

A Study of Functioning and Performance of Non-Communicable Diseases Clinics Established Under National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke in Jammu & Kashmir

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PREFACE

The Union territory of Jammu & Kashmir has enrolled 45.36 Lakh individuals aged 30 years or more into the NCD portal. Of these, more than 41.48 Lakh individuals have been assessed for risk factors for NCDs. Besides, a total of 30.42 lakh individuals among these have been screened

and 4.9 Lakh examined. Till now, 1.75 Lakh have been put under treatment for NCDs, which will be followed up to ensure that they have a controlled disease status. This was followed by district wise status of NCD screening and continuum of care. In this direction, the presents study has been to examine the knowledge, symptoms, risk factors about hypertension and diabetes etc., among the men and women of rural and urban people of Jammu & Kashmir.

We are highly thankful to the Ministry of Health and Family Welfare (MoHFW), Govt., of India, New Delhi for providing the necessary financial support. We would like to thank our data collection team/data editing/data entry team for their keen pains in data collection. Last but not the least credit goes to all respondents who spend their valuable time in responding with tremendous patience to our questions. We are also thankful to hospital administration who cooperate with us during the survey. It is hoped that the findings of this study will be helpful to the Union Ministry of Health & Family Welfare (MoHFW) and the UT of J&K in taking necessary steps in controlling and containing the vicious diseases like hypertension, diabetes, cancers, Cardiovascular diseases & strokes.

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CHAPTER – I

INTRODUCTION

Introduction

Presently world is experiencing an epidemiological transition from low NCDs to high NCDs. NCDs accounted for < 40 of diseases burden in 1990 and this burden has increased to > 60 in 2016 and currently NCDs principally the cardiovascular diseases and diabetes are responsible for over 63 of global deaths. This burden is one of the major public health challenges facing all countries, regardless of their economic status. Once considered a problem related to affluence; hypertension, diabetes and obesity is now fast growing in developing countries and the burden of these diseases within countries is shifting towards groups with lower Socio-Economic status.

Non-communicable diseases (NCDs), also known as chronic diseases, tend to be of long duration and are the result of combination of genetic, physiological, environmental and behavioral factors. The main types of NCD are cardiovascular diseases (such as heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma) and diabetes. People of all age groups, regions and countries are affected by NCDs. These conditions are often associated with older age groups, but evidence shows that 17 million NCD deaths occur before the age of 70 years. Of these premature deaths, 86 are estimated to occur in low- and middle-income countries. Children, adults and the elderly are all vulnerable to the risk factors contributing to NCDs, whether from unhealthy diets, physical inactivity, exposure to tobacco smoke or the harmful use of alcohol.

These diseases are driven by forces that include rapid unplanned urbanization, globalization of unhealthy lifestyles and population ageing. Unhealthy diets and a lack of physical activity may show up in people as raised blood pressure, increased blood glucose, elevated blood lipids and obesity. These are called metabolic risk factors and can lead to cardiovascular disease, the leading NCD in terms of premature deaths.

Non-communicable disease (NCD) kills 41 million people each year, equivalent to 74 of all deaths globally. Each year, 17 million people die from a NCD before age 70; 86 of these premature deaths occur in low- and middle-income countries. Of all NCD deaths, 77 are in low- and middle-income countries. Cardiovascular diseases account for most NCD deaths, or 17.9 million people annually, followed by cancers (9.3 million), chronic respiratory diseases (4.1 million), and diabetes (2.0 million including kidney disease deaths caused by diabetes). These four groups of diseases account for over 80 of all premature NCD deaths. Tobacco use, physical

inactivity, the harmful use of alcohol and unhealthy diets all increase the risk of dying from an NCD. Detection, screening and treatment of NCDs, as well as palliative care, are key components of the response to NCDs (WHO, 2022).

Indian Scenario

India is experiencing a rapid health transition with a rising burden of Non-Communicable Diseases (NCD) surpassing the burden of communicable diseases like water-borne or vector-borne diseases, TB, HIV, etc. In India, nearly 5.8 million people (WHO report, 2015) die from NCDs (heart and lung diseases, stroke, cancer and diabetes) every year or in other words 1 in 4 Indians has a risk of dying from an NCD before they reach the age of 70. The NCDs like Cardiovascular diseases, Cancer, Chronic Respiratory Diseases, Diabetes and other NCDs are estimated to account for around 60 of all deaths, thus making them the leading causes of death. NCDs cause considerable loss in potentially productive years of life. Losses due to premature deaths related to heart diseases, stroke, hypertension and diabetes are also projected to increase over the years.

Indian Council of Medical Research(ICMR) has estimated that proportion of deaths due to Non-Communicable Diseases (NCDs) in India have increased from 37.9 in 1990 to 61.8 in 2016 (Indian Council of Medical Research, 2017). The four major NCDs are cardiovascular diseases (CVDs), cancers, chronic respiratory diseases (CRDs) and diabetes which share four behavioral risk factors – unhealthy diet, lack of physical activity, and use of tobacco and alcohol. In 1990s only 3 of population had cardiovascular diseases which increased to 7 in 2016 and in 1990, only 0.7 of the population was found to be diabetic which increased to 2.2 in 2016.

India is the first country to adopt the National Action Plan with specific national targets and indicators aimed at reducing the number of global premature deaths from NCDs by 25 by 2025(WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020). The global action plan has suggested 9 targets for countries to set in order to contain the NCDs. But India has taken the unprecedented step of setting a tenth target to address household air pollution. India's National Monitoring Framework for Prevention and Control of NCDs has committed for a 50 relative reduction in household use of solid fuel and a 30 relative reduction in prevalence of current tobacco use by 2025.

Jammu & Kashmir Scenario

Non-communicable diseases (NCD) are known threats to socio-economic development not only in developing countries but worldwide. Urbanization and lifestyle changes happening rapidly around the globe including India have resulted in increased prevalence of NCD and Jammu & Kashmir is no exception to this worldwide problem. The rising trend in NCD here warrants the continuous surveillance and awareness amongst population. In Jammu & Kashmir out of the given population, 10 of men and women are hypertensive, 4 are diabetic and 24 are pre-diabetic. Moreover, the Union territory of Jammu & Kashmir has enrolled 45.36 Lakh individuals aged 30 years or more into the NCD portal in 2022-23. Of these, more than 41.48 Lakh individuals have been assessed for risk factors for NCDs. Besides, a total of 30.42 lakh individuals among these have been screened and 4.9 Lakh examined. Till now 2023, 1.75 Lakh have been put under treatment for NCDs, which will be followed up to ensure that they have a controlled disease status. This was followed by district wise status of NCD screening and continuum of care. In this direction, the presents study has been taken to examine the knowledge, symptoms, risk factors about hypertension and diabetes etc., among the men and women of rural and urban people of Jammu & Kashmir.

Significance of the study

The National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) was launched in 2010 in 100 districts of India on pilot basis in order to prevent and control the major NCDs. Now the programme covers all districts. In the last few decades, the prevalence of non-communicable diseases particularly hypertension and diabetes has drastically increased in India. Roughly one fifth of India men and women age 15-49 have Hypertensive, 14 are diabetic and almost one in every 4 persons age 15-54 is obese. The main focus of the programme was on health promotion, early diagnoses, management of NCDs, referral of cases, follow up, continuity of care, besides strengthening the infrastructure and capacity building. The goal was to promote healthy life style and reduce preventable morbidity, avoidable disability, and premature mortality due to NCDs in India. To achieve these goals, GOI has decided to establish NCD clinics at all the DHs and CHCs in a phased manner.

Like other districts of India, NCD clinics have been established in various DHs and CHCs in Jammu & Kashmir but till date no evaluation of these clinics has been done to assess their performance and identify the issues in their functioning. In this direction, the present study has been taken to understand the knowledge, symptoms, risk factors and preventive measures of

hypertension, diabetes, Cancers, Strokes and Cardiovascular diseases among Men & Women by place of residence, education level, marital & economic status, region & area etc., in the UT of Jammu & Kashmir.

Objectives of the study

In consonance with the significance and nature of the study, following are the broad objectives under taken during the study:

1. To study whether NCD clinics have been equipped with requisite inputs (like infrastructure, human resources, training, equipment, drugs, lab, and other logistics) required for screening, treatment, referral and reporting of NCDs as per the NPCDCS guidelines.
2. to study the performance of these clinics in terms of screening, diagnosis, treatment, referral and follow up of NCDs
3. to understand the perception of patients about the services received and quality of services at the selected NCD clinics
4. to identify the gaps in service delivery and suggest some measures that can be undertaken to improve the service delivery of NCD clinics in the Jammu & Kashmir.

Methodology of the study

The study has been conducted in 4 districts of Jammu & Kashmir (2 from Kashmir region and 2 from Jammu region). From each district, the NCD Clinic located at DH and 2 located at CHCs has been selected.

From each facility, information has been collected about the physical infrastructure, manpower, trainings, diagnostic facilities etc. Information about the performance of NCD clinic has been collected for the last 5 years.

The NCDs to be included Hypertension, Diabetes, Breast cancers, cervical cancers and other cancers.

A questionnaire has been developed for the persons seeking services from the NCD clinics. This included the back ground characteristics, knowledge of NCD clinic, source of knowledge, reasons for visiting NCD clinic, Investigations conducted, diagnosis, medicines prescribed, free medicines provided, follow up and few questions about quality of services. A maximum of 15 respondents from each NCD clinic has been interviewed. Care has been taken to give proper representation to both men & women.

Sampling procedure of the study

The Union territory of Jammu and Kashmir has been stratified into two geographical divisions such as Jammu division and Kashmir division. From each division, two districts were selected purposely. In Kashmir division, one district (Anantnag) has been selected from southern region of Kashmir division and another district (Baramulla) has been selected from Northern region of Kashmir while as from Jammu division, district Kathua has been selected from plain region of Jammu and district Ramban has been selected from hilly/mountainous region.

One district hospital NCD Clinic and two CHCs NCD Clinics from each district has been selected randomly for the study. From each health facility 15-20 patients were interviewed randomly on the day of visit. But in case of NCD Clinic CHC Seer of district Anantnag due to non-availability of MO, only four patients were interviewed from general OPD. Finally, a total of 130 patients were interviewed for the study.

CHAPTER – II

REQUISITE HEALTH FACILITIES AT THE SELECTED NCD CLINICS OF JAMMU & KASHMIR

Introduction

The present chapter deals with the availability of requisite inputs like infrastructure, human resources, training, equipment, drugs, lab, and other logistics required for screening, treatment, referral and reporting of NCDs as per the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) guidelines. Under NPCDCS, 677 NCD clinics at District level, 187 District Cardiac Care Units, 266 District Day Care Centres and 5392 NCD clinics at Community Health Centre level have been set up to ensure the treatment of common NCDs in J&K. The main headings of the present chapter are discussed as:

Human Resource at NCD Clinics

In Kashmir province the district NCD clinic Anantnag has only one general physician, one physiotherapist and a data entry operator while the sanctioned positions of GNM, lab Technician and counselor are vacant. At the NCD Clinic of CHC Kokernag there is one medical officer, a GNM, a counselor and a data entry operator and in NCD Clinic CHC Seer has only one GNM, lab Technician, Counselor and one DEO in position while as other positions in all the three NCD Clinics are vacant in the district (Table 1).

In district Baramulla, the visited NCD facilities have better position in terms of manpower as district NCD clinic Baramulla has presently strength of one general physician, two GNMs, one lab technician and one counselor in position while as the sanctioned positions of Physiotherapist and data entry operator are vacant (Table 1).

In the NCD Clinic of CHC Patten, the available human resource consists of one general physician, one GNM, one lab technician while as the sanctioned positions of counselor and Physiotherapist is vacant. At CHC Spore NCD clinic, three positions are vacant, out of total sanctioned positions that include counselor, Physiotherapist and DEO (Table 1).

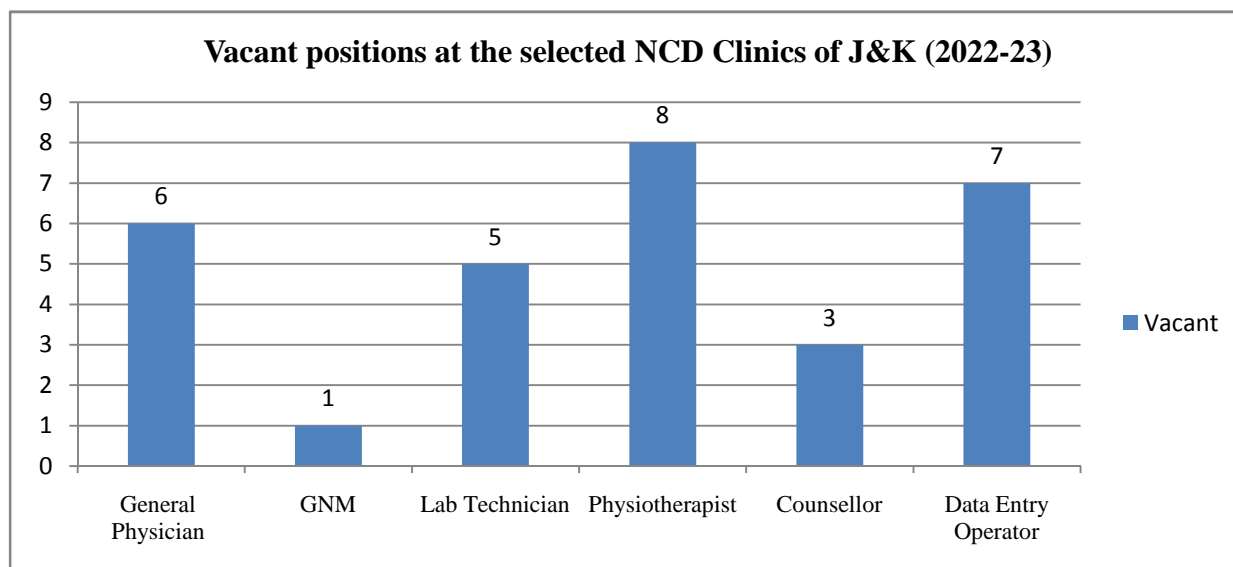
In two districts of Jammu region, namely district Kathua and Ramban and it was found that in Kathua, sanctioned positions of two GNMs, one lab technician, counselor and Physiotherapist were found in-position while as the sanctioned positions of general Physician and DEO are vacant in the district hospital NCD Clinic. In CHC Heera-Nagar and CHC Basoli, both NCD

Clinics have only one GNM and one Councilor in position while as all other positions are vacant (Table 1).

In district hospital NCD Clinic Ramban, the sanctioned positions of two GNMs, one lab technician, counselor and Physiotherapist were in-position while as the sanctioned positions of general Physician and DEO are vacant in district hospital NCD Clinic. In Banihal CHC, NCD Clinic has only one GNM and one Councilor in position while as all other positions are vacant (Table 1).

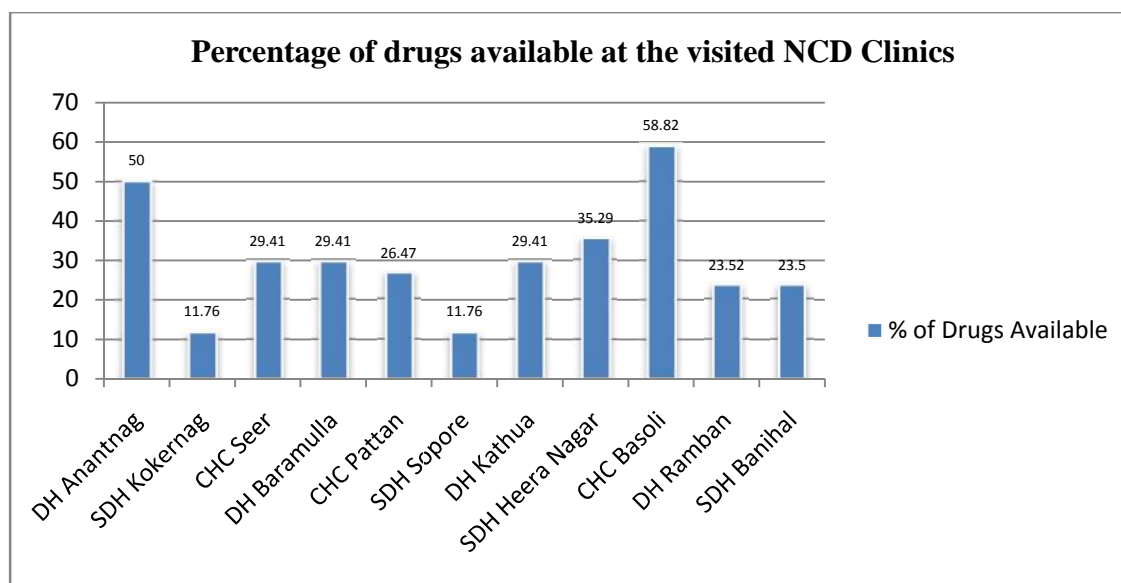
From the above analysis it has been concluded that 30 positions of human resources are vacant including 06 general physicians, 05 lab technicians, 08 Physiotherapists, 03 Counselors, 07 Data Entry Operator and 01 GNMS (Table 1).

Table-1: Human Resource of NCD Clinics in Jammu and Kashmir (2022-23).												Vacant
	Anantnag			Baramulla			Kathua		Ramban			
	Anantnag	Kokernag	Seer	Baramulla	Pattan	Sopore	Kathua	Heera Nagar	Basoli	Ramban	Banihal	Total vacant positions
General Physician	1	1	0	1	1	1	0	0	0	0	0	06
GNM	0	1	1	2	1	1	2	1	1	2	1	01
Lab Technician	0	0	1	1	1	1	1	0	0	1	0	05
Physiotherapist	1	0	0	0	0	0	1	0	0	1	0	08
Counsellor	0	1	1	1	0	0	1	1	1	1	1	03
Data Entry Operator	1	1	1	0	1	0	0	0	0	0	0	07
Total Vacant:												30



Availability of drugs at NCD Clinics

Out of 17 essential drugs, 50 of drugs were found available at district hospital NCD Clinic Anantnag, 30 of drugs were available at district hospital NCD Clinic Baramulla and Kathua and 59 at DH Ramban. Only 12 of drugs were found available at NCD Clinic CHC Kokernag and Spore while as 35 and 24 drugs were found available at NCD Clinic Heera Nagar and Banihal (Table 2). Moreover, it has been concluded that majority of NCD Clinics have sufficient supply of drugs except multi salted drugs which is required because of pressing demand of patients.



Infrastructure like Lab equipments and services

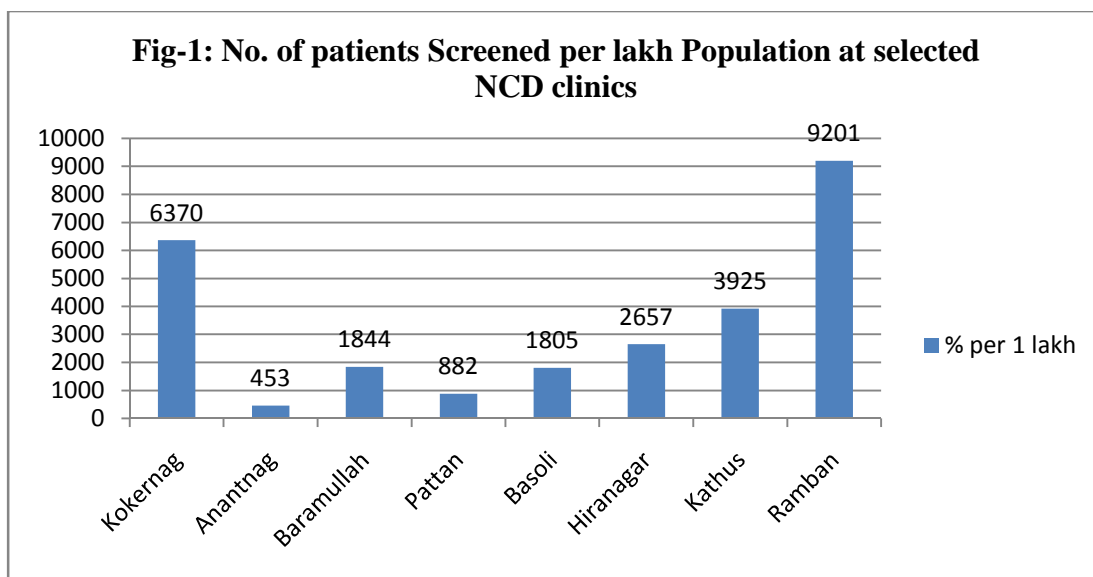
Out of selected NCD clinics, only two NCD clinics of DH Ramban and CHC Seer have lab technicians in position both the technicians are working in general lab of the hospital as they don't have separate laboratory or space available for conducting investigations. The health equipments such as BP apparatus, glucometers, lancets, weighing machine are available but the height measuring scale are not available at any visited NCD clinics. The laboratory services such as Hb, TLC, DLC, platelet count, fasting blood sugar, liver function test, kidney function test, lipid profile, urine sugar and X-ray tests are either performed in the General Lab of district hospital/CHC or in the private laboratory. Therefore, some health equipment and laboratory services are not available at the visited NCD clinics and CHCs (Table 3).

Service Delivery at NCD Clinics

The number of persons, who attended OPD during April 2022 to January 2023, was 6789 in NCD clinic Anantnag, 11067 at NCD Clinic Kokernag, 36407 at NCD Clinic Baramulla, at NCD

Clinic Pattan 2022, at NCD clinic Kathua 8281, at NCD Clinic Heera Nagar 3661, at NCD Clinic Basoli 1278, and 14600 at NCD clinic Ramban (Table 4 & Fig-1).

We calculated the number of patients who visited different NCD clinics per 100000 population. According to this information Ramban has the highest percentage of population screened per lakh population (9201), followed by Kokernag NCD clinic (6370). Kathua DH clinic also has screened about 4000 persons per lakh population and the NCD clinics at CHC Hiranagar, Basoli and DH Baramulla have screened around 1800-2600 persons per lakh population. The performance of DH Anantnag and CHC Pattan NCD clinics is very low.



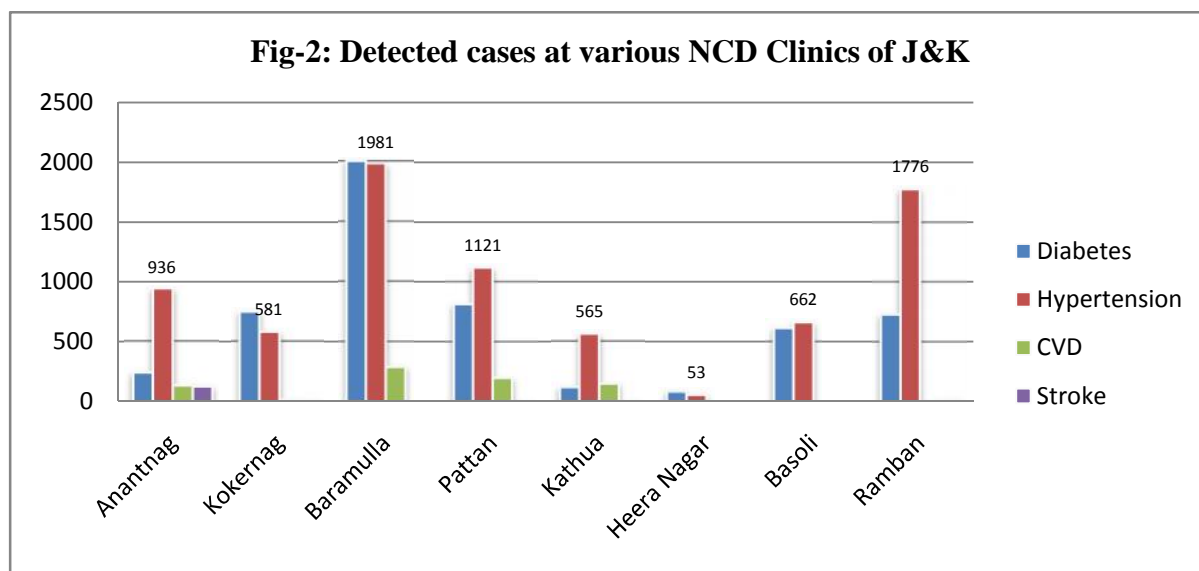
The DNCD clinic Anantnag has detected 244 with diabetes, 936 with Hypertension (HT), 136 CVD, 127 Stroke, 101 with CKD and 24 with other diseases. NCD Clinic Kokernag has detected 746 with diabetes, 581 with Hypertension (HT), 18 CVD and 05 with Stroke (Table 4).

The DNCD clinic Baramulla has detected 2002 with diabetes, 1981 with Hypertension (HT), 292 CVD, and 10 with CKD diseases. The NCD Clinic Pattan has detected 816 with diabetes, 1121 with Hypertension (HT), 201 CVD and 3 with Stroke (Table 4).

At the NCD clinic Kathua, 124 patients have been detected with diabetes, 656 with HT, 151 with CVD, 01 with stroke, 10 with CKD, 5 with oral cancer, 34 with breast cancer and 224 with other diseases (Table 4).

The NCD Clinics of Heera Nagar and Basoli, 77 and 616 for diabetes, 53 and 662 for HT were detected at these clinics respectively whereas at the DNCD clinic Ramban, a total of 730

diabetic, 1776 hypertensive, 01 CVD, 20 stroke and 01 oral cancer patients were detected (Table-4 & Fig-2).



Training skills of Human Resource

The available human resource at NCD clinics established in district hospitals and CHCs have been provided 3 days short term training course in 2021. These training were provided to MOs and paramedical staff. But, newly appointed paramedical staff at various NCD clinics have not been yet imparted any training related to NCDs. Moreover, trainings for reporting and record keeping have not been provided to the concerned staff, which is affecting the performance and the quality of reporting of NCDs.

As per the above analysis, all the visited NCD Clinics are functional without some of the required facilities like diagnostic services; physiotherapy and counseling. The study reveals that most of the NCD clinics have shortage of multi salt drugs but mono salt drugs are available at the visited NCD clinics. The study also found that although most of the NCD clinics have shortage of human resource but somehow they are managing the OPD services with some internal arrangements. The study strongly recommends that all vacant positions sanctioned under NCD programme be filled up at the earliest and diagnostic facilities be upgraded at the NCD clinics.

CHAPTER – III

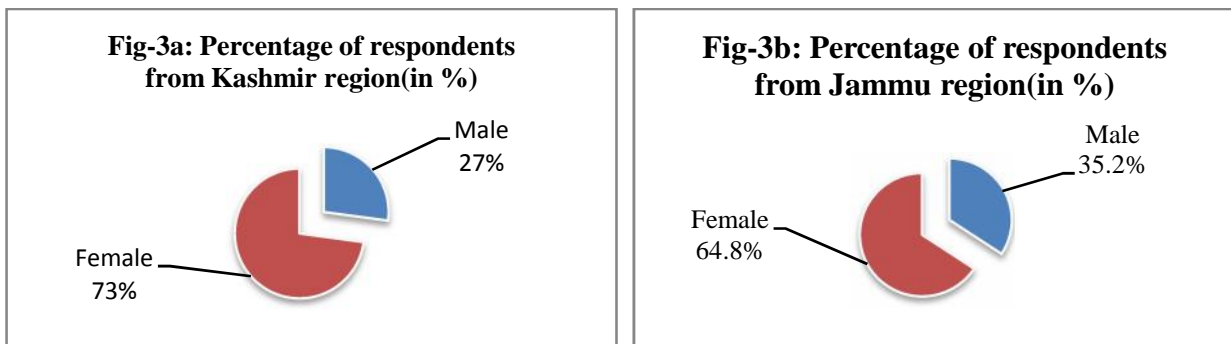
BACKGROUND CHARACTERISTICS OF NCD PATIENTS

Background characteristics of respondents

The present section of this chapter deals with the background characteristics of respondents by age, region, place of residence, education, marital status, religion, occupation and economic status. Randomly, one hundred thirty (130) respondents were taken from four districts of J&K, two from Jammu division such as Kathua and Ramban whereas two from Kashmir province such as Baramulla and Anantnag, of which 41 (31) were male respondents and 89(68) were female respondents. The category wise characteristics among male and female respondents are discussed under broad headings as:

Region-wise distribution of respondents

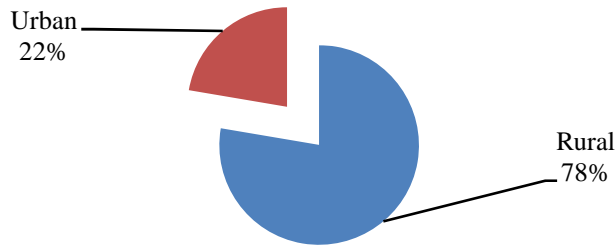
Table 5 shows that out of 130 respondents, 59(45) respondents were taken from Kashmir region in which 16(27) were male and 43(72) were female whereas 71(54) respondents were taken from Jammu region in which 25(35) were male and 46(65) were female respondents (Fig-3a & Fig-3b).



Area-wise distribution of respondents

Table 6 shows that 101 (77) respondents were rural and 29(22) respondents were urban. Of the rural respondents, 30(29) were male and 71(70) were female respondents whereas of the urban respondents, 11(38) were male and 18(62) were female respondents (Fig-4).

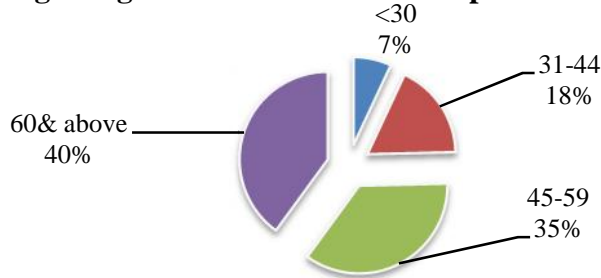
Fig-4: Area-wise distribution of respondents(in %)



Age-wise distribution of respondents

Table 6 that shows that only 9(7) respondents falls in the age group of < 30 years and 23(18) respondents falls in the age group of 31-44 years whereas 46(35) respondents falls in the age group of 45-59 years and 52(40) falls in the age group of 60 years and above(Fig-5).

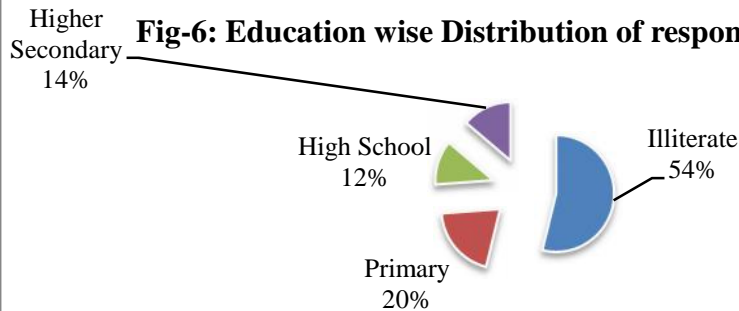
Fig-5: Age-wise distribution of respondents (in %)



Education-wise distribution of respondents

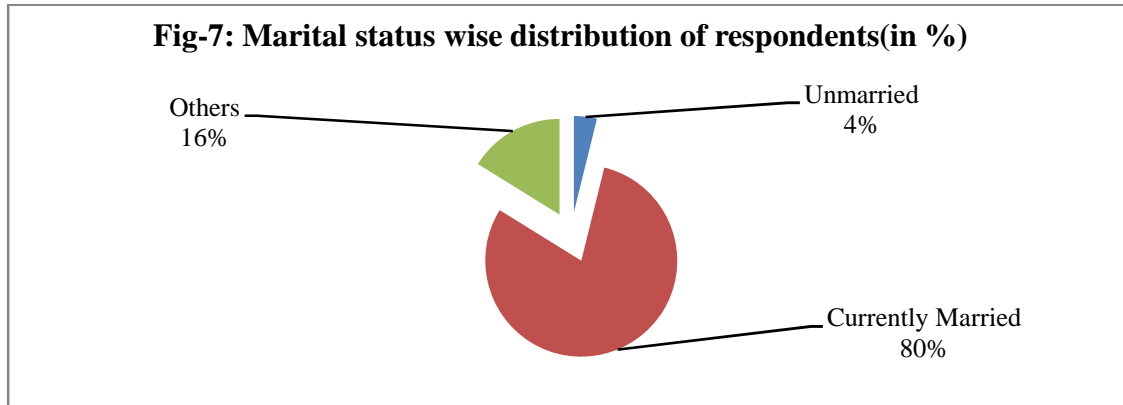
Table 6 shows that 70(54) respondents were illiterate and 26(20) respondents have primary/middle standard whereas 18(14) respondents have higher secondary standard and only 16(12) have high school standard (Fig-6).

Fig-6: Education wise Distribution of respondents (in %)



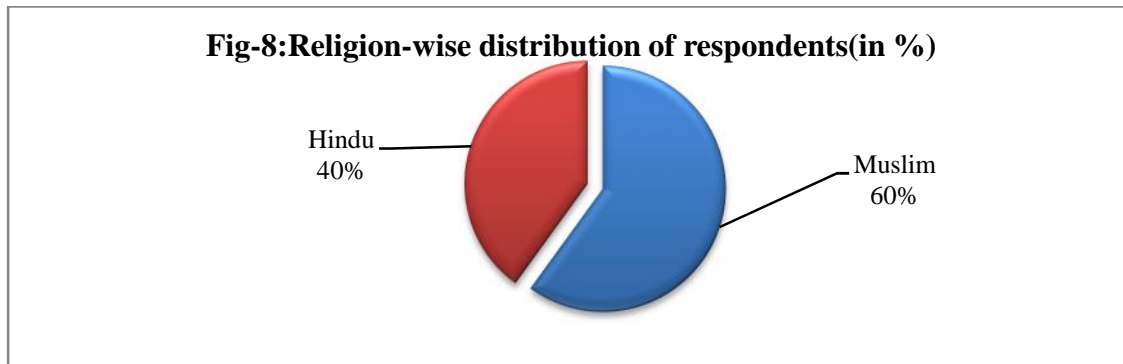
Marital Status wise distribution of respondents

Table 6, shows that 80 of respondents were married, and the prevalence of NCD among unmarried seemed to be very low, at 4 in Jammu and Kashmir. Also, the majority of respondents (60) were Muslims, and only 40 were Hindus (Fig-7).



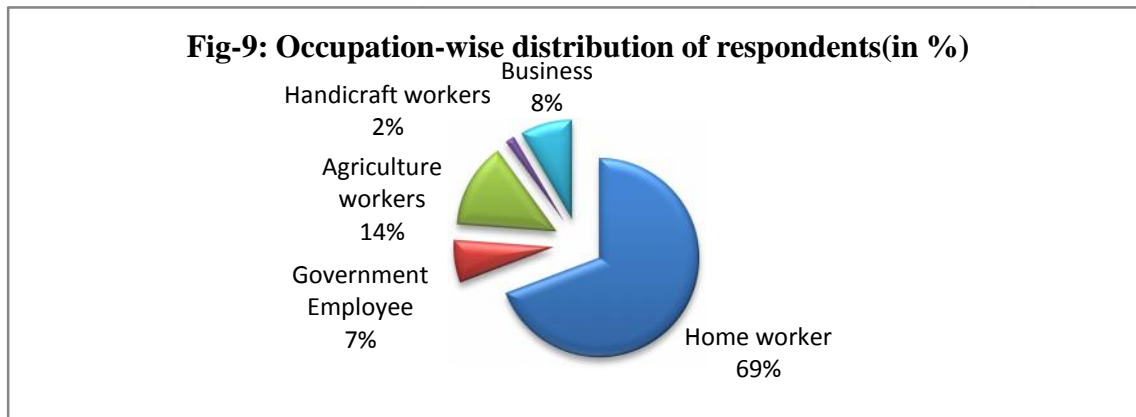
Religion-wise distribution of respondents

Table 6 shows that 78(60) respondents are Muslims and 52(40) respondents were Hindu. Of the Muslim respondents, 22(28) respondents were males and 56(72) respondents were female whereas of the Hindu respondents, 19(37) respondents were males and 33(63) respondents were female (Fig-8).



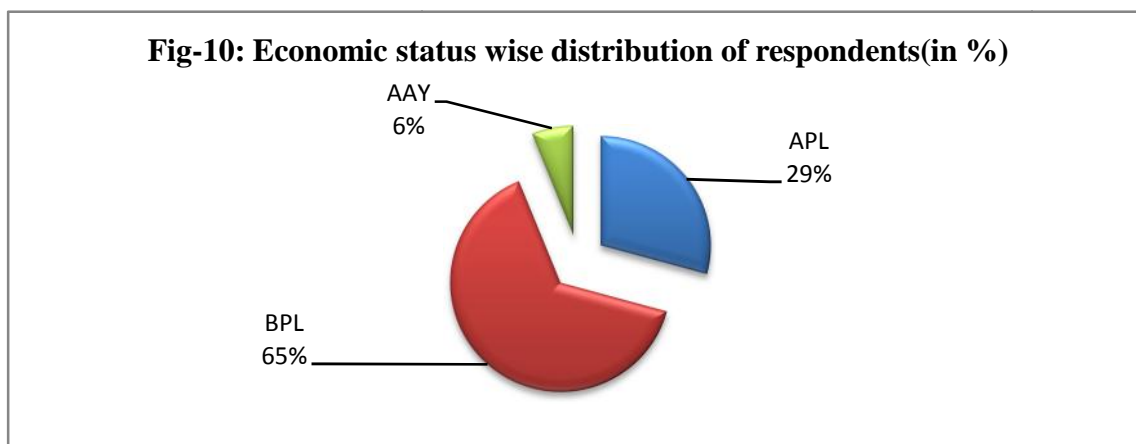
Occupation wise distribution of respondents

Table 6 shows that 90(69) respondents were home workers and 18(14) respondents were agriculture workers whereas 11(8) respondents were business personals and only 9(7) respondents were government employee. Moreover, only 2(1) respondents were handicraft workers (Fig-9).



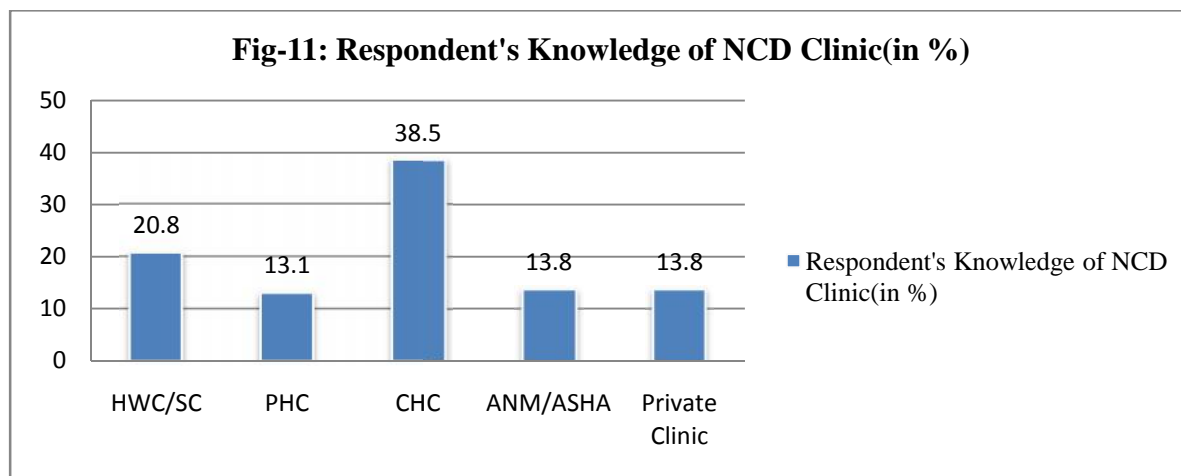
Economic status-wise distribution of respondents

Table 6 shows that 84 (64) are BPL respondents and 38(29) are APL respondents whereas only 8 (6) are AAY respondents (Fig-10).



Respondents by Source of Knowledge about NCD Clinics

The present section of this chapter deals with the percentage of respondents by source of knowledge about NCD clinics by age, region and place of residence, education, marital status, religion, occupation and economic status. Table 6 shows that 21 respondents received information about NCD clinic from a HWC/SC and 13 respondents received information from PHCs whereas 39 respondents received information from CHC. Although ANMs and ASHAs are supposed to inform the public about the NCD clinics and the facilities available there but our study found that only 14 of the respondents had received information about NCD clinic from ANMs/ASHAs, which clearly indicates that front line workers like ANMs/ASHAs are not playing a dominant role in disseminating information about NCD clinics among patients (Fig-11).



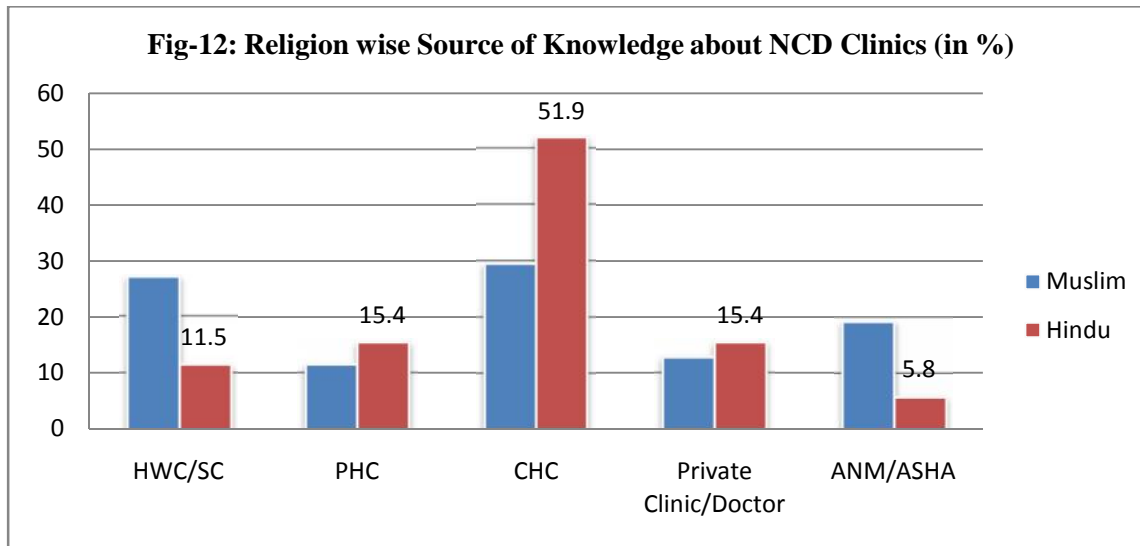
The category wise respondents by source of knowledge among male and female respondents are discussed under broad headings as:

Gender-wise distribution of respondents

Table 6 shows that 17 male and 22 female respondents acquired the knowledge about NCDs from HWC/SC where as 12 male and 13 female respondents know about NCDs form PHCs. Moreover, 39 male and 38.2 female respondents obtained the knowledge about NCDs from CHCs whereas only 19 male and 11 female respondents received the knowledge for the same from ANMs/ASHAs.

Region wise distribution of respondents

Table 6 shows that in Kashmir region, 10 respondents and 29 respondents acquired knowledge about NCDs from HWC/SCs and PHCs respectively whereas 34 respondents in Kashmir province and 42 respondents in Jammu region received the information about NCDs from CHCs. Moreover, only 16 respondents in Kashmir and 11 respondents in Jammu obtained the knowledge about NCDs from PHCs whereas 25 respondents in Kashmir and 4 respondents in Jammu achieved the knowledge about NCDs from ANMs/ASHAs and only 15 respondents in Kashmir and 13 respondents in Jammu received the knowledge about NCDs from private clinics/doctors.

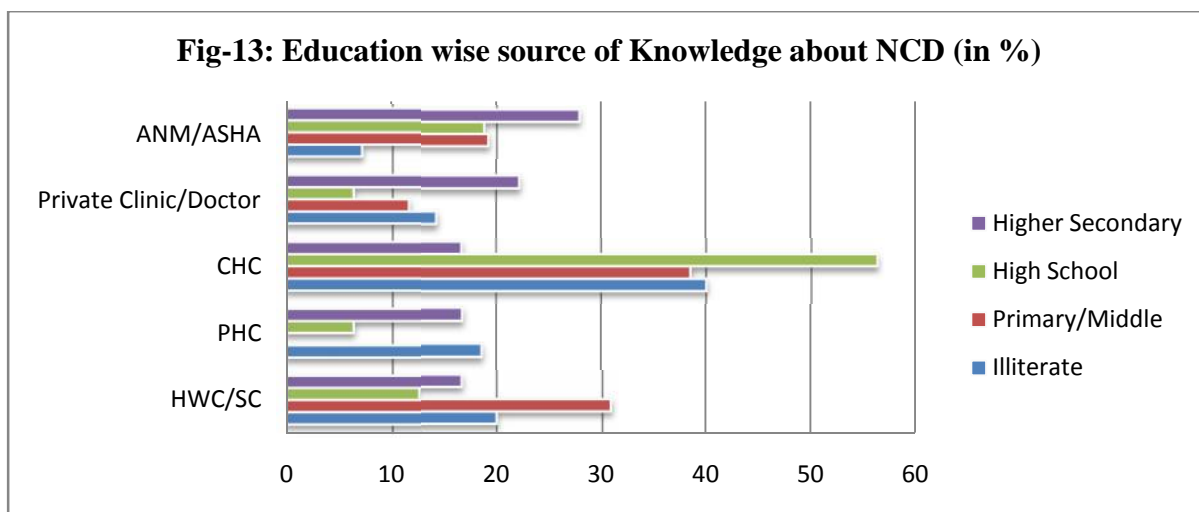


Age-wise distribution of respondents

Table 6 shows that in the age group of less than 30 years, 66 had received knowledge either from HWCs or ANMs, with 33 each, in the age group of more than 60 years, 46 had received knowledge from CHCs, followed by HWC (20). Among the age group of 31–44 years, 30 had received the knowledge from HWC, and in the age group of 45–59 years, 33 had received it from CHC.

Education-wise distribution of respondents

Table 6 shows that 40 illiterate respondents received information about the NCDs from CHCs, followed by 20 received from HWC/SC. From the primary/middle educational standard, 38 and 31 received the information again from CHC and HWCs respectively. The least information which was received those whose educational level was higher secondary or above and among them 28 received information from ANMs and 22 received from private clinics.

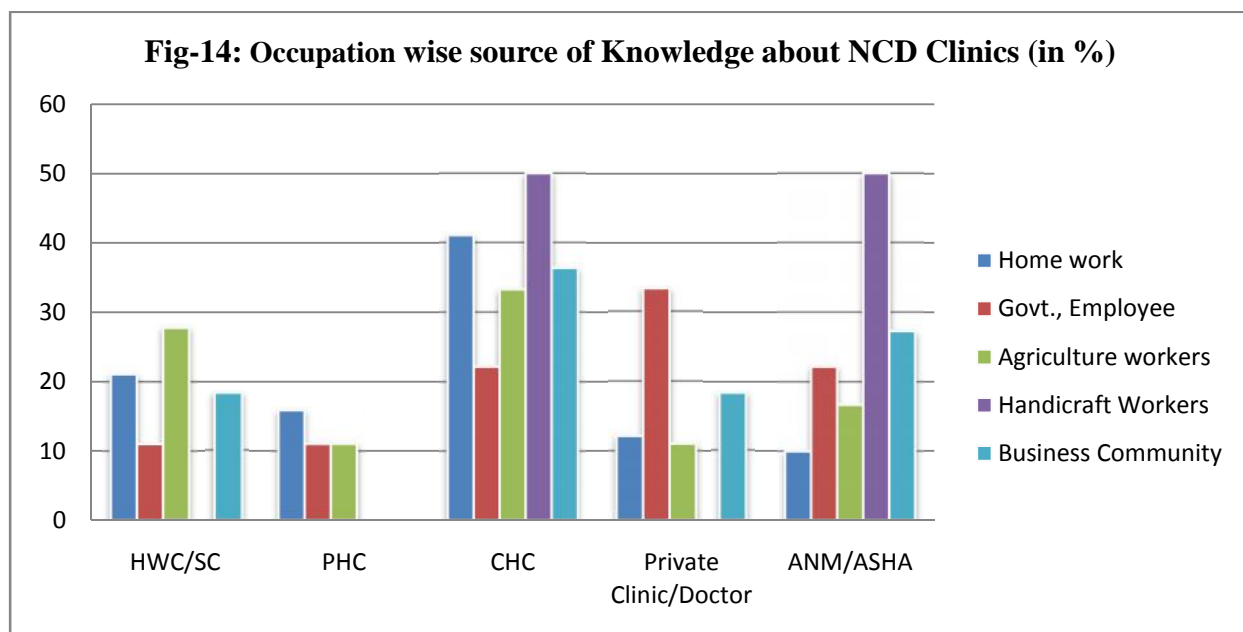


Marital status wise distribution of respondents

Table 6 shows that unmarried respondents have received knowledge about NCD clinic either from HWC/SC and ANM with 40 each whereas 37 married respondents received information from CHCs, followed by HWC/SC with 23. On the basis of religion, source of information is same for both Muslims and Hindus.

Occupation-wise distribution of respondents

Table 6 shows that majority of government employees (almost 33) received information about NCDs from private clinics, followed by ANMs, CHCs with 22 each. Half of the handicraft workers received the information about the same from CHCs. Maximum proportion of home workers, agriculture laborers and business community, have received the knowledge about NCDs from CHCs.

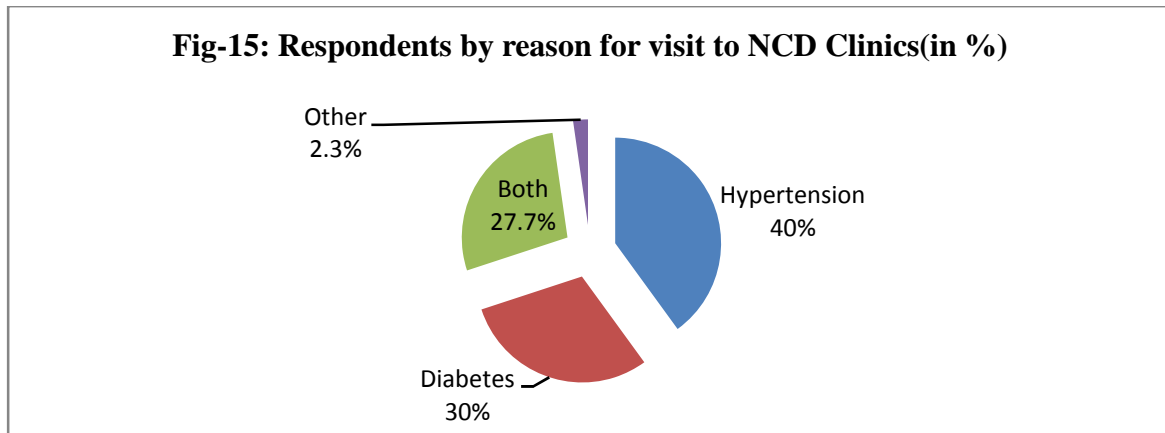


Economic status wise distribution of respondents

Table 6 shows 10 APL respondents, 24 BPL respondents and 37 AAY respondents received the knowledge about NCDs from HWC/SC whereas 16 APL respondents, 13 BPL respondents and 0 AAY respondents acquired knowledge about NCDs from PHCs. Moreover, 42 APL respondents, 37 BPL respondents and 37.5 AAY respondents received the knowledge about NCDs from CHCs whereas 18 APL respondents, 12 BPL respondents and 12 AAY respondents acquired the knowledge about NCDs from private clinics. Further, 13 APL respondents, 14 BPL respondents and 13 AAY respondents achieved the information about NCDs from NNMs/ASHAs.

Distribution of Respondents by reason of visiting NCD Clinic

The present section of this chapter deals with the percentage of respondents by reason to visit NCD clinics by age, region, place of residence, education, marital status, religion, occupation and economic status and the results are presented in Table 7. It was found that 40 respondents come to visit NCD clinic for the treatment of hypertension and 30 respondents come for diabetes whereas only 28 respondents come for the treatment of both (diabetes as well as hypertension) and only 2 respondents had come for other checkups (Fig-15).



The category wise respondents by source of knowledge among male and female respondents are discussed under broad headings as:

Gender-wise and region wise distribution by reason for visit

Table 7 shows that 46 male respondents visited for the treatment of hypertension, 37 female respondents visited NCD Clinic for the treatment of diabetes and 28 female respondents came to visit NCD clinic for the treatment of both diabetes as well as hypertension. Table 7 shows that 49 of the respondents in Jammu region and 29 in Kashmir region had visited a NCD clinic for diabetes. Similarly the proportion of respondents who visited for treatment of hypertension was 34 and 27 in Kashmir region and Jammu region respectively. There is not much difference in the reasons for visiting a NCD clinic by residence, however, higher the proportion of urban respondents visit the facility for treatment/management of diabetes as compared to their rural counterparts.

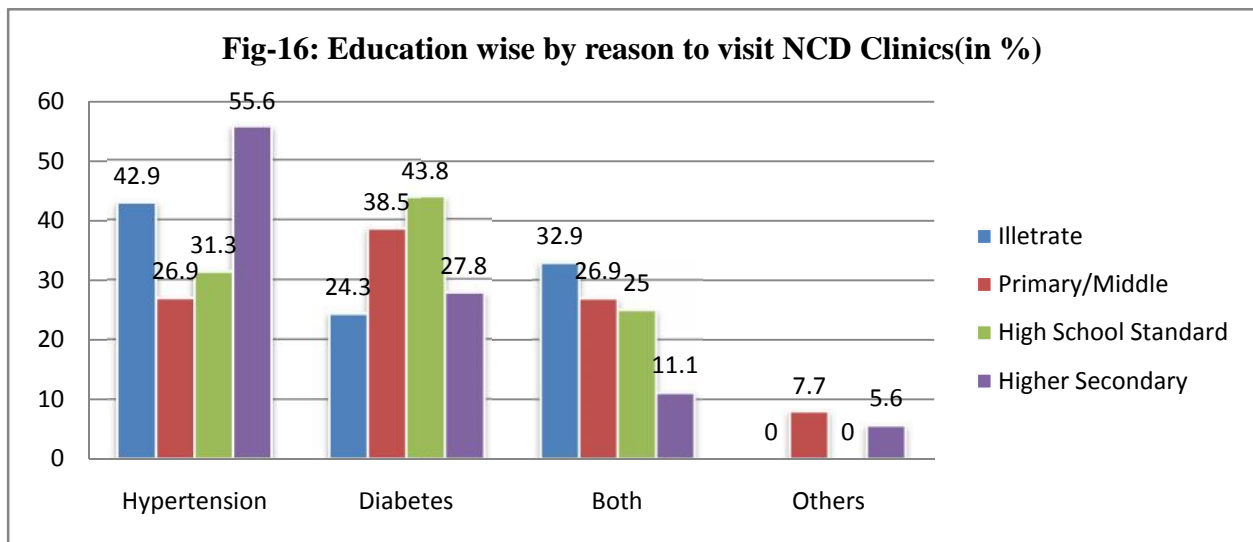
Age-wise distribution of respondents by reason to visit

Table 7 shows that with an increase in age, the proportion of respondents visiting a NCD clinic decreases. For example the percentage of respondent's age less than 30 visiting the facility for diabetes was 56 as compared to 25 among respondents age 60 and above. On the contrary, the

proportion of respondents visiting NCD clinic for both diabetes and Hypertension increases with age. So far as hypertension is concerned, although there seems to be no relationship between age but almost 40 percent of respondents after age 30 visit a NCD clinic for treatment of hypertension.

Education-wise distribution of respondents by reason to visit

Table 7 shows that among the illiterate respondents, the prevalence of hypertension is higher (38) than diabetes (27) while as among the respondents who had some literacy from primary to more than higher secondary school, the prevalence of diabetes is higher than hypertension, which clearly reflects the fact that for those who do the physical work, the chance of becoming diabetic is less. Among the unmarried respondents, the prevalence of diabetes is higher, with 60 of the respondents having diabetes, while 40 of the respondents had other problems other than diabetes (Fig-16).



Marital status wise distribution of respondents by reason to visit

Table 7 shows that 60 unmarried and 28 currently married and 33 other respondents come to visit NCD Clinic for the treatment of diabetes whereas 0 unmarried and 40 married and 47 other respondents come to visit NCD clinic for the treatment of hypertension.

Religion-wise distribution of respondents by reason to visit

Table 7 shows that 33 Muslim and 50 Hindu respondents come to visit NCD clinic for the cause of hypertension whereas 33 Muslim and 25.0 Hindu respondents came to visit NCD clinic for the treatment of diabetes. Moreover, 29 Muslims and 25 Hindu respondents came to visit the NCD Clinic for the reason of both hypertension as well as diabetes.

Occupation-wise distribution of respondents by reason to visit

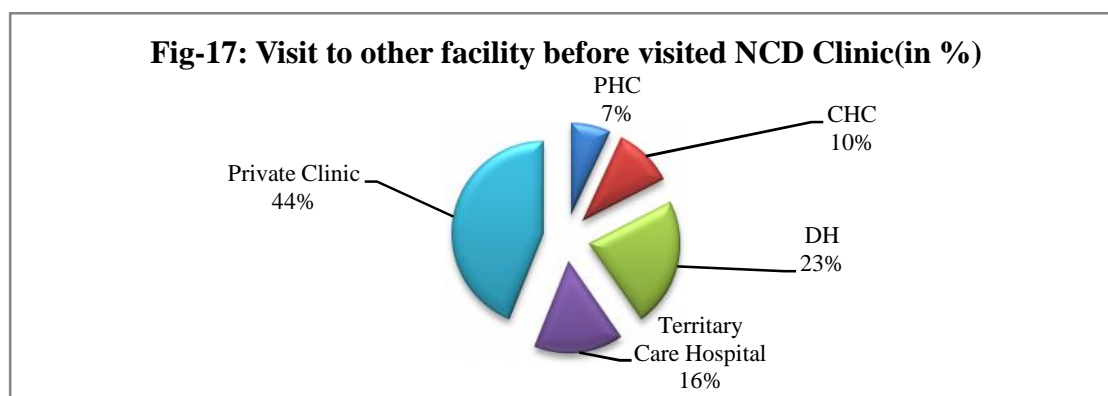
Table 7 shows that almost one-half of our respondents who are government employees or Handicraft workers visit a NCD clinic for treatment of hypertension. A significant proportion of agricultural workers also visit NCD clinics for management of hypertension. Although small percentage of Govt. employees visited a NCD clinic for diabetes but almost one third of the Govt employees have visited NCD clinics for management of both hypertension and diabetes. Significant proportions of respondents who are involved in business have also visited NCD clinics for treatment of other ailments.

Economic status wise distribution of respondents by reason to visit

Table 7 shows that 39 APL respondents, 42 BPL respondent and 12 AAY respondents came to visit NCD clinic for the treatment of hypertension whereas 18 APL respondents, 31.0 BPL respondent and 75 AAY respondents came to visit NCD clinic for the cause of diabetes. Moreover, 37 APL respondents, 25 BPL respondent and 13 AAY respondents came to visit NCD clinic for the treatment of both hypertension as well as diabetes.

Respondents by visits to any other facility before visiting NCD Clinic

The present section of this chapter deals with the percentage of respondents by visit to any other health facility before visited the NCD Clinic by age, region, place of residence, education, marital status, religion, occupation and economic status. Table 8 shows that only 7 respondents visited PHC, 10 respondents visited CHC, 23 respondents visited District Hospital, 44 respondents visited private clinic and 16 respondents visited territory care hospital for the treatment of either hypertension or diabetes or for both (Fig-17).



The category wise respondents by source of knowledge among male and female respondents are discussed under broad headings as:

Gender-wise distribution of respondent's visit before NCD visit

Table 8 shows that 41 male and 44 female respondents agreed that they have visited other facility before the visit of this NCD Clinic. Table 8 shows that, in Kashmir division, 59 respondents had not visited to any other facility before the visit of NCD facility while as in Jammu region 53 respondents had not visited to any other facility before the visit of NCD clinic. Table 8 also shows that 53 rural and 55 urban had not visited to any other facility before the visit of this facility.

Table 8 shows that half of the respondents of more than 60 years of age had visited to other facilities before visiting this facility while as in other age groups of less than 30 years and 31-44 years more than 60 of the respondents had not visited to any other facility before visiting this facility. Table 8 shows that among higher educational groups, 56 of the respondents visited other health facilities before visiting to this NCD clinic on the day of interview while as among the illiterate respondents 61 and among the primary/middle class respondents 55 and 61 had not visited any other facility before visiting this facility.

Marital status-wise distribution of respondent's visit before NCD visit

Table 8 shows that 60 of unmarried respondents visited other facilities and among married respondents only 40 visited other facilities for the treatment of different NCD diseases before visiting this NCD clinic. Table 9 shows that half of the Muslim respondents visited to other facility before visiting to this facility while as among the Hindus more than two third (67) had not visited any other facility before visiting this NCD facility.

Table 8 shows that 77 of the government employees visited to other health facilities for the treatment before to visit this facility on the day of interview while as 55 of the respondents who work at home and 72 of the agriculture workers had not visited any other facility before visiting this facility for the treatment. Table 8 shows that majority of BPL had not visited any other facility before visiting this facility. It is clear from the above analysis that educated, government employees and APL visited other higher type of facilities for advanced treatment.

Respondents by reason for shifting from private to NCD Clinics

Table 9, shows different reasons for shifting from a private clinic to public NCD clinic, and it was found that more than half of the patients (51) shifted to a public NCD clinic because of good care, and 35 respondents shifted because of free treatment at the government NCD clinics.

Moreover, 59 male respondents and 47 female respondents revealed that government NCD clinic are providing extra ordinary care, and 29 male respondents and 37 female respondents revealed that NCD clinic provides them free medicine as well treatment.

Distribution of respondents referred to NCD Clinics

Table 10 shows the percentage of the respondents who were referred to the NCD clinic, and it was found that in the sampled districts of Jammu and Kashmir, 67 of the sampled patients were not referred to any NCD clinic, 16 were referred by PHCs, 8 were referred by DH, and only a meager age were referred by tertiary care hospitals. It was also found 4 of the patients were referred by private clinics/doctors. From the PHCs, 15 of males and 16 of females were referred, while the CHCs referred only 5 of males and 2 of females.

The referral rate in Jammu region is higher than in Kashmir division, and PHCs in both Jammu division and Kashmir division have an effective role in referring high risk NCD patients for advanced treatment. On the basis of age distribution, 23 of the respondents who were more than 60 years of age were referred by PHCs, as were 33 of respondents at higher education levels and 44 of government employees.

Table 10 clearly reflects the fact that educated respondents as well as government employees are more cautious about their health than illiterate people and those who are working in the informal sector. It was important, mention that 6 of the respondent patients from Jammu division, and 6 more than 60 years old were referred by private clinic/doctors to the NCD clinic. Also 6 of higher educational group, 11 of government and 6 of agricultural labours were referred by private clinics to NCD.

CHAPTER – IV

KNOWLEDGE, SYMPTOMS, RISK FACTORS & PREVENTIVE MEASURES OF HYPERTENSION

Introduction

Hypertension (HTN or HT), also known as high blood pressure (HBP), is a long-term medical condition in which the blood pressure in the arteries is persistently elevated. High blood pressure usually does not cause symptoms. High blood pressure, however, is a major risk factor for stroke, coronary artery disease, heart failure, atrial fibrillation, peripheral arterial disease, vision loss, chronic kidney disease, and dementia. Hypertension is a major cause of premature death worldwide.

High blood pressure is classified as primary (essential) hypertension or secondary hypertension. The primary hypertension is the high blood pressure due to nonspecific lifestyle and genetic factors. Lifestyle factors that increase the risk include excess salt in the diet, excess body weight, smoking, physical inactivity and alcohol use. The secondary high blood pressure is the high blood pressure due to an identifiable cause, such as chronic kidney disease, narrowing of the kidney arteries, an endocrine disorder, or the use of birth control pills. Almost 90-95 hypertension cases are due to primary factors whereas the remaining 05-10 cases of hypertension are due to secondary factors.

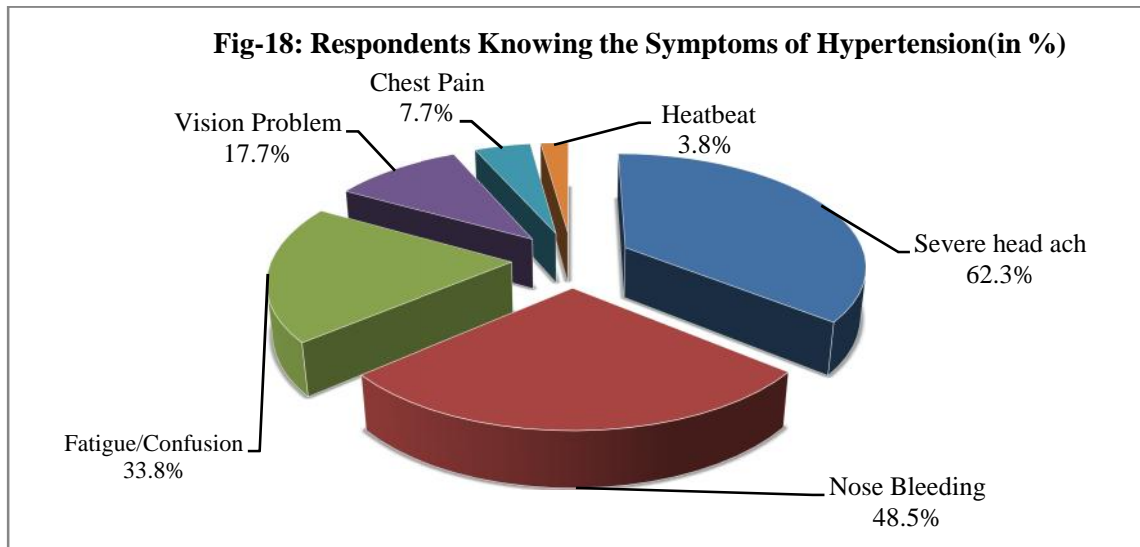
Blood pressure is classified by two measurements, the systolic and diastolic pressures, which are the maximum and minimum pressures, respectively. For most adults, normal blood pressure at rest is within the range of 100-130 millimeters mercury (mmHg) systolic and 60–80 mmHg diastolic. For most adults, high blood pressure is present if the resting blood pressure is persistently at or above 130/80 or 140/90 mmHg. Different numbers apply to children. Ambulatory blood pressure monitoring over a 24-hour period appears more accurate than office-based blood pressure measurement.

Lifestyle changes and medications can lower blood pressure and decrease the risk of health complications. Lifestyle changes include weight loss, physical exercise, decreased salt intake, reducing alcohol intake, and a healthy diet. If lifestyle changes are not sufficient, then blood pressure medications are used. Up to three medications taken concurrently can control blood pressure in 90 of people. The treatment of moderately high arterial blood pressure (defined as

>160/100 mmHg) with medications is associated with an improved life expectancy. The effect of treatment of blood pressure between 130/80 mmHg and 160/100 mmHg is less clear, with some reviews finding benefit and others finding unclear benefit. High blood pressure affects between 16 and 37 of the population globally. In 2010 hypertension was believed to have been a factor in 18 of all deaths (9.4 million globally). In this regard, the present study was the humble effort to understand the knowledge, symptoms, risk factors & preventive measures of hypertension.

Respondents Knowing the Symptoms of Hypertension

The present section of this chapter deals with the percentage of respondents knowing the symptoms of hypertension by age, region, place of residence, education, marital status, religion, occupation and economic status. Table 7 shows that 62 respondents believed that severe head ach is the symptom of hypertension and 48 respondents are of the opinion that nose bleeding is the symptom for the same whereas only 34 respondents claimed that fatigue or confusion is the symptom of hypertension and 18 respondents acknowledged that low vision is the symptom of hypertension. Moreover, 8 and 4 respondents contented that chest pain and irregular heartbeat is the symptom of hypertension respectively (Fig-18).



The category wise knowledge about the symptoms of hypertension among male and female respondents is discussed under the broad headings as:

Gender-wise distribution of respondents

Table 11 shows that out of 130 respondents, 71 male and 58 female respondents believed that ‘severe head ach’ is the symptom of hypertension whereas only 7 male and 8 female respondents are of the opinion that ‘chest pain’ is the symptom of hypertension.

Region wise distribution of respondents

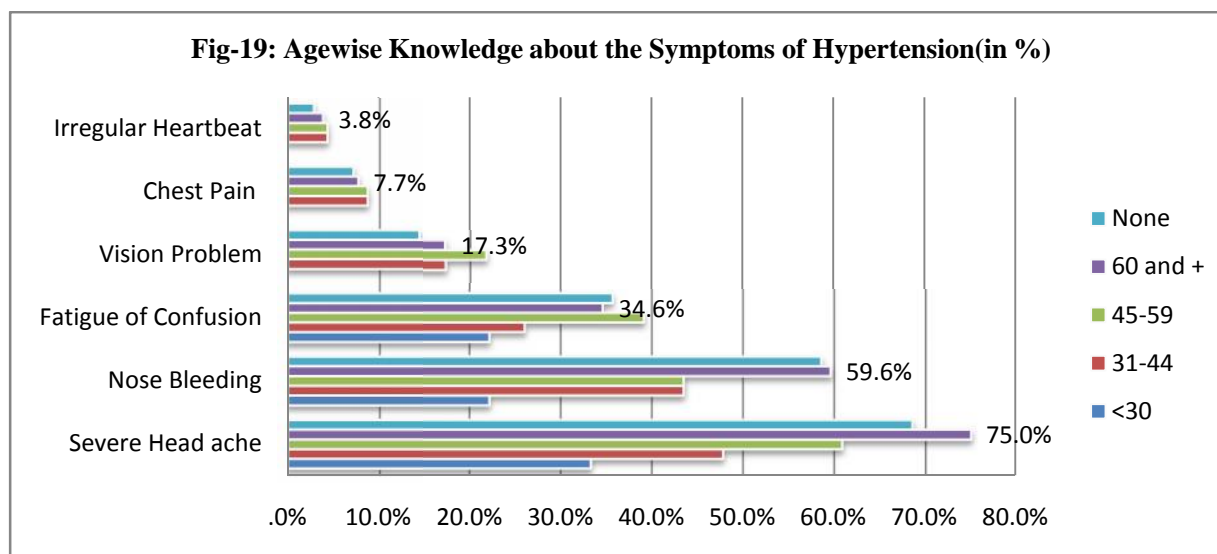
Table 11 shows that in Kashmir division 10 respondents and in Jammu 23 respondents claimed that low vision is the symptom of hypertension whereas only 5 respondents in Kashmir region and 3 respondents in Jammu region believed that irregular heartbeat is the symptom of hypertension. Moreover, only 3 respondents in Kashmir region and 11 respondents in Jammu opinioned that chest pain is the symptom of hypertension.

Residence wise distribution of respondents

Table 11 shows that out of the total respondents 65.3 rural respondents and 51.7 urban respondents believed that severe head ach is the symptom of hypertension whereas 5.9 rural respondents and 13.8 claimed that chest pain is the symptom of hypertension.

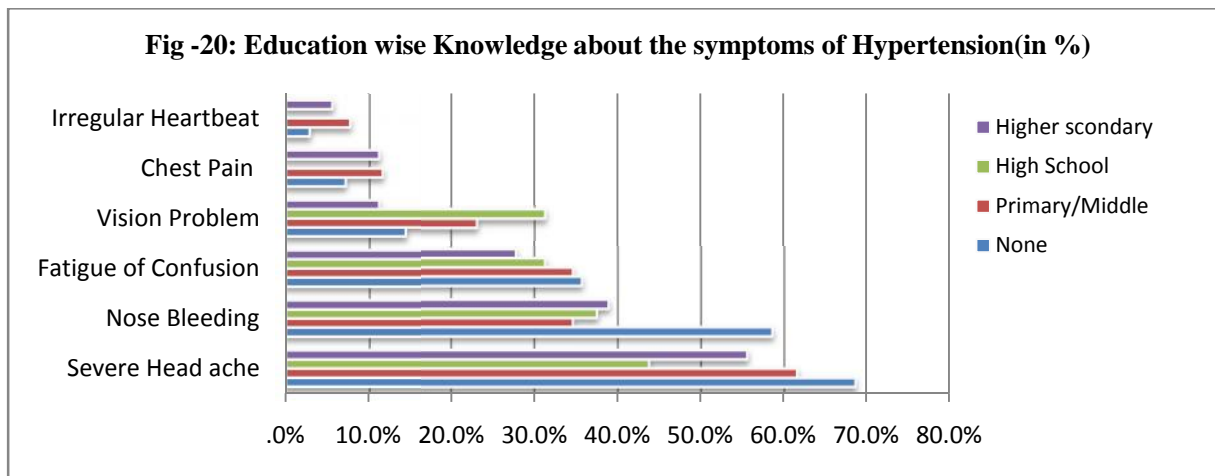
Age-wise distribution of respondents

Table 11 shows 60.9 respondents in the age group of 45-59 years and 75 respondents in the age group of 60 & above believed that severe head ach is the symptom of hypertension whereas 22 respondents in the age group of less than 30 years and 43 respondents in the age group of 31-44 acknowledged that nose bleeding is the symptom of hypertension (Fig-19).



Education-wise distribution of respondents

Table 11 shows that 68 illiterate respondents and 56 higher secondary pass respondents believed that 'sever head ach' is the symptom of hypertension whereas 3 illiterate respondents and 6 higher secondary pass respondents acknowledged that irregular heartbeat is the symptom of hypertension (Fig-20).

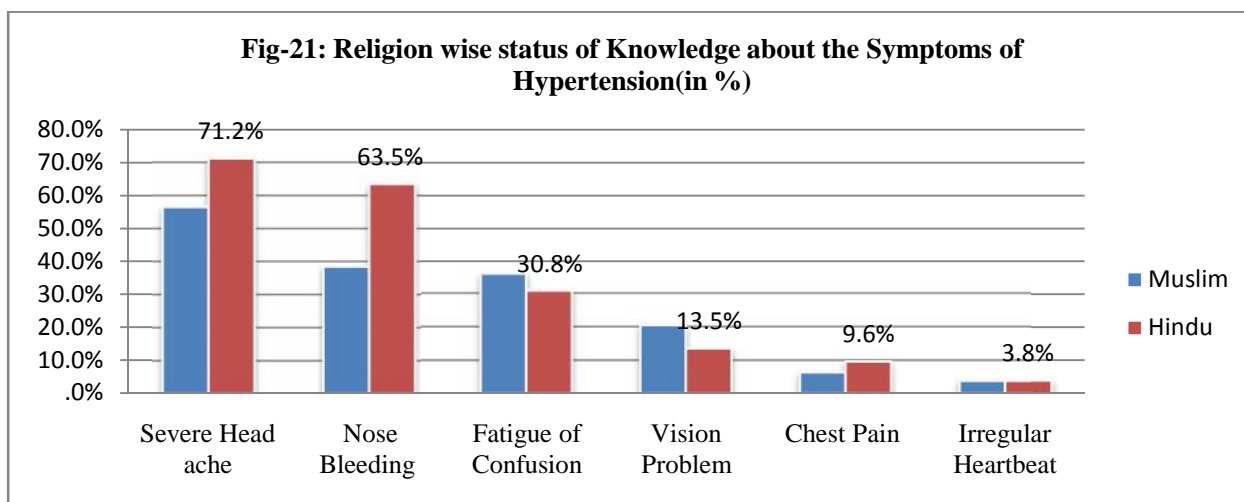


Marital status-wise distribution of respondents

Table 11 shows that out of total respondents 62 unmarried and 40 married respondents believed that the severe head ach is the symptom of hypertension whereas 67 other respondents acknowledged for the same statement. Moreover, 4 currently married and 5 other respondents are of the opinion that chest pain is the symptoms of hypertension.

Religion-wise distribution of respondents

Table 11 shows that 56 Muslim and 71 Hindu respondents opinioned that severe head ach is the symptoms of hypertension whereas 38 Muslim and 63 Hindu respondents are of the opinion that nose bleeding is the symptom for the same (Fig-21).



Occupation-wise distribution of respondents

In Table 11, it has been shown that out of total respondents, 89 government employee and 54 business community workers believed that severe head ach is the symptom of hypertension whereas 54 business persons and 61 home workers said that severe head ach claimed for the same.

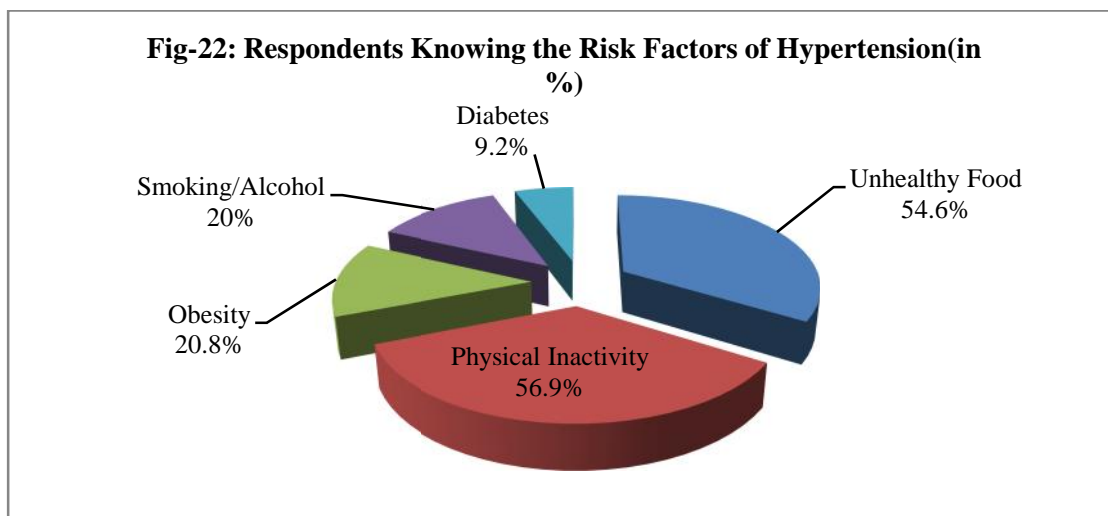
Economic-status wise distribution of respondents

Table 11 shows that 73 APL and 57 BPL respondents opined that severe head ach is the symptom of hypertension whereas 62 AYA respondents acknowledged for the same. Moreover, 66 APL and 43 BPL respondents claimed that nose bleeding is the symptom of hypertension whereas only 25 AYA respondents supported for the same statement.

As per the above analysis, it has been found that majority of the respondents believed that ‘severe head ach’ is the symptom of hypertension and some supported the statement of nose bleeding for the same while as only few of the respondents claimed that fatigue or confusion is the symptom of hypertension. Those who have supported the said opinions are married male respondents belong to the rural areas falls in the age group of 60 years & above. Moreover, these respondents also belong to the Hindu community of APL category and most of them are illiterate and are government employees. However, overall, majority of the respondents believed that head ach is the major symptom of hypertension.

Respondents Knowing the Risk Factors of Hypertension

The present section of this chapter deals with the percentage of respondents knowing the risk factors of hypertension by age, region, place of residence, education, marital status, religion, occupation and economic status. Tables 12 shows that 54 respondents are of the opinion that unhealthy food is the risk factor of hypertension and 57 respondents contented that physical inactivity is the risk factor for the same whereas almost 21 respondents believed that obesity as well as smoking/alcohol is the major risk factor of hypertension. Moreover, only 9 respondents acknowledged that diabetes is the risk factor for the same (Fig-22).



The category wise knowledge about the risk factors of hypertension among the male and female respondents is discussed under the broad headings as:

Gender-wise distribution of respondents

Table 12 shows that 63 male and 50 female respondents are of the opinion that unhealthy food is the risk factor of hypertension whereas 66 male and 53 female respondents claimed that physical inactivity is the risk factor of hypertension.

Region-wise distribution of respondents

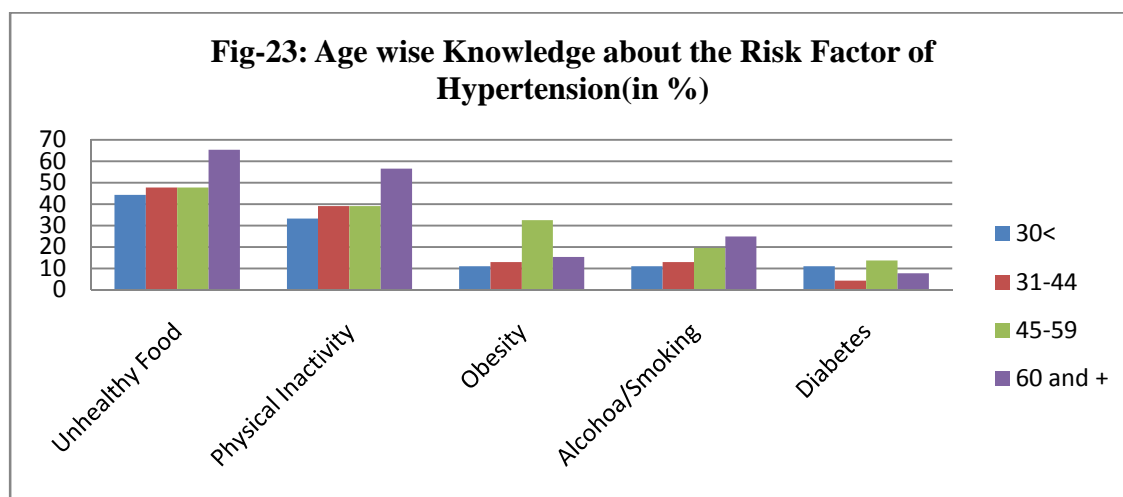
Table 12 shows that in Kashmir division, 44 respondents and in Jammu division 63 respondents are of the view that unhealthy food is the risk factor of hypertension whereas 15 respondents in Kashmir and 24 respondents in Jammu believed smoking/alcohol is the major risk factor of hypertension.

Residence-wise distribution of respondents

Table 12 depicts that out of the total respondents 57 rural and 45 urban respondents believed that unhealthy food is the risk factor of hypertension whereas 21 rural and 14 urban respondents opinioned that obesity is the risk factor for the same.

Age-wise distribution of respondents

In Table 12 it has been shown that 44 respondents in the age group of less than 30 years believed and 65 respondents in the age group of 60 years & above believed that unhealthy food is the risk factor of hypertension whereas 33 respondents in the age group of less than 30 years and 69 respondents in the age group of 60 & above claimed that physical inactivity is the risk factor of hypertension (Fig-23).



Education-wise distribution of respondents

Table 12 shows that 60 illiterate and 31 high school pass respondents are of the opinion that unhealthy food is the risk factor of hypertension whereas 61 primary/middle pass and 31 10th pass respondents acknowledged that physical inactivity is the risk factor for the same. Moreover, 17 illiterate and 12 5th pass respondents said that obesity is the risk factor of hypertension whereas 11 illiterate and 6 12th pass respondents believed that diabetes is the risk factor of hypertension.

Marital status-wise distribution of respondents

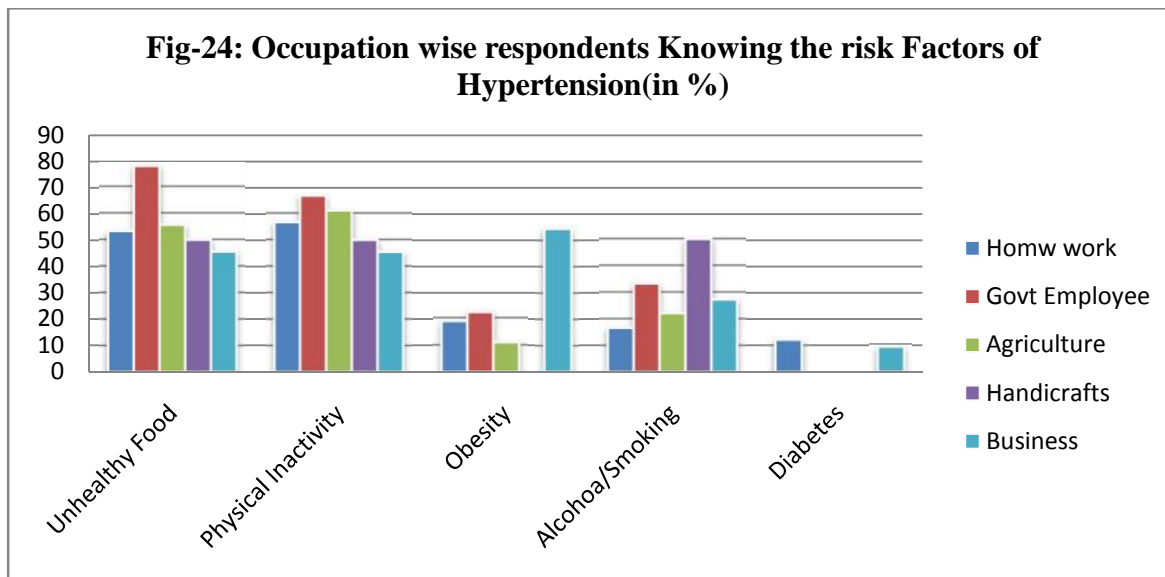
Table 12 shows that 20 unmarried and 56 currently married respondents are of the opinion that unhealthy food is the risk factor of hypertension whereas 57 other respondents claimed that unhealthy food is the risk factor for the same. Moreover, 20 unmarried and 9 other respondents are of the opinion that obesity is the risk factor of hypertension.

Religion-wise distribution of respondents

Table 12 shows that 47 Muslim and 65 Hindu respondents are of the opinion that unhealthy food is the risk factor of hypertension whereas 27 Muslim and 11 Hindu respondents believed that obesity is the risk factor for the same. Moreover, 19 Muslim and 21 Hindu respondents supported that smoking/alcohol is the risk factor of hypertension whereas 50 Muslim and 67 Hindu respondents are of the view that physical in activity is the risk factor of hypertension.

Occupation-wise distribution of respondents

Table 12 depicts that 78 government employee, 45 business men, 50 handicraft workers, 53 home workers believed that unhealthy food is the risk factor of hypertension whereas 56 home workers, 67 government employee, 61 agriculture workers, 50 handicraft workers and 45.5 business persons are of the opinion that physical inactivity is the risk factor of hypertension. Moreover, 17 home worker, 33 government employee, 22 agriculture workers, 50 handicraft workers and 27 business community believed smoking/alcohol is the risk factor of hypertension (Fig-24).



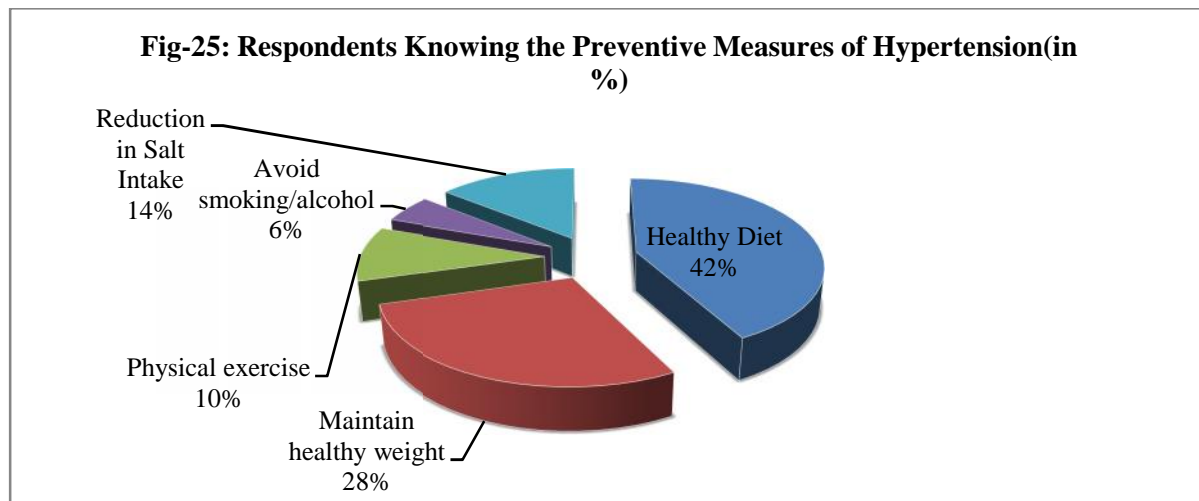
Economic status-wise distribution of respondents

Table 12 shows that 68 APL, 50 BPL and 37 AAY respondents said that unhealthy food is the risk factor of hypertension whereas only 13 APL, 20 BPL and 62 AAY respondents viewed that obesity is the risk factor of hypertension.

Overall the study reveals that majority of the respondents opined that ‘unhealthy food’ is the risk factor of hypertension and some respondents believed that ‘physical inactivity’ may be the risk factor for the same whereas few of the respondents said that obesity as well as consumption of smoking/alcohol is the major risk factor of hypertension. The above opinions are supported by Hindu married male respondents belong to the rural area of Jammu region falls in the age group of 60 years & above. Moreover, these respondents are illiterate of APL category and are government employees.

Distribution of Respondents Knowing the Preventive Measures of Hypertension

The present section of this chapter deals with the percentage of respondents knowing the preventive measures of hypertension by age, region, place of residence, education, marital status, religion, occupation and economic status. In Table 13 it has been shown that 48 respondents are of the opinion that healthy diet is the preventive measure of hypertension and 32 respondents contented that maintaining healthy weight is the preventive measure for the same whereas only 11 respondents believed that physical exercise is the preventive measure of hypertension and 6.2 respondents viewed that avoiding smoking/alcohol is the best prevention for the same. Moreover, only 16 respondents acknowledged that reduction in salt intake is the prevention of hypertension (Fig-25).



The category wise knowledge about the preventive measures of hypertension among the male and female respondents is discussed under the broad headings as:

Gender-wise distribution of respondents

Table 13 shows that 56 male and 45 female respondents are of the opinion that healthy diet is the preventive measures of hypertension whereas 44 male and 27 female respondents claimed that maintaining health weight is the preventive measure for the same. Moreover, 15 male and 10 female respondents viewed that physical exercise is the preventive measure of hypertension whereas only 5 male and 7 female respondents are of the opinion that avoid smoking/alcohol is the preventive measure of hypertension.

Region-wise distribution of respondents

Table 13 shows that, in Kashmir division, 36 respondents and in Jammu division 59 respondents are of the opinion that healthy diet is the preventive measure of hypertension whereas 17 respondents in Kashmir valley and 45 respondents in Jammu region believed maintaining healthy weight is the preventive measure of hypertension. Moreover, in Kashmir province 5 respondents and in Jammu division 17 respondents are of the view that physical exercise is the preventive measure of hypertension whereas only 3 respondents in Kashmir region and 9 respondents in Jammu division claimed that avoiding smoking/alcohol is the best prevention of hypertension. Further, Table 13 depicts that 10 respondents in Kashmir and 21 respondents believed that reduction in Salt intake is the preventive measure of hypertension.

Residence-wise distribution of respondents

Table 13 shows that 53.5 rural and 31.0 urban respondents believed that healthy diet is the preventive measure of hypertension whereas 34 rural and 28 urban respondents contented that

maintaining healthy weight is the preventive measures of hypertension. Moreover, 11 rural and 14 urban respondents claimed that physical exercise is the preventive measure of hypertension whereas only 7 rural and 3 urban respondents said that avoiding smoking/alcohol is the preventive measure for the same. Further, 19 rural and 7 urban respondents are of the opinion that reduction in the salt intake is the best preventive measure of hypertension.

Age-wise distribution of respondents

Table 13 shows that 33 respondents in the age group of less than 30 years, 43 respondents in the age group of 31 years, 48 respondents in the age group of 45-59 years and 47 respondents believed that healthy diet is the preventive measure of hypertension whereas 11 respondents in the age group of less than 30 years, 17 respondents in the age group of 31 years, 11 respondents in the age group of 45-59 years and 10 respondents viewed that physical exercise is the preventive measure of hypertension.

Education-wise distribution of respondents

Table 13 shows that 50 illiterate, 57 primary/middle, 37 high school and 39 higher secondary school respondents are of the opinion that healthy diet is the preventive measures of hypertension whereas only 11 illiterate, 15 primary/middle, 6 high school and 11 higher secondary school respondents are of the view that physical exercise is the preventive measures for the same. Moreover, 19 illiterate, 11 primary/middle, 12 high school and 16 higher secondary school respondents believed that reduction in salt intake diet is the best preventive measure of hypertension.

Marital status-wise distribution of respondents

In Table 13 it has been shown that 40 unmarried, 47 currently married and 57 other respondents are of the opinion that healthy diet is the preventive measure of hypertension whereas zero unmarried, 14 married and 28 other respondents claimed that reduction in the salt intake is the preventive measure for the same.

Religion-wise distribution of respondents

Table 13 shows that 43 Muslim and 56 Hindu respondents are of the opinion that healthy diet is the preventive measure of hypertension whereas 24 Muslim and 44 Hindu respondents supported that maintaining healthy weight is the preventive measure of for the same. Moreover, only 9 Muslim and 27 Hindu respondents said that reduction in salt intake is the preventive measure of

hypertension whereas only 6 Muslims and 6 Hindu respondents are of the opinion that avoiding smoking/alcohol is the preventive measure of hypertension.

Occupation-wise distribution of respondents

Table 13 depicts that 44 home worker, 78 government employee, 50 agriculture workers and 63.6 business community claimed that healthy diet is the preventive measure of hypertension whereas 28 home worker, 67 government employee, 44 agriculture workers and 27.3 business community believed that maintaining healthy weight is the preventive measure for the same. Moreover, 7 home worker, zero government employee, 5.6 agriculture workers and 9 business community are of the view that avoiding smoking/alcohol is the preventive measure of hypertension whereas only 18 home worker, 0 government employee, 11 agriculture workers and 27 business community acknowledged that reduction in salt intake is the preventive measure for the same

Economic status-wise distribution of respondents

Table 13 shows that 52 APL, 46.4 BPL and 50 AAY respondents said that healthy diet is the preventive measure of hypertension whereas 37 APL, 31 BPL and 25 AAY respondents believed that maintaining healthy diet is the preventive measure for the same. Moreover, 3 APL, 7 BPL and 13 AAY respondents claimed that avoiding smoking/alcohol is the preventive measure of hypertension whereas 18 APL, 17 BPL and 0 AAY respondents opined that reduction in salt intake is the preventive measure of the hypertension.

From the above analysis, it has been found that majority of the respondents opined that 'healthy diet', 'regular physical exercise' and 'reduction in salt intake' is the best preventive measure of hypertension and some respondents claimed that maintaining healthy weight and avoiding consumption of smoking/alcohol may be the best preventive measure for the same. The said statements were opined by government employees of Hindu male respondents belong to the APL category of rural area of Jammu region falls in the age group of 60 years & above.

CHAPTER – V

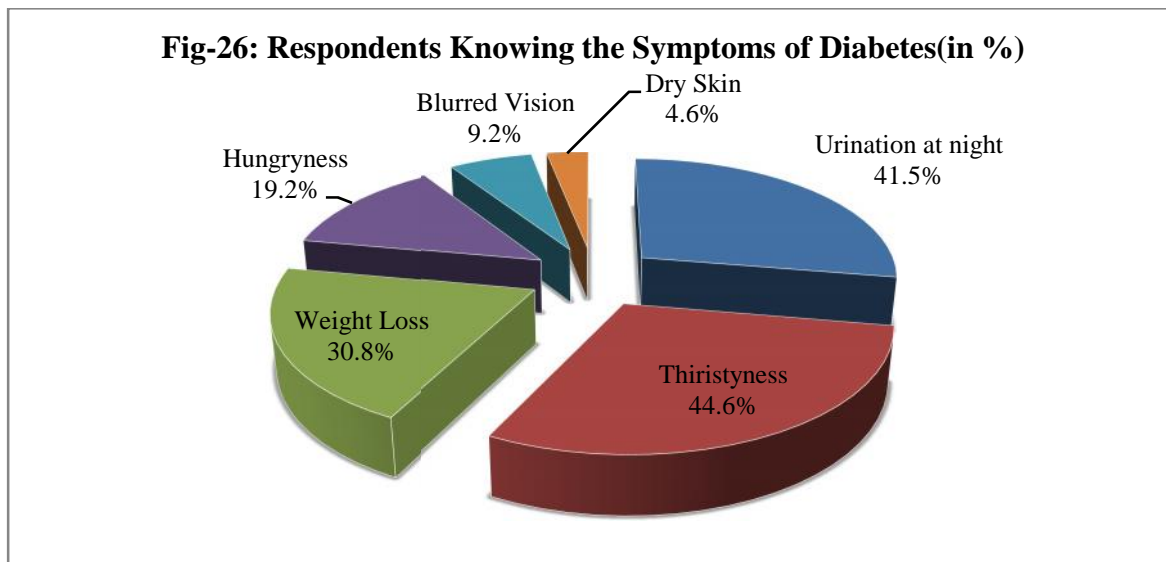
KNOWLEDGE, SYMPTOMS, RISK FACTORS & PREVENTIVE MEASURES OF DIABETES

Introduction

Diabetes is a chronic, metabolic disease characterized by elevated levels of blood glucose (or blood sugar), which leads over time to serious damage to the heart, blood vessels, eyes, kidneys and nerves. The most common is type 2 diabetes, usually in adults, which occurs when the body becomes resistant to insulin or doesn't make enough insulin. In the past 3 decades the prevalence of type 2 diabetes has raised dramatically in countries of all income levels. Type 1 diabetes, once known as juvenile diabetes or insulin-dependent diabetes, is a chronic condition in which the pancreas produces little or no insulin by itself. For people living with diabetes, access to affordable treatment, including insulin, is critical to their survival. There is a globally agreed target to halt the rise in diabetes and obesity by 2025. About 422 million people worldwide have diabetes, the majority living in low-and middle-income countries, and 1.5 million deaths are directly attributed to diabetes each year. Both the number of cases and the prevalence of diabetes have been steadily increasing over the past few decades. In this regard, presents chapter is the humble effort to understand the knowledge, symptoms and preventive measures of diabetes among male and female respondents of Jammu & Kashmir.

Respondents Knowing the Symptoms of Diabetes

The present section of this chapter deals with the percentage of respondents knowing the symptoms of diabetes by age, region, place of residence, education, marital status, religion, occupation and economic status. Table 14 shows that 41 respondents believed that urination at night is the symptom of diabetes and 45 respondents are of the opinion that thirstiness is the symptom for the same whereas 31 respondents claimed that weight loss is the symptom of diabetes and 19 respondents acknowledged that hungriness is the symptom for the same. Moreover, only 9 respondents are of the view that blurred vision is the symptom of diabetes and 5 respondents believed that dry skin is the symptom for the same (Fig-26).



The category wise knowledge about the symptoms of diabetes among male and female respondents is discussed under the broad headings as:

Gender-wise distribution of respondents

Table 14 shows that out of the total respondents, 29.3 male and 31.5 female respondents believed that ‘losing weight’ is the symptom of diabetes whereas only 17.1 male and 20.2 female respondents are of the opinion that ‘hungryness is the symptom for the same. Moreover, 13.5 female respondents believed that blurred vision is the symptom of diabetes and 6.7 female respondents opined that dry skin is the symptom for the same.

Region wise distribution of respondents

Table 14 shows that in Kashmir division 42 respondents and in Jammu 41 respondents claimed that urination is the symptom of diabetes whereas 44 respondents in Kashmir region and 45 respondents in Jammu region believed that thirstiness is the symptom of diabetes. Moreover, only 2 respondents in Kashmir region and 7 respondents in Jammu opined that dry skin is the symptom for the same.

Area-wise distribution of respondents

Table 14 shows that out of the total respondents 30 rural respondents and 34 urban respondents believed that losing weight is the symptom of diabetes whereas 9 rural and 10.3 urban respondents are of the view that blurred vision is the symptom of diabetes.

Age distribution of respondents

Table 14 shows that 44 respondents in the age group of < 30 years, 52 respondents in the age group of 31-44, 41 respondents in the age group of 45-59 years and 36 respondents in the age group of 60 years & above believed that urination at night is the symptom of diabetes whereas 11 respondents in the age group of < 30 years, 17 respondents in the age group of 31-44, 28 respondents in the age group of 45-59 years and 13 respondents in the age group of 60 years & above are of the view that hunger is the symptom for the same.

Education wise distribution of respondents

Table 14 shows that 38 illiterate, 39 primary/middle, 62 high school and 39 higher secondary pass respondents believed that 'urination is the symptom of diabetes whereas 41 illiterate, 50 primary/middle, 56 high school, and 40 higher secondary pass respondents acknowledged that thirstiness is the symptom for the same. Moreover, 16 illiterate, 23 primary/middle, 44 high school and 6 higher secondary pass respondents viewed that hunger is the symptom of diabetes.

Marital status-wise distribution of respondents

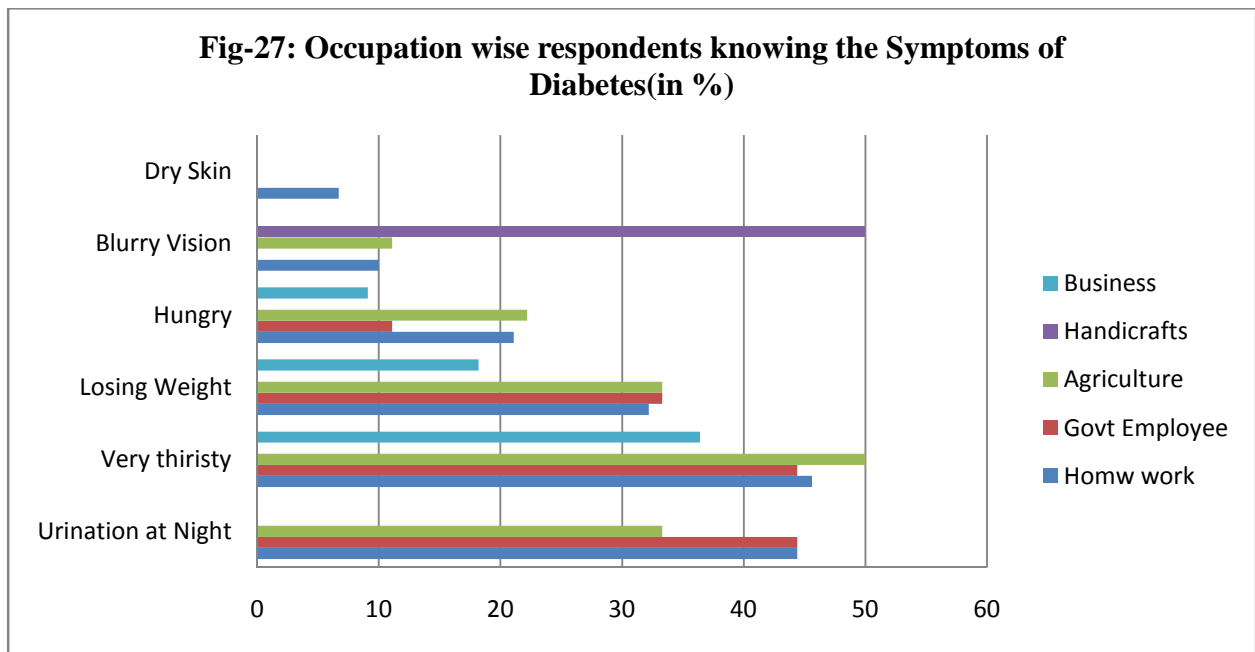
In Table 14 it has been shown that out of total respondents 40 unmarried, 47 currently married and 14 other respondents believed that the urination at night is the symptom of diabetes whereas 40 unmarried, 34 currently married and 9 other respondents acknowledged that losing weight is the symptom for the same.

Religion-wise distribution of respondents

Table 14 shows that 42.3 Muslim and 40.4 Hindu respondents opinioned that urination at night is the symptoms of diabetes whereas 32.1 Muslim and 28.8 Hindu respondents are of the opinion that losing weight is the symptom for the same.

Occupation-wise distribution of respondents

In Table 14, it has been shown that out of total respondents, 44 home workers, 44 government employee, 33 agriculture workers and 36 business community believed that urination is the major symptom of diabetes whereas 32 home workers, 33 government employee, 33 agriculture workers and 18 business persons said that losing weight is the symptom for the same(Fig-27).



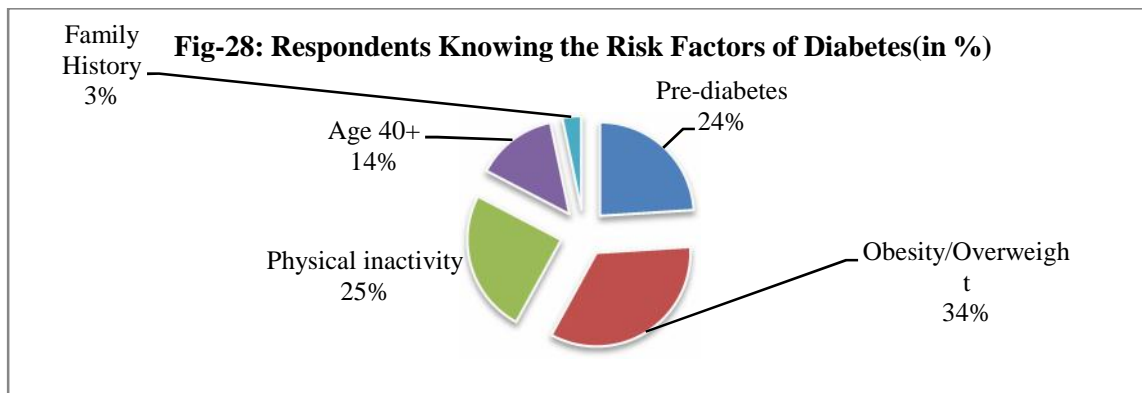
Economic-status wise distribution of respondents

Table 14 shows that 44.7 APL, 38 BPL and 62 AAY respondents opined that urination at night is the symptom of diabetes whereas 45 APL, 44 BPL and 50 AYA respondents acknowledged that thirstiness is the symptom for the same. Moreover, 16 APL, 15 BPL and 75 AYA respondents claimed that hungriness is the symptom of diabetes.

Overall the above analysis shows that majority of the respondents believed that ‘urination at night’ and ‘thirstiness’ is the symptom of diabetes whereas some feels that ‘sudden weight loss’ & blurred vision is the symptom for the same. This opinion is generally held by respondents who are female, have high school education, belong to urban areas, are from Kashmir region and are in the age group of 31-44. Further, respondents who are Muslims and also the respondents who belong to AAY category also held the above opinion.

Distribution of Respondents Knowing the Risk Factors of Diabetes

The present section of this chapter deals with the percentage of respondents knowing the risk factors of Diabetes by age, region, place of residence, education, marital status, religion, occupation and economic status. Tables 15 shows that 28 respondents are of the opinion that pre-diabetes is the risk factor of Diabetes and 39 respondents contented that obesity/overweight is the risk factor for the same whereas 28 respondents believed that physical inactivity is the major risk factor for the same. Moreover, only 16 respondents acknowledged that above 40 years of age is the risk factor of diabetes and 4 respondents are of the opinion that family history is the risk factor for the same (Fig-28).



The category wise knowledge about the risk factors of Diabetes among the male and female respondents is discussed under the broad headings as:

Gender-wise distribution of respondents

Table 15 shows that 63 male and 51 female respondents are of the opinion that unhealthy food is the risk factor of Diabetes whereas only 66 male and 53 female respondents claimed that physical inactivity is the risk factor of Diabetes.

Region-wise distribution of respondents

Table 15 shows that in Kashmir division, 21 respondents and in Jammu division 34 respondents are of the view that pre-diabetes is the risk factor of Diabetes whereas 2 respondents in Kashmir and 6 respondents in Jammu believed that family history is the major risk factor of Diabetes.

Residence-wise distribution of respondents

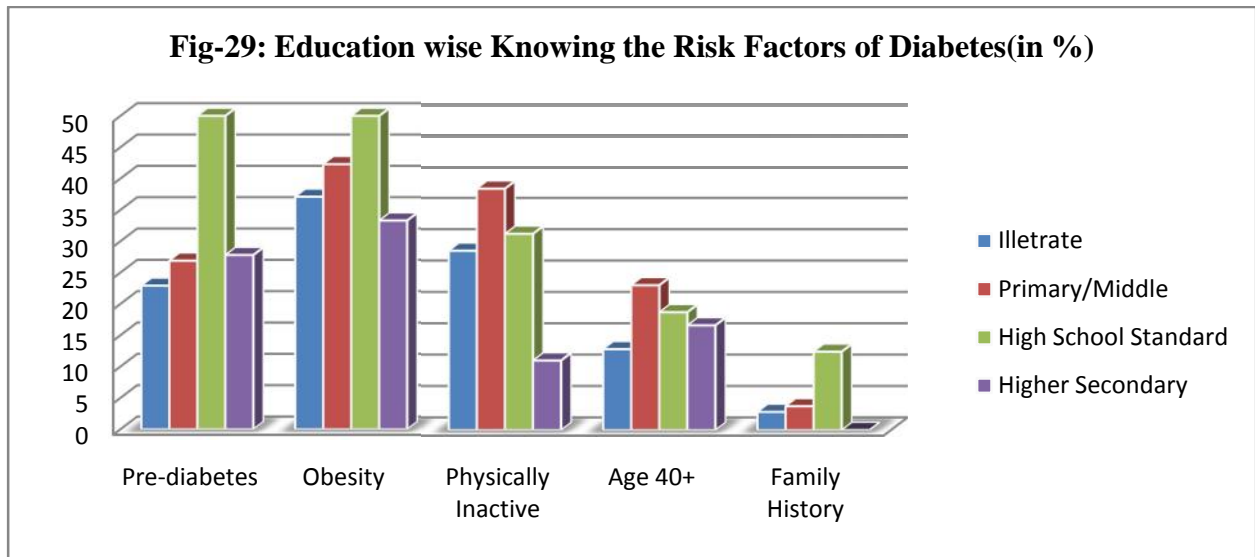
Table 15 depicts that out of the total respondents 39 rural and 38 urban respondents believed that obesity/overweight is the risk factor of Diabetes whereas only 4 rural and 3 urban respondents opinioned that family history is the risk factor for the same.

Age-wise distribution of respondents

In Table 15 it has been shown that 22 respondents in the age group of less than 30 years, 43 respondents in the age group of 31-44 years, 23 respondents in the age group of 45-59 years, 25 respondents in the age group of 60 years & above believed that pre-diabetes is the risk factor of Diabetes whereas 11 respondents in the age group of less than 30 years, 17 respondents in the age group of 31-44 years, 15 respondents in the age group of 45-59 years, 17 respondents in the age group of 60 years & above viewed that Age above 40 years is the risk factor for the same.

Education-wise distribution of respondents

Table 15 shows that 23 illiterate, 27 primary/middle, 50 high school, 28 higher secondary pass respondents are of the opinion that pre-diabetes is the risk factor of Diabetes whereas 37 illiterate, 42 primary/middle, 31 high school, 11 higher secondary pass respondents acknowledged that physical inactivity is the risk factor for the same. Moreover, 13 illiterate, 23 primary/middle, 19 high school, and 17 higher secondary pass respondents claimed that family history is the risk factor of diabetes whereas 2.9 illiterate, 4 primary/middle, 12 high school, and zero higher secondary pass respondents said that family history is the risk factor for the same (Fig-29).



Marital status-wise distribution of respondents

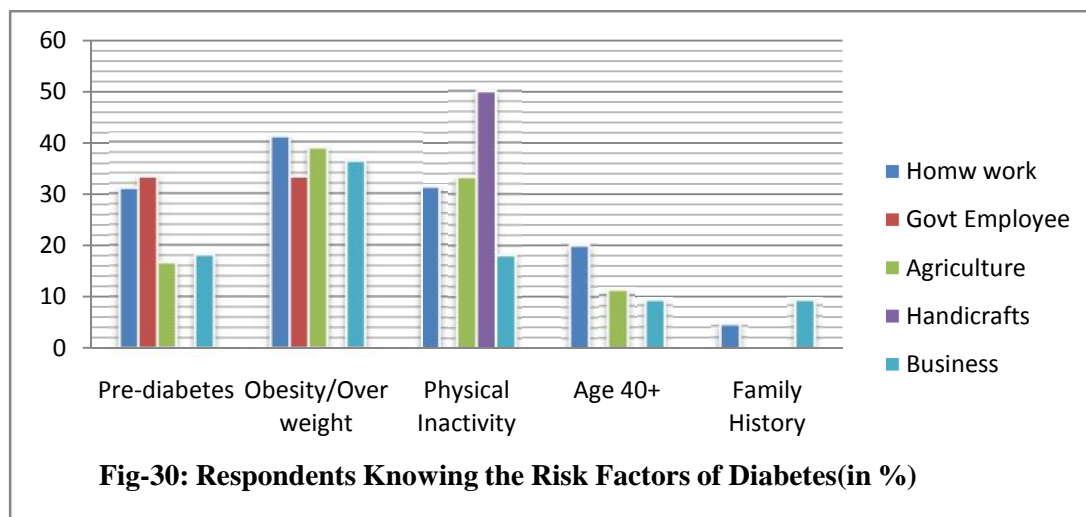
Table 15 shows that 20 unmarried and 31 currently married and 14.3 other respondents are of the opinion that pre-diabetes is the risk factor of Diabetes whereas only 4 currently married and 4.8 other respondents claimed that family history is the risk factor for the same. Moreover, 20.0 unmarried, 31 currently married and 19 other respondents viewed that that physical inactivity is the risk factor of Diabetes.

Religion-wise distribution of respondents

Table 15 shows that 37 Muslim and 42 Hindu respondents are of the opinion that obesity/overweight is the risk factor of Diabetes whereas only 2 Muslim and 8 Hindu respondents are of the opinion that family history is the risk factor for the same. Moreover, 30.8 Muslim and 25 Hindu respondents agreed that physical inactivity is the risk factor of Diabetes whereas 14 Muslim and 19 Hindu respondents are of the view that Age above 40 is the risk factor for the same.

Occupation-wise distribution of respondents

Table 15 depicts that 31 home workers, 33 government employee, 17 agriculture workers, 18 business community believed that pre-diabetes is the risk factor of Diabetes whereas 41 home workers, 33 government employee, 39 agriculture workers and 36 business men are of the opinion that obesity/overweight is the risk factor for the same (Fig-30).



Economic status-wise distribution of respondents

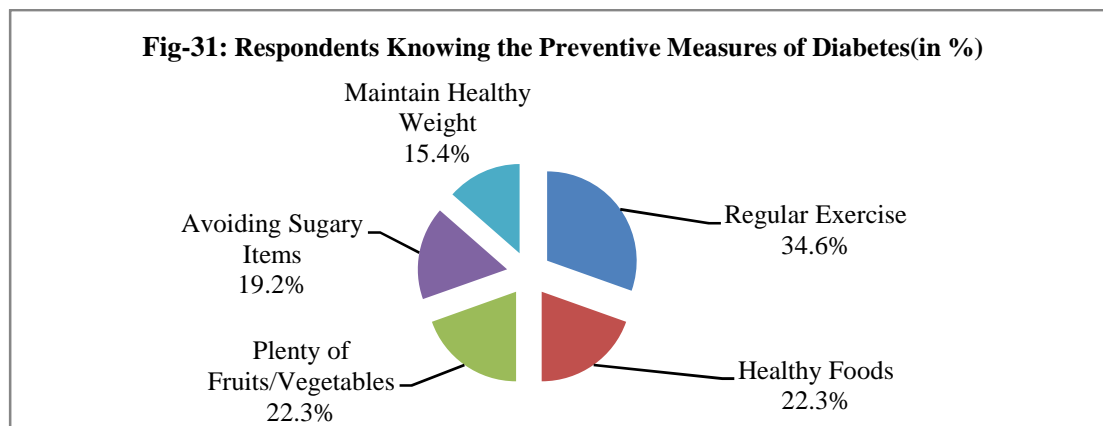
Table 15 shows that 45 APL, 37 BPL and 37 AAY respondents said that obesity is the risk factor of Diabetes whereas only 5 APL, 3.6 BPL and zero AAY respondents viewed that family history is the risk factor for the same.

The above analysis shows that majority of the respondents are of the opinion that ‘pre-diabetes & obesity/overweight’ may be the risk factors of diabetes and some respondents believed that physical inactivity & above 40 years of age is the major risk factor for the same whereas few of the respondents supported that family history is the risk factor of diabetes. This opinion was held by the male respondents belonged to the rural area of Jammu region falls in the age group of 31-44 years having high school standard and were currently married. Moreover, these respondents are Hindu belong to APL category and are handicraft workers and government employee.

Distribution of Respondents Knowing the Preventive Measures of Diabetes

The present section of this chapter deals with the percentage of respondents knowing the preventive measures of Diabetes by age, region, place of residence, education, marital status, religion, occupation and economic status. In Table 16 it has been shown that 34 respondents are of the opinion that regular exercise is the preventive measure of Diabetes and 22 respondents contented that healthy food is the preventive measure for the same whereas 22 respondents

believed that eating plenty of fruits & vegetables is the preventive measure of Diabetes and 19 respondents viewed that avoiding sugary items is the best prevention for the same. Moreover, only 15 respondents acknowledged that maintaining healthy weight is the prevention of Diabetes (Fig-31).



The category wise knowledge about the preventive measures of diabetes among the male and female respondents is discussed under the broad headings as:

Gender-wise distribution of respondents

Table 16 shows that 27 male and 38 female respondents are of the opinion that regular exercise is the preventive measure of Diabetes whereas 24 male and 17 female respondents claimed that avoiding sugary items is the preventive measure for the same. Moreover, 17 male and 25 female respondents viewed that taking healthy food and plenty of fruits/vegetables is the best preventive measure of Diabetes whereas only 12 male and 17 female respondents are of the opinion that avoid maintaining healthy weight is the preventive measure for the same.

Region-wise distribution of respondents

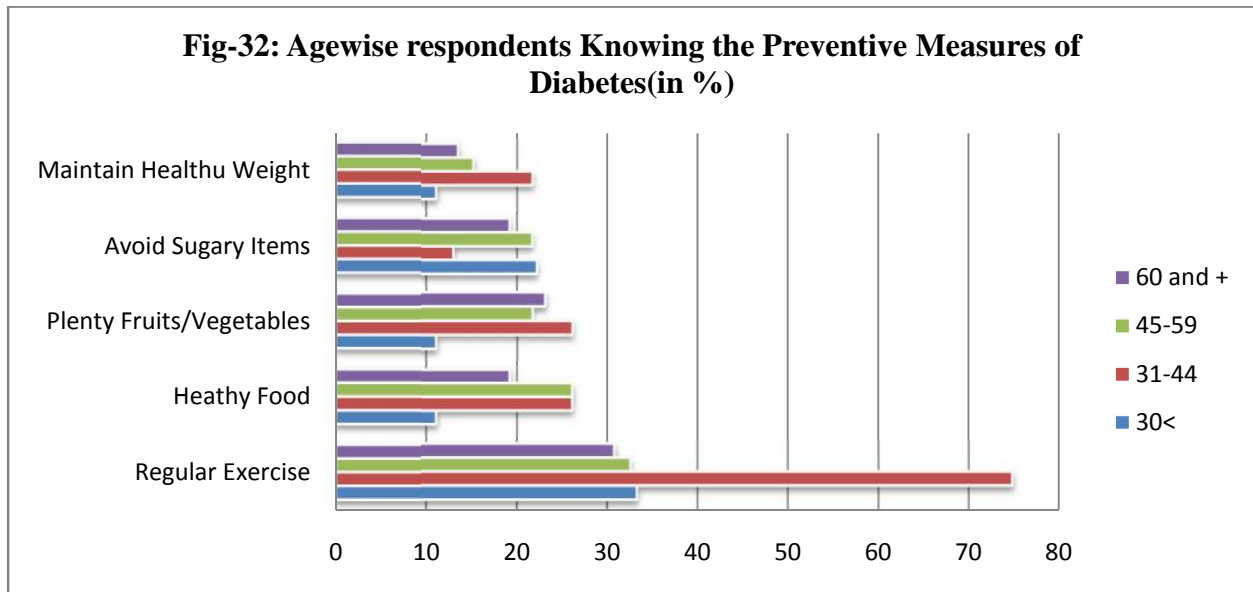
Table 16 shows that, in Kashmir division, 31 respondents and in Jammu division 38 respondents are of the opinion that regular exercise is the preventive measure of Diabetes whereas 15 respondents in Kashmir valley and 15 respondents in Jammu region believed that maintaining healthy weight is the preventive measure of Diabetes. Moreover, in Kashmir province 25.4 respondents and in Jammu division 19 respondents are of the view that taking healthy food is the preventive measure of Diabetes whereas only 20 respondents in Kashmir region and 18 respondents in Jammu division claimed that avoiding sugary items is the best prevention of Diabetes.

Residence-wise distribution of respondents

Table 16 shows that 35 rural and 31 urban respondents believed that regular exercise is the preventive measure of Diabetes whereas 20 rural and 17 urban respondents contented that avoiding sugary items is the core preventive measure of Diabetes. Moreover, 21 rural and 21 urban respondents claimed that taking healthy food is the preventive measure of Diabetes whereas 20 rural and 31 urban respondents said that taking plenty of fruits and vegetables is the preventive measure for the same.

Age-wise distribution of respondents

Table 16 shows that 33 respondents in the age group of less than 30 years, 48 respondents in the age group of 31-44 years, 32 respondents in the age group of 45-59 years and 31 respondents in the age group of 60 & above believed that regular exercise is the preventive measure of Diabetes whereas 22 respondents in the age group of less than 30 years, 13 respondents in the age group of 31-44 years, 21 respondents in the age group of 45-59 years and 9 respondents in the age group of 60 years & above viewed that avoiding sugary items is the preventive measure for the same (Fig-32).



Education-wise distribution of respondents

Table 16 shows that 28 illiterate, 38 primary/middle, 50 high school and 38 higher secondary school respondents are of the opinion that regular exercise is the preventive measures of Diabetes whereas 14 illiterate, 31 primary/middle, 25 high school and 17 higher secondary school respondents are of the view that avoiding sugary items is the best preventive measure for the same. Moreover, 11 illiterate, 19 primary/middle, 25 high school and 17 higher secondary school

respondents believed that reduction maintaining healthy weight is the best preventive measure for the same.

Marital status-wise distribution of respondents

In Table 16, it has been shown that 60 unmarried, 36 currently married and 24 other respondents are of the opinion that regular exercise is the preventive measure of Diabetes whereas 20 unmarried, 21 married and 9 other respondents believed that avoiding sugary items is the best preventive measure for the same.

Religion-wise distribution of respondents

Table 16 shows that 32 Muslim and 38 Hindu respondents are of the opinion that regular exercise is the preventive measure of Diabetes whereas 18 Muslim and 21 Hindu respondents supported that avoiding sugary items is the preventive measure of for the same. Moreover, 25 Muslim and 17 Hindu respondents said that taking healthy food is the preventive measure of Diabetes whereas 24 Muslims and 19 Hindu respondents are of the opinion that taking plenty of fruits/vegetables is the preventive measure for the same.

Occupation-wise distribution of respondents

Table 16 depicts that 40 home worker, 44 government employee, 17 agriculture workers, 50.0 handicraft workers and 9.1 business community claimed that regular exercise is the preventive measure of Diabetes whereas 18 home worker, 11 government employee, 22 agriculture workers, 50 handicraft workers and 27 business community believed that avoiding sugary items is the preventive measure for the same. Moreover, 23 home worker, 22 government employee, 22 agriculture workers and 18.8 business community are of the view that taking healthy food is the preventive measure of Diabetes whereas 25 home worker, 22 government employee, 11 agriculture workers and 18 business community acknowledged that taking plenty of fruits/vegetables is the preventive measure for the same.

Economic status-wise distribution of respondents

Table 16 shows that 34 APL, 34 BPL and 37 AAY respondents said that regular exercise is the preventive measure of Diabetes whereas 16 APL, 21 BPL and 12 AAY respondents believed that avoiding sugary items is the best preventive measure for the same. Moreover, 5 APL, 19 BPL and 25 AAY respondents claimed that maintain healthy weight is the preventive measure of Diabetes whereas 21 APL, 23 BPL and 25 AAY respondents opined that taking plenty of fruits/vegetables is the preventive measure for the same.

The above analysis shows that majority of the respondents are of the opinion that regular exercise as well as healthy food is the preventive measure of diabetes and some believed that eating plenty of fruits & vegetables is the best preventive measure for the same whereas few of the respondents viewed that avoiding sugary items is the best prevention of diabetes. The said arguments favoured by the high school standard female respondents belong to the rural area of Jammu region falls in the age group of 31-44 years. Majority of these respondents are Hindu and handicraft workers belong to AAY category.

CHAPTER – VI

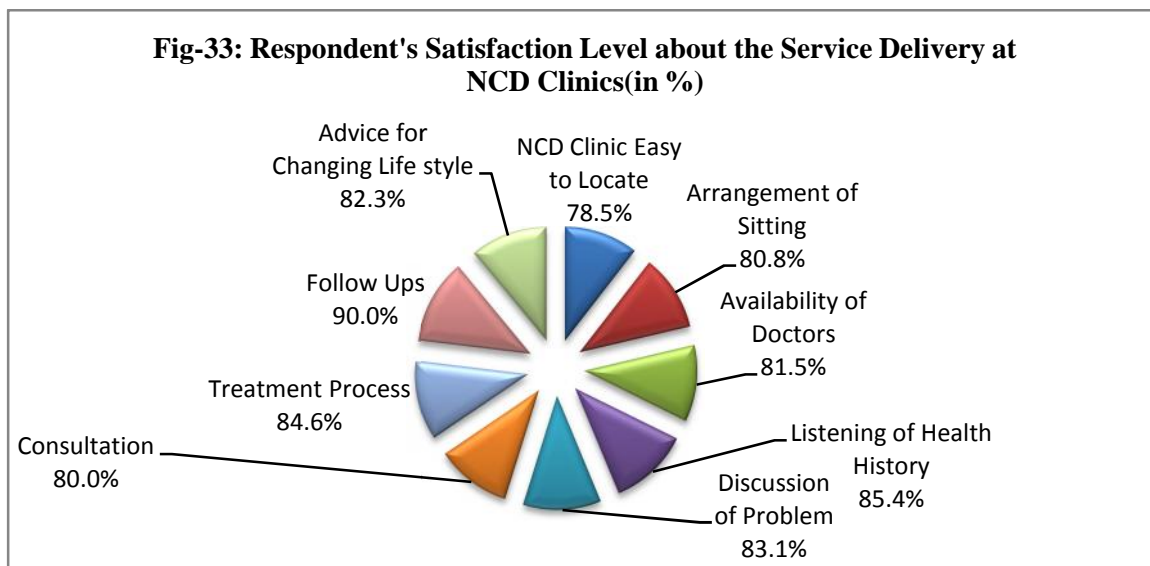
PERCEPTION OF RESPONDENTS ABOUT THE SERVICE DELIVERY AT NCD CLINICS

Introduction

The present chapter is based on the experience and satisfaction level of male and female respondents during their visit at NCD clinics visited for consultation. The respondents were interviewed at various NCD clinics established at various district hospitals, Community Health Centres (CHCs) and Sub-district Hospitals (SDH) of Jammu & Kashmir.

Respondents Satisfaction Level about the Service Delivery

The present section of this chapter deals with the percentage of respondent's Satisfaction about the service delivery at NCD Clinics by age, region, place of residence, education, marital status, religion, occupation and economic status. Table 17 shows that 78 respondents believed that NCD Clinics are easy to locate and 81 respondents are of the opinion that arrangement for sitting at NCD Clinics are exemplary whereas 81 respondents claimed that doctors are available at the NCD Clinics and 85 respondents acknowledged that doctors are eager to listen the health history of patients at these NCD Clinics. Moreover, 83 respondents are of the view that doctors gives enough time to discuss the problem/issue with patient whereas 90 respondents said that doctors advices the patients for the follow ups (Fig-33).



The category wise satisfaction level and perception about the service delivery at NCD Clinics among male and female respondents are discussed under the broad headings as:

Gender-wise Satisfaction level among respondents

Table 17 shows that 80 male and 77 female respondents are of the opinion that NCD Clinic is visible and easy to find its location whereas 87 male and 77 female respondents believed that arrangement for sitting is exemplary at NCD Clinic visited. Moreover, 90 male and 78 female respondents said that doctors gave them advice for changing their life style. Further, table 13 shows that 87 male and 81 female respondents are of the opinion that doctors gave them time to discuss their problem/issue.

Region-wise Satisfaction level among respondents

Table 17 shows, in Kashmir division 69 respondents and in Jammu division 90 respondents claimed that arrangement for sitting at NCD Clinics is exemplary whereas 84 respondents in Kashmir and 76 respondents in Jammu opinioned that doctors provide patients maximum time while consultation.

Residence-wise Satisfaction level among respondents

Table 17 shows that 87 rural and 79 urban respondents believed that doctors are eager to listen the patients health history and 83 rural and 79 urban respondents contented that doctors advices patients to come for follow ups. Moreover, 80 rural and 86 urban respondents claimed that doctor's remains available at these NCD clinics whereas 80 rural and 79 urban respondents said that doctors provide maximum time to patient while consultation.

Age-wise Satisfaction level among respondents

Table 17 shows that 87 respondents in the age group of less than 30 years, 76 respondents in the age group of 31-44 years, 81 respondents in the age group of 45-59 years and 94 respondents in the age group of 60 & above believed that doctors are eager to listen the health history from patients whereas 78 respondents in the age group of less than 30 years, 88 respondents in the age group of 31-44 years, 75 respondents in the age group of 45-59 years and 94 respondents in the age group of 60 years & above viewed that doctors advises patients to come for follow ups for further checkups.

Education-wise Satisfaction level among respondents

Table 17 shows that 75 illiterate, 81 primary/middle, 87 high school and 77 higher secondary school respondents are of the opinion that NCD clinics are easy to find whereas 84 illiterate, 73 primary/middle, 81 high school and 83 higher secondary school respondents are of the view that doctors remains available at NCD clinics. Moreover, 87 illiterate, 77 primary/middle, 81 high

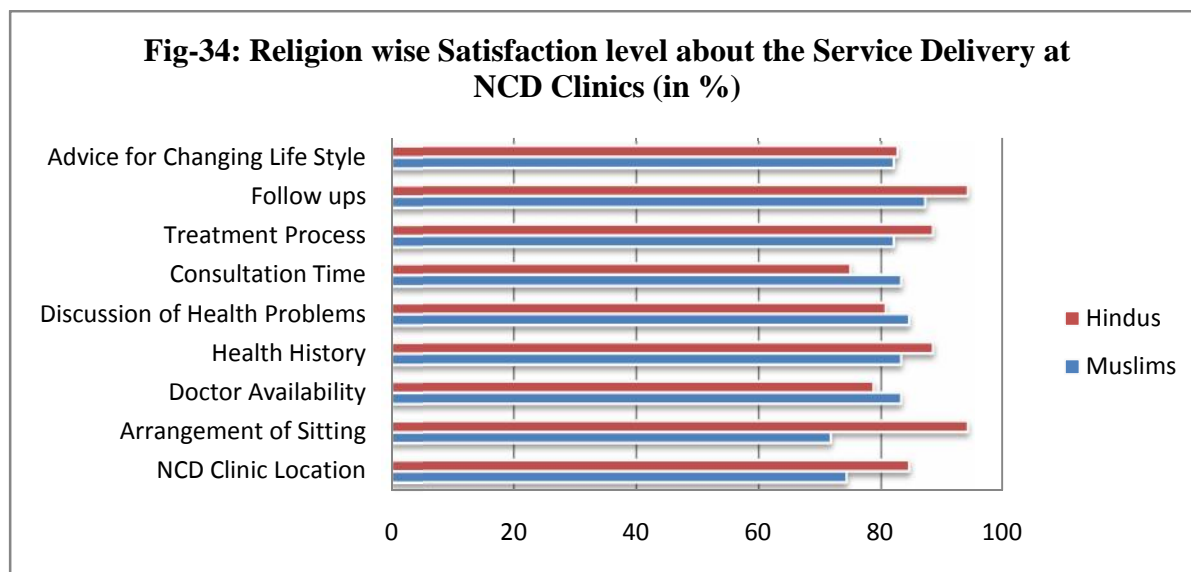
school and 94 higher secondary school respondents believed that doctors remains liberal to hear the health history from patients whereas 83 illiterate, 73 primary/middle, 94 high school and 89 higher secondary school respondents are of the opinion that doctors like discuss patient’s health problem at these NCD clinics.

Marital status-wise Satisfaction level among respondents

Table 17 that 40 unmarried, 81 currently married and 71 other respondents are of the opinion that NCD clinics are easy to locate whereas 60 unmarried, 90 married and 95 other respondents believed that doctors advices patients to come for follow ups.

Religion-wise Satisfaction level among respondents

Table 17 shows that 72 Muslim and 94 Hindu respondents are of the opinion that arrangement for sitting at NCD Clinics are exemplary whereas 83 Muslim and 75 Hindu respondents said that doctors gives maximum time to patients while consultation. Moreover, 87 Muslim and 94 Hindu respondents viewed that doctors advices patients to come for follow ups (Fig-34).



Occupation-wise Satisfaction level among respondents

Table 17 depicts that 79 home worker, 89 government employee, 72 agriculture workers, 100 handicraft workers and 73 business community claimed that regular NCD clinics are easy to locate whereas 87 home worker, 89 government employee, 72 agriculture workers, 100 handicraft workers and 81.8 business community believed that doctors are eager to listen health history from patients. Moreover, 89 home worker, 89 government employee, 100 agriculture workers and 100 business community are of the view that doctors advices patients for changing life style.

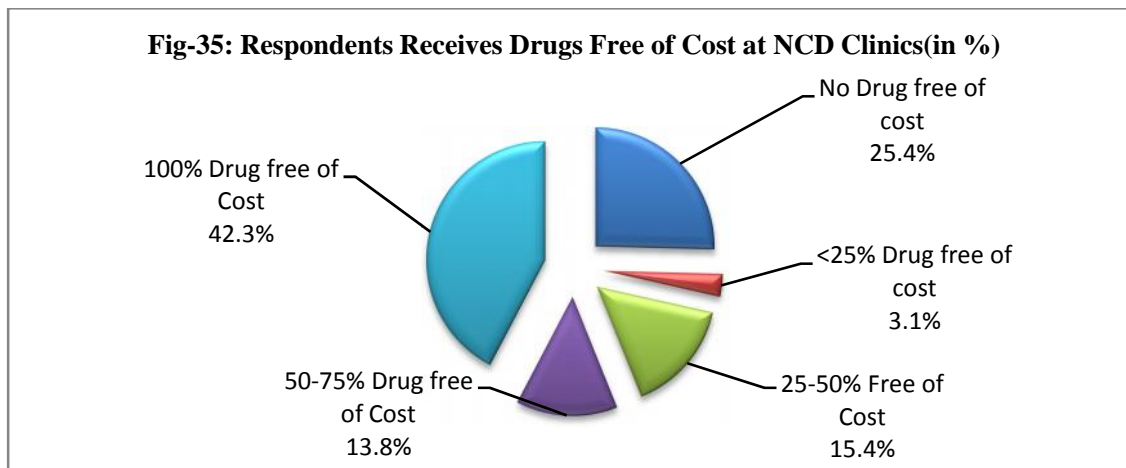
Economic status-wise Satisfaction level among respondents

Table 17 shows that 79 APL, 79 BPL and 62 AAY respondents said that NCD Clinics are easy to locate whereas 81 APL, 83 BPL and 62 AAY respondents believed that doctors remains available at these NCD Clinics. Moreover, 81 APL, 78 BPL and 87 AAY respondents claimed that doctors gives maximum time to patients while consultation whereas 79 APL, 83 BPL and 87 AAY respondents opined that doctors advices patients for changing life style.

From the above analysis, it has been found that majority of respondents believed that NCD Clinics are easy to locate and were happy for the sitting arrangement of NCD Clinics and some of the respondents said that doctors remained available whenever they visited NCD clinic whereas most of the respondents acknowledged that doctors were eager to listen the health history of patients. Moreover, majority of respondents are of the view that doctors gives enough time to discuss their health problem/issue with patient rather doctors advices the patients for the follow ups. This opinion was supported by the majority of Hindu male respondents who are currently married belong to the rural areas of Jammu region falls in the age group of 60 years & above. Moreover, majority of them were handicraft workers of high school standard belong to BPL category.

Distribution of Respondents Received Drugs Free of Cost at NCD Clinics

The present section of this chapter deals with the percentage of respondent's provided drugs free of cost at NCD Clinics by age, region, place of residence, education, marital status, religion, occupation and economic status presented in Table 18. Table 18 shows that 25 respondents did not receive drug/medicine free of cost at NCD Clinics and 3 respondents received < 25 drugs free of cost at NCD Clinics whereas 15 respondents received 25-50 drugs free of cost at the NCD Clinics and 14 respondents received 50-75 drugs free of cost at these NCD Clinics. Moreover, 42 respondents received 100 drugs free of cost at these NCD clinics (Fig-14). On the basis of above analysis, it has been concluded that majority of NCD patients (42) are receiving drugs free of cost at these NCD clinics (Fig-35).



The category wise %age of drugs provided free of cost at NCD Clinics among male and female respondents are discussed under the broad headings as:

Gender-wise receiving drugs free of Cost

Table 18 shows that 29 male and 24 female respondents does not receive any drug free of cost whereas 37 male and 44 female respondents received 100 drugs free of cost from the same. Moreover, 2 male and 3 female respondents received <25 drugs free of cost whereas 17 male and 12 female respondents received 50-75 drugs free of cost from the same.

Region-wise respondents receiving drugs free of Cost

Table 18 shows, in Kashmir division 29 respondents and in Jammu division 22 respondents does not receive any drug free of cost at NCD Clinics whereas 35 respondents in Kashmir and 48 respondents in Jammu received 100 drugs free of cost from the same.

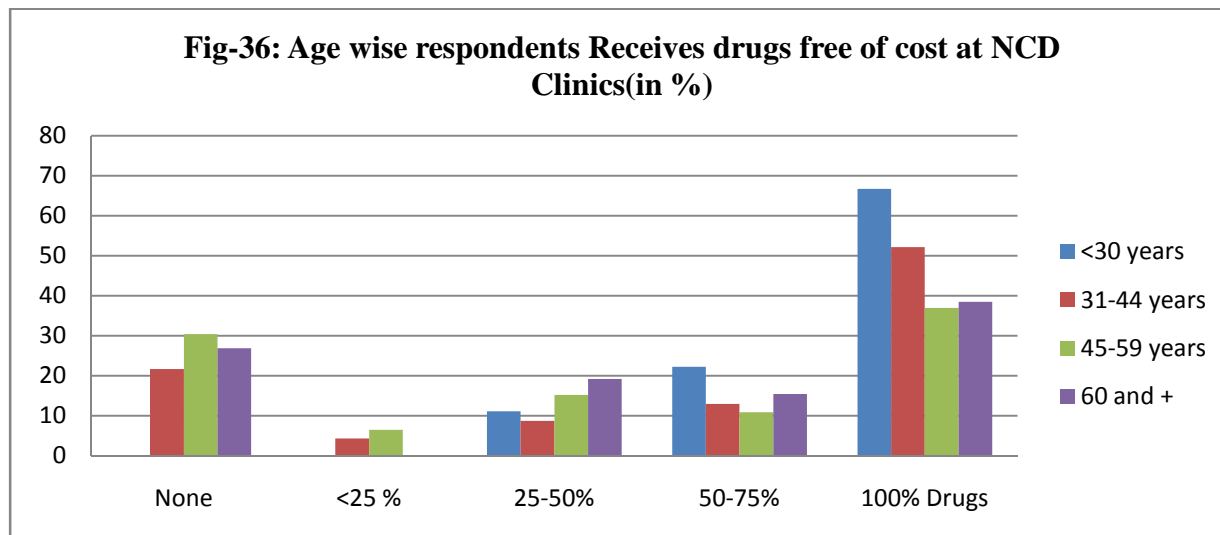
Residence-wise respondents receiving drugs free of Cost

Table 18 shows that 24 rural and 31 urban respondents does not receive any drug free of cost at NCD Clinics while as 42 rural and 45 urban received 100 drugs free of cost from the same. Moreover, 16 rural and 7 urban respondents received 50-75 drugs free of cost at NCD Clinics whereas 3 rural and 3 urban respondents received < 25 drugs free of cost from the same.

Age-wise respondents receiving drugs free of Cost

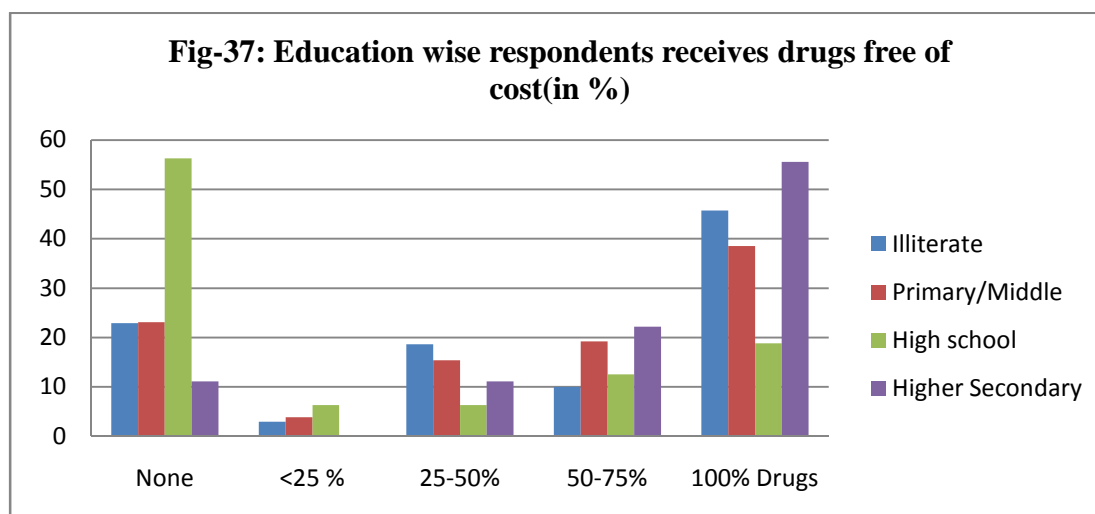
Table 18 shows that zero respondents in the age group of less than 30 years, 21 respondents in the age group of 31-44 years, 30 respondents in the age group of 45-59 years and 27 respondents in the age group of 60 & above respondents does not receive any drug free of cost at NCD Clinics whereas 67 respondents in the age group of less than 30 years, 52 respondents in the age group of 31-44 years, 37 respondents in the age group of 45-59 years and 38 respondents in the

age group of 60 years & above respondents received 100 drugs free of cost from the same (Fig-36).



Education-wise respondents receiving drugs free of Cost

Table 18 shows that 23 illiterate, 23 primary/middle, 56 high school and 11 higher secondary school respondents does not receive any drug free of cost at NCD Clinics whereas 45 illiterate, 38 primary/middle, 19 high school and 56 higher secondary school respondents received 100 drug free of cost from the same. Moreover, 3 illiterate, 4 primary/middle, 6.3 high school and zero higher secondary school respondents received < 25 drugs free of cost at NCD Clinics whereas 10 illiterate, 19 primary/middle, 12 high school and 22 higher secondary school respondents received 50-75 drugs free of cost from the same (Fig-37).



Marital status-wise respondents receiving drugs free of Cost

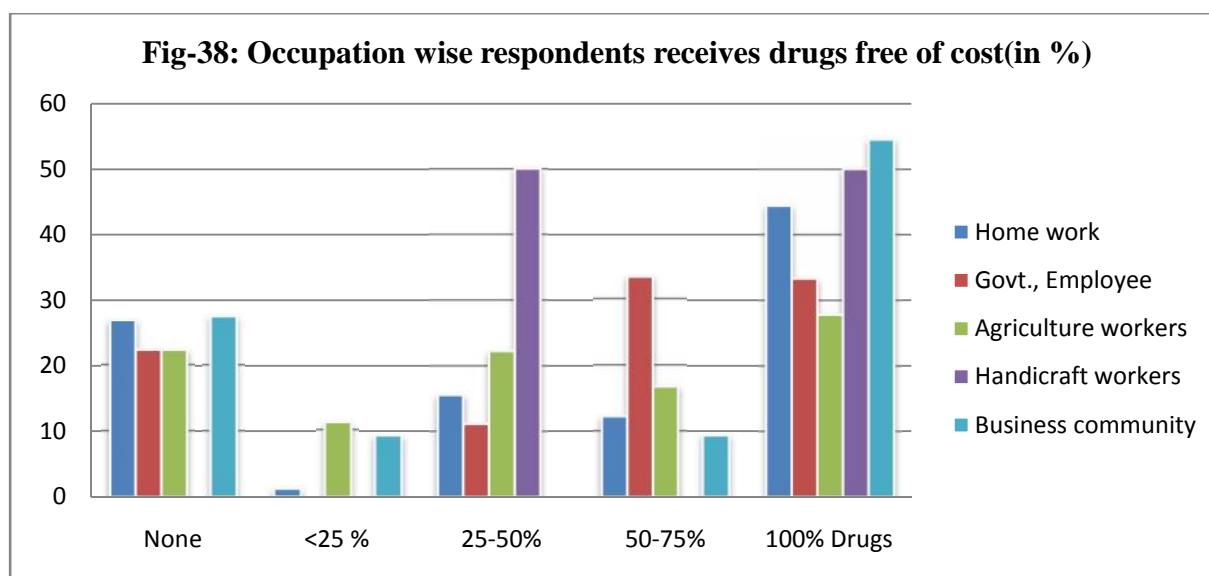
Table 18 that zero unmarried, 27 currently married and 24 other respondents does not receive any drug free of cost at the NCD Clinics whereas 80 unmarried, 43 married and 29 other respondents received 100 drugs free of cost from the same.

Religion-wise respondents receiving drugs free of Cost

Table 18 shows that 72 Muslim and 94 Hindu respondents are of the opinion that arrangement for sitting at NCD Clinics are exemplary whereas 83 Muslim and 75 Hindu respondents said that doctors gives maximum time to patients while consultation. Moreover, 87 Muslim and 94 Hindu respondents viewed that doctors advices patients to come for follow ups whereas.

Occupation-wise respondents receiving drugs free of Cost

Table 18 depicts that 26 home worker, 22 government employee, 22 agriculture workers, 0 handicraft workers and 27 business community does not receive any drug free of cost at NCD Clinics whereas 44 home worker, 33 government employee, 28 agriculture workers, 50 handicraft workers and 54 business community received 100 drugs at NCD Clinics from the same. Moreover, 16 home worker, 11 government employee, 22 agriculture workers and 50.0 business community received 50-75 drug free of cost at NCD Clinics (Fig-38).



Economic status-wise respondents receiving drugs free of Cost

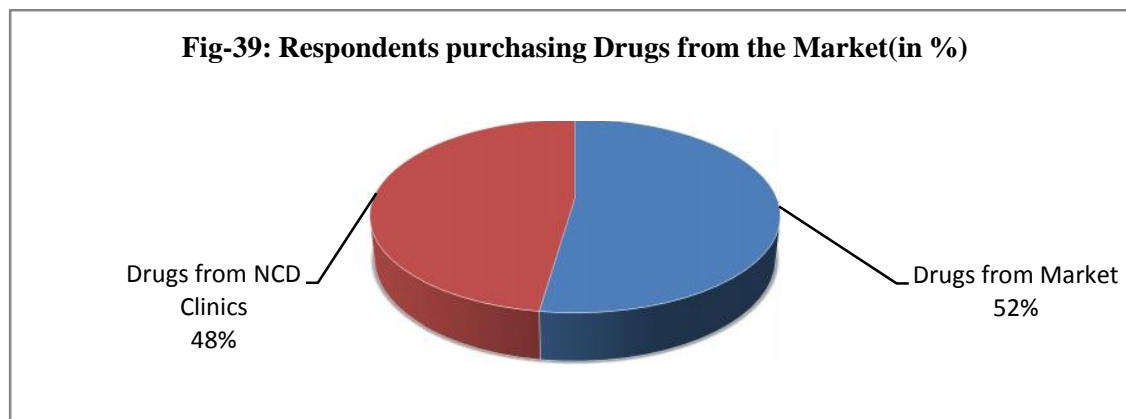
Table 18 shows that 21 APL, 26 BPL and 37 AAY respondents does not receive any drug at NCD clinics whereas 34 APL, 47 BPL and 25 AAY respondents received 100 drugs free of cost from the same. Moreover, 16 APL, 11 BPL and 37 AAY respondents received 50-75 drugs free

of cost at NCD Clinics whereas only 5 APL, 3 BPL and zero AAY respondents received <25 drugs free of cost from the same.

The analysis also depicts that majority of the respondents receive medicines free of cost at NCD Clinics and few of the respondents receive < 25 drugs free of cost from the same whereas some of the respondents receive 25-50 drugs free of cost at NCD Clinics. Moreover, some of the respondents receive 50-75 drugs free of cost at these NCD Clinics. This opinion was generally held by Hindu female respondents who are currently married of BPL category belong to the urban area of Jammu region falls in the age group of 60 years & above and most of them were business community belonged to BPL category.

Distribution of Respondents by Purchase of Drugs from Market

The present section of this chapter deals with the percentage of respondents by purchase of drugs from the market by age, region, place of residence, education, marital status, religion, occupation and economic status. Table 19 shows that out of 130 respondents, 68(52.3) respondents claimed that they had not to purchase drugs from market and 62(47.7) respondents said that they have to purchase drugs from the market (Fig-39).

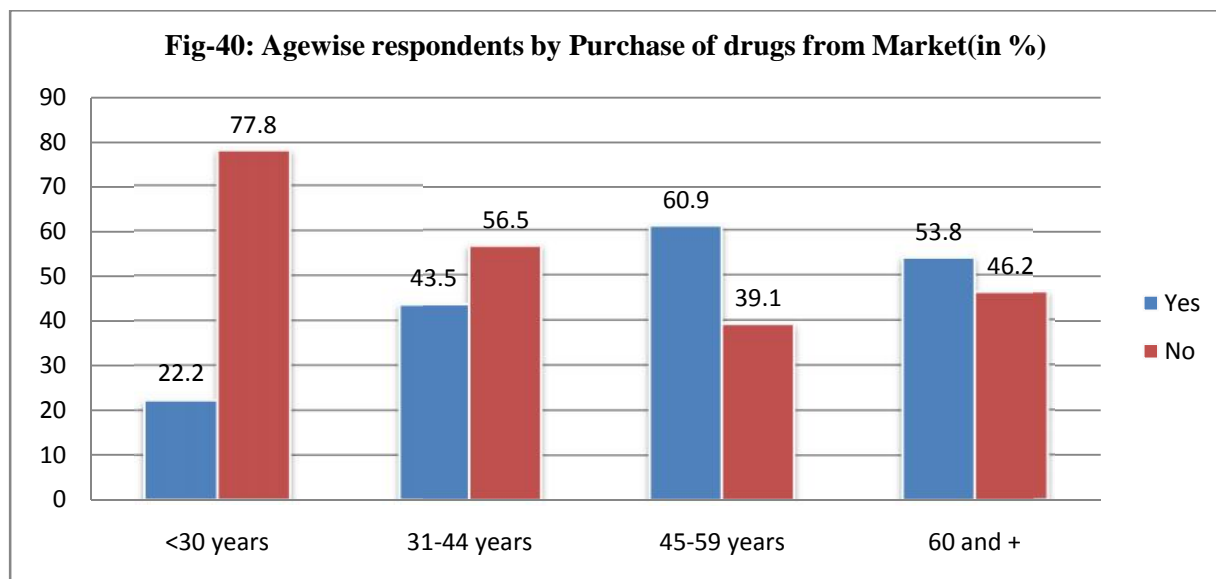


The category wise age of respondents purchasing drugs from market is discussed under the broad headings as:

Region/Areas and Gender/age wise respondents purchasing drugs from Market

Table 19 shows that 61 male and 48 female respondents claimed that they purchased medicine from market. Table 19 shows, in Kashmir division 57 respondents and in Jammu division 47.9 respondents argued that they purchased medicine from the market whereas Table 19 also shows that 51 rural and 55 urban respondents claimed that they purchased medicines from the market. Table 19 shows that 22 respondents in the age group of less than 30 years, 43.5 respondents in

the age group of 31-44 years, 61 respondents in the age group of 45-59 years and 54 respondents in the age group of 60 & above respondents viewed that they have to purchase medicine from Market(Fig-40).



Education/Martial Status and religion-wise respondents purchasing drugs from Market

Table 19 shows that 53 illiterate, 50 primary/middle, 62 high school and 44 higher secondary school respondents are of the opinion that they purchased their medicines from the market. Table 19 shows that 40 unmarried, 54 currently married and 47 other respondents said that they purchase medicines from the market. Table 15 also shows that 45 Muslim and 63.5 Hindu respondents purchase their medicines from the market.

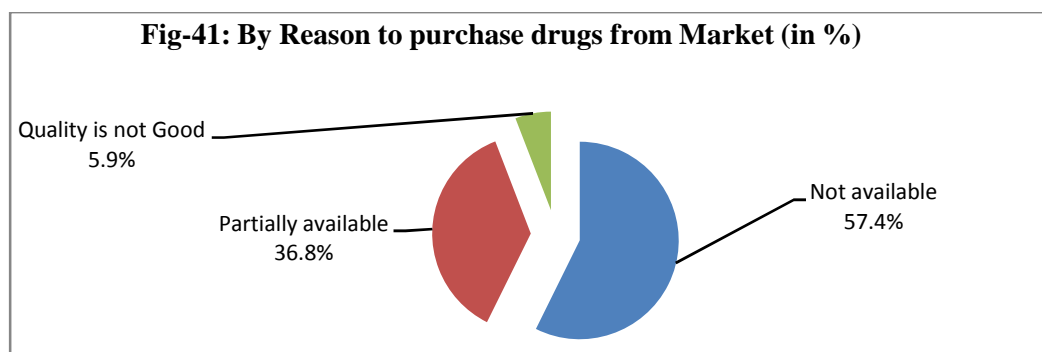
Occupation and economic status-wise respondents purchasing drugs from Market

Table 19 depicts that 51 home worker, 67 government employee, 61 agriculture workers, 50 handicraft workers and 36 business community said that they purchase their medicines from the market. Table 19 also shows that 60 APL, 49 BPL and 50 AAY respondents have to purchase their medicines from the market.

From the above analysis, it has been found that majority of respondents claimed that they had not to purchase drugs from market and few of the respondents said that they have to purchase drugs from the market. This opinion was claimed by the Muslim high school standard male respondents who are currently married belong to the urban areas of Kashmir region falls in the age group of 45-59 years.

Respondents by reason to purchase medicines from Market

The present section of this chapter deals with the age of respondents by reason to purchase medicine from market by age, region, place of residence, education, marital status, religion, occupation and economic status presented in Table 20. Table 20 shows that 57 respondents believed that medicines were not available at NCD clinics visited and 36.8 respondents were of the opinion that medicines were partially available for the same whereas 5.9 respondents said that quality of medicines were not good at NCD clinics visited(Fig-41).



The category wise age of respondents by reason to purchase medicines from market is discussed under the broad headings as:

Gender-wise respondents by reason to purchase Medicine from Market

Table 20 shows that 52 male and 60 female respondents claimed that medicines were not available at the visited NCD Clinics whereas 40 male and 35 female respondents said that medicines was partially available from the same. Further, only 8 male and 5 female respondents claimed that quality of medicines were very poor.

Region-wise respondents purchasing drugs from Market

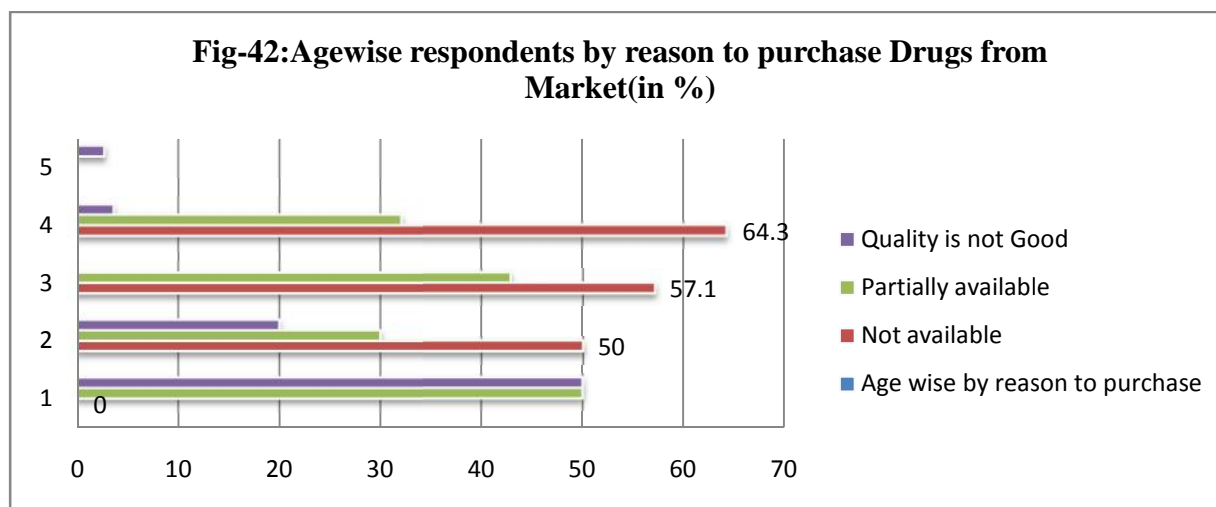
Table 20 shows, in Kashmir division 65 respondents viewed that medicines were not available at NCD Clinic and 29 respondents argued that medicines were partially available whereas only 6 respondents said that quality of medicines were not good.

Area-wise respondents purchasing drugs from Market

Table 20 shows that 56 rural and 62 urban respondents were of the opinion that medicines were not available whereas 38 rural 31 urban respondents claimed that medicines were partially available at the visited NCD clinics. Moreover, only 6 rural and 6 urban respondents opinioned that quality of medicine was substandard at the visited NCD Clinic.

Age-wise respondents purchasing drugs from Market

Table 20 shows that zero respondents in the age group of less than 30 years, 50 respondents in the age group of 31-44 years, 57 respondents in the age group of 45-59 years and 64 respondents in the age group of 60 & above respondents said that medicines were not available at NCD Clinics visited whereas 50 respondents in the age group of less than 30 years, 30 respondents in the age group of 31-44 years, 43 respondents in the age group of 45-59 years and 32 respondents in the age group of 60 & above are of the opinion that medicines were partially from the same. Moreover, 50 respondents in the age group of less than 30 years, 20 respondents in the age group of 31-44 years, zero respondents in the age group of 45-59 years and 4 respondents in the age group of 60 & above believed that quality of medicines were not good at NCD Clinics visited(Fig-42).



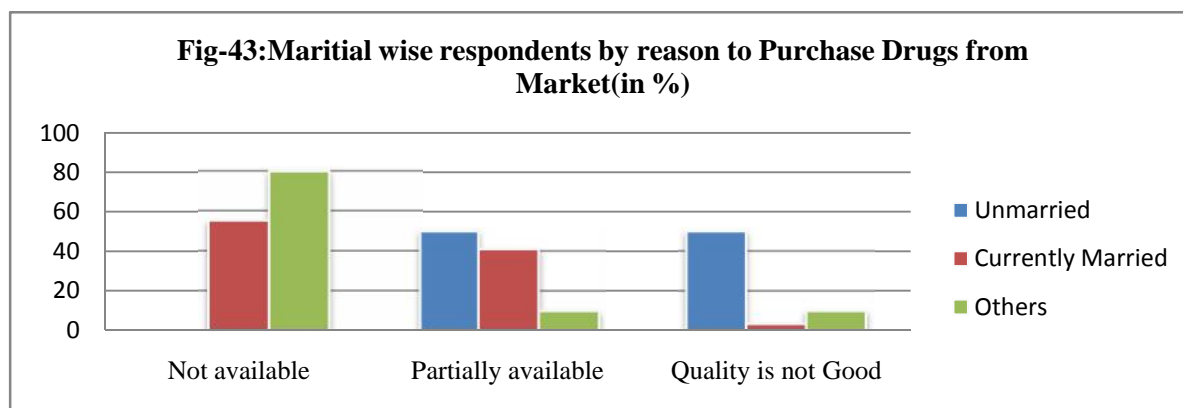
Education-wise respondents purchasing drugs from Market

Table 20 shows that 62 illiterate, 54 primary/middle, 70 high school and 25 higher secondary school respondents are of the opinion that medicines were not available at NCD Clinics visited whereas 35 illiterate, 46 primary/middle, 30 high school and 37 higher secondary school respondents believed that medicines were partially available from the same. Moreover, 3 illiterate and 37 higher secondary school respondents said that quality of medicines were substandard at NCD Clinics visited.

Marital status-wise respondents purchasing drugs from Market

Table 20 shows that zero unmarried, 55 currently married and 80 other respondents said that medicines were not available at NCD clinics visited whereas 50 unmarried, 41 currently married and 10 other respondents are of the opinion that medicines were partially available from the

same. Moreover, 50 unmarried, 4 currently married and 10 other respondents said that quality of medicines were not good (Fig-43).

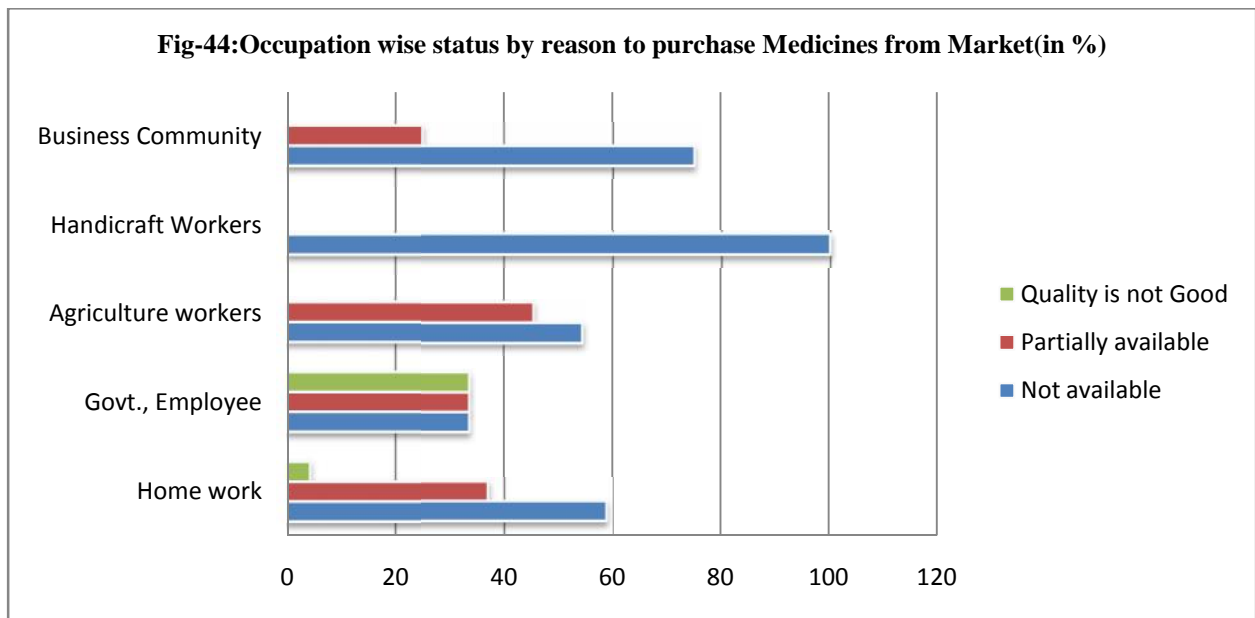


Religion-wise respondents purchasing drugs from Market

Table 20 shows that 63 Muslim and 51 Hindu respondents said that medicines are not available at NCD clinics visited whereas 31 Muslim and 42 Hindu respondents claimed that medicines were partially available from the same. Moreover, 5 Muslim and 6 Hindu respondents said that medicines were not of good quality at NCD clinics visited.

Occupation-wise respondents purchasing drugs from Market

Table 20 depicts that 59 home worker, 33 government employee, 54 agriculture workers, 100 handicraft workers and 75 business community said that medicines were not available at NCD Clinics visited whereas 37 home worker, 33 government employee, 45 agriculture workers, 0 handicraft workers and 25 business community said that medicines were partially available from the same. Moreover, 4 home worker, 33 government employee, zero agriculture workers, zero handicraft workers and business community said that quality of medicines were not good at NCD Clinics visited (Fig-44).



Economic status-wise respondents purchasing drugs from Market

Table 20 shows that 48 APL, 66 BPL and 25 AAY respondents said that medicines were not available at NCD clinics visited whereas 35 APL, 34 BPL and 75 AAY respondents said that medicines were partially available from the same. Moreover, only 17 APL respondents said that quality of medicines at NCD clinics were not good.

The above analysis shows that majority of female respondents believed that medicines were not available at NCD clinics visited and few of the male respondents were of the opinion that medicines were partially available for the same. This opinion was held by business community people who belong to urban areas of Kashmir region with high school standard lies in the age group of 60 years & above.

Respondents by adequacy of waiting time for various Service

Table 21 shows that majority of respondents claimed that registration time, consultation time, and medication receiving time at the NCD clinics were adequate, and the patients did not have to wait for a long time outside the NCD clinics to receive the different health services. The satisfaction level among the males about time adequacy is better than that among the females. Table 21 shows that 89.2 respondents are of the opinion that time for registration is adequate and 90.8 respondents said that time for consultation is also adequate whereas 90.0 respondents opined that time for receiving medicines is also good.

On the regional basis, the time adequacy level in Kashmir region is better than Jammu region. It is pertinent to mention that respondents from rural areas had to wait longer at NCD clinics than

those from urban areas. Table 21 shows that young population below 30 years are fully satisfied with the time adequacy of different health services available at NCD clinics. Also, on the basis of educational standard of respondents, it was found that those who had a higher educational level and had government jobs got health services very quickly at NCD clinics than those who had a low level of education and were working in the informal sector.

Respondents by utilization of Lab Investigation facilities

Table 22 shows that one fourth (25) of respondents were advised and did the urine examination while as 75 respondents were neither advised nor did the urine examination. In the case of blood examination, 75 respondents were advised for blood examination, and they have also done it; incase of USG, a small age of respondents, with only 4 , were advised and have performed the USG, and for X-ray, 8 were advised, and they have done it. Table 22 shows that almost 18 respondents had been advised for an ECG examination. It is important to mention that, 7 of the patients had not done the blood examination despite being advised (Fig-45).

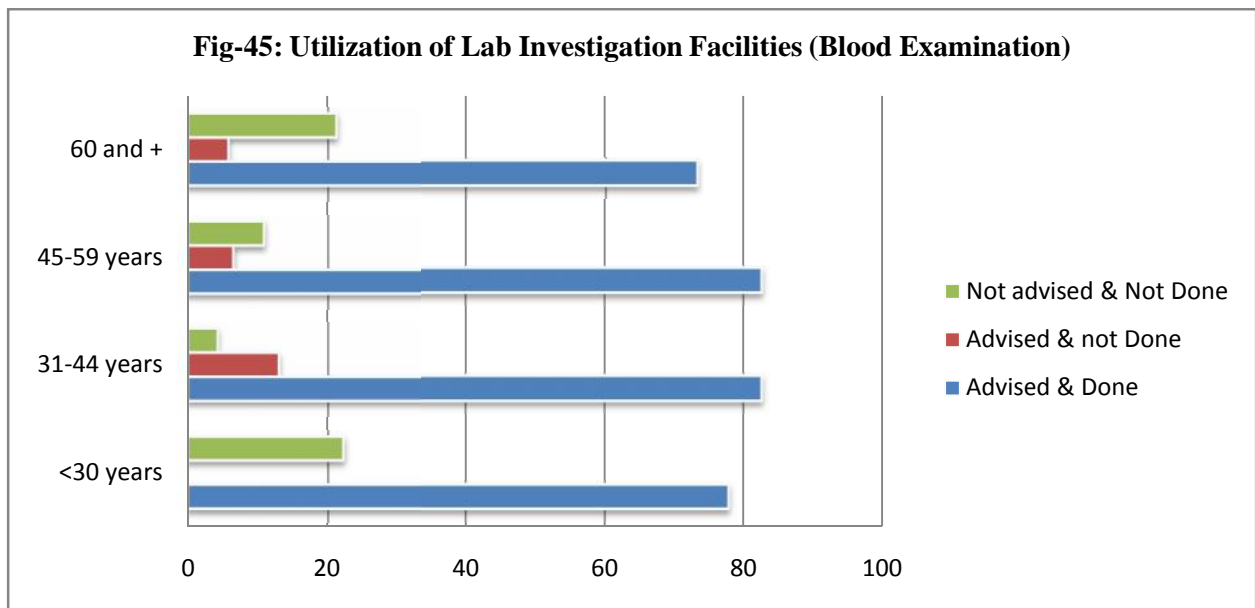
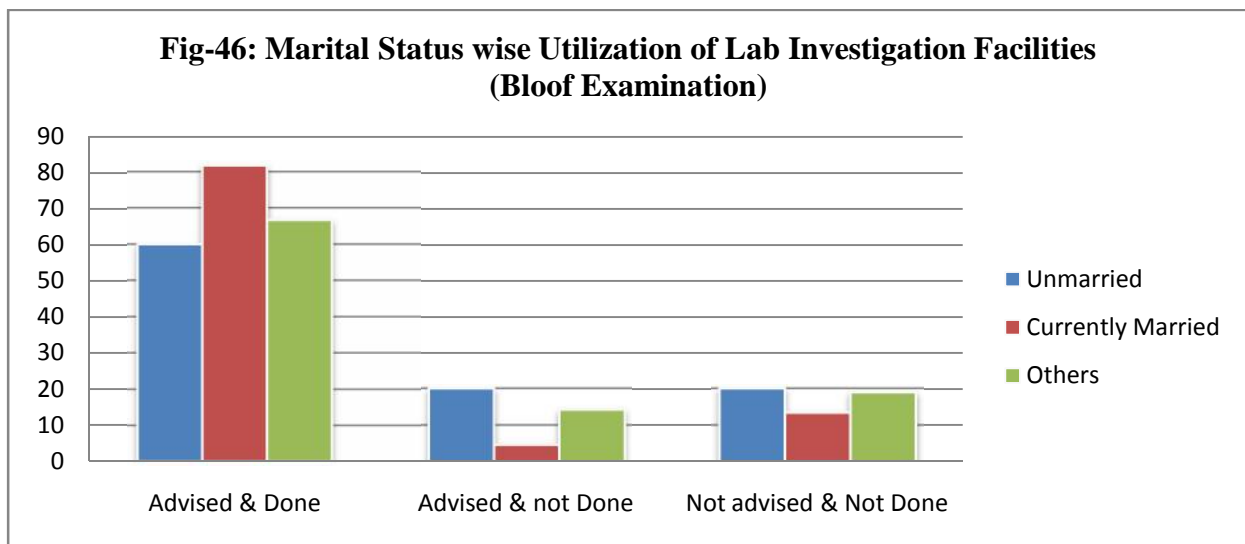


Table 22 shows that 30 females respondents had been advised for urine examination, 83 for blood examination, which is higher among females than males, while in X-ray and ECG examinations, male proportions were slightly higher than females.

Table 22 shows that 10 of male patients had not conducted the blood examination despite being advised from the doctor. In Kashmir division, urine examination, USG, and X-ray were higher than Jammu division. Among the age groups, it was seen that urine examination, USG, and ECG were higher among younger age groups below the age of 30 years than the older ones.

Table 22 shows that patients, who had the high schooling, had conducted more lab investigations than others and shows that 44 had conducted the urine examination, 75 conducted blood examination, 13 conducted X-ray and 31 conducted ECG. In case of illiterates, the lab investigation rate is lower than educated respondents. The educated people are more cautious about their health than uneducated patients.

Among the unmarried respondents, 40 , and 60 conducted urine and blood examinations, which is higher than among married people. Also, 20 of unmarried had undergone USC, X-ray, and ECG. Despite being advised by the doctor, a higher proportion of married respondents did not conduct the investigation. In case of government employees, the lab investigation rate was higher than other categories of the work force (Fig-46).



The different types of lab investigations were conducted at different health facilities like DH, SDH, and CHC etc. It was found that the majority of the investigations were conducted at the CHC, which included blood examinations, USGs, urine examinations, etc.

The above analysis shows that majority of respondents claimed that medicines were not available at the visited NCD Clinic and few of the male respondents said that medicines were partially available from the same whereas few male respondents claimed that quality of medicines was very poor. Moreover, majority of respondents were happy about the services like lab investigation, services of doctors, medicines etc., provided and available at NCD clinics. This opinion was claimed by were high school standard Muslim female respondents who are currently married of AAY category belonging to the urban area of Kashmir region falls in the age group of 60 years & above.

CHAPTER – VII

SUMMARY AND FINDINGS

Objectives

The objective of this study was to study whether NCD clinics have been equipped with requisite infrastructure, human resources and their skill development, equipment, drugs and laboratory services required for screening, treatment, referral and reporting of NCDs as per the NPCDCS guidelines. The study also examined the performance of NCD clinics in terms of screening, diagnosis, treatment, referral and follow up of NCDs. The perception of patients about the quality of services at the selected NCD clinics is also highlighted.

Methodology

The study was conducted in 4 districts of Jammu and Kashmir. These districts are Anantnag, Baramulla, Kathua and Ramban. From each district, we selected 3 NCD clinics (NCD clinic located at DH and 2 clinics located at CHCs). From each selected facility, information was collected about the physical infrastructure, manpower, trainings, diagnostic facilities etc. Information about the performance of NCD clinic has been collected for the last 5 years. The NCDs included in the study were hypertension, diabetes, breast and cervical cancer. It was planned to interview 10-15 respondents (male and female) from each NCD and a total of 130 clients attending the NCD clinics were interviewed for the study.

Findings

The study reveals that none of the selected NCD clinics have staff as per the NCD guidelines; nonetheless, NCD clinics located in Baramulla and Anantnag districts have comparatively better staff than Ramban and Kathua. However, almost all these clinics are managing the staff from internal arrangement for running NCD OPD clinics and do not allow the patients to suffer due to shortage of staff. But it was also found that NCD staff is also involved in running other units of the hospital like emergency, general OPD, night rosters, which severely affects the working of NCD clinics.

Each NCD clinic should have at least one functional Physiotherapy Unit, but it is functional at DH Ramban only. Although, a Physiotherapist is posted at NCD clinic Anantnag but due to lack of space and non availability of equipment, physiotherapy services are not available at DH Anantnag. NCD clinics should have a separate lab and therefore a post of Lab Technician has been sanctioned for each NCD clinic. While the posts of Lab Technicians have been filled up in

some NCD clinics but none of these clinics have a separate laboratory for NCD patients. In fact all the NCD clinics are using the general lab of DH/CHC for NCD investigations. Facility for blood sugar testing is freely available at all the facilities but NCD patients have to pay for other investigations.

Each of the DH, NCD clinic, should have at least 04 bedded Cardiac Care Units. It was found that some of the facilities have procured the Cardiac Care Beds but these units are not functional in all the facilities due to lack of space, staff and other infrastructure. It was also found that majority of the NCD clinics had good stock of essential NCD drugs but it was reported by the doctors that NCD clinics have shortage of multi salt drugs. NCD clinics located at Baramulla and Kathua reported deficit of more than 39% of multi salt NCD drugs and some CHCs have only 10% essential drugs available.

Reporting of information about NCD patients like Number of patients visited, their gender, age, diagnosis, treatment given, referral is not maintained properly at the NCD clinics.

The study revealed that a significant proportion of patients were not aware about the symptoms, risk factors, preventive measures of hypertension, diabetes, breast cancer and cervical cancer. Most of these respondents were illiterate and had a lower socio economic background. Of the respondents who were aware of symptoms and preventive measures of reducing the chances of hypertension and diabetes, majority opined that 'healthy diet', 'regular physical exercise' and 'reduction in salt/sugar intake' is the best preventive measure of hypertension and diabetes.

It was also found that majority of respondents believed that NCD Clinics are easy to locate and were happy with the sitting arrangement, availability of staff and treatment received from the NCD clinics. Most of the respondents acknowledged that doctors were eager to listen to the health history of patients and gave enough time to discuss with them their health problem/issue and also informed them about follow ups. So far as the provision of medicines is concerned, it was found that substantial proportion of patients had not received all the prescribed medicines from the facility and doctors also prescribe non generic medicines which are generally not available at the NCD clinic.

Recommendations

The study strongly recommends that all vacant positions sanctioned under NCD programme should be filled up at the earliest and diagnostic facilities should be upgraded at the NCD clinics.

Most of the NCD Clinics have acute shortage of multi salted drugs. Patients expressed that only mono salted medicines are available at NCD clinics, but these mono salted drugs have side effects. Therefore, patients hesitate to consume these drugs. It is recommended that combination of drugs instead of single content drug should be made available at the NCD clinics.

The newly appointed staff at NCD clinics has not yet received training about the various aspects of NCD programme and due to lack of training most of the newly appointed paramedical staff are also not very well acquainted with the recording and reporting of NCD information. Therefore, training should be given to the concerned staff about screening, detection of the disease, treatment, old and new cases, referral and the overall footfall at clinics.

Although H&WCs are expected to play an important role in building awareness, screening, referral, continuum of care and follow-up but it seems that their potential has not yet been used to achieve these objectives. It is suggested that there is a need to evaluate the performance of H&WCs and identify the challenges and bottlenecks, due to which they are unable to realize their full potential.

Dedicated NCD screening clinics in Jammu & Kashmir are non-existent. Awareness and screening camps by the NCD clinics in remote areas will help in early detection of these diseases and hence decreasing the mortality rate of patients. Mobile mammography clinics can also play an important role in this direction.

Although tele-consultation services are increasingly used in various government health facilities but in case of NCDs, its use was found to be minimal. Our informal discussion with the staff and patients reveal that there is a need for creation of awareness about the tele-consultation so that people will avail services as and when required. This will help to build the confidence among service users about higher level of treatment available at their doorsteps.

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Appendix – I

	Anantnag			Baramulla			Kathua		Ramban		
	Anantnag	Kokernag	Seer	Baramulla	Pattan	Sopore	Kathua	Heera Nagar	Basoli	Ramban	Banihal
General Physician	1	1	0	1	1	1	0	0	0	0	0
GNM	0	1	1	2	1	1	2	1	1	2	1
Lab Technician	0	0	1	1	1	1	1	0	0	1	0
Physiotherapist	1	0	0	0	0	0	1	0	0	1	0
Counsellor	0	1	1	1	0	0	1	1	1	1	1
Data Entry Operator	1	1	1	0	1	0	0	0	0	0	0

	Type of Facility	No of Essential Drug List	No of Essential Drug List out of 34 Drugs
	Anantnag	DH Anantnag	17
SDH Kokernag		4	11.76
CHC Seer		10	29.41
Baramulla	DH Baramulla	10	29.41
	CHC Pattan	9	26.47
	SDH Sopore	4	11.76
Kathua	DH Kathua	10	29.41
	SDH Heera Nagar	12	35.29
	CHC Basoli	20	58.82
Ramban	DH Ramban	8	23.52
	SDH Banihal	8	23.52
	CHC Batote	0	0

Table-3: Status of Infrastructure at NCD Clinics in Jammu and Kashmir.

	Anantnag			Baramulla			Kathua				Ramban		
	Anantnag	Kokernag	Seer	Baramull	Pattan	Sopore	Kathua	Heera Nagar	Basoli	Ramban	Banihal	Batote	
NCD OPD	1	1	1	1	1	1	1	1	1	1	1	0	
Physiotherapy	1	0	0	0	0	0	1	0	0	1	0	0	
CCU	0	0	0	0	0	0	0	0	0	0	0	0	
Day-care	0	0	0	0	0	0	0	0	0	0	0	0	
Geriatric	0	0	0	0	0	0	0	0	0	0	0	0	
Patient waiting area	1	1	1	1	1	1	1	1	1	1	1	0	
Sting benches in the waiting area	0	0	0	0	0	0	0	0	0	0	0	0	
Doctor's chair/table	1	1	1	1	1	1	1	1	1	1	1	1	
Examination Bed	1	1	1	1	1	1	1	1	1	1	1	1	
Tool for patient	1	1	1	1	1	1	1	1	1	1	1	1	
Screen	0	0	0	0	0	0	0	0	0	0	0	0	
Space for nursing staff	0	0	0	0	0	0	0	0	0	0	0	0	
Space for counselor	0	0	0	0	0	0	0	0	0	0	0	0	
Space for physiotherapy unit	0	0	0	0	0	0	0	0	0	0	0	0	
Space for day care unit	0	0	0	0	0	0	0	0	0	0	0	0	
Space for CCU	0	0	0	0	0	0	0	0	0	0	0	0	
Other Space	0	0	0	0	0	0	0	0	0	0	0	0	

Table-4: Services provided by NCD clinics in Jammu and Kashmir (2022-23).

Services	Anantnag			Baramulla			Kathua			Ramban	
	Anantnag	Kokernag	Seer	Baramulla	Pattan	Sopore	Kathua	Heera Nagar	Basoli	Ramban	Banihal
Total OPD	6789	11067	0	36407	0	0	8281	3661	1278	14600	
Diabetes	244	746	0	2002	816	0	124	570	616	730	0
Hypertension	936	581	0	1981	1121	0	656	616	662	1776	0
CVD	136	18	0	292	201	0	151	0	0	1	0
Stroke	127	5	0	0	0	0	1	0	0	20	0
CKD	101	0	0	10	0	0	10	0	0	0	0
Oral cancer	0	0	0	0	0	0	5	0	0	1	0
Breast	0	0	0	0	0	0	34	0	0	0	0
Other	24	0	0	0	0	0	224	0	0	2	0
New Patients diagnosed with											

Diabetes	0	0	0	0	0	0	0	0	0	0	0
Hypertension	0	0	0	0	0	0	0	0	0	0	0
CVD	0	18	0	0	0	0	226	0	0	0	0
Stroke	0	5	0	0	0	0	42	0	0	0	0
CKD	0	0	0	0	0	0	0	0	0	0	0
Oral cancer	0	0	0	0	0	0	0	0	0	0	0
Breast	0	0	0	0	0	0	0	0	0	0	0
Other	1	1	0	0	0	0	0	0	0	0	0
Diabetes	219	746	0	377	0	0	122	0	0	0	0
Hypertension	1095	581	0	401	0	0	637	0	0	0	0
CVD	341	0	0	0	0	0	151	0	0	0	0
Stroke	125	0	0	0	0	0	1	0	0	0	0
CKD	184	0	0	0	0	0	8	0	0	0	0
Oral cancer	0	0	0	0	0	0	5	0	0	0	0
Breast	0	0	0	0	0	0	34	0	0	0	0
Other	6	0	0	0	0	0	14	0	0	0	0
New Patients diagnosed with											
Diabetes	0	0	0	0	0	0	7	0	0	0	0
Hypertension	0	0	0	0	0	0	0	0	0	0	0
CVD	0	0	0	0	0	0	16	0	0	0	0
Stroke	0	0	0	0	0	0	0	0	0	0	0
CKD	1	0	0	0	0	0	2	0	0	0	0
Oral cancer	0	0	0	0	0	0	0	0	0	0	0
Breast	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	2	0	0	0	0
No of Persons Counseled for Health promotion	2963	870	0	16826	0	0	12359	0	0	0	0

Name of NCD Clinics	Diabetes	Hypertension	CVD	Stroke	CKD	Other Diseases	Oral Cancer	Breast Cancer
Anantnag	244	936	136	127	101	24	0	0
Kokernag	746	581	18	5	0	0	0	0
Baramulla	2002	1981	292	0	10	0	0	0
Pattan	816	1121	201	3	0	0	0	0
Kathua	124	565	151	1	10	224	5	34
Heera Nagar	77	53	0	0	0	0	0	0
Basoli	616	662	0	0	0	0	0	0
Ramban	730	1776	1	20	0	0	1	0

Characteristics	Category	Total		Gender			
		No	%	Male		Female	
				No	%	No	%
Region	Kashmir	59	45.4%	16	27.1%	43	72.9%
	Jammu	71	54.6%	25	35.2%	46	64.8%
Place of Residence	Rural	101	77.7%	30	29.7%	71	70.3%
	Urban	29	22.3%	11	37.9%	18	62.1%
Age	<30	9	6.9%	2	22.2%	7	77.8%
	31-44	23	17.7%	6	26.1%	17	73.9%
	45-59	46	35.4%	17	37.0%	29	63.0%
	60 and +	52	40.0%	16	30.8%	36	69.2%
Education	None	70	53.8%	15	21.4%	55	78.6%
	Primary/Middle	26	20.0%	11	42.3%	15	57.7%
	High School	16	12.3%	7	43.8%	9	56.3%
	Higher secondary	18	13.8%	8	44.4%	10	55.6%
Marital Status	Unmarried	5	3.8%	1	20.0%	4	80.0%
	Currently married	104	80.0%	39	37.5%	65	62.5%
	Other	21	16.2%	1	4.8%	20	95.2%
Religion	Muslim	78	60.0%	22	28.2%	56	71.8%
	Hindu	52	40.0%	19	36.5%	33	63.5%
Working status	Home Work	90	69.2%	11	12.2%	79	87.8%
	Government Employee	9	6.9%	8	88.9%	1	11.1%
	Agriculture	18	13.8%	13	72.2%	5	27.8%
	Handicrafts	2	1.5%	1	50.0%	1	50.0%
	Business	11	8.5%	8	72.7%	3	27.3%
Economic Status	APL	38	29.2%	17	44.7%	21	55.3%
	BP	84	64.6%	20	23.8%	64	76.2%
	Antyodaya	8	6.2%	4	50.0%	4	50.0%
Total		130	100.0%	41	31.5%	89	68.5%

Characteristics	Category	Total	HWC/SC	PHC	CHC	Private clinic/doct or	ANM/AS HA
		%	%	%	%	%	%
Gender	Male	100.0%	17.1%	12.2%	39.0%	12.2%	19.5%
	Female	100.0%	22.5%	13.5%	38.2%	14.6%	11.2%
Region	Kashmir	100.0%	10.2%	15.3%	33.9%	15.3%	25.4%
	Jammu	100.0%	29.6%	11.3%	42.3%	12.7%	4.2%
Place of Residence	Rural	100.0%	21.8%	12.9%	38.6%	13.9%	12.9%
	Urban	100.0%	17.2%	13.8%	37.9%	13.8%	17.2%
Age	<30	100.0%	33.3%		22.2%	11.1%	33.3%
	31-44	100.0%	30.4%	13.0%	39.1%	8.7%	8.7%
	45-59	100.0%	17.4%	13.0%	32.6%	17.4%	19.6%
	60 and +	100.0%	17.3%	15.4%	46.2%	13.5%	7.7%
Education	None	100.0%	20.0%	18.6%	40.0%	14.3%	7.1%
	Primary/Middle	100.0%	30.8%		38.5%	11.5%	19.2%
	High School	100.0%	12.5%	6.3%	56.3%	6.3%	18.8%
	Higher secondary	100.0%	16.7%	16.7%	16.7%	22.2%	27.8%
Marital Status	Unmarried	100.0%	40.0%		20.0%		40.0%
	Currently married	100.0%	23.1%	13.5%	37.5%	10.6%	15.4%
	Other	100.0%	4.8%	14.3%	47.6%	33.3%	
Religion	Muslim	100.0%	26.9%	11.5%	29.5%	12.8%	19.2%
	Hindu	100.0%	11.5%	15.4%	51.9%	15.4%	5.8%
Working status	Home Work	100.0%	21.1%	15.6%	41.1%	12.2%	10.0%
	Government Employee	100.0%	11.1%	11.1%	22.2%	33.3%	22.2%
	Agriculture	100.0%	27.8%	11.1%	33.3%	11.1%	16.7%
	Handicrafts	100.0%			50.0%		50.0%
	Business	100.0%	18.2%		36.4%	18.2%	27.3%
Economic Status	APL	100.0%	10.5%	15.8%	42.1%	18.4%	13.2%
	BP	100.0%	23.8%	13.1%	36.9%	11.9%	14.3%
	Antyodaya	100.0%	37.5%		37.5%	12.5%	12.5%
Total		100%	20.8%	13.1%	38.5%	13.8%	13.8%

Table-7: Distribution of Respondents by Reasons for Visiting NCD Clinics (in %)

Characteristics	Category	Total	Main reason for visiting			
		Total	Both	Hypertension	Diabetes	Other
		%	%	%	%	%
Gender	Male	100.0%	26.8%	46.3%	26.8%	0
	Female	100.0%	28.1%	37.1%	31.5%	3.4%
Region	Kashmir	100.0%	32.2%	28.8%	33.9%	5.1%
	Jammu	100.0%	23.9%	49.3%	26.8%	
Place of Residence	Rural	100.0%	28.7%	39.6%	28.7%	3.0%
	Urban	100.0%	24.1%	41.4%	34.5%	
Age	<30	100.0%		33.3%	55.6%	11.1%
	31-44	100.0%	17.4%	43.5%	30.4%	8.7%
	45-59	100.0%	30.4%	39.1%	30.4%	
	60 and +	100.0%	34.6%	40.4%	25.0%	
Education	None	100.0%	32.9%	42.9%	24.3%	
	Primary/Middle	100.0%	26.9%	26.9%	38.5%	7.7%
	High School	100.0%	25.0%	31.3%	43.8%	
	Higher secondary	100.0%	11.1%	55.6%	27.8%	5.6%
Marital Status	Unmarried	100.0%			60.0%	40.0%
	Currently married	100.0%	30.8%	40.4%	27.9%	1.0%
	Other	100.0%	19.0%	47.6%	33.3%	
Religion	Muslim	100.0%	29.5%	33.3%	33.3%	3.8%
	Hindu	100.0%	25.0%	50.0%	25.0%	
Working status	Home Work	100.0%	28.9%	37.8%	32.2%	1.1%
	Government Employee	100.0%	33.3%	55.6%	11.1%	
	Agriculture	100.0%	16.7%	44.4%	38.9%	
	Handicrafts	100.0%		50.0%	50.0%	
	Business	100.0%	36.4%	36.4%	9.1%	18.2%
Economic Status	APL	100.0%	36.8%	39.5%	18.4%	5.3%
	BP	100.0%	25.0%	42.9%	31.0%	1.2%
	Antyodaya	100.0%	12.5%	12.5%	75.0%	
Total		100.0%	27.7%	40.0%	30.0%	2.3%

Table-8: Distribution of Respondents by Visit to any other facility before visiting this Clinic(in %)							
Category		Visited other clinic before this clinic.	Place of visit				
		Yes	PHC	CHC	DH	Tertiary Care Hospital	Private clinic/doctor
		%	%	%	%	%	%
Gender	Male	41.5%	5.9%	17.6%	17.6%	11.8%	47.1%
	Female	44.9%	7.5%	7.5%	25.0%	17.5%	42.5%
Region	Kashmir	40.7%	12.5%	20.8%	4.2%	29.2%	33.3%
	Jammu	46.5%	3.0%	3.0%	36.4%	6.1%	51.5%
Place of Residence	Rural	45.5%	6.5%	13.0%	21.7%	13.0%	45.7%
	Urban	37.9%	9.1%		27.3%	27.3%	36.4%
Age	<30	33.3%			66.7%		33.3%
	31-44	34.8%	12.5%	25.0%	25.0%		37.5%
	45-59	43.5%	10.0%	5.0%	20.0%	20.0%	45.0%
	60 and +	50.0%	3.8%	11.5%	19.2%	19.2%	46.2%
Education	None	44.3%	3.2%	9.7%	25.8%	22.6%	38.7%
	Primary/Middle	38.5%		10.0%	30.0%	10.0%	50.0%
	High School	37.5%		16.7%	16.7%	16.7%	50.0%
	Higher secondary	55.6%	30.0%	10.0%	10.0%		50.0%
Marital Status	Unmarried	60.0%			33.3%	33.3%	33.3%
	Currently married	39.4%	7.3%	9.8%	29.3%	7.3%	46.3%
	Other	61.9%	7.7%	15.4%		38.5%	38.5%
Religion	Muslim	51.3%	7.5%	15.0%	30.0%	22.5%	25.0%
	Hindu	32.7%	5.9%		5.9%		88.2%
Working status	Home Work	44.4%	7.5%	10.0%	25.0%	20.0%	37.5%
	Government Employee	77.8%		14.3%			85.7%
	Agriculture	27.8%		20.0%	20.0%		60.0%
	Business	45.5%	20.0%		40.0%	20.0%	20.0%
Economic Status	APL	50.0%		10.5%	10.5%	5.3%	73.7%
	BP	40.5%	11.8%	8.8%	26.5%	20.6%	32.4%
	Antyodaya	50.0%		25.0%	50.0%	25.0%	
Total		43.8	7.0	10.5	22.8	15.8	43.9

Gender	Change from Private NCD clinic	
	Free treatment	Free medicines
Male	29.4%	
Female	37.5%	2.5%
Total	35.1%	1.8%

Category		Referred from			
		Not Referred	DH	Tertiary Care Hospital	Private clinic/doctor
		%	%	%	%
Gender	Male	68.3%	7.3%	2.4%	2.4%
	Female	66.3%	9.0%	1.1%	4.5%
Region	Kashmir	79.7%	1.7%	1.7%	1.7%
	Jammu	56.3%	14.1%	1.4%	5.6%
Place of Residence	Rural	67.3%	8.9%	2.0%	4.0%
	Urban	65.5%	6.9%		3.4%
Age	<30	77.8%	11.1%		
	31-44	65.2%	4.3%		
	45-59	73.9%	10.9%	2.2%	6.5%
	60 and +	59.6%	7.7%	1.9%	3.8%
Education	None	65.7%	11.4%	1.4%	4.3%
	Primary/Middle	76.9%	7.7%	3.8%	3.8%
	High School	68.8%			6.3%
	Higher secondary	55.6%	5.6%		
Marital Status	Unmarried	80.0%			
	Currently married	68.3%	10.6%	1.9%	4.8%
	Other	57.1%			
Religion	Muslim	62.8%	14.1%	2.6%	1.3%
	Hindu	73.1%			7.7%
Working status	Home Work	65.6%	10.0%	1.1%	3.3%
	Government Employee	33.3%			11.1%
	Agriculture	88.9%			5.6%
	Handicrafts	100.0%			
	Business	63.6%	18.2%	9.1%	
Economic Status	APL	65.8%	2.6%	2.6%	2.6%
	BP	65.5%	10.7%	1.2%	4.8%
	Antyodaya	87.5%	12.5%		
Total		66.9%	8.5%	1.5%	3.8%

Table-11: Distribution of Respondents Knowing Symptoms of Hypertension							
Category		Severe Head ache.	Nose Bleeding.	Fatigue of Confusion.	Vision Problem	Chest Pain	Irregular Heart beat.
		%	%	%	%	%	%
Gender	Male	70.7%	58.5%	39.0%	24.4%	7.3%	4.9%
	Female	58.4%	43.8%	31.5%	14.6%	7.9%	3.4%
Region	Kashmir	61.0%	44.1%	28.8%	10.2%	3.4%	5.1%
	Jammu	63.4%	52.1%	38.0%	23.9%	11.3%	2.8%
Place of Residence	Rural	65.3%	49.5%	35.6%	19.8%	5.9%	3.0%
	Urban	51.7%	44.8%	27.6%	10.3%	13.8%	6.9%
Age	<30	33.3%	22.2%	22.2%			
	31-44	47.8%	43.5%	26.1%	17.4%	8.7%	4.3%
	45-59	60.9%	43.5%	39.1%	21.7%	8.7%	4.3%
	60 and +	75.0%	59.6%	34.6%	17.3%	7.7%	3.8%
Education	None	68.6%	58.6%	35.7%	14.3%	7.1%	2.9%
	Primary/Middle	61.5%	34.6%	34.6%	23.1%	11.5%	7.7%
	High School	43.8%	37.5%	31.3%	31.3%		
	Higher secondary	55.6%	38.9%	27.8%	11.1%	11.1%	5.6%
Marital Status	Unmarried	40.0%	40.0%	20.0%			
	Currently married	62.5%	50.0%	37.5%	19.2%	8.7%	3.8%
	Other	66.7%	42.9%	19.0%	14.3%	4.8%	4.8%
Religion	Muslim	56.4%	38.5%	35.9%	20.5%	6.4%	3.8%
	Hindu	71.2%	63.5%	30.8%	13.5%	9.6%	3.8%
Working status	Home Work	61.1%	48.9%	36.7%	15.6%	6.7%	2.2%
	Government Employee	88.9%	77.8%	55.6%	33.3%	11.1%	
	Agriculture	61.1%	38.9%	16.7%	16.7%	11.1%	11.1%
	Handicrafts	50.0%	50.0%				
	Business	54.5%	36.4%	27.3%	27.3%	9.1%	9.1%
Economic Status	APL	73.7%	65.8%	47.4%	13.2%	5.3%	2.6%
	BP	57.1%	42.9%	29.8%	20.2%	8.3%	4.8%
	Antyodaya	62.5%	25.0%	12.5%	12.5%	12.5%	
Total		62.3%	48.5%	33.8%	17.7%	7.7%	3.8%

Category		Unhealthy food	Physical inactivity	Obesity	Alcohol/Smoking	Diabetes
		%	%	%	%	%
Gender	Male	63.4%	65.9%	29.3%	24.4%	2.4%
	Female	50.6%	52.8%	16.9%	18.0%	12.4%
Region	Kashmir	44.1%	45.8%	18.6%	15.3%	10.2%
	Jammu	63.4%	66.2%	22.5%	23.9%	8.5%
Place of Residence	Rural	57.4%	59.4%	22.8%	19.8%	7.9%
	Urban	44.8%	48.3%	13.8%	20.7%	13.8%
Age	<30	44.4%	33.3%	11.1%	11.1%	11.1%
	31-44	47.8%	39.1%	13.0%	13.0%	4.3%
	45-59	47.8%	56.5%	32.6%	19.6%	13.0%
	60 and +	65.4%	69.2%	15.4%	25.0%	7.7%
Education	None	60.0%	62.9%	17.1%	22.9%	11.4%
	Primary/Middle	53.8%	61.5%	34.6%	15.4%	7.7%
	High School	31.3%	31.3%	12.5%	18.8%	6.3%
	Higher secondary	55.6%	50.0%	22.2%	16.7%	5.6%
Marital Status	Unmarried	20.0%	40.0%	20.0%	0.0%	0.0%
	Currently married	55.8%	57.7%	23.1%	21.2%	9.6%
	Other	57.1%	57.1%	9.5%	19.0%	9.5%
Religion	Muslim	47.4%	50.0%	26.9%	19.2%	9.0%
	Hindu	65.4%	67.3%	11.5%	21.2%	9.6%
Working status	Home Work	53.3%	56.7%	18.9%	16.7%	12.2%
	Government Employee	77.8%	66.7%	22.2%	33.3%	0.0%
	Agriculture	55.6%	61.1%	11.1%	22.2%	0.0%
	Handicrafts	50.0%	50.0%		50.0%	0.0%
	Business	45.5%	45.5%	54.5%	27.3%	9.1%
Economic Status	APL	68.4%	60.5%	13.2%	31.6%	18.4%
	BP	50.0%	54.8%	20.2%	16.7%	6.0%
	Antyodaya	37.5%	62.5%	62.5%		
Total		54.6%	56.9%	20.8%	20.0%	9.2%

Table-13: Distribution of Respondents Knowing Preventive Measures of Hypertension (in %).						
Category		Healthy Diet	Maintain healthy weight	Physical Exercise	Avoid Smoking/alcohol	Reduce Salt Intake
		%	%	%	%	%
Gender	Male	56.1%	43.9%	14.6%	4.9%	17.1%
	Female	44.9%	27.0%	10.1%	6.7%	15.7%
Region	Kashmir	35.6%	16.9%	5.1%	3.4%	10.2%
	Jammu	59.2%	45.1%	16.9%	8.5%	21.1%
Place of Residence	Rural	53.5%	33.7%	10.9%	6.9%	18.8%
	Urban	31.0%	27.6%	13.8%	3.4%	6.9%
Age	<30	33.3%	33.3%	11.1%		
	31-44	43.5%	34.8%	17.4%	4.3%	13.0%
	45-59	47.8%	34.8%	10.9%	6.5%	21.7%
	60 and +	53.8%	28.8%	9.6%	7.7%	15.4%
Education	None	50.0%	31.4%	11.4%	7.1%	18.6%
	Primary/Middle	57.7%	42.3%	15.4%	7.7%	11.5%
	High School	37.5%	18.8%	6.3%	6.3%	12.5%
	Higher secondary	38.9%	33.3%	11.1%		16.7%
Marital Status	Unmarried	40.0%	20.0%			
	Currently married	47.1%	34.6%	11.5%	6.7%	14.4%
	Other	57.1%	23.8%	14.3%	4.8%	28.6%
Religion	Muslim	43.6%	24.4%	12.8%	6.4%	9.0%
	Hindu	55.8%	44.2%	9.6%	5.8%	26.9%
Working status	Home Work	44.4%	27.8%	10.0%	6.7%	17.8%
	Government Employee	77.8%	66.7%	33.3%		
	Agriculture	50.0%	44.4%	11.1%	5.6%	11.1%
	Handicrafts					
	Business	63.6%	27.3%	9.1%	9.1%	27.3%
Economic Status	APL	52.6%	36.8%	10.5%	2.6%	18.4%
	BP	46.4%	31.0%	13.1%	7.1%	16.7%
	Antyodaya	50.0%	25.0%		12.5%	
Total		48.5%	32.3%	11.5%	6.2%	16.2%

Category		Urination lot at Night	very Thirsty	lose Weight	Very Hungry	Blurry Vision	Dry Skin
		%	%	%	%	%	%
Gender	Male	41.5%	39.0%	29.3%	17.1%		
	Female	41.6%	47.2%	31.5%	20.2%	13.5%	6.7%
Region	Kashmir	42.4%	44.1%	32.2%	23.7%	10.2%	1.7%
	Jammu	40.8%	45.1%	29.6%	15.5%	8.5%	7.0%
Place of Residence	Rural	41.6%	45.5%	29.7%	18.8%	8.9%	5.0%
	Urban	41.4%	41.4%	34.5%	20.7%	10.3%	3.4%
Age	<30	44.4%	33.3%	44.4%	11.1%	11.1%	
	31-44	52.2%	47.8%	39.1%	17.4%	13.0%	4.3%
	45-59	41.3%	47.8%	32.6%	28.3%	10.9%	4.3%
	60 and +	36.5%	42.3%	23.1%	13.5%	5.8%	5.8%
Education	None	38.6%	41.4%	24.3%	15.7%	12.9%	8.6%
	Primary/Middle	38.5%	50.0%	34.6%	23.1%	3.8%	
	High School	62.5%	56.3%	43.8%	43.8%		
	Higher secondary	38.9%	38.9%	38.9%	5.6%	11.1%	
Marital Status	Unmarried	40.0%	20.0%	40.0%		20.0%	
	Currently married	47.1%	49.0%	34.6%	20.2%	7.7%	3.8%
	Other	14.3%	28.6%	9.5%	19.0%	14.3%	9.5%
Religion	Muslim	42.3%	42.3%	32.1%	23.1%	10.3%	6.4%
	Hindu	40.4%	48.1%	28.8%	13.5%	7.7%	1.9%
Working status	Home Work	44.4%	45.6%	32.2%	21.1%	10.0%	6.7%
	Government Employee	44.4%	44.4%	33.3%	11.1%		
	Agriculture	33.3%	50.0%	33.3%	22.2%	11.1%	
	Handicrafts					50.0%	
	Business	36.4%	36.4%	18.2%	9.1%		
Economic Status	APL	44.7%	44.7%	23.7%	15.8%	10.5%	2.6%
	BP	38.1%	44.0%	29.8%	15.5%	9.5%	6.0%
	Antyodaya	62.5%	50.0%	75.0%	75.0%		
Total		41.5%	44.6%	30.8%	19.2%	9.2%	4.6%

Category		Pre-Diabetes	Obesity/Overweight	Physical in activity	Age 40+	Family History
Gender	Male	22.0%	41.5%	19.5%	14.6%	4.9%
	Female	30.3%	38.2%	32.6%	16.9%	3.4%
Region	Kashmir	20.3%	37.3%	27.1%	16.9%	1.7%
	Jammu	33.8%	40.8%	29.6%	15.5%	5.6%
Place of Residence	Rural	29.7%	39.6%	28.7%	16.8%	4.0%
	Urban	20.7%	37.9%	27.6%	13.8%	3.4%
Age	<30	22.2%	22.2%	11.1%	11.1%	
	31-44	43.5%	34.8%	26.1%	17.4%	4.3%
	45-59	23.9%	43.5%	34.8%	15.2%	4.3%
	60 and +	25.0%	40.4%	26.9%	17.3%	3.8%
Education	None	22.9%	37.1%	28.6%	12.9%	2.9%
	Primary/Middle	26.9%	42.3%	38.5%	23.1%	3.8%
	High School	50.0%	50.0%	31.3%	18.8%	12.5%
	Higher secondary	27.8%	33.3%	11.1%	16.7%	
Marital Status	Unmarried	20.0%	40.0%	20.0%	20.0%	
	Currently married	30.8%	41.3%	30.8%	18.3%	3.8%
	Other	14.3%	28.6%	19.0%	4.8%	4.8%
Religion	Muslim	24.4%	37.2%	30.8%	14.1%	1.3%
	Hindu	32.7%	42.3%	25.0%	19.2%	7.7%
Working status	Home Work	31.1%	41.1%	31.1%	20.0%	4.4%
	Government Employee	33.3%	33.3%			
	Agriculture	16.7%	38.9%	33.3%	11.1%	
	Handicrafts			50.0%		
	Business	18.2%	36.4%	18.2%	9.1%	9.1%
Economic Status	APL	34.2%	44.7%	21.1%	15.8%	5.3%
	BP	25.0%	36.9%	29.8%	14.3%	3.6%
	Antyodaya	25.0%	37.5%	50.0%	37.5%	
Type of Clinic	DH	31.0%	42.3%	29.6%	14.1%	7.0%
	CHC	23.7%	35.6%	27.1%	18.6%	
	Total	27.7%	39.2%	28.5%	16.2%	3.8%

Table-16: Distribution of Respondents Knowing Preventive Measures of Diabetes(in %).						
Category		Do exercise/Walk	Eat Healthy Food	Eat fruits & Vegetables	Avoid sugary items	Maintain healthy weight
		%	%	%	%	%
Gender	Male	26.8%	17.1%	17.1%	24.4%	12.2%
	Female	38.2%	24.7%	24.7%	16.9%	16.9%
Region	Kashmir	30.5%	25.4%	20.3%	20.3%	15.3%
	Jammu	38.0%	19.7%	23.9%	18.3%	15.5%
Place of Residence	Rural	35.6%	22.8%	19.8%	19.8%	17.8%
	Urban	31.0%	20.7%	31.0%	17.2%	6.9%
Age	<30	33.3%	11.1%	11.1%	22.2%	11.1%
	31-44	47.8%	26.1%	26.1%	13.0%	21.7%
	45-59	32.6%	26.1%	21.7%	21.7%	15.2%
	60 and +	30.8%	19.2%	23.1%	19.2%	13.5%
Education	None	28.6%	18.6%	21.4%	14.3%	11.4%
	Primary/Middle	38.5%	26.9%	26.9%	30.8%	19.2%
	High School	50.0%	31.3%	25.0%	25.0%	25.0%
	Higher secondary	38.9%	22.2%	16.7%	16.7%	16.7%
Marital Status	Unmarried	60.0%	20.0%	20.0%	20.0%	
	Currently married	35.6%	21.2%	22.1%	21.2%	18.3%
	Other	23.8%	28.6%	23.8%	9.5%	4.8%
Religion	Muslim	32.1%	25.6%	24.4%	17.9%	11.5%
	Hindu	38.5%	17.3%	19.2%	21.2%	21.2%
Working status	Home Work	40.0%	23.3%	25.6%	17.8%	17.8%
	Government Employee	44.4%	22.2%	22.2%	11.1%	
	Agriculture	16.7%	22.2%	11.1%	22.2%	16.7%
	Handicrafts	50.0%			50.0%	
	Business	9.1%	18.2%	18.2%	27.3%	9.1%
Economic Status	APL	34.2%	21.1%	21.1%	15.8%	5.3%
	BP	34.5%	22.6%	25.0%	21.4%	19.0%
	Antyodaya	37.5%	25.0%		12.5%	25.0%
Type of Clinic	DH	36.6%	23.9%	26.8%	16.9%	14.1%
	CHC	32.2%	20.3%	16.9%	22.0%	16.9%
Total		34.6%	22.3%	22.3%	19.2%	15.4%

Characteristics		NCD Clinic easy to find	Arrangement for sitting	Doctor available	Health history	Discussion of problems.	Give consultation time	Information about treatment process.	To come for a follow-up	Advice changing life style
Gender	Male	80.5%	87.8%	80.5%	80.5%	87.8%	80.5%	80.5%	87.8%	90.2%
	Female	77.5%	77.5%	82.0%	87.6%	80.9%	79.8%	86.5%	91.0%	78.7%
Region	Kashmir	78.0%	69.5%	86.4%	83.1%	83.1%	84.7%	83.1%	86.4%	84.7%
	Jammu	78.9%	90.1%	77.5%	87.3%	83.1%	76.1%	85.9%	93.0%	80.3%
Place of Residence	Rural	79.2%	80.2%	80.2%	87.1%	82.2%	80.2%	87.1%	89.1%	83.2%
	Urban	75.9%	82.8%	86.2%	79.3%	86.2%	79.3%	75.9%	93.1%	79.3%
Age	<30	66.7%	33.3%	88.9%	88.9%	88.9%	88.9%	66.7%	77.8%	88.9%
	31-44	69.6%	91.3%	69.6%	87.0%	82.6%	91.3%	82.6%	100.0%	78.3%
	45-59	89.1%	78.3%	80.4%	80.4%	82.6%	71.7%	89.1%	89.1%	87.0%
	60 and +	75.0%	86.5%	86.5%	88.5%	82.7%	80.8%	84.6%	88.5%	78.8%
Education	None	75.7%	82.9%	84.3%	87.1%	82.9%	81.4%	85.7%	90.0%	78.6%
	Primary/Middle	80.8%	80.8%	73.1%	76.9%	73.1%	65.4%	88.5%	88.5%	88.5%
	High School	87.5%	75.0%	81.3%	81.3%	93.8%	87.5%	87.5%	100.0%	75.0%
	Higher secondary	77.8%	77.8%	83.3%	94.4%	88.9%	88.9%	72.2%	83.3%	94.4%
Marital Status	Unmarried	40.0%	20.0%	80.0%	100.0%	80.0%	100.0%	60.0%	60.0%	80.0%
	Currently married	81.7%	83.7%	81.7%	84.6%	85.6%	80.8%	82.7%	90.4%	82.7%
	Other	71.4%	81.0%	81.0%	85.7%	71.4%	71.4%	100.0%	95.2%	81.0%
Religion	Muslim	74.4%	71.8%	83.3%	83.3%	84.6%	83.3%	82.1%	87.2%	82.1%
	Hindu	84.6%	94.2%	78.8%	88.5%	80.8%	75.0%	88.5%	94.2%	82.7%
Working status	Home Work	78.9%	83.3%	80.0%	87.8%	83.3%	78.9%	85.6%	90.0%	77.8%
	Govt., Employee	88.9%	100.0%	88.9%	88.9%	100.0%	100.0%	55.6%	100.0%	88.9%
	Agriculture	72.2%	61.1%	77.8%	72.2%	83.3%	77.8%	88.9%	88.9%	88.9%
	Handicrafts	100%	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Business	72.7%	81.8%	90.9%	81.8%	63.6%	72.7%	90.9%	81.8%	100.0%
Economic Status	APL	78.9%	76.3%	81.6%	81.6%	81.6%	81.6%	84.2%	89.5%	78.9%
	BP	79.8%	82.1%	83.3%	88.1%	83.3%	78.6%	85.7%	90.5%	83.3%
	AAY	62.5%	87.5%	62.5%	75.0%	87.5%	87.5%	75.0%	87.5%	87.5%
Type of Clinic	DH	43.1%	40.8%	43.1%	46.9%	46.9%	43.8%	46.2%	49.2%	43.8%
	CHC	35.4%	40.0%	38.5%	38.5%	36.2%	36.2%	38.5%	40.8%	38.5%
Total		78.5%	80.8%	81.5%	85.4%	83.1%	80.0%	84.6%	90.0%	82.3%

Category		% of Medicines provided				
		None	<5%	25%-50%	50%-75%	100%
Gender	Male	29.3%	2.4%	14.6%	17.1%	36.6%
	Female	23.6%	3.4%	15.7%	12.4%	44.9%
Region	Kashmir	28.8%	6.8%	16.9%	11.9%	35.6%
	Jammu	22.5%		14.1%	15.5%	47.9%
Place of Residence	Rural	23.8%	3.0%	15.8%	15.8%	41.6%
	Urban	31.0%	3.4%	13.8%	6.9%	44.8%
Age	<30			11.1%	22.2%	66.7%
	31-44	21.7%	4.3%	8.7%	13.0%	52.2%
	45-59	30.4%	6.5%	15.2%	10.9%	37.0%
	60 and +	26.9%		19.2%	15.4%	38.5%
Education	None	22.9%	2.9%	18.6%	10.0%	45.7%
	Primary/Middle	23.1%	3.8%	15.4%	19.2%	38.5%
	High School	56.3%	6.3%	6.3%	12.5%	18.8%
	Higher secondary	11.1%		11.1%	22.2%	55.6%
Marital Status	Unmarried				20.0%	80.0%
	Currently married	26.9%	3.8%	14.4%	11.5%	43.3%
	Other	23.8%		23.8%	23.8%	28.6%
Religion	Muslim	24.4%	5.1%	14.1%	9.0%	47.4%
	Hindu	26.9%		17.3%	21.2%	34.6%
Working status	Home Work	26.7%	1.1%	15.6%	12.2%	44.4%
	Government Employee	22.2%		11.1%	33.3%	33.3%
	Agriculture	22.2%	11.1%	22.2%	16.7%	27.8%
	Handicrafts			50.0%		50.0%
	Business	27.3%	9.1%		9.1%	54.5%
Economic Status	APL	21.1%	5.3%	23.7%	15.8%	34.2%
	BP	26.2%	2.4%	13.1%	10.7%	47.6%
	Antyodaya	37.5%			37.5%	25.0%
Type of Clinic	DH	21.1%	4.2%	16.9%	14.1%	43.7%
	CHC	30.5%	1.7%	13.6%	13.6%	40.7%
Total		25.4%	3.1%	15.4%	13.8%	42.3%

Category		Total		Purchased from market			
		1	2	Yes		No	
		Count	%	Count	%	Count	%
Gender	Male	41	100.0%	25	61.0%	16	39.0%
	Female	89	100.0%	43	48.3%	46	51.7%
Region	Kashmir	59	100.0%	34	57.6%	25	42.4%
	Jammu	71	100.0%	34	47.9%	37	52.1%
Place of Residence	Rural	101	100.0%	52	51.5%	49	48.5%
	Urban	29	100.0%	16	55.2%	13	44.8%
Age	<30	9	100.0%	2	22.2%	7	77.8%
	31-44	23	100.0%	10	43.5%	13	56.5%
	45-59	46	100.0%	28	60.9%	18	39.1%
	60 and +	52	100.0%	28	53.8%	24	46.2%
Education	None	70	100.0%	37	52.9%	33	47.1%
	Primary/Middle	26	100.0%	13	50.0%	13	50.0%
	High School	16	100.0%	10	62.5%	6	37.5%
	Higher secondary	18	100.0%	8	44.4%	10	55.6%
Marital Status	Unmarried	5	100.0%	2	40.0%	3	60.0%
	Currently married	104	100.0%	56	53.8%	48	46.2%
	Other	21	100.0%	10	47.6%	11	52.4%
Religion	Muslim	78	100.0%	35	44.9%	43	55.1%
	Hindu	52	100.0%	33	63.5%	19	36.5%
Working status	Home Work	90	100.0%	46	51.1%	44	48.9%
	Government Employee	9	100.0%	6	66.7%	3	33.3%
	Agriculture	18	100.0%	11	61.1%	7	38.9%
	Handicrafts	2	100.0%	1	50.0%	1	50.0%
	Business	11	100.0%	4	36.4%	7	63.6%
Economic Status	APL	38	100.0%	23	60.5%	15	39.5%
	BP	84	100.0%	41	48.8%	43	51.2%
	Antyodaya	8	100.0%	4	50.0%	4	50.0%
Type of Clinic	DH	71	100.0%	34	47.9%	37	52.1%
	CHC	59	100.0%	34	57.6%	25	42.4%
Total		130	100%	68	52.3%	62	47.7%

Table-20: Distribution of Respondents by Reasons for purchase of medicines from Market (in %).

Category		Total	Why purchased		
			Not available	Provided partially/not full dose	Poor quality of drugs
			%	%	%
Gender	Male	100.0%	52.0%	40.0%	8.0%
	Female	100.0%	60.5%	34.9%	4.7%
Region	Kashmir	100.0%	64.7%	29.4%	5.9%
Place of Residence	Rural	100.0%	55.8%	38.5%	5.8%
	Urban	100.0%	62.5%	31.3%	6.3%
Age	<30	100.0%		50.0%	50.0%
	31-44	100.0%	50.0%	30.0%	20.0%
	45-59	100.0%	57.1%	42.9%	
	60 and +	100.0%	64.3%	32.1%	3.6%
Education	None	100.0%	62.2%	35.1%	2.7%
	Primary/Middle	100.0%	53.8%	46.2%	
	High School	100.0%	70.0%	30.0%	
	Higher secondary	100.0%	25.0%	37.5%	37.5%
Marital Status	Unmarried	100.0%		50.0%	50.0%
	Currently married	100.0%	55.4%	41.1%	3.6%
	Other	100.0%	80.0%	10.0%	10.0%
Religion	Muslim	100.0%	62.9%	31.4%	5.7%
	Hindu	100.0%	51.5%	42.4%	6.1%
Working status	Home Work	100.0%	58.7%	37.0%	4.3%
	Government Employee	100.0%	33.3%	33.3%	33.3%
	Agriculture	100.0%	54.5%	45.5%	
	Handicrafts	100.0%	100.0%		
	Business	100.0%	75.0%	25.0%	
Economic Status	APL	100.0%	47.8%	34.8%	17.4%
	BP	100.0%	65.9%	34.1%	
	Antyodaya	100.0%	25.0%	75.0%	
Type of Clinic	DH	100.0%	50.0%	41.2%	8.8%
	CHC	100.0%	64.7%	32.4%	2.9%
Total		100.0%	57.4%	36.8%	5.9%

Category		Total	waiting time for registration	waiting time for consultation	waiting time for receiving medicines
Gender	Male	100.0%	90.2%	92.7%	92.7%
	Female	100.0%	88.8%	89.9%	88.8%
Region	Kashmir	100.0%	94.9%	96.6%	91.5%
	Jammu	100.0%	84.5%	85.9%	88.7%
Place of Residence	Rural	100.0%	87.1%	89.1%	89.1%
	Urban	100.0%	96.6%	96.6%	93.1%
Age	<30	100.0%	100.0%	100.0%	100.0%
	31-44	100.0%	91.3%	95.7%	95.7%
	45-59	100.0%	84.8%	91.3%	89.1%
	60 and +	100.0%	90.4%	86.5%	86.5%
Education	None	100.0%	90.0%	91.4%	90.0%
	Primary/Middle	100.0%	84.6%	84.6%	88.5%
	High School	100.0%	87.5%	87.5%	87.5%
	Higher secondary	100.0%	94.4%	100.0%	94.4%
Marital Status	Unmarried	100.0%	100.0%	100.0%	100.0%
	Currently married	100.0%	87.5%	91.3%	90.4%
	Other	100.0%	95.2%	85.7%	85.7%
Religion	Muslim	100.0%	88.5%	89.7%	85.9%
	Hindu	100.0%	90.4%	92.3%	96.2%
Working status	Home Work	100.0%	87.8%	88.9%	87.8%
	Government Employee	100.0%	100.0%	100.0%	100.0%
	Agriculture	100.0%	88.9%	88.9%	88.9%
	Handicrafts	100.0%	100.0%	100.0%	100.0%
	Business	100.0%	90.9%	100.0%	100.0%
Economic Status	APL	100.0%	97.4%	100.0%	100.0%
	BP	100.0%	85.7%	86.9%	85.7%
	Antyodaya	100.0%	87.5%	87.5%	87.5%
Type of Clinic	DH	100.0%	87.3%	90.1%	87.3%
	CHC	100.0%	91.5%	91.5%	93.2%
Total		100.0%	89.2%	90.8%	90.0%

Table-22: Distribution of Respondents by Utilization of Lab Investigation facilities (in %).

Category		Urine Examination		Blood Examination			USG		X-Ray		ECG	
		Advised and done	Not advised not done	Advised and done	Advised not done	Not advised not done	Advised and done	Not advised not done	Advised and done	Not advised not done	Advised and done	Not advised not done
Gender	Male	14.6%	85.4%	68.3%	9.8%	22.0%	4.9%	95.1%	9.8%	90.2%	34.1%	65.9%
	Female	30.3%	69.7%	83.1%	5.6%	11.2%	4.5%	95.5%	7.9%	92.1%	10.1%	89.9%
Region	Kashmir	33.9%	66.1%	72.9%	8.5%	18.6%	6.8%	93.2%	18.6%	81.4%	16.9%	83.1%
	Jammu	18.3%	81.7%	83.1%	5.6%	11.3%	2.8%	97.2%		100.0%	18.3%	81.7%
Place of Residence	Rural	28.7%	71.3%	80.2%	7.9%	11.9%	4.0%	96.0%	7.9%	92.1%	18.8%	81.2%
	Urban	13.8%	86.2%	72.4%	3.4%	24.1%	6.9%	93.1%	10.3%	89.7%	13.8%	86.2%
Age	<30	33.3%	66.7%	77.8%		22.2%	44.4%	55.6%	33.3%	66.7%	22.2%	77.8%
	31-44	21.7%	78.3%	82.6%	13.0%	4.3%		100.0%		100.0%	17.4%	82.6%
	45-59	28.3%	71.7%	82.6%	6.5%	10.9%	2.2%	97.8%	6.5%	93.5%	17.4%	82.6%
	60 and +	23.1%	76.9%	73.1%	5.8%	21.2%	1.9%	98.1%	9.6%	90.4%	17.3%	82.7%
Education	None	21.4%	78.6%	80.0%	4.3%	15.7%	1.4%	98.6%	7.1%	92.9%	15.7%	84.3%
	Primary/Middle	23.1%	76.9%	84.6%	7.7%	7.7%		100.0%	7.7%	92.3%	11.5%	88.5%
	High School	43.8%	56.3%	75.0%	6.3%	18.8%	6.3%	93.8%	12.5%	87.5%	31.3%	68.8%
	Higher secondary	27.8%	72.2%	66.7%	16.7%	16.7%	22.2%	77.8%	11.1%	88.9%	22.2%	77.8%
Marital Status	Unmarried	40.0%	60.0%	60.0%	20.0%	20.0%	20.0%	80.0%	20.0%	80.0%	20.0%	80.0%
	Currently married	23.1%	76.9%	81.7%	4.8%	13.5%	2.9%	97.1%	6.7%	93.3%	18.3%	81.7%
	Other	33.3%	66.7%	66.7%	14.3%	19.0%	9.5%	90.5%	14.3%	85.7%	14.3%	85.7%
Religion	Muslim	34.6%	65.4%	76.9%	6.4%	16.7%	6.4%	93.6%	14.1%	85.9%	24.4%	75.6%
	Hindu	11.5%	88.5%	80.8%	7.7%	11.5%	1.9%	98.1%		100.0%	7.7%	92.3%
Working status	Home Work	27.8%	72.2%	81.1%	6.7%	12.2%	4.4%	95.6%	5.6%	94.4%	13.3%	86.7%
	Govt., Employee	33.3%	66.7%	66.7%	33.3%			100.0%	22.2%	77.8%	44.4%	55.6%
	Agriculture	16.7%	83.3%	77.8%		22.2%		100.0%	11.1%	88.9%	27.8%	72.2%
	Handicrafts		100.0%	50.0%		50.0%		100.0%		100.0%	50.0%	50.0%
	Business	18.2%	81.8%	72.7%		27.3%	18.2%	81.8%	18.2%	81.8%	9.1%	90.9%
Economic Status	APL	18.4%	81.6%	65.8%	15.8%	18.4%	7.9%	92.1%	7.9%	92.1%	26.3%	73.7%
	BP	27.4%	72.6%	82.1%	3.6%	14.3%	3.6%	96.4%	8.3%	91.7%	11.9%	88.1%
	Antyodaya	37.5%	62.5%	100.0%				100.0%	12.5%	87.5%	37.5%	62.5%
Type of Clinic	DH	22.5%	77.5%	81.7%	5.6%	12.7%	2.8%	97.2%	8.5%	91.5%	21.1%	78.9%
	CHC	28.8%	71.2%	74.6%	8.5%	16.9%	6.8%	93.2%	8.5%	91.5%	13.6%	86.4%
30	Total	25.4%	74.6%	78.5%	6.9%	14.6%	4.6%	95.4%	8.5%	91.5%	17.7%	82.3%

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