) of the study participants were aware about diabetes, while 140 (38.89%) of them were unaware about diabetes. In a KAP study conducted on 116 participants about diabetes in Mumbai in 2016, reported that 43.1% of the participants were aware about diabetes, which was less compared to our study.[64] In another study conducted in Tamil Nadu among 43 participants in 2015, stated that 81% of the participants were aware about diabetes which was in contrast to the present study.[65]

The awareness about hypertension in the present study was seen among 182 (50.56%) of the participants and 165 (45.83%) of them were not aware of it. In a study conducted in Nagpur of Maharashtra conducted among 280 adults aged 18 years and above in 2017, reported that 62% of the participants were having good knowledge about hypertension, which was more when compared to the present study.[63]

In an another study conducted in Tamil Nadu among 50 participants in 2016, reported that 94% of the study participants were aware about hypertension, which was quite high compared to the present study, which may be due to the study being a hospital based study.[66] In the present study, the awareness about Cardio-vascular diseases was seen among 92 (25.56%) of the participants and 209 (58.06%) were not aware about CVDs, similarly 217 (60.28%) of them were aware about cancers and 178 (49.44%) were aware about stroke.

In the present study it was noted that, the information about NCD camps (Table 36) were given by ASHAs to 122 (33.89%) of the participants, Anganwadi workers were the informants for 84 (23.33%) of the participants, followed by neighbours (9.72%), Male Health Workers (6.67%), their friends (6.39%) and by ANMs (5.83%). In a study conducted in ten Sub-centres in Surendranagar district of Gujarat in 2015 reported that, 11% of the times, ASHAs and Anganwadi workers were the source of information about NCD camps, the findings of which were contradictory to the present results.[15]

In the present study, it was noted that 260 (72.22%) of the participants were aware about NCD camps (Table 37), while 42 (11.67%) of them were not aware about NCD camps. In a study conducted in Surendranagar district of Gujarat in 2015 reported that, 21% in the community were aware about the camps, while 79% were not aware, which was contradictory to the results of the present study.[15]

In the present study it was noted that 212 (58.89%) of the participants approached the nearby PHC for NCD health care and 107 (29.72%) of them approached private hospital (Table 38). In a study conducted on 84 respondents of 254 households in Mumbai in 2016, reported that more than 81% of the diabetic and hypertensive patients approached private hospital for health care, which was

contradictory in comparison with our result.[10] In another study conducted in Manipal of Karnataka on 405 households in 2016 reported that 57.7% of the rural population approached private sector while 42.3% approached government sector.[67]

It was noted in the present study that, 42 (11.67%) of the study participants had the habit of smoking, 44 (12.22%) of them had the habit of alcohol consumption and 63 (17.50%) of them had the habit of chewing tobacco (Table 39). In a study conducted on 350 individuals aged 18 years and above in Shimla of Himachal Pradesh in 2016, reported that the tobacco use as smoking was 21.4% and smokeless use of tobacco was 2.3% and alcohol consumption was 36%, which was slightly lesser than that of the present study results.[68]

In the present study it was noted that 306 (85%) of them visited doctor for confirmation of the diseases after being screened positive at NCD camps conducted at Sub-centres, while 15% of them didn't visit and the major reason given was that they were busy at work (61.11%) and the PHC was far away was the response given by 20.37% of participants (Table 40 and Table 41). In a study by Deshmukh et al. conducted in Maharashtra on 84 participants in 2016, reported that 66% of hypertensive and 59% of diabetic individuals visited doctor, which was quiet less compared to the results of the present study and the reason mentioned for not visiting the doctor was asymptomatic nature of the disease and financial constraints.[10]

In this study it was observed that 268 (74.44%) of the participants were compliant for medication / treatment, regular follow up was seen in 67.22% of participants, while 25.56% were not compliant and the reasons enlisted for non-compliance was non-availability of medications at PHC (34.78%), 32.61% opined that medications were costly and 13.04% said that PHC was far away (Tables 42 & 43). In a study by Deshmukh et al. conducted in Maharashtra on 84 participants in

2016, reported that 76% of the participants were on medications, 74% of them on regular follow up and reason for non-compliance for medications were longer distance of health care provider, financial constraints and dissatisfaction from treatment, compared to which in the present study 74% of study participants were on medications and 67% of the participants were on follow up.[10]

308 (85.56%) of the participants informed that they were referred to higher health care centres for further confirmation and management of the disease and 185 (51.39%) of participants were not getting the necessary medications free of cost with respect to treatment of NCDs. 37% of the study participants felt that the programme was useful for the community. It was also noted in the present study that the participants who were aware, visited the doctor for confirmation of the disease and among them the compliance for medication and follow up care was better and proved statistically significant.

Conclusion

The implementation of NPCDCS was 100% in health care facilities at all levels, which included the District Hospital (DH), Community Health Centre (CHC), Primary Health Centres (CHCs) and selected Sub-centres in Belagavi taluka.

District Hospital:

The NCD clinic was established in Belagavi district hospital with 100% manpower, but the establishment of Cardiac Care Unit and availability of emergency services for NCDs was due. The necessary laboratory investigations were available and also the equipment were adequate with respect to NPCDCS as per the guidelines.

Community Health centre:

The NCD clinic was established at Hirebagewadi CHC, but with no adequate manpower and the necessary laboratory investigations were partially available (45%) and the equipment were adequate. There was a well-established referral services for emergency patients of NCDs.

Primary Health Centres:

Opportunistic screening and health promotion activities were carried out in all 12 PHCs (100%) with adequate man power and equipment, but need to strengthen availability of laboratory investigations for diagnosis of uncomplicated NCDs and treatment.

Sub-Centres:

NCD screening camps were being conducted at all selected Sub-Centres, but not up to the requirement as per guidelines and only 69% of ANMs had received training for NPCDCS and the necessary equipment and IEC / health education materials were available at Sub-Centres for conduction of NCD camps.

Beneficiaries of NCD camps conducted at Sub-centres:

Knowledge and awareness about NCDs was not sufficient among the beneficiaries under NPCDCS and it was observed that ASHAs and Anganwadi workers played the key role of informants for public about conduction of NCD camps. Though the beneficiaries were referred to their respective PHCs for confirmation of the disease, the participants were ignorant and compliance for medications and follow up care was poor. It was observed in the present study that the participants who visited the doctor for confirmation of the disease had better compliance for medications and follow up care.

Strengths of the study

1. The present study covered a large population of NCD camp beneficiaries.
2. The health care facilities at all levels (District hospital, Community Health Centre, Primary Health Centres and Sub-Centres) were assessed.
3. The NPCDCS service utilization by the beneficiaries was assessed and also addressed reasons for poor utilization.

Limitations of the study

1. The NPCDCS was newly launched in the Belagavi district, so it was not possible to assess the full long term impact of the programme
2. Only diabetes and hypertension component of the programme was addressed in the present study, as other services regarding cardiovascular diseases, cancer and stroke were yet to be launched in Belagavi district during data collection.
3. The beneficiaries were interviewed after six months of their visit to NCD camps at Sub-centres, which might have led to recall bias.

Recommendations

1. **At District level:**

- The skilled man power recruitment needs to be addressed for effective implementation and provision of health care under NPCDCS at district hospital.
- Specialists for CCU at district hospital for provision of emergency health care services must be recruited.

2. **At Community Health Centre:**

The skilled man power recruitment needs to be addressed for effective implementation and provision of health care under NPCDCS at CHC.

3. **At Primary health Centres:**

- All staff must be trained for NPCDCS and periodic training is necessary, especially for Medical officers, ANMs, staff nurse, laboratory technicians and pharmacists for newer updates on identification and management of NCDs.
- Laboratory investigations must be made available, as per the guidelines which are necessary for early detection of NCD to initiate early treatment.
- Referral services of complicated NCD cases under NPCDCS needs to be strengthened.

4. **At Sub-centres:**

- Follow up treatment services for screened beneficiaries who will be attending the further NCD camps at Sub-centres under NPCDCS must be made available at Sub-centres for better compliance and follow up.
- NCD camps to be conducted more frequently / regularly in order to ensure 100% of target population.

- Referral cards to be made available for referral of suspected cases for further management.

5. At Community level:

- The public needs to be sensitized towards NCDs, by making them aware about risk factors and services availability by IEC / health education by mass media and health care staff.
- To involve local leaders, youth associations, self-help groups, mahila mandal and local NGOs for their voluntary involvement in sensitization of community towards NCDs.
- Tracking of screened individuals for follow up using modern technologies, like SMS alerts.

Summary

This study was conducted in Belagavi taluka of Belagavi district in Karnataka to assess the implementation of the 'National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke' (NPCDCS) with respect to hypertension and diabetes at various levels of health care facilities, which included the Belagavi District Hospital, Hirebagewadi Community Health Centre, 12 Primary Health Centres, selected 36 Sub-centres and 360 beneficiaries, (ten from each Sub-centre who had attended the NCD screening camps six months prior to visit of interviewer) conducted at selected sub-centres in Belagavi taluka.

The variables used in this study were derived from the revised operational guidelines for NPCDCS by Ministry of Health and Family Welfare, Government of India, as well as the revised Indian Public Health Standards based on the type of health care facility assessed. The concerned Medical Officers, Auxiliary Nurse Midwives or Male Health workers were contacted and interviewed after obtaining official permission from the District Health Officer of Belagavi district.

The implementation of the NPCDCS was 100% at the Belagavi district hospital with establishment of the NCD clinic and performance of activities of opportunistic screening of the individuals aged 30 years and above, health promotion activities, emergency treatment and referral services, OPD and IPD care, but services of palliative care and day care chemotherapy was not available and establishment of the CCU was still due at the time of the visit. The man-power for district NCD clinic was adequate as per the requirement mentioned in the guidelines.

There was implementation of the programme in the Hirebagewadi CHC, with establishment of the NCD clinic, but the manpower availability was inadequate with vacant posts of the physician, counsellor and a GNM. The activities of opportunistic screening, health promotion, OPD care was rendered and also there was a well-established referral services for the emergency cases of NCDs. The necessary laboratory investigations were not available and the availability of the equipment were inadequate at the time of data collection.

Among the 12 PHCs, there was active implementation of the programme in all the 12 PHCs with provision of services of opportunistic screening of the individuals aged 30 years and above, health promotion activities. The PHCs covered a population of 4, 77,805 with 70 Sub-Centres, mean population covered by each PHC being 39,817and mean population per SC being 6,825. The activities of Out-patient care, In-patient care were rendered was 100% and the necessary equipment were available in all 12 PHCs, but most of the PHCs had inadequate laboratory facilities needed as per guidelines for early identification and treatment of NCDs and the ECG machine was available in only one PHC out of the 12 PHCs in Belagavi taluka.

There was active implementation of the NPCDCS in all 36 selected Sub-Centres and the services of opportunistic screening of the individuals aged 30 years and above and health promotion activities were rendered. The selected 36 Sub-Centres covered a population of 2, 48,753 with mean Sub-Centre population of 6,909. 63% of the SCs were conducting the NCD camps weekly, with average number of NCD camps conducted per SC being 30 per year and the population screened for NCDs across 36 SCs was 64, 096 accounting to 25.77% of the target

population. The prevalence of diabetes was found to be 4.87% and prevalence of hypertension was found to be 4.99% among those who were screened at sub-centre NCD camps. 69% of the ANMs had received training regarding NPCDCS and all the necessary equipment was available except for referral cards.

Out of the 360 beneficiaries, who attended sub-centre NCD camps 58.33% were females, 89.72% were married, 82% were Hindus by religion, 45.83% belonged to nuclear family, 40.83% of them had completed primary schooling, 56.67% were BPL ration card holders and 63% of them belonged to Class IV and Class V socio-economic status. Overall awareness about NCDs was 43.11%, Anganwadi workers and ASHAs were the informants about the sub-centre NCD camps for 56% of the participants. 72.22% of them were aware about NCD camps, 58.89% of them approached nearest PHC for health care and 85% of the participants visited the doctor for confirmation of the disease, 74.44% were compliant for prescribed medications, 67.22% of them were on regular follow up and only 48.61% of them received medications for free from the government health care facilities. The study participants who had visited doctor for confirmation of the disease had better follow up and compliance for medication and it was proven statistically significant.

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ANNEXURE I – ETHICAL CLEARANCE LETTER

K.L.E.UNIVERSITY'S
JAWAHARLAL NEHRU MEDICAL COLLEGE,
NEHRU NAGAR, BELAGAVI-590010 (KARNATAKA-INDIA)
(Accredited 'A' Grade by NAAC)

Website: http//www.jnmc.edu
E-Mail : dome@jnmc.edu

Phone: (+ 91-(0)831 Office : 2471350
Principal: 2471701
Fax No. +91 (0)831 – 2470759

Ref: MDC/DOME/ 03 **Date: 17/10/2016**

To,

Dr. [redacted]
PG student in Community Medicine,
J.N.Medical College,
BELAGAVI.

Sub: Institutional Ethical Clearance for the study.

With reference to the above, we wish to inform you that your proposed research project titled **"ASSESSMENT OF NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF CANCER, DIABETES CARDIOVASCULAR DISEASE AND STROKE (NPCDCS) WITH REFERENCE TO INDIVIDUALS SCREENED POSITIVE FOR DIABETES AND HYPERTENSION AT SUB -CENTRE LEVEL CAMPS IN BELAGAVI TALUKA IN KARNATAKA – A CROSS SECTIONAL STUDY",** is ethical and justifiable. The proposed research project has been cleared by the JNMC Institutional Ethics Committee on Human Subjects Research.

(Dr. Arathi Darshan)
Member Secretary
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

(Dr. Ganga Pilli)
Chairman,
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

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ANNEXURE II – PERMISSION LETTER – DISTRICT HEALTH AND FAMILY WELFARE OFFICER, BELAGAVI.

depart_LH_Un 2016.260

K.L.E. University
JAWAHARLAL NERHU MEDICAL COLLEGE, BELAGAVI.
Accredited 'A' Grade by NAAC
DEPARTMENT OF COMMUNITY MEDICINE

College Office – 91-831-2471350, Dept.91-831-2444065 Email : jnmc@sancharnet.in, commed@jnmc.edu

Ref. No.: SPM/

Date: 23/11/2016.

From,
Dr
Post – Graduate Student,
Dept. of Community Medicine
KLE University's
J.N.Medical College, Belagavi.

To,
The District Health and Family Welfare Officer,
Vaccine Depot, Tilakwadi,
BELAGAVI.

(Through Proper Channel)

Sub: Request for permission for data collection in Govt. Health Centres of Belagavi Taluk.

Respected Sir,

I am a post – graduate student in Community Medicine at KLE University's J.N.Medical College, Belagavi. I wish to do my dissertation on **"Assessment of National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke with reference to individuals screened positive for Diabetes and Hypertension in Belagavi taluk, Karnataka – A Cross sectiona study"** under the guidance of M.S., Professor of Community Medicine, JNMC.

I need to interview selected individuals who are screened positive for Diabetes and Hypertension in NPCDCS camps of selected sub centres of Belagavi taluk for research purpose. Kindly permit me to do the same by contacting staff of PHC, SC and access to official records. The data will be kept confidential and used for research purpose only.

A copy of prposed dissertation synopsis is enclosed herewith, for your kind perusal. Kindly do the needful.

Thanking you,

(Dr.(Mrs.) P.R.Walvekar)
Professor & Head,
Dept. of Community Medicine
K.L.E. University's J.N.Medical College,
Belagavi-590 010.

Office of the Principal J.N. MEDICAL COLLEGE BELAGAVI

PRINCIPAL,
J.N.MEDICAL COLLEGE, BELAGAVI

ANNEXURE II A– PERMISSION LETTER ADDRESSED TO COMMISSIONER, DEPARTMENT OF HEALTH AND FAMILY WELFARE SERVICES, GOVERNMENT OF KARNATAKA, BENGALURU.

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K.L.E. University
JAWAHARLAL NERHU MEDICAL COLLEGE, BELAGAVI.
Accredited 'A' Grade by NAAC (2nd Cycle)
DEPARTMENT OF COMMUNITY MEDICINE
College Office – 91-831-2471350, Dept 91-831-2444065 Email jnmc@sancharnet.in, commed@jnmc.edu

Ref. No.: SPM/ Date: 29/05/2017.

From,
Dr.
Post – Graduate Student,
Dept. of Community Medicine
KLE University's
J.N.Medical College, Belagavi.

To,
The Commissioner,
Health and Family Welfare Services,
Anandrao Circle,
BENGALURU.

(Through Proper Channel)

Sub: Request for permission for data collection in Govt. Health Centres of Belagavi Taluk.
Ref: our request letter No.SPM/ dated 04/01/2017.

Respected Sir,

With reference to the above, I am a post – graduate student in Community Medicine at KLE University's J.N.Medical College, Belagavi. I wish to do my dissertation on **"Assessment of National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke with reference to individuals screened positive for Diabetes and Hypertension in Belagavi taluk, Karnataka – A Cross sectiona study"** under the guidance of M.S., Professor of Community Medicine, JNMC.

I need to interview selected individuals who are screened positive for Diabetes and Hypertension in NPCDCS camps of selected sub centres of Belagavi taluk for research purpose. Kindly permit me to do the same by contacting staff of PHC, SC and access to official records. The data will be kept confidential and used for research purpose only.

A copy of prposed dissertation synopsis is enclosed herewith, for your kind perusal. Kindly do the needful.

Thanking you,

PRINCIPAL,
J.N.MEDICAL COLLEGE, BELAGAVI

PRINCIPAL
Jawaharlal Nehru Medical College
BELAGAVI

ANNEXURE II B – PERMISSION LETTER ADDRESSED TO THE STATE PROGRAMME OFFICER, STATE NCD CELL, DEPARTMENT OF HEALTH AND FAMILY WELFARE SERVICES, GOVERNMENT OF KARNATAKA, BENGALURU.

depart_LH_Un 20177.96

K.L.E. University
JAWAHARLAL NERHU MEDICAL COLLEGE, BELAGAVI.
Accredited 'A' Grade by NAAC (2nd Cycle)
DEPARTMENT OF COMMUNITY MEDICINE

College Office – 91-831-2471350, Dept 91-831-2444065 Email : jnmc@sancharnet.in, commed@jnmc.edu

Ref. No.: SPM/ Date: 29/05/2017.

From,
Dr.
Post – Graduate Student,
Dept. of Community Medicine
KLE University's
J.N.Medical College, Belagavi.

To,
The State Programme Officer,
State NCD Cell,
Directorate of Health & Family Welfare,
Family Welfare Services,
Anandarao Circle,
BENGALURU.

(Through Proper Channel)

Sub: Request for permission for data collection in Govt. Health Centres of Belagavi Taluk.

Respected Sir/Madam,

I am a post – graduate student in Community Medicine at KLE University's J.N.Medical College, Belagavi. I wish to do my dissertation on **"Assessment of National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke with reference to individuals screened positive for Diabetes and Hypertension in Belagavi taluk, Karnataka – A Cross sectiona study"** under the guidance of

Professor of Community Medicine, JNMC.

I need to interview selected individuals who are screened positive for Diabetes and Hypertension in NPCDCS camps of selected sub centres of Belagavi taluk for research purpose. Kindly permit me to do the same by contacting staff of PHC, SC and access to official records. The data will be kept confidential and used for research purpose only.

A copy of prposed dissertation synopsis is enclosed herewith, for your kind perusal. Kindly do the needful.

Thanking you,

ANNEXURE III – WRITTEN INFORMED CONSENT FORM

WRITTEN INFORMED CONSENT FORM:

"Assessment of National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular disease and Stroke (NPCDCS) with reference to individuals screened positive for Diabetes and Hypertension at Sub-Centre level camps in Belagavi Taluka in Karnataka-A Cross sectional study".

Investigator: Dr. _____ **Guide:** Dr. _____

Introduction:

Non-communicable diseases are a major public health problem. This programme (NPCDCS) was launched by Government of India to tackle the burden of NCDs and to provide health education and health promotion to all. Hence this study is being conducted to find the drawbacks of the programme and to find solution to strengthen the programme at all possible levels.

Methodology:

Beneficiaries who would have attended the NPCDCS camps conducted at Sub-Centre level will be interviewed personally by the investigator by using a predesigned and pretested questionnaire. Beneficiaries who would have attended the camps under NPCDCS at Sub-Centre levels six months prior to the date of data collection will be interviewed by obtaining the list of selected beneficiaries under respective Sub-Centres.

Possible benefits:

The investigator does not promise or guarantee you any direct benefits or services from this study. This study is going to help in assessing the services of the programme and will give necessary feedback to appropriate authorities and suggest improvement measures for further strengthening of programme.

Possible risks:

There are no risks involved in this study.

Cost of participation:

The cost of the study will be entirely borne by the researcher. There will be no cost to you for your participation in this study.

Legal rights:

By signing this consent form, you are not waiving off any of your legal rights.

Privacy and Confidentiality:

Your personal identity will not be revealed and all information collected will be coded so that, no one other than the investigator, will know your identity.

Withdrawal from the study:

You can withdraw from the study at any point of time, if you wish so and you will not be devoid of any benefits from the programme, which you are entitled to.

Authorization to publish the results:

The researcher may use the information gathered from this study for presentation or publication in scientific journals. However your personal identity will not be revealed.

Questions:

If you have any queries regarding violation of rights or ethical issues, you can contact **Dr. (Mrs.) Ganga S. Pilli**, Chairperson, Institutional Ethics Committee for Human Subjects' Research, J.N. Medical College, KAHER, Belagavi – 590010, Contact number: 9480275601.

CONSENT STATEMENT

"I have been explained in my own understandable language about the contents in this form and my queries have been clarified by the investigator and I have been told that I have the right to withdraw from participating in this study at any point of time. I have been assured that confidentiality will be maintained and will be used only for this study and my identity shall never be revealed in future.

I hereby give my consent for participation in the study voluntarily and not under the influence of the investigator or any other influence".

Name of the participant _____ Signature/ Left thumb impression.

Name of the eyewitness _____ Signature.

Name of the interviewer _____ Signature.

Date: __/__/_____

Place: _____.

Signature of the guide.

ANNEXURE IV – RESEARCH PROFORMA

I. PROFORMA FOR DISTRICT HOSPITAL

DATE: __/__/____ Sl. No: ___

01] Name of the district : _____

02] Population covered : _____

03] Name and designation of the informant: _____

04] Is there active implementation of NPCDCS programme in this district hospital? Yes No

If yes, when was it started in this district hospital? specify_____

05] Is there a separate NCD clinic? Yes No

If yes, when was it started? Specify _____

06] Is opportunistic screening of individuals above the age of 30 years done (for non-communicable diseases in NCD clinic) daily? Yes No

If No, how frequently is screening done, specify _____

07] Are patients referred from SC, PHCs and CHCs to NCD clinic for further management of patients screened during camps? Yes No

08] Are the details of NCD clinic, data of number of patients screened and other necessary data recorded (as per guidelines)? Yes No

09] Is the recorded data reported? Yes No

If yes, to whom is it reported, specify _____

10] How frequently is the data reported?

a) Weekly b) Monthly c) Quarterly d) Yearly

11] Activities of District hospital under NPCDCS (according to guidelines)

Activities	**Yes**	**No**	**If no, reason**
Establishment of CCU (4 bedded)			
Out-patient and In-patient care			
Health promotion			
Day care chemotherapy			
Palliative care			
Training facilities for other staff			

12] Is there referral services for complicated/emergency patients in case of non-availability of treatment here? Yes No

if yes, where are they referred to? specify_____

13] Manpower/Human resource availability under NPCDCS (as per revised operational guidelines of NPCDCS by government of India and IPHS guidelines)

a) **For NCD clinic**

Manpower/ Staff	**Required**	**Available**
General Physician	01	
GNM	02	
Technician	01	
Physiotherapist	01	
Counsellor	01	
Data entry operator	01	

b) **For CCU**

Manpower/ Staff	**Required**	**Available**
Specialist (Cardiologist/ General physician)	01	
GNM	04	

14] Laboratory investigations and Diagnostics availability under NPCDCS (as per revised operational guidelines of NPCDCS by government of India and IPHS guidelines)

Laboratory investigations/Diagnostics	**Availability (Yes)**	**Availability (No)**
Hb%, TC, DC, Platelet count		
Bleeding time, Clotting time		
Blood sugar (FBS,PPBS)		
Lipid profile		
Liver Function Test (LFT)		
Kidney Function test (KFT)		
Urine routine, Urine sugar		
Pap smear		
X-Ray		
Ultrasound (USG)		
ECG		
ECHO		
CT Scan		
MRI		
Mammography (desirable)		

15] Is there facility of outsourcing of investigations if any of the above investigations/ diagnostics are unavailable? Yes No

If yes, from where, specify _____

16] Indicative list of equipment for CCU:

Sl. No	Equipment	Availability (Yes	Availability (No)
01	ECG machine computerized		
02	ECG machine ordinary		
03	12 Channel stress ECG test equipment Tread Mill		
04	Cardiac monitor with defibrillator		
05	Cardiac monitor		
06	Defibrillator		
07	Ventilators (adult) -4		
08	Ventilator (pediatric)		
09	Pulse Oximeter		
10	Pulse Oximeter with NIB		
11	Infusion pump		
12	BP apparatus stand model		
13	BP apparatus table model		
14	Stethoscope		
15	Portable X-ray machine		
16	Central patient monitoring station		
17	Intubation kit, Bronchoscope, Laryngoscope		
18	Portable USG machine		
19	Medical gas pipeline		

17] What is your suggestion to strengthen the programme at district level?

i)_____
_____

ii)_____
_____

--- THANK YOU ---

II. PROFORMA FOR COMMUNITY HEALTH CENTRE (CHC)

DATE: __/__/____ Sl. No: ___

01] Name of the CHC : _____

02] Population covered : _____

03] Name and designation of the informant : _____

04] Is there active implementation of NPCDCS programme in this district hospital?
Yes No
if yes, when was it started in this district hospital? specify_____

05] Is there a separate NCD clinic? Yes No
if yes, when was it started? Specify _____

06] Is opportunistic screening of individuals above the age of 30 years done (for non-communicable diseases in NCD clinic) daily? Yes No
If No, how frequently is screening done, specify _____

07] Are patients referred from SC, PHCs for further management of patients screened during camps? Yes No

08] Are the details of NCD clinic, data of number of patients screened and other necessary data recorded (as per guidelines) Yes No

09] Is the recorded data reported? Yes No
If yes, to whom is it reported, specify _____

10] How frequently is the data reported?
a) Weekly b) Monthly c) Quarterly d) Yearly

11] Activities of Community health centre under NPCDCS (according to guidelines)
a) Health promotion Yes No
b) Out-patient and In-patient care Yes No
c) Diagnosis and treatment of Diabetes, Hypertension, Stroke
Yes No
d) Identification of high risk cases for cardiovascular diseases
Yes No
e) Screening for oral, breast, cervical cancers and provide education about warning signs of these cancers. Yes No

12] Is there referral services for complicated/emergency patients in case of non-availability of treatment here? Yes No
if yes, where are they referred to? specify_____

13] Manpower/Human resource availability (as per revised operational guidelines of NPCDCS by government of India and IPHS guidelines)

Manpower/ Staff	**Required**	**Available**
General Physician	01	
GNM	02	
Technician	01	
Physiotherapist	01	
Counsellor	01	
Data entry operator	01	

14] Laboratory investigations and Diagnostics availability (as per revised operational guidelines of NPCDCS by government of India and IPHS guidelines)

Laboratory investigations/Diagnostics	**Availability (Yes)**	**Availability (No)**
Blood sugar (FBS,PPBS)		
Total cholesterol		
Lipid profile		
Blood urea		
X-ray		
ECG		
Ultrasound (USG)		
Pap smear		

15] Is there facility of outsourcing of investigations if any of the above investigations/ diagnostics are unavailable? Yes No

If yes, from where, specify _____

16] Indicative list of equipment in CHC

Equipment	**Availability (yes)**	**Availability (no)**
Magna visualizer (desirable)		
Indirect laryngoscope (desirable)		
Punch biopsy forceps (desirable)		
ECG machine ordinary		
Cardiac monitor		
Defibrillator		
Pulse Oximeter		
Infusion pump		
Stethoscope		
BP apparatus stand model		
BP apparatus table model		
Weighing scale (adult)		

17] What is your suggestion to strengthen the programme at CHC level?

i)_____

_____

ii)_____

_____

--- THANK YOU ---

II. PROFORMA FOR PRIMARY HEALTH CENTRE

DATE: __/__/____ Sl. No: ___

01] Name of the PHC : _____

02] Population covered : _____

03] Number of sub centres : _____

04] Number of ANM/MSW : _____

05] Name and designation of the informant: _____

06] Does this PHC work 24*7? Yes No

07] Is there active implementation of NPCDCS programme in this district hospital?
Yes No

If yes, when was it started in this district hospital? specify_____

08] Is opportunistic screening of individuals above the age of 30 years done (for non-communicable diseases in OPD) daily? Yes No

If No, how frequently is screening done, specify _____

09] Are patients referred from sub centres after conduction of health check-up camps under NPCDCS for further management? Yes No

10] Are the details of camps, data of number of patients screened and other necessary data recorded (as per guidelines)? Yes No

11] Is the recorded data reported? Yes No

If yes, to whom is it reported, specify _____

12] How frequently is the data reported?

a) Weekly b) Monthly c) Quarterly d) Yearly

13] Activities of PHC under NPCDCS (according to guidelines)

a) Health promotion and behaviour change through counselling
Yes No

b) Early diagnosis and treatment of simple Diabetes and Hypertension
Yes No

c) Identification of high risk cases for cardiovascular diseases
Yes No

d) Screening for oral, breast, cervical cancers and provide education about warning signs of these cancers Yes No

e) Out-patient care Yes No

14] Is there referral services for complicated/emergency patients in case of non-availability of treatment here? Yes No

If yes, where are they referred to? specify_____

15] Have you received IEC materials/Banners/Pamphlets to provide to patients for their knowledge and awareness? Yes No

16] Availability of basic investigations necessary for early detection of Diabetes, hypertension and risk factors for Cardio-vascular diseases.

a) Hb% Yes No
b) Blood sugar (FBS, PPBS) Yes No
c) Blood urea Yes No
d) Lipid profile Yes No

17] Availability of equipment in PHC necessary for screening common NCDs

a) BP apparatus table model Yes No
b) Stethoscope Yes No
c) Weighing scale (adult) Yes No
d) Stadiometer Yes No
e) ECG machine ordinary (desirable) Yes No

18] What is your suggestion to strengthen the programme at PHC level?

i)_____
_____

ii)_____
_____
_

IV. PROFORMA FOR SUB CENTRE

DATE: __/__/____ Sl. No: ___

01] Name of the Sub centre : _____

02] Population covered : _____

03] Name of the PHC it belongs to : _____

04] In charge ANM/MSW : _____

05] Is there active implementation of NPCDCS programme in this sub centre?
Yes No

If yes, when was it started in this district hospital? specify_____

06] Are the health check up camps conducted in this sub centre regularly under NPCDCS? Yes No

07] How often are the camps conducted?
a) Weekly b) Monthly c) Randomly
d) Not known e) When told by senior authorities, Specify_____

08] How many camps have been conducted in this sub centre for the past 12 months? _____

09] What was the population covered in the camps for the past 12 months? _____

10] How many individuals were screened positive for diabetes and hypertension in those camps for the past 12 months?
a) Diabetes only _____
b) Hypertension only _____
c) Both hypertension and diabetes _____

11] How many patients among the screened patients were referred to PHC/CHC or other health facility for further evaluation/confirmation? _____

12] Are the screened patients regularly followed up? Yes No

13] Are the details of camps, data of number of patients screened and other necessary data recorded (as per guidelines)? Yes No

14] Is the recorded data reported? Yes No
If yes, to whom is it reported, specify _____

15] How frequently is the data reported?
a) Weekly b) Monthly c) Quarterly d) Yearly

16] Are the individuals above the age of 30 years screened for diabetes and hypertension by using glucometer and BP measurement respectively?

Yes No

If no, what is the reason? Specify _____

17] Is health education, awareness of risk factors and danger signs of common cancer (oral, cervical, breast) given to patients? Yes No

18] Is there availability of IEC materials, banners and necessary equipment for conduction of camps? Yes No

If yes, who provided those? Specify _____

19] Is any special incentive provided? Yes No

If yes, what is the incentive amount? Specify _____

20] Have you received any training for this particular programme?

Yes No

If no, what is the reason? Specify _____

21] Have the following items been provided for conduction of camps?

a) NPCDCS register	Yes	No
b) IEC materials	Yes	No
c) Referral cards	Yes	No
d) BP apparatus	Yes	No
e) Glucometer	Yes	No
f) Glucometer strips	Yes	No
g) Stethoscope	Yes	No
h) Weighing machine (adult)	Yes	No
i) Stadiometer/measuring tape	Yes	No

22] What are the parameters looked/checked/measured during camps?

a) Height	Yes	No
b) weight	Yes	No
c) Blood pressure	Yes	No
d) Blood sugar (glucometer)	Yes	No
e) Oral cavity/oral lesions (precancerous lesions)	Yes	No
f) History of alcohol consumption	Yes	No
g) history of smoking/chewing tobacco	Yes	No

23] Will there be anyone to monitor the camps? Yes No

If yes, who will be there? Specify _____

24] Have any of the camps conducted in the past 12 months under NPCDCS collaborated with any NGOs/voluntary organizations/local clubs/local bodies?

Yes No If yes, specify _____

25] What is your suggestion to strengthen the programme at sub centre level?

i)_____
_____

ii)_____
_____

V. PROFORMA TO ASSESS KNOWLEDGE, AWARENESS AND UTILIZATION OF NPCDCS SERVICES BY BENEFICIARIES (who attended NCD camp).

Note: "The personal data provided by you will be kept confidential. Only aggregated results will be presented/ published".

DATE: __/__/____ Sl. No: ___

A. SOCIO DEMOGRAPHIC DETAILS:

1] Name : Mr/Mrs/Ms_____

2] Age : ____years

3] Sex a) Male b) Female

4] Marital status a) Single b) Married
c) Divorced d) widow/widower

5] Religion a) Hindu b) Muslim
c) Christian d) Others, specify_____

6] Category a) SC b) ST
c) OBC d) others

7] Type of the family a) Nuclear b) Joint c) Broken

8] Educational qualification a) Illiterate b) Primary (1-5years of schooling)
c) Secondary (6-10 years of schooling)
d) PUC (11^{th}/ 12^{th})/ITI e) Graduation

9] Occupation a) Farmer b) Labourer
c) Self-employed d) Govt. employee e) Pvt. Employee
f) Retired/Pensioner g) Unemployed h) Home maker

10] Total monthly income : Rs_____

11] Number of family members : ____

12] Per capita income : Rs_____/ month

13] Socio economic status : (modifies B.G. Prasad's classification)

a) Class I b) Class II c) Class III d) Class IV e) Class V

B. KNOWLEDGE, AWARENESS AND UTILIZATION OF NPCDCS SERVICES.

KNOWLEDGE:

14] Have you heard of the following diseases?

a) Hypertension (BP)	Yes	No
b) Diabetes (Sugar)	Yes	No
c) Cardiovascular disease (Heart related)	Yes	No
d) Cancer	Yes	No
e) Stroke (Paralysis)	Yes	No

15] Family history of any of these above mentioned diseases

Disease	Father (Yes/No)	Mother (Yes/No)	Siblings (Yes/No)
Hypertension			
Diabetes			
Cardiovascular disease			
Cancer			
Stroke			

16] Are these diseases?

a) Curable	Yes	No
b) Preventable	Yes	No
c) Communicable	Yes	No

17] Can increased blood pressure cause stroke/paralysis? Yes No

18] Can uncontrolled diabetes (sugar) cause blindness/kidney failure?

Yes No

AWARENESS:

19] How did you come to know about the health check-up camp?

a) Through anganwadi worker
b) Through ASHA worker
c) Through banners/pamphlet/public address
d) Through others, specify _____

20] Did you know that blood sugar and blood pressure are checked for free of cost at camps, sub centres, PHC, CHC, District hospital? Yes No

21] In case of illness in any of your family members including you, who do you approach for treatment/medicines? specify_____

PRACTICE:

22] Do you have any of these habits? If yes, specify duration,

a) Smoking Yes No, _____
b) Alcohol consumption Yes No, _____
c) Chewing tobacco/gutka/khaini Yes No, _____.

UTILIZATION OF NPCDCS SERVICES:

23] Have you visited the doctor at PHC/CHC/District hospital/any health facility for confirmation of the disease? Yes No

If no, what is the reason? Specify_____

24] Are you taking the prescribed medicines/tablets regularly? Yes No

If no, what is the reason? Specify_____

25] Are you going for follow up regularly? Yes No

If no, reason, specify_____

26] Was any health education given to you in the camps/at PHC/CHC/District hospital regarding these things?

a) Physical activity/exercise Yes No
b) To eat more fruits and vegetables Yes N
c) Stress management Yes No
d) Avoidance of alcohol/smoking/tobacco Yes No
e) Warning signals of cancer (oral, breast, cervical) Yes No

27] Were you referred to PHC/CHC/District hospital for further evaluation? Yes No

28] How frequently do you get your blood sugar checked and BP measurement?

a) Weekly b) Fortnightly c) When free d) Monthly
e) As per Doctor's advice f) not done

29] Are you getting the medicines/treatment/consultation for free? Yes No

30] Do you find the screening/health check-up camps helpful for the community? Yes No

31] What is your suggestion to strengthen this programme?

i)_____
_____

ii)_____
_____
__

--- THANK YOU ---

ANNEXURE V – List of Equipment as per NPCDCS

1. List of equipment for NCD clinic/CCU for District Hospital:[3]

Sl no	List of equipment
1	ECG machine computerized
2	ECG machine ordinary
3	12 Channel stress ECG test equipment Tread Mill
4	Cardiac Monitor with Defibrillator
5	Cardiac monitor
6	Defibrillator
7	Ventilators (adult)
8	Ventilators (pediatrics)
9	Pulse Oximeter
10	Pulse Oximeter with NIBP (Noninvasive Blood Pressure)
11	Infusion Pump
12	B.P. apparatus stand model
13	B.P. apparatus table model
14	Stethoscope
15	Portable X ray machine
16	Central Patient Monitoring Station
17	Intubation kit, Bronchoscope, laryngoscope
18	Portable ultrasound machine
19	Medical gas pipeline

2. List of equipment for NCD clinic for Community Health Centres:[3]

Sl. No	List of Equipment
1	Magna visualizer (desirable)
2	Indirect laryngoscope (desirable)
3	Punch biopsy forceps (desirable)
4	ECG machine ordinary
5	Cardiac monitor
6	Defibrillator
7	Pulse Oximeter
8	Infusion pump
9	Stethoscope
10	BP apparatus stand model
11	BP apparatus table model
12	Weighing scale (adult)

3. List of Equipment for Primary Health Centres:[3]

Sl. No	List of Equipment
1	BP apparatus table model
2	Stethoscope
3	Weighing scale (adult)
4	Stadiometer
5	ECG machine ordinary (desirable)

ANNEXURE VI – List of Investigations

1. List of Investigations for District Hospital under NPCDCS:[3]

Sl. No	List of Investigations
1	Hb%, TC, DC, Platelet count
2	Bleeding time, Clotting time
3	Blood sugar (FBS, PPBS)
4	Lipid profile
5	Liver Function Tests (LFT)
6	Kidney Function Tests (KFT)
7	Urine routine, Urine sugar
8	Pap smear
9	X-Ray
10	Ultrasound (USG)
11	ECG
12	ECHO (Echocardiography)
13	CT Scan
14	MRI
15	Mammography (desirable)

2. List of investigations for Community Health Centres under NPCDCS:[3]

Sl. No	List of Investigations
1	Blood sugar (FBS, PPBS)
2	Total cholesterol
3	Lipid profile
4	Blood urea
5	X-ray
6	ECG
7	Ultrasound (USG)
8	Pap smear

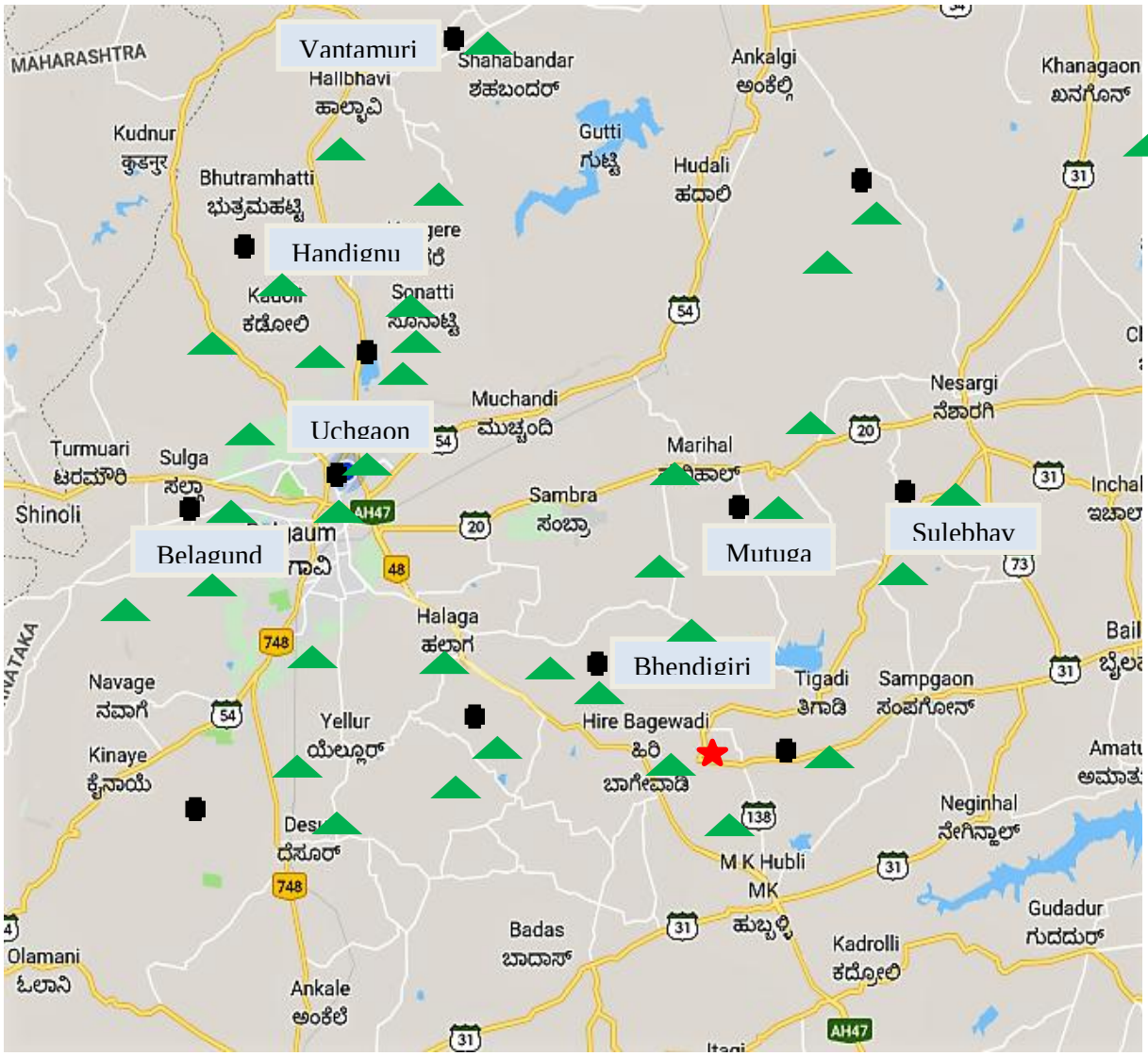
3. List of Investigations for Primary Health Centres under NPCDCS:[3]

Sl. No	List of Investigations
1	Haemoglobin
2	Blood Sugar (FBS, PPBS)
3	Lipid profile
4	Blood urea

ANNEXURE VII – LIST OF SELECTED DISTRICT HOSPITAL, COMMUNITY HEALTH CENTRE, PRIMARY HEALTH CENTRES AND SUB-CENTRES IN BELAGAVI TALUKA OF BELAGAVI DISTRICT.

Sl. No	**Name of the health Facility**	
01	Belagavi District Hospital	
02	Hirebagewadi Community Health Centre	
Sl. No	**Selected Primary Health Centres**	**Selected Sub-Centres**
01	Mutuga	1. Balekundri 2. Mutuga I 3. Sambra
02	Sulebhavi	1. Sulebhavi 2. Modaga 3. Mariyaal
03	Hirebhagewadi	1. Mastmardi 2. Bastwadi 3. Tarihaal
04	Belagundi	1. Belavatti 2. Belagundi 3. Hindalga
05	Uchgaon	1. Sulaga 2. Uchgaon 3. Ambewadi
06	Bhendigiri	1. Bhendigiri 2. K K Koppa 3. Mutnaal
07	Hudali	1. Ashte 2. Khangaon B K 3. Muchandi
08	Handignur	1. Handignur 2. Kangrali K H 3. Agasaga
09	Kadoli	1. Kangraali B K 2. Bombarga 3. Kednur
10	Kinaye	1. Waghwaade 2. Santibastwaad 3. Piranwaadi
11	Vantamuri	1. Vantamuri 2. Honaga 3. Bhutramhatti
12	Yallur	1. Dhamane 2. Yallur III 3. Yallur II

FIGURE 1 – MAP OF BELAGAVI TALUKA SHOWING THE SURVEYED DH, CHC, PHCS AND SELECTED SCS



District Hospital – ●

Community Health Centre – ★

Primary Health Centres –●

Sub-Centres - ▲

ANNEXURE IX – Key to Mater Chart

I. District Hospital data:

A] Name of the district: 1. Belagavi

B] Population covered: 1. < 20,00,000 2. 20,00,000-50,00,000
3. >50,00,000

C] Name and designation of the informant: 1. Medical Officer 2. Staff Nurse
3. ANM 4. Male Health Worker 5. Lab Technician
6. Pharmacist 7. LHV

D] Is there active implementation of NPCDCS in the district hospital?:
1. Yes 0. No

E] When was it started in the district hospital? 1. 2018 2. 2017
3. 2016 4. 2015 5. 2014 6. Before 2013

F] Is there a separate NCD clinic? 1. Yes 0. No

G] When was the NCD clinic started? 1. 2018 2. 2017
3. 2016 4. 2015 5. 2014 6. Before 2013

H] Is opportunistic screening of individuals above the age of 30 years done daily?
1. Yes 0. No

I] Are patients referred from SC, PHCs, CHCs to NCD clinic?
1. Yes 0. No

J] Are the details of NCD clinic and necessary data recorded?
1. Yes 0. No

K] Is the recorded data reported? 1. Yes 0. No

L] To whom is the data reported? 1. Taluka Health Office
2. District Health Office 3. District Surveillance Office
9. Don't Know

M] How frequently is the data reported? 1. Weekly 2. Monthly
3. Quarterly 4. Yearly 9. Don't know

N] Establishment of CCU? 1. Yes 0. No

O] Out Patient Care? 1. Yes 0. No

P] In Patient Care? 1. Yes 0. No

Q] Health Promotion: 1. Yes 0. No

R] Day care Chemotherapy: 1. Yes 0. No

S] Palliative care: 1. Yes 0. No

T] Training Facilities for other staff: 1. Yes 0. No

U] Is there referral services for complicated patients in case of non-availability of treatment here? 1. Yes 0. No

V] Availability of General Physician: 1. Yes 0. No

W] Availability of 2 GNM: 1. Yes 0. No

X] Availability of Technician: 1. Yes 0. No

Y] Availability of Physiotherapist: 1. Yes 0. No

Z] Availability of Counsellor: 1. Yes 0. No

AA] Availability of Data entry operator: 1. Yes 0. No

AB] Availability of Cardiologist for CCU: 1. Yes 0. No

AC] Availability of 4 GNM for CCU: 1. Yes 0. No

AD] Availability of CBC investigation: 1. Yes 0. No

AE] Availability of BT, CT investigation: 1. Yes 0. No

AF] Availability of Blood sugar (FBS, PPBS) investigation: 1. Yes 0. No

AG] Availability of lipid profile investigation: 1. Yes 0. No

AH] Availability of Liver Function test investigation: 1. Yes 0. No

AI] Availability of Renal function test investigation: 1. Yes 0. No

AJ] Availability of Urine routine, Urine sugar investigation: 1. Yes 0. No

AK] Availability of Pap smear investigation: 1. Yes 0. No

AL] Availability of X-ray investigation: 1. Yes 0. No

AM] Availability of USG investigation: 1. Yes 0. No

AN] Availability of ECG: 1. Yes 0. No

AO] Availability of ECHO: 1. Yes 0. No

AP] Availability of CT scan: 1. Yes 0. No

AQ] Availability of MRI: 1. Yes 0. No

AR] Availability of Mammography: 1. Yes 0. No

AS] Is there outsourcing of unavailable investigations? 1. Yes 0. No

AT] Availability of computerized ECG machine: 1. Yes 0. No

AU] Availability of ordinary ECG machine: 1. Yes 0. No

AV] Availability of 12 channel stress ECG test tread mill: 1. Yes 0. No

AW] Availability of cardiac monitor with defibrillator: 1. Yes 0. No

AX] Availability of cardiac monitor: 1. Yes 0. No

AY] Availability of defibrillator: 1. Yes 0. No

AZ] Availability of 4 adult ventilators: 1. Yes 0. No

BA] Availability of pediatric ventilator: 1. Yes 0. No

BB] Availability of pulse Oximeter: 1. Yes 0. No

BC] Availability of pulse Oximeter with NIB: 1. Yes 0. No

BD] Availability of Infusion pump: 1. Yes 0. No

BE] Availability of BP apparatus stand model: 1. Yes 0. No

BF] Availability of BP apparatus table model: 1. Yes 0. No

BG] Availability stethoscope: 1. Yes 0. No

BH] Availability portable X-ray machine: 1. Yes 0. No

BI] Availability central patient monitoring station: 1. Yes 0. No

BJ] Availability intubation kit/bronchoscope/laryngoscope: 1. Yes 0. No

BK] Availability of portable USG machine: 1. Yes 0. No

BL] Availability of medical gas pipeline: 1. Yes 0. No

II. **Community Health Centre data**:

A] Name of the CHC: 1. Hirebagewadi

B] Population covered: 1. 80,000 2. 80,000-1,20,000
3. 1,20,000-2,00,000 4. >2,00,000

C] Name and designation of the informant: 1. Medical Officer 2. Staff Nurse
3. ANM 4. Male Health Worker 5. Lab Technician
6. Pharmacist 7. LHV

D] Is there active implementation of NPCDCS in the CHC?: 1. Yes 0. No

E] When was it started in the district hospital? 1. 2018 2. 2017
3. 2016 4. 2015 5. 2014 6. Before 2013

F] Is there a separate NCD clinic? 1. Yes 0. No

G] When was the NCD clinic started? 1. 2018 2. 2017
3. 2016 4. 2015 5. 2014 6. Before 2013

H] Is opportunistic screening of individuals above the age of 30 years done daily?
1. Yes 0. No

I] Are patients referred from SC, PHCs, to NCD clinic? 1. Yes 0. No

J] Are the details of NCD clinic and necessary data recorded?
1. Yes 0. No

K] Is the recorded data reported? 1. Yes 0. No

L] To whom is the data reported? 1. Taluka Health Office
2. District Health Office 3. District Surveillance Office
9. Don't Know

M] How frequently is the data reported? 1. Weekly 2. Monthly
3. Quarterly 4. Yearly 9. Don't know

N] Health promotion: 1. Yes 0. No

O] Out-patient care: 1. Yes 0. No

P] In-patient care: 1. Yes 0. No

Q] Diagnosis and treatment of Diabetes, Hypertension, stroke:
1. Yes 0. No

R] Identification of high risk cases for CVD: 1. Yes 0. No

S] Screening for oral, breast, cervical cancers: 1. Yes 0. No

T] Is there referral services for complicated patients in case of non-availability of treatment here? 1. Yes 0. No

U] Where are the patients referred? 1. District hospital 2. KLE hospital 3. Others

V] Availability of General Physician: 1. Yes 0. No

W] Availability of 2 GNM: 1. Yes 0. No 3. Partial

X] Availability of Technician: 1. Yes 0. No

Y] Availability of Physiotherapist: 1. Yes 0. No

Z] Availability of Counsellor: 1. Yes 0. No

AA] Availability of Data entry operator: 1. Yes 0. No

AB] Availability of Blood sugar (FBS, PPBS) investigation: 1. Yes 0. No

AC] Availability of total cholesterol investigation: 1. Yes 0. No

AD] Availability of Lipid profile investigation: 1. Yes 0. No

AE] Availability of blood urea test investigation: 1. Yes 0. No

AF] Availability of X-Ray investigation: 1. Yes 0. No

AG] Availability of ECG investigation: 1. Yes 0. No

AH] Availability of USG investigation: 1. Yes 0. No

AI] Availability of Pap smear: 1. Yes 0. No

AJ] Is there facility of outsourcing of investigations: 1. Yes 0. No

AK] Availability of Magna visualizer (desirable): 1. Yes 0. No

AL] Availability of indirect laryngoscope (desirable): 1. Yes 0. No

AM] Availability of punch biopsy forceps (desirable): 1. Yes 0. No

AN] Availability of ordinary ECG machine: 1. Yes 0. No

AO] Availability of cardiac monitor: 1. Yes 0. No

AP] Availability of defibrillator: 1. Yes 0. No

AQ] Availability of pulse Oximeter: 1. Yes 0. No

AR] Availability of Infusion pump: 1. Yes 0. No

AS] Availability stethoscope: 1. Yes 0. No

AT] Availability of BP apparatus stand model: 1. Yes 0. No

AU] Availability of BP apparatus table model: 1. Yes 0. No

AV] Availability of weighing scale (adult): 1. Yes 0. No

III. Primary Health Centre data:

A] Name of the PHC: 1. Mutuga 2. Sulebhavi
3. Hirebhagewadi 4. Belagundi
5. Uchgaon 6. Bhendigeri
7. Hudali 8. Handignur
9. Kadoli 10. Kinaye
11. Vantamuri 12. Yallur

B] Population covered: 1. <30,000 2. 30,000-40,000
3. 40,000-50,000 4. >50,000

C] Number of sub-centres: 1. 1 2. 2 3. 3
4. 4 5. 5 6. 6
7. 7 8. 8 9. 9

D] Number of ANM: 1. 1 2. 2 3. 3
4. 4 5. 5 6. 6
7. 7 8. 8 9. 9

E] Number of MSW: 1. 1 2. 2 3. 3
4. 4 5. 5 6. 6
7. 7 8. 8 9. 9

F] Name and designation of informant: 1. Medical Officer 2. Staff Nurse
3. ANM 4. Male Health Worker 5. Lab Technician
6. Pharmacist 7. LHV

G] Is it 24 X 7 PHC? 1. Yes 0. No

H] Is there active implementation of NPCDCS? 1. Yes 0. No

I] When was NPCDCS programme started? 1. 2018 2. 2017
3. 2016 4. 2015 5. 2014 6. Before 2013
9. Don't know

J] Is opportunistic screening of individuals above 30 years of age done daily?
1. Yes 0. No

K] Are patients referred from Sub-centres? 1. Yes 0. No

L] Are details of camps recorded? 1. Yes 0. No

M] Is the recorded data reported? 1. Yes 0. No

N] To whom is the data reported? 1. Taluka Health Office
2. District Health Office 3. District Surveillance Office
9. Don't Know

O] How frequently is the data reported? 1. Weekly 2. Monthly
3. Quarterly 4. Yearly 9. Don't know

P] Health promotion: 1. Yes 0. No

Q] Diagnosis and treatment of Diabetes, Hypertension: 1. Yes 0. No

R] Identification of high risk cases for CVD: 1. Yes 0. No

S] Screening for oral, breast, cervical cancers: 1. Yes 0. No

T] Out-patient care: 1. Yes 0. No

U] Is there referral services for complicated patients in case of non-availability of treatment here? 1. Yes 0. No

V] Where are the patients referred? 1. District hospital 2. KLE hospital
3. Others

W] Have you received IEC materials/Banners/Pamphlets? 1. Yes 0. No

X] Availability of Haemoglobin investigation: 1. Yes 0. No

Y] Availability of Blood sugar (FBS/PPBS): 1. Yes 0. No

Z] Availability of Blood urea investigation: 1. Yes 0. No

AA] Availability of lipid profile investigation: 1. Yes 0. No

AB] Availability of BP apparatus table model: 1. Yes 0. No

AC] Availability of Stethoscope: 1. Yes 0. No

AD] Availability of Weighing machine (adult): 1. Yes 0. No

AE] Availability of Stadiometer: 1. Yes 0. No

AF] Availability of ordinary ECG machine (desirable): 1. Yes 0. No

IV. Sub-centre data:

A] Name of the sub-centre:

1.1 Balekundri	1.2 Mutuga I	1.3 Sambra
2.1 Sulebhavi	2.2 Modaga	2.3 Mariyaal
3.1 Mastmardi	3.2 Bastwadi	3.3 Tariyad
4.1 Belavatti	4.2 Belagundi	4.3 Hindalga
5.1 Sulaga	5.2 Uchgaon	5.3 Ambewadi
6.1 Bhendigiri	6.2 K. K. Koppa	6.3 Mutnaal
7.1 Aste	7.2 Khangaon B. K.	7.3 Muchandi
8.1 Handignur	8.2 Kangrali K. H.	8.3 Agasiga
9.1 Kangrali B.K.	9.2 Bombarga	9.3 Kednur
10.1 Waghwade	10.2 Santibastwad	10.3 Piranwadi
11.1 Vantamuri	11.2 Honaga	11.3 Bhutramhatti
12.1 Dhamane	12.2 Yellur III	12.3 Yellur II

B] Population covered: _____ 1. < 5,000 2. 5,000 – 10,000 3. > 10,000

C] Name of the PHC it belongs to?

1. Mutuga	2. Sulebhavi
3. Hirebhagewadi	4. Belagundi
5. Uchgaon	6. Bhendigeri
7. Hudali	8. Handignur
9. Kadoli	10. Kinaye
11. Vantamuri	12. Yallur

D] Is there active implementation of NPCDCS in the sub-centre? 1. Yes 0. No

E] When was NPCDCS programme started? 1. 2017-2018 2. 2016-2017 3. 2015-2016 4. 2014-2015 5. 2013-2014 6. Before 2013 9. Don't know

F] Are the health check-ups conducted under NPCDCS regularly? 1. Yes 0. No

G] How often are the camps conducted? 1. Weekly 2. Monthly 3. Randomly 4. When told by superiors 9. Don't know

H] How many camps have been conducted in the past 12 months? _____ 9. Don't know/Not available

I] What was the population covered in the past 12 months? _____ 9. Don't know/Not available

J] How many individuals were screened positive for Diabetes in past 12 months? _____ 9. Don't know/Not available

K] How many individuals were screened positive for Hypertension in past 12 months? _____ 9. Don't know/Not available

L] How many individuals were screened positive for Diabetes and Hypertension in past 12 months? _____ 9. Don't know/Not available

M] How many screened positive patients were referred to PHC/higher centre? _____ 9. Don't know/Not available

N] Are the screened patients regularly followed up? 1. Yes 0. No

O] Are the details of patients and camps recorded? 1. Yes 0. No

P] Is the data recorded reported? 1. Yes 0. No

Q] To whom is the data reported? 1. MO 2. LHV 3. Senior Male
4. Taluka Health Office 5. District Health Office
6. District Surveillance Office 9. Don't Know

R] How frequently is the data reported? 1. Weekly 2. Monthly
3. Quarterly 4. Yearly 9. Don't know

S] Are individuals screened using glucometer and BP apparatus? 1. Yes 0. No

T] Health education, awareness regarding cancer (breast, oral, cervical) given to patients? 1. Yes 0. No

U] Is there availability of IEC materials/banners for camps? 1. Yes 0. No

V] Who provided those IEC materials? 1. PHC 2. Taluka Health Office
3. DSO 4. District Health Office
9. Don't know

W] Is any special incentive provided for conduction of camps? 1. Yes 0. No
9. Don't know

X] Have you received any training for this programme? 1. Yes 0. No

Y] What was the reason for not receiving training? 1. Leave
2. Not joined to duty yet 3. Don't remember
4. Maternity leave 5. No training given after joining
9. Not applicable

Z] Availability of NPCDCS register: 1. Yes 0. No

AA] Availability of IEC materials: 1. Yes 0. No

AB] Availability of Referral cards: 1. Yes 0. No

AC] Availability of BP apparatus: 1. Yes 0. No

AD] Availability of Glucometer: 1. Yes 0. No

AE] Availability of Glucometer strips: 1. Yes 0. No

AF] Availability of Stethoscope: 1. Yes 0. No

AG] Availability of Weighing machine (adult): 1. Yes 0. No

AH] Availability of Stadiometer/measuring tape: 1. Yes 0. No

AI] During camps, do you measure Height? 1. Yes 0. No

AJ] During camps, do you measure Weight? 1. Yes 0. No

AK] During camps, do you measure BP? 1. Yes 0. No

AL] During camps, do you measure Blood Sugar? 1. Yes 0. No

AM] During camps, do you look for precancerous lesions? 1. Yes 0. No

AN] During camps, do you ask for history of alcohol use? 1. Yes 0. No

AO] During camps, do ask for h/o smoking/chewing tobacco? 1. Yes 0. No

AP] Will there be anyone to monitor the camps? 1. Yes 0. No

AQ] Who monitors the camps? 1. MO 2. LHV 3. Senior male
4. THO staff 5. DSO staff
6. DHO staff 9. Don't know

AR] Have you conducted any camps with collaboration of NGO/voluntary organizations? 1. Yes 0. No

V. Beneficiary Knowledge, Awareness and Utilization data

A] Name: _____ given numbers as ID

B] Age: _____ years

C] Sex: 1. Male 2. Female

D] Marital status: 1. Single 2. Married
3. Divorced 4. Widow/widower

E] Religion: 1. Hindu 2. Muslim
3. Christian 4. Others

F] Category: 1. SC 2. ST
3. OBC 4. Others

G] Type of family: 1. Nuclear 2. Joint 3. Broken

H] Educational qualification: 1. Illiterate 2. Primary (1-5 years of school)
3. Secondary (6-10 years of school)
4. PUC (11^{th}, 12^{th})/ITI/diploma
5. Degree/PG

I] Occupation: 1. Farmer 2. Labourer/daily wage
3. Self-employed 4. Government employee
5. Private employee 6. Retired/pensioner
7. Unemployed 8. Home maker

J] Ration card: 1. BPL 2. APL 3. No ration card

K] Total monthly income: Rs. _____ per month

L] Number of family members: _____

M] Per capita income: Rs. _____/ month

N] Socio economic status: 1. Class I 2. Class II
3. Class III 4. Class IV 5. Class V
(mod. B. G. Prasad's classification)

O] Have you heard of the disease Hypertension? 1. Yes 0. No
9. No response

P] Have you heard of the disease Diabetes? 1. Yes 0. No
9. No response

Q] Have you heard of the disease CVD? 1. Yes 0. No
9. No response

R] Have you heard of the disease Cancer? 1. Yes 0. No
9. No response

S] Have you heard of the disease Stroke? 1. Yes 0. No
9. No response

T] Family history of hypertension: 1. Father 2. Mother
3. Siblings 4. No history 9. Don't know

U] Family history of Diabetes: 1. Father 2. Mother 3. Siblings
4. No history 9. Don't know

V] Family history of cardiovascular disease: 1. Father 2. Mother
3. Siblings 4. No history 9. Don't know

W] Family history of Cancer: 1. Father 2. Mother 3. Siblings
4. No history 9. Don't know

X] Family history of Stroke: 1. Father 2. Mother 3. Siblings
4. No history 9. Don't know

Y] Are these diseases curable? 1. Yes 0. No 9. Don't know

Z] Are these diseases preventable? 1. Yes 0. No 9. Don't know

AA] Are these diseases communicable? 1. Yes 0. No
9. Don't know

AB] Can increased blood pressure cause stroke/paralysis: 1. Yes 0. No
9. Don't know

AC] Can uncontrolled diabetes cause blindness/kidney failure?
1. Yes 0. No 9. Don't know

AD] How did you come to know about health check-up camp?
1. Anganwadi worker 2. ASHA
3. Banner/pamphlet/public address 4. Routine check-up
5. Neighbour 6. Friend 7. MHW 8. ANM
9. Others

AE] Did you know that blood sugar and BP are checked free of cost at camps/PHC/CHC? 1. Yes 0. No 9. Don't know

AF] In case of illness who do you approach for treatment/medicines?
1. PHC 2. Sub-centre 3. District hospital
4. Private hospital

AG] Do you have the habit of smoking? 1. Yes 0. No

AH] Do you have the habit of consuming alcohol? 1. Yes 0. No

AI] Do you have the habit of chewing tobacco? 1. Yes 0. No

AJ] Have you visited the doctor at PHC/CHC/DH for confirmation of the disease?
1. Yes 0. No

AK] Reason for not visiting doctor for confirmation of disease:
1. Busy at work 2. Far away from PHC
3. No one told me to visit doctor 4. I don't have any illness
9. Not applicable

AL] Are you taking prescribed medicines/tablets regularly? 1. Yes 0. No

AM] Reason for not taking medicines regularly: 1. Costly
2. Not available at PHC 3. Far away
4. I don't have any illness 5. Can treat myself
9. Not applicable

AN] Are you going for follow up regularly? 1. Yes 0. No

AO] Reasons for not going to follow up regularly: 1. Busy
2. Far away 3. No one to take me to doctor
4. Didn't know 9. Not applicable

AP] Was health education regarding physical activity/exercise?
1. Yes 0. No 9. Don't remember

AQ] Was health education regarding eating fruits/vegetables?
1. Yes 0. No 9. Don't remember

AR] Was health education regarding stress management? 1. Yes 0. No
9. Don't remember

AS] Was health education regarding avoidance alcohol/smoking? 1. Yes 0. No
9. Don't remember

AT] Was health education regarding signs of cancer? 1. Yes 0. No
9. Don't remember

AU] Were you referred to PHC/CHC/DH for evaluation? 1. Yes 0. No
9. Not applicable

AV] How frequently do you get your blood sugar/BP checked? 1. Weekly
2. Fortnightly 3. When free 4. Monthly
5. As per doctor's advice 6. Not done yet
7. When tablets are over

AW] Are you getting medicines/treatment/consultation for free?
1. Yes 0. No 9. Not applicable

AX] Do you find the screening/health check-up camps useful for the community?
1. Yes 0. No 9. Don't know

ANNEXURE X – IEC MATERIALS

Annexure X – IEC Material

Figure 2a – NPCDCS IEC Pamphlet (Kannada):

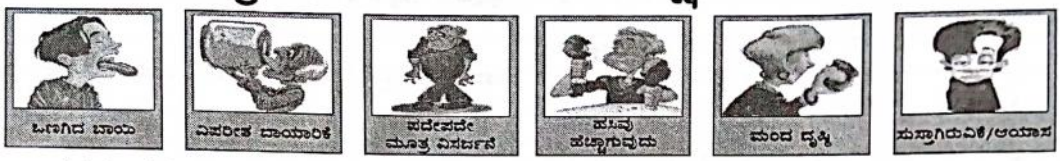
Figure 2b – NPCDCS IEC Pamphlet (Kannada):

Figure 3a – NPCDCS IEC Handbill (Kannada):

ಸಕ್ಕರೆ ಖಾಯಿಲೆ ಎಂದರೇನು?

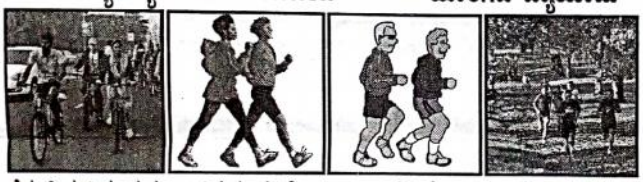
ರಕ್ತದಲ್ಲಿ ಸಕ್ಕರೆಯ ಅಂಶ ಹೆಚ್ಚಾಗುವ ಸ್ಥಿತಿಯೇ ಸಕ್ಕರೆ ಖಾಯಿಲೆ ಅಥವಾ ಡಯಾಬಿಟಿಸ್. ದೇಹದಲ್ಲಿನ ಸಕ್ಕರೆ ಅಂಶವನ್ನು ದೇಹ ಉಪಯೋಗಿಸಿಕೊಳ್ಳಲು ಇನ್ಸುಲಿನ್ ಅವಶ್ಯ. ಆದರೆ ದೇಹ ಸಾಕಷ್ಟು ಇನ್ಸುಲಿನ್ ತಯಾರಿಸುವುದಿಲ್ಲ ಅಥವಾ ತಯಾರಾದ ಇನ್ಸುಲಿನ್ ಅನ್ನು ದೇಹ ಸಮರ್ಪಕವಾಗಿ ಉಪಯೋಗಿಸುವುದಿಲ್ಲ, ಹೀಗಾಗಿ ರಕ್ತದಲ್ಲಿ ಸಕ್ಕರೆಯ ಪ್ರಮಾಣ ನಿಗಧಿತ ಪ್ರಮಾಣಕ್ಕಿಂತ ಹೆಚ್ಚಾಗುತ್ತದೆ. ಈ ಸ್ಥಿತಿಯನ್ನೇ ಸಕ್ಕರೆ ಖಾಯಿಲೆ ಎಂದು ಕರೆಯುತ್ತಾರೆ.

ಸಕ್ಕರೆ ಖಾಯಿಲೆಯ ಲಕ್ಷಣಗಳು :



ರಕ್ತದೊತ್ತಡ ಮತ್ತು ಸಕ್ಕರೆ ಖಾಯಿಲೆ ರೋಗಿಗಳು ವ್ಯಾಯಾಮದ ಮೂಲಕ ತಾವೇ ಆರೈಕೆ ಮಾಡಿಕೊಳ್ಳುವುದು

ದಿನನಿತ್ಯ ವ್ಯಾಯಾಮ ಮಾಡಬೇಕು — ಹೊರಗಡೆ ವ್ಯಾಯಾಮ

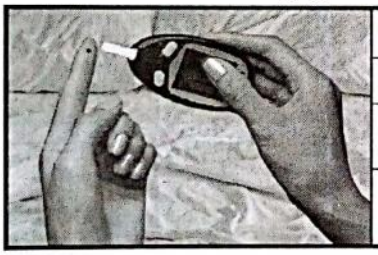


ಸೈಕಲ್ ತುಳಿಯುವುದು | ಬಿರುಸು ನಡಿಗೆ | ಜಾಗಿಂಗ್ | ನಿಧಾನವಾಗಿ ಓಡುವುದು

ನಿಮಗೆ ಯಾವುದೇ ತೊಂದರೆ ಇಲ್ಲದಿದ್ದರೂ ಸಹ ಸಕ್ಕರೆ ಖಾಯಿಲೆಗೆ ವೈದ್ಯರು ಹೇಳಿದಂತೆ ನಿಯಮಿತವಾಗಿ ಔಷಧಿಯನ್ನು ತೆಗೆದುಕೊಳ್ಳಬೇಕು.

ಉತ್ತಮ ಆರೋಗ್ಯಕ್ಕಾಗಿ ದೇಹದ ತೂಕವನ್ನು ಸಮವಾಗಿ ಕಾಪಾಡಿಕೊಳ್ಳಿ

ಮೇಲಿನ ಲಕ್ಷಣಗಳು ನಿಮ್ಮಲ್ಲಿ ಕಂಡುಬಂದರೆ ಹತ್ತಿರದ ಆಸ್ಪತ್ರೆಗೆ ಭೇಟಿ ನೀಡಿ ವೈದ್ಯರಿಂದ ಪರೀಕ್ಷಿಸಿಕೊಳ್ಳಿ, ಚಿಕಿತ್ಸೆ ಪಡೆಯಿರಿ.



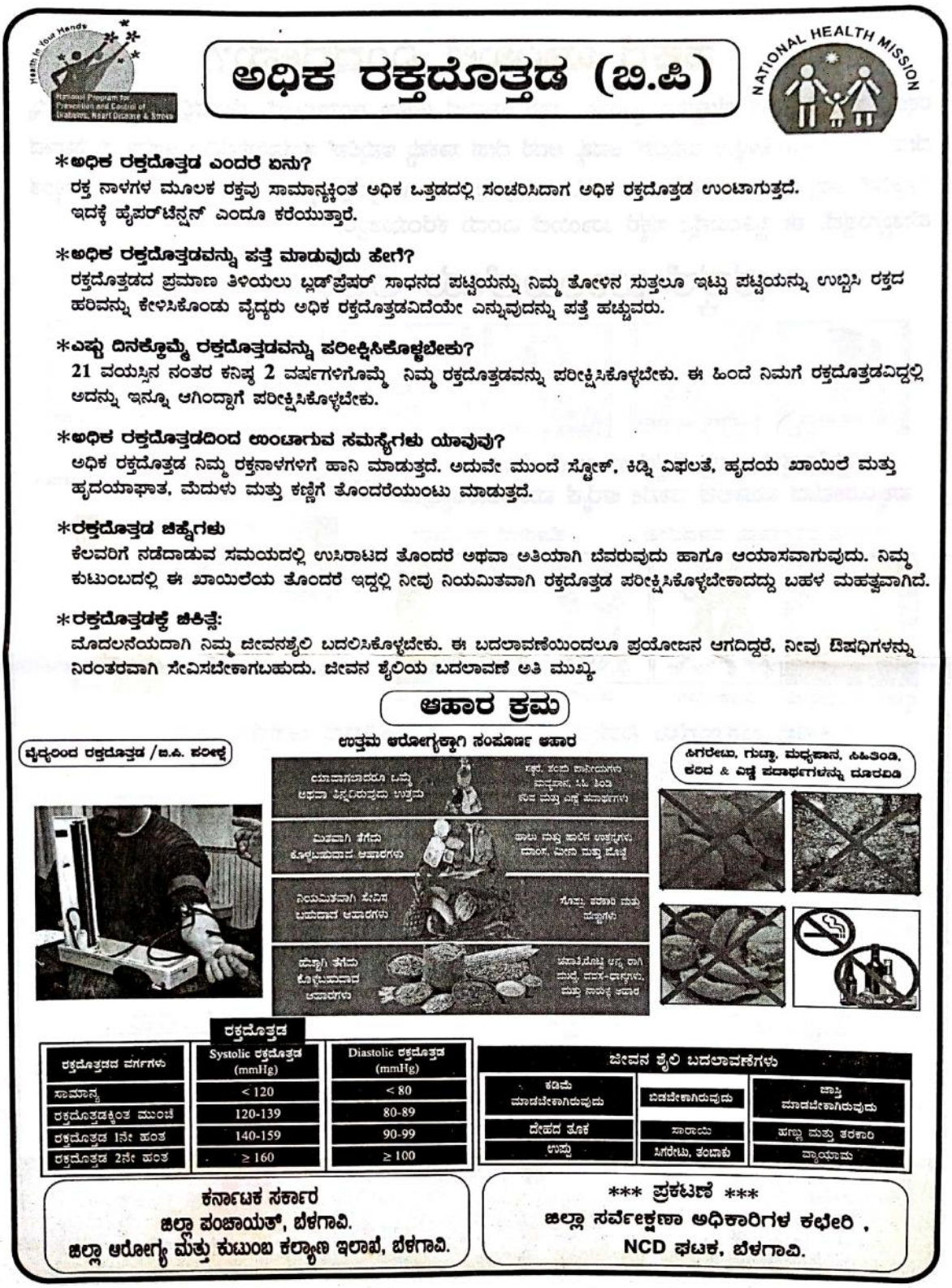
	ರಕ್ತದಲ್ಲಿ ಸಕ್ಕರೆಯ ಪ್ರಮಾಣ (mg/dl)		
	ಸಹಜ ಸ್ಥಿತಿ	ಸಮಾಧಾನಕರ	ಅಸಮಾಧಾನಕರ
ಖಾಲಿ ಹೊಟ್ಟೆಯಲ್ಲಿ	80 - 110	111 - 125	> 125
ಆಹಾರ ಸೇವಿಸಿದ ಎರಡು ಘಂಟೆ ನಂತರ	120 - 140	140 - 180	> 180

ಸಕ್ಕರೆ ಖಾಯಿಲೆ ತಡೆಗಟ್ಟಲು ಜೀವನ ಶೈಲಿಯ ಬದಲಾವಣೆಗಳು :

ಕಡಿಮೆ ಮಾಡಬೇಕಾಗಿರುವುದು : ಸಿಹಿ ಮತ್ತು ಎಣ್ಣೆ ಪದಾರ್ಥಗಳು, ದೇಹದ ತೂಕ ಕಡಿಮೆ ಮಾಡುವುದು
ವರ್ಜಿಸಬೇಕಾಗಿರುವುದು : ಮಧ್ಯಪಾನ , ಧೂಮಪಾನ, ತಂಬಾಕು ಸೇವನೆ
ಹೆಚ್ಚಾಗಿ ಸೇವಿಸಬೇಕಾಗಿರುವುದು : ತರಕಾರಿ /ಸೊಪ್ಪು, ವ್ಯಾಯಾಮ

ರಾಷ್ಟ್ರೀಯ ಕ್ಯಾನ್ಸರ್, ಮಧುಮೇಹ, ಹೃದಯ ಸಂಬಂಧಿತ ಹಾಗೂ ಪಾಶ್ವವಾರ್ಯು ರೋಗಗಳ ತಡೆಗಟ್ಟುವಿಕೆ ಮತ್ತು ನಿಯಂತ್ರಣ ಕಾರ್ಯಕ್ರಮ, ಬೆಳಗಾವಿ ಜಿಲ್ಲೆ.

Figure 3b – NPCDCS IEC Handbill (Kannada):



ಅಧಿಕ ರಕ್ತದೊತ್ತಡ (ಬಿ.ಪಿ)

***ಅಧಿಕ ರಕ್ತದೊತ್ತಡ ಎಂದರೆ ಏನು?**

ರಕ್ತ ನಾಳಗಳ ಮೂಲಕ ರಕ್ತವು ಸಾಮಾನ್ಯಕ್ಕಿಂತ ಅಧಿಕ ಒತ್ತಡದಲ್ಲಿ ಸಂಚರಿಸಿದಾಗ ಅಧಿಕ ರಕ್ತದೊತ್ತಡ ಉಂಟಾಗುತ್ತದೆ. ಇದಕ್ಕೆ ಹೈಪರ್‌ಟೆನ್ಷನ್ ಎಂದೂ ಕರೆಯುತ್ತಾರೆ.

***ಅಧಿಕ ರಕ್ತದೊತ್ತಡವನ್ನು ಪತ್ತೆ ಮಾಡುವುದು ಹೇಗೆ?**

ರಕ್ತದೊತ್ತಡದ ಪ್ರಮಾಣ ತಿಳಿಯಲು ಬ್ಲಡ್‌ಪ್ರೆಷರ್ ಸಾಧನದ ಪಟ್ಟಿಯನ್ನು ನಿಮ್ಮ ತೋಳಿನ ಸುತ್ತಲೂ ಇಟ್ಟು ಪಟ್ಟಿಯನ್ನು ಉಬ್ಬಿಸಿ ರಕ್ತದ ಹರಿವನ್ನು ಕೇಳಿಸಿಕೊಂಡು ವೈದ್ಯರು ಅಧಿಕ ರಕ್ತದೊತ್ತಡವಿದೆಯೇ ಎನ್ನುವುದನ್ನು ಪತ್ತೆ ಹಚ್ಚುವರು.

***ಎಷ್ಟು ದಿನಕ್ಕೊಮ್ಮೆ ರಕ್ತದೊತ್ತಡವನ್ನು ಪರೀಕ್ಷಿಸಿಕೊಳ್ಳಬೇಕು?**

21 ವಯಸ್ಸಿನ ನಂತರ ಕನಿಷ್ಠ 2 ವರ್ಷಗಳಿಗೊಮ್ಮೆ ನಿಮ್ಮ ರಕ್ತದೊತ್ತಡವನ್ನು ಪರೀಕ್ಷಿಸಿಕೊಳ್ಳಬೇಕು. ಈ ಹಿಂದೆ ನಿಮಗೆ ರಕ್ತದೊತ್ತಡವಿದ್ದಲ್ಲಿ ಅದನ್ನು ಇನ್ನೂ ಆಗಿಂದ್ದಾಗೆ ಪರೀಕ್ಷಿಸಿಕೊಳ್ಳಬೇಕು.

***ಅಧಿಕ ರಕ್ತದೊತ್ತಡದಿಂದ ಉಂಟಾಗುವ ಸಮಸ್ಯೆಗಳು ಯಾವುವು?**

ಅಧಿಕ ರಕ್ತದೊತ್ತಡ ನಿಮ್ಮ ರಕ್ತನಾಳಗಳಿಗೆ ಹಾನಿ ಮಾಡುತ್ತದೆ. ಅದುವೇ ಮುಂದೆ ಸ್ಟ್ರೋಕ್, ಕಿಡ್ನಿ ವಿಫಲತೆ, ಹೃದಯ ಖಾಯಿಲೆ ಮತ್ತು ಹೃದಯಾಘಾತ, ಮೆದುಳು ಮತ್ತು ಕಣ್ಣಿಗೆ ತೊಂದರೆಯುಂಟು ಮಾಡುತ್ತದೆ.

***ರಕ್ತದೊತ್ತಡ ಚಿಹ್ನೆಗಳು**

ಕೆಲವರಿಗೆ ನಡೆದಾಡುವ ಸಮಯದಲ್ಲಿ ಉಸಿರಾಟದ ತೊಂದರೆ ಅಥವಾ ಅತಿಯಾಗಿ ಬೆವರುವುದು ಹಾಗೂ ಆಯಾಸವಾಗುವುದು. ನಿಮ್ಮ ಕುಟುಂಬದಲ್ಲಿ ಈ ಖಾಯಿಲೆಯ ತೊಂದರೆ ಇದ್ದಲ್ಲಿ ನೀವು ನಿಯಮಿತವಾಗಿ ರಕ್ತದೊತ್ತಡ ಪರೀಕ್ಷಿಸಿಕೊಳ್ಳಬೇಕಾದದ್ದು ಬಹಳ ಮಹತ್ವವಾಗಿದೆ.

***ರಕ್ತದೊತ್ತಡಕ್ಕೆ ಚಿಕಿತ್ಸೆ:**

ಮೊದಲನೆಯದಾಗಿ ನಿಮ್ಮ ಜೀವನಶೈಲಿ ಬದಲಿಸಿಕೊಳ್ಳಬೇಕು. ಈ ಬದಲಾವಣೆಯಿಂದಲೂ ಪ್ರಯೋಜನ ಆಗದಿದ್ದರೆ, ನೀವು ಔಷಧಿಗಳನ್ನು ನಿರಂತರವಾಗಿ ಸೇವಿಸಬೇಕಾಗಬಹುದು. ಜೀವನ ಶೈಲಿಯ ಬದಲಾವಣೆ ಅತಿ ಮುಖ್ಯ

ಆಹಾರ ಕ್ರಮ

ಉತ್ತಮ ಆರೋಗ್ಯಕ್ಕಾಗಿ ಸಂಪೂರ್ಣ ಆಹಾರ

ವೈದ್ಯರಿಂದ ರಕ್ತದೊತ್ತಡ /ಬಿ.ಪಿ. ಪರೀಕ್ಷೆ

ಸಿಗರೇಟು, ಗುಟ್ಕಾ, ಮದ್ಯಪಾನ, ಸಿಹಿತಿಂಡಿ, ಕರಿದ & ಎಣ್ಣೆ ಪದಾರ್ಥಗಳನ್ನು ದೂರವಿಡಿ

ರಕ್ತದೊತ್ತಡದ ವರ್ಗಗಳು	ರಕ್ತದೊತ್ತಡ Systolic ರಕ್ತದೊತ್ತಡ (mmHg)	Diastolic ರಕ್ತದೊತ್ತಡ (mmHg)
ಸಾಮಾನ್ಯ	< 120	< 80
ರಕ್ತದೊತ್ತಡಕ್ಕಿಂತ ಮುಂಚೆ	120-139	80-89
ರಕ್ತದೊತ್ತಡ 1ನೇ ಹಂತ	140-159	90-99
ರಕ್ತದೊತ್ತಡ 2ನೇ ಹಂತ	≥ 160	≥ 100

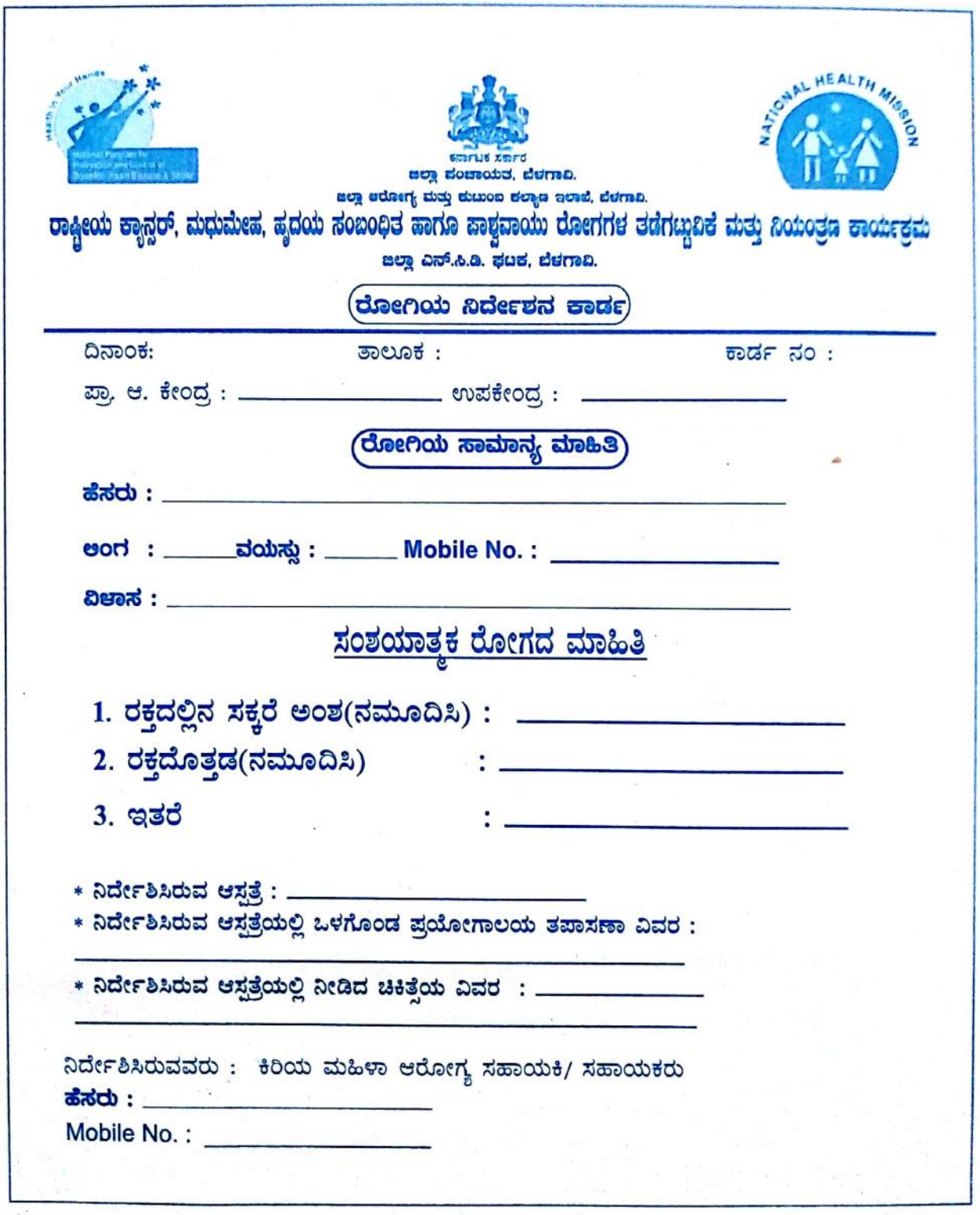
ಜೀವನ ಶೈಲಿ ಬದಲಾವಣೆಗಳು

ಕಡಿಮೆ ಮಾಡಬೇಕಾಗಿರುವುದು	ಬಿಡಬೇಕಾಗಿರುವುದು	ಜಾಸ್ತಿ ಮಾಡಬೇಕಾಗಿರುವುದು
ದೇಹದ ತೂಕ	ಸಾರಾಯಿ	ಹಣ್ಣು ಮತ್ತು ತರಕಾರಿ
ಉಪ್ಪು	ಸಿಗರೇಟು, ತಂಬಾಕು	ವ್ಯಾಯಾಮ

ಕರ್ನಾಟಕ ಸರ್ಕಾರ
ಜಿಲ್ಲಾ ಪಂಚಾಯತ್, ಬೆಳಗಾವಿ.
ಜಿಲ್ಲಾ ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಇಲಾಖೆ, ಬೆಳಗಾವಿ.

*** ಪ್ರಕಟಣೆ ***
ಜಿಲ್ಲಾ ಸರ್ವೇಕ್ಷಣಾ ಅಧಿಕಾರಿಗಳ ಕಛೇರಿ ,
NCD ಘಟಕ, ಬೆಳಗಾವಿ.

Figure 4a – NPCDCS Referral Card (Kannada):



ಕರ್ನಾಟಕ ಸರ್ಕಾರ
ಜಿಲ್ಲಾ ಪಂಚಾಯತ, ಬೆಳಗಾವಿ.
ಜಿಲ್ಲಾ ಆರೋಗ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಇಲಾಖೆ, ಬೆಳಗಾವಿ.

ರಾಷ್ಟ್ರೀಯ ಕ್ಯಾನ್ಸರ್, ಮಧುಮೇಹ, ಹೃದಯ ಸಂಬಂಧಿತ ಹಾಗೂ ಪಾಶ್ವವಾಯು ರೋಗಗಳ ತಡೆಗಟ್ಟುವಿಕೆ ಮತ್ತು ನಿಯಂತ್ರಣ ಕಾರ್ಯಕ್ರಮ

ಜಿಲ್ಲಾ ಎನ್.ಸಿ.ಡಿ. ಘಟಕ, ಬೆಳಗಾವಿ.

ರೋಗಿಯ ನಿರ್ದೇಶನ ಕಾರ್ಡ

ದಿನಾಂಕ: ತಾಲೂಕ : ಕಾರ್ಡ ನಂ :

ಪ್ರಾ. ಆ. ಕೇಂದ್ರ : _____ ಉಪಕೇಂದ್ರ : _____

ರೋಗಿಯ ಸಾಮಾನ್ಯ ಮಾಹಿತಿ

ಹೆಸರು : _____

ಅಂಗ : _____ **ವಯಸ್ಸು :** _____ **Mobile No. :** _____

ವಿಳಾಸ : _____

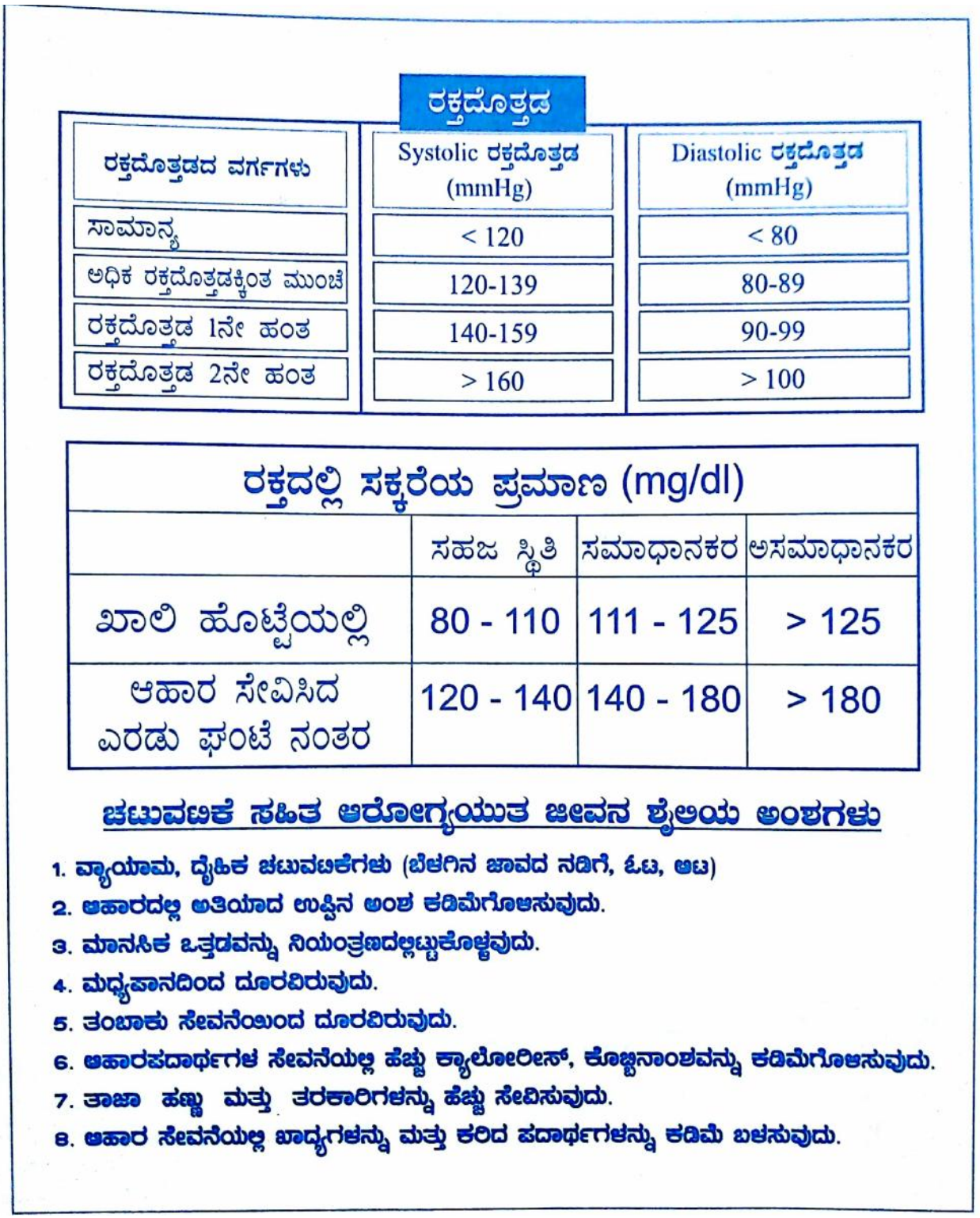
ಸಂಶಯಾತ್ಮಕ ರೋಗದ ಮಾಹಿತಿ

1. ರಕ್ತದಲ್ಲಿನ ಸಕ್ಕರೆ ಅಂಶ(ನಮೂದಿಸಿ) : _____
2. ರಕ್ತದೊತ್ತಡ(ನಮೂದಿಸಿ) : _____
3. ಇತರೆ : _____

* ನಿರ್ದೇಶಿಸಿರುವ ಆಸ್ಪತ್ರೆ : _____
* ನಿರ್ದೇಶಿಸಿರುವ ಆಸ್ಪತ್ರೆಯಲ್ಲಿ ಒಳಗೊಂಡ ಪ್ರಯೋಗಾಲಯ ತಪಾಸಣಾ ವಿವರ :
_____
* ನಿರ್ದೇಶಿಸಿರುವ ಆಸ್ಪತ್ರೆಯಲ್ಲಿ ನೀಡಿದ ಚಿಕಿತ್ಸೆಯ ವಿವರ : _____
_____

ನಿರ್ದೇಶಿಸಿರುವವರು : ಕಿರಿಯ ಮಹಿಳಾ ಆರೋಗ್ಯ ಸಹಾಯಕಿ/ ಸಹಾಯಕರು
ಹೆಸರು : _____
Mobile No. : _____

Figure 4b – NPCDCS Referral Card (Kannada):



ರಕ್ತದೊತ್ತಡ

ರಕ್ತದೊತ್ತಡದ ವರ್ಗಗಳು	Systolic ರಕ್ತದೊತ್ತಡ (mmHg)	Diastolic ರಕ್ತದೊತ್ತಡ (mmHg)
ಸಾಮಾನ್ಯ	< 120	< 80
ಅಧಿಕ ರಕ್ತದೊತ್ತಡಕ್ಕಿಂತ ಮುಂಚೆ	120-139	80-89
ರಕ್ತದೊತ್ತಡ 1ನೇ ಹಂತ	140-159	90-99
ರಕ್ತದೊತ್ತಡ 2ನೇ ಹಂತ	> 160	> 100

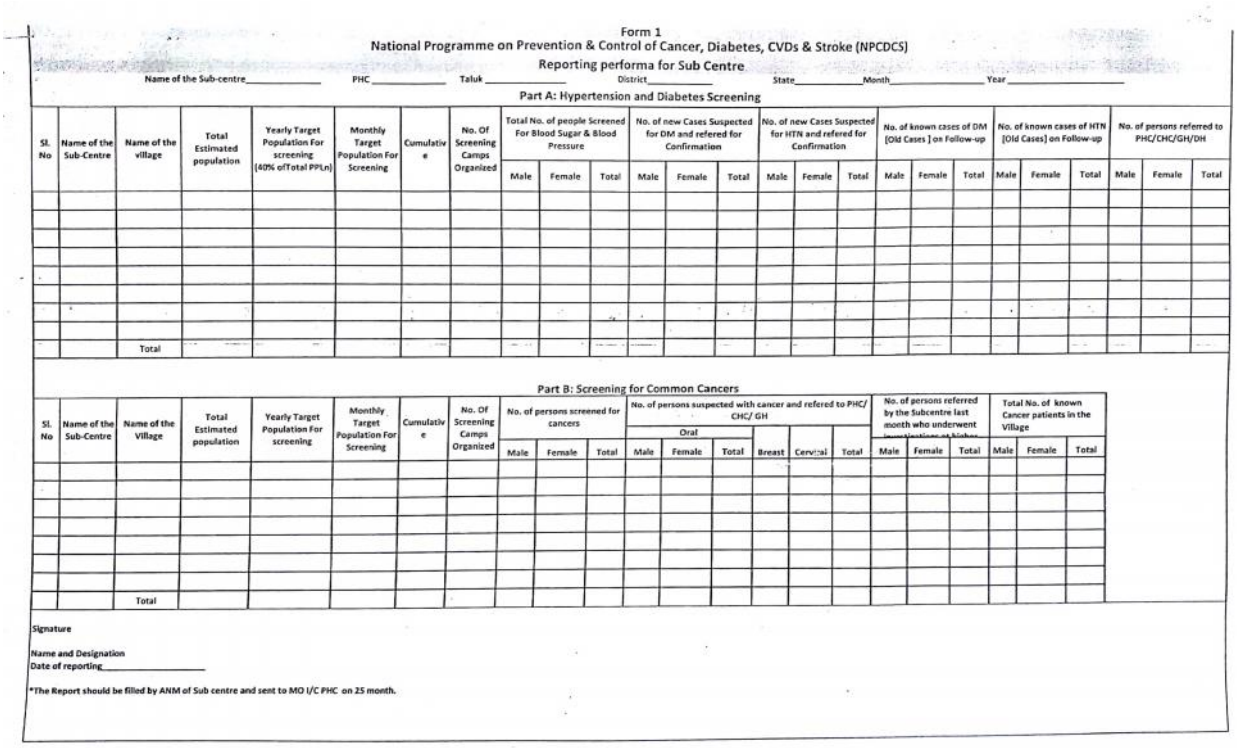
ರಕ್ತದಲ್ಲಿ ಸಕ್ಕರೆಯ ಪ್ರಮಾಣ (mg/dl)

	ಸಹಜ ಸ್ಥಿತಿ	ಸಮಾಧಾನಕರ	ಅಸಮಾಧಾನಕರ
ಖಾಲಿ ಹೊಟ್ಟೆಯಲ್ಲಿ	80 - 110	111 - 125	> 125
ಆಹಾರ ಸೇವಿಸಿದ ಎರಡು ಘಂಟೆ ನಂತರ	120 - 140	140 - 180	> 180

ಚಟುವಟಿಕೆ ಸಹಿತ ಆರೋಗ್ಯಯುತ ಜೀವನ ಶೈಲಿಯ ಅಂಶಗಳು

1. ವ್ಯಾಯಾಮ, ದೈಹಿಕ ಚಟುವಟಿಕೆಗಳು (ಬೆಳಗಿನ ಜಾವದ ನಡಿಗೆ, ಓಟ, ಆಟ)
2. ಆಹಾರದಲ್ಲಿ ಅತಿಯಾದ ಉಪ್ಪಿನ ಅಂಶ ಕಡಿಮೆಗೊಳಿಸುವುದು.
3. ಮಾನಸಿಕ ಒತ್ತಡವನ್ನು ನಿಯಂತ್ರಣದಲ್ಲಿಟ್ಟುಕೊಳ್ಳವುದು.
4. ಮದ್ಯಪಾನದಿಂದ ದೂರವಿರುವುದು.
5. ತಂಬಾಕು ಸೇವನೆಯಿಂದ ದೂರವಿರುವುದು.
6. ಆಹಾರಪದಾರ್ಥಗಳ ಸೇವನೆಯಲ್ಲಿ ಹೆಚ್ಚು ಕ್ಯಾಲೋರೀಸ್, ಕೊಬ್ಬಿನಾಂಶವನ್ನು ಕಡಿಮೆಗೊಳಿಸುವುದು.
7. ತಾಜಾ ಹಣ್ಣು ಮತ್ತು ತರಕಾರಿಗಳನ್ನು ಹೆಚ್ಚು ಸೇವಿಸುವುದು.
8. ಆಹಾರ ಸೇವನೆಯಲ್ಲಿ ಖಾದ್ಯಗಳನ್ನು ಮತ್ತು ಕರಿದ ಪದಾರ್ಥಗಳನ್ನು ಕಡಿಮೆ ಬಳಸುವುದು.

Figure 5a – NPCDCS Reporting format for Sub-Centre:



Form 1

National Programme on Prevention & Control of Cancer, Diabetes, CVDs & Stroke (NPCDCS)

Reporting performa for Sub Centre

Name of the Sub-centre_____ PHC _____ Taluk _____ District_____ State_____Month_____ Year_____

Part A: Hypertension and Diabetes Screening

Sl. No	Name of the Sub-Centre	Name of the village	Total Estimated population	Yearly Target Population For screening (40% ofTotal PPLn)	Monthly Target Population For Screening	Cumulative	No. Of Screening Camps Organized	Total No. of people Screened For Blood Sugar & Blood Pressure			No. of new Cases Suspected for DM and refered for Confirmation			No. of new Cases Suspected for HTN and refered for Confirmation			No. of known cases of DM [Old Cases] on Follow-up			No. of known cases of HTN [Old Cases] on Follow-up			No. of persons referred to PHC/CHC/GH/DH		
								Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
		Total																							

Part B: Screening for Common Cancers

Sl. No	Name of the Sub-Centre	Name of the Village	Total Estimated population	Yearly Target Population For screening	Monthly Target Population For Screening	Cumulative	No. Of Screening Camps Organized	No. of persons screened for cancers			No. of persons suspected with cancer and refered to PHC/ CHC/ GH						No. of persons referred by the Subcentre last month who underwent			Total No. of known Cancer patients in the Village		
											Oral											
								Male	Female	Total	Male	Female	Total	Breast	Cervical	Total	Male	Female	Total	Male	Female	Total
		Total																				

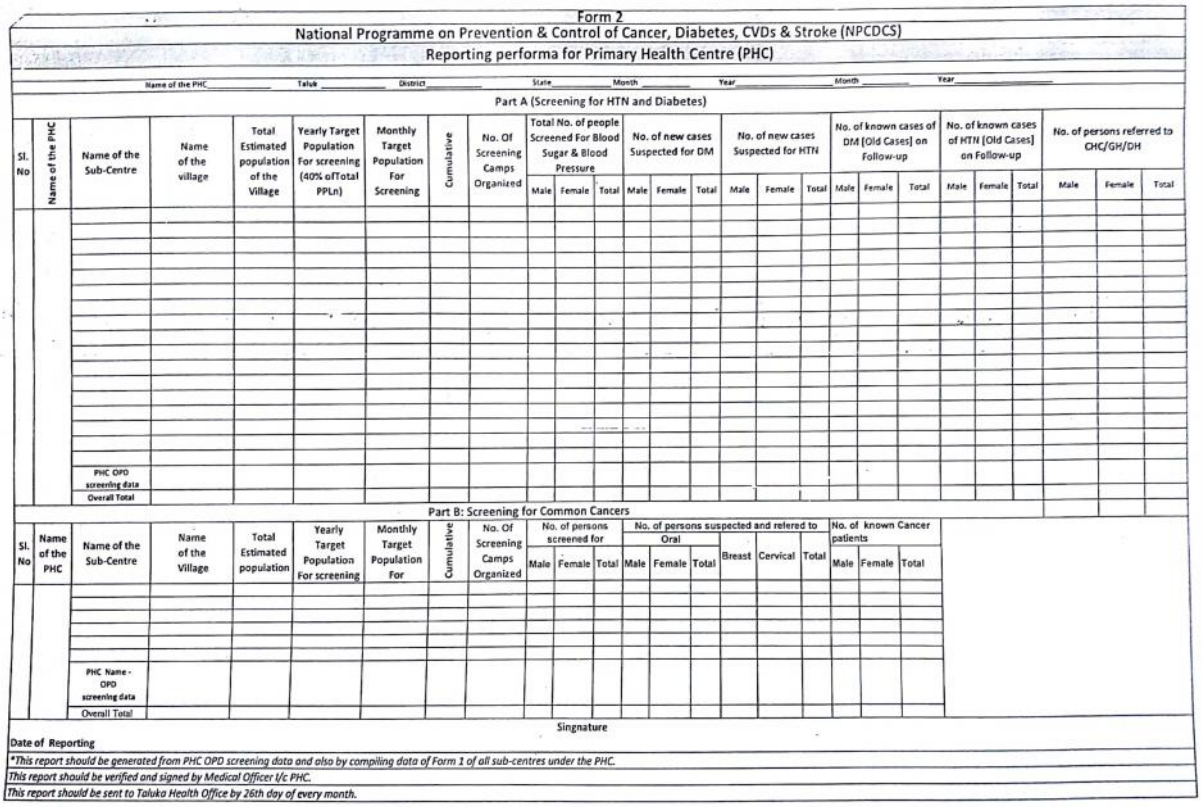
Signature

Name and Designation

Date of reporting_____

*The Report should be filled by ANM of Sub centre and sent to MO I/C PHC on 25 month.

Figure 5b – NPCDCS Reporting format for Primary Health Centre:



Form 2

National Programme on Prevention & Control of Cancer, Diabetes, CVDs & Stroke (NPCDCS)

Reporting performa for Primary Health Centre (PHC)

Name of the PHC_____ Taluk _____ District_____ State_____ Month _____ Year_____ Month _____ Year_____

Part A (Screening for HTN and Diabetes)

Sl. No	Name of the PHC	Name of the Sub-Centre	Name of the village	Total Estimated population of the Village	Yearly Target Population For screening (40% ofTotal PPLn)	Monthly Target Population For Screening	Cumulative	No. Of Screening Camps Organized	Total No. of people Screened For Blood Sugar & Blood Pressure			No. of new cases Suspected for DM			No. of new cases Suspected for HTN			No. of known cases of DM [Old Cases] on Follow-up			No. of known cases of HTN [Old Cases] on Follow-up			No. of persons referred to CHC/GH/DH		
									Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
		PHC OPD screening data																								
		Overall Total																								

Part B: Screening for Common Cancers

Sl. No	Name of the PHC	Name of the Sub-Centre	Name of the Village	Total Estimated population	Yearly Target Population For screening	Monthly Target Population For	Cumulative	No. Of Screening Camps Organized	No. of persons screened for			No. of persons suspected and refered to						No. of known Cancer patients		
												Oral								
									Male	Female	Total	Male	Female	Total	Breast	Cervical	Total	Male	Female	Total
		PHC Name - OPD screening data																		
		Overall Total																		

Signature

Date of Reporting

*This report should be generated from PHC OPD screening data and also by compiling data of Form 1 of all sub-centres under the PHC.

This report should be verified and signed by Medical Officer I/c PHC.

This report should be sent to Taluka Health Office by 26th day of every month.

Figure 5c – NPCDCS reporting format for Primary Health Centres:

(Form 2)

National Programme on Prevention & Control of Cancer, Diabetes, CVDs & Stroke (NPCDCS)
District Surveillance Office, NCD Cell, Belagavi.

Reporting Performa for Primary Health Centre

Taluk: _____ District : Belagavi State: Karnataka

Month : _____ Year : _____

No. of Sub-centres in the PHC : _____ No. of Sub-centres reported : _____

		During the month			Cumulative since April during current year		
		Male	Female	Total	Male	Female	Total
No. of screening camps organized during the month							
No. of people screened for Blood Sugar & Blood Pressure							
No. of people suspected with	Diabetes						
	Hypertension						
	Cancers						
No. of persons referred to CHC/GH/DH							

Date of Reporting _____

Mobile no.

_____
Signature / Name and Designation

*The Report should be sent to District NCD Cell by 5th of every month.

Figure 6 – NPCDCS – A manual for Medical Officers:

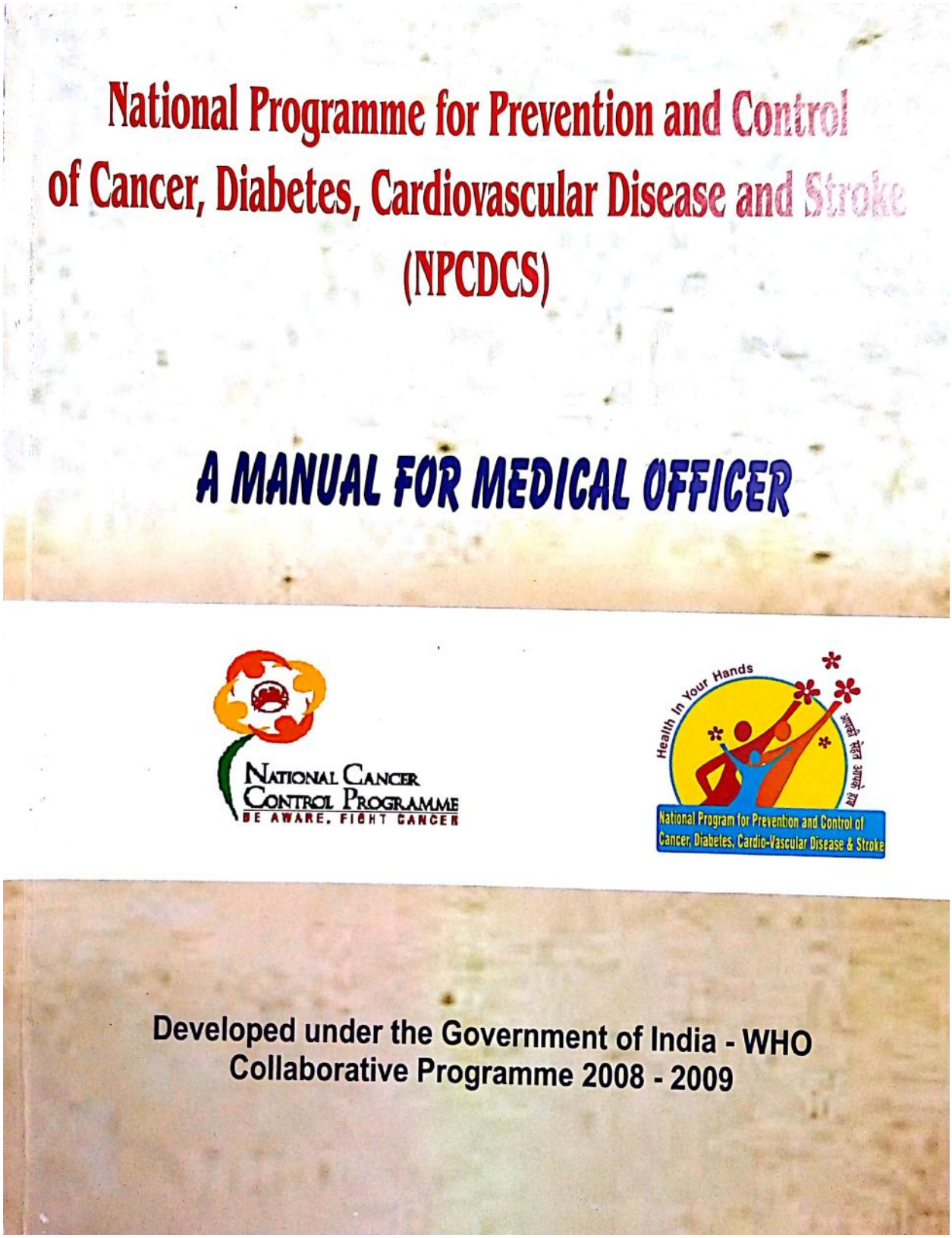


Figure 7 – NPCDCS register

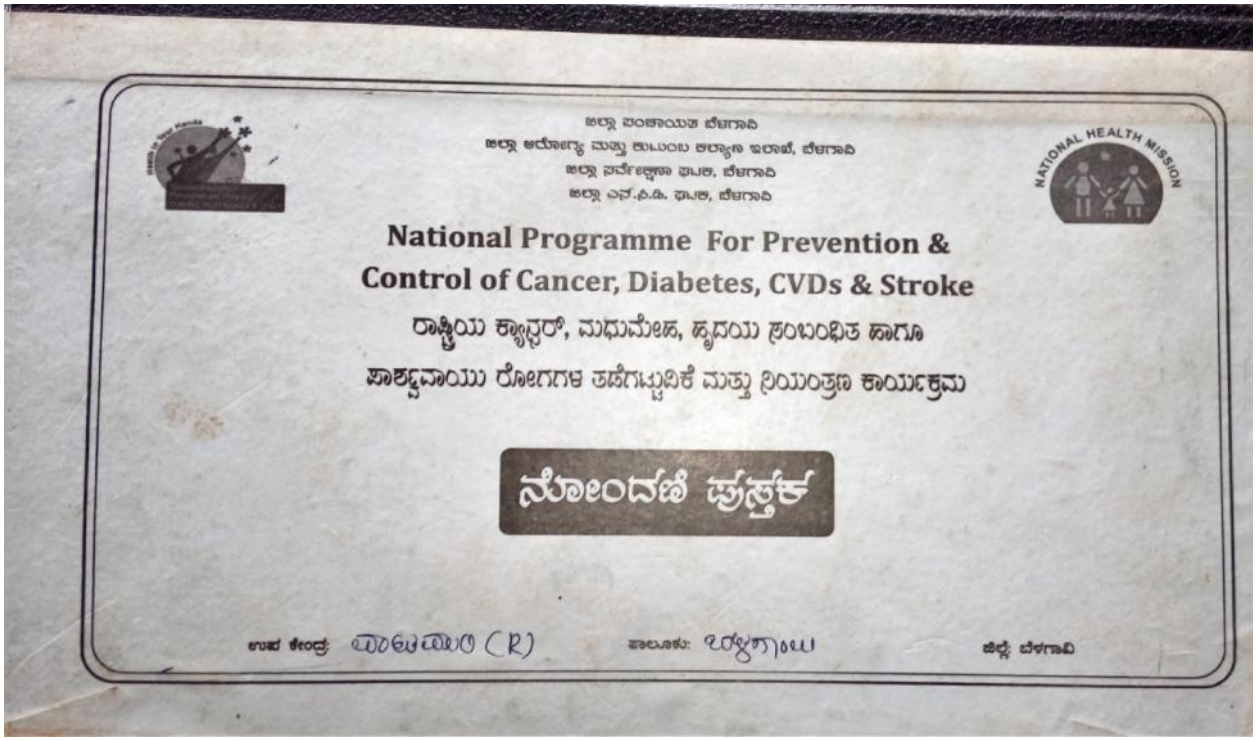
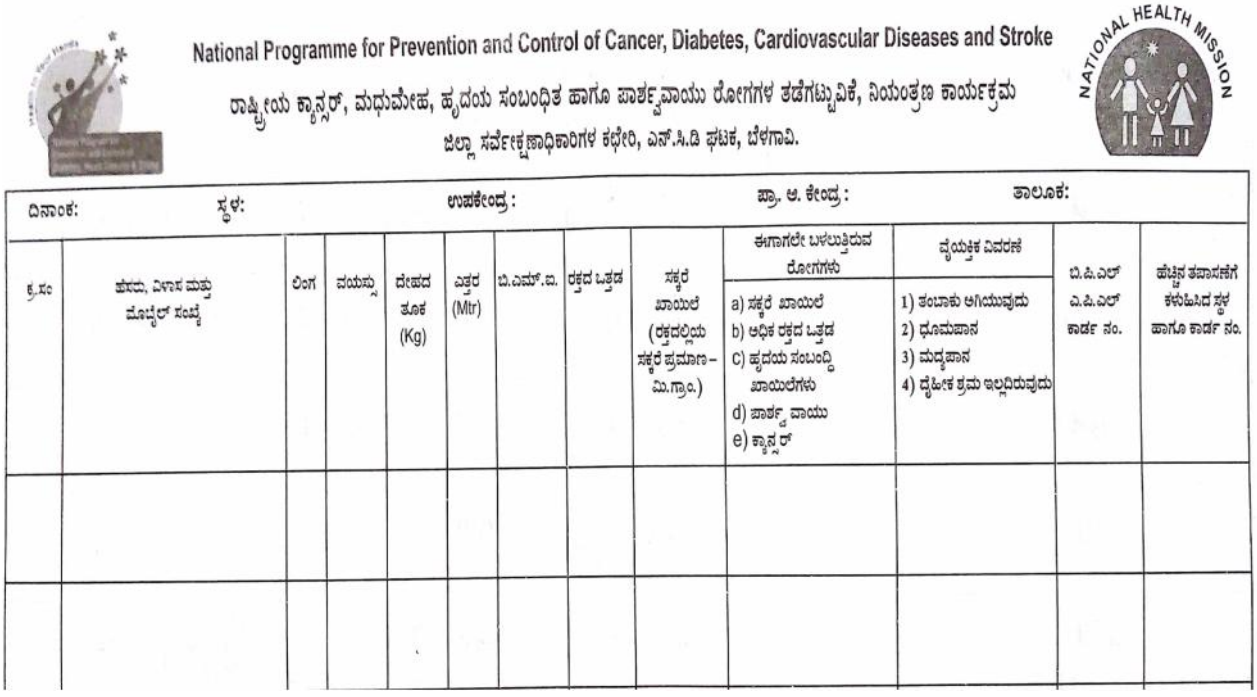


Figure 7a – NPCDCS register



district	population	designation	implementation	when started	NCD clinic	from when	opportunistic screening	are patients referred	data recorded	recorded data reported?	to whom	frequency of reporting`	CCU	OPD	IPD	health promotion	day care chemotherapy	palliative care	training of staff	referral services	GP	2 GNM	technician
1	**2**	**3**	**4**	**4a**	**5**	**5a**	**6**	**7**	**8**	**9**	**9a**	**10**	**11a**	**11b**	**11c**	**11d**	**11e**	**11f**	**11g**	**12**	**13a**	**13b**	**13c**
1	2	1	1	3	1	3	1	1	1	1	9	2	0	1	1	1	0	0	1	0	1	1	1

physiotherapist	counselor	data entry operator	cardiologist	4 GNM	CBC	BT, CT	Blood sugar	lipid profile	LFT	RFT	Urine routine, sugar	Pap smear	X-ray	USG	ECG	ECHO	CT Scan	MRI	Mamography	outsourcing availability?	ECG computerized
13d	13e	13f	13g	13h	14a	14b	14c	14d	14e	14f	14g	14h	14i	14j	14k	14l	14m	14n	14o	15	16a
1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0

ECG ordinary	Tread mill	CM with defibrillator	cardiac monitor	defibrillator	ventilators 4 adult	ventilator P	pulse oximeter	pulse oximwter with NIB	infusion pump	BP stand	BP table	stethoscope	portable X-ray	monitoring station	intubation, bronchoscope, laryngoscope	postable USG	gas pipeline
16b	**16c**	**16d**	**16e**	**16f**	**16g**	**16h**	**16i**	**16j**	**16k**	**16l**	**16m**	**16n**	**16o**	**16p**	**16q**	**16r**	**16s**
1	0	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1

1	1	CHC
2	2	population
2	3	designation
1	4	implementation
2	4a	when started
1	5	NCD clinic
2	5a	from when
1	6	opportunistic screening
1	7	are patients referred from PHC, SC
1	8	data recorded
1	9	recorded data reported?
9	9a	to whom
2	10	frequency of reporting`
1	11a	health promotion
1	11b	OPD care
1	11c	IPD care
1	11d	diagnosis and treatment of DM, HTN, Stroke
1	11e	identification of high risk cases
1	11f	screening of Oral, breast, cervical cancers
1	12	referral services
1	12a	where to?
0	13a	GP
2	13b	2 GNM
1	13c	technician

physiotherapist	counselor	data entry operator	Blood sugar (FBS, PPBS)	total cholesterol	lipid profile	blood urea	X-ray	ECG	USG	pap smear	outsourcing availability?	magna visualizer	indirect laryngoscope	punch biopsy forceps	ECG machine ordinary	cardiac monitor	defibrillator	pulse oximeter	infusion pump	stethoscope	BP stand
13d	13e	13f	14a	14b	14c	14d	14e	14f	14g	14h	15	16a	16b	16c	16d	16e	16f	16g	16h	16i	16j
0	1	0	1	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	1	1

BP table	weighing scale adult
16k	16l
1	1

PHC	population	number of subcentres	number of ANM	number of MHW	designation of informant	24*7 ?	active implimentation	from when?	opportunistic screening daily?	referred from SC?	data recoreded?	data reported?	to whom?	frequency of data reporting	health promotion and BCC	early diagnosis & Treatment	identification of high risk	screening for oral, breast, cervical cancer	OPD
1	2	3	4	4a	5	6	7	7a	8	9	10	11	11a	12	13a	13b	13c	13d	13e
1	2	5	5	4	3	0	1	4	1	1	1	1	1	1	1	1	1	1	1
2	2	5	5	4	1	0	1	4	1	1	1	1	3	2	1	1	1	1	1
3	2	6	5	3	2	1	1	3	1	1	1	1	1	2	1	1	1	1	1
4	3	6	6	4	6	0	1	9	1	1	1	1	1	1	1	1	1	0	1
5	2	6	5	4	5	0	1	6	1	1	1	1	1	2	1	1	1	1	1
6	2	6	3	2	2	1	1	3	1	1	1	1	1	2	1	1	1	0	1
7	2	6	6	4	1	0	1	9	1	1	1	1	1	2	1	1	1	1	1
8	1	5	2	2	7	0	1	5	1	1	1	1	1	2	1	1	1	1	1
9	2	6	4	2	5	0	1	9	1	0	1	1	1	2	1	1	1	1	1
10	3	9	9	4	1	1	1	4	1	1	1	1	1	2	1	1	1	1	1
11	2	5	5	4	1	0	1	4	1	0	1	1	1	2	1	1	1	0	1
12	1	5	5	4	1	0	1	4	1	1	1	1	1	2	1	1	1	1	1

referral to higher centre?	where to?	IEC/banner/pamplets received?	Hb	blood sugar (FBS,PPBS)	blood urea	lipid profile	BP apparatus table model	stethoscope	weighing scale adult	stadiometer	ECG ordinary
14.0	14a	15	16a	16b	16c	16d	17a	17b	17c	17d	17e
1	1	1	1	1	1	1	1	1	1	1	0
1	1	1	1	1	0	0	1	1	1	1	0
1	1	0	1	1	0	0	1	1	1	1	1
1	1	1	1	0	0	0	1	1	1	1	0
1	1	1	1	1	0	0	1	1	1	1	0
1	1	1	1	1	1	0	1	1	1	1	0
1	1	1	1	1	0	0	1	1	1	0	0
1	1	1	1	1	0	0	1	1	1	1	0
1	1	1	1	1	0	0	1	1	1	1	0
1	1,2	1	1	1	0	0	1	1	1	1	0
1	1,2	1	1	1	0	0	1	1	1	1	0
1	1	1	1	1	0	0	1	1	1	1	0

SC	population	belonging PHC	active implimentation	from when?	health check up camps conducted?	frequency of camps	how many camps in past year	population covered last year	% of population covered	DM only	HTN only	DM+HTN	referred to PHC	follow up	data recorded?	data reported?	to whom?	frequency of data reporting	screening of 30 years above?
1	2	3	5	5a	6	7	8	9		10a	10b	10c	11	12	13	14	14a	15	16
1.1	6220	1	1	9	1	1	48	1100	17.7	23	38	130	130	1	1	1	1	2	1
1.2	4804	1	1	9	1	1	44	2196	45.7	98	227	167	592	1	1	1	1	2	1
1.3	7239	1	1	4	1	1	40	1170	16.2	17	36	45	88	1	1	1	1	2	1
2.1	9634	2	1	4	1	2	22	963	10.0	34	32	26	9	1	1	1	1	2	1
2.2	5612	2	1	3	1	1	41	1327	23.6	32	71	67	67	1	1	1	1	2	1
2.3	4731	2	1	9	1	1	51	2117	44.7	121	173	207	501	1	1	1	2	2	1
3.1	5271	3	1	3	1	1	47	2272	43.1	12	17	41	41	1	1	1	1	2	1
3.2	6213	3	1	9	1	2	26	1376	22.1	71	66	102	102	1	1	1	1	2	1
3.3	7213	3	1	4	1	2	20	1731	24.0	21	36	51	108	1	1	1	2	2	1
4.1	6837	5	1	5	1	2	12	1275	18.6	13	14	21	35	1	1	1	2	2	1
4.2	7236	5	1	5	1	2	12	3273	45.2	13	11	11	27	1	1	1	1	2	1
4.3	7377	5	1	9	1	1	28	1786	24.2	55	26	14	9	1	1	1	2	2	1
5.1	6972	4	1	5	1	2	12	926	13.3	11	17	17	33	1	1	1	2	2	1
5.2	9271	4	1	6	1	2	15	3217	34.7	321	276	127	87	1	1	1	2	2	1
5.3	7311	4	1	9	1	1	40	2138	29.2	18	7	8	10	1	1	1	2	2	1
6.1	5327	6	1	6	1	3	15	1321	24.8	32	17	9	57	1	1	1	2	2	1
6.2	4932	6	1	4	1	2	10	1321	26.8	28	9	13	15	1	1	1	2	2	1
6.3	5921	6	1	5	1	2	12	3121	52.7	32	16	18	66	1	1	1	2	2	1
7.1	5178	7	1	4	1	1	40	1600	30.9	20	10	23	38	1	1	1	1	2	1
7.2	6000	7	1	4	1	1	40	1166	19.4	20	16	14	33	1	1	1	1	2	1
7.3	10542	7	1	4	1	1	40	2169	20.6	20	12	13	45	1	1	1	1	2	1
8.1	6328	8	1	4	1	2	12	1372	21.7	19	12	16	26	1	1	1	2	2	1
8.2	7371	8	1	4	1	2	10	1311	17.8	21	15	22	22	1	1	1	4	2	1
8.3	6811	8	1	3	1	1	15	2200	32.3	14	31	9	30	1	1	1	2	2	1
9.1	7000	9	1	9	1	1	40	2000	28.6	13	12	19	28	1	1	1	4	2	1
9.2	8100	9	1	2	1	1	20	1333	16.5	22	11	15	21	1	1	1	2	2	1
9.3	7832	9	1	4	1	1	36	2311	29.5	21	25	16	52	1	1	1	4	2	1
10.1	5876	10	1	4	1	1	36	784	13.3	97	116	103	42	1	1	1	2	2	1
10.2	6878	10	1	4	1	1	52	740	10.8	80	50	25	9	1	1	1	1	2	1
10.3	13868	10	1	4	1	1	40	880	6.3	90	70	50	50	1	1	1	2	1	1
11.1	8547	11	1	9	1	1	22	2136	25.0	38	60	15	9	1	1	1	1	2	1
11.2	6877	11	1	4	1	3	20	1763	25.6	11	13	14	19	1	1	1	1	2	1
11.3	5683	11	1	4	1	1	30	3121	54.9	12	11	5	28	1	1	1	1	2	1
12.1	7821	12	1	2	1	1	50	3000	38.4	40	48	9	48	1	1	1	1	2	1
12.2	4471	12	1	2	1	1	30	880	19.7	24	15	20	59	1	1	1	2	2	1
12.3	5449	12	1	3	1	1	48	2700	49.6	94	64	54	28	1	1	1	1	1	1

health education about cancers	availability of IEC/banners	who provided it?	any incentive for NPCDCS service?	received training?	if no, why?	NPCDCS register	IEC materials	referral cards	BP apparatus	Glucometer	Glucometer strips	stethoscope	weighing scale adult	stadiometer/measuring tape	height	weight	BP	Blood sugar	precancerous lesions	H/O alcohol	h/o smoking/tobcco	do anyone monitor?
17	18	18a	19	20	20a	21a	21b	21c	21d	21e	21f	21g	21h	21i	22a	22b	22c	22d	22e	22f	22g	23
1	1	9	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	2	0	1	9	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1
1	1	2	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	2	0	0	2	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0	0	9	0	0	3	1	0	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1
1	1	2	0	1	9	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1
1	1	2	0	0	3	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0	1	9	0	1	9	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1
0	0	9	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1
1	1	9	0	1	9	1	1	0	1	1	1	1	1	0	1	1	1	1	1	0	1	1
1	1	9	0	1	9	1	1	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1
1	1	2	0	1	9	1	1	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1
1	1	9	0	0	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1
1	1	9	0	1	9	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1
0	1	9	0	1	9	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1
1	1	9	0	0	4	1	1	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1
1	1	9	0	1	9	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1
0	1	9	0	1	9	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1
1	1	2	0	1	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	2	0	1	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	2	0	1	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	9	0	1	9	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	9	0	1	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	2	0	1	9	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	2	0	0	4	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	2	0	1	9	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	2	0	1	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1	0	1	9	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1
1	1	9	0	1	9	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1
1	1	9	0	1	9	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	2	0	0	5	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0
1	1	2	0	0	5	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	2	0	1	9	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0	0	9	0	1	9	1	0	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1
1	0	9	0	1	9	1	0	0	1	1	1	0	1	0	1	1	1	1	1	1	1	1
1	1	1	0	1	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

if yes, who?	any NGO?
23a	**24**
1	0
1	0
3	0
2,3	0
3	0
2	0
1	0
3	0
1	0
1,3	0
4	0
1,2,3	0
1	0
1,2	0
1,2,3	0
2,3	0
1,2,3	0
3	0
2	0
2	0
2	0
1,2	0
2	0
2	0
2	0
2,3	0
2	0
2,3	0
2,3	0
2,3	0
9	0
2,3	0
1,2	0
3	0
4	0
3	0

name (ID)	age	sex	marital status	religion	caste category	type of family	education	occupation	ration card	monthly income	number of family members	percapita income	SES	HTN	DM	CVDs	Cancer	Stroke	f/h HTN	f/h Dm	f/h CVDs	f/h Cancer	f/h stroke	curable	preventable	communicable	can increased BP cause stroke?	can uncontrolled DM cause kidney failure?	health checkup camp information	did you know it is free checkup	whom do you approach in illness	smoking	alcohol	tobacco chewing	did you visit doctor?	if no, why?	taking medication?	if no, why?	follow up regularly?	if no, why?	HE physical activity	HE fruits and vegetables	HE stress management	HE avoid habits	HE cancer warning signals	were you referred to PHC	frequency of BP, sugar check up	medicines/treatment free?	is health check up camp useful?
1	2	3	4	5	6	7	8	9	9a	10	11	12	13	14a	14b	14c	14d	14e	15a	15b	15c	15d	15e	16a	16b	16c	17	18	19	20	21	22a	22b	22c	23	23a	24	24a	25	25a	26a	26b	26c	26d	26e	27	28	29	30
1	34	1	2	1	4	1	5	4	2	18000	5	3600	2	1	1	1	1	1	2	2	0	4	4	0	0	0	0	1	6	1	4	0	0	0	1	9	1	9	1	9	0	0	0	1	0	1	3	1	1
2	55	2	2	1	4	1	1	2	1	6000	2	3000	3	1	1	1	1	1	4	4	0	4	4	0	0	0	0	0	2	1	1	0	0	1	0	1	0	1	0	4	0	0	0	1	0	1	6	0	9
3	38	1	2	1	4	1	4	1	1	10000	5	2000	4	1	1	1	1	1	2	4	4	1	4	1	1	0	1	1	8	1	4	0	1	0	1	9	1	9	0	1	0	1	0	1	0	1	3	1	1
4	59	1	2	1	4	1	3	6	1	5000	2	2500	3	1	1	1	1	1	4	4	4	4	4	0	0	0	1	0	4	1	1	0	0	0	1	9	1	9	1	9	0	0	0	0	0	0	3	1	1
5	55	2	2	1	4	2	1	2	1	3000	8	375	5	1	1	0	1	0	4	4	4	4	4	0	0	0	0	0	2	1	1	0	0	1	1	9	0	2	1	9	0	0	0	0	0	1	3	0	9
6	65	2	2	1	1	2	2	8	1	6000	8	750	5	1	1	0	1	1	3	4	4	4	4	1	1	0	0	0	1	1	1	0	0	1	1	9	1	9	1	9	0	1	0	1	1	1	3	0	9
7	52	2	2	1	1	2	1	8	1	12000	10	1200	4	1	1	0	0	0	4	4	4	4	4	9	9	9	9	9	8	1	1	0	0	1	1	9	1	9	1	9	0	0	0	0	0	1	4	0	9
8	46	1	2	1	1	2	1	2	1	5000	11	455	5	1	1	1	1	1	3	3	4	4	4	0	0	0	0	0	7	1	4	1	1	1	1	9	1	9	0	1	0	0	0	0	0	1	4	0	9
9	62	2	2	1	1	2	1	8	1	8000	6	1333	5	1	1	0	1	1	9	4	4	3	4	9	9	9	9	9	2	1	1	0	0	1	1	9	1	9	1	9	0	0	0	0	0	1	5	0	9
10	66	2	2	1	1	2	1	8	1	11000	8	1375	4	1	1	1	1	1	4	4	4	4	4	1	0	0	0	0	2	1	1	0	0	1	1	9	0	2	0	2	0	0	0	0	0	1	6	0	9
11	72	1	2	2	4	1	1	6	1	6000	3	2000	3	1	1	1	1	1	3	4	4	4	4	0	0	0	0	0	6	1	4	1	0	0	1	9	1	9	1	9	0	0	0	0	0	1	7	1	1
12	62	1	2	1	1	2	1	6	1	13000	9	1444	4	1	1	1	1	1	4	3	4	2	4	0	0	0	1	0	6	1	1	1	1	1	1	9	1	9	1	9	0	0	0	0	0	1	7	1	1
13	37	2	2	1	1	1	1	2	1	6000	5	1200	4	1	1	1	1	1	1	4	1,3	4	4	1	1	0	1	9	2	1	1	0	0	0	1	9	1	9	1	9	1	1	0	0	0	1	7	1	1
14	46	2	2	1	1	2	1	8	1	5000	7	714	5	1	1	0	1	0	4	4	4	4	4	9	9	9	9	9	2	1	1	0	0	1	1	9	0	2	0	1	0	0	0	0	0	1	7	0	1
15	45	2	2	1	1	2	1	2	1	3000	7	429	5	1	1	1	1	1	3	4	4	4	4	9	9	9	0	0	2	1	1	0	0	1	1	9	1	9	1	9	0	0	0	1	0	1	6	0	1
16	37	2	2	1	4	1	1	2	1	4000	3	1333	4	1	1	0	0	0	9	4	4	4	4	1	1	0	0	0	1	1	1	0	0	0	1	9	1	9	1	9	1	1	1	1	1	1	4	1	1
17	60	2	4	1	1	2	1	8	1	5600	8	700	5	1	1	0	0	1	4	4	4	4	4	9	9	9	9	9	2	1	1	0	0	0	1	9	1	9	1	9	0	0	0	0	0	1	5	1	9
18	41	2	2	1	1	2	1	2	1	2000	7	286	5	1	1	0	1	1	3	4	4	4	4	1	1	0	0	0	2	1	1	0	0	1	1	9	1	9	1	9	1	1	1	1	1	1	5	1	1
19	55	2	2	1	1	2	1	8	1	9000	9	1000	4	1	1	0	0	0	4	4	4	4	4	9	9	9	9	9	1	1	1	0	0	0	1	9	0	3	0	1	1	1	1	1	1	1	4	0	9
20	39	2	2	2	4	2	1	8	1	11000	14	786	5	1	1	1	1	1	1	1	4	4	4	1	1	1	1	1	2	1	4	0	0	0	1	9	1	9	0	2	0	0	0	0	0	1	4	0	9
21	37	2	2	1	1	2	1	8	1	12300	7	1757	4	1	1	1	1	1	4	4	4	4	4	1	1	1	1	1	1	1	1	0	0	0	1	9	1	9	1	9	1	1	1	1	1	1	4	0	1
22	62	2	2	1	2	1	1	8	1	42000	4	10500	1	1	1	0	0	1	9	4	4	4	4	1	1	0	0	0	1	1	1	0	0	1	1	9	1	9	1	9	0	0	0	0	0	1	4	1	1
23	56	2	2	1	1	1	1	2	1	21000	3	7000	1	1	1	0	1	1	4	4	4	4	4	0	0	0	0	0	2	1	1	0	0	1	1	9	0	2	0	1	1	1	0	1	1	1	5	0	9
24	49	2	2	1	1	1	1	2	1	12000	4	3000	3	1	1	0	0	0	4	4	4	4	4	9	9	9	9	9	5	1	1	0	0	0	1	9	1	9	1	9	9	9	9	9	9	1	5	1	9
25	39	2	1	1	1	2	1	2	1	5000	8	625	5	1	1	1	0	0	0	4	4	4	4	4	0	0	0	9	9	9	1	1	0	0	1	1	9	1	9	1	9	1	1	0	0	0	5	1	9
26	55	1	2	1	1	1	1	2	2	8000	2	4000	2	1	1	1	1	1	3	4	4	4	4	1	1	0	0	0	9	1	1	1	0	1	1	9	1	9	1	9	0	0	0	1	0	1	3	1	9
27	51	2	2	1	4	2	1	2	3	10000	7	1429	4	1	1	0	1	0	4	4	4	4	4	9	9	9	9	9	5	1	1	0	0	0	1	9	1	9	1	9	0	0	0	0	0	1	3	0	9
28	66	2	2	1	2	2	1	8	1	8000	7	1143	4	9	0	0	0	0	9	4	4	4	4	9	9	9	9	9	5	9	1	0	0	0	0	1	0	5	0	4	9	9	9	9	9	1	6	0	9
29	46	1	2	1	4	2	2	1	3	30000	7	4286	2	1	1	1	1	1	4	1	4	4	4	1	1	1	0	0	4	1	1	1	1	1	1	9	1	9	1	9	1	0	0	1	0	1	5	0	9
30	38	1	2	1	1	1	3	3	1	12000	4	3000	3	1	1	1	1	1	1,2	1	1	4	4	0	0	9	0	0	7	1	4	1	0	1	1	9	1	9	1	9	1	0	0	0	0	1	7	0	1
31	36	1	2	1	1	1	1	1	1	5000	5	1000	4	1	1	1	1	1	1	4	1	1	2	1	0	9	2	9	1	1	1	0	1	0	1	9	0	4	0	2	0	0	9	1	0	1	4	0	0
32	41	2	2	1	2	1	1	1	1	6000	4	1500	4	1	1	1	1	1	1	4	1	1	4	1	0	9	9	9	2	0	1	0	1	0	1	9	1	9	0	2	0	0	9	1	0	1	5	1	0
33	45	1	2	1	1	1	2	1	1	9000	3	3000	3	1	1	1	0	1	4	4	2	2	4	0	0	9	9	9	2	0	4	0	1	0	1	9	1	9	1	9	0	0	0	1	9	1	3	1	0
34	58	2	2	1	1	2	2	1	3	12000	8	1500	4	1	1	0	9	0	9	2	4	1	4	0	0	9	9	9	1	1	4	0	0	0	0	1	0	3	0	2	0	0	0	1	0	1	6	0	9
35	89	2	3	1	1	2	3	1	2	13000	7	1857	3	1	0	0	9	0	4	2	4	4	4	0	0	1	9	9	4	1	2	0	0	0	0	2	0	2	0	1	0	9	1	9	0	1	6	0	9
36	36	2	2	1	1	1	1	2	2	10000	5	2000	3	1	0	0	0	0	2	1	4	4	1	9	0	1	1	1	2	1	1	0	0	0	0	2	0	5	0	3	0	9	1	9	0	1	6	0	9
37	35	2	2	1	1	1	1	3	2	9000	3	3000	3	1	0	0	0	0	4	1	3	4	1	9	9	1	0	1	4	1	3	0	0	0	1	9	1	9	1	9	0	9	1	9	9	0	3	1	9

name (ID)	age	sex	marital status	religion	caste category	type of family	education	occupation	ration card	monthly income	number of family members	percapita income	SES	HTN	DM	CVDs	Cancer	Stroke	f/h HTN	f/h Dm	f/h CVDs	f/h Cancer	f/h stroke	curable	preventable	communicable	can increased BP cause stroke?	can uncontrolled DM cause kidney failure?	health checkup camp information	did you know it is free checkup	whom do you approach in illness	smoking	alcohol	tobacco chewing	did you visit doctor?	if no, why?	taking medication?	if no, why?	follow up regularly?	if no, why?	HE physical activity	HE fruits and vegetables	HE stress management	HE avoid habits	HE cancer warning signals	were you referred to PHC	frequency of BP, sugar check up	medicines/treatment free?	is health check up camp useful?
38	52	2	2	1	1	1	2	2	2	7000	2	3500	2	0	1	0	9	0	4	3	2	4	3	9	0	0	0	0	1	1	4	0	0	0	1	9	0	4	1	9	0	9	1	9	0	1	3	0	1
39	54	1	2	1	1	2	3	3	2	5000	8	625	5	0	1	0	0	9	9	4	2	4	3	9	9	0	0	0	4	1	4	0	1	0	1	9	1	9	1	9	0	9	0	1	0	1	3	0	9
40	62	1	2	1	2	1	3	3	1	4000	5	800	5	1	1	1	0	9	1	4	4	4	4	1	0	0	0	0	5	1	4	0	0	0	1	9	1	9	1	9	0	9	0	0	9	1	3	0	1
41	61	2	2	1	1	1	2	1	3000	4	750	5	1	1	1	0	0	4	4	4	3	4	9	0	0	0	0	0	2	1	3	1	0	1	1	9	1	9	1	9	0	0	0	0	9	1	3	0	1
42	45	1	2	1	2	1	1	3	1	2000	2	1000	4	1	1	0	0	0	4	4	1	1	4	9	0	0	0	1	6	1	3	0	0	1	1	9	1	9	1	9	9	0	1	1	0	1	6	1	9
43	44	1	2	1	4	1	2	8	1	5000	3	1667	4	0	0	0	1	0	3	4	2	2	4	9	0	0	0	1	8	1	1	0	0	1	1	9	1	9	1	9	9	1	9	0	0	0	3	0	9
44	41	1	4	2	1	2	2	8	3	6000	6	1000	4	1	1	0	1	0	3	2	4	1	4	9	9	1	0	1	1	1	1	0	0	1	1	9	0	2	0	1	9	0	9	1	1	1	3	0	9
45	42	1	1	2	4	3	2	8	3	7000	5	1400	4	0	1	9	1	1	4	2	4	4	4	9	9	0	9	9	4	1	1	0	1	0	1	9	1	9	1	9	9	1	9	1	1	1	6	1	9
46	40	2	2	1	1	1	2	3	2	6000	3	2000	3	1	1	9	1	1	3	1	4	4	4	1	0	0	1	1	4	1	1	0	0	0	1	9	1	9	1	9	9	0	0	0	1	1	6	1	9
47	35	1	2	1	1	1	3	8	2	5000	6	833	5	0	0	0	9	1	4	1	3	4	4	9	9	0	0	9	6	9	1	0	1	0	1	9	1	9	0	3	0	1	9	0	1	1	6	1	9
48	30	1	2	1	1	1	3	3	1	4000	3	1333	4	1	1	0	1	1	9	3	2	4	4	9	0	0	0	9	1	9	1	1	0	0	1	9	1	9	1	9	0	0	9	0	0	1	6	1	1
49	36	2	2	1	4	1	3	2	1	6000	2	3000	3	1	1	0	1	1	4	4	2	4	4	9	9	0	0	9	7	9	1	1	0	0	1	9	1	9	1	9	0	0	9	0	0	1	3	1	1
50	61	2	2	1	2	1	4	8	1	7000	2	3500	2	1	1	0	1	1	4	4	4	4	4	9	1	0	0	1	6	9	1	0	0	1	1	9	1	9	1	9	0	0	9	1	0	1	7	0	1
51	60	2	2	1	1	3	2	8	1	5000	5	1000	4	1	0	0	1	1	4	4	4	3	4	0	1	0	0	1	2	1	1	0	0	0	1	9	1	9	1	9	9	1	9	1	1	0	7	1	1
52	35	1	2	1	2	2	2	7	1	18000	11	1636	4	1	0	1	1	1	4	3	9	4	4	0	0	0	9	1	1	1	2	0	1	0	0	3	0	1	0	2	0	0	0	9	9	0	6	0	1
53	38	2	2	1	3	1	2	8	1	11000	6	1833	3	1	9	1	1	1	3	4	9	4	4	0	0	0	9	0	2	1	1	0	1	0	1	9	1	9	1	9	9	1	0	9	9	1	4	1	1
54	47	1	2	1	3	3	3	8	1	10000	8	1250	4	0	9	1	1	1	3	3	9	1	3	0	9	0	9	0	1	1	2	0	1	0	1	9	1	9	1	9	0	0	0	9	9	1	5	1	9
55	48	2	2	4	1	2	3	7	2	12000	9	1333	4	0	0	1	0	1	4	4	9	4	4	0	0	9	1	0	1	1	1	0	0	0	0	4	0	1	0	3	1	1	0	9	0	1	6	0	1
56	45	1	2	4	1	1	3	1	1	13000	2	6500	1	0	0	1	1	1	9	4	9	4	4	0	0	0	0	9	5	1	1	0	0	1	0	1	0	3	0	1	1	0	0	1	9	1	6	0	9
57	41	2	2	4	4	3	2	2	1	12000	6	2000	3	0	9	9	1	1	4	3	9	4	4	1	9	9	0	9	6	1	1	0	0	1	1	9	1	9	1	9	1	0	0	1	9	1	4	1	9
58	44	1	4	1	2	1	2	1	1	11000	5	2200	3	0	9	9	1	1	4	4	4	4	3	9	9	0	0	9	8	1	1	0	0	1	1	9	1	9	1	9	1	1	0	0	9	1	5	1	1
59	36	2	2	1	3	1	2	1	1	9000	4	2250	3	1	1	0	1	1	1	1	4	4	4	9	1	0	0	1	2	1	1	0	0	0	1	9	0	2	0	4	1	0	0	0	9	1	4	0	1
60	35	2	2	1	1	1	3	1	3	8000	3	2667	3	1	1	0	1	1	1	4	9	3	4	9	0	0	0	1	1	1	1	0	0	0	1	9	1	9	1	9	0	9	0	1	9	1	5	0	9
61	39	2	2	1	1	1	3	2	1	7000	6	1167	4	1	1	0	1	1	4	3	9	4	4	0	9	0	0	0	1	1	4	0	0	0	1	9	1	9	1	9	0	0	1	0	0	1	5	1	9
62	31	2	2	1	4	1	3	3	1	7500	5	1500	4	0	1	0	1	1	4	4	9	4	4	0	1	9	1	0	1	1	4	1	0	0	1	9	1	9	1	9	0	0	1	9	0	1	5	1	9
63	32	2	2	1	4	1	1	8	1	6000	3	2000	3	0	1	9	1	1	4	4	4	2	4	0	1	9	1	0	1	1	1	0	0	0	1	9	1	9	1	9	0	0	0	9	0	1	5	1	9
64	38	2	2	4	4	1	2	8	2	6500	4	1625	4	1	0	0	0	1	9	3	4	4	4	0	0	0	1	0	4	1	1	0	1	0	0	4	0	1	0	1	0	0	0	0	0	1	6	0	9
65	37	1	3	1	4	1	2	3	2	6600	3	2200	3	1	0	9	0	1	4	4	4	4	4	0	0	9	1	0	4	1	4	0	0	0	0	1	0	1	0	2	0	1	0	0	0	1	6	0	9
66	65	2	2	1	4	1	4	2	2	3250	2	1625	4	0	0	0	1	1	4	1	1	9	1	0	0	0	0	9	2	1	1	0	0	0	1	9	1	9	1	9	9	1	0	1	0	1	5	0	9
67	62	2	2	1	4	1	4	8	2	3000	2	1500	4	0	1	9	0	1	1	4	4	9	4	9	9	9	0	9	5	9	4	0	1	0	1	9	1	9	0	2	9	1	0	1	0	1	3	1	1
68	68	2	2	1	4	1	5	8	3	8000	4	2000	3	1	0	0	1	1	4	4	4	9	4	0	0	1	0	9	1	1	1	0	1	0	1	9	1	9	1	9	0	1	0	0	0	0	3	1	0
69	61	1	2	1	4	1	2	7	1	7000	3	2333	3	0	0	0	1	1	4	4	4	9	4	0	0	1	0	9	4	1	3	0	1	0	1	9	1	9	1	9	0	1	1	0	0	1	5	0	0
70	63	1	2	1	3	1	2	8	1	6000	3	2000	3	9	0	0	0	1	9	4	4	4	4	0	9	0	0	9	5	0	3	1	1	0	1	9	1	9	1	9	0	1	0	0	1	1	5	0	0
71	80	2	2	1	1	1	1	8	1	4500	5	900	5	0	0	0	1	1	4	4	4	4	4	0	9	0	0	9	2	0	4	0	0	1	1	9	1	9	1	9	1	1	1	1	1	1	3	0	9
72	68	2	1	3	1	3	2	8	1	19000	6	3167	2	0	1	0	0	1	4	3	3	4	4	0	9	9	0	9	2	0	4	0	0	0	0	1	0	1	0	2	1	0	1	0	0	1	6	0	9
73	52	1	3	3	1	1	1	5	1	6000	2	3000	3	0	1	1	0	1	4	4	4	4	4	0	9	9	0	0	0	1	1	4	0	0	0	0	3	0	2	0	3	0	0	0	1	0	1	6	0	9
74	54	1	2	1	2	1	1	5	1	14000	4	3500	2	0	1	1	1	0	4	4	4	4	4	0	9	9	0	0	0	1	1	4	1	0	0	0	1	0	5	0	1	1	0	0	1	0	1	6	0	9
75	32	1	2	1	2	1	1	3	1	8000	6	1333	4	0	1	0	1	1	1	4	2	4	1	0	0	9	1	0	1	1	1	0	0	0	1	9	1	9	1	9	0	0	0	0	0	1	3	0	9

name (ID)	age	sex	marital status	religion	caste category	type of family	education	occupation	ration card	monthly income	number of family members	percapita income	SES	HTN	DM	CVDs	Cancer	Stroke	f/h HTN	f/h Dm	f/h CVDs	f/h Cancer	f/h stroke	curable	preventable	communicable	can increased BP cause stroke?	can uncontrolled DM cause kidney failure?	health checkup camp information	did you know it is free checkup	whom do you approach in illness	smoking	alcohol	tobacco chewing	did you visit doctor?	if no, why?	taking medication?	if no, why?	follow up regularly?	if no, why?	HE physical activity	HE fruits and vegetables	HE stress management	HE avoid habits	HE cancer warning signals	were you referred to PHC	frequency of BP, sugar check up	medicines/treatment free?	is health check up camp useful?
76	36	2	2	1	3	3	2	5	2	5000	5	1000	4	0	1	1	0	1	1	1,2	4	2	1	9	0	9	1	0	2	1	1	0	0	0	1	9	0	2	0	1	0	1	0	0	0	0	3	0	9
77	85	2	2	1	3	1	2	3	1	12000	4	3000	3	0	9	0	1	1	9	1	4	4	4	0	0	1	0	0	2	1	1	0	1	0	1	9	1	9	1	9	0	1	0	0	0	0	3	1	1
78	65	2	2	1	3	2	2	3	1	5000	8	625	5	1	0	1	1	1	4	1	4	4	4	0	0	0	0	0	9	4	1	1	0	0	0	1	9	1	9	1	9	0	9	0	0	1	0	3	1	1
79	42	1	2	1	3	1	3	3	1	8000	2	4000	2	1	0	1	1	1	4	4	4	4	1	0	0	9	1	9	7	9	1	1	0	0	0	1	9	0	3	0	2	0	0	9	0	0	1	7	0	1
80	41	2	2	2	3	2	3	2	3	10000	7	1429	4	1	0	1	1	1	4	4	4	4	4	0	0	0	1	9	8	1	4	1	0	0	1	9	0	2	1	9	0	0	9	9	1	1	7	0	1
81	65	1	2	1	3	2	3	3	3	8000	7	1143	4	1	0	1	0	0	9	4	4	4	4	9	0	1	1	9	1	1	1	1	0	0	0	1	0	1	0	1	0	0	9	9	1	1	6	0	9
82	77	1	4	1	4	3	3	3	3	30000	7	4286	2	1	0	0	9	0	3	2	9	4	4	9	0	9	9	9	8	1	1	0	0	0	1	9	0	4	1	9	0	1	0	9	0	1	7	0	9
83	32	2	2	1	3	2	3	3	1	11000	8	1375	4	0	1	0	9	0	2	4	9	3	4	0	0	9	9	9	2	1	1	0	0	1	1	9	1	9	1	9	1	1	0	0	0	1	7	1	9
84	65	2	2	1	3	1	3	2	1	6000	3	2000	3	0	1	9	0	1	2	4	9	4	4	9	0	9	9	1	6	1	1	0	0	0	1	9	1	9	1	9	1	1	0	0	0	1	7	0	0
85	41	2	2	1	3	2	2	5	1	13000	9	1444	4	1	1	9	0	1	4	4	9	4	3	0	0	9	9	1	5	0	1	0	0	0	1	9	1	9	1	9	1	0	0	0	0	1	7	0	0
86	45	2	2	1	3	1	2	5	1	6000	5	1200	4	1	1	9	9	1	4	1	9	4	4	9	9	9	9	0	2	9	4	0	0	0	1	9	1	9	0	3	1	1	9	1	0	1	5	0	0
87	42	2	4	1	3	3	2	3	1	5000	7	714	5	1	1	0	0	1	2	4	4	3	4	1	0	9	9	1	7	9	3	0	0	0	1	9	1	9	1	9	1	0	0	1	0	1	5	1	1
88	36	1	2	1	3	2	1	3	3	3000	7	429	5	1	0	0	0	1	2	4	4	4	2	1	0	0	0	0	7	9	2	0	0	0	0	1	0	1	0	2	9	9	0	1	9	1	6	0	1
89	38	2	2	1	1	1	2	7	1	4000	3	1333	4	0	0	0	0	0	4	3	9	4	4	0	0	1	0	1	5	1	1	0	0	0	0	1	0	2	0	4	9	1	9	1	9	1	6	0	0
90	39	2	2	1	1	2	2	8	1	5600	8	700	5	1	0	0	0	1	9	3	9	4	4	0	0	0	0	1	4	1	1	0	0	0	0	1	0	1	0	3	9	0	9	1	9	1	6	0	1
91	44	2	2	1	1	2	2	8	1	2000	7	286	5	0	0	0	1	1	4	4	9	4	4	9	0	0	0	0	9	2	1	1	0	0	0	1	9	1	9	1	9	0	0	9	1	0	1	5	1	1
92	45	2	2	2	2	2	3	8	3	9000	9	1000	4	1	1	0	1	1	4	3	9	4	4	0	0	0	1	9	2	9	1	0	0	0	1	9	1	9	1	9	0	0	9	0	0	1	5	1	9
93	35	2	2	1	2	2	3	8	1	11000	14	786	5	1	1	9	1	0	1	2	4	4	4	0	9	1	1	9	2	9	1	1	0	0	1	9	1	9	1	9	1	0	0	0	0	0	5	1	1
94	33	1	4	1	4	2	2	3	1	12300	7	1757	4	0	1	1	1	1	4	9	4	4	4	9	0	1	0	1	2	1	4	0	1	0	1	9	0	5	0	2	1	0	0	0	0	1	3	0	1
95	66	1	2	1	1	1	1	3	1	42000	4	10500	1	0	1	0	9	1	4	9	2	1	4	9	9	0	0	9	2	9	4	0	0	0	1	9	1	9	1	9	9	1	0	0	9	1	3	0	9
96	55	1	2	1	1	1	2	2	3	21000	3	7000	1	0	1	0	9	1	9	9	4	4	4	1	0	0	0	1	2	1	4	0	0	0	1	9	1	9	1	9	9	1	0	0	0	1	2	1	9
97	41	1	2	2	1	1	3	2	2	12000	4	3000	3	0	9	0	1	0	2	9	4	4	4	0	0	0	0	9	2	9	1	1	0	1	1	9	1	9	1	9	1	1	1	0	0	1	1	1	9
98	33	1	2	1	1	2	2	1	2	5000	8	625	5	0	0	0	0	1	0	4	9	3	4	4	0	0	9	0	1	2	0	4	0	0	0	0	1	9	1	9	1	1	0	0	9	1	3	1	9
99	39	2	2	1	4	1	2	1	1	8000	2	4000	2	1	0	9	1	9	4	4	4	4	4	0	0	9	1	9	6	0	1	0	0	0	0	1	0	3	0	2	9	1	1	0	9	1	6	0	9
100	46	2	2	1	4	1	2	1	1	10000	7	1429	4	1	0	0	1	9	4	4	3	4	4	0	9	9	1	1	2	0	4	0	0	0	0	1	0	2	0	2	9	0	0	0	9	1	6	0	9
101	35	1	2	1	4	3	3	1	1	8000	7	1143	4	1	0	9	1	0	1	9	4	4	4	0	9	9	0	0	8	1	1	0	0	0	1	9	1	9	0	3	9	0	1	0	9	0	3	1	1
102	30	2	2	1	4	3	2	8	1	30000	7	4286	2	0	0	0	1	0	1	4	4	4	4	1	0	1	1	0	4	1	4	1	0	0	1	9	1	9	1	9	1	0	0	0	0	0	3	0	1
103	36	1	2	1	4	3	2	8	1	18000	5	3600	2	1	1	9	0	9	4	9	3	4	4	0	9	9	0	0	2	1	1	0	1	0	1	9	1	9	1	9	1	0	0	1	0	1	5	0	1
104	61	2	2	2	4	1	1	8	3	6000	2	3000	3	0	1	0	1	9	9	9	4	1	4	0	0	9	0	1	1	1	4	0	0	0	1	9	1	9	1	9	0	0	0	0	0	1	5	1	1
105	60	1	4	1	4	3	1	8	3	10000	5	2000	4	1	1	0	1	1	4	9	1	1	4	0	9	9	0	1	8	1	1	0	0	0	1	9	1	9	1	9	0	0	0	0	0	1	4	1	1
106	35	2	2	1	4	1	1	8	3	5000	2	2500	3	0	1	0	1	1	4	4	4	4	4	9	1	9	0	1	7	1	4	0	1	0	1	9	1	9	1	9	0	0	0	1	1	1	7	1	1
107	38	1	2	1	4	2	3	3	3	3000	8	375	5	1	1	0	1	1	4	9	3	4	2	0	1	9	0	1	2	1	4	1	0	1	1	9	1	9	0	1	0	0	0	0	0	1	5	0	9
108	47	2	2	1	4	2	2	3	1	6000	8	750	5	9	0	0	1	1	3	9	4	4	4	0	0	1	0	0	2	1	4	0	0	1	0	2	0	2	0	1	1	0	0	1	1	1	6	0	1
109	48	1	2	3	4	2	1	5	1	12000	10	1200	4	0	0	1	1	1	9	9	4	4	4	0	0	9	0	0	6	1	1	0	0	0	1	9	0	1	0	2	9	0	0	1	0	1	4	0	9
110	45	1	1	1	4	2	4	3	1	5000	11	455	5	0	0	1	1	0	4	9	3	4	4	0	9	1	9	0	6	1	1	0	0	0	0	1	0	1	0	2	9	1	9	0	1	1	6	0	9
111	41	1	2	1	4	1	5	3	2	6000	3	2000	3	0	0	0	1	0	4	4	4	4	1	0	0	0	0	9	0	2	1	3	0	0	0	1	9	1	9	1	9	1	0	0	0	1	3	0	1
112	44	2	2	1	4	1	2	5	1	5000	6	833	5	0	1	1	0	0	3	4	1	1	4	0	0	0	0	9	0	2	1	3	0	0	0	0	1	0	1	0	2	1	0	0	0	0	1	6	0	1
113	36	2	2	1	3	3	2	3	2	8000	6	1333	5	0	1	0	0	1	9	9	4	4	4	9	9	0	9	0	2	1	2	0	0	0	1	9	1	9	1	9	0	1	0	1	0	1	5	0	9

name (ID)	age	sex	marital status	religion	caste category	type of family	education	occupation	ration card	monthly income	number of family members	percapita income	SES	HTN	DM	CVDs	Cancer	Stroke	f/h HTN	f/h Dm	f/h CVDs	f/h Cancer	f/h stroke	curable	preventable	communicable	can increased BP cause stroke?	can uncontrolled DM cause kidney failure?	health checkup camp information	did you know it is free checkup	whom do you approach in illness	smoking	alcohol	tobacco chewing	did you visit doctor?	if no, why?	taking medication?	if no, why?	follow up regularly?	if no, why?	HE physical activity	HE fruits and vegetables	HE stress management	HE avoid habits	HE cancer warning signals	were you referred to PHC	frequency of BP, sugar check up	medicines/treatment free?	is health check up camp useful?
114	35	2	2	1	3	2	1	1	1	11000	8	1375	4	0	1	1	1	0	9	9	4	4	4	0	9	0	1	0	1	1	1	1	0	0	1	9	1	9	1	9	0	0	0	9	0	1	2	0	9
115	39	2	2	1	3	1	2	3	3	6000	3	2000	3	0	1	1	0	0	4	9	4	4	4	9	1	0	1	0	2	1	1	0	0	0	1	9	1	9	1	9	0	1	0	1	0	1	4	0	9
116	31	1	2	1	3	2	1	1	3	13000	9	1444	4	1	1	1	1	0	4	9	4	4	4	0	0	0	0	0	2	1	4	0	0	0	1	9	1	9	1	9	0	1	1	0	0	0	7	1	9
117	32	1	2	1	1	2	1	1	3	6000	5	1200	4	1	9	1	1	0	4	9	4	4	3	0	9	9	0	0	1	1	1	1	0	0	1	9	1	9	0	3	0	0	0	0	0	1	3	1	9
118	38	2	2	1	1	2	1	1	1	5000	7	714	5	1	0	0	0	1	9	9	3	3	4	0	1	0	0	1	2	1	4	0	0	0	1	9	1	9	1	9	1	1	1	9	0	1	3	1	9
119	37	2	2	1	1	3	2	1	1	3000	7	429	5	1	0	0	1	1	4	9	4	4	4	0	9	9	0	1	1	1	1	0	0	0	1	9	1	9	1	9	0	0	0	1	9	1	5	1	9
120	65	2	2	4	2	1	2	8	1	4000	3	1333	4	1	0	9	0	1	1	9	4	4	2	9	9	0	0	0	1	1	1	0	1	0	1	9	1	9	1	9	1	1	0	1	9	1	7	0	1
121	62	2	2	1	3	2	2	8	2	5600	8	700	5	0	0	9	0	1	4	9	4	2	4	9	9	0	0	0	2	1	1	0	0	0	1	9	1	9	1	9	1	9	0	0	0	1	4	0	0
122	68	2	2	1	3	3	3	8	1	2000	7	286	5	0	0	9	1	1	9	9	1,2	4	4	0	9	0	1	1	5	1	1	0	0	0	1	9	0	1	0	1	0	1	0	0	0	1	6	0	0
123	38	2	2	1	4	2	3	8	1	9000	9	1000	4	1	1	0	1	9	4	4	1	4	9	9	9	0	1	1	9	1	4	0	0	0	0	0	2	0	2	1	0	0	0	0	0	1	6	0	0
124	37	1	3	1	4	2	3	3	1	11000	14	786	5	1	1	0	0	0	4	4	1	4	9	0	1	9	0	1	9	1	1	0	0	1	1	9	0	2	0	2	1	0	9	0	0	1	3	0	9
125	65	2	3	1	1	2	3	3	3	12300	7	1757	4	1	1	0	1	0	4	1	4	4	4	9	0	9	0	9	5	1	1	0	0	0	1	9	0	2	1	9	1	9	9	0	1	1	6	0	9
126	62	1	2	1	2	1	3	2	3	42000	4	10500	1	1	1	0	1	9	9	4	4	4	2	1	0	0	0	9	5	1	4	0	0	0	1	9	1	9	1	9	1	1	0	0	0	0	5	0	9
127	68	1	2	2	1	1	3	3	3	21000	3	7000	1	0	1	0	1	0	9	4	4	4	4	1	0	9	1	9	4	1	1	0	0	0	1	9	1	9	1	9	9	1	0	0	1	0	4	0	9
128	61	2	2	1	2	1	2	2	3	12000	4	3000	3	1	9	0	1	0	4	4	2	4	4	0	0	0	0	9	7	0	1	0	0	0	1	9	1	9	1	9	9	0	9	0	0	0	7	1	1
129	35	1	2	1	1	3	2	2	1	5000	8	625	5	0	0	0	0	0	1	4	4	4	4	0	1	9	1	9	1	0	1	0	0	0	1	9	1	9	0	3	9	0	0	0	0	1	4	0	9
130	30	2	2	1	2	1	2	8	1	8000	2	4000	2	1	0	0	9	0	1	4	4	4	4	9	1	1	1	9	2	0	1	1	0	0	1	9	1	9	1	9	9	0	0	0	0	0	2	0	1
131	36	1	2	1	1	3	1	7	2	10000	7	1429	4	1	0	0	9	0	4	3	4	4	9	0	0	1	0	0	2	9	1	0	0	0	1	9	1	9	1	9	9	0	0	0	0	0	3	1	1
132	61	2	2	1	1	3	2	7	1	8000	7	1143	4	0	0	0	0	1	4	4	1	4	9	0	0	0	9	0	1	1	1	0	1	0	1	9	1	9	1	9	0	0	9	9	0	1	3	1	9
133	60	1	2	1	1	2	2	8	2	30000	7	4286	2	0	1	9	0	1	9	4	4	4	9	9	0	0	9	0	4	1	1	0	0	0	0	1	0	4	0	4	1	0	9	9	9	1	6	0	9
134	35	2	2	1	1	1	2	8	1	5000	3	1667	4	0	1	0	9	1	4	2	4	4	9	9	0	9	0	0	2	1	1	0	0	0	1	9	1	9	1	9	0	0	0	9	9	1	1	1	9
135	38	1	2	1	1	3	3	8	3	8000	6	1333	5	0	1	9	0	1	4	4	3	4	9	1	0	0	0	1	4	1	4	0	0	0	1	9	1	9	1	9	1	0	0	9	0	1	4	1	9
136	47	2	2	2	4	2	3	2	2	11000	8	1375	4	1	1	0	0	1	4	4	3	4	9	0	0	0	1	1	1	1	1	0	0	0	1	9	1	9	1	9	9	0	0	9	0	1	7	0	9
137	48	1	2	1	4	1	2	8	2	6000	3	2000	3	1	1	9	0	9	3	9	4	4	4	9	9	9	9	0	4	1	1	0	0	0	0	1	9	1	9	1	9	9	0	0	0	9	1	5	0	9
138	45	1	4	1	4	2	1	1	1	13000	9	1444	4	0	9	0	0	9	2	9	3	4	4	9	0	9	9	0	5	9	1	1	0	0	1	9	0	3	0	2	9	0	1	0	0	1	3	0	1
139	41	1	4	1	4	1	1	1	1	6000	5	1200	4	0	0	0	1	0	2	9	4	4	9	9	9	1	0	0	2	1	1	0	0	0	1	9	1	9	0	1	0	9	1	0	0	1	2	0	1
140	44	1	2	1	4	3	1	3	1	5000	7	714	5	0	0	0	1	0	3	9	4	4	9	1	0	0	0	0	6	9	1	0	0	0	1	9	1	9	1	9	0	9	0	0	0	0	1	0	1
141	36	1	2	1	4	1	1	1	1	3000	7	429	5	0	0	0	1	0	1	4	4	2	9	9	0	0	0	0	8	9	1	0	1	1	0	3	0	1	0	2	0	9	0	9	9	1	6	0	1
142	35	1	2	1	3	1	3	2	1	4000	3	1333	4	0	0	0	1	0	9	4	4	4	4	9	0	1	1	1	1	0	1	0	0	0	0	1	0	5	0	2	0	9	0	0	9	1	6	0	1
143	39	2	2	2	3	2	2	2	3	5600	8	700	5	0	0	1	0	9	2	4	4	4	4	1	0	0	9	1	4	9	1	0	0	0	1	9	1	9	1	9	0	9	0	9	0	1	4	1	1
144	31	2	1	1	3	3	1	2	3	2000	7	286	5	0	1	1	1	0	4	4	9	3	1	0	9	0	1	0	4	1	1	0	0	0	1	9	1	9	1	9	0	0	0	0	0	1	7	1	9
145	32	2	2	1	1	2	1	3	3	9000	9	1000	4	1	1	0	0	9	4	4	9	4	2	0	9	0	0	1	6	1	4	0	0	0	1	9	1	9	1	9	1	0	0	1	0	1	3	1	1
146	38	2	2	1	3	2	2	3	3	11000	14	786	5	1	1	1	9	0	4	1	9	3	4	0	0	0	9	0	1	1	1	0	0	0	1	9	1	9	1	9	0	0	0	1	0	1	3	1	9
147	37	1	1	1	3	2	2	3	1	12300	7	1757	4	1	1	0	1	9	4	4	9	4	4	0	9	0	9	0	7	1	1	0	0	0	1	9	1	9	1	9	1	0	0	1	1	1	6	0	9
148	65	2	2	1	3	1	2	6	1	42000	4	10500	1	1	1	1	1	0	9	4	4	4	4	0	0	0	1	0	6	1	4	0	0	0	1	9	0	2	1	9	1	9	0	1	1	1	6	0	1
149	62	2	2	1	1	1	2	6	1	21000	3	7000	1	1	1	1	1	0	4	4	4	3	4	0	9	9	1	0	2	1	4	0	0	0	1	9	1	9	1	9	0	0	0	1	0	1	6	0	1
150	68	1	2	1	1	1	2	6	2	12000	4	3000	3	0	9	1	1	0	3	4	1	4	4	0	1	0	9	0	1	9	2	0	0	0	0	1	9	1	9	1	9	1	9	0	0	0	0	6	0	9
151	55	2	2	2	1	3	3	2	1	5000	8	625	5	0	0	1	1	0	4	3	4	1	4	0	1	9	9	0	2	9	1	0	0	0	1	9	1	9	1	9	1	0	0	0	0	0	3	0	9

name (ID)	age	sex	marital status	religion	caste category	type of family	education	occupation	ration card	monthly income	number of family members	percapita income	SES	HTN	DM	CVDs	Cancer	Stroke	f/h HTN	f/h Dm	f/h CVDs	f/h Cancer	f/h stroke	curable	preventable	communicable	can increased BP cause stroke?	can uncontrolled DM cause kidney failure?	health checkup camp information	did you know it is free checkup	whom do you approach in illness	smoking	alcohol	tobacco chewing	did you visit doctor?	if no, why?	taking medication?	if no, why?	follow up regularly?	if no, why?	HE physical activity	HE fruits and vegetables	HE stress management	HE avoid habits	HE cancer warning signals	were you referred to PHC	frequency of BP, sugar check up	medicines/treatment free?	is health check up camp useful?
152	56	2	2	1	1	1	3	7	2	8000	2	4000	2	1	0	0	1	0	4	4	4	4	1	9	0	0	1	0	1	9	3	0	0	0	1	9	1	9	0	2	9	1	0	0	0	1	7	1	9
153	36	2	2	1	1	1	4	8	1	10000	7	1429	4	1	0	0	0	1	4	4	4	3	4	0	0	0	1	9	1	9	4	1	0	1	0	2	0	1	0	2	9	1	0	0	0	1	6	0	9
154	45	1	2	1	3	2	5	7	3	8000	7	1143	4	1	0	9	1	1	3	4	4	4	4	9	9	0	1	9	5	9	4	0	0	1	1	9	1	9	1	9	1	1	0	0	0	1	4	1	9
155	41	1	2	2	3	2	2	8	3	30000	7	4286	2	1	1	9	1	0	9	2	4	4	4	0	0	0	0	0	2	9	4	0	0	0	1	9	1	9	1	9	1	1	0	0	0	1	5	1	9
156	44	1	4	1	3	1	2	8	3	5000	2	2500	3	0	1	9	1	1	4	4	3	3	4	0	0	9	0	9	1	1	3	0	0	0	1	9	1	9	1	9	1	1	1	9	0	1	4	0	9
157	36	1	2	1	3	2	1	8	1	3000	8	375	5	1	1	0	1	0	4	2	4	4	4	0	9	9	9	1	1	1	3	0	0	0	1	9	1	9	1	9	9	0	0	9	0	1	5	0	1
158	35	2	2	1	3	2	2	3	1	6000	8	750	5	0	1	0	1	1	4	4	4	1	3	0	9	0	9	1	1	1	1	0	0	0	1	9	1	9	1	9	0	0	0	0	0	1	4	1	0
159	39	2	2	1	4	2	1	3	1	12000	10	1200	4	1	1	0	1	1	9	4	2	4	4	9	1	9	9	0	1	1	1	0	0	0	1	9	1	9	0	3	0	0	1	0	0	1	5	1	0
160	31	2	1	1	4	2	1	3	2	5000	11	455	5	1	9	0	1	1	4	4	4	4	4	9	0	0	9	0	4	1	1	0	1	0	0	1	0	1	0	1	0	0	0	0	0	1	6	0	0
161	32	2	2	1	4	1	1	1	1	9000	3	3000	3	0	0	0	0	1	1	4	4	4	2	0	9	9	1	0	4	1	1	0	0	0	0	0	1	0	2	0	1	1	0	1	1	0	1	6	0	9
162	38	1	2	1	4	1	2	5	1	7000	2	3500	2	0	0	0	0	0	1	4	4	4	4	9	9	1	1	0	2	1	1	0	0	0	0	1	0	2	0	1	1	0	1	1	0	1	6	0	9
163	37	2	2	1	4	2	2	1	1	5000	8	625	5	0	0	1	0	0	4	4	4	4	4	0	0	1	1	0	5	1	1	0	0	0	1	9	1	9	1	9	0	9	0	0	0	0	5	0	9
164	65	2	2	1	4	2	2	1	3	8000	6	1333	5	0	0	9	1	9	9	4	4	3	9	9	1	0	0	0	1	1	1	0	0	1	1	9	1	9	1	9	0	9	1	1	0	0	3	1	9
165	62	2	2	2	4	3	3	2	3	11000	8	1375	4	9	0	9	0	9	9	4	4	4	4	1	0	0	0	1	4	1	1	1	0	1	1	9	1	9	1	9	1	0	0	0	1	0	3	1	9
166	68	2	2	1	4	1	3	2	3	6000	3	2000	3	0	1	0	1	9	9	3	4	4	4	1	0	9	0	1	5	1	1	0	0	0	1	9	0	2	0	2	0	0	1	0	0	1	5	0	9
167	61	1	2	1	4	2	3	2	3	13000	9	1444	4	0	1	0	1	0	4	4	4	4	9	0	0	0	0	0	2	1	2	0	0	0	1	9	1	9	1	9	1	0	9	0	0	1	5	1	1
168	35	2	2	1	3	1	3	2	1	6000	5	1200	4	0	1	0	0	0	4	4	4	1,2	4	0	0	0	0	0	2	1	1	0	0	0	0	1	9	1	9	1	9	9	1	1	0	1	3	1	1
169	30	2	2	1	3	2	3	2	1	5000	7	714	5	0	1	0	1	0	4	4	4	1	4	9	0	9	0	0	1	0	2	0	0	0	1	9	1	9	1	9	1	1	0	0	0	1	3	0	1
170	36	2	2	1	3	3	3	2	2	3000	7	429	5	0	1	9	0	0	4	2	4	1	2	0	0	9	0	1	1	1	1	0	0	0	1	9	1	9	1	9	1	0	0	0	1	1	3	1	1
171	61	1	2	1	1	1	2	2	1	4000	3	1333	4	0	1	0	0	0	1	4	4	4	4	0	9	1	0	0	1	0	1	0	0	0	0	4	0	3	0	1	1	1	9	0	1	1	6	0	9
172	60	1	4	2	1	2	2	3	2	5600	8	700	5	0	1	9	1	0	1	4	4	4	9	9	0	0	0	1	2	0	1	0	0	0	1	9	1	9	0	3	1	0	1	0	0	1	3	1	9
173	35	2	2	1	1	2	2	1	1	2000	7	286	5	1	0	0	1	9	4	4	4	4	9	9	9	1	1	1	2	0	1	0	0	0	1	9	1	9	1	9	1	0	1	1	0	1	7	1	9
174	38	2	2	1	1	2	1	1	1	9000	9	1000	4	1	0	9	0	1	9	4	4	2	9	1	0	1	1	0	4	0	1	0	0	0	1	9	1	9	1	9	1	0	0	1	0	1	7	1	0
175	47	2	2	1	3	2	2	1	1	11000	14	786	5	1	0	0	1	0	4	2	4	4	4	0	0	0	0	9	7	0	1	0	0	0	1	9	1	9	1	9	0	0	0	1	9	1	7	0	0
176	48	2	2	4	3	2	2	1	1	12300	7	1757	4	1	0	0	1	0	4	4	4	4	4	0	0	0	0	9	8	1	4	0	1	0	1	9	1	9	1	9	0	0	0	1	0	1	7	1	0
177	45	1	2	3	1	1	2	2	3	20000	4	5000	2	1	1	0	1	0	3	4	4	4	4	0	0	0	1	0	1	1	4	0	0	0	1	9	1	9	1	9	0	0	0	1	0	1	7	1	1
178	41	2	2	3	1	1	3	1	3	21000	3	7000	1	0	1	0	1	0	4	4	9	1	1	9	9	9	1	0	8	1	1	0	0	0	1	9	1	9	1	9	0	0	0	9	0	1	7	1	1
179	44	2	2	2	1	1	3	2	3	7500	4	1875	3	0	1	0	0	9	4	4	9	4	4	9	9	9	1	1	2	1	1	0	0	1	1	9	1	9	1	9	0	0	0	9	9	1	5	0	0
180	36	2	2	2	1	1	2	1	3	12000	4	3000	3	1	1	1	9	0	4	4	4	4	4	9	0	9	9	9	6	1	4	0	0	1	1	9	1	9	1	9	9	1	0	9	0	0	5	0	1
181	35	1	2	2	1	2	1	1	3	5000	8	625	5	1	1	1	9	9	9	4	4	3	4	9	9	9	9	5	9	1	1	0	0	0	0	2	0	1	0	1	9	1	0	0	0	0	6	0	1
182	39	2	2	2	4	1	2	1	1	8000	2	4000	2	1	9	0	0	0	2	3	4	3	4	1	0	1	9	0	2	1	4	0	0	0	1	9	1	9	0	2	9	1	0	0	9	0	5	1	9
183	31	1	2	2	1	2	3	1	3	10000	7	1429	4	1	0	1	0	9	2	4	4	4	4	0	9	9	9	0	7	1	1	0	0	0	1	9	0	4	0	1	9	1	0	1	9	1	5	0	1
184	32	2	2	1	1	2	3	1	1	8000	7	1143	4	0	0	0	9	0	4	4	4	4	3	0	1	9	9	0	7	1	3	0	0	0	1	9	1	9	1	9	1	1	0	1	0	1	3	1	1
185	38	1	2	1	1	3	4	1	1	30000	7	4286	2	1	0	1	0	0	4	4	1	4	4	0	1	9	9	1	5	9	3	1	0	1	1	9	1	9	1	9	0	9	9	9	0	1	3	1	9
186	37	2	1	1	1	1	5	2	3	9000	3	3000	3	0	0	1	0	0	4	3	2	1	4	0	0	9	0	9	4	9	4	0	0	0	1	9	1	9	1	9	1	9	9	9	1	1	2	1	9
187	65	1	2	1	4	1	2	2	2	7000	2	3500	2	1	0	1	0	0	2	4	4	4	2	0	0	9	0	9	2	1	4	0	0	0	1	9	1	9	1	9	1	9	9	1	1	1	1	0	9
188	62	2	2	1	1	3	2	2	2	5000	8	625	5	1	1	1	0	0	4	4	4	4	4	0	0	9	1	0	0	2	1	4	0	0	0	1	9	1	9	1	9	0	0	9	1	1	1	3	1	9
189	68	2	2	1	1	1	1	8	1	12000	4	3000	3	0	1	0	1	1	4	4	4	4	4	9	0	9	0	1	2	1	4	0	0	0	1	9	1	9	1	9	0	0	9	9	1	1	3	1	9

name (ID)	age	sex	marital status	religion	caste category	type of family	education	occupation	ration card	monthly income	number of family members	percapita income	SES	HTN	DM	CVDs	Cancer	Stroke	f/h HTN	f/h Dm	f/h CVDs	f/h Cancer	f/h stroke	curable	preventable	communicable	can increased BP cause stroke?	can uncontrolled DM cause kidney failure?	health checkup camp information	did you know it is free checkup	whom do you approach in illness	smoking	alcohol	tobacco chewing	did you visit doctor?	if no, why?	taking medication?	if no, why?	follow up regularly?	if no, why?	HE physical activity	HE fruits and vegetables	HE stress management	HE avoid habits	HE cancer warning signals	were you referred to PHC	frequency of BP, sugar check up	medicines/treatment free?	is health check up camp useful?
190	44	2	2	1	1	2	2	8	1	5000	8	625	5	0	1	0	1	1	3	4	4	4	3	0	0	1	1	0	2	1	1	0	0	0	1	9	1	9	1	9	0	1	0	9	0	1	3	1	9
191	36	1	2	1	1	1	1	7	1	8000	2	4000	2	0	1	9	1	0	9	4	4	4	4	9	9	1	1	1	2	1	1	0	0	0	0	1	0	2	0	1	0	1	0	9	0	1	6	0	1
192	35	2	2	2	1	2	1	8	1	10000	7	1429	4	0	1	9	1	1	2	4	4	2	3	0	9	1	0	0	1	1	1	0	1	0	1	9	1	9	1	9	0	9	0	1	0	1	5	1	1
193	39	2	2	1	1	3	1	8	1	8000	7	1143	4	9	9	9	1	0	2	4	1	4	4	0	1	0	0	0	0	1	1	1	0	0	0	1	9	1	9	0	1	1	9	0	1	1	1	4	0	1
194	31	2	2	1	3	3	2	7	3	30000	7	4286	2	0	0	0	9	1	4	1	4	4	4	0	0	0	0	0	1	1	1	0	0	1	1	9	1	9	1	9	1	1	9	0	9	1	7	1	1
195	32	2	2	1	3	1	2	7	3	6000	3	2000	3	0	9	0	1	1	4	4	4	4	3	0	9	0	0	0	1	1	4	0	0	0	1	9	1	9	1	9	1	1	0	0	9	1	5	1	1
196	38	1	2	1	3	2	2	7	3	13000	9	1444	4	0	0	0	1	1	4	4	4	4	4	9	9	0	0	9	4	1	1	1	0	0	1	9	1	9	1	9	1	9	9	0	9	1	4	1	1
197	37	2	4	1	3	1	3	8	3	6000	5	1200	4	0	0	0	1	1	3	4	4	4	1	9	9	0	1	9	4	9	1	0	0	0	1	9	0	5	0	3	0	9	0	0	0	1	3	0	9
198	65	1	2	1	3	2	3	8	1	5000	7	714	5	0	0	0	1	0	1	4	4	4	4	0	1	1	1	9	2	0	1	0	0	0	1	9	1	9	1	9	0	9	1	1	9	1	5	1	1
199	62	1	2	2	3	3	3	8	1	3000	7	429	5	0	0	0	1	0	2	4	3	4	3	9	9	0	0	1	5	0	1	1	1	0	1	9	1	9	1	9	0	1	1	9	9	1	2	0	9
200	68	2	2	1	3	1	3	8	1	4000	3	1333	4	0	1	1	1	9	4	4	4	4	4	0	9	0	1	1	1	0	1	0	1	0	1	9	1	9	1	9	0	1	1	9	9	0	4	1	9
201	61	2	2	1	3	2	3	8	2	5600	8	700	5	1	1	0	0	9	2	4	4	4	4	9	9	0	0	1	4	1	4	0	0	0	1	9	1	9	1	9	9	0	1	1	9	0	7	0	1
202	35	1	2	1	3	3	3	2	1	2000	7	286	5	1	1	0	1	9	2	4	2	4	3	1	9	0	0	0	5	1	3	0	0	0	1	9	1	9	1	9	9	0	1	1	9	0	3	1	1
203	30	2	2	1	3	2	2	3	2	9000	9	1000	4	1	1	0	1	0	4	1	4	4	4	1	9	0	0	0	2	1	2	0	0	0	1	9	1	9	1	9	0	0	0	0	0	1	3	1	9
204	36	1	2	2	3	2	2	1	1	11000	14	786	5	1	1	0	1	0	9	1	4	2	1	0	1	0	0	0	2	1	1	0	0	0	0	1	0	1	0	2	0	0	0	0	0	1	6	0	9
205	61	2	2	1	3	2	2	3	3	12300	7	1757	4	1	9	0	1	0	4	2	4	4	4	0	9	9	0	0	1	1	1	0	0	0	1	9	1	9	0	1	0	1	0	0	0	1	7	1	9
206	60	1	2	1	3	1	1	5	3	26000	4	6500	1	0	0	9	1	0	4	4	4	4	4	9	9	0	0	0	1	1	1	0	0	0	1	9	1	9	1	9	0	9	0	0	0	1	4	1	9
207	35	1	2	1	4	1	2	1	3	21000	3	7000	1	0	0	0	1	0	4	4	4	4	4	0	9	9	0	0	1	1	1	0	0	0	1	9	1	9	1	9	1	9	0	0	0	1	6	0	9
208	38	1	2	1	4	1	2	1	1	12000	4	3000	3	1	0	9	1	0	4	4	4	4	4	0	1	0	9	0	2	1	1	0	0	1	1	9	1	9	1	9	1	1	0	1	0	1	3	1	9
209	47	1	2	1	4	1	2	3	1	5000	5	1000	4	1	0	0	1	0	4	4	4	4	4	9	1	0	9	0	2	1	4	0	0	0	1	9	1	9	1	9	1	1	9	0	0	1	6	1	9
210	48	1	4	1	3	1	3	3	1	6000	4	1500	4	1	0	9	0	1	9	4	4	4	3	9	0	0	9	0	4	1	4	0	0	0	1	9	1	9	1	9	1	0	9	1	0	1	5	1	1
211	45	1	2	1	3	1	3	3	2	9000	3	3000	3	1	1	0	0	1	3	4	4	3	4	1	0	0	9	1	7	1	4	0	1	0	1	9	1	9	1	9	0	0	0	1	0	1	4	1	0
212	41	1	2	1	3	1	2	2	1	18000	5	3600	2	0	1	0	1	1	2	4	4	4	4	0	0	9	1	1	8	1	1	0	0	0	1	9	1	9	1	9	0	0	0	0	1	1	7	1	0
213	44	2	2	1	3	1	3	2	1	6000	2	3000	3	1	1	0	0	0	3	1	4	4	4	9	0	9	1	0	1	1	4	0	0	0	1	9	1	9	0	4	0	0	0	1	1	1	4	0	0
214	36	2	2	4	3	1	3	2	1	10000	5	2000	4	0	1	0	1	9	2	4	4	4	1,2	1	0	0	0	0	8	1	1	0	0	0	1	9	1	9	1	9	0	0	1	1	0	1	2	0	9
215	35	2	2	1	3	1	2	2	3	5000	2	2500	3	1	1	0	1	9	4	4	4	3	1	9	0	9	0	1	2	1	4	0	0	0	1	9	0	1	0	4	0	1	1	1	0	1	3	0	9
216	39	2	2	1	3	2	1	8	3	3000	8	375	5	1	9	1	0	0	4	4	4	4	1	9	0	0	0	1	6	1	1	1	0	0	1	9	1	9	1	9	0	0	0	1	0	0	3	0	9
217	31	2	2	1	3	2	1	8	3	6000	8	750	5	0	0	1	1	0	4	4	4	4	4	9	0	9	0	1	5	1	4	0	0	0	0	1	0	2	0	1	0	1	1	9	0	0	6	0	9
218	32	2	2	1	3	2	1	7	3	12000	10	1200	4	0	1	0	0	9	4	4	4	4	4	9	9	1	0	9	2	1	1	0	0	0	0	1	0	1	0	2	0	1	0	9	0	0	6	0	1
219	38	2	2	1	3	2	2	5	1	5000	11	455	5	0	1	1	0	0	9	3	4	4	4	9	0	1	0	9	7	1	4	0	0	0	1	9	1	9	1	9	9	0	0	9	0	1	7	1	9
220	37	1	2	2	3	1	2	3	1	6000	3	2000	3	0	0	0	1	0	4	4	4	4	2	1	9	0	1	9	7	1	1	0	0	0	1	9	1	9	1	9	9	1	0	9	1	1	3	1	1
221	65	2	4	1	3	2	2	2	2	5000	6	833	5	9	0	1	1	0	4	4	9	4	4	1	0	0	1	9	5	1	4	0	0	0	1	9	1	9	1	9	1	1	0	9	0	1	3	1	1
222	62	2	4	1	4	1	2	2	1	12000	4	3000	3	0	0	1	0	0	1	2	9	4	4	0	0	9	0	9	4	1	4	0	0	0	1	9	1	9	1	9	1	1	0	0	1	1	6	1	9
223	68	2	4	1	4	3	2	2	2	5000	8	625	5	0	0	1	1	1	2	4	9	1	4	0	0	0	0	9	2	1	4	0	1	1	1	9	1	9	1	9	9	1	0	1	1	1	6	1	9
224	31	1	1	2	4	1	3	3	1	8000	2	4000	2	0	0	1	1	1	2	4	4	4	1	0	0	0	0	0	2	1	1	0	0	1	1	9	1	9	1	9	9	9	0	0	0	1	6	1	9
225	32	2	1	3	4	3	3	3	3	10000	7	1429	4	0	1	0	1	1	3	4	4	4	4	0	9	9	1	0	2	1	1	0	0	0	1	9	1	9	0	1	9	9	0	1	0	1	6	0	9
226	38	2	2	1	4	3	3	8	3	8000	7	1143	4	0	1	0	1	1	4	4	4	4	4	1	9	9	0	0	2	1	3	0	0	0	1	9	1	9	1	9	1	9	1	9	0	1	3	1	9
227	37	2	2	1	4	3	3	8	2	30000	7	4286	2	0	1	9	0	0	4	4	4	4	3	9	0	1	1	0	2	1	3	0	0	0	1	9	1	9	1	9	0	9	1	0	0	1	7	0	9

name (ID)	age	sex	marital status	religion	caste category	type of family	education	occupation	ration card	monthly income	number of family members	percapita income	SES	HTN	DM	CVDs	Cancer	Stroke	f/h HTN	f/h Dm	f/h CVDs	f/h Cancer	f/h stroke	curable	preventable	communicable	can increased BP cause stroke?	can uncontrolled DM cause kidney failure?	health checkup camp information	did you know it is free checkup	whom do you approach in illness	smoking	alcohol	tobacco chewing	did you visit doctor?	if no, why?	taking medication?	if no, why?	follow up regularly?	if no, why?	HE physical activity	HE fruits and vegetables	HE stress management	HE avoid habits	HE cancer warning signals	were you referred to PHC	frequency of BP, sugar check up	medicines/treatment free?	is health check up camp useful?
228	65	1	2	1	4	2	4	7	3	9500	5	1900	3	0	1	9	9	1	4	4	4	4	3	9	9	0	1	1	2	0	2	0	0	0	1	9	1	9	1	9	0	9	1	1	0	1	7	1	1
229	62	2	2	1	1	2	5	1	1	8000	6	1333	5	1	1	9	9	0	1	4	9	4	4	9	0	9	0	1	2	0	1	0	0	0	1	9	1	9	1	9	0	0	1	0	0	1	4	1	1
230	68	1	2	1	1	2	2	4	1	11000	8	1375	4	1	9	0	0	9	9	1	9	4	3	9	9	1	9	0	2	0	1	0	0	0	1	9	1	9	1	9	0	1	1	0	9	1	5	1	1
231	61	2	2	2	1	1	2	1	1	6000	3	2000	3	1	0	0	0	1	4	2	4	4	4	0	1	0	9	0	2	9	4	1	0	0	0	1	0	3	0	3	0	0	9	0	9	1	6	0	1
232	35	1	2	1	1	2	1	1	1	13000	9	1444	4	1	0	0	9	1	4	4	9	1	4	0	1	0	0	0	1	1	1	0	0	0	1	9	1	9	1	9	0	1	9	0	9	0	5	1	1
233	42	2	2	1	3	3	2	1	1	6000	5	1200	4	1	0	0	0	1	9	4	4	1	4	0	0	0	0	0	1	1	1	0	0	0	1	9	1	9	1	9	0	0	9	0	0	1	4	1	1
234	48	2	2	1	3	3	1	1	3	5000	7	714	5	0	0	0	0	1	4	4	4	4	4	0	0	0	1	0	1	1	4	0	0	0	1	9	0	1	0	1	0	0	0	0	0	1	5	0	9
235	59	1	2	1	1	2	1	1	1	3000	7	429	5	0	0	0	0	1	3	4	2	4	2	0	9	0	9	1	1	1	1	0	0	0	1	9	1	9	1	9	0	0	0	0	0	1	5	1	1
236	33	1	2	1	1	1	1	1	3	4000	3	1333	4	1	1	1	0	1	4	4	4	3	4	0	0	0	9	1	4	1	4	0	0	0	1	9	1	9	1	9	0	1	1	0	0	1	5	0	9
237	68	1	2	1	1	2	2	3	2	5600	8	700	5	1	1	9	1	0	4	4	4	4	4	9	0	1	0	0	4	1	1	0	0	0	0	1	9	1	9	1	9	0	1	1	0	9	1	5	0	9
238	59	1	2	1	1	2	2	3	2	2000	7	286	5	1	1	0	1	1	2	4	1	3	1	0	9	1	0	1	2	9	3	0	1	0	1	9	1	9	0	1	0	1	9	0	0	1	5	0	1
239	35	2	2	1	1	2	2	2	1	9000	9	1000	4	1	1	0	1	1	4	4	4	4	4	9	9	0	0	0	5	1	3	0	0	0	1	9	1	9	1	9	0	9	9	0	0	1	3	1	1
240	30	2	2	3	4	2	3	3	1	11000	14	786	5	0	1	0	1	1	9	4	4	4	4	0	1	0	1	0	1	9	4	0	0	0	1	9	1	9	1	9	0	9	1	0	9	1	3	1	9
241	36	2	2	1	1	2	3	2	1	12300	7	1757	4	1	0	0	0	1	4	4	4	3	4	0	0	0	0	0	4	9	4	0	0	0	0	1	0	1	0	1	1	1	1	1	9	1	6	0	9
242	61	2	2	1	1	1	3	3	1	25000	4	6250	1	0	0	9	9	1	4	4	4	4	4	0	9	9	0	0	5	0	4	0	0	0	1	9	1	9	1	9	0	9	9	0	9	1	5	1	9
243	60	1	2	1	1	1	3	2	1	21000	3	7000	1	1	0	0	0	1	1	4	2,3	4	1	4	0	9	9	1	0	2	9	4	0	0	0	1	9	1	9	1	9	0	1	9	0	9	0	3	1	9
244	35	2	2	1	2	1	3	1	3	12000	4	3000	3	1	0	9	1	1	4	4	3	4	3	9	1	9	0	0	2	1	1	0	0	0	1	1	9	1	9	1	9	1	9	9	1	0	1	3	0	9
245	38	1	2	1	2	2	3	4	3	5000	8	625	5	0	1	0	1	1	9	4	4	3	4	9	0	9	1	0	1	1	1	1	0	0	0	1	9	1	9	1	9	0	9	1	0	0	1	3	1	9
246	47	1	2	4	1	1	2	1	3	8000	2	4000	2	0	1	9	1	0	4	4	4	4	4	0	0	1	1	9	1	1	1	0	0	0	0	1	9	1	9	1	9	1	0	1	1	0	1	3	1	9
247	48	2	2	1	1	2	2	7	3	10000	7	1429	4	0	1	0	1	0	4	4	2	4	2	9	0	9	0	9	1	1	1	0	1	0	1	9	1	9	1	9	1	0	0	1	0	1	3	0	1
248	45	1	2	1	1	3	2	7	1	8000	7	1143	4	0	1	0	1	1	4	4	4	3	4	0	0	9	9	9	2	1	1	0	1	0	1	9	1	9	1	9	0	0	0	0	1	1	7	0	0
249	41	1	2	1	1	2	1	8	1	30000	7	4286	2	1	1	0	0	0	9	3	4	4	4	9	0	9	9	9	2	1	4	0	0	0	1	9	1	9	0	2	1	0	0	1	0	1	7	1	0
250	44	1	2	1	4	1	2	8	1	6000	2	3000	3	9	9	0	1	1	4	4	4	1	4	1	1	9	0	1	4	9	1	0	0	0	1	9	0	2	0	1	0	1	0	0	1	1	7	0	0
251	36	2	2	2	1	2	2	8	2	10000	5	2000	4	0	0	0	1	1	4	4	4	4	4	1	9	9	0	1	7	9	1	0	0	0	1	9	1	9	1	9	1	1	1	1	0	1	7	1	9
252	35	2	2	1	1	1	2	8	1	5000	2	2500	3	0	0	1	1	0	4	4	4	4	4	0	9	1	1	0	8	9	1	0	0	0	1	9	1	9	1	9	9	1	9	9	1	1	7	1	9
253	39	1	2	1	1	1	3	2	2	3000	8	375	5	0	0	1	1	1	4	4	9	4	4	0	9	1	9	0	1	9	1	0	0	1	1	9	1	9	1	9	1	0	9	1	0	1	7	1	9
254	31	2	2	1	1	3	3	3	1	6000	8	750	5	0	0	0	1	0	4	4	9	4	4	9	1	1	9	0	8	9	1	0	0	0	0	2	0	1	0	1	0	1	1	0	0	0	6	0	9
255	32	1	2	1	1	2	2	1	3	12000	10	1200	4	0	0	1	1	0	9	2	9	4	4	0	0	0	0	0	2	9	4	0	0	0	1	9	1	9	1	9	0	1	1	0	0	1	5	1	9
256	38	1	2	1	4	2	3	2	3	5000	11	455	5	0	1	0	1	1	4	2	4	3	4	0	0	0	0	0	6	1	3	0	0	0	1	9	1	9	1	9	9	1	0	9	0	1	5	0	9
257	37	1	2	1	4	1	3	3	3	6000	3	2000	3	0	1	1	1	1	4	2	4	4	1	9	1	0	0	0	5	1	2	0	0	0	1	9	1	9	1	9	1	0	0	1	0	1	5	1	1
258	65	1	2	1	4	2	2	5	1	5000	6	833	5	1	1	1	0	0	3	2	4	4	4	9	0	9	1	1	2	1	1	0	0	0	1	9	1	9	1	9	1	0	0	1	0	1	5	1	1
259	62	2	2	4	4	1	2	8	1	12000	4	3000	3	1	1	1	0	1	4	2	4	4	4	1	0	9	0	1	7	1	1	0	0	0	1	9	1	9	0	3	0	1	0	0	0	1	3	1	1
260	68	2	2	1	4	3	1	4	1	5000	8	625	5	1	1	1	1	1	4	2	4	1,2	4	0	0	9	0	0	7	1	1	0	0	0	1	9	1	9	1	9	0	1	0	0	0	1	3	1	1
261	70	2	4	1	3	1	1	7	2	8000	2	4000	2	1	0	0	0	1	4	1,2	4	1	4	9	0	9	0	0	5	1	1	0	1	0	1	9	1	9	1	9	0	1	1	0	9	1	2	1	9
262	48	2	1	1	3	2	1	6	1	10000	7	1429	4	1	9	0	1	1	3	4	4	1	4	9	0	1	0	0	4	1	1	1	0	1	1	9	1	9	1	9	0	9	0	0	9	0	1	1	9
263	35	1	2	1	3	3	4	3	1	8000	7	1143	4	0	9	9	1	0	9	4	1	4	3	0	0	9	0	1	2	1	4	1	0	0	1	9	0	1	1	9	0	9	1	0	0	0	3	0	9
264	57	2	2	2	3	3	5	3	1	30000	7	4286	2	0	0	9	0	9	4	4	4	4	4	0	9	9	0	0	2	1	4	1	0	0	1	9	0	1	0	1	0	9	1	0	0	0	3	0	0
265	47	1	2	1	2	1	2	2	3	12000	4	3000	3	1	0	9	1	9	4	4	4	4	4	1	0	9	0	1	2	1	4	0	0	0	1	9	0	2	1	9	0	9	0	0	0	0	3	0	1

name (ID)	age	sex	marital status	religion	caste category	type of family	education	occupation	ration card	monthly income	number of family members	percapita income	SES	HTN	DM	CVDs	Cancer	Stroke	f/h HTN	f/h Dm	f/h CVDs	f/h Cancer	f/h stroke	curable	preventable	communicable	can increased BP cause stroke?	can uncontrolled DM cause kidney failure?	health checkup camp information	did you know it is free checkup	whom do you approach in illness	smoking	alcohol	tobacco chewing	did you visit doctor?	if no, why?	taking medication?	if no, why?	follow up regularly?	if no, why?	HE physical activity	HE fruits and vegetables	HE stress management	HE avoid habits	HE cancer warning signals	were you referred to PHC	frequency of BP, sugar check up	medicines/treatment free?	is health check up camp useful?
266	42	2	2	1	3	1	2	1	3	5000	5	1000	4	1	0	0	0	0	4	4	4	2	2	1	9	9	1	1	2	1	1	0	0	0	0	1	0	4	0	4	0	1	1	0	0	1	6	0	9
267	41	2	2	1	3	1	1	1	3	6000	4	1500	4	1	0	0	0	0	4	4	4	4	4	1	0	9	1	0	2	1	4	0	0	0	0	1	0	2	0	2	0	0	1	0	1	1	6	0	1
268	44	2	2	1	3	1	2	1	3	9000	3	3000	3	1	1	0	1	9	4	1	4	4	4	0	0	1	0	9	2	1	1	0	0	0	1	9	0	3	0	1	0	0	1	0	0	1	4	0	1
269	65	2	2	2	3	1	1	7	1	6000	3	2000	3	0	1	0	1	0	9	4	4	4	4	0	0	9	0	9	2	0	4	0	0	0	1	9	1	9	1	9	0	0	1	0	1	1	7	1	9
270	33	2	2	1	3	1	1	8	1	5000	6	833	5	1	1	0	0	0	1	4	9	1	4	0	0	9	1	0	1	1	1	0	0	0	1	9	1	9	1	9	9	0	9	9	0	1	5	1	9
271	57	2	4	1	3	3	1	7	2	8000	6	1333	5	0	1	0	1	0	4	4	9	4	3	0	9	1	1	0	1	0	4	0	0	0	1	9	1	9	0	3	9	1	9	9	0	1	4	1	9
272	55	2	2	1	1	2	2	1	1	11000	8	1375	4	1	1	0	1	0	4	4	4	4	4	0	9	0	1	1	1	0	1	0	1	0	1	9	1	9	0	1	9	0	9	9	0	1	3	1	9
273	49	1	2	3	1	1	2	3	2	6000	3	2000	3	1	9	1	1	1	4	4	4	3	4	9	0	0	9	9	1	0	4	0	0	1	1	9	1	9	0	1	9	0	9	9	0	1	5	0	9
274	39	1	2	1	1	2	2	3	2	13000	9	1444	4	0	0	0	1	1	4	3	1	3	2	9	9	1	9	9	4	0	1	0	0	1	1	9	1	9	0	2	9	1	9	9	0	1	2	0	9
275	36	1	2	1	1	1	3	2	2	6000	5	1200	4	0	0	9	0	1	9	4	4	4	4	9	0	9	9	0	4	0	4	0	0	0	1	9	1	9	1	9	0	0	0	0	9	1	4	0	1
276	35	2	2	1	1	3	3	2	1	5000	7	714	5	0	0	1	9	1	4	4	4	3	4	0	9	9	9	0	2	1	4	0	0	0	1	9	0	1	1	9	0	1	1	0	9	1	7	0	1
277	30	1	2	1	4	3	3	2	1	3000	7	429	5	0	0	0	9	1	4	2	4	1	4	0	1	9	9	0	5	1	4	1	0	0	1	9	0	1	0	1	0	1	0	0	0	1	3	0	1
278	36	1	2	1	4	1	3	2	1	4000	3	1333	4	9	0	0	0	9	4	4	4	2	4	0	1	9	9	1	1	1	1	0	0	0	1	9	1	9	1	9	0	1	1	0	0	1	3	0	1
279	61	1	2	2	3	2	3	2	1	5600	8	700	5	9	1	0	0	1	1	4	4	1	4	0	0	9	0	0	4	1	1	0	0	0	1	9	1	9	1	9	9	1	0	9	9	0	5	1	1
280	60	2	2	1	2	2	3	1	2	2000	7	286	5	0	1	0	9	1	1	2	3	4	4	0	0	0	0	0	5	1	1	0	0	0	1	9	1	9	1	9	0	1	0	0	0	1	7	1	1
281	35	2	2	1	4	2	2	1	3	9000	9	1000	4	0	1	0	0	1	9	1	4	4	4	0	9	0	0	1	2	9	1	0	0	0	0	1	0	2	0	1	9	1	0	9	0	1	6	0	9
282	38	2	2	1	1	2	2	2	1	11000	14	786	5	0	1	9	0	1	3	1	4	4	4	9	0	0	0	1	2	1	4	0	0	0	1	9	1	9	1	9	0	1	1	0	0	1	6	1	1
283	47	1	2	1	1	3	2	2	1	12300	7	1757	4	0	1	0	0	1	4	3	2	4	4	0	0	0	1	0	1	1	1	0	1	0	1	9	1	9	1	9	1	0	1	1	9	1	3	1	9
284	48	2	2	2	1	1	1	1	1	33000	4	8250	1	0	1	9	0	1	3	4	4	4	4	9	9	0	1	0	1	1	1	0	0	0	1	9	1	9	1	9	1	0	1	1	9	1	6	1	9
285	45	2	2	2	1	1	2	1	1	21000	3	7000	1	0	1	0	1	0	4	4	4	4	4	0	9	0	0	0	1	9	3	0	0	0	1	9	1	9	1	9	1	0	0	1	0	1	5	0	1
286	41	1	2	2	3	1	2	1	3	6000	3	2000	3	0	0	9	1	1	4	4	4	4	4	0	1	9	0	0	2	9	2	0	0	0	1	9	1	9	1	9	1	9	0	1	0	1	4	1	1
287	44	2	2	1	3	3	2	2	2	5000	6	833	5	1	0	0	1	1	3	4	4	4	4	0	0	0	0	0	2	1	1	0	0	0	1	9	1	9	0	3	1	0	0	1	0	1	7	1	9
288	36	2	2	1	3	2	3	2	2	18000	5	3600	2	1	0	0	1	1	4	4	4	4	4	0	1	9	0	1	4	1	1	0	0	0	1	9	1	9	1	9	0	0	1	0	0	1	4	1	9
289	35	2	2	3	3	1	3	2	1	6000	2	3000	3	1	0	0	0	1	1	1	4	4	4	9	1	0	0	1	7	1	1	0	0	0	1	1	9	1	9	1	9	0	0	0	0	1	1	2	0	9
290	39	1	2	1	3	2	2	8	1	10000	5	2000	4	1	1	0	9	1	4	4	9	4	4	9	1	0	1	0	8	1	1	0	0	0	1	9	1	9	1	9	0	0	0	0	1	0	3	0	9
291	31	2	2	2	4	1	1	8	1	5000	2	2500	3	1	1	0	1	1	3	4	9	4	4	0	9	0	1	1	1	1	4	1	0	0	1	9	1	9	1	9	0	0	0	0	0	1	3	0	9
292	32	2	2	1	4	2	5	8	1	3000	8	375	5	0	1	1	1	1	9	4	9	4	4	9	9	0	0	0	8	1	1	0	0	0	1	9	0	2	0	1	0	0	9	0	0	1	1	0	9
293	38	2	2	1	1	2	4	8	1	6000	8	750	5	0	1	1	1	1	4	4	9	4	4	0	9	9	1	0	2	1	1	0	0	0	1	9	1	9	1	9	0	0	9	0	0	1	4	1	9
294	37	1	2	1	4	2	5	8	3	12000	10	1200	4	1	1	0	1	0	3	4	4	4	4	9	9	9	0	0	6	1	4	0	0	0	1	9	0	4	0	2	9	0	9	9	0	1	7	0	1
295	65	2	2	1	1	2	2	7	3	5000	11	455	5	1	9	1	1	0	4	3	4	1	4	1	9	0	0	0	5	1	1	0	0	0	1	9	1	9	1	9	9	1	0	9	0	1	5	1	0
296	48	2	2	1	4	1	2	8	3	12000	4	3000	3	1	0	0	1	1	1	4	3	4	2	1	0	9	0	0	2	1	4	0	0	0	1	9	1	9	0	1	0	9	0	0	0	1	3	1	0
297	41	2	2	1	3	2	1	8	3	5000	8	625	5	1	0	1	0	1	4	4	3	4	4	0	0	0	0	0	7	1	1	0	1	0	1	9	1	9	1	9	0	9	0	0	0	1	2	0	0
298	37	1	2	1	3	1	2	8	1	8000	2	4000	2	0	0	1	1	1	4	2	4	4	4	0	0	9	0	0	7	1	3	0	1	1	1	9	1	9	1	9	0	9	0	0	0	1	1	1	9
299	36	1	2	1	3	3	1	2	1	10000	7	1429	4	1	0	1	1	1	9	4	3	4	4	9	0	1	0	9	5	1	3	0	0	1	1	9	1	9	1	9	1	9	0	1	0	1	4	1	9
300	63	2	2	1	4	1	1	2	1	8000	7	1143	4	0	0	1	1	1	4	4	1	4	2	0	0	1	0	9	4	1	4	0	0	1	0	1	0	4	0	1	1	0	1	1	0	1	6	0	9
301	35	1	2	1	4	3	1	2	2	30000	7	4286	2	1	1	0	1	1	4	4	2	3	4	0	1	0	9	9	2	9	4	0	0	0	1	0	4	0	2	0	4	0	0	0	0	1	6	0	9
302	30	2	2	1	3	1	2	6	1	12000	4	3000	3	1	1	0	1	0	3	2	4	4	4	9	1	0	9	9	2	9	4	0	0	0	1	9	1	9	1	9	1	0	1	1	0	0	3	1	1
303	36	1	2	2	3	1	2	6	2	5000	5	1000	4	0	1	9	1	0	4	2	4	4	4	9	0	9	9	1	2	9	4	0	0	0	1	9	1	9	1	9	0	0	0	0	0	0	3	0	9

name (ID)	age	sex	marital status	religion	caste category	type of family	education	occupation	ration card	monthly income	number of family members	percapita income	SES	HTN	DM	CVDs	Cancer	Stroke	f/h HTN	f/h Dm	f/h CVDs	f/h Cancer	f/h stroke	curable	preventable	communicable	can increased BP cause stroke?	can uncontrolled DM cause kidney failure?	health checkup camp information	did you know it is free checkup	whom do you approach in illness	smoking	alcohol	tobacco chewing	did you visit doctor?	if no, why?	taking medication?	if no, why?	follow up regularly?	if no, why?	HE physical activity	HE fruits and vegetables	HE stress management	HE avoid habits	HE cancer warning signals	were you referred to PHC	frequency of BP, sugar check up	medicines/treatment free?	is health check up camp useful?
304	61	2	2	1	4	1	2	2	1	6000	4	1500	4	0	1	9	1	0	4	1	4	2	4	1	0	0	9	1	2	9	1	1	0	0	1	9	1	9	1	9	0	9	0	0	0	1	4	0	1
305	60	1	2	1	4	1	3	5	3	9000	3	3000	3	0	1	9	1	0	4	1	3	4	4	0	0	0	1	0	2	9	1	0	0	0	1	9	1	9	1	9	0	0	0	0	0	1	7	0	1
306	35	2	2	1	4	2	3	2	3	8000	6	1333	5	0	9	0	0	9	1,2	3	2	4	4	9	9	9	1	0	2	0	1	0	0	0	1	9	1	9	1	9	0	9	0	0	0	1	5	1	9
307	38	1	2	2	4	2	3	5	3	11000	8	1375	4	9	0	0	0	9	1	4	2	4	3	9	9	9	0	0	2	0	1	0	0	0	0	1	9	1	9	0	3	0	0	0	0	1	1	4	1	9
308	47	2	2	1	4	1	3	8	1	6000	3	2000	3	9	0	0	1	0	1	4	4	4	4	9	9	1	0	0	2	0	1	0	0	0	0	2	0	1	0	2	0	1	0	0	0	1	6	0	9
309	48	1	2	1	4	2	3	8	1	13000	9	1444	4	0	0	0	0	0	9	4	4	3	4	0	9	0	0	0	6	1	4	0	0	0	0	1	0	3	0	1	0	1	0	0	0	1	6	0	9
310	45	2	2	2	4	1	3	8	1	6000	5	1200	4	0	0	0	1	0	4	1	3	2	4	0	1	0	0	0	2	0	1	1	1	0	0	1	0	2	0	1	0	1	0	0	1	1	6	0	9
311	41	1	2	2	4	3	2	8	2	5000	7	714	5	0	1	0	1	0	4	4	4	4	3	0	9	0	0	1	2	0	1	0	0	1	0	3	0	2	0	1	1	1	0	1	0	1	6	0	9
312	44	2	2	2	4	2	2	8	1	3000	7	429	5	0	1	1	0	1	2	4	4	4	4	1	9	0	0	1	2	1	1	0	0	0	0	1	0	5	0	2	1	1	0	1	1	1	6	0	1
313	36	1	2	1	4	1	2	5	1	4000	3	1333	4	0	1	1	1	1	9	1	4	2	4	0	9	0	1	0	1	0	1	0	0	0	0	2	0	1	0	2	1	0	9	1	1	1	6	0	1
314	35	1	2	1	4	2	1	5	1	5600	8	700	5	0	1	0	0	1	4	4	4	4	4	0	9	9	1	0	2	1	1	0	0	0	1	9	1	9	1	9	1	0	9	1	0	1	5	1	1
315	39	1	2	1	1	1	2	2	3	2000	7	286	5	0	1	0	0	1	4	4	4	4	4	0	9	1	0	0	2	1	4	0	0	0	1	9	1	9	1	9	1	0	9	1	1	0	6	1	1
316	31	1	2	1	3	2	2	2	3	9000	9	1000	4	1	9	0	1	1	1	4	1	4	4	0	1	0	0	1	1	1	3	0	0	0	1	9	1	9	1	9	9	0	0	9	0	1	3	0	1
317	32	2	2	2	4	2	2	2	3	11000	14	786	5	1	0	0	1	1	9	4	1	4	4	0	9	1	0	0	2	9	2	0	0	0	1	9	1	9	1	9	9	0	0	9	1	1	5	0	1
318	38	2	2	1	4	2	3	8	3	12300	7	1757	4	1	0	9	0	0	9	4	1	4	4	1	9	1	1	1	1	1	1	0	0	0	1	9	0	2	1	9	9	0	0	9	9	1	4	0	9
319	37	2	2	1	4	1	3	8	1	35000	4	8750	1	1	0	0	1	0	3	3	4	1	1	1	0	0	0	1	1	9	1	0	0	0	1	9	1	9	1	9	0	9	0	0	1	1	7	0	1
320	65	2	2	1	4	1	2	8	1	21000	3	7000	1	1	0	9	1	0	3	4	4	2	4	0	0	0	1	0	2	1	1	0	1	0	1	9	1	9	1	9	0	9	0	0	0	1	4	1	9
321	62	1	2	1	3	1	1	8	2	9000	3	3000	3	0	0	0	1	0	4	4	2	1	4	0	0	0	1	9	5	9	1	0	0	0	1	9	1	9	0	2	1	0	0	1	0	1	3	0	9
322	68	2	4	1	3	1	1	7	1	7000	2	3500	2	0	1	9	1	1	3	2	4	4	4	0	0	9	0	9	9	1	1	0	0	0	1	9	1	9	1	9	1	0	0	1	0	1	3	0	1
323	45	2	2	4	3	2	1	8	2	5000	8	625	5	1	1	0	0	1	4	4	2	4	4	0	1	9	9	0	9	1	4	0	0	1	0	3	0	4	0	1	9	0	0	9	0	1	6	0	1
324	52	1	2	1	4	3	3	8	3	18000	5	3600	2	1	1	0	9	1	4	4	4	4	4	0	0	9	9	0	5	1	4	0	0	1	1	9	1	9	1	9	9	1	0	9	0	0	3	1	9
325	65	1	2	1	4	1	2	2	2	6000	2	3000	3	1	1	0	9	1	9	4	4	1	4	0	0	9	0	1	5	1	4	0	0	0	1	9	1	9	1	9	1	1	1	1	0	1	4	1	9
326	36	1	2	1	4	1	2	2	1	10000	5	2000	4	1	1	0	0	0	4	4	3	4	4	9	0	1	0	9	4	9	1	0	0	0	1	9	1	9	1	9	1	0	0	1	1	1	7	1	9
327	35	2	2	1	2	1	3	3	3	5000	2	2500	3	0	0	0	0	0	4	4	4	4	4	0	0	9	1	9	7	1	4	0	0	0	1	9	1	9	1	9	9	1	1	9	1	1	5	1	9
328	57	2	2	1	4	2	3	2	1	3000	8	375	5	1	0	1	9	0	4	4	3	4	1	9	0	9	9	0	1	1	1	0	0	0	1	9	1	9	1	9	9	0	1	9	1	1	2	0	9
329	54	2	2	1	4	2	2	3	3	6000	8	750	5	0	9	1	0	0	9	4	4	4	4	0	9	9	9	0	2	1	4	0	0	0	1	9	1	9	1	9	9	0	0	9	1	1	3	0	9
330	61	1	2	1	4	2	2	2	2	12000	10	1200	4	1	1	0	0	0	1	4	4	4	4	0	9	9	0	0	2	1	1	0	0	0	1	9	1	9	1	9	1	0	1	1	1	1	3	0	9
331	35	2	2	2	4	2	1	3	2	5000	11	455	5	1	0	1	0	1	1	4	3	3	4	0	9	9	0	1	1	1	4	0	0	0	1	9	1	9	1	9	1	0	1	1	0	1	4	1	1
332	30	2	2	1	3	1	1	2	1	12000	4	3000	3	0	0	0	0	0	1	4	4	4	4	0	0	9	0	0	4	9	1	0	0	1	0	2	0	3	0	1	0	0	1	0	0	1	6	0	0
333	36	1	2	1	1	2	4	2	1	5000	8	625	5	0	0	1	1	1	4	4	1	4	4	9	1	9	1	0	2	1	4	0	1	1	1	9	1	9	0	3	0	0	1	0	0	1	7	1	0
334	61	2	2	1	4	1	5	1	1	8000	2	4000	2	0	0	1	1	0	4	4	4	2	3	9	1	9	1	0	4	1	1	0	0	0	1	9	1	9	1	9	0	0	9	0	0	1	5	1	0
335	60	2	2	1	1	3	2	2	1	10000	7	1429	4	0	1	1	1	1	4	4	3	4	4	0	0	9	1	1	1	1	4	1	0	0	1	9	0	5	0	4	0	0	9	0	9	1	6	0	9
336	35	2	2	2	3	3	2	1	1	8000	7	1143	4	9	1	1	1	0	2	4	4	4	4	9	0	0	1	1	4	1	4	1	0	1	1	9	1	9	1	9	1	1	9	1	9	0	6	1	9
337	38	1	2	1	3	2	1	1	3	30000	7	4286	2	9	1	0	1	9	9	4	4	4	1	0	0	0	0	0	5	1	4	0	0	0	1	9	1	9	1	9	9	1	9	9	9	0	7	1	9
338	47	1	2	1	3	1	2	1	3	9000	3	3000	3	0	1	0	1	9	2	4	3	4	4	9	9	0	0	1	2	9	1	0	0	0	1	9	1	9	1	9	9	1	9	9	0	0	5	1	9
339	48	2	2	1	3	1	1	1	3	7000	2	3500	2	0	1	9	1	0	2	4	4	4	4	1	9	0	0	0	6	1	1	0	0	0	1	9	1	9	1	9	1	1	0	1	0	1	5	1	9
340	45	2	2	3	3	2	1	2	3	5000	8	625	5	0	9	9	1	0	2	4	1	2	4	1	9	0	0	0	8	0	1	0	0	1	1	9	1	9	1	9	1	1	1	1	0	1	7	0	9
341	41	2	2	2	1	1	1	2	1	18000	5	3600	2	0	0	9	1	0	9	4	4	1	4	0	9	0	0	0	1	1	1	0	0	0	1	9	1	9	1	9	0	9	0	0	0	1	4	1	1

name (ID)	age	sex	marital status	religion	caste category	type of family	education	occupation	ration card	monthly income	number of family members	percapita income	SES	HTN	DM	CVDs	Cancer	Stroke	f/h HTN	f/h Dm	f/h CVDs	f/h Cancer	f/h stroke	curable	preventable	communicable	can increased BP cause stroke?	can uncontrolled DM cause kidney failure?	health checkup camp information	did you know it is free checkup	whom do you approach in illness	smoking	alcohol	tobacco chewing	did you visit doctor?	if no, why?	taking medication?	if no, why?	follow up regularly?	if no, why?	HE physical activity	HE fruits and vegetables	HE stress management	HE avoid habits	HE cancer warning signals	were you referred to PHC	frequency of BP, sugar check up	medicines/treatment free?	is health check up camp useful?
342	44	2	2	1	4	1	2	2	1	6000	2	3000	3	0	0	0	1	0	4	4	4	4	4	0	1	1	0	0	4	1	4	0	0	0	1	9	1	9	1	9	0	9	1	0	9	1	3	1	1
343	36	1	2	1	1	3	2	8	1	10000	5	2000	4	0	0	0	0	0	1	4	4	4	3	9	9	1	0	0	4	1	1	0	0	0	1	9	1	9	1	9	0	9	0	0	9	1	3	1	1
344	35	1	2	1	1	1	2	8	2	5000	2	2500	3	0	1	0	1	0	3	3	4	4	4	0	9	1	0	0	6	1	3	0	0	0	1	9	0	2	0	1	0	0	0	0	9	1	1	0	1
345	39	1	2	1	1	2	3	8	1	3000	8	375	5	1	1	0	1	1	4	4	4	1,2	4	0	9	0	0	0	1	1	2	0	0	0	1	9	1	9	1	9	0	0	0	0	9	1	5	1	9
346	31	2	2	1	1	2	3	7	2	6000	8	750	5	1	1	0	1	1	4	4	3	4	2	9	9	0	1	9	7	0	1	0	0	1	1	9	1	9	1	9	1	1	0	1	9	1	7	1	9
347	32	1	2	1	3	2	3	8	1	12000	10	1200	4	1	1	0	1	0	3	4	4	4	4	9	9	0	1	9	6	9	4	0	0	0	0	2	0	1	0	2	0	1	0	0	9	1	6	0	9
348	38	2	2	1	3	2	3	8	3	5000	11	455	5	1	1	0	1	0	9	3	4	4	4	1	1	1	0	9	2	0	4	0	0	0	1	9	1	9	0	1	1	9	0	1	9	1	4	1	0
349	37	1	2	2	3	1	3	8	3	12000	4	3000	3	1	9	0	1	0	4	4	4	4	4	0	0	9	0	9	1	1	3	0	1	0	1	9	1	9	0	3	1	9	0	1	0	1	6	1	0
350	65	2	2	1	3	1	3	5	3	5000	5	1000	4	0	0	1	1	0	4	4	1,2	4	4	1	0	9	1	1	2	0	2	0	0	0	1	9	1	9	0	1	0	1	0	0	0	0	5	0	0
351	62	1	2	1	4	1	2	6	1	6000	4	1500	4	0	0	1	1	0	4	4	1	3	4	0	9	9	1	1	1	9	3	1	0	0	1	9	1	9	1	9	1	1	9	1	1	1	3	1	1
352	68	1	2	1	4	1	2	6	1	9000	3	3000	3	1	0	0	0	1	1	4	1	1	4	0	0	9	1	0	1	9	1	0	0	1	1	9	1	9	1	9	1	9	9	1	0	1	3	1	1
353	68	2	4	1	4	3	2	5	1	18000	5	3600	2	1	0	0	0	1	2	4	4	4	4	0	0	0	9	0	5	9	1	0	0	0	1	9	1	9	1	9	1	9	9	1	0	1	5	1	0
354	61	1	4	1	1	1	1	2	2	6000	2	3000	3	1	0	0	1	1	2	4	4	4	1	9	1	0	9	0	6	1	1	0	0	0	1	9	1	9	1	9	1	9	0	1	0	1	7	1	1
355	35	2	2	1	1	1	2	1	1	10000	5	2000	4	1	1	9	0	0	9	4	4	4	4	9	1	0	9	0	8	1	4	0	0	0	1	9	1	9	1	9	9	1	0	9	0	1	5	1	9
356	41	2	2	2	1	1	2	1	1	5000	2	2500	3	0	1	9	1	0	4	1	2	4	4	9	1	0	9	0	7	1	4	0	0	0	1	9	0	5	0	4	9	1	9	9	0	1	7	0	9
357	44	2	2	1	1	2	2	4	1	3000	8	375	5	1	1	0	1	0	4	4	4	3	4	9	9	9	9	0	8	1	4	0	0	0	1	9	1	9	1	9	9	0	0	9	0	1	5	0	1
358	46	1	2	1	1	2	3	1	3	6000	8	750	5	0	1	0	0	0	9	4	4	1	4	1	9	9	9	1	8	1	1	0	0	0	1	1	9	1	9	1	9	9	0	0	9	9	1	3	1	1
359	56	1	2	1	3	2	3	1	3	12000	10	1200	4	1	1	0	1	1	2	4	4	1	1	9	9	9	0	1	1	1	1	0	0	0	0	4	0	3	0	2	9	0	0	9	0	1	6	0	1
360	58	2	2	1	3	2	2	1	3	5000	11	455	5	1	0	0	0	1	4	4	1	4	1	9	1	9	0	0	2	1	1	0	0	0	1	9	1	9	0	3	0	0	1	0	0	0	3	1	1