"ASSESSMENT OF SOCIO-ECONOMIC IMPACT AND HEALTH CARE EXPENDITURE PATTERN OF COVID 19 IN HOUSEHOLDS OF RURAL FIELD PRACTICE AREA OF BELAGAVI - A COMMUNITY BASED CROSS-SECTIONAL STUDY"

Submitted by

(REG. NO. BD0121008)

Dissertation

Submitted to

KAHER, Belagavi, Karnataka,
In partial fulfilment of the requirements for the degree of

M. D. (Doctor of Medicine)
In
COMMUNITY MEDICINE

DEPARTMENT OF COMMUNITY MEDICINE,
JAWAHARLAL NEHRU MEDICAL COLLEGE, KAHER,
BELAGAVI, KARNATAKA, INDIA - 590010.

DECEMBER 2024 / JANUARY 2025

KLE ACADEMY OF HIGHER EDUCATION AND RESEARCH, BELAGAVI

Endorsement by the HOD and Principal / Head of the Institution

This is to certify that the dissertation entitled **"ASSESSMENT OF SOCIO-ECONOMIC IMPACT AND HEALTHCARE EXPENDITURE PATTERN OF COVID-19 IN HOUSEHOLDS OF RURAL FIELD PRACTICE AREA OF BELAGAVI – A COMMUNITY BASED CROSS-SECTIONAL STUDY"** is a bona fide research work done by the candidate **REG. NO. BD0121008.**

Dr. Girija J Mahantshetti MD
Professor and Head,
Department of Community Medicine,
J. N. Medical College,
KAHER, Belagavi - 590010,
Karnataka, India.

Place: Belagavi
Date: 18/06/2024

Dr. (Mrs.) N. S. Mahantashetti MD
Principal
J. N. Medical College,
KAHER, Belagavi - 590010,
Karnataka, India.

PRINCIPAL
J.N. Medical College,
BELAGAVI- 590 010

Place: Belagavi
Date: 19/06/2024

UNDERTAKING

I, **(Reg. No. BD0121008),** hereby declare that the information and the data mentioned in any dissertation entitled **"Assessment of Socio-economic impact and health care expenditure pattern of COVID 19 in households of rural field practice area of Belagavi - A community based cross-sectional study"** belongs to me and is original. I am aware of the definition of plagiarism as detailed below:

- An act or instance of using or closely imitating the language and thoughts of another author without authorization and the representation of the author's work as one's own, as by not crediting the original author.
- A piece of writing or other work reflecting such unauthorized use or imitation.
- The deliberate or reckless representation of another's words, thoughts or ideas as one's own without attribution in connection with submission of academic work, whether graded or otherwise.

"I hereby declare that the dissertation prepared by me is original-one and does not involve plagiarism anywhere. In case at a later stage, it is found that I have indulged in plagiarism, then I am solely responsible for the same and the institution is at liberty to take any disciplinary action against me including cancellation of dissertation or any other penalties imposed by the University."

Date: 27.06.2024

Place: Belagavi **(REG NO: BD0121008)**

PLAGIARISM ACCEPTED LETTER

KLE JAWAHARLAL NEHRU MEDICAL COLLEGE
(A constituent unit of KLE Academy of Higher Education & Research Deemed-to-be-University)
(Recognized by National Medical Commission, New Delhi)
Accredited 'A+' Grade by NAAC (3rd Cycle) Placed in Category 'A' by MoE (GoI)
Nehru Nagar, Belagavi- 590 010, Karnataka, INDIA
0831 - 2471350 0831 - 2470759 www.jnmc.edu jncipal@jnmc.edu

Ref No: MDC/PG/ Date: 15-06-2024

"ACCEPTANCE LETTER"

The softcopy of thesis entitled: **"ASSESSMENT OF SOCIOECONOMIC IMPACT AND HEALTHCARE EXPENDITURE PATTERN OF COVID-19 IN HOUSEHOLDS OF RURAL FIELD PRACTICE AREA OF BELAGAVI - A COMMUNITY BASED CROSS-SECTIONAL STUDY"** has been submitted for Anti-Plagiarism check through Turnitin software. The scan has been carried out and the scanned output reveals a match percentage of **04%** which is within the acceptable limits of **10%** as per the guidelines given by UGC.

Shivaswamy
Guide.

KAHER BELAGAVI J. N. MEDICAL COLLEGE

Dr. (Mrs.) N.S. Mahantashetti.
Chairperson-Antiplagiarism Committee &
Principal,
J. N. Medical College, Belagavi.

To,
Reg. No. BD0121008
Postgraduate Student,
2021-22 Batch,
Department of Community Medicine,
J. N. Medical College, Belagavi.

ETHICAL CLEARANCE

K.L.E. ACADEMY OF HIGHER EDUCATION AND RESEARCH
(Deemed – to- be- University)
Accredited 'A+' Grade by NAAC in (3rd Cycle) Placed in Category 'A' by MHRD (GoI)
JNMC INSTITUTIONAL ETHICS COMMITTEE
JAWAHARLAL NEHRU MEDICAL COLLEGE,
NEHRU NAGAR, BELAGAVI-590010 (KARNATAKA-INDIA)
Website: http//www.jnmc.edu
E-Mail : dome@jnmc.edu
Phone: (+ 91-(0)831 Office : 2472550
Principal: 2471701
Fax No. +91 (0)831 – 2470759

Ref No.MDC/JNMCIEC/ 78 **Date: 27/09/2022**

To,

BD0121008

PG Student in Community Medicine,
J. N. Medical College,
BELAGAVI.

Sub: Institutional Ethical Clearance for the study.

With reference to the above, we wish to inform you that your proposed research project titled **"ASSESSMENT OF SOCIO-ECONOMIC IMPACT AND HEALTH CARE EXPENDITURE PATTERN OF COVID 19 IN HOUSEHOLDS OF RURAL FIELD PRACTICE AREA OF BELAGAVI –A COMMUNITY BASED CROSS –SECTIONAL STUDY"** is ethical and justifiable. The proposed research project has been cleared by the JNMC Institutional Ethics Committee.

(Dr. Smita Sonoli)
Member Secretary
JNMC Institutional Ethics Committee
J.N.Medical College, Belagavi.

(Dr. Harsha Hegde)
Chairman,
JNMC Institutional Ethics Committee
J.N.Medical College, Belagavi

LIST OF ABBREVIATIONS USED

S.No.	Abbreviations	Expansion of the abbreviations
1.	AB	Ayushman Bharat
2.	AIIMS	All India Institute of Medical Sciences
3.	ASHA	Accredited Social Health Activist
4.	BCC	Behavioural Change Communication
5.	CHO	Community Health Officer
6.	CI	Confidence Interval
7.	CNAA	Community Needs Assessment
8.	COVID-19	Corona Virus Disease – 2019
9.	CPI	Consumer Price Index
10.	CRHSP	Comprehensive Rural Health Service Project
11.	CRISPR	Clustered regularly interspaced short palindromic repeats
12.	DPCE	Daily Per Capita Expenditure
13.	GDP	Gross Domestic Product
14.	IEC	Information Education & Communication
15.	IPD	In-Patient Department
16.	ICTV	International Committee on Taxonomy of Viruses
17.	ICU	Intensive Care Unit
18.	IQR	Inter Quartile Range
19.	INR	Indian National Rupee
20.	JNMC	Jawaharlal Nehru Medical College
21.	KAHER	KLE Academy of Higher Education & Research

22.	MERS	Middle East Respiratory Syndrome
23.	mRNA	messenger Ribo Nucleic Acid
24.	NHA	National Health Accounts
25.	OOPE	Out of Pocket Expenditure
26.	OPD	Out-Patient Department
27.	PCR	Polymerized Chain Reaction
28.	PHC	Primary Health Care
29.	PMJAY	Pradhan Mantri Jan Arogya Yojana
30.	PPP	Purchasing Power Parity
31.	R_0	Reproduction number
32.	RAT	Rapid Antigen Test
33.	RNA	Ribo Nucleic Acid
34.	RTPCR	Reverse transcriptase Polymerized Chain Reaction
35.	RT-LAMP	Reverse Transcriptase – Loop Mediated Isothermal Amplification
36.	SARS	Severe Acute Respiratory Syndrome
37.	SES	Socio Economic Status
38.	SPSS	Statistical Package for Social Sciences
39.	USA	United States of America
40.	USD	United States Dollar
41.	WHO	World Health Organization

ABSTRACT

"ASSESSMENT OF SOCIO-ECONOMIC IMPACT AND HEALTH CARE EXPENDITURE PATTERN OF COVID 19 IN HOUSEHOLDS OF RURAL FIELD PRACTICE AREA OF BELAGAVI - A COMMUNITY BASED CROSS-SECTIONAL STUDY"

Background:

SARS-CoV-2 infection started in China and then later spread across continents to cause Covid-19 disease. It was announced as a pandemic on March 11, 2020. Kerala was the first state to report the case on January 30, 2020. Lockdown and quarantine measures were taken to limit the spread of infection by the government, though India remained the one of the top countries to report cases and deaths due to Covid-19. The impact of the disease is widespread ranging from health, economy, politics and, social life. Vaccine inequities were seen globally, intake of vaccine conferred protection in terms of disease severity and survival. Long term consequences of the infection are seen in the form of post-Covid or long-Covid symptoms affecting multiple organ systems.

Objective:

The study aims to assess the socioeconomic impact and to estimate the average healthcare expenditure for covid 19 infection in the rural field practice area.

Methodology:

A community base cross-sectional study was conducted in field practice area of Vantamuri (rural) from October 2022 to September 2023, to assess the socio-economic impact and to estimate the healthcare expenditure for Covid-19 disease.

Direct medical costs were included. For statistical analysis Odds ratio and Pearson Chi-square tests were used.

Results:

Among 357 participants, 50.7% were males. 75% of the participants belonged to the age group of 18-60 years. Around 70% were married participants. 95% of the participants received at-least primary school education. Half of the participants belonged to higher socio-economic class. Among participants, 74% did not have any insurance coverage. Around 4% of the participants died due to the Covid-19 disease. One-fifth of the participants reported symptoms of long-Covid.

Conclusion:

The findings from the study points that economically productive age group, number of comorbidities, financially disadvantaged groups were more affected due to Covid-19 disease. Three-fourth of the participants had been affected during second wave. Catastrophic spending was seen among private sector hospitalized participants without insurance cover.

Keywords: Socio-economic impact, Covid-19, health insurance, long-Covid, compensation.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

On December 31, 2019, WHO received communications from the Government of China that a 'pneumonia of unknown etiology' has been found affecting many people of Wuhan city, Hubei province.[1] WHO named this virus as novel coronavirus or 2019-nCoV on January 12th, 2020 and later it was coined by International Committee on Taxonomy of Viruses (ICTV) as 'SARS-CoV-2' (Severe Acute Respiratory Syndrome Corona Virus 2). The disease caused by the virus was termed as 'Corona virus disease 2019 (Covid-19)' on February 11,2020.[2] WHO declared that 'Covid-19 was a pandemic' on March 11, 2020.[3] Coronaviruses have been responsible for three pandemics in last 20 years (SARS in 2002 to 2003, Middle Eastern Respiratory Syndrome in 2012, Covid-19 in 2019 to 2023).[4]

In India, first Covid-19 case was reported in Kerala on 30th January, 2020. On 25th March, 2020, Government of India declared immediate country level lockdown till 31st March, 2020 and then extended the same three times till 17th May, 2020. Gradual relaxation was done in six phases till 30th November, 2020. To aid in case management Covid-19 dedicated hospitals and healthcare centres were created.[5]

As on February 2024, more than 774 million cases and seven million deaths were reported by WHO. The top three countries to report cases were U.S.A, China and India respectively and with respect to deaths U.S.A, Brazil and India respectively. India reported a total of 45 million cases and five lakh deaths since the beginning of the pandemic. The Mortality rate for SARS-CoV-2 infection as notified by WHO was <0.001 per 100,000 population.[6,7] WHO data on vaccination states that 13.59 billion people are vaccinated till February 2024. 67% of global population received complete primary series of vaccine and 32% vaccinated with at-least one booster dose.[8]

Coronaviruses (SARS-CoV, MERS-CoV, and SARS-CoV-2) are enveloped viruses that contains positive-sense single-stranded RNA with largest genome. They belong to genus Betacoronavirus of the family Coronaviridae. Through direct contact with cellular receptor ('Angiotensin converting enzyme 2') protein S mediates host cell entry. Once entered, the RNA genome will be released into host cell cytosol and the virus begins to replicate and produces new virions. The virions are then assembled and released into intracellular space to aid infection of neighbouring cells.[4] Human-to-Human transmission was higher for SARS-CoV-2 compared with SARS-CoV infection.[2] Direct transmission through respiratory droplet or aerosols was found to be the effective transmission compared with fomite.[9] The period of communicability varies between three days prior and three weeks later to symptom onset. It can be longer for patients with severe disease. The incubation period is two to 14 days with median incubation period of seven days.[5]

'Reproduction number' (R_0) determines the ability to contain an emerging pathogen. It is the average number of secondary cases arising from a primary case in a completely susceptible population. R0 is calculated by taking in consideration of generation interval. R0 for Covid-19 was estimated using previous MERS-CoV and SARS-CoV data and found to be between 2 and 4. Containment measures are not needed if R0 is less than 1, on the other hand a higher R0 make containment more difficult.[9] Quarantine lowers transmission by preventing transmission prior to symptom onset. Period of quarantine depends on incubation period and temporal infectiousness profile. The importance of quarantine lies in the fact that RTPCR tests carry low sensitivity, especially early in the infection, as well as limited testing capacity in many countries. The main reason for people being placed in quarantine is

because they were identified as close contacts of confirmed Covid-19 through contact tracing or must have returned from a place with high community transmission.[10]

Other non-pharmacological measures to control spread of the disease include isolation, lockdowns, social distancing measures and use of face mask. Though non-pharmacological measures effectively reduced pace of the viral spread, the risk was not reduced for people involved in public facing jobs like health care workers and frontline workers, taxi and bus drivers, factories (due to ill-ventilation and overcrowding) and to those residing in nursing homes, homeless shelters, and prisons.[9] Even with higher transmission rates for SARS-CoV-2 than previously emerged SARS, the mortality rates or the case fatality rates were vice versa.[2] But in terms of absolute numbers, Covid-19 was the third leading cause of death in 2020, whereas it became the number one cause in 2023.[11]

The highlighting fact is that while all other coronaviruses affects the respiratory tract, SARS-CoV-2 virus also cause distress to heart, gastrointestinal system, liver, kidney and central nervous system.[2] The various diagnostic modalities for SARS-CoV-2 include RT-PCR, Chest CT, Serology, RT-LAMP, CRISPR/Cas.[12] The degree of severity of the disease ranges from mild illness to critical condition.[13] Albeit differences in signs and symptoms between patients, the common symptoms include fever, fatigue, backache, cough, expectoration, anorexia, sputum production, shortness of breath, loss of taste or smell etc. others include sore throat, headache, confusion, hemoptysis, and chest tightness.[2,4] Gastrointestinal symptoms like nausea, vomiting and diarrhea were also reported.[2] Majority of the cases tend to be mild but certain degree of cases shows severity due to systemic inflammation, tissue damage and cardiac injury.[4] Children had mild symptoms compared to adults. Some patients remained asymptomatic throughout the infection.[2] Comorbid conditions such as

diabetes, obesity and hypertension influence severity of Covid-19 disease.[4] Severe life-threatening events like pneumonia, respiratory distress, septic shock and multiorgan failure were reported.[1]

Impact of Covid-19 is not only restricted to health, the devastating effects are widespread ranging from health, society, politics and economy. Economic breakdown has a negative impact on health as it cripples the financial resources towards public health.[14] On an economic standpoint, Covid-19 disease, because of its ability to spread rapidly and infect large number of individuals and by virtue of its complications, can impose high direct and indirect medical costs to the patients, health system as well as to the government.[15] People living in lower socio-economic class generally suffer from health inequities. It is further confirmed by Covid-19 disease with respect to infection and mortality. Studies have found that inequalities existed during Covid-19 between urban and rural communities.[3] 'Out of pocket expenditure' (OOPE) accounts for about 60% of healthcare expenditure in India.[16] Out of pocket expenditure is defined as any spending made by the household towards purchase of healthcare service delivery. National Health Accounts (NHA) report highlights that OOPE constitutes 68% of total healthcare expenses.[17] In India and other developing countries, the pandemic could make large number of households vulnerable to catastrophic expenditure due to Covid-19 hospitalizations. In terms of absolute number of cases (45,040,074 as on June, 2024), India is among the worst affected countries.[16] Health insurance coverage in urban and rural areas are 20% and 15% respectively.[17] In terms of policy decisions, India has a publicly funded health insurance – 'Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana' (PMJAY) for inpatients' care costs in public and private health facilities.[16]

Direct medical costs are influenced by factors like severity, mean length of stay both in wards and ICUs and certain other factors.[15] The length of stay due to Covid-19 depends on several factors like time elapsed from exposure to symptom onset, from symptom onset to time of admission in the hospital. The median duration of hospital stay due to Covid-19 has been reported to be 10-13 days.[13] Meta analysis evaluating rate of Intensive care unit admissions found that one in four patients affected with Covid-19 required ICU admissions.[17] The cost for ICU admission were three to four folds higher, compared to patients admitted in general wards.[15] In India, intensive care accounted for 20-30% of total hospitalization cost. The fact that intensive care in India is primarily provided by private sector, which in in turn burden the hospitalized people from low socio-economic setting.[17] However, many state governments had fixed price ceilings for Covid-19 care in private facilities.[16] To calculate direct costs which included both medical and non-medical costs, various parameters like expenditures for diagnosis, treatment, rehabilitation, food costs and accommodation costs were considered. Direct medical costs estimated by a study in 2020 from U.S.A showed a median direct medical cost of 3,045 US dollars (~INR 2,32,577 @ 2020 exchange rate).[14,17] Indirect costs include the amount of income that has been lost as result of disease, mandatory containment at home or lost productivity due to premature death of the working individuals.[14]

On the vaccine perspective, similar to H1N1 influenza vaccines, highly effective Covid-19 vaccines were distributed to global north at first. Countries in the global south have suffered with limited access to vaccines. Effectiveness of Covid-19 vaccine depends on type of the vaccine, number of doses and gap between two vaccines. Additionally, it also influenced by type of the variant at that point of time. mRNA vaccines are more effective compared to vaccines prepared using other

modalities. Moreover, Unvaccinated individuals were more likely to report ‘Long Covid’ symptoms as well as a higher mortality due to Covid-19.[11] The World Health Organization defines "post-COVID-19 symptoms" as those of individuals with probable or confirmed SARS-CoV-2 infection who continue to have symptoms 3 months after infection, persisting for at least 2 months, and with no other obvious cause. It accounts for both direct and indirect effects of Covid-19.[18]

OBJECTIVES OF THE STUDY

1. To assess the socioeconomic impact of Covid-19 in the rural field practice area.

2. To estimate the average healthcare expenditure for covid 19 infection during the pandemic in a rural setting.

REVIEW OF LITERATURE

A direct medical cost analysis for Covid-19 ICU patients was conducted retrospectively in a tertiary hospital in India from June 2020 to December 2020. 176 participants were included, in which 24% were females, and no difference between the genders with respect to age. At-least one comorbidity was present in 72% participants, in which hypertension was the common (n= 89, 50.56%). The median hospital stay was found to be 13 days, of which 9 days was ICU stay. The study found that majority of expenses were due to hospital drugs, bed charges, equipment charges and lab tests. In this study, COVID-19 patient on ICU admission boar a median cost of INR 2,02,249 (US $ 2742.91). A median delay of more than 4 days to hospitalization and more than 6 days to ICU admission from the onset of symptom led to a significant higher cost in hospitalization. The study revealed that government schemes covered 79% of cost, out of pocket paying was 12.5%, followed by private insurance of 8.5%. the study stated that the longer hospital stays and ICU admissions were the two prime factors responsible for increased medical cost.[17]

A Covid-19 cross-sectional survey was conducted telephonically by the 'state health resource centre', a technical agency working for state health department of Chhattisgarh, India in December 2020. Around 1294 individuals were interviewed, out of which 492 were hospitalized patients. This study assessed the socio-demographic characteristics as well as out of pocket expenditure. In this study, people from urban residence (n=358) were higher compared to rural population (n=134). The study had more males (n=342) than females (n=150). People of age group 15-39 years were more compared to other age groups (n=231). Households with low per-capita (class I according to modified BG Prasad's classification) income were affected more

compared to other classes. Among those who were hospitalized, 69.3% were hospitalized in public health settings and the rest in private hospitals. Among hospitalizations, 15.6% admissions were less than a week, 68.8% were between 7 and 13 days long and 15.5% were 2 weeks or longer. The mean duration of hospitalization was around 10 days. The mean out of pocket expenditure on hospitalization was INR 169,504 in private hospitals while in public settings it was INR 4871. In this study, around 12% of the hospitalized individuals had private health insurance.[16]

A prospective multicentric study involving COVID-19 patients was conducted in India during 2022 to know the benefits of Covid vaccination on the outcome during the third wave. RT-PCR positive or rapid antigen test positive adult participants were enrolled. A total of 788 patients were analyzed across 13 centers in Gujarat. At the end of follow up, 2.8% had expired. The age of subjects was reported in median as 54 years, with male preponderance. Vaccination was reported among 90%, of which, 77% received two doses of covishield vaccine. Mortality was significantly higher among the non-vaccinated participants. Logistic regression analysis revealed significance for patients with comorbidities with mortality. Vaccination status was associated with patient survival. Factors associated with higher mortality among vaccinated were increasing age and comorbidities.[19]

A cohort study of RT-PCR confirmed Covid-19 patients was done in 2021 in South India to find the effect of vaccination on mortality, hospitalization, oxygen therapy and, ICU admission. The mean age of the participants was 46.3 years. 17.9% and 4.8% received at least one dose of covishield and covaxin respectively. Mortality was 0.2%, 3.5%, and 12.9% among fully vaccinated, partially vaccinated, and unvaccinated patients respectively. The difference in mortality among unvaccinated

vs fully vaccinated was 12.7%. On adjusted analysis, as compared to unvaccinated patients, at least one dose of vaccine reduced the need for hospitalization, oxygen, ICU admission and mortality.[20]

A retrospective case-series study was done at two Primary Health care Centres in Spain to estimate the prevalence of Covid-19 symptoms and signs for SARS-CoV-2 during March to April 2020. Risk factors and utilization of health services were also analysed. Sociodemographic, clinical and, health service utilization variables were collected. Analysis was done to study factors associated with use of health services. Among 499 patients studied from the health centres, 44.9% were men and mean age was 58.2 years. The frequent symptoms were cough (77.9%), fever (77.7%) and dyspnoea (54.1%). 60.7% were hospitalized. 64.5% established contact with their primary care provider first before attending to the hospital. There was a higher percentage (58%) of patients with atypical unilateral or bilateral pneumonia.[1]

A retrospective record-based study was done in Vietnam with the goal to identify various factors associated with Covid-19 hospital stays in terms of median duration during the second COVID-19 wave in Vietnam from 5th March to 8th April 2020. 133 Covid-19 hospitalized patients data recorded retrospectively over two weeks were enrolled. Cox proportional-hazards regression model was used to find the risk factors associated with duration of hospital stay. Accordingly, 65 (48.9%) females, 98 (73.7%) patients were 48 years or younger, comorbidities were seen in 15 (11.3%) persons, 21 (16.0%) were severely ill and, 5 (3.8%) individuals with life-threatening conditions. After testing negative for the SARS-CoV-2 virus, 82 (61.7%) patients were discharged. The median hospital stay duration was 21 (IQR: 16–34) days. Cox regression model showed that factors like age, residence and contamination

sources were associated with longer duration of hospitalization significantly. The median duration of hospital stay was 18 days and 24 days for participants aged less than 48 years and > 48 years respectively. People who were infected in Vietnam had longer period of stay in hospitals compared to people infected abroad. North Vietnam participants had a longer hospitalization duration compared to South Vietnam.[13]

A cross-sectional study was done based on the data of the COVID-19 patients referred to a university hospital in Saudi Arabia in 2020 with an aim to estimate both direct medical and indirect costs of treating Covid-19 from a societal perspective as well as the economic burden of COVID-19 in Iran. The data were collected from the patients' records. All the 477 COVID-19 affected individuals admitted to the medical centre during the 4 months were included. Bottom-up costing, incidence as well as income-based human capital approaches were used. The estimated direct medical costs was 28,240,025,968 Rials (US $ 1,791,172). The mean cost of 59,203,409 Rials (US $ 3755) per person, in which 41% was that of intensive and general care. Costs of medicines and medical consumables (28%) followed next. Loss of income due to premature death, hospitalization leading to economic loss and job absenteeism during period of recovery were included to estimate mean indirect costs. Economic burden of the disease for inpatients at the country was 22,688,925,933,095 Rials (equal to US $ 1,439,083,784). The results showed that the severe disease bring about the higher cost for treatment. It was estimated that the high Covid-19 disease prevalence imposes a heavy burden on the country's economy and healthcare system that may lead to cost-control approaches.[15]

A prevalence-based cost-of-illness study was conducted in Iran using bottom-up approach in 2020 with an aim to estimate the COVID-19 patients health

costs and associated factors. Data were obtained from the Hospital's Information System and Cost-of-illness checklist. 745 Covid-19 patients were included in the study. Total cost was estimated at 8813.15 (PPP, Current International US $), accounting for 60% of GDP per capita. The mean direct as well as indirect cost was estimated to be 3362.49 (38% of the total cost), and 5450.66 (62% of the total cost), respectively. Participants with increasing age, who had insurance, those who died had higher mean hospitalization cost. Covid-19 disease imposes a significant financial burden at various levels including people, health systems, insurance sectors and the country's economy.[14]

A hospital-based cross-sectional study was conducted among outpatients and inpatients, in 'All India Institute of Medical Sciences' (AIIMS), New Delhi and the outpatients and inpatients of the 'Comprehensive Rural Health Services Project' (CRHSP) hospital, AIIMS, Haryana in 2005-06. The study included 374 inpatients and outpatients with an aim to generate evidence on the social and economic impact arising due to out-of-pocket expenses on illness. The median expenditure was similar for urban and rural patients. 51.3% and 24.4% were employed before and after the illness among rural respondents. The corresponding figures were 65.6% and 23.4% for urban respondents. The economic and the social impact of illness in terms of expenditure on food, also on education, health and, the need to sell land or domestic cattle was statistically significant. A significant proportion of the upper and upper middle classes were also affected. Bank loans and moneylenders were common source of loan for the upper and middle classes, Whereas the lower socioeconomic classes depended upon support of their friends financially. The average cost of hospitalized care in a government hospital in 2004 was Rs.3,238. If it was presumed an average stay of 7 days for each hospitalization, Rs.3,238 would have amounted to

an expenditure of Rs.462.6 per day per hospitalization. For a person with a daily per capita expenditure (DPCE) of Rs.93, this accounts for an enormous additional burden. The study highlighted that out-of-pocket expenses are a burden for the poor and the middle classes.[21]

A community cross-sectional study was done between in 2018-19 in Bhatar block of Purba Barddhaman district, West Bengal to find out the determinants of out-of-pocket as well as catastrophic health spending among rural population. 235 households were studied, in that 198 (84.3%) had male member as the family head. 49 were illiterate, and 23 had education till higher secondary and above. 70 (30.2%) households were found to be joint family, while 164 were nuclear family. Health insurance was present among 151 (64.3%) households. The median Out of pocket health expenditure was reported as INR 3,870. The median direct indirect health expenditure in the study was INR 1,780.00 and INR 2,100.00. 38 households reported catastrophic healthcare expenditure. 85.5% had adequate money, while 27 (11.5%) borrowed, and 7 (3%) reported that they sold their assets.[22]

A retrospective cohort study was conducted on hospitalized Covid-19 patients in Saudi Arabia to find out the survival and to estimate the direct medical cost in 2020. The data was collected from patient admission to discharge with final status which was either death or discharged alive. 22% participants were female, and 67% between 25 and 54 years of age. Only 15% were admitted to ICU. About 16% of patients died in hospital. The median duration of stay was 7.93 days, with a maximum length of stay of 43 days. The mean cost (in Saudi Arabian Rial) for those admitted to the general Medical Ward and ICU per patient was 42,704.49 (INR 8,88,432.06) and 79,418.30 (INR 16,52,245.63), respectively. The total direct medical cost of COVID-

19 exceeded compared to MERS-CoV due to the higher infection rate in Covid-19. Variations in cost estimates across countries highlighted the significant challenges to estimate and compare globally due to differences in the cost of treatment, healthcare utilization rates and their prices between countries.[23]

A study was conducted in a private hospital setting in Istanbul, Turkey adopting micro-costing approach using historical cost data for one year from April 2020 to April 2021 with an aim to calculate the medical costs for participants with Covid-19 based on the clinical severity. All direct and indirect medical costs were determined for participants. The analysis measured the unit cost in Turkish Lira and estimated 459,99 ₺ (~ US $ 6440) for an outpatient and 1.184,63 ₺ (~ US $ 16,584) per day for inpatient. For participants who are non-intubated in intensive care it was estimated to be 1.938,11 (~ US $ 27,133), and 2.393,99₺ (~ US $ 33516) for intubated participants. The study also indicated that for non-intubated patient in intensive care units the costs was 1.54 times higher, while for an intubated patient's it was 2.08 times higher compared to total cost per inpatient.[24]

A cross-sectional ecological study with data from 3,140 counties was conducted in USA to analyze influence of country level social determinants, education, income, comorbidities, political voting patterns, and preventive healthcare measures on COVID-19 case-fatalities. Data were obtained from COVID-19 Community profile report between 2nd January to 8th January, 2021. Particular week cutoff was selected as it eliminated the effect of vaccines or newer strains. Analysis was done using generalized additive models and adjusted by COVID-19 Community Vulnerability Index. Reduced case-fatality rates were observed with respect to Age, education, and Income. On the other hand, obesity, leisure activity, binge drinking

and individuals on anti-hypertensives were associated with high case-fatality rates. Large household size was protective in Midwest, but harmful in Northeast USA. Chronic kidney disease was one of the strong predictors of high case-fatality rates.[25]

MATERIALS AND METHODS

A) Source of Data: Previously diagnosed Covid-19 patients residing in rural field practice area of PHC Vantamuri (rural), that is under the administrative control of Jawaharlal Nehru Medical College, KAHER, Belagavi, Karnataka. The field area of PHC Vantamuri (rural) caters a population of approximately forty thousand people estimated as per Community Needs Assessment Approach survey done in 2022-2023. A total of five Sub Health Centre's also called Health and Wellness Centre's headed by Community Health officers (CHO) and Seventeen villages are present under field practice area.

The names of the Sub Health Centre's with population as per CNAA survey 2022 are:

Vantamuri – 9513, Kakati-A – 8084, Kakati-B – 7233, Honaga – 9025, Bhutramanahatti - 6551

B) Study Design: A community-based cross-sectional study.

C) Study Period: One year (1st October 2022 to 30th September 2023).

D) Sample Size: Sample size calculated using the prevalence of Out-of-pocket expenditure in India, Reddy KN et al as per National Health Accounts of 2021[17] (68%) and calculated as,

$4pq/d^2$ where,

p = 68%

q = 32%

d = 5%

$4*68*32/5^2$

8704/25

348.16 ≈ 350

A minimum total of 350 participants were found to be appropriate sample for the study, although no restrictions were applied to stop the study on reaching the sample size.

E) **Sampling technique:** Universal sampling was done to ensure enrollment of maximum number of participants for the study.

F) Inclusion Criteria: All covid 19 positive cases registered in the PHC during first three waves of the pandemic (1st March 2020 – 31st March 2022) were included for detailed study.

G) Exclusion Criteria: Those households which were locked and non-availability of respondents (>18 years) on three successive visits by the investigator were excluded. Positive cases during the pandemic from ITBP occupation in Hallbhavi village, from Vantamuri subcentre was excluded due to the frequent movement and unstable population.

H) Ethical clearance: Approval from the Institutional Ethical Committee for Human Subject's Research of the medical college vide under letter MDC/JNMCIEC/78 dated 27/09/2022 was obtained.

I) Data collection procedure: Written informed consent for all the subjects participating in the current study were obtained and they participants were recruited

according to the inclusion and exclusion criteria. Using structured & pre-designed questionnaire, pilot testing was done among 20 participants and the questionnaire was modified accordingly before the conduct of the actual study. The research questionnaire consisted of socio-demographic data of study participants, Covid-19 infection/disease/death/recovery status, OPD/IPD/ICU/Oxygen therapy, Health care seeking behaviour & expenditure status, health insurance and reimbursement/compensation for Covid 19 death by the Govt of India, if any.

The sections included in the questionnaire were;

1. Respondent's details
2. General family details
3. COVID-19 family details
4. COVID-19 affected individual details
5. Hospitalization details
6. Health expenditure details for out-patient participants
7. Health expenditure details for In-patient participants
8. Health seeking behaviour & mode of payment details
9. long COVID details, if any.

The participants were visited in person by the investigator and conducted personal interview. In case of participant's absence, other family members above eighteen years were considered for obtaining reliable information. Non-interested participants or responders were automatically excluded / removed from the study. During the process of data collection, concerned Accredited Social Health Activist (ASHA) were also accompanied with the investigator during the interview.

For hospitalized patients, participants who had expenditure bills were directly entered into questionnaire, whereas, for participants without bills, approximate total sum of money spent was enquired orally and documented in the questionnaire. Healthcare expenses towards COVID-19 were calculated using direct medical costs.

Direct medical costs included,

1. Physician / Hospital Consultation charges
2. Expenditure on Covid-19 diagnosis (laboratory and radiological charges)
3. Expenditure on Covid-19 treatment (drugs and procedural charges) and rehabilitation
4. Bed charges for admitted patients / ICU / Ventilator charges etc.,

For laboratory charges, fixed ceiling rates (at the time of survey) were used for computation for government and private separately for RAT & RT-PCR.

Laboratory procedures included relevant microbiology, biochemical and pathological investigations.

Radiodiagnosis charges were included for chest X-rays, Computed Tomography, Magnetic Resource Imaging (MRI) and Echocardiogram.

J) Data processing and analysis/statistical analysis:

Collected data was coded, entered & analyzed using SPSS statistical software version 20. Data were represented by frequency distribution table. To check the dependency between different variables, Pearson chi-square test was applied. Odds ratio was used, wherever applicable.

Description of the study variables

Types of Family:

Nuclear: It includes married couple along with their dependent children.

Joint: It consists of number of married couple and their children living in same household

Three-generation: It consists of household where representatives from three generation live together.

Broken: It includes families with couples being separated and living alone with or without children.

Socioeconomic status

Information on family per-capita income (INR/month) was obtained and SES was classified using Modified B.G. Prasad's classification for the year 2023.[26]

The consumer price index (CPI) for the year 2023 was calculated taking the average CPI of twelve months and found to be 136.4.[27]

Multiplication factor = current CPI (2023) / Base index value (2016) = 136.4 / 100 = 1.364

New income value = multiplication factor * old income value * 4.63 * 4.93 * 2.88

Socio-economic status	B.G. Prasad's classification (1961)	Revised B.G. Prasad's classification (2023)
I	≥100	>8967
II	50-99	4483-8966
III	30-49	2690 – 4482
IV	15-29	1346 - 2689
V	<15	<1345

Wave of infection – Covid-19

First wave: March 2020 to February 2021

Second wave: March 2021 to December 2021

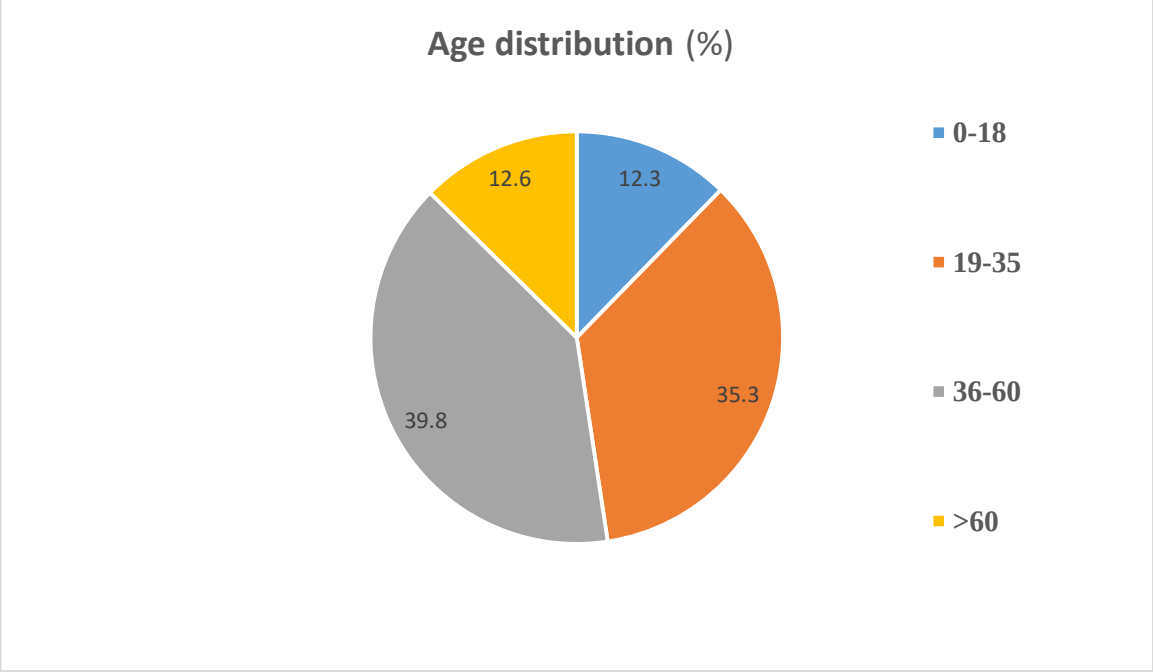
Third wave: January 2022 to February 2022

RESULTS

Table 1: Distribution of the participants according to age group (n = 357)

Age group in Years	Frequency	Percentage	Cumulative percentage
0-18	44	12.3	12.3
18-35	126	35.3	47.6
35-60	142	39.8	87.4
>60	45	12.6	100.0
Total	**357**	**100.0**	**100.0**

Graph 1: Distribution of the participants according to age group

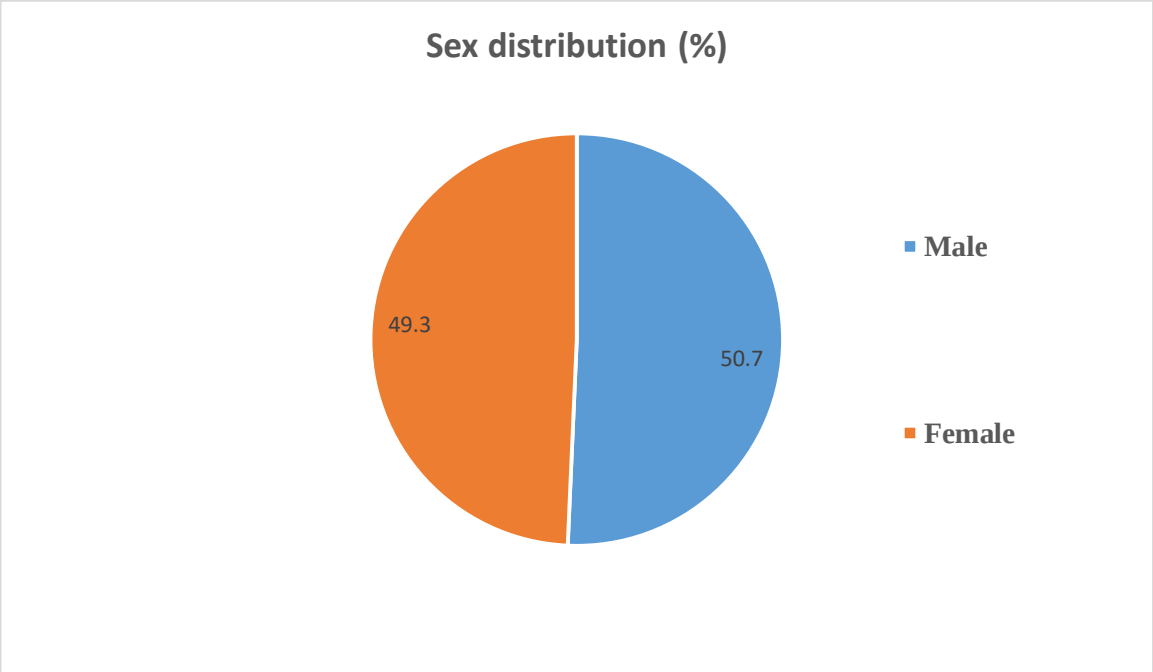


In the present study, out of 357 participants, 268 (75.1%) belonged to 18-59 years age group, 44 (12.3%) were below 18 years, and 45 (12.6%) were above 60 years.

Table 2: Distribution of the participants according to gender (n = 357)

Gender	Frequency	Percentage	Cumulative percentage
Male	181	50.7	50.7
Female	176	49.3	100.0
Total	**357**	**100.0**	**100.0**

Graph 2: Distribution of the participants according to gender

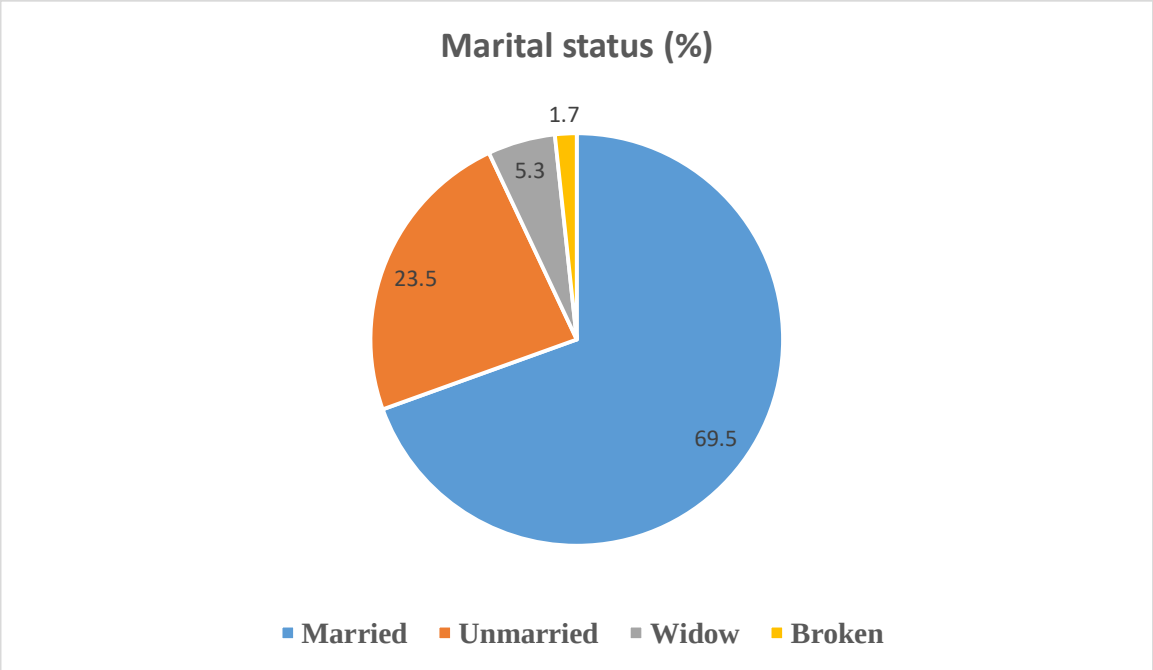


Among 357 study participants, 181 (50.7%) were males and 176 (49.3%) were females.

Table 3: Distribution of the participants according to marital status (n = 357)

Marital status	Frequency	Percentage	Cumulative percentage
Married	248	69.5	69.5
Unmarried	84	23.5	93.0
Widow/Widower	19	5.3	98.3
Broken family	6	1.7	100.0
Total	**357**	**100.0**	**100.0**

Graph 3: Distribution of the participants according to marital status

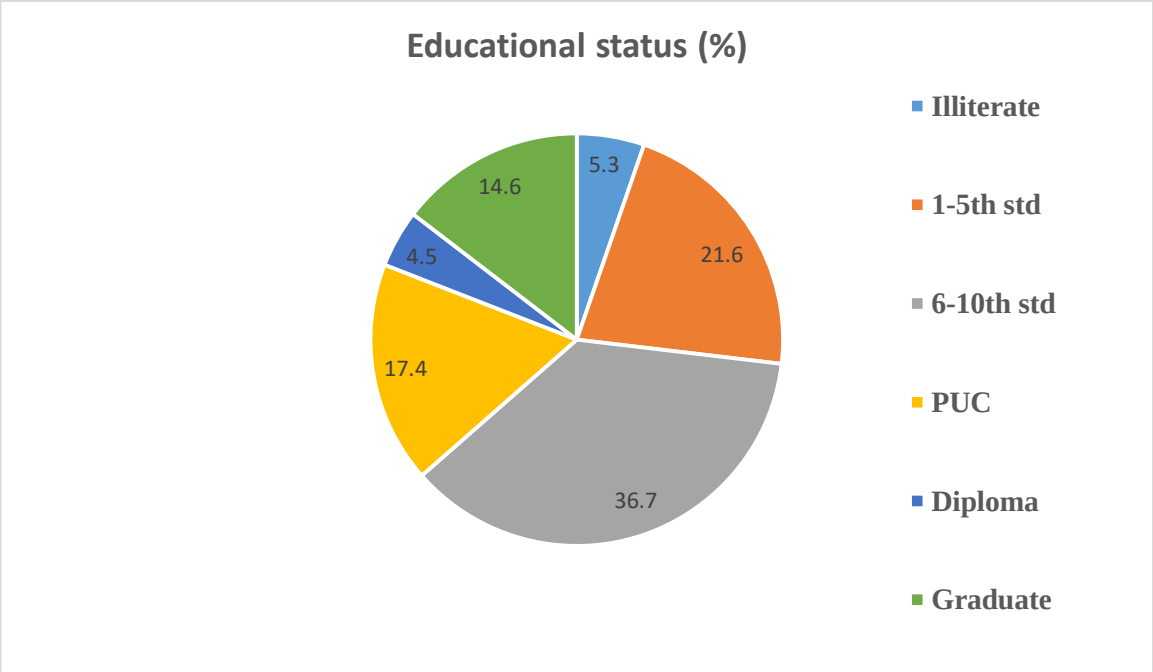


In the present study, 248 (69.5%) participants were married, whereas, 84 (23.5%) were unmarried and 25 (7%) were widow/widower or broken.

Table 4: Distribution of the participants according to educational status (n = 357)

Education	Frequency	Percentage	Cumulative percentage
Illiterate	19	5.3	5.3
1-5th std	77	21.6	26.9
6-10th std	131	36.7	63.6
PUC / Diploma	78	21.8	85.4
Graduate	52	14.6	100.0
Total	**357**	**100.0**	**100.0**

Graph 4: Distribution of the participants according to educational status

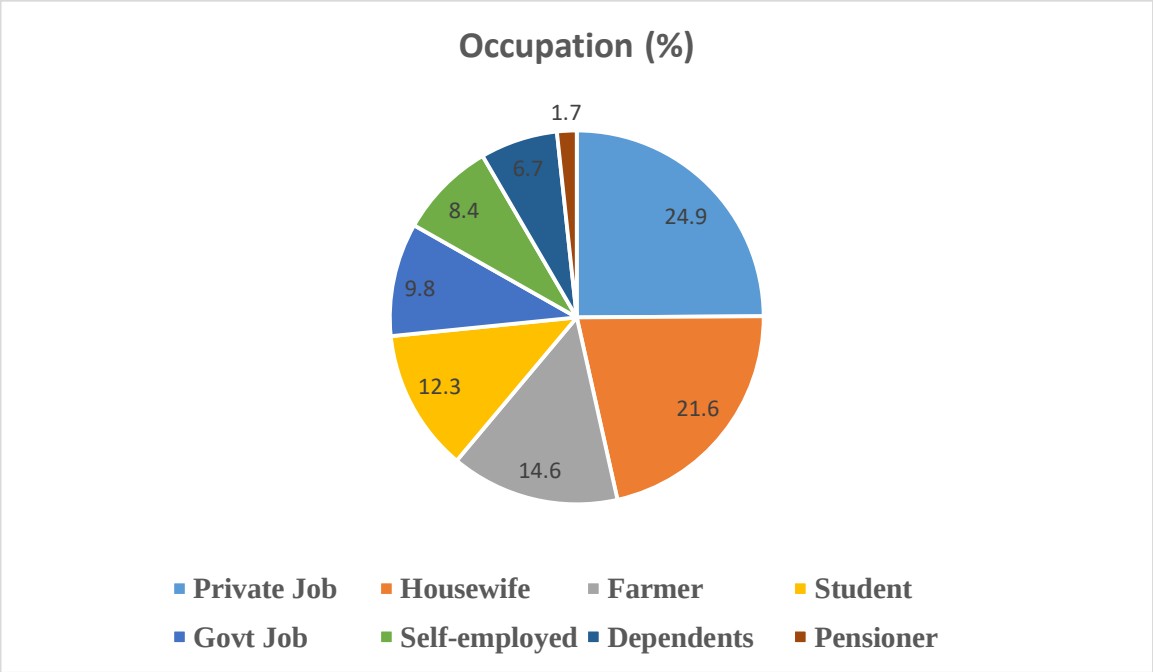


Among 357 study participants, majority had primary 77 (21.6%) or secondary 131 (36.7%) education, 17.4% (62) had PUC and 14.6% (52) were graduates, whereas, 5.3% (19) were illiterates and 4.5% (16) had diploma.

Table 5: Distribution of the participants according to occupational status (n = 357)

Occupation	Frequency	Percentage	Cumulative percentage
Private Job	89	24.9	24.9
Homemaker	77	21.6	46.5
Farmer	52	14.6	61.1
Student	44	12.3	73.4
Govt Job	35	9.8	83.2
Self-employed	30	8.4	91.6
Dependents	24	6.7	98.3
Pensioner	6	1.7	100.0
Total	**357**	**100.0**	**100.0**

Graph 5: Distribution of the participants according to occupational status

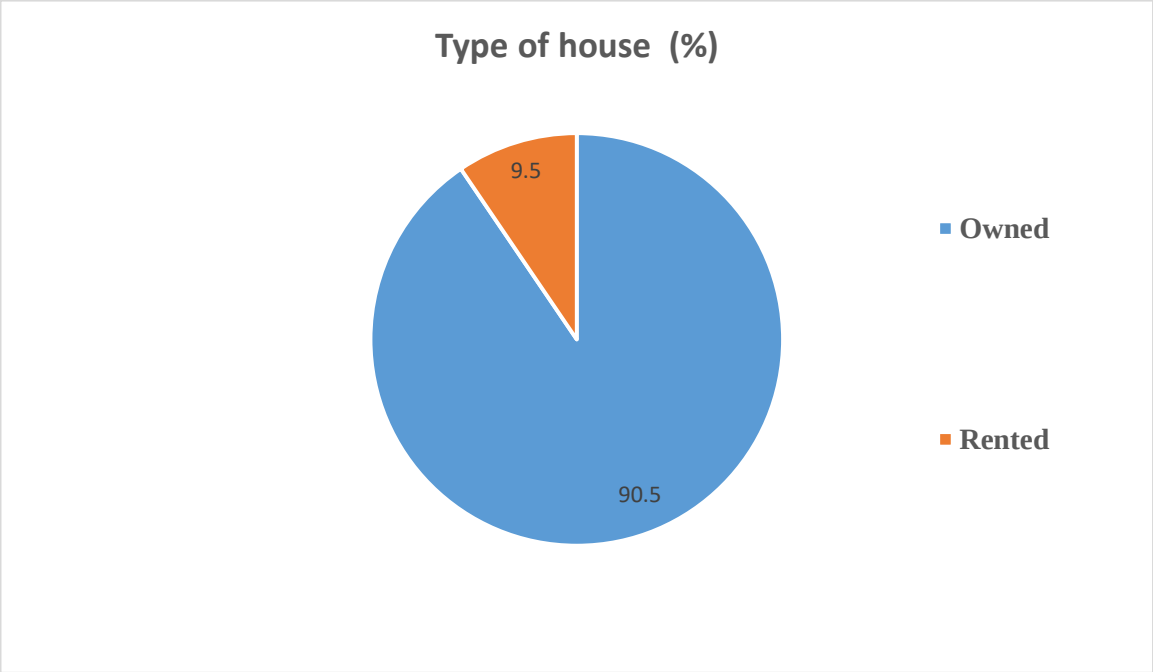


Among the 357 study participants, 24.9% had private job, 21.6% were homemakers, 14.6% were farmers, 12.3% were students. 9.8% were in government job, 8.4% were self-employed, 6.7% were dependents and 1.7% were receiving pensions.

Table 6: Distribution of the study participants according to type of house (n = 357)

Type of House	Frequency	Percentage	Cumulative percentage
Owned	323	90.5	90.5
Rented	34	9.5	100.0
Total	**357**	**100.0**	**100.0**

Graph 6: Distribution of the study participants according to type of house

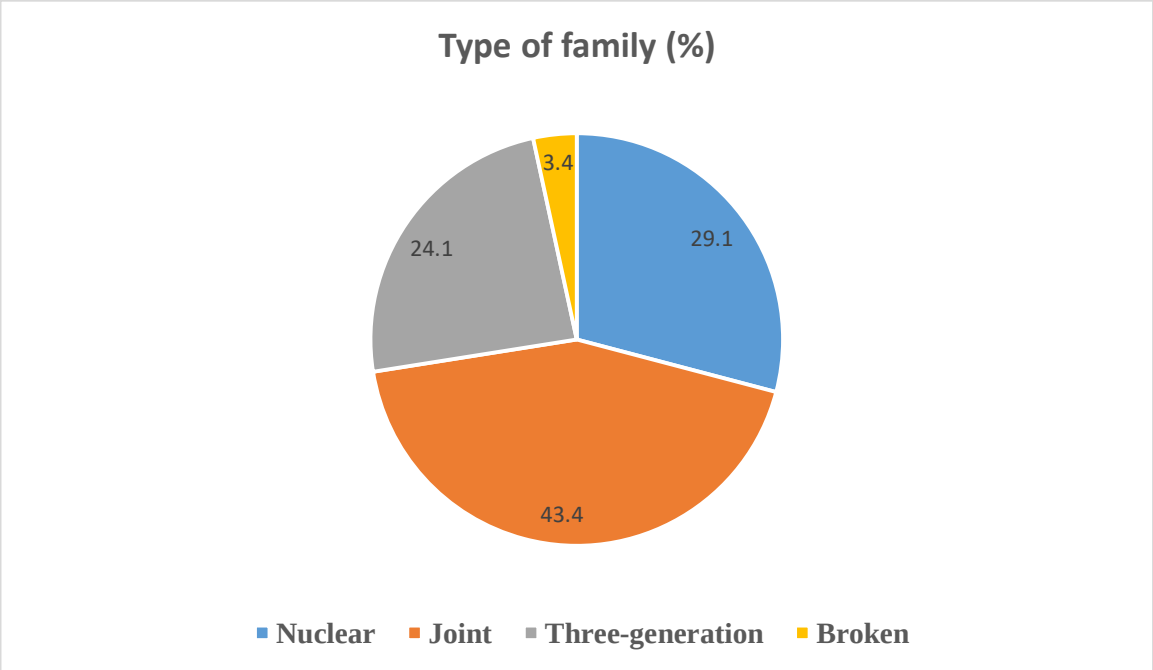


Out of 357 study participants, 90.5% (323) lived in their owned house, whereas, 9.5% (34) were living in rented house.

Table 7: Distribution of the participants according to type of family (n = 357)

Type of Family	Frequency	Percentage	Cumulative percentage
Nuclear	104	29.1	29.1
Joint	155	43.4	72.5
Three-generation	86	24.1	96.6
Broken	12	3.4	100.0
Total	**357**	**100.0**	**100.0**

Graph 7: Distribution of the participants according to type of family

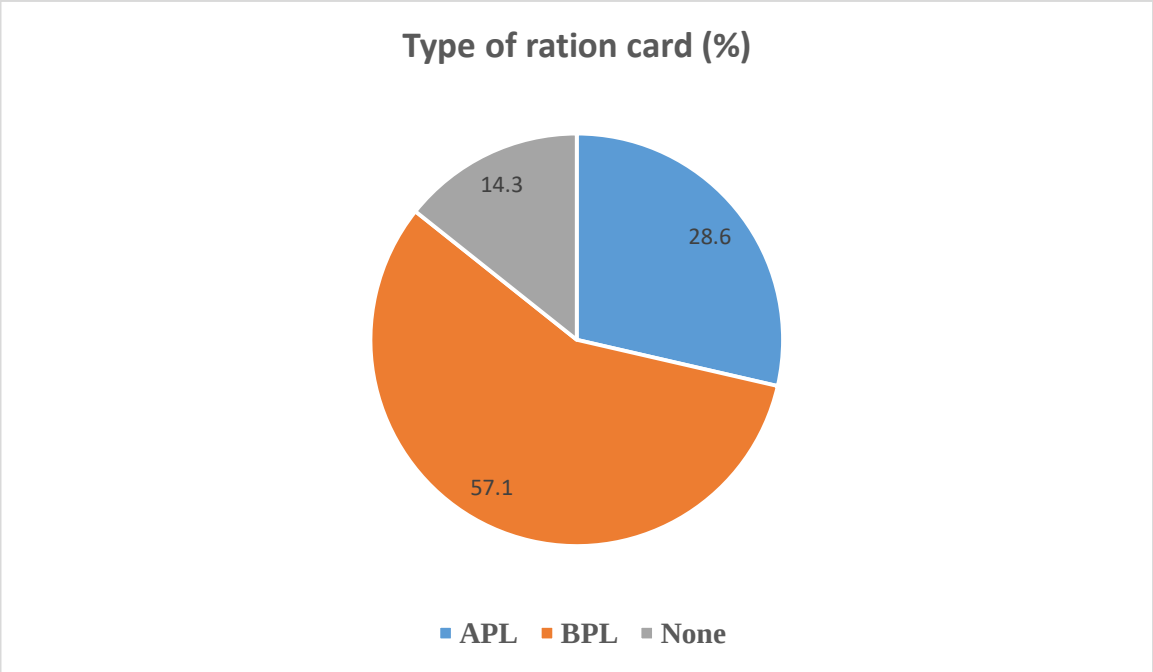


Among the 357 study participants, 155 (43.4%) were living in joint family, 104 (29.1%) were nuclear family, 86 (24.1%) were three-generation family and 12 (3.4%) belonged to broken family.

Table 8: Distribution of the participants according to possession of type of ration card (n = 357)

Type of Ration card	Frequency	Percentage	Cumulative percentage
APL	102	28.6	28.6
BPL	204	57.1	85.7
None	51	14.3	100.0
Total	**357**	**100.0**	**100.0**

Graph 8: Distribution of the participants according to possession of type of ration card

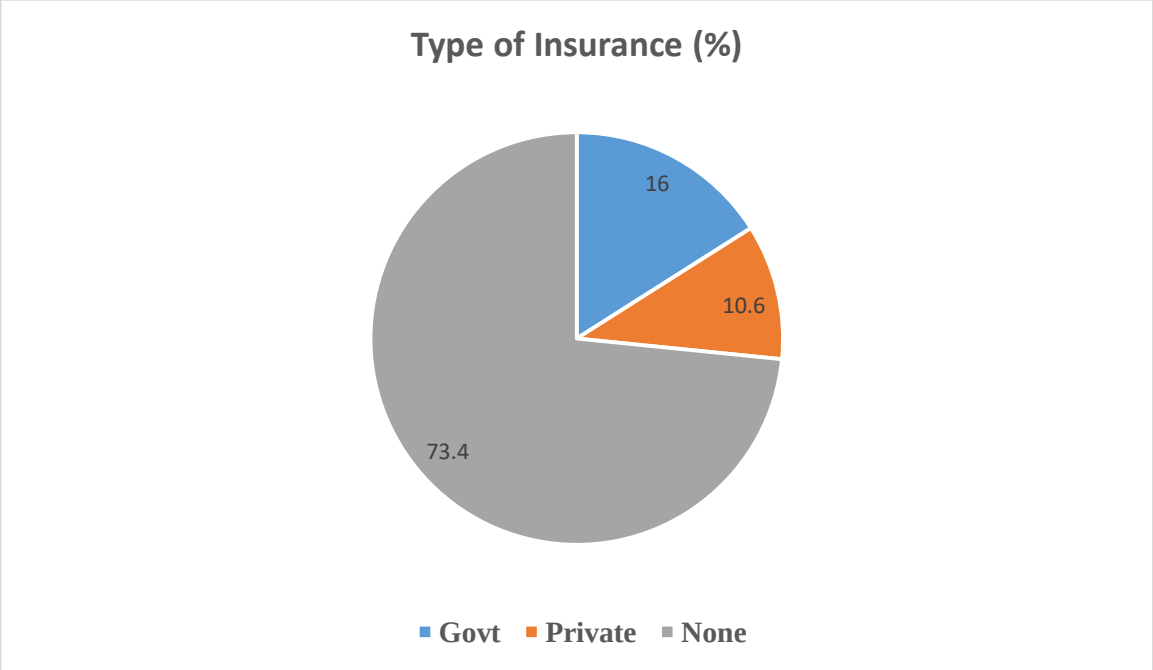


Among the 357 study participants, 204 (57.1%) were BPL card holders, 102 (28.6%) belonged to APL families and 51 (14.3%) had no ration cards.

Table 9: Distribution of the participants according to type of insurance (n = 357)

Type of Insurance	Frequency	Percentage	Cumulative percentage
Govt	57	16.0	16.0
Private	38	10.6	26.6
None	262	73.4	100.0
Total	**357**	**100.0**	**100.0**

Graph 9: Distribution of the participants according to type of insurance

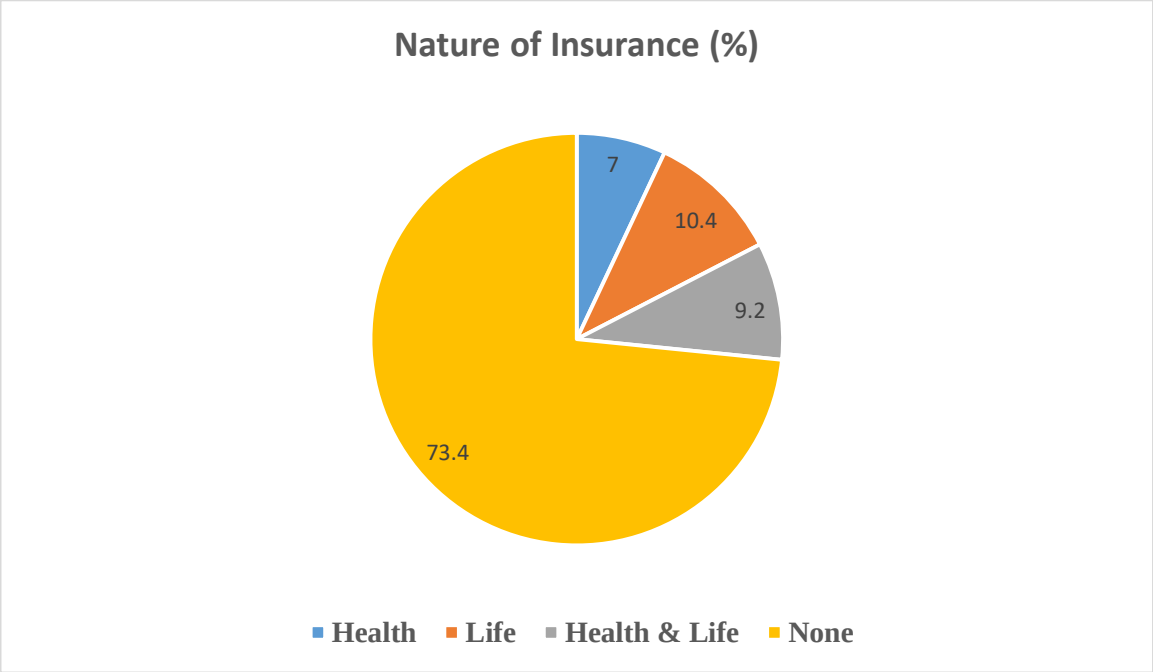


Among the 357 study participants, 262 (73.4%) had no insurance, 57 (16%) had government insurance and 38 (10.6%) had private insurance.

Table 10: Distribution of the participants according to nature of insurance (n = 357)

Nature of Insurance	Frequency	Percentage	Cumulative percentage
Health	25	7.0	7.0
Life	37	10.4	17.4
Health & Life	33	9.2	26.6
None	262	73.4	100.0
Total	**357**	**100.0**	**100.0**

Graph 10: Distribution of the participants according to nature of insurance

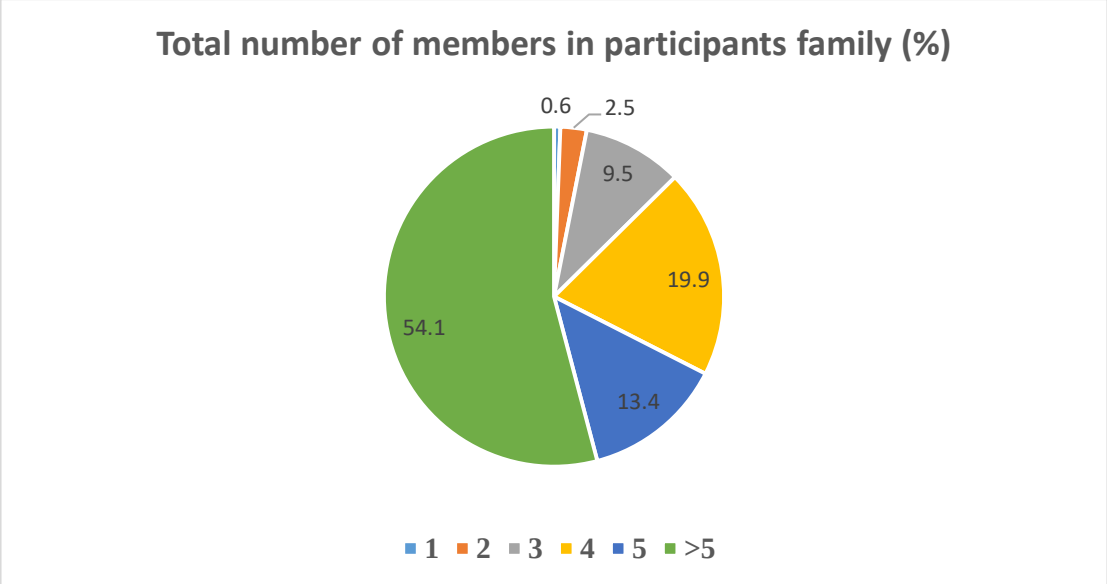


Among the 357 study participants, 262 (73.4%) did not have any insurance, 37 (10.4%) had only life insurance, 33 (9.2%) had both health and life insurance and 25 (7%) had only health insurance.

Table 11: Distribution of the participants according to total number of members in family (n = 357)

Number of Family members	Frequency	Percentage	Cumulative percentage
1	2	0.6	0.6
2	9	2.5	3.1
3	34	9.5	12.6
4	71	19.9	32.5
5	48	13.4	45.9
>5	193	54.1	100.0
Total	**357**	**100.0**	**100.0**

Graph 11: Distribution of the participants according to total number of members in family



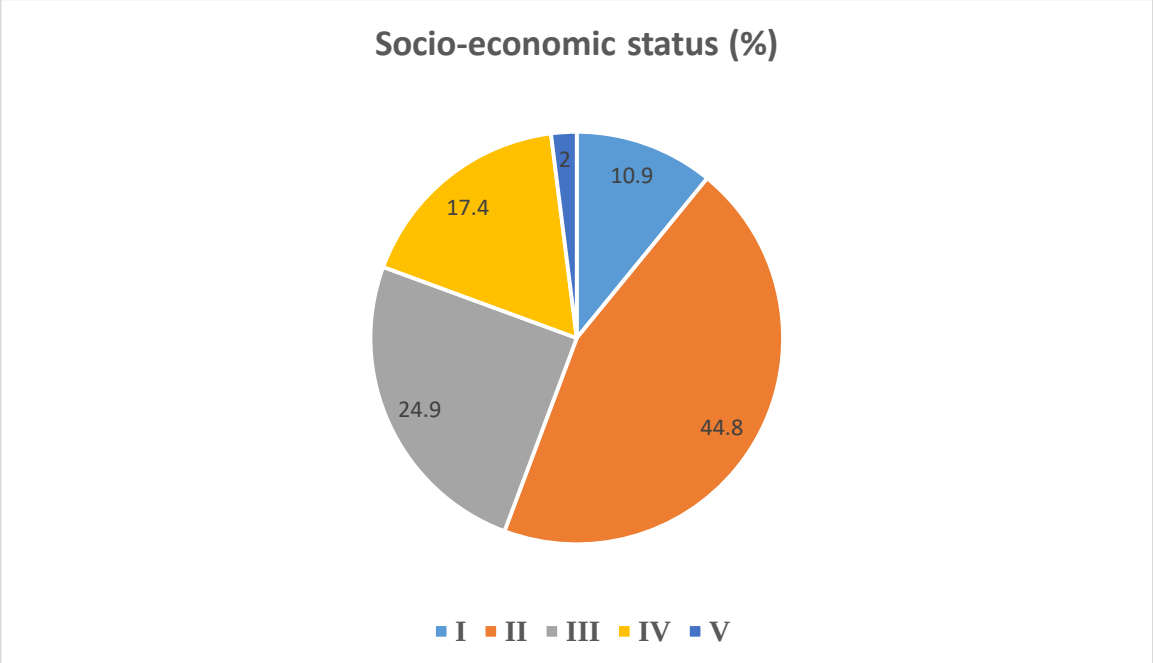
Among the 357 study participants, majority i.e., 193 (54.1%) had family size of more than five members, 48 (13.4%) and 71 (19.9%) had family size of five and four

respectively. On the other hand, 34 (9.5%), 9 (2.5%) and 2 (0.6%) had three, two and one members in the family respectively.

Table 12: Distribution of the participants according to Socio-economic status of the family (n = 357)

Socio-economic class	Frequency	Percentage	Cumulative percentage
I	39	10.9	10.9
II	160	44.8	55.7
III	89	24.9	80.6
IV	62	17.4	98.0
V	7	2.0	100.0
Total	**357**	**100.0**	**100.0**

Graph 12: Distribution of the participants according to Socio-economic status of the family

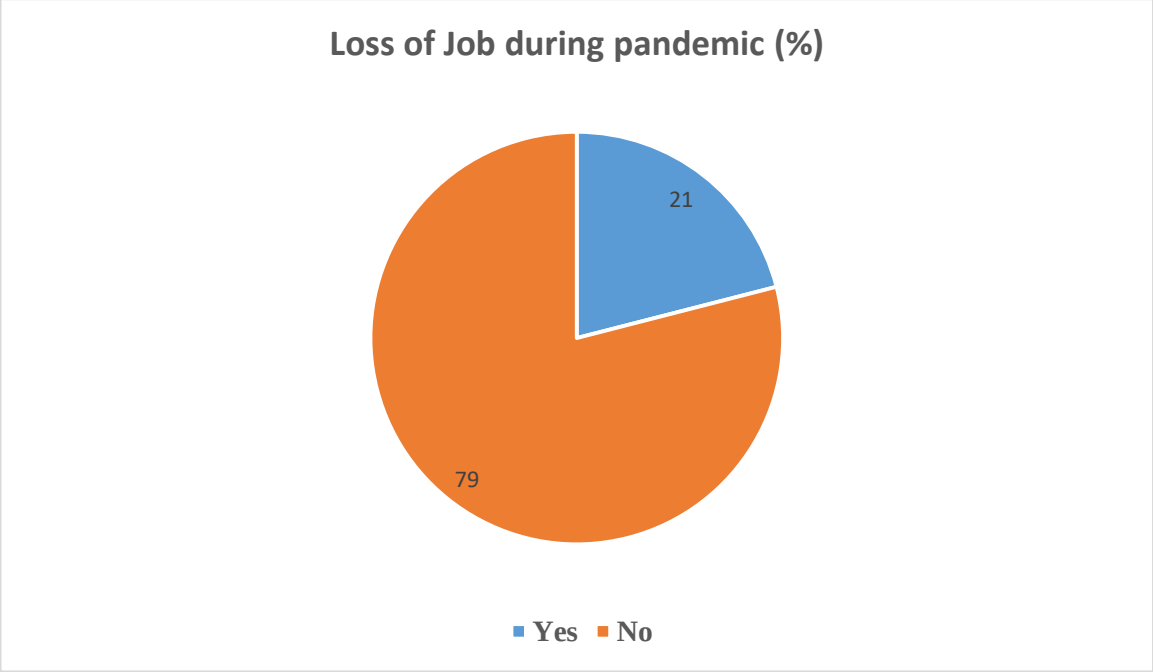


Out of 357 study participants, 39 (10.9%) belong to socio-economic class I. 160 (44.8%), 89 (24.9%), 62 (17.4%) belong to class II, III and IV respectively. Only seven (2%) participants belong to class V socio economic group.

Table 13: Distribution of participants according to loss of job during the pandemic in the family (n = 357)

Loss of Job in Family	Frequency	Percentage	Cumulative percentage
Yes	75	21.0	21.0
No	282	79.0	100.0
Total	**357**	**100.0**	**100.0**

Graph 13: Distribution of participants according to loss of job during the pandemic in the family

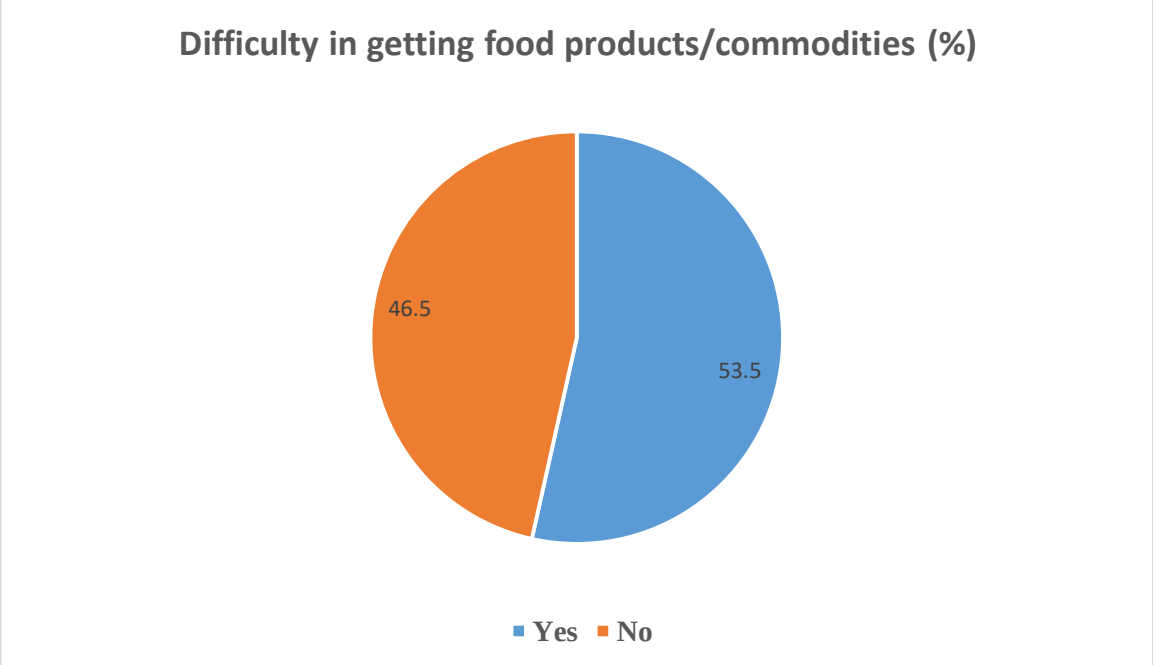


Among the 357 study participants, no loss of job was seen among 282 (79%) participants, 75 (21%) had reported loss of job during the pandemic.

Table 14: Distribution of the participants according to difficulty of family in getting food products/commodities during the pandemic (n = 357)

Difficulty in getting food products & Commodities	Frequency	Percentage	Cumulative percentage
Yes	191	53.5	53.5
No	166	46.5	100.0
Total	**357**	**100.0**	**100.0**

Graph 14: Distribution of the participants according to difficulty of family in getting food products/commodities during the pandemic

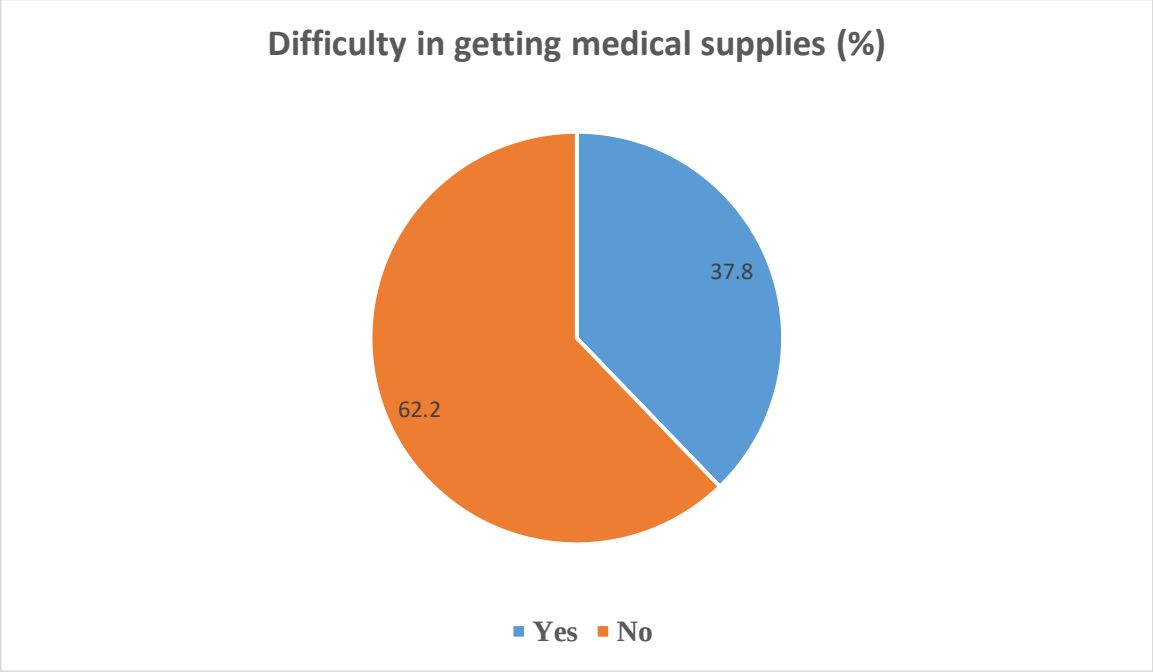


Among the 357 study participants, 191 (53.5%) found difficulty in getting food products. 166 (46.5%) reported no difficulty during covid pandemic.

Table 15: Distribution of difficulty of the participants according to difficulty of family in getting medical supplies during the pandemic (n = 357)

Difficulty in getting medical supplies	Frequency	Percentage	Cumulative percentage
Yes	135	37.8	37.8
No	222	62.2	100.0
Total	**357**	**100.0**	**100.0**

Graph 15: Distribution of difficulty of the participants according to difficulty of family in getting medical supplies during the pandemic

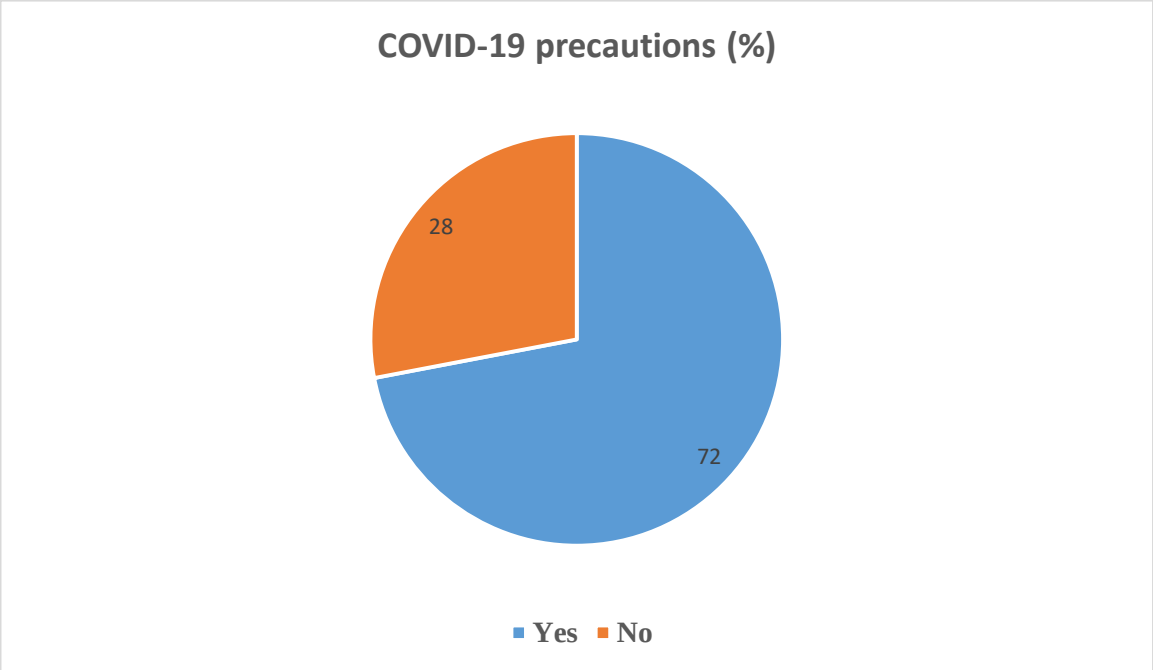


Among the 357 study participants, 222 (62.2%) reported no difficulty in getting medical supplies, whereas, 135 (37.8%) reported difficulty during covid pandemic.

Table 16: Distribution according to adequate COVID-19 precautions followed by family members of the participants during the pandemic (n = 357)

COVID-19 Precautions followed adequately	Frequency	Percentage	Cumulative percentage
Yes	257	72.0	72.0
No	100	28.0	100.0
Total	**357**	**100.0**	**100.0**

Graph 16: Distribution according to adequate COVID-19 precautions followed by family members of the participants during the pandemic

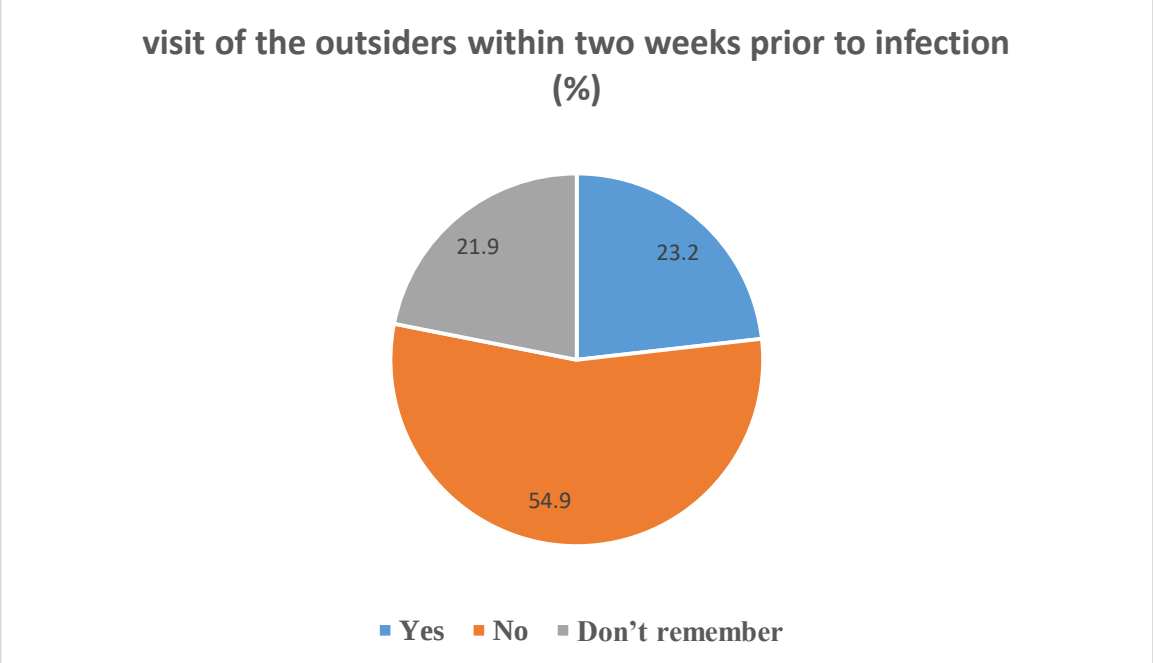


Among the 357 study participants, 257 (72%) reported that their family members followed adequate precautions during pandemic, 100 (28%) did not follow appropriate precautions.

Table 17: Distribution of the participants according to visit of the outsiders to the participants house within two weeks prior to infection (n = 357)

Visit of the outsiders within two weeks prior to infection	Frequency	Percentage	Cumulative percentage
Yes	83	23.2	23.2
No	196	54.9	78.1
Do not remember	78	21.9	100.0
Total	**357**	**100.0**	**100.0**

Graph 17: Distribution of the participants according to visit of the outsiders to the participants house within two weeks prior to infection

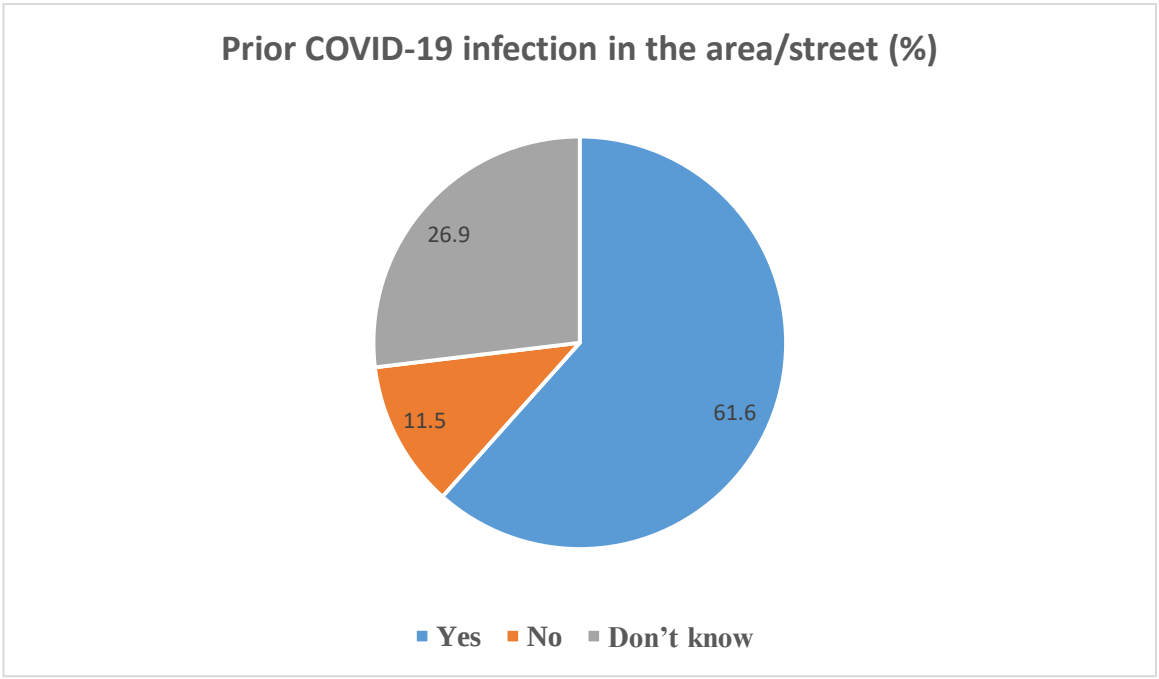


Among the 357 study participants, 196 (54.9%) reported no visit by the outsiders in prior two weeks of infection. 83 (23.2%) confirmed the visit. whereas, 78 (21.8%) said that they did not remember the event during the covid pandemic.

Table 18: Distribution of the participants according to prior COVID-19 infection in their area/street (n = 357)

Prior COVID infection in the area/street	Frequency	Percentage	Cumulative percentage
Yes	220	61.6	61.6
No	41	11.5	73.1
Do not know	96	26.9	100.0
Total	**357**	**100.0**	**100.0**

Graph 18: Distribution of the participants according to prior COVID-19 infection in their area/street

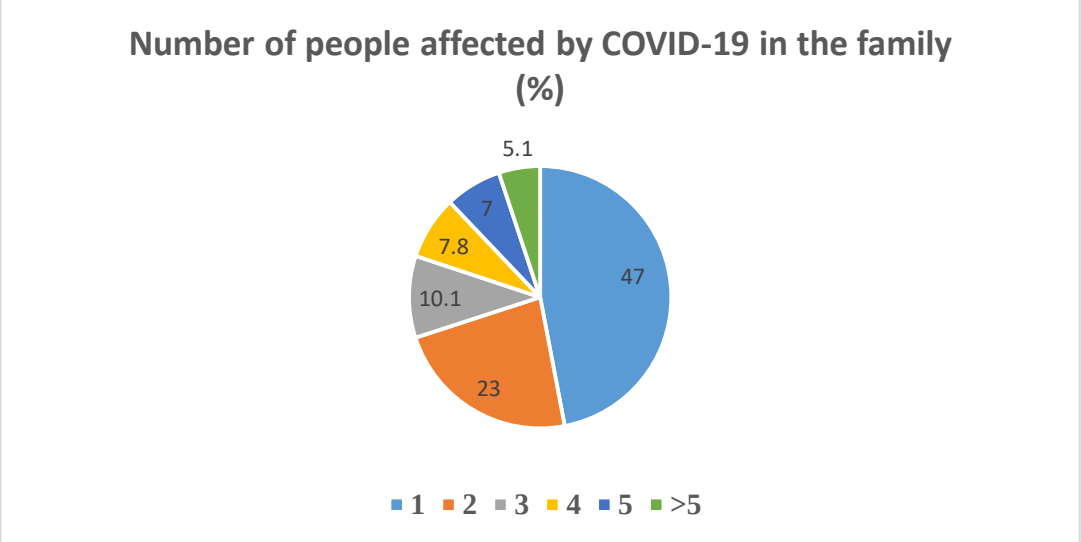


Among the 357 study participants, 220 (61.6%) reported that there was prior covid-19 infection in the vicinity. 96 (26.9%) were unaware and 41 (11.5%) reported that no cases existed before their infection during the covid pandemic.

Table 19: Distribution of the participants according to number of people affected by COVID-19 in the family (n = 357)

Number of people affected by COVID in the family	Frequency	Percentage	Cumulative percentage
1	166	47.0	47.0
2	82	23.0	70.0
3	36	10.1	80.1
4	28	7.8	87.9
5	25	7.0	94.9
>5	20	5.1	100.0
Total	**357**	**100.0**	**100.0**

Graph 19: Distribution of the participants according to number of people affected by COVID-19 in the family

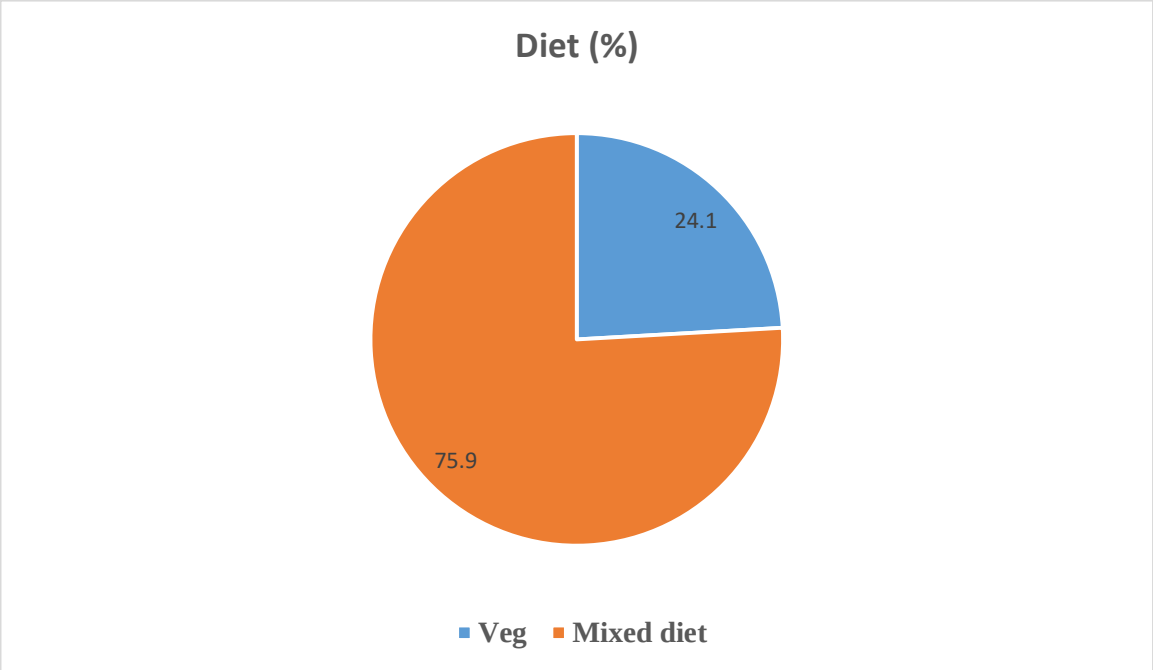


Among the 357 study participants, 166 (47%) reported only one of them was affected in the family. 82 (23%), 36 (10.1%), 28 (7.8%) said that two, three and four members had been affected in the family respectively. 25 (7%) and 20 (5.1%) reported that five and more than five members in the family had been affected by covid-19.

Table 20: Distribution of the participants according to type of diet (n = 357)

Diet	Frequency	Percentage	Cumulative percentage
Veg	86	24.1	24.1
Mixed diet	271	75.9	100.0
Total	**357**	**100.0**	**100.0**

Graph 20: Distribution of the participants according to type of diet

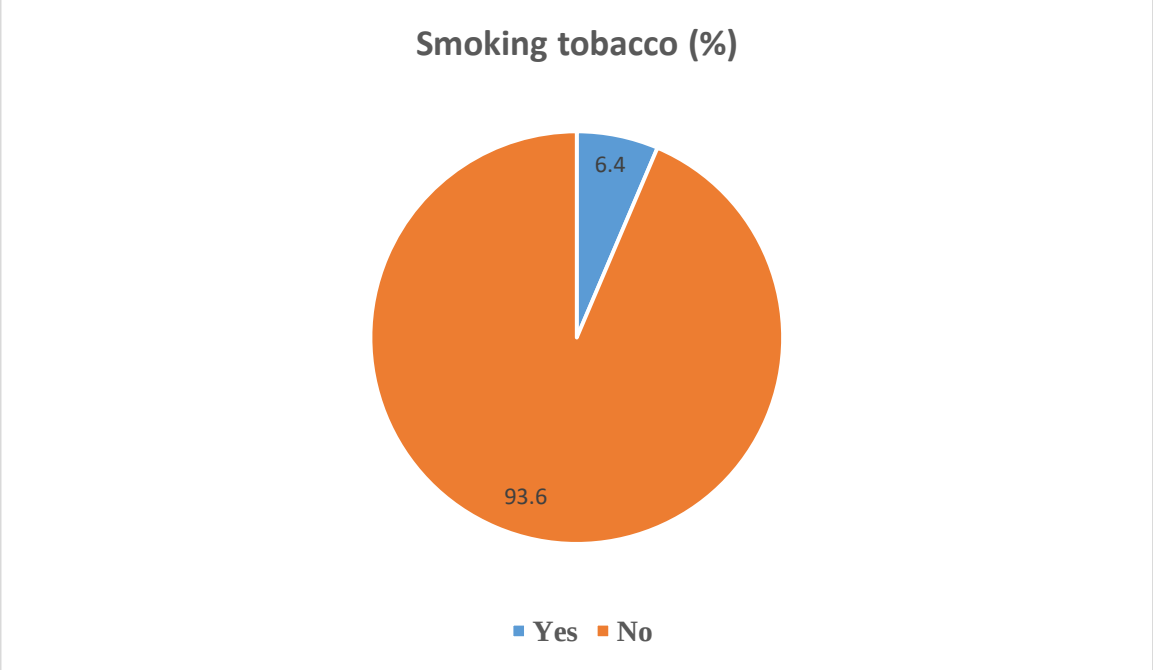


Out of 357 study participants, 271 (75.9%) were practicing mixed diet and 86 (24.1%) were vegetarians.

Table 21: Distribution of the participants according to smoking tobacco (n = 357)

Smoking tobacco	Frequency	Percentage	Cumulative percentage
Yes	23	6.4	6.4
No	334	93.6	100.0
Total	**357**	**100.0**	**100.0**

Graph 21: Distribution of the participants according to smoking tobacco

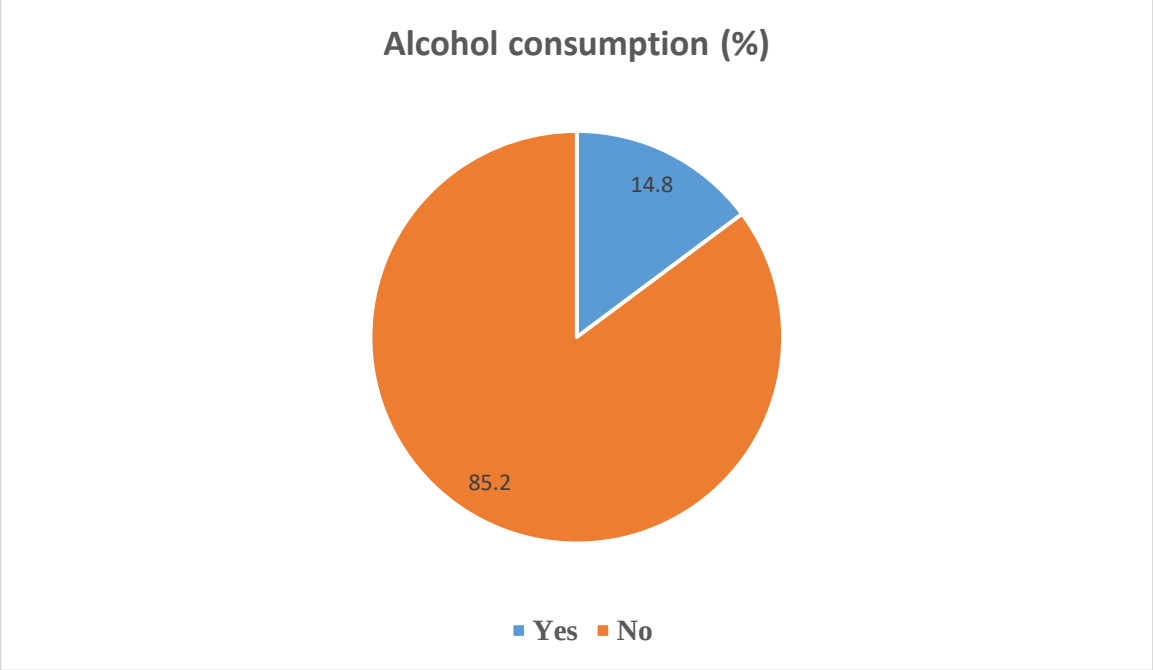


Among the 357 study participants, 334 (93.6%) were non-smokers, whereas 23 (6.4%) were tobacco smokers.

Table 22: Distribution of the participants according to alcohol consumption (n = 357)

Alcohol consumption	Frequency	Percentage	Cumulative percentage
Yes	53	14.8	14.8
No	304	85.2	100.0
Total	**357**	**100.0**	**100.0**

Graph 22: Distribution of the participants according to alcohol consumption

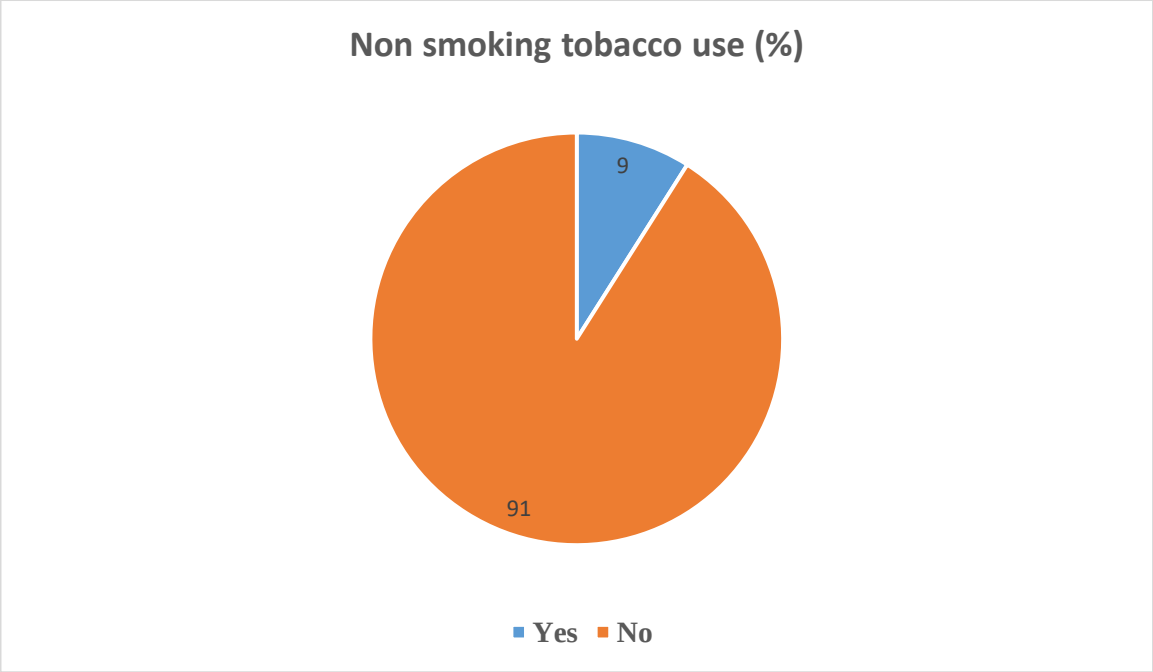


Among the 357 study participants, 304 (85.2%) reported nil consumption of alcohol and 53 (14.8%) declared that they had consumed alcohol in their lifetime.

Table 23: Distribution of the participants according to non-smoking tobacco consumption (n = 357)

Tobacco	Frequency	Percentage	Cumulative percentage
Yes	32	9.0	9.0
No	325	91.0	100.0
Total	**357**	**100.0**	**100.0**

Graph 23: Distribution of the study participants according to non-smoking tobacco consumption

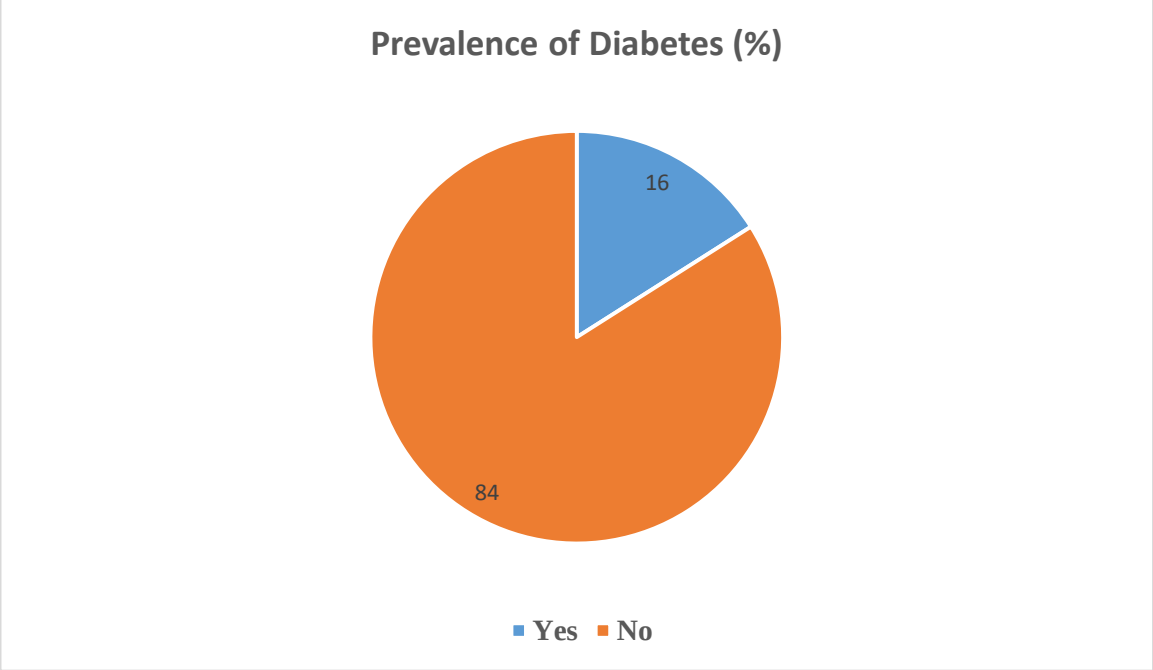


Among the 357 study participants, 325 (91%) had reported no consumption of non-smoking tobacco, 32 (9%) had consumed it in their lifetime.

Table 24: Distribution of the participants according to prevalence of diabetes (n = 357)

Diabetes Prevalence	Frequency	Percentage	Cumulative percentage
Yes	57	16.0	16.0
No	300	84.0	100.0
Total	**357**	**100.0**	**100.0**

Graph 24: Distribution of the participants according to prevalence of diabetes

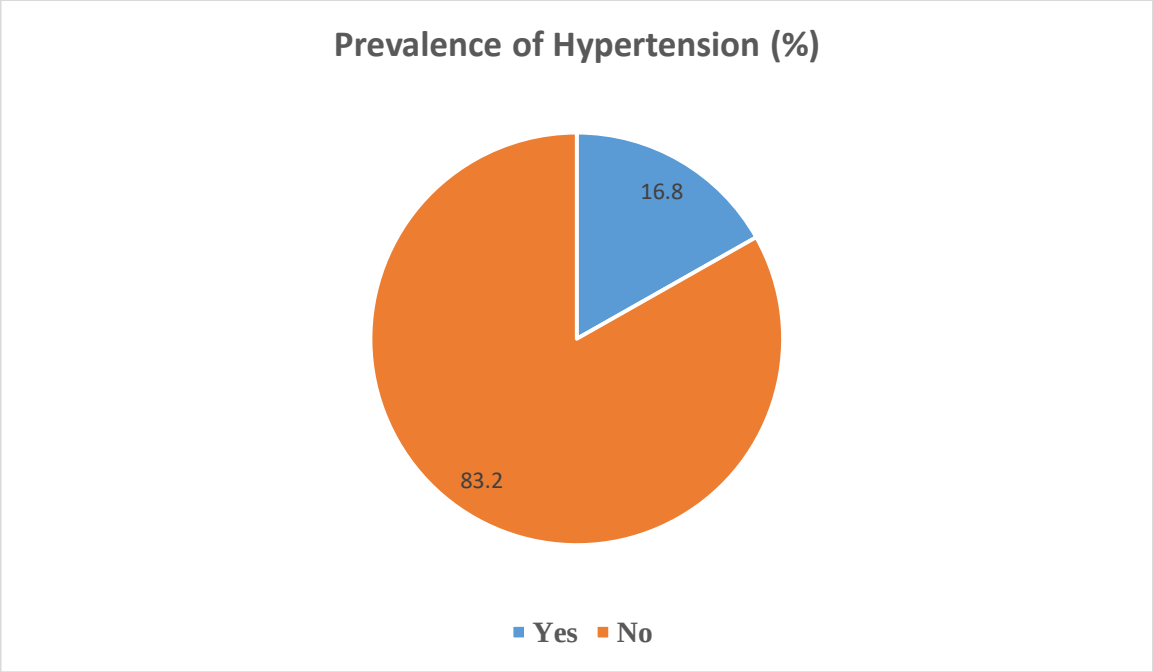


Among the 357 study participants, 57 (16%) reported that they had diabetes and 300 (84%) had no history of diabetes.

Table 25: Distribution of the participants according to prevalence of hypertension (n = 357)

Hypertension prevalence	Frequency	Percentage	Cumulative percentage
Yes	60	16.8	16.8
No	297	83.2	100.0
Total	**357**	**100.0**	**100.0**

Graph 25: Distribution of the participants according to prevalence of hypertension.

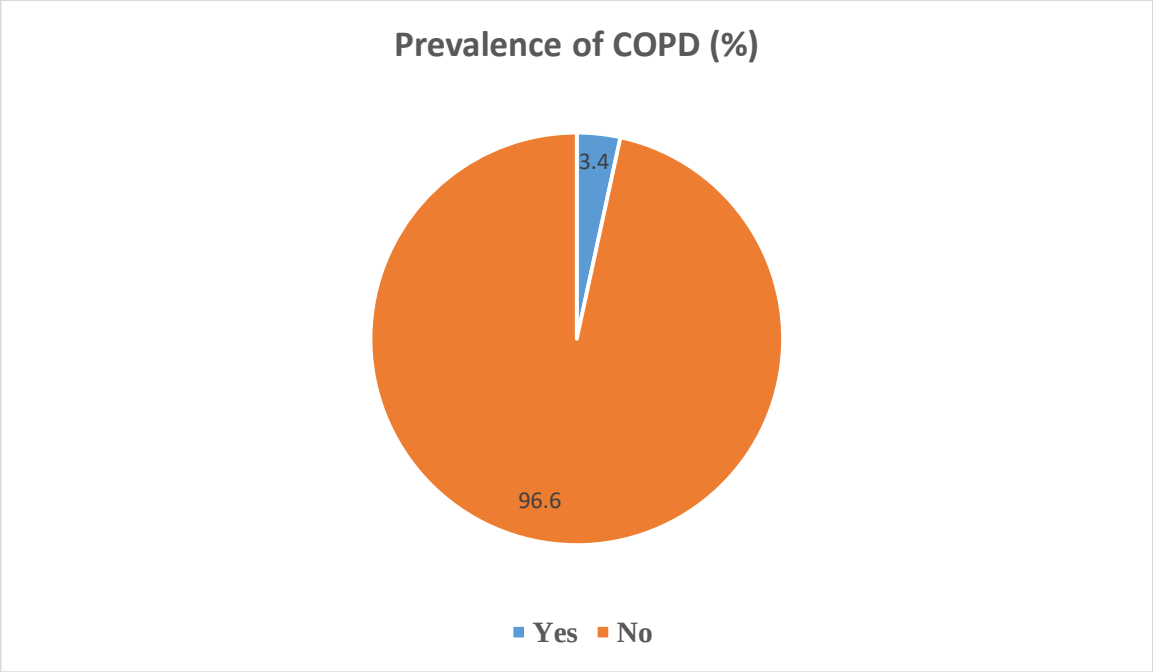


Among the 357 study participants, 60 (16.8%) reported that they had history of hypertension and 297 (83.2%) had negative history.

Table 26: Distribution of the participants according to prevalence of chronic obstructive pulmonary disease (n = 357)

COPD prevalence	Frequency	Percentage	Cumulative percentage
Yes	12	3.4	3.4
No	345	96.6	100.0
Total	**357**	**100.0**	**100.0**

Graph 26: Distribution of the participants according to prevalence of chronic obstructive pulmonary disease

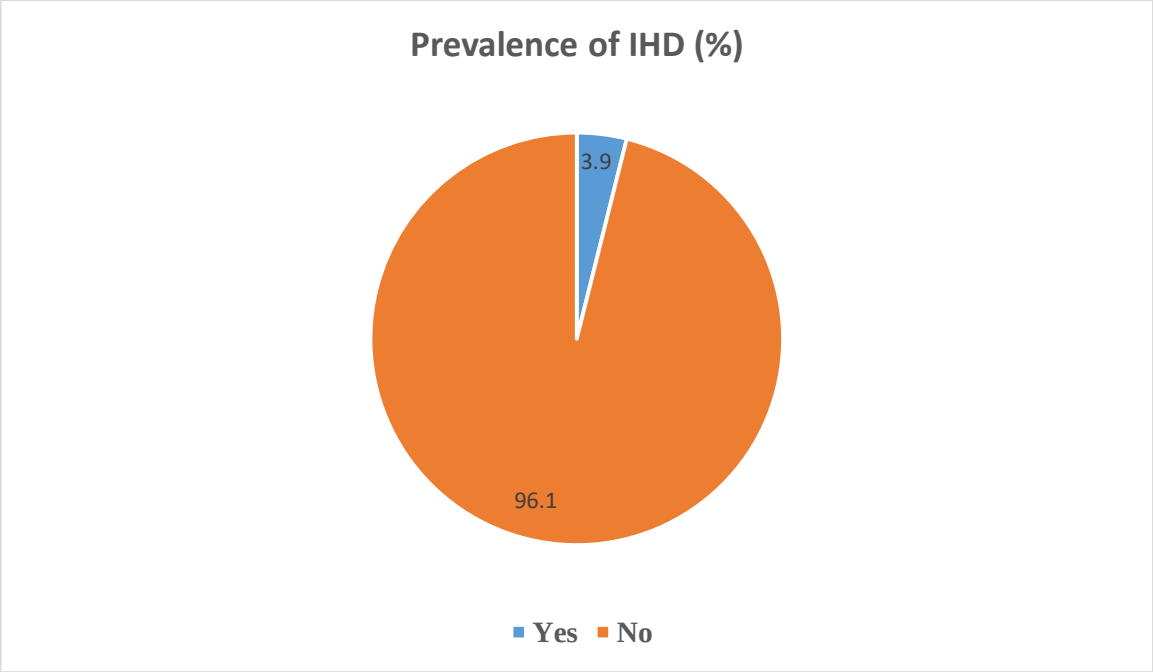


Among the 357 study participants, 12 (3.4%) had history of COPD, while 345 (96.6%) did not have any history of COPD.

Table 27: Distribution of the participants according to prevalence of ischemic heart disease (n = 357)

IHD prevalence	Frequency	Percentage	Cumulative percentage
Yes	14	3.9	3.9
No	343	96.1	100.0
Total	**357**	**100.0**	**100.0**

Graph 27: Distribution of the participants according to prevalence of ischemic heart disease

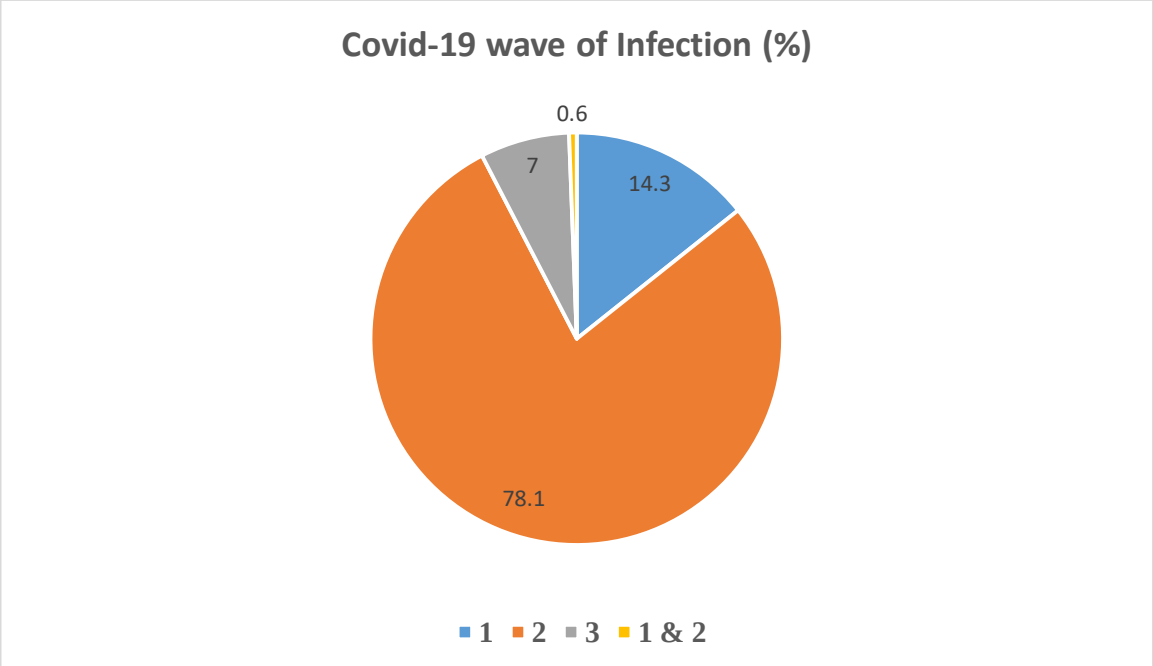


Among the 357 study participants, 14 (3.9%) had history of IHD, while 343 (96.1%) did not have any history of IHD.

Table 28: Distribution of the participants according to COVID-19 wave of infection (n = 357)

COVID-19 Wave of infection	Frequency	Percentage	Cumulative percentage
1	51	14.3	14.3
2	279	78.1	92.4
3	25	7.0	99.4
1 & 2	2	0.6	100.0
Total	**357**	**100.0**	**100.0**

Graph 28: Distribution of the participants according to COVID-19 wave of infection

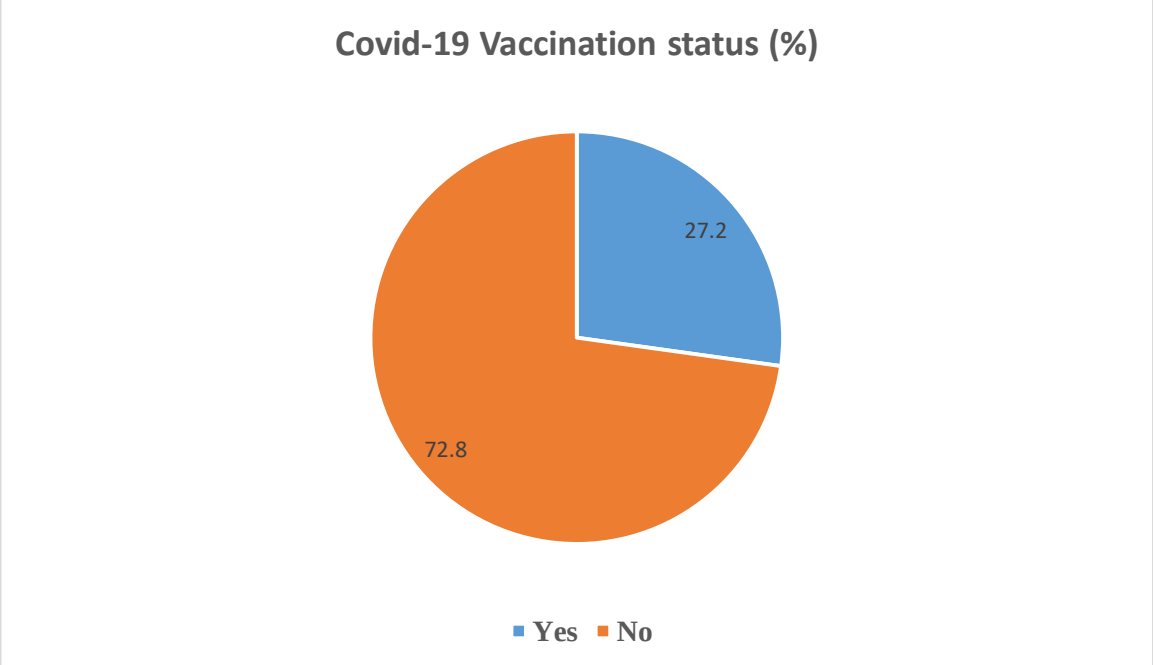


Among the 357 study participants, 279 (78.1%) had contacted covid-19 infection during second wave. 51 (14.3%) during first wave and 25 (7%) reported it during third wave respectively. Only 2 (0.6%) had it during first and second waves.

Table 29: Distribution of the participants according to COVID-19 vaccination status prior to COVID-19 infection (n = 357)

Covid-19 Vaccination status prior to infection	Frequency	Percentage	Cumulative percentage
Yes	97	27.2	27.2
No	260	72.8	100.0
Total	**357**	**100.0**	**100.0**

Graph 29: Distribution of the participants according to COVID-19 vaccination status prior to COVID-19 infection

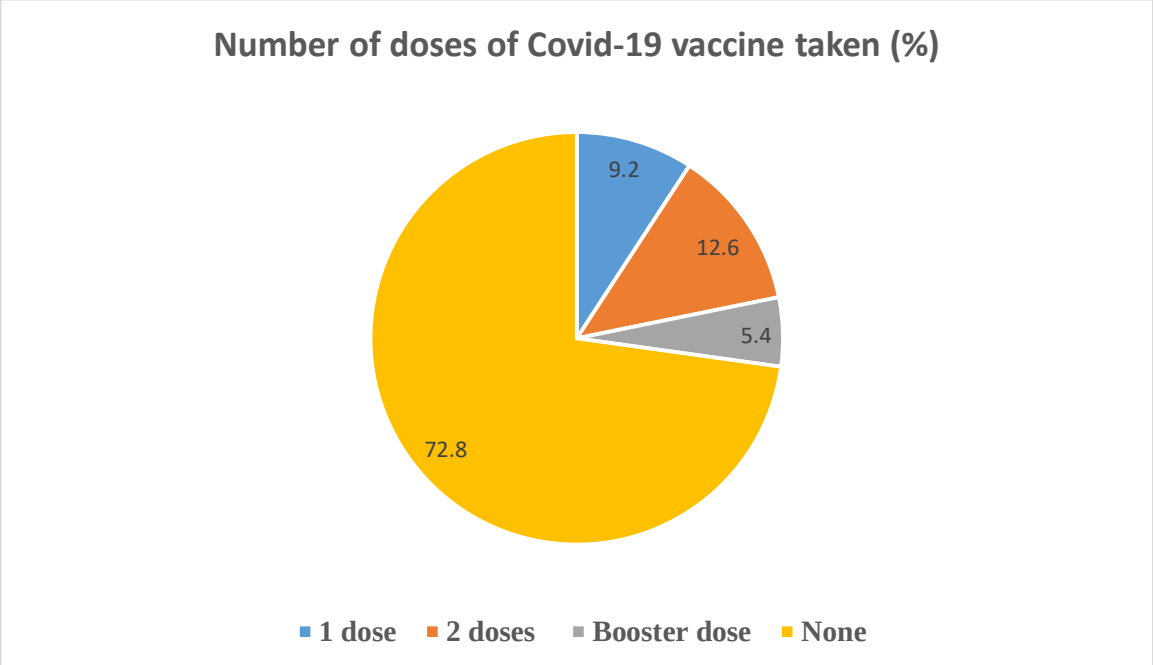


Among the 357 study participants, 260 (72.8%) had not been vaccinated prior to infection, only 97 (27.2%) had been vaccinated prior to infection during the pandemic.

Table 30: Distribution of the participants according to number of doses of COVID-19 vaccine taken prior to COVID-19 infection (n = 357)

Number of doses of Covid-19 vaccine taken prior to infection	Frequency	Percentage	Cumulative percentage
1 dose	33	9.2	9.2
2 doses	45	12.6	21.8
Booster dose	19	5.4	27.2
None	260	72.8	100.0
Total	**357**	**100.0**	**100.0**

Graph 30: Distribution of the participants according to number of doses of COVID-19 vaccine taken prior to COVID-19 infection

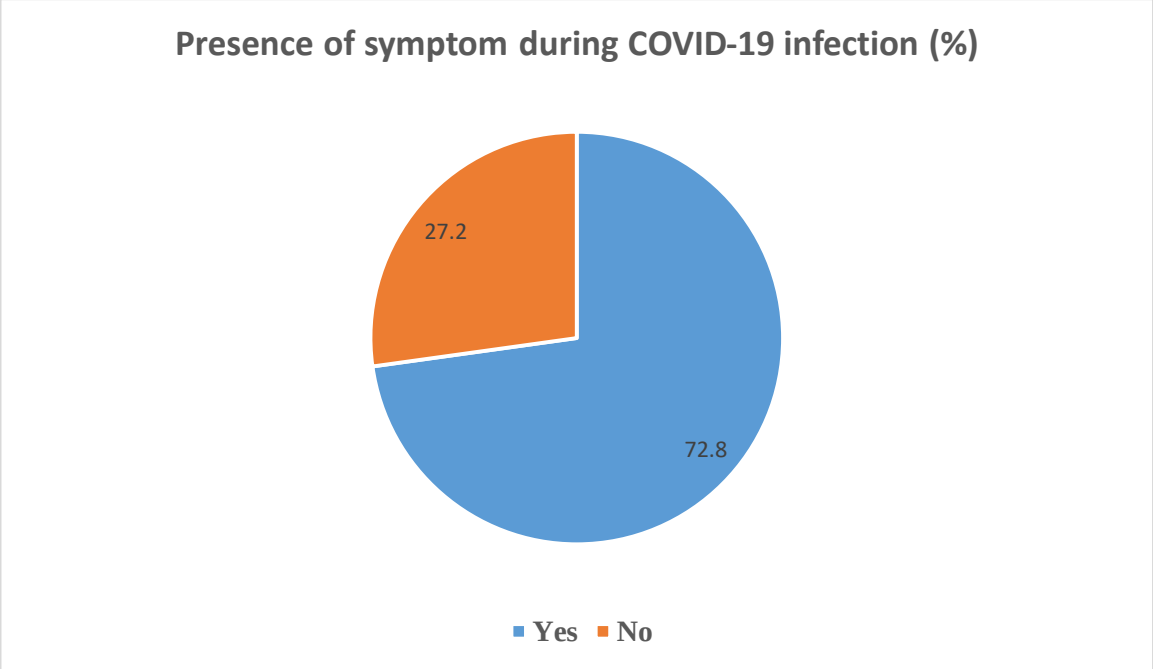


Among the 357 study participants, 260 (72.8%) did not receive any covid-19 vaccine before infection. 45 (12.6%) received only one dose, 33 (9.2%) received two doses and 19 (5.3%) received booster dose prior to infection during the pandemic.

Table 31: Distribution of the participants according to presence of symptom during COVID-19 infection (n = 357)

Symptomatic during illness	Frequency	Percentage	Cumulative percentage
Yes	260	72.8	72.8
No	97	27.2	100.0
Total	**357**	**100.0**	**100.0**

Graph 31: Distribution of the participants according to presence of symptom during COVID-19 infection

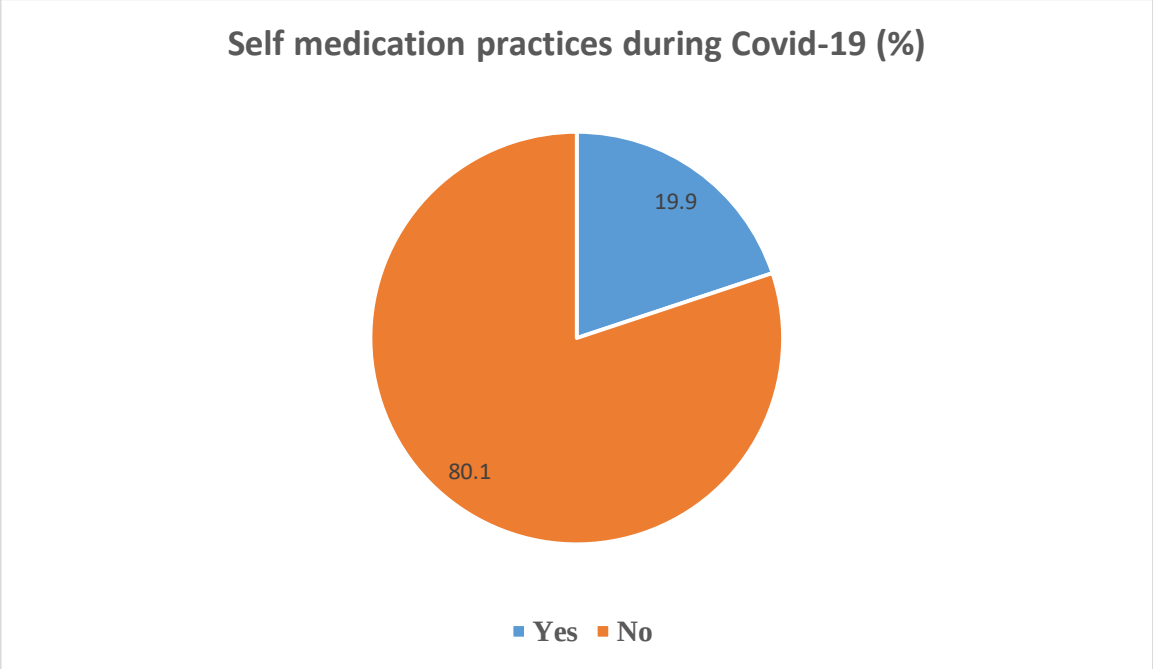


Among the 357 study participants, 260 (72.8%) had at-least one symptom during the infection. Whereas, 97 (27.2%) reported no symptom during the illness.

Table 32: Distribution of the participants according to intake of self-medication during covid-19 illness (n = 357)

Self-medication during covid-19 illness	Frequency	Percentage	Cumulative percentage
Yes	71	19.9	19.9
No	286	80.1	100.0
Total	**357**	**100.0**	**100.0**

Graph 32: Distribution of the participants according to intake of self-medication during covid-19 illness

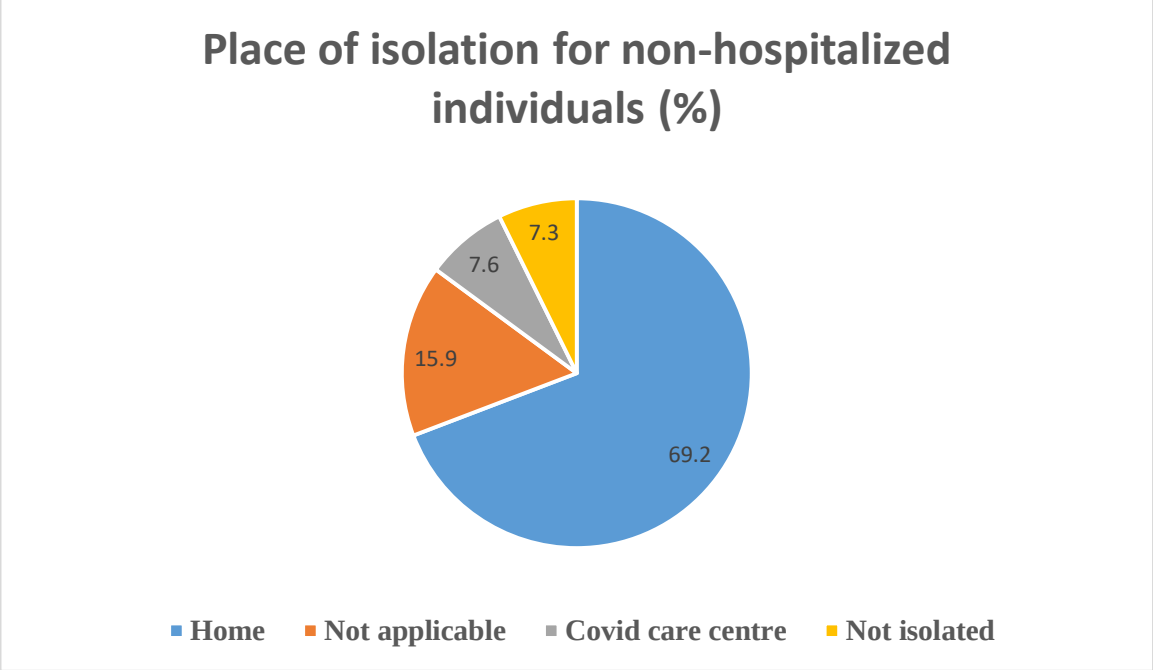


Among the 357 study participants, 71 (19.9%) reported self-medication practices during covid-19 illness, while 286 (80.1%) did not take any self-medication.

Table 33: Distribution of the participants according to Place of isolation for non-hospitalized individuals. (n = 300)

Place of isolation	Frequency	Percentage	Cumulative percentage
Home	247	82.3	82.3
Covid care centre	27	9.0	91.3
Not isolated	26	8.7	100.0
Total	**300**	**100.0**	**100.0**

Graph 33: Distribution of the participants according to Place of isolation for non-hospitalized individuals.

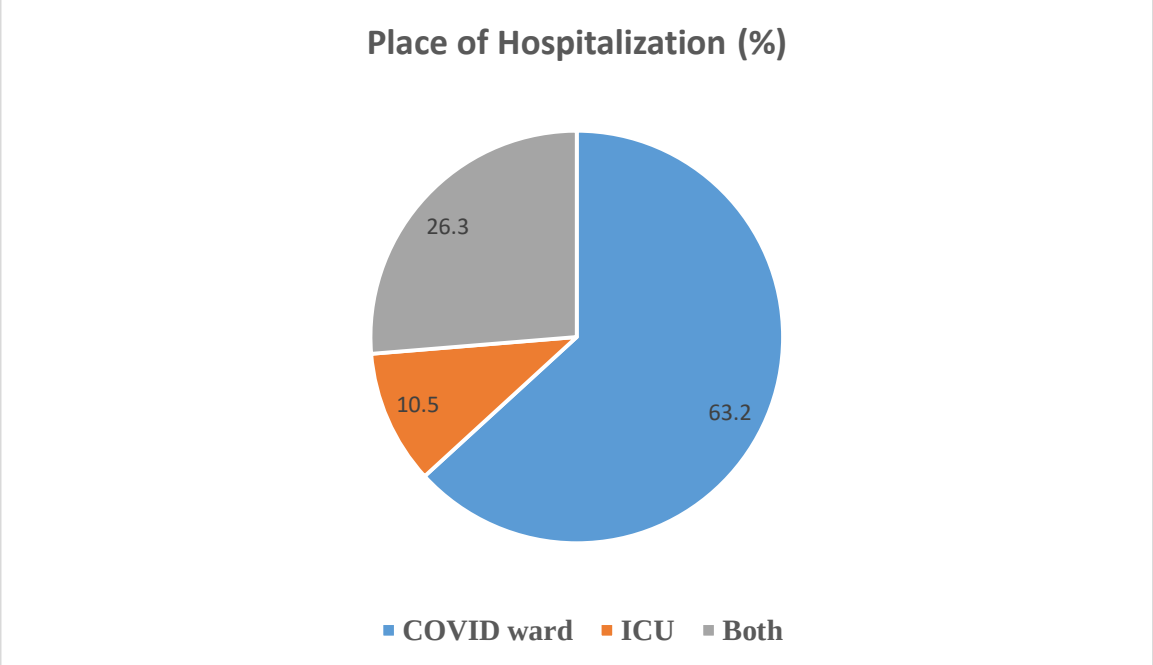


Among the 300 non-hospitalized study participants, 247 (69.2%) were isolated at home, 27 (7.6%) at covid care centres, 26 (7.3%) were not isolated during the covid pandemic.

Table 34: Distribution of the participants according to place of hospital admission for hospitalized individuals. (n = 57)

Admitted ward	Frequency	Percentage	Cumulative percentage
COVID ward	36	63.2	63.2
ICU	6	10.5	73.7
Both	15	26.3	100.0
Total	**57**	**100.0**	**100.0**

Graph 34: Distribution of the participants according to place of hospital admission for hospitalized individuals

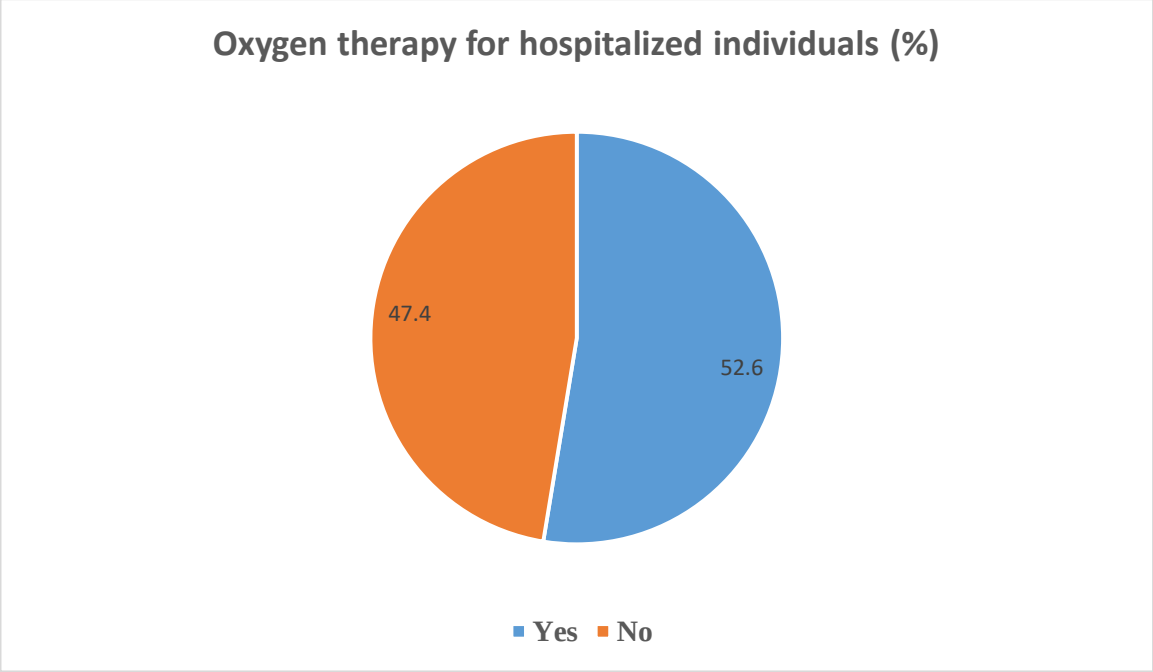


Among the 57 hospitalized study participants, 36 (63.2%) were admitted in COVID ward, 15 (26.3%) in both COVID ward or ICU, while 6 (10.5%) were admitted in ICU only.

Table 35: Distribution of the participants according to oxygen therapy for hospitalized individuals for Covid-19. (n = 57)

Oxygen therapy for Covid-19	Frequency	Percentage	Cumulative percentage
Yes	30	52.6	52.6
No	27	47.4	100.0
Total	**57**	**100.0**	**100.0**

Graph 35: Distribution of the participants according to oxygen therapy for hospitalized individuals for Covid-19.

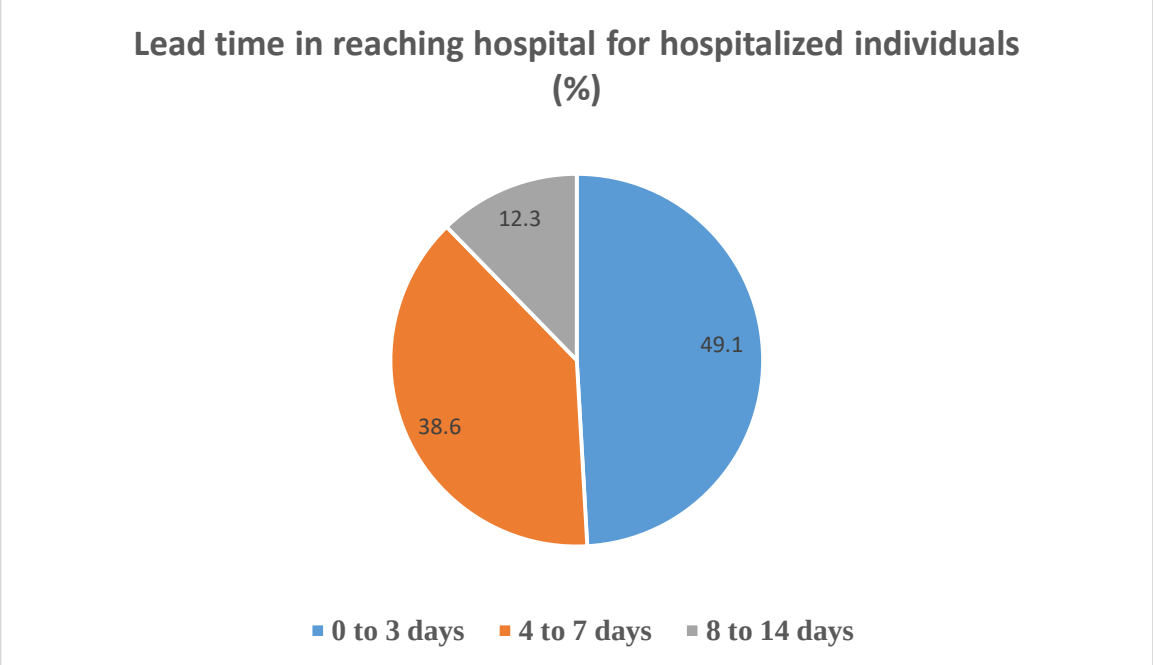


Among the 57 hospitalized study participants for Covid-19 treatment, 30 (52.6%) received oxygen therapy, 27 (47.4%) did not receive any oxygen therapy.

Table 36: Distribution of the participants according to lead time to reach hospital for hospitalized individuals. (n = 57)

Lead time in reaching hospital	Frequency	Percentage	Cumulative percentage
0 to 3 days	28	49.1	49.1
4 to 7 days	22	38.6	87.7
8 to 14 days	7	12.3	100.0
Total	**57**	**100.0**	**100.0**

Graph 36: Distribution of the participants according to lead time to reach hospital for hospitalized individuals.

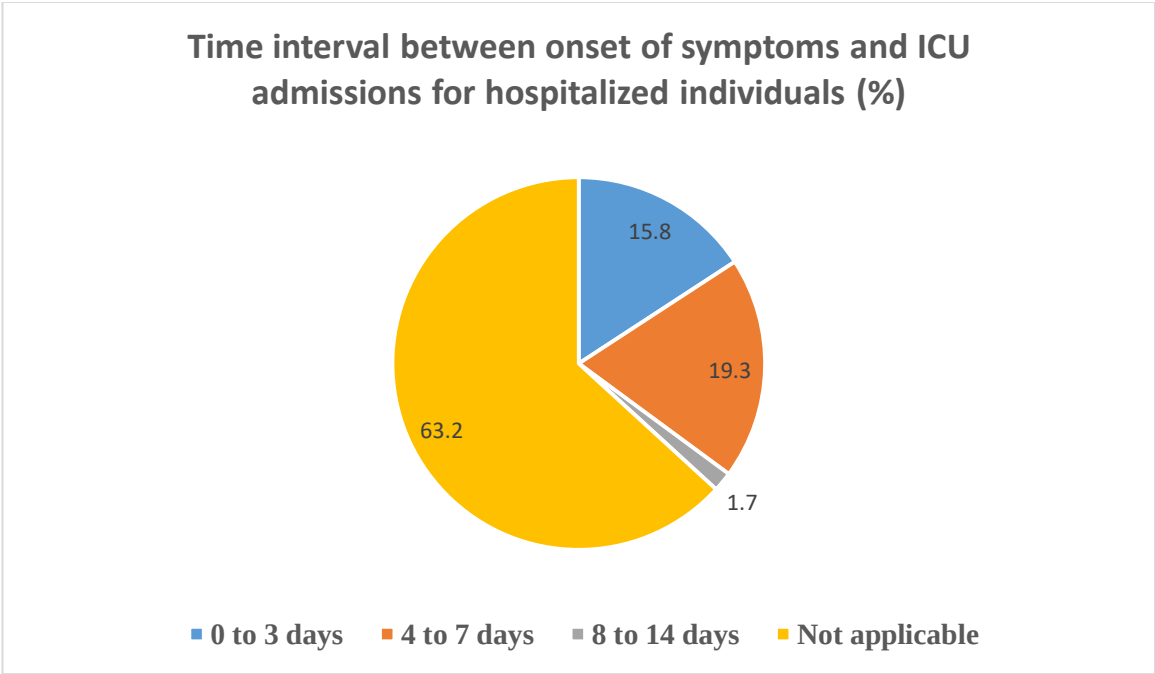


Among the 57 hospitalized study participants for Covid-19, 28 (49.1%) reached hospital within three days of symptoms onset, 22 (38.6%) within seven days, while 7 (12.3%) between seven and fourteenth day.

Table 37: Distribution of the participants according to time interval between Covid-19 symptoms onset and ICU admissions for hospitalized individuals. (n = 57)

Time interval between onset of symptoms and ICU admissions	Frequency	Percentage	Cumulative percentage
0 to 3 days	9	15.8	15.8
4 to 7 days	11	19.3	35.1
8 to 14 days	1	1.7	36.8
Not applicable	36	63.2	100.0
Total	**57**	**100.0**	**100.0**

Graph 37: Distribution of the participants according to time interval between Covid-19 symptoms onset and ICU admissions for hospitalized individuals.

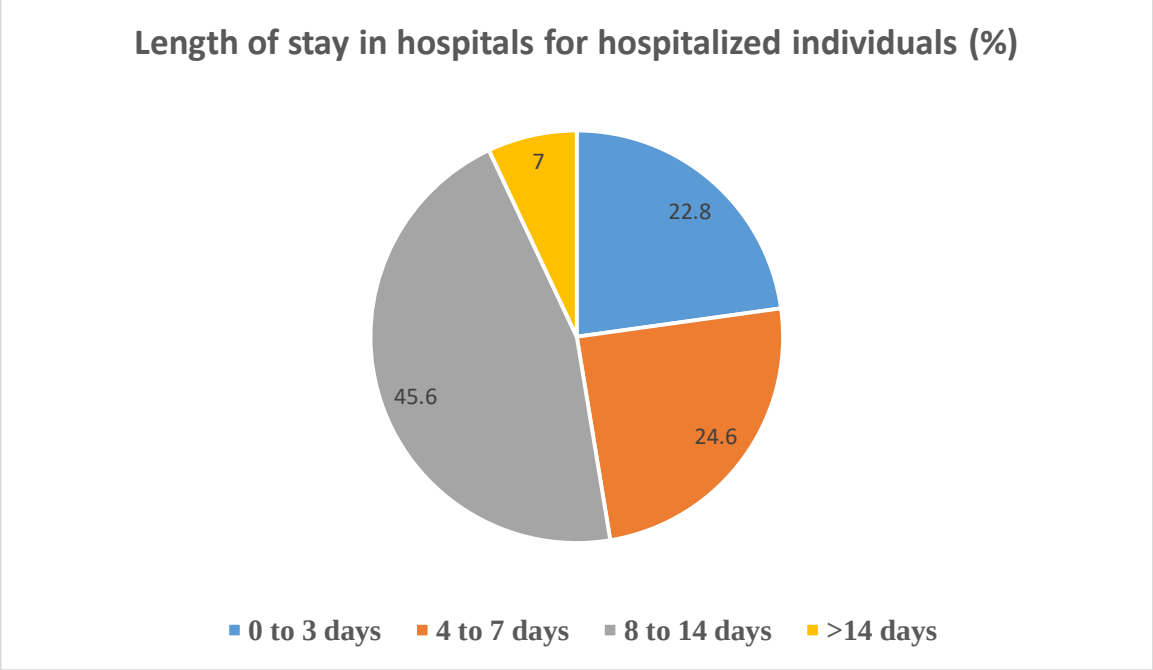


Among the 57 hospitalized study participants, 9 (15.8%) were admitted in ICU within three days of symptom onset, 11 (19.3%) between four and seven days, 1 (1.7%) between eight and fourteen days, while 36 (63.2%) participants who were hospitalized did not receive any ICU care.

Table 38: Distribution of the participants according to length of stay in hospitals for Covid-19 hospitalized individuals. (n = 57)

Duration of stay in hospital for Covid-19	Frequency	Percentage	Cumulative percentage
0 to 3 days	13	22.8	22.8
4 to 7 days	14	24.6	47.4
8 to 14 days	26	45.6	93.0
>14 days	4	7.0	100.0
Total	**57**	**100.0**	**100.0**

Graph 38: Distribution of the participants according to duration of stay in hospitals for Covid-19 hospitalized individuals.

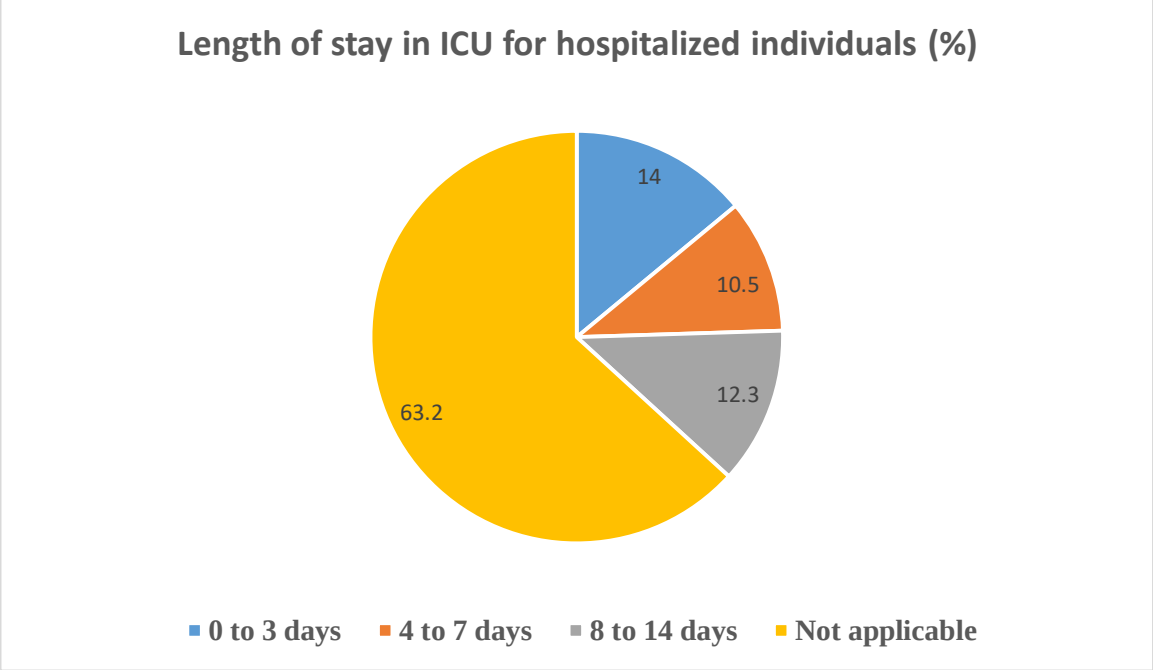


Among the 57 hospitalized study participants, 13 (22.8%) stayed less than three days in hospital, 14 (24.6%) stayed between four to seven days, 26 (45.6%) stayed between eight to fourteen days, and only 4 (7%) for more than fourteen days in hospital.

Table 39: Distribution of the participants according to length of stay in ICU among Covid-19 hospitalized individuals. (n = 57)

Length of stay in ICU for Covid-19	Frequency	Percentage	Cumulative percentage
0 to 3 days	8	14.0	14.0
4 to 7 days	6	10.5	24.5
8 to 14 days	7	12.3	36.8
Not applicable	36	63.2	100.0
Total	**57**	**100.0**	**100.0**

Graph 39: Distribution of the participants according to length of stay in ICU among Covid-19 hospitalized individuals.

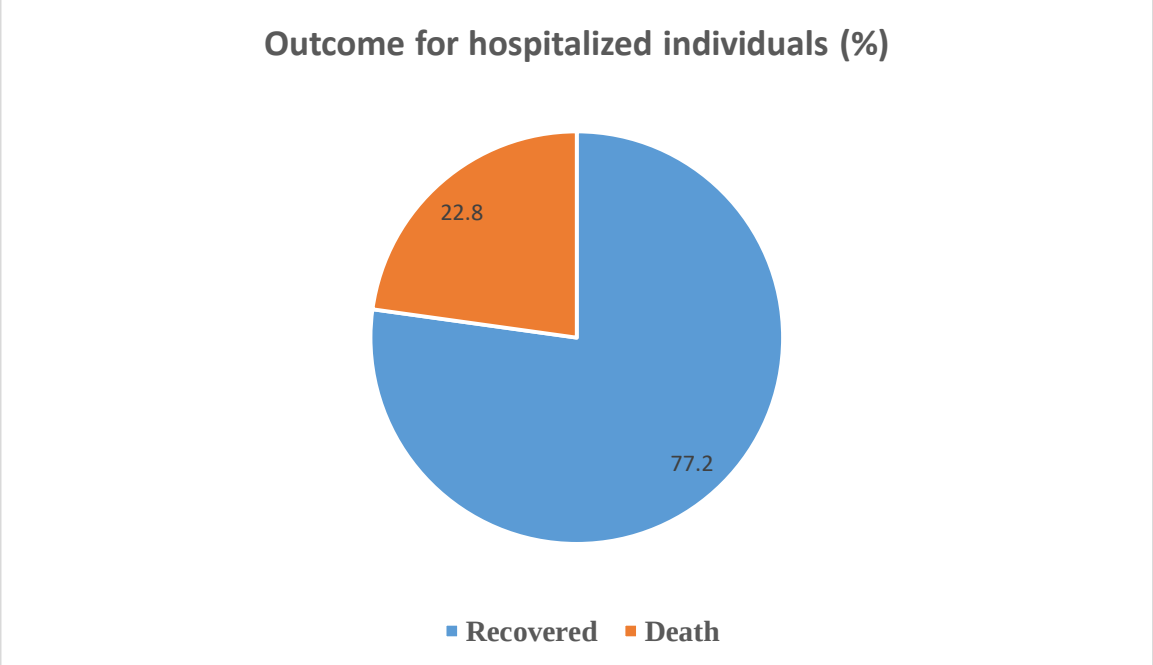


Among the 57 hospitalized study participants, 8 (14%) stayed in ICU for less than three days, 6 (10.5%) stayed between four to seven days, 7 (12.3%) stayed between eight to fourteen days. While 36 (63.2%) participants who were hospitalized did not receive any ICU care.

Table 40: Distribution of the participants according to outcome for hospitalized individuals for Covid-19. (n = 57)

Outcome of hospitalized individuals for Covid-19	Frequency	Percentage	Cumulative percentage
Recovered	44	77.2	77.2
Death	13	22.8	100.0
Total	**57**	**100.0**	**100.0**

Graph 40: Distribution of the participants according to Outcome for hospitalized individuals for Covid-19

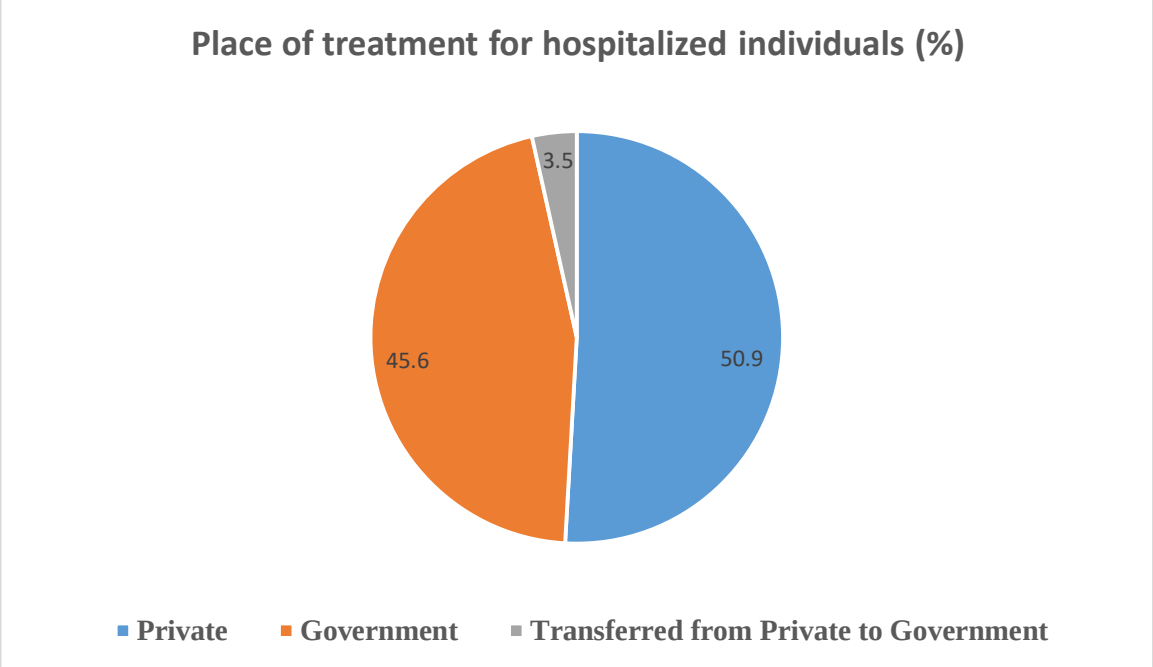


Among the 57 hospitalized study participants, 44 (77.2%) recovered while 13 (22.8%) died due to COVID-19 infection during pandemic period.

Table 41: Distribution of the participants according to place of treatment for hospitalized individuals. (n = 57)

Place of treatment of hospitalized individuals for Covid-19	Frequency	Percentage	Cumulative percentage
Private	29	50.9	50.9
Government	26	45.6	96.5
Transferred from Private to Government	2	3.5	100.0
Total	**57**	**100.0**	**100.0**

Graph 41: Distribution of the participants according to Place of treatment for hospitalized individuals.

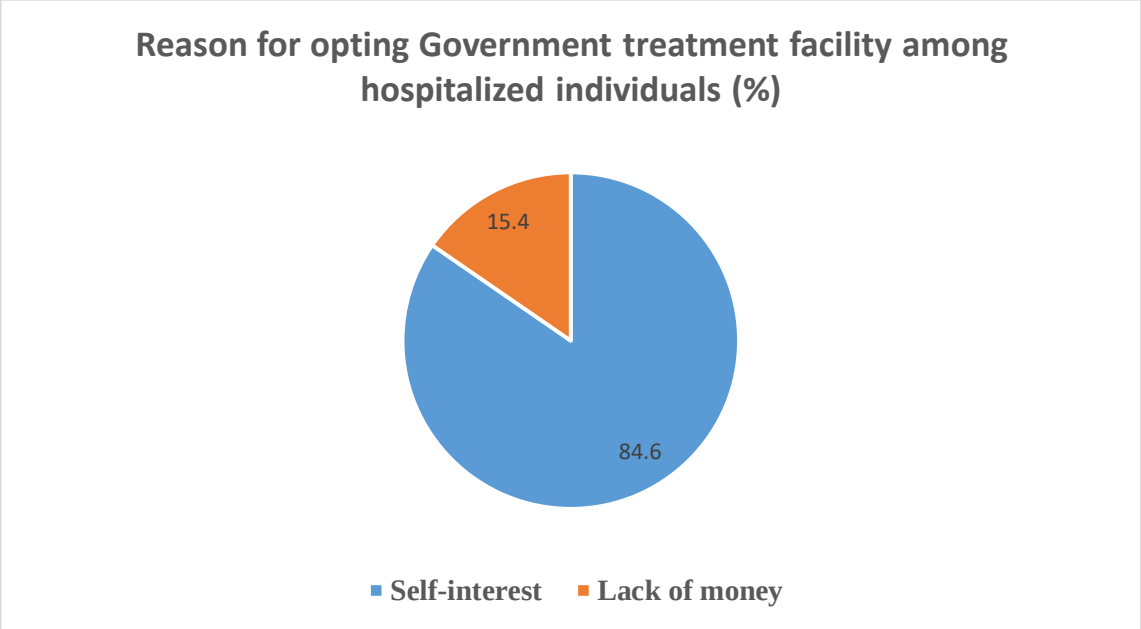


Among the 57 hospitalized study participants, 29 (50.9%) received treatment from private hospitals, 26 (45.6%) from government hospitals. While 2 (3.5%) were transferred from private to government hospitals for Covid-19.

Table 42: Distribution of the participants according to reason for opting Government treatment facility among hospitalized individuals for Covid-19. (n = 26)

Reason for opting government treatment facility among hospitalized individuals for Covid-19	Frequency	Percentage	Cumulative percentage
Self-interest	22	84.6	84.6
Lack of money	4	15.4	100.0
Total	**26**	**100.0**	**100.0**

Graph 42: Distribution of the participants according to Reason for opting Government treatment facility among hospitalized individuals for Covid-19.

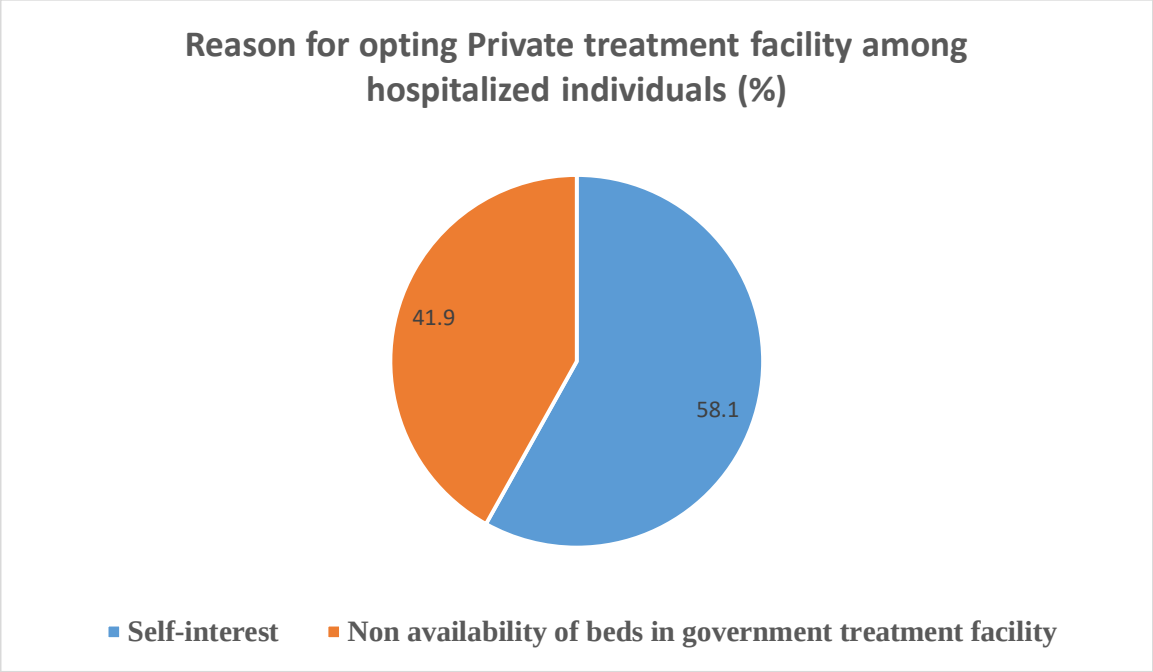


Among the 26 hospitalized study participants who received treatment for Covid-19 from government hospitals, 22 (84.6%) reported that it was due to their self-interest, while 4 (15.4%) said it was due to lack of money.

Table 43: Distribution of the participants according to reason for opting Private treatment facility among hospitalized individuals. (n = 31)

Reason for opting Private treatment facility among hospitalized individuals for Covid-19	Frequency	Percentage	Cumulative percentage
Self-interest	18	58.1	58.1
Non availability of beds in government treatment facility	13	41.9	100.0
Total	**31**	**100.0**	**100.0**

Graph 43: Distribution of the participants according to reason for opting Private treatment facility among hospitalized individuals.

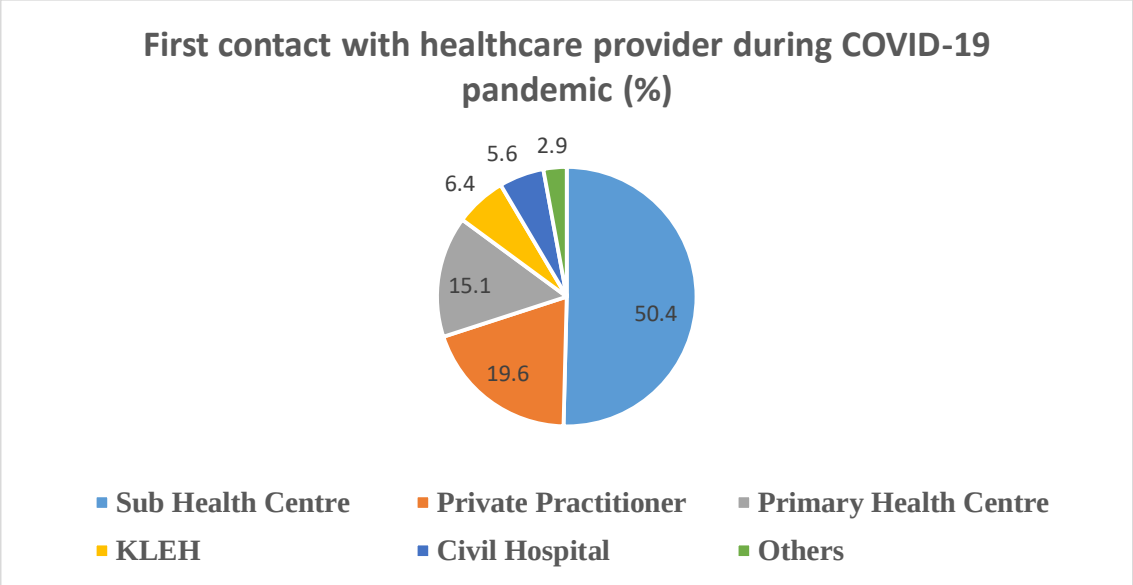


Among the 31 hospitalized study participants who received treatment from private hospitals, 18 (58.1%) reported it was because of self-interest, while 13 (41.9%) reported it was due to non-availability of beds in government hospitals for Covid-19.

Table 44: Distribution of the participants according to first contact with healthcare provider during COVID-19 pandemic. (n = 357)

First Contact with healthcare provider	Frequency	Percentage	Cumulative percentage
Sub Health Centre	180	50.4	50.4
Private Practitioner	70	19.6	70.0
PHC/CHC	54	15.1	85.1
KLE Hospital	23	6.4	91.5
District Hospital	20	5.6	97.1
Others	10	2.9	100.0
Total	**357**	**100.0**	**100.0**

Graph 44: Distribution of the participants according to first contact with healthcare provider during COVID-19 pandemic.

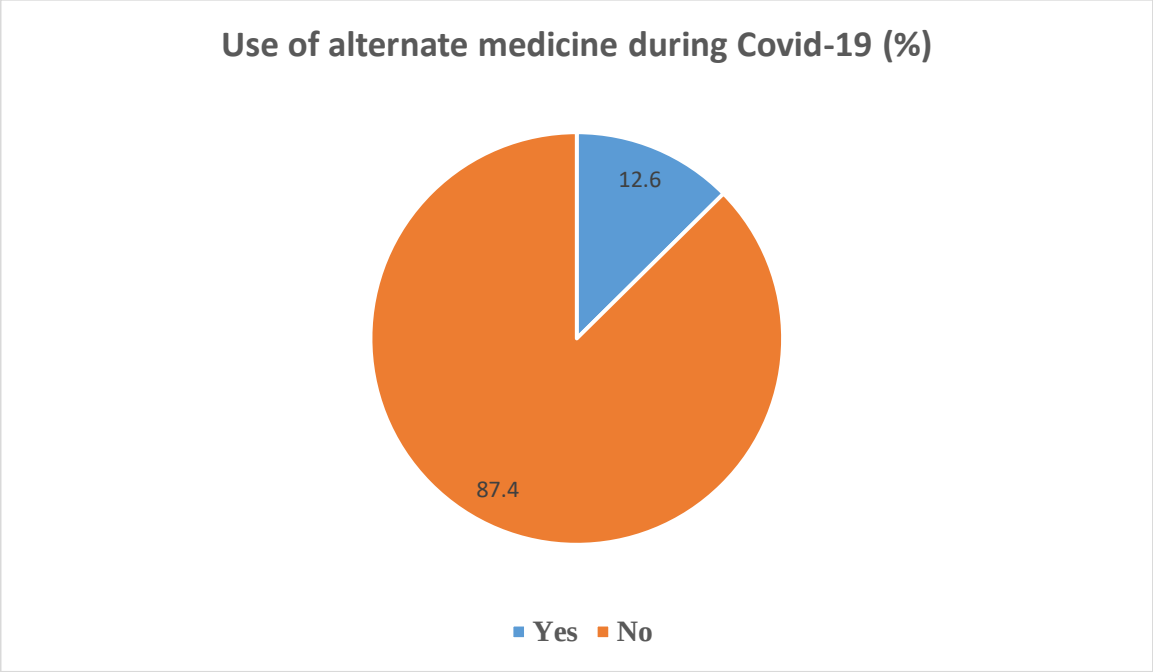


Among the 357 study participants, 180 (50.4%) reported that their first healthcare provider contact was with sub-health centre, 70 (19.6%), 54 (15.1%) and 23 (6.4%) reported private practitioner, PHC/CHC, and KLE Hospital as their first contact with healthcare provider respectively. 20 (5.6%) and 10 (2.9%) reported civil hospitals and others as their first healthcare provider during the pandemic respectively.

Table 45: Distribution of the participants according to use of alternate medicine during COVID-19 pandemic. (n = 357)

Consumed alternate medicine	Frequency	Percentage	Cumulative percentage
Yes	45	12.6	12.6
No	312	87.4	100.0
Total	**357**	**100.0**	**100.0**

Graph 45: Distribution of the participants according to use of alternate medicine during COVID-19 pandemic.



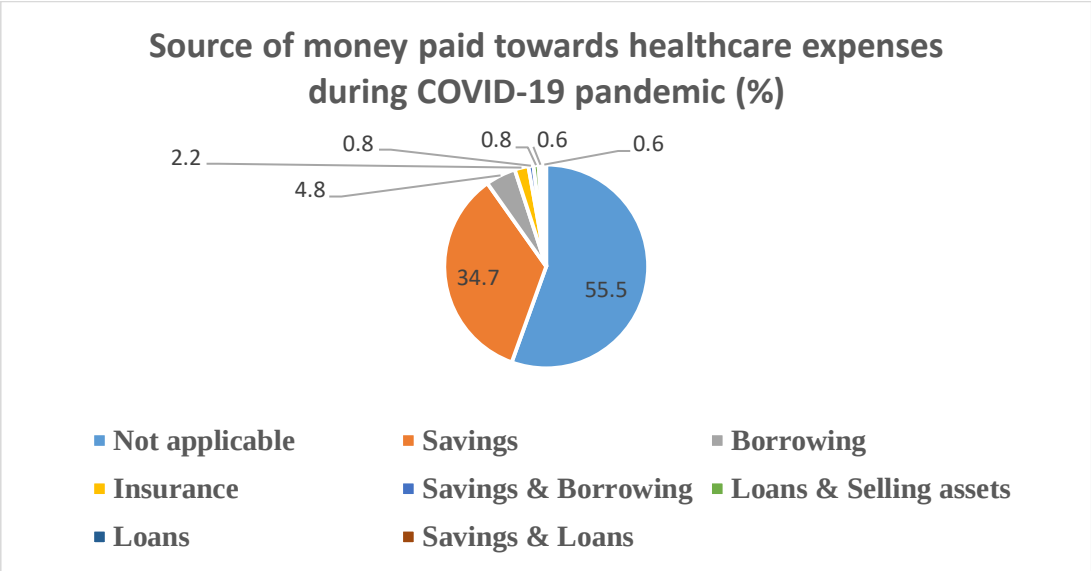
Among the 357 study participants, 312 (87.4%) did not consume any alternate medicine during the Covid-19 illness, while 45 (12.6%) reported that they used alternate medicine during the pandemic.

Table 46: Distribution of the participants according to source of money paid towards healthcare expenses during COVID-19 pandemic. (n = 357)

Source of money paid	Frequency	Percentage	Cumulative percentage
Not applicable/free service	198	55.5	55.5
Savings	124	34.7	90.2
Borrowing	17	4.8	95.0
Insurance	8	2.2	97.2
Savings & Borrowing	3	0.8	98.0
Loans & Selling assets	3	0.8	98.8
Loans	2	0.6	99.4

Savings & Loans	2	0.6	100.0
Total	**357**	**100.0**	**100.0**

Graph 46: Distribution of the participants according to source of money paid towards healthcare expenses during COVID-19 pandemic.

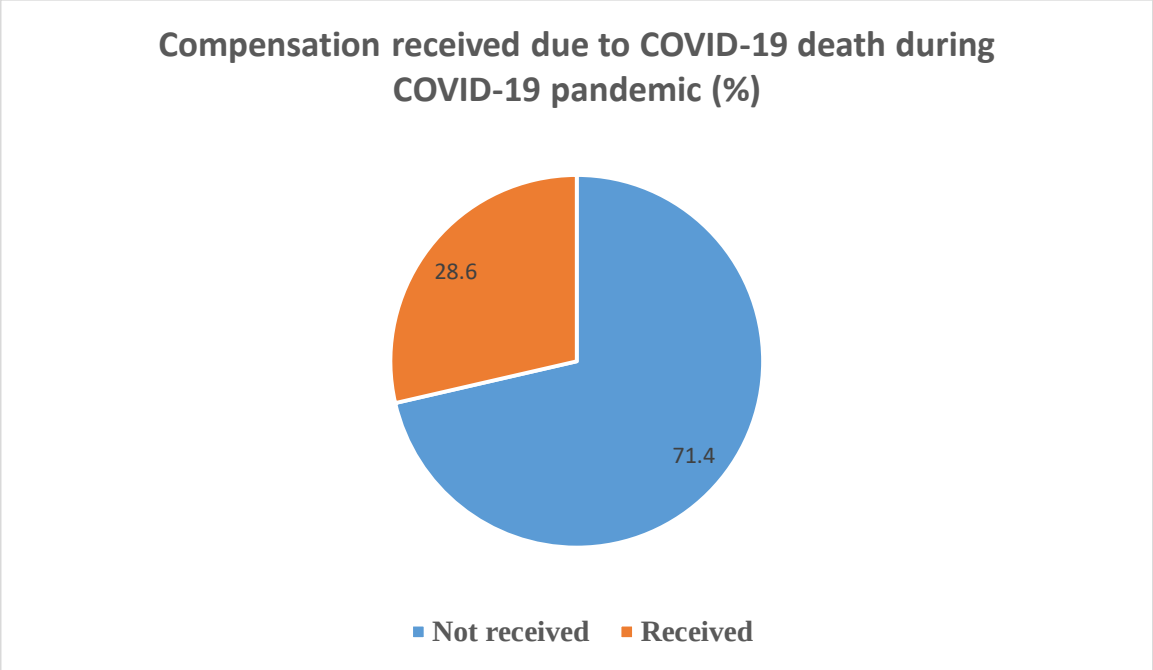


Among the study participants, 198 (55.5%) did not spend any money for their treatment as they received it free from government facility. 124 (34.7%) used their savings, 17 (4.8%) borrowed for their expenses. 8 (2.2%) had their expenses covered by insurance. While the remaining 10 (2.8%) had spent by combination of loans, savings and borrowing.

Table 47: Distribution of the participants according to compensation received due to COVID-19 death during COVID-19 pandemic. (n = 14)

Compensation for Covid-19 death	Frequency	Percentage	Cumulative percentage
Not received	10	71.4	71.4
Received	4	28.6	100.0
Total	**14**	**100.0**	**100.0**

Graph 47: Distribution of the participants according to compensation received due to COVID-19 death during COVID-19 pandemic.

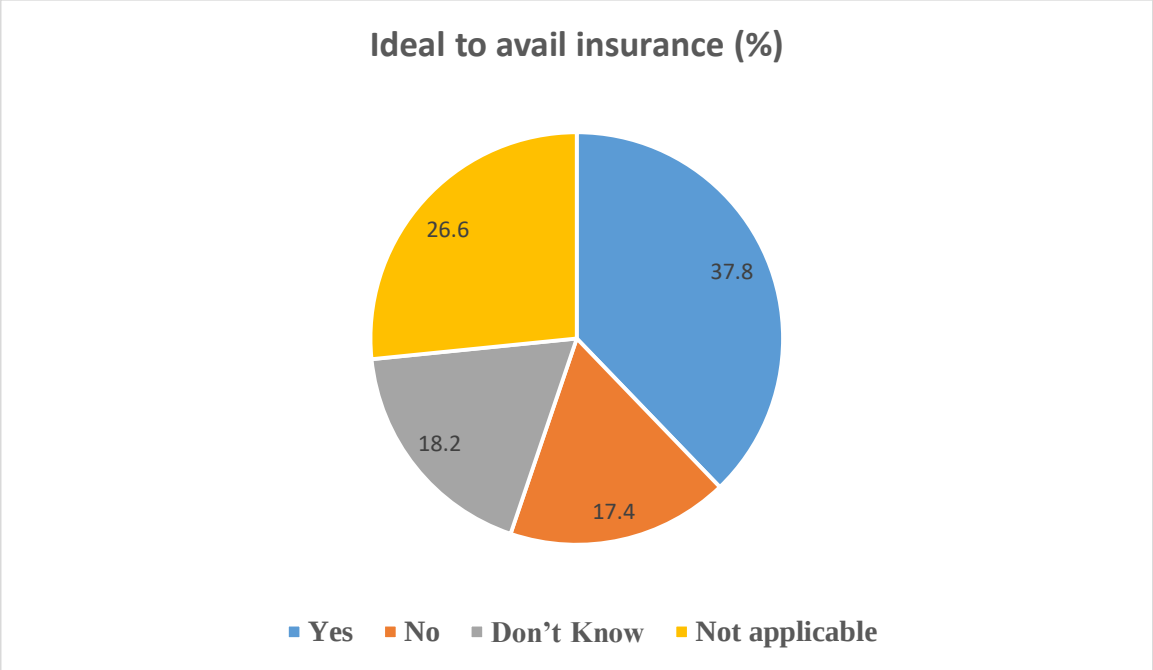


Among the 14 study participants who died due to COVID-19 illness, 10 (71.4%) did not receive any compensation, while 4 (28.6%) had received compensation for Covid-19 death.

Table 48: Distribution of the participants according to Idea to avail insurance. (n = 357)

Idea to avail Insurance in future	Frequency	Percentage	Cumulative percentage
Yes	135	37.8	37.8
No	62	17.4	55.2
Do not Know	65	18.2	73.4
Not applicable	95	26.6	100.0
Total	**357**	**100.0**	**100.0**

Graph 48: Distribution of the participants according to Idea to avail insurance in future.

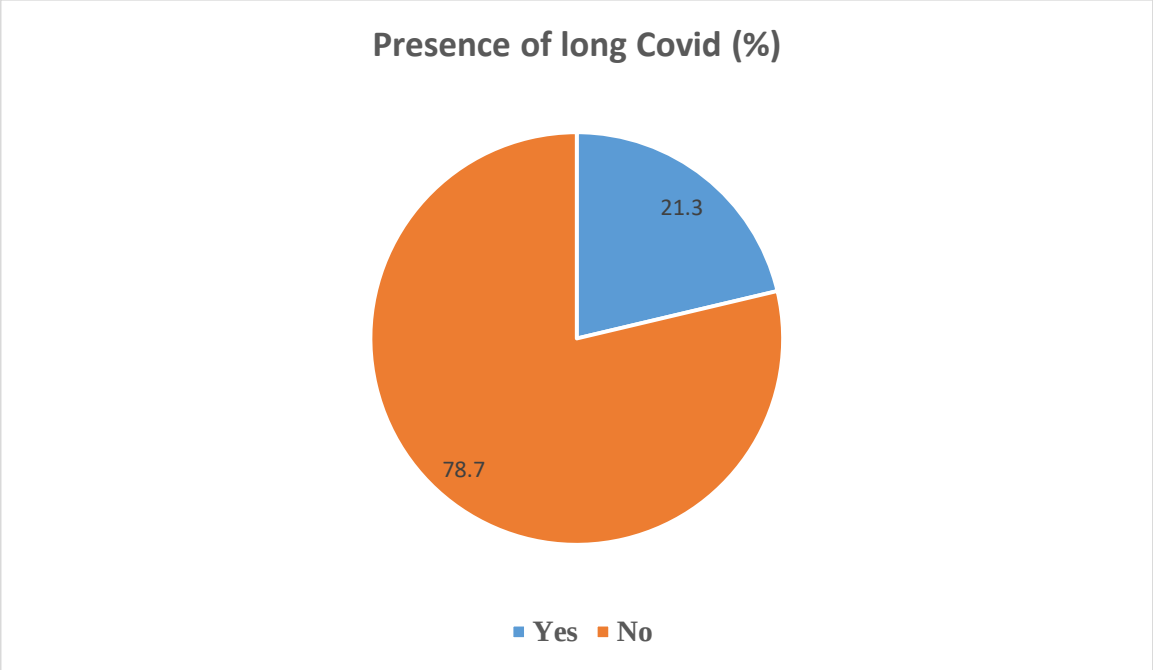


In the current study with 357 participants, 135 (37.8%) participants had the idea of availing insurance in future, while 65 (18.2%) participants were not sure about getting insured. 62 (17.4%) expressed that they are not willing to get an insurance. It was not applicable to 95 (26.6%) participants as they already had some form of insurance.

Table 49: Distribution of the participants based on presence of Long COVID symptoms. (n = 357)

Long COVID	Frequency	Percentage	Cumulative percentage
Yes	76	21.3	21.3
No	281	78.7	100.0
Total	**357**	**100.0**	**100.0**

Graph 49: Distribution of the participants based on presence of Long COVID symptoms.



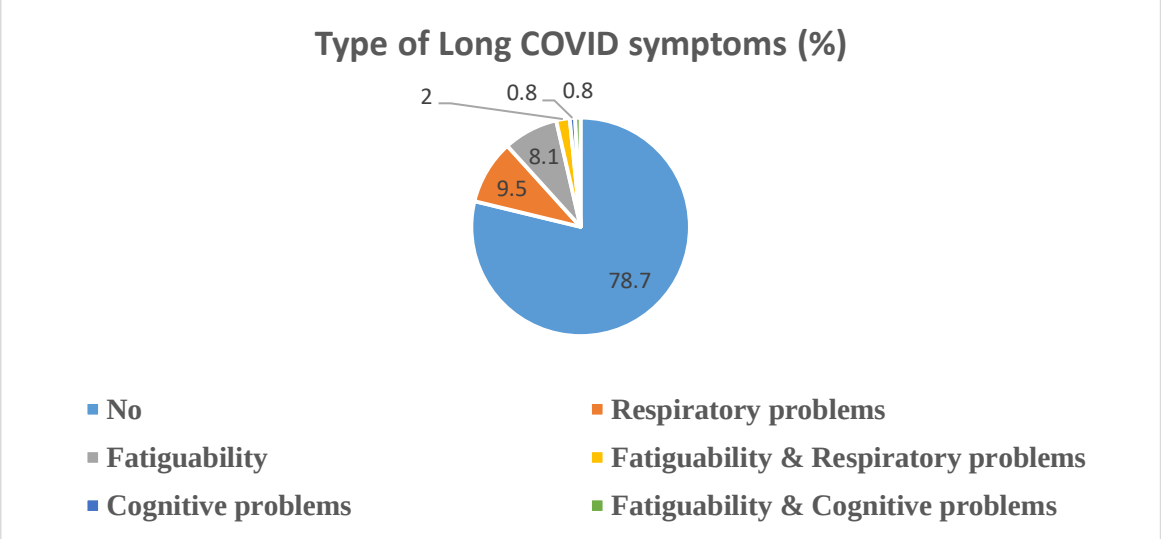
Among the 357 study participants, 281 (78.7%) had reported no long Covid symptoms, while 76 (21.3%) reported that they experience some long covid symptoms during the pandemic.

Table 50: Distribution of the participants according to type of Long COVID symptoms (n = 357)

Long COVID	Frequency	Percentage	Cumulative percentage
No symptoms	281	78.8	78.8
Respiratory problems	34	9.5	88.3
Fatiguability	29	8.1	96.4
Fatiguability & Respiratory problems	7	2.0	98.4

Cognitive problems	3	0.8	99.2
Fatiguability & Cognitive problems	3	0.8	100.0
Total	**357**	**100.0**	**100.0**

Table 50: Distribution of the participants according to type of Long COVID symptoms



Among the 357 study participants, 281 (78.7%) did not report any long covid symptoms. Respiratory problems and fatiguability was reported in 34 (9.5%) and 29 (8.1%) participants respectively. 3 (0.8%) had cognitive problems and 10 (2.8%) had varying combinations of fatiguability, respiratory problems and cognitive problems.

Table 51: Distribution of direct medical cost (rupees) of the participants (n = 357)

Type of participants	Frequency (%)	Median (IQR)
Non-hospitalized	300 (84.03)	2335 (1135-4743)
Hospitalized	57 (15.97)	72800 (40000-155000)

The median cost for the non-hospitalized participants was INR 2,335, whereas for hospitalized participants, it was INR 72,800.

Table 52: Association between Socio-economic class and, nature of occupation, with availability of insurance among study participants (n = 357)

Variables	Insurance			x^2	Odds ratio (95% CI)	Lower limit	Upper limit	p value
	Yes, (n)	No, (n)	Total, (n)					
Socio-economic status								
Upper SES	68	131	199	13.16	2.52	1.52	4.18	0.00
Lower SES	27	131	158					
Occupation								
Salaried	52	72	124	22.85	3.19	1.96	5.19	0.00
Non-salaried	43	190	233					

In the current study, significant association was seen between socio-economic status and owning an insurance package with p<0.00 among the participants with Covid-19.

Also, significant association was seen between Occupation and Insurance with p<0.00 among the participants with Covid-19.

Table 53: Association between Socio-economic class with difficulty in getting food, commodity, and medical supplies during Covid-19 pandemic among study participants. (n = 357)

Variables	Socio-economic status	x^2	Odds	Lower	Upper	p

	Upper SES, (n)	Lower SES, (n)	Total, (n)		**ratio (95% CI)**	**limit**	**limit**	**value**
Difficulty in getting food and commodity								
Yes	85	106	191	21.03	0.37	0.24	0.56	0.00
No	114	52	166					
Difficulty in getting medical supplies								
Yes	46	89	135	41.32	0.23	0.15	0.37	0.00
No	153	69	222					

Difficulty in obtaining food products, and commodities were significantly associated with socio-economic status with p<0.00 among the study participants.

Difficulty in obtaining medical supplies was found to be significantly associated with socio-economic status with p<0.00 among the study participants.

Table 54: Association between Educational status and age group with self-medication practices among study participants (n = 357)

Variables	**Self-medication**			x^2	**P value**
	Yes, n	No, n	Total, n		
Educational status					
Illiterate	3	16	19		
Primary	9	68	77		
Secondary	29	102	131		
PUC	8	54	62	12.41*	0.02*

Diploma	5	11	16		
Graduate	17	35	52		
Total	71	286	357		
Age group (in years)					
0-18	3	41	44	12.66*	0.005*
19-35	34	92	126		
36-60	30	112	142		
>60	4	41	45		

*Fisher-exact test is applied as cells have value less than 5

Among self-medication practices reported in the study, statistically significant associations were seen between educational status and self-medication with p value of 0.02.

Statistical significance was also seen between age group and self-medication with p value of 0.005 among the participants.

Table 55: Association between age group and oxygen therapy among the participants (n = 357)

Variables	**Oxygen therapy for Covid-19**				x^2	**P value**
	Yes, (n)	No, (n)	NA, (n)	Total (n)		
Age group (in years)						
0-18	0	0	44	44	26.39*	0.000*
19-35	3	13	110	126		
36-60	19	11	112	142		

>60	8	3	34	45		

*Fisher-exact test is applied as cells have value less than 5

Significant association was also seen between age group and oxygen therapy among Covid-19 hospitalized individuals in the study (p<0.000).

Table 56: Association between Covid-19 hospitalization and long COVID symptoms among the study participants (n = 357)

Variables	**Long COVID**			x^2	**Odds ratio (95% CI)**	**Lower limit**	**Upper limit**	**p value**
	Yes, (n)	No, (n)	Total, (n)					
Covid-19 Hospitalization								
Hospitalized	22	35	57	12.13	2.86	1.56	5.26	0.00
Non-hospitalized	54	246	300					
Total	76	281	357					

Similarly, long COVID symptoms were associated with Covid-19 hospitalization in the present study significantly (p<0.00).

DISCUSSION

Table 1: Distribution of the participants according to age group

Majority of the participants (75.1%) in the study were in age group of 18-59 years in our study and the same has been reported by Garg et al. with 80.9% participants in 15-59 years age group. The findings reported by Garg et al. with 492 participants, in Chhattisgarh, India in 2020, was that 16% participants belonged to age above sixty years.[16] It aligns with our study results, as it was reported that a total of 12.6% belonged to the age group of 60 and above. Participants in the economically productive age group were more affected especially during the second Covid wave. Role of age on COVID-19 had been well documented, as it remain as an important predictor of severity and outcome.

Table 2: Distribution of the participants according to gender

In the current study, 50.7% of the participants were males, which is comparable with the study done in 2022 in India by Patel K. et al., with male preponderance of 55.8% with 788 participants.[19] Similarly, a study done in tertiary hospital in Maharashtra by Kamini N Reddy et.al. with also showed higher male participants of about 76.1%, but in another study done among 499 participants by Rogero-Blanco et al., in Madrid, Spain in 2020, female participants were higher accounting to 55.1% of the total participants.[17,1] Increased infection in males can be explained by relatively higher degree of mobility outdoors for livelihood in the Indian communities.

Table 3: Distribution of the participants according to marital status

In the present study, 69.5% of the participants were married and 23.5% were single. Similar findings were reported from a study by Magdy et al. in 2020, in Egypt with 1200 participants, where 64% were married and 30% were single or unmarried. Our study revealed that 7% were either separated or widowed and the same as observed in a study by Magdy et al. with 6% of participants being divorced or separated.[28] A study done in New Delhi, India with 300 participants by Sharma et al. reported that married people felt less boredom and were relatively happy during the lockdown compared to their unmarried counterparts.[29]

Table 4: Distribution of the participants according to educational status

In a study done among 235 households by Dalui et al. in West Bengal, India, 35.7% had educational qualification up to primary education. 33.6% and 9.8% for secondary and high school qualification. 20.9% were illiterates.[22] All these findings align with our results as in our study, 21.6% & 36.7% had received up to primary and secondary education respectively. 21.8% had high school qualifications. Illiteracy was reported to be 5.3%. Also, a similar study by Garg et al. showed 4.8% and 12.5% participants as illiterate and with primary education respectively.[16] Educational qualification of the participants is expected to have an impact on understanding about the disease in terms of its severity and communicability and therefore will capacitate to follow precautionary measures to avoid spread of the disease.

Table 5: Distribution of the participants according to occupational status

Based on the occupation, 43.1% were employed by self or through private or government. 14.6% were farmers and 12.3% were students in our study. Notably, a

study by Magdy et al. reported that 41% were employed, 1.7% were farmers and 51.7% as students. Unemployment was 5.2% in the reference study, whereas, our study recorded 6.7% as dependents and 1.7% as pensioners.[28] Nature of the occupation is one of the principal determinants of stress among working individuals, as who were self-employed or employed in unstable firms, tend to experience income and/or job loss. While on the other hand individuals with job security or working in government sector had relative protection economically.

Table 6: Distribution of the participants according to type of house

Majority of the participants (90.5%) from our study resided in their owned house during the pandemic. Only 9.5% of the participants lived in rental houses. In a study by Jie Xiao et al., it was reported that 53% of participants were living in their owned house, while 44% resided as tenants in rented houses.[30] With income being cutoff during the pandemic for majority of the participants during lockdown, living in rented house adds up to the financial distress or worry among individuals.

Table 7: Distribution of the participants according to type of family

The present study reported that 29.1% belong to nuclear families whereas 43.4% belong to joint families. But in a study done by Dalui et al. reported contrasting findings that as high as 69.8% belong to nuclear families and 30.2% belong to joint families.[22] While a study conducted during 2021 in Mangaluru city in India with 294 participants by Joseph et al. reported that 84% belonged to nuclear family, 11.2% and 4.8% as joint and three-generation family respectively.[31] Our study reported 24.1% belong to three-generation family. Higher number of people living in same house is presumed to have a positive impact in terms of reassurance, while the same can aid in

the spread of the disease if adequate precautionary measures are not followed or due to overcrowding.

Table 8: Distribution of the participants according to possession of type of ration card

The findings from the study reveals that most of them belonged to below poverty line as per their ration-card holdings. As high as 57.1% belong to BPL families, comparable with the findings by Dalui et al. where they have reported that 70.2% belong to BPL families.[22] This variable also serves as a marker for socio-economic identification. Government of India has taken considerable measures to protect the below poverty line families economically and socially by doubling the rations and making it free during the pandemic.

Tables 9 &10: Distribution of the participants according to type & nature of insurance

In the present study, overall, 16.6% had insurance coverage. 10.6% participants had private insurance. It is comparable with the study done by Garg et al. where it was reported as 12% of participants had private insurance.[16] In another study by Kamini N Reddy et al. it was reported that 8.5% had private insurance.[17] Contrasting results were reported in a study done in Mississippi by Lucar et al., in 2020 among 100 participants, where 31% had private insurance and 52% had public insurance and only 17% were uninsured.[32] On comparison with western counterparts, utilization of insurance remains at lower levels despite significant number of private players are providing at various premium levels. Nevertheless, Ayushman Bharat scheme is expected to close the gap and protect the vulnerable families from catastrophe in future.

Table 11: Distribution of the participants according to total number of members in family

In the present study, with respect to family size, 45.9% of the participants had a family composition of five or less members, while 54.1% had more than five members in their family. Similarly, a study done by Garg et al. revealed that 61.8% participants with family size of five or lesser and 38.2% with more than five members.[16] As earlier discussed, number of members living under a single roof had both positive and negative effects on the illness during the pandemic.

Table 12: Distribution of the participants according to Socio-economic status of the family

Socioeconomic distribution of participants from our study revealed that majority belong to class II (44.8%), and III (24.9%). While 10.9% & 17.4% belong to class I, and IV respectively. only 2% belong to class V. A study conducted in Mangaluru city by Joseph et al. showed that the distribution of participants according to socioeconomic class I, II, III, and IV were 52.7%, 34.6%, 9.7% and 3% respectively.[31] In a study conducted among 915 participants in Morocco by Mahdi et al., higher relative risk for severe disease was reported among people living in low socioeconomic class.[33] These findings provide insights on disease epidemiology with respect to socio-economic class.

Table 13: Distribution of the participants according to loss of job during the pandemic in the family

Loss of job or income in our study among the participants were reports as 21%. In a study done in Indonesia by Putra et al., it was reported that 42% of

participants experienced income loss and 4% experienced job loss.[34] Various studies had reported temporary or permanent loss of job and income threatening to push the vulnerable families to the verge of poverty.

Tables 14 & 15: Distribution of the participants according to difficulty of family in getting food products/commodities and medical supplies during the pandemic

In the present study, 53.5% participants responded that they faced difficulty in getting food products during the pandemic, while a study done in France by Marty et al., among 938 participants in 2020 reported that 89.7% participants had experienced some difficulty in getting food during the lockdown.[35] Lockdown or curfew measures taken to reduce the impact of COVID-19 infection had critically affected food chain across globe and caused constraints to the access for essential products and commodities in the community.

Table 16: Distribution according to adequate COVID-19 precautions followed by family members of the participants during the pandemic

In the present study, 72% participants reported that they followed appropriate precautions, while 28% did not follow adequate safety precautions during the pandemic. In a study done by Golnar Sabetian et al. among the healthcare workers, it was reported that as many as 98.5% used masks, while 18.7% and 58.2% did not use gloves and facial shields in their work place respectively.[36] In a study done by Magdy et al. it was reported that only 20% of the participants wore masks during the pandemic. 85% washed hands with soap and disinfectants. 42% of participants performed more than half of the specified preventive measures in their study.[28] Ensuring appropriate precautionary measures will prevent or lessen the chance of individuals from contracting the infection.

Table 17: Distribution of the participants according to visit of the outsiders to the participants house within two weeks prior to infection

Around 23% of the participants reported visit of the outsiders within two weeks of their infection. This aids in spread of the infection if safety measures are not followed. Albeit strict country wide lockdown measures, mobility within deep interior rural pockets could have happened and cannot be always monitored by the enforcement authorities. Adequate knowledge on the disease causation and spread may limit the movement of the community and adhere to the measures of the government.

Table 18: Distribution of the participants according to prior COVID-19 infection in their area/street

Nearly 62% reported that there were positive cases in their neighbourhood or in their street prior to their infection. Direct contact with the positive case during their incubation period or during the active disease would have facilitated the spread and predisposing the participant to infection.

Table 19: Distribution of the participants according to number of people affected by COVID-19 in the family

In majority of the families, only the participant was tested positive for the disease (47%). Whereas, in 23% an additional member in the family was affected. In around 12% of the families, five or more than five were affected. This describes us that adequate precautionary measures were not in place in those families leading to transmission of covid infection.

Table 20: Distribution of the participants according to type of diet

Report from the study revealed that more than 70% participants consumed mixed-diet. Exact knowledge on the type of diet and its role in COVID-19 infection is uncertain. Published literature was not available on this regard to compare.

Tables 21, 22 & 23: Distribution of participants according to Unhealthy habits

Prevalence of smoking among the participants in our study was found to be 6.4%. Similar results were seen in a study done by Rogero-Blanco et al. with prevalence of 7.8%.[1] In another study done among 2755 participants in Israel by Adler et al., 15.4% of the participants who were affected by covid-19 illness were smokers.[37]

In our study, 14.8% participants reported that they consumed alcohol at some point in their lifetime. In a study done by Jin et al., among 105 participants in Wuhan, China, it was found that 12.6% of the participants had habit of consuming alcohol at least once in their lifetime.[38]

In a meta-analysis done by Zhang et al. has explained that people with history of smoking had experienced more severe forms of COVID-19 disease with odds ratio of 1.55 and death with odds ratio of 1.58 as compared to non-smokers with statistical significance.[39] This explains the relationship between unhealthy habits and COVID-19.

Tables 24, 25, 26 & 27: Distribution of the participants according to prevalence of commodities

Prevalence of diabetes in the present study was found to be 16% comparable with 17.5% from a study done by Rogero-Blanco et al., but these findings contrast

with the findings from other studies conducted by Abilash et al. and Reddy NK et al., where they had reported the prevalence of diabetes 32.7% and 45.45% respectively.[1,20,17]

Our study identified the prevalence of hypertension among the study participants to be 16.8%. whereas a study conducted by Reddy NK et al., found hypertension prevalence to be as high as 50.56%.

In a study by Reddy NK et al., prevalence of chronic obstructive pulmonary disease was found to be 2.84%.[17] While our study reported a prevalence of 3.4%, another similar study by Rogero Blanco et al. reported to be 4.8%.[1]

Ischemic heart disease was reported among 3.9% participants in the current study. In a study conducted by Reddy NK et al., reported prevalence of 9.09%.[17]

Presence of comorbidities was one of the main factors in determining the severity and prognosis of the disease. In a study by Patel K et al. it was seen that presence of number of comorbidities were significantly associated with odds of 3 times compared to people without comorbidities for mortality.[19]

Table 28: Distribution of the participants according to COVID-19 wave of infection

During the first wave of infection, 14.3% participants were affected in the present study. Majority (78.1%) were affected during the second wave. A small proportion of participants (7%) reported that they contacted infection during the third wave. Two participants had encountered infection in both first and second waves. In a study done by Begum et al., from an Intensive care project in Australia, among the 2493 patients admitted in ICU during COVID-19 pandemic 79.5% were admitted

during the third wave, whereas, during first and second waves 8.6% and 11.9% were admitted respectively.[40] Number and severity of the cases soared during the second wave, compared to the first and the same is seen in our result.

Table 29: Distribution of the participants according to COVID-19 vaccination status prior to COVID-19 infection

Prior to the infection 27.2% study participants were vaccinated in the current study. In a study conducted by Abilash et al. it was reported that 22.7% participants were vaccinated.[20] Whereas, as much as 90% were vaccinated in a study done by Patel AK. et al in 2022.[19] Percentage of vaccinated individuals increased with subsequent waves of infection due to efforts and commitment by the government.

Table 30: Distribution of the participants according to number of doses of COVID-19 vaccine taken prior to COVID-19 infection

At least one dose of covid vaccination were received by 27.2% of the participants. In a study done in 2020-21 by Mahdi et al., it was reported that only 11.3% were vaccinated. Among those who got vaccinated, our study reported that 46.4% received two doses, 34% received one dose while 19.6% received booster dose. These results are comparable with the study by Mahdi et al., as 74.3% received two doses of vaccination while 25.7% received one dose of vaccination.[33] In a study by Abhilash et al. it was reported that severity of the disease was profound in unvaccinated group compared with vaccinated group with relative risk of 0.16.[20] This highlights the importance of vaccination.

Table 31: Distribution of the participants according to presence of symptom during COVID-19 infection

The current study reported that 72.8% participants had symptoms during the illness, whereas from a study done in Vietnam by Pham Quang Thai et al., among 133 hospitalized patients showed that 66.9 % had symptoms and Rogero-Blanco et al., reported that 97.8% had symptoms during the course of the illness.[13,1] In a study done by Petersen et al. in 2020 among 180 participants in Faroe Islands, it was found that 87.2% participants had symptomatic illness.[41] Many studies have reported that a proportion of individuals remained asymptomatic during the illness, though reason is largely uncertain.

Table 32: Distribution of the participants according to intake of self-medication during covid-19 illness

Self-medication practices in present study was found to be 19.9% among the participants. Near similar results were reported from a study conducted during 2020 in Puducherry among 480 participants, by Stalin P et al., where 21.7% participants reported self-medication practices during the pandemic.[42] In another study by Joseph et al. 29.7% used self-medication during covid-19 illness.[31] Availability of over-the-counter medicines for common symptoms during the pandemic, unavailability of public transport during lockdown to travel to distant places to seek healthcare had influenced the people towards self-medication practices.

Table 33: Distribution of the participants according to Place of isolation for non-hospitalized individuals.

Results from the current study showed that 69.2% were isolated at home, 7.6% were isolated in covid care centre. In a study by Jin et al., 45.6% were isolated in hospitals, 36.9% were isolated at home and 5.8% in isolation centre.[38] 76.8% participants were isolated/quarantined in our study, whereas from a study by Thai et al., reported 55.6% were quarantined.[13] Though most of the houses in current study did not have adequate rooms or facilities required for isolation, unavailability of covid care centre's in large numbers during various stages of pandemic mandated the asymptomatic and mild symptomatic to remain isolated in available space in their houses.

Table 34: Distribution of the participants according to place of hospital admission for hospitalized individuals.

A total of 16% participants were hospitalized in the present study. In a study conducted by Garg et al., 38% patients were hospitalized.[16] While a study done by Rogero-Blanco et al., 78.6% required hospital care.[1] In a study by Petersen et al. a total of 5.3% were hospitalized during illness.[41] ICU admissions in our study was 1.7%, while it was reported as 9.3% by Rogero-Blanco et al., COVID-19 caused by SARS-CoV-2, being a respiratory pathogen with its ability to cause severe disease had led to significant hospitalization both in general wards and ICUs.

Table 35: Distribution of the participants according to oxygen therapy for hospitalized individuals for Covid-19.

Of the 57 hospitalized patients, 52.6% were given oxygen therapy in present study. While a study by Garg et al., reported that 18.3% utilized oxygen during hospitalization.[16] As it is well known that primary target for COVID-19 disease was the respiratory system, oxygen saturation was greatly compromised in individuals with severe disease and hence necessitating oxygen support.

Table 36: Distribution of the participants according to lead time in reaching hospital for hospitalized individuals.

Our present study findings for time taken to reach hospital for admission were 49.1% within first three days of symptom onset, 38.6% and 12.3% for more than three to less than seven days and between seven to fourteen days respectively. It shows that majority of them were hospitalized during the first week of symptom onset. In a study done by Begum et al., lead time in reaching hospital were calculated for subsequent waves of covid-19 infection.[40] The findings from the study report that median time for hospital admission were 6, 6.6, and 6.5 (in days) for wave 1, 2, and 3 respectively. The results revealed that patients' health seeking behaviour was variable has half of them neglected to consult healthcare provider on appropriate time even during the pandemic.

Table 37: Distribution of the participants according to time interval between onset of Covid-19 symptoms and ICU admissions for hospitalized individuals.

In the present study, majority (95.2%) of the ICU admissions among hospitalized participants had taken place during first seven days of symptom onset.

Similar results by Begum et al. reported a median of 8.2 days from symptom onset to ICU admission during first and third waves, while a median of 7.6 days was observed during second wave.[40] Overall, a total of 5.9% participants underwent ICU admissions. In another study done by Teker et al. 14.6% required ICU admissions, while another study by Reddy K et al., reported that 94.9% required ICU admissions.[24,17] The difference is largely because of the reference study conducted in hospital settings, while our study was done in community setting.

Table 38: Distribution of the participants according to length of stay in hospitals for Covid-19 hospitalized individuals.

Duration of hospitalization less than seven days, less than two weeks and more than fourteen days in present study was seen in 47.4%, 45.6% and 7% of hospitalized participants for covid-19 respectively. Whereas, a study by Garg et al., reported 15.6%, 68.8% and 15.5% patients stayed during this period respectively.[16] In another study by Lucar et al., 35% were admitted more than ten days in hospital for the covid-19 illness.[32] 93% participants were hospitalized for less than two weeks in the current study. It aligns with results reported by Begum et al. which revealed median length of hospital stay reported as 17.2, 14, and 13.2 (in days) during first, second and third waves respectively.[40]

Table 39: Distribution of the participants according to length of stay in ICU among Covid-19 hospitalized individuals.

Overall, 36.8% of the hospitalized participants were admitted in ICU settings. This is comparable with a study by Lucar et al., where it showed that 49% of hospitalized patients were ICU admitted. Furthermore, in the present study among the ICU admitted patients, length of stay in ICU less than seven days were seen in 66.7%,

whereas, 33.3% participants were admitted in ICU for a period of eight to fourteen days. Lucar et al., reported that 27% patients were admitted in ICU for more than five days.[32] Factors like advancing age and presence of increasing number of comorbidities primarily influence the duration of ICU admissions.

Table 40: Distribution of the participants according to outcome for hospitalized individuals for Covid-19.

In the present study, a total of 3.9% patients expired, one of them at home, compared to 2.8% patients from a study conducted by Patel AK. et al., whereas Rogero-Blanco et al., reported that 7.4% had died including one in home due to COVID-19 disease.[19,1] A study by Kamini N Reddy et al. reported contrasting findings that 67% of patients died at the end of hospitalization.[17] Differences in death tolls were due to the fact some studies were conducted in tertiary care facilities and ICU settings, where severely ill patients are managed compared to our community study setting, where it was predominantly primary care.

Table 41: Distribution of the participants according to place of treatment for hospitalized individuals.

Private sector hospitalization among the hospitalized patients were 50.9% in the current study 45.6% were admitted in government hospitals and, 3.5% shifted from private to government as they could not continue to afford the treatment. while a study by Garg et al., 69.3% were reported to be hospitalized in public sector healthcare facilities.[16] Unavailability of beds were a major issue especially during the second Covid wave of infection in India, but efforts were taken by the government to resolve this issue by scaling up measures to mitigate the catastrophe.

Tables 42 & 43: Distribution of the participants according to reason for opting Government treatment or Private treatment facility among hospitalized individuals for Covid-19.

Participants hospitalized in public sector facility reported that 84.6% was due to self-interest and 1.4% was because of lack of money to pay to private care provider in our study. 58.1% of the participants received treatment from private health care provider in current study due to self-interest. While 41.9% said it was due to un-availability of beds in public health facility, mostly in second wave of covid 19. With Ayushman Bharat (PMJAY) in place, patients can utilize healthcare services from empaneled private hospitals.

Table 44: Distribution of the participants according to first contact with healthcare provider during COVID-19 pandemic.

The findings from the current study showed that 65.5% of the participants received their first treatment from Govt PHC/sub-health centres (15.1% & 50.4%). 19.6% from private clinics and 9.3% and 5.6% from private and government hospitals respectively. A review article by Stalin P et al., reported that 22.3% attended private clinic, while 3.7% and 11.4% received treatment from private and government hospital respectively during the pandemic. Participants receiving treatment from govt PHC were 26.7%.[42] Results from the study showed that participants heath seeking behaviour during the pandemic was fairly good, as they had approached one or the other healthcare facility to avail the services.

Table 45: Distribution of the participants according to use of alternate medicine during COVID-19 pandemic.

Use of alternate medicines by the participants stood at 12.6% in the current study. while, a study by Joseph et al., 27% used alternate medicines during their illness.[31] In another study by Jin et al., from China, 22.3% participants used traditional Chinese medicine during illness.[38] Home-made remedies were used by patients during the pandemic as reported by many studies. Little evidence is available to explain the role of alternate medicines in the management of COVID-19.

Table 46: Distribution of the participants according to source of money paid towards healthcare expenses during COVID-19 pandemic.

Participants costs towards covid-19 healthcare utilization in the current study reported that 42.3% were covered by savings, borrowing or through utilization of loans. In a study done in Kerala, India by Ronnie Thomas et al., among 155 participants, 32.9% were reported to be covered by borrowing, sale of assets or through utilization of loans.[43] Since most of the healthcare needs like testing for infection and drugs for treatment were provided by the respective primary health centre's or subhealth centre's to asymptomatic and mild symptomatic patients, many were saved from spending from out of pocket. Hospitalization in private sector without insurance has forced few participants to borrow, loan or to sell their assets.

Table 47: Distribution of the participants according to compensation received due to COVID-19 death during COVID-19 pandemic.

In the current study, out of fourteen participants who died due to COVID-19 disease, only 28.6% participants received compensation from the government as of

December 2023. Improper or incomplete documentation, lack of awareness about issue of compensation were some of the factors attributed as barriers in receiving compensation. Government of India had released provisions for compensation of about fifty thousand rupees under State Disaster Response Fund.[44] While, Government of Karnataka had announced a sum of one lakh rupees per family living in below poverty line.[45]

Table 48: Distribution of the participants according to Idea to avail insurance in future.

The present study highlighted that 37.8% of the participants had the idea of availing insurance in the future, while 18.2% were not sure about getting an insurance. 17.4% of study participants said that they had no idea to avail insurance for them in future. Implementation of 'Ayushmann Bharat – Pradhan Mantri Jan Arogya Yojana', a 'public health insurance scheme' by Government of India with an aim to provide insurance coverage up to five lakhs per family per year for secondary and tertiary hospitalization to the low-income generating families.

Table 49: Distribution of the participants based on presence of Long COVID symptoms.

In the current study, symptoms of long covid were reported among 21.3% of participants. Our results align with the study results of 34.6% reported by Adler et al.[37] while another study by Petersen et al. reported that 53.1% of the participants had at least one symptom of long covid.[41] Sarda et al. conducted a study in North India and reported a prevalence of 28.2%.[46]

Table 50: Distribution of the study participants according to type of Long COVID symptoms.

In a study in Kerala by Poojara et al. with 250 participants in 2021-22, the prevalence of post-recovery symptoms in the form of dry cough was 40.4%, while current study showed long covid symptoms involving respiratory system was 11.5%.[47] In a study by Bahmer et al. the most common reported long-term symptoms were neurological ailments, fatigue and sleeping disturbances. Fatiguability was reported as high as 57% in that study, while the current study reported 10.1%.[48]

Table 51: Distribution of direct medical cost (rupees) of the participants.

The median cost of outpatient treatment in present study was INR 2335 (~US $ 31.58), whereas for Hospitalized participants it was INR 72800 (~US $ 984.72). In a study done by Reddy K et al., the median cost was reported as INR 2,02,248 for patients admitted in ICU settings.[17] A study done in Kerala by Thomas R et al., reported a median expenditure of INR 2,980 and INR 38100 respectively for hospitalized patients in public and private sectors respectively.[43] In a similar study done by Garg et al., in Chhattisgarh, the median cost was INR 4,871 and INR 1,69,504 for government and private institutions respectively.[16]

Table 52: Association between Socio-economic class and, nature of occupation, with availability of insurance among study participants.

Significant difference in the availability of insurance coverage among participants belonging to upper socio-economic in the current study as opposed to participants of lower socio-economic class shows inequities in among people in the society. Direct factors like financial constraints and indirect factors like lack of

awareness could account to these differences. Our study shows statistically significant difference (p<0.00) in obtaining insurance package among people of different socio-economic class, with people belonging to higher SES had higher odds of 2.5 times compared to lower SES participants in owning an insurance package. Similar findings have been reported by Ambade et al. where the people belonging to highest wealth quintile had adjusted odds of 1.3 times health insurance coverage compared to individuals of lowest wealth quintile.[49]

In the current study, salaried persons had higher insurance coverage when compared with self-earning or dependent groups with a statistical significance (p < 0.00) and with 3.2 times higher odds among salaried persons. In a study by Ponnusamy et al. it was reported that higher number of individuals with semi-skilled and unskilled occupations were uninsured, this was proved by statistical significance of p <0.001 and p <0.009.[50] Some of the reasons behind salaried individuals getting insured may include employer policy, better understanding on importance of insurance cover, peer influence and benefits of tax rebates for the purpose of income tax. People who are placed in high income jobs generally have better educational qualifications, paving way for greater understanding of the schemes.

Table 53: Association between Socio-economic class with difficulty in getting food, commodity, and medical supplies during Covid-19 pandemic among study participants.

The present study results highlighted association between socio-economic class and difficulty of participants in procuring food items, commodities, and medical supplies like masks. These results highlight the purchasing power of various strata of

people in the community during the times of hardships. With p<0.00, the findings from the current study are statistically significant.

Table 54: Association between Educational status and age group with self-medication practices among the participants.

Findings from our study report that participants from all the age groups indulged in self-medication practices. Although significant associations are seen with young and middle age participants with statistical significance of p<0.005. These results align with the study done by Thenmozhi et al (p<0.03).[51] Self-medication practices were seen in higher frequency among young people compared to older population. These findings convey the fact that better knowledge of younger population on the availability of over-the-counter medications is acquired through social media platforms and peer communication networks.

With respect to educational status, participants who had received higher education had significant self-medication practices. This is evident from the results of our study with statistical significance of p<0.02. Similar results were obtained from study by Thenmozhi et al. with significance of p<0.03.[51] These findings signify that knowledge on medication for common ailments are fairly established among individuals with higher education.

Table 55: Association between age group and oxygen therapy among the participants.

This study reported a strong association between the increasing age and need for oxygen among hospitalized participants. Statistical significance with p<0.000 was highlighted by chi-square tests. Notably from a study conducted by Pathak et al.

reported similar association between increasing age and oxygen requirement among hospitalized COVID-19 individuals ($p<0.013$).[52] During the pandemic, one of the main reasons for hospitalization of Covid-19 infected individuals was hypoxia. Oxygen requirement to COVID-19 affected individuals skyrocketed the need for oxygen supplies in healthcare facilities and the increased demand for oxygen availability was clearly seen during the peak of the pandemic.[53]

Table 56: Association between Covid-19 hospitalization and symptoms of long COVID among the study participants.

In the current study, significant differences were found between hospitalized individuals and non-hospitalized individuals regarding long covid symptoms, with odds ratio of 2.8 times favoring hospitalized individuals to develop long Covid symptoms and with a statistical significance of $p<0.00$. In a study by Salve et al. conducted among hospitalized individuals, the prevalence was reported as 37.3%.[54] In another study by Sarda et al. on long covid symptoms among outpatients, it was reported as 28.2%. Long covid symptoms are reported among both hospitalized and non-hospitalized populations.[46] Although higher rates were seen among post-hospitalized individuals compared to those stayed at home.

CONCLUSION

Findings form our study points that economically productive age group, people suffering from multiple comorbidities, financially disadvantaged class were more affected in the pandemic. Second wave of COVID-19 infection had affected significant participants ($3/4^{th}$) compared to the other two waves. Half of the hospitalized individuals required oxygen administration.

Catastrophic healthcare spending was seen among hospitalized individuals in private sector without insurance coverage. Two-third of eligible family did not receive any Covid-19 compensation from the government after undesired outcome during our study period and, long covid were significantly observed among the hospitalized participants.

RECOMMENDATIONS

Individual and family level:

Adherence to the advisories made by the government regarding the pandemic, proper use of face mask and sanitizer, adopting strict isolation / quarantine measures, avoiding unnecessary travels, proper health seeking behaviour, compliance to the medication advised and, acquiring knowledge on various health interventions under Ayushman Bharat are essential.

Village / PHC level:

Advocating frequent health education interventions in the form of IEC / BCC activities on hand hygiene regularly, use of face masks and, maintaining social distancing in crowded public areas during the times of pandemic will maximize the yield towards the preventive efforts of the health authorities.

Special camps at village levels to be conducted by PHC authorities for generation of AB-PMJAY cards for the eligible beneficiaries. Government should hasten the process for the benefit of the society.

Awareness about benefits of PMJAY insurance scheme should be created at population level, once the documents are generated, through mass media networks.

District, State and National level:

Pandemic preparedness by public and private healthcare institutions and measures are to be in place for providing care during distressing pandemics situations. This can be done by strengthening existing healthcare delivery system.

To prevent out-of-pocket expenditure leading to catastrophe health spending, public health assurance or health insurance schemes like 'Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana' by government is mandatory.

Enrollment process is underway and had already been completed for around 62% of the eligible beneficiaries as of June, 2024. Mechanisms are to been identified to speed up the process.

At the state level, awareness about Yeshasvini scheme should be created to the eligible beneficiaries for better utilization of its benefits.

Role of Hospitals, Medical colleges / Universities:

Rehabilitation centres and special clinics to address and attend the people suffering from Long-COVID symptoms is need of the hour, as it can affect the quality of life of the individual. On a large scale it can lead to economic loss to the country.

Pandemic modules created to emphasize the importance of learning pandemic situations will help the UG /PG health science students for better understanding of not only the illness, but also the social and legal issues arising out of such outbreaks.

Further, in depth research and analysis are needed to explore the impact of COVID-19 on various organ systems of infected individuals to quantify the long-term burden of the pandemic.

Role of Health insurance agencies:

Special Covid specific health insurance or coverage packages are to be introduced at affordable premiums for the benefit of the general population.

STRENGTHS

With thorough literature search, it can be justified that it is one of its kind studies, to explore various aspects of COVID-19 in the community. Various sections comprising socio-demographic details, COVID-19 details of the participants as well as family, clinical details, expenditure patterns and, health seeking behaviour were fragmented to capture comprehensive information on the topic.

Estimation of medical costs for treatment are usually done in hospital settings, whereas, this current study tried to measure from community settings.

Useful insights have been obtained on participants attitude towards health insurance, adherence to COVID-19 appropriate behaviour, comorbid status and, health seeking behaviors.

In addition to the scope of the study, it served as an opportunity to provide information and clarify doubts on various aspects of COVID-19 and to educate them on the hand hygiene and other precautionary measures to be taken, if another wave of COVID-19 strikes the community in future.

Participants who had active long Covid symptoms were guided / referred to KLE Hospital / District hospital.

LIMITATIONS

Although the study tried to cover the major socio-economical determinants as well as expenditure patterns on healthcare during COVID-19, some of the desired data could not be captured leading to certain limitations like calculating indirect medical costs and non-medical costs and, type of vaccine used that could not be avoided.

The limitations were, small sample size that covered only one field area with no longitudinal follow-up. Qualitative data was not obtained from the participants. Lack of maintenance of proper medical records and self-reported comorbidities, that was not cross-verified by the investigator.

Recall bias:

One of the major and foremost limitation is the period in which the study has been conducted. By the time the idea was conceived and operationalized, peak of the COVID-19 was long gone. As the study tried to include people affected across all three waves of COVID-19 in the field practice area spanning over a period of two years, potential recall bias could not be circumvented. And in addition, significant proportion of families, affected individuals could not be interviewed and only a caregiver or available member of the family provided information.

Measurement bias:

In addition to the recall bias, expenditure bills of the participants towards healthcare services during the infection were not fully available for majority of

participants and hence the costs were calculated, based on inputs from government official circulars and costs reported from other studies during the pandemic period.

Accessibility:

As the design of the study being community based cross sectional study, the participants were to be identified and reached with the help peripheral health workers i.e.,) ASHA workers. Albeit substantial people infected during the pandemic interviewed with lot of efforts, still some eligible individuals could not be reached and surveyed, as some health care workers were reluctant to accompany due to their work schedule.

Generalizability:

Since, this data is generated from a single field practice area with a mere sample size, the findings from this study should be carefully interpreted and to be extrapolated with caution.

SUMMARY

COVID-19 has caused significant disruptions in economy and healthcare across the globe. With India being one of the top three countries to report cases and deaths accounting for around forty-five million cases and five lakh deaths. Estimates released by WHO are far greater than the actual numbers reported by government authorities. The pandemic has led to remarkable social and economic restraints.

The purpose of the study was to assess the socioeconomic impact and to estimate the expenditure pattern towards healthcare for COVID-19 infection during the pandemic.

The study was designed as community based cross sectional study and set to be carried out in one of the field practice areas with population of around forty thousand to identify the social and economic effects of COVID-19 on the infected individuals. In addition, the questionnaire also included section to investigate the prevalence of long covid among participants.

Chi-square test was used to find the association between variables. Both direct and indirect costs were included to assess the median costs of healthcare spending for hospitalized and day care patients were calculated.

The findings revealed that socio-economic and occupational status played a part in purchasing an insurance cover and, influenced the ease of procuring the essentials during the pandemic. Although the participants were aware about their vaccination status, they could not differentiate and tell name of the vaccine they were given. Symptomatic infection among bulk of participants was evident during the pandemic. Also, the pandemic has crippled many families due to temporary loss of

job and income due to lockdown imposed to curtail the spread of infection. Covid-19 affecting the head of the family or the earning member predisposes the family to adverse financial burden. Such situations warrant the need for social security net.

Overall, the study highlights the need for comprehensive and equitable healthcare insurance coverage for people belonging to all socio-economic strata irrespective of their power to access healthcare. 'Public health insurance schemes' in the form of 'Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana' (AB-PMJAY) will be a key and can significantly reduce the burden of out-of-pocket spending especially to the vulnerable population as social safety net.

BIBLIOGRAPHY

1. Blanco ER, Garcia VG, Garcia RM, Molina PM, Hamalainen SM, Rodriguez JAL, et al. Characteristics of a COVID-19 confrmed case series in primary care (COVID-19-PC project): a cross-sectional study. BMC Fam Pract. 2021; 22(66). https://doi.org/10.1186/s12875-021-01419-7. Accessed date on January 14, 2024.
2. Majumder J, Minko T. Recent Developments on Therapeutic and Diagnostic Approaches for COVID-19. The AAPS Journal. 2021; 23(14): DOI: 10.1208/s12248-020-00532-2. Accessed date on January 18, 2024.
3. Lancaster E, Byrd K, Ai Y, Lee J. Socioeconomic status correlations with confirmed COVID-19 cases and SARS-CoV-2 wastewater concentrations in small-medium sized communities. Environmental Research 215 (2022) 114290. https://doi.org/10.1016/j.envres.2022.114290. Accessed date on January 09, 2024.
4. Yuan Y, Jiao B, Qu L, Yang D and Liu R. The development of COVID-19 treatment. Front. Immunol 2023; 14:1125246. doi: 10.3389/fimmu.2023.1125246. Accessed date on January 04, 2024.
5. Park K. Parks textbook of preventive and social medicine. 26th ed. Banarsidas Bhanot. Jabalpur 2021.
6. World Health Organization 2023 data.who.int, WHO Coronavirus (COVID-19) dashboard > Cases [Dashboard].

https://data.who.int/dashboards/covid19/cases. Accessed date on February 14, 2024.

7. World Health Organization 2023 data.who.int, WHO Coronavirus (COVID-19) dashboard > Deaths [Dashboard]. https://data.who.int/dashboards/covid19/deaths. Accessed date on February 14, 2024.
8. World Health Organization 2023 data.who.int, WHO Coronavirus (COVID-19) dashboard > Vaccines [Dashboard]. https://data.who.int/dashboards/covid19/vaccines. Accessed date on February 14, 2024.
9. Koelle K, Martin MA, Anita R, Lopman B, Dean NE. The changing epidemiology of SARS-CoV-2. Science 2022 March 11; 375(6585): 1116–1121. doi:10.1126/science.abm4915. Accessed date on January 14, 2024.
10. Ashcroft P, Lehtinen S, Angst DC, Low N, Bonhoeffer S. Quantifying the impact of quarantine duration on COVID-19 transmission. eLife 2021; 10:e63704. DOI: https://doi.org/10.7554/eLife.63704. Accessed date on January 24, 2024.
11. Martin R, Maleche A, Gay J, Ftima H. Lessons learnt from COVID-19 to reduce mortality and morbidity in the Global South: addressing global vaccine equity for future pandemics. BMJ Glob Health 2024; 9:e013680. doi:10. 1136/ bmjgh-2023-013680. Accessed date on December 22, 2023.
12. Sreepadmanabh M, Sahu AK, Chande A. COVID-19: Advances in diagnostic tools, treatment strategies, and vaccine development. J Biosci.2020; 45(148):

Indian Academy of Sciences. DOI: 10.1007/s12038-020-00114-6. Accessed date on January 14, 2024.

13. Thai PQ, Toan DTT, Son DT, Van HTH, Minh LN, Hung LX, et al (. Factors associated with the duration of hospitalisation among COVID-19 patients in Vietnam: A survival analysis. Epidemiology and Infection 148 2020; e114, 1–7. https://doi.org/10.1017/ S0950268820001259. Accessed date on June 11, 2023.
14. Nakhaei K, Jalilian H, Zozani MA, Heyadari S, Torkzadeh and Taji M. Direct and indirect cost of COVID-19 patients in Iran. Health Policy and Technology 10 2021; 100572. https://doi.org/10.1016/j.hlpt.2021.100572. Accessed date on July 06, 2023.
15. Ghaffari Darab, Keshavarz K, Sadeghi E, Shahmahamadi J, Kavosi Z. The economic burden of coronavirus disease 2019 (COVID-19): evidence from Iran. BMC Health Services Research 2021; 21:132. https://doi.org/10.1186/s12913-021-06126-8. Accessed date on January 14, 2024.
16. Garg S, Bebarta KK, Tripathi N and Krishnendhu C. Catastrophic health expenditure due to hospitalization for COVID-19 treatment in India: findings from a primary survey. BMC Research Notes 2022 15:86. https://doi. org/10.1186/s13104-022-05977-6. Accessed date on May 3, 2022.
17. Reddy KN, Shah J, Iyer S, Chowdary M, Yerrapalem N, Pasalkar N, et al. Direct medical cost analysis of Indian Covid-19 patients requiring critical care admission. Indian J Crit Care Med 2021; 25(10):1120-1125. DOI:10.5005/jp-journals-10071-23991. Accessed date on April 27, 2022.

18. He KY, Lei XY, Zhang L, Wu DH, Li JQ, Lu LY, et al. Development and management of gastrointestinal symptoms in long-term COVID-19. Front. Microbiol 2023; 14:1278479. DOI 10.3389/fmicb.2023.1278479. Accessed date on December 24, 2023.

19. Patel AK, Patel D, Shevkani M, Shah A, Madan S, Gohel S, et al. COVID-19 patients' clinical profile and outcome with respect to their vaccination status: A prospective observational multicentre cohort study during third wave in Western India. Indian Journal of Medical Microbiology 2023; 41:28-32. https://doi.org/10.1016/j.ijmmb.2022.12.004. Accessed date on May 21, 2024.

20. Abhilash KPP, Mathiyalagan P, Krishnaraj VRK, Selvan S, Kanagarajan R, Reddy NP, et al. Impact of prior vaccination with Covishield and Covaxin on mortality among symptomatic COVID-19 patients during the second wave of the pandemic in South India during April and May 2021: a cohort study. Vaccine 2022; 40:2107-13. https://doi.org/10.1016/j.vaccine.2022.02.023. Accessed date on May 16, 2024.

21. Bajpai V, Singh N, Sardana H, Kumari S, Vettiyil B, Saraya A. Economic and social impact of out-of-pocket expenditure on households of patients attending public hospitals. Natl Med J India 2017; 30:15-20. Accessed date March 21, 2024.

22. Dalui A, Banerjee S, Roy R. Determinants of out-of-pocket and catastrophic health expenditure in rural population: A community-based study in a block of Purba Barddhaman, West Bengal. Indian J Public Health 2020;64:223-8. DOI: 10.4103/ijph.IJPH_848_20. Accessed on May 8, 2022.

23. Khan AA, AlRuthia Y, Balkhi B, Alghadeer SM, Temsah MH, Althunayyan SM, et al. Survival and Estimation of Direct Medical Costs of Hospitalized

COVID-19 Patients in the Kingdom of Saudi Arabia. Int J Environ Res Public Health 2020;17(20):7458. doi: 10.3390/ijerph17207458. Accessed date May 8 2022.

24. Teker C, Cavmak D, Avci H. The Costs of Medical Care for Covid-19 Patients: A case study in Turkey. Asia Pacific Journal of Health Management 2021; 16(4):i1167. doi: 10.24083/apjhm.v16i4.1167. Accessed date April 29, 2024.
25. Gerken J, Zapata D, Kuivinen D and Zapata I. Comorbidities, sociodemographic factors, and determinants of health on COVID-19 fatalities in the United States. Front. Public Health 2022; 10:993662. doi: 10.3389/fpubh.2022.993662. Accessed date on April 14, 2024.
26. Mahantshetti S, Singh J, Dhandapani S. Updated Modified BG Prasad classification for October 2023. Natl J Community Med 2024;15(01):89-90. DOI: 10.55489/njcm.150120243429. Accessed date May 28, 2024.
27. Official website of labour bureau, ministry of labour and employement, government of India. Gov.in. (cited on 10/02/2024).
28. Magdy MD, Metwally A, Magdy O. Assessment of community psycho-behavioral responses during the outbreak of novel coronavirus (2019-nCoV): a cross-sectional study. AIMS Public Health 2021; 9(1):26-40. DOI:10.3934/publichealth.2022003. Accessed date on May 23, 2024.
29. Sharma S, Kumar A. Effects of gender, marital status, living status, personality and value orientation on attitude and emotions during Covid-19 lockdown. International Journal of Social Science Research and Review 2023; 6(6):42-58. http://ijssrr.com. Accessed date on May 16, 2024.

30. Xiao J, Zhao J, Luo Z, Liu F and, Greenwood D. The impact of built environment on mental health: A COVID-19 lockdown perspective. Health & Place. 2022;77:102889. https://doi.org/10.1016/j.healthplace.2022.102889. Accessed on June 3, 2024.

31. Joseph N, Singh VP, Murthy IV, Raman V, Nagaraj MB, Shetty RV, et al. Practices, awareness, and perception towards home-based COVID-19 management among the general population in Mangalore city in south India F1000Research 2022; 10:1271 https://doi.org/10.12688/f1000research.74514.2. Accessed date on April 11, 2024.

32. Lucar J, Wingler MJB, Cretella DA, Ward LM, Gomillia CES, Chamberlain N, et al. Epidemiology, Clinical Features, and Outcomes of Hospitalized Adults with COVID-19 in Mississippi. Southern Medical Journal 2021; 114(3):144-49. DOI: 10.14423/SMJ.0000000000001222. Accessed date April 11, 2024.

33. Mahdi Z, Charif F, Gourinda A, et al. Examining the Determinants of COVID-19 Severity: A Cohort Study in Morocco of 915 Patients. Cureus 2022; 14(12): e32914. DOI 10.7759/cureus.32914. Accessed date May 09, 2024

34. Putra RAA, Ovsiannikov K, Kotani K. COVID-19-associated income loss and job loss: Evidence from Indonesia. Journal of Asian Economics 2023; 87:1-14. https://doi.org/10.1016/j.asieco.2023.101631. Accessed date on May 19, 2024.

35. Marty L, Guillain BL, Labesse M, Nicklaus S. Food choice motives and the nutritional quality of diet during the COVID-19 lockdown in France. Appetite

2021; 157:1-7. https://doi.org/10.1016/j.appet.2020.105005. Accessed date on May 22, 2024.

36. Sabetian G, Moghadami M, Hashemizadeh Fard Haghighi, L, Shahriarirad R, Javad Fallaahi M, Asmarian N et al. COVID-19 infection among healthcare workers: a cross-sectional study in southwest Iran. *Virol J* 2021;18(58). https://doi.org/10.1186/s12985-021-01532-0. Accessed on May 31, 2024.
37. Adler L, Gazit S, Pinto Y, Perez G, Reuveni MM, Yehoshua I, et al. Long-COVID in patients with a history of mild or asymptomatic SARS-CoV-2 infection: a Nationwide Cohort Study. Scandinavian Journal of Primary Health Care 2022;40(3): 342-49. https://doi.org/10.1080/02813432.2022.2139480. Accessed date on May 21, 2024.
38. Jin YH, Huang Q, Wang YY, Zeng XT, Luo LS, Pan ZY, et al. Perceived infection transmission routes, infection control practices, psychosocial changes, and management of COVID-19 infected healthcare workers in a tertiary acute care hospital in Wuhan: a cross-sectional survey. Military Medical Research 2020;7:24. https://doi.org/10.1186/s40779-020-00254-8. Accessed date May 19, 2024.
39. Zhang H, Ma S, Han T, Qu G, Cheng C, Uy JP, et al. Association of smoking history with severe and critical outcomes in COVID-19 patients: A systemic review and meta-analysis. Eur J Integr Med 2021;43:101313 doi: 10.1016/j.eujim.2021.101313. Accessed date 14 June, 2024.
40. Begum H, Neto AS, Alliegro P, Broadley T, Trapani T, Campbell LT. et al. People in intensive care with COVID-19: demographic and clinical features during first, second, and third pandemic waves in Australia. Med J Aust. 2022 Oct;217(7):352-60. doi: 10.5694/mja2.51590. Accessed date May 21, 2024.

41. Petersen MS, Kristiansen MF, Hanusson KD, Danielsen ME, Steig BA, Gaini S, et al. Long COVID in the Faroe Islands: A Longitudinal study among Nonhospitalized patients. Clinical Infectious Diseases 2021; 73(11): e4058-63. DOI: 10.1093/cid/ciaa1792. Accessed date May 28, 2024.
42. Stalin P, Alexander T, Purty AJ, Manikandan M, Vaishnavi S. Health-seeking behavior for acute health problems during COVID-19 lockdown among the residents of an urban area in Puducherry. Indian J Community Med 2022;47: 299-301. DOI: 10.4103/ijcm.ijcm_739_21. Accessed date April 11, 2024.
43. Thomas R, Jacob QM, Eliza SR, Mini M, Jose J, Sobha A. Economic burden and catastrophic health expenditure associated with COVID-19 hospitalizations in Kerala, South India. Clinico Economics and Outcomes Research 2022; 14:439-446. https://doi.org/10.1101/2021.12.20.21268081. Accessed date May 20 2022.
44. https://www.thehindu.com/news/national/karnataka/covid-19-fatality-numbers-swell-by-25000-after-verification-by-revenue-dept-panel/article67443408.ece.
45. https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://ndma.gov.in/sites/default/files/PDF/Final-Guidelines-on-Ex-Gratia-Assistance-to-Covid-19-Victims.pdf&ved=2ahUKEwjVnoz9kP6GAxXyT2wGHaCVCKgQFnoECBIQBg&usg=AOvVaw1_nhK1hArmkKqyHdRlId8z.
46. Sarda R, Kumar A, Chandra A, Bir M, Kumar S, Soneja M et al. Prevalence of Long Covid-19 and its Impact on Quality of Life among Tertiary care center in North India. Journal of Patient Experience 2022;9:1-7. DOI: 10.1177/23743735221117358.

47. Poojara R, George F, Sebastian J, Salam SF. Assessment of Post-Covid Syndrome manifestations among Covid-19 patients in Ernakulam District. The Journal of Research ANGRAU 2022;50(4). https://doi.org/10.58537/jorangrau.2022.50.4.07. Accessed date June 5, 2024.

48. Bahmer T, Borzikowsky C, Lieb W, Horn A, Krist L, Fricke J, et al. Severity, predictors and clinical correlates of Post-COVID syndrome (PCS) in Germany: A prospective, multi-centre, population-based cohort study. E Clinical Medicine 2022; 18(51): 101549. doi: 10.1016/j.eclinm.2022.101549. Accessed date May 27, 2024.

49. Ambade M, Rajpal S, Kim R and Subramanian SV. Socioeconomic and geographic variation in coverage of health insurance across India. Front. Public Health 2023;11: 1160088. doi:10.3389/fpubh.2023.1160088. Accessed date on May 21, 2024.

50. Ponnusamy P, Venugopal V, Dongre AR. Health insurance coverage and its determinants among middle-income households in Urban Puducherry: A mixed methods study. Indian J Public Health 2021; 65:231-6. DOI: 10.4103/ijph.IJPH_1357_20. Accessed date May 21, 2024.

51. Thenmozhi B, Sharmil SH. Self-medication practices of the rural community people: A cross-sectional study. Indian J Community Med 2023;48:619-22. DOI: 10.4103/ijcm.ijcm_842_22. Accessed date May 31, 2024.

52. Pathak BD, Upadhaya RB, Joshi S, Dhakal B, Sapkota S and, Bishwakarma K. Oxygen requirement and associated risk factors in Post-Covid-19 patients admitted to a tertiary care centre: A cross-sectional study. Can J Infect Dis Med Microbiol. 2023;3140708. Doi:10.1155/2023/3140708. Accessed on June 3, 2024.

53. Batheja D, Kurian V, Buteau S, Joy N and, Nair A. Role of oxygenation devices in alleviating the oxygen crisis in India. PLOS Glob Public Health. 2023;3(8):e0002297. Accessed on June 11, 2024.

54. Salve HR, Daniel RA, Kumar A, Kumar R and, Misra P. Prevalence and Determinants of Long COVID among patients attending the Outpatient department of a Subdistrict Hospital in Haryana. Cureus. 2023;15(9):e46007. Doi:10.7759/cureus.46007. Accessed on May 22, 2024.

ANNEXURE – I

INFORMED CONSENT FORM

"ASSESSMENT OF SOCIO-ECONOMIC IMPACT AND HEALTH CARE EXPENDITURE PATTERN OF COVID 19 IN HOUSEHOLDS OF RURAL FIELD PRACTICE AREA OF BELAGAVI - A COMMUNITY BASED CROSS-SECTIONAL STUDY"

Introduction:

A cluster of pneumonia of unknown etiology was reported in Wuhan City, China, on December 31, 2019. On 7th January 2020, the Chinese authorities identified a new CoV as a cause of pneumonia outbreak. The new strain was named SARS-CoV-2 or the novel coronavirus and the disease as COVID-19. India reported its first positive case of novel coronavirus on January 30, 2020, in Kerala, in a student, who returned from Wuhan University. As of May 4, 2022, India has reported 4,25,44,689 coronavirus disease-19 (COVID-19) cases second only to the USA. The number of deaths in India is 5,23,920 as per MOHFW database[1].In India, intensive care is one of the primary drivers of hospital cost accounting for 20 to 30% of a hospital's budget. The penetration of health insurance is only 15% in rural and 20% in urban areas of India. The National Health Accounts report suggests that out-of-pocket expenditure constitutes about 68% of total healthcare expenses. Intensive care in India is primarily provided by the private sector, and costs are mostly borne through out-of-pocket expenditure by individuals. The COVID-19 pandemic is likely to have increased the economic burden on patients requiring ICU admission. OOP health expenditures were those made by households at the point of receiving health services and include cash

payments reported in the surveys. Catastrophic spending on health occurs when a household must reduce its basic expenses over acertain period of time to cope with healthcare expenses on one or more of its members. India was among the worst affected countries in the world in terms of the number of COVID-19 infected persons. In terms of policy responses in India, the central and state governments tried to expand the capacity of public hospitals and offered free services for COVID-19 treatment. India has a Publicly Funded Health Insurance (PFHI) programme known as Ayushman Bharat—Pradhan Mantri Jan Arogya Yojana (PMJAY) to cover in-patient care costs in public as well as private hospitals. In addition, governments in many states of India declared price ceilings for COVID-19 related care in private hospitals.

Explanation of procedures:

After approval from the institutional ethical committee, a written informed consent for all the subjects participating in the study will be obtained and the participants will be recruited according to the inclusion and exclusion criteria. Structured & pre-designed questionnaire consisting of socio-demographic data, Covid-19 infection / disease / death / recovery status, OPD / IPD / Oxygen therapy, Health care seeking behavior, health insurance and compensation for Covid 19 death.

Possible Benefits:

You will not get any benefits by participating in this study. The data gathered will help the population at large.

Incentives:

You will not be eligible for any kind of monetary benefits or free services by virtue of your participation in the study.

Possible Risks:

There are no risks involved in this study.

Privacy and Confidentiality:

The results of the study may be published for scientific purposes. However, your identity will not be revealed and all information collected will be coded so that no one other than the investigator will know your identity.

Withdrawal:

You can withdraw from the study at any point of time if you wish to do so.

Costs of Participation:

The cost of the study will be borne by the researcher. There will be no additional cost to you for participating in this study.

Payment of Participation:

There will be no incentives to you for participating in this study.

Authorization to publish the results:

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

Legal Rights:

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

CONSENT STATEMENT

I am making a voluntary decision to participate in the study **"Assessment of Socio-economic impact and health care expenditure pattern of COVID 19 in households of rural field practice area of Belagavi - A community based cross-sectional study"**. My signature below indicates that I have decided to participate and I have read the information provided above or the information provided above has been read to me in the language that I understand best. I was given the opportunity to ask questions and that they have been answered to my satisfaction.

Name of the Participant:

Signature or Left Thumb Impression of the Participant:

Name of the Witness:

Signature or Left Thumb Impression of the Witness:

Name of the Investigator:

Signature of the Investigator:

Date:

Place:

ANNEXURE – II

QUESTIONNAIRE

"ASSESSMENT OF SOCIO-ECONOMIC IMPACT AND HEALTH CARE EXPENDITURE PATTERN OF COVID 19 IN HOUSEHOLDS OF RURAL FIELD PRACTICE AREA OF BELAGAVI - A COMMUNITY BASED CROSS-SECTIONAL STUDY"

I. Socio-Demographic Details

1.1. Type of the House: Owned / Rented

1.2. Type of family: Nuclear / Joint / Three generation family / Broken

1.3. Type of the ration card: APL / BPL / No Ration-card

1.4. Type of the insurance: Govt / Private / Both / Nil

1.5. Nature of insurance: Health only / Life only / Both / None

1.6. Total number of members in the family: 1 / 2 / 3 / 4 / 5 / >5

1.7. Total Monthly income (in rupees):_____

1.8. Per Capita Income/month (in rupees): _____

1.9. Socio-economic class (B G prasad Classification): I / II / III / IV / V

1.10. Is the family covered by any self-help group: Yes / No

1.11. Any loss of job in the family during the pandemic: Yes / No

1.12. Did you find any difficulty in getting food products during the pandemic?

Yes / No

1.13. Did you find any difficulty in getting commodities during the pandemic?

Yes / No

1.14. Did you find any difficulty in getting medical supplies like mask during the pandemic? Yes / No

1.15. Did you find any difficulty in getting medical supplies like sanitizer during the pandemic? Yes / No

II. Details of COVID 19 in the Family

2.1. Whether COVID 19 precautions were followed adequately? Yes / No

2.2. Any outsiders visited the house within two weeks prior to the covid infection?

Yes / No / Don't know

2.3. Have any people in your Street / Area had COVID 19 infection prior to your illness? Yes / No / Don't know

2.4. Number of Persons affected by COVID 19 in the family? 1 / 2 / 3 / 4 / 5 / >5

2.5. Number of people hospitalized in the household for COVID 19?

Nil / 1 / 2 / 3 / 4 / 5 / >5

2.6. Number of deaths, if any: Nil / 1 / 2 / 3 / 4 / 5 / >5

2.7. Are all the eligible members in the family vaccinated now?

Yes / No

III. Details of the persons affected with COVID 19

3.1. Name of the Affected individual _____

3.2. Age (in years): 0-18 / 19-35 / 36-60 / >60

3.3. Gender: Male / Female

3.4. Marital status – Married / Unmarried / Broken / widow

3.5. Level of education: illiterate / 1-5^{std} / 6-10^{std} / PUC / Diploma / Graduate / Post-graduate

3.6. Occupation:	Govt Job / Private Job / Self-employed / Farmer / laborer / pensioner / Others
3.7. Type of diet:	Veg / Mixed diet
3.8. Smoking:	Yes / No
3.9. Alcohol:	Yes / No
3.10. Tobacco:	Yes / No
3.11. Illicit drug abuse:	Yes / No
3.12. Do you have Diabetes:	Yes / No
3.13. Do you have Hypertension?	Yes / No
3.14. Do you have COPD?	Yes / No
3.15. Do you have IHD?	Yes / No
3.16. Do you have Cancer?	Yes / No
3.17. In which wave you got affected?	1^{st} / 2^{nd} / 3^{rd} / 4^{th}
3.18. Have you been vaccinated before infection?	Yes / No
3.19. If yes, how many doses have been done?	1 / 2 / booster
3.20. Have you been Symptomatic during the course of illness? (If yes, go to Q.no 3.23, If no, go to Q.no 3.24)	Yes / No

III.1 For Asymptomatic & Non-hospitalized Symptomatic

3.21. Have you been isolated?	Yes / No
3.22. If yes, where have you been isolated?	At home / COVID care centre
3.23. Have you received any treatment?	Yes / No
3.24. If yes, what type of treatment?	Allopathy / Alternative treatment

III.2 For Hospitalized Symptomatic

3.25. If hospitalized, where were you admitted? COVID Ward / ICU / Both

3.26. Received oxygen therapy? Yes / No

3.27. Lead time in reaching the hospital (in days): 0-3 / 4-7 / 8-14 / >14

3.28. Time interval between onset of symptoms and ICU admissions (in days):

0-3 / 4-7 / 8-14 / >14

3.29. Length of stay in the hospital (in days)? 0-3 / 4-7 / 8-14 / >14

3.30. Length of stay in ICU (in days)? 0-3 / 4-7 / 8-14 / >14

3.31. What was the outcome? Recovered / Death

3.32. If recovered, with Complications? Yes / No

3.33. Where have you have been treated?

Govt / Private / transferred from Govt to Private/

transferred from Private to Govt

3.34. What was the reason for opting Govt treatment facility?

Lack of money / Self-interest

3.35. What was reason for opting Private treatment facility?

Non availability of Beds in Govt setup / Self-interest

3.36. Overall expenditure for treatment for Covid-19 infection:

IV. Details of the Health seeking behavior & Mode of Payment

4.1. Did you take any self-medication during the illness? Yes / No

4.2. Where did you first visited after the onset of illness?

Sub-center / PHC / Private Practitioner /

civil hospital / KLE'S hospital / others

4.3. Did you take any alternate medicine during illness: Yes / No

4.4. If not insured, what was source of money paid?

Savings / Loans / Selling assets / Borrowing

4.5. Did the family receive any compensation from the government due to death?

Yes / No

4.6. Do you have the idea to avail insurance in future? Yes / No

V. Long COVID

5.1. Have you had any of the following symptoms three months after your illness?

a) Fatigue with bodily pains and / or symptoms of depression or anxiety

b) Cognitive problems such as forgetfulness or difficulty in concentrating

c) Respiratory problems with shortness of breath and persistent cough

ANNEXURE – III

KEY TO MASTER CHART

II. Socio-Demographic Details

1.1. Type of the House: Owned (1) / Rented (2)

1.2. Type of family: Nuclear (1) / Joint (2) / Three generation family (3) / Broken (4)

1.3. Type of the ration card: APL (1) / BPL (2) / No Ration-card (3)

1.4. Type of the insurance: Govt (1) / Private (2) / Both (3) / Nil (4)

1.5. Nature of insurance: Health only (1) / Life only (2) / Both (3) / None (4)

1.6. Total number of members in the family: 1 / 2 / 3 / 4 / 5 / >5

1.7. Total Monthly income (in rupees):_____

1.8. Per Capita Income/month (in rupees): _____

1.9. Socio-economic class (B G prasad Classification): I (1) / II (2) / III (3) / IV (4) / V (5)

1.10. Is the family covered by any self-help group: Yes (1) / No (2)

1.11. Any loss of job in the family during the pandemic: Yes (1) / No (2)

1.12. Did you find any difficulty in getting food products during the pandemic?

Yes (1) / No (2)

1.13. Did you find any difficulty in getting commodities during the pandemic?

Yes (1) / No (2)

1.14. Did you find any difficulty in getting medical supplies like mask during the pandemic? Yes (1) / No (2)

1.15. Did you find any difficulty in getting medical supplies like sanitizer during the pandemic? Yes (1) / No (2)

II. Details of COVID 19 in the Family

2.1. Whether COVID 19 precautions were followed adequately? Yes (1) / No (2)

2.2. Any outsiders visited the house within two weeks prior to the covid infection?

Yes (1) / No (2) / Don't know (3)

2.3. Have any people in your Street / Area had COVID 19 infection prior to your illness? Yes (1) / No (2) / Don't know (3)

2.4. Number of Persons affected by COVID 19 in the family? 1 / 2 / 3 / 4 / 5 / >5

2.5. Number of people hospitalized in the household for COVID 19?

Nil (1) / 1 (2) / 2 (3) / 3 (4) / 4 (5) / 5 (6) / >5 (7)

2.6. Number of deaths, if any: Nil (1) / 1 (2) / 2 (3) / 3 (4) / 4 (5) / 5 (6) / >5 (7)

2.7. Are all the eligible members in the family vaccinated now?

Yes (1) / No (2)

III. Details of the persons affected with COVID 19

3.1. Name of the Affected individual _____

3.2. Age (in years): 0-18 (1) / 19-35 (2) / 36-60 (3) / >60 (4)

3.3. Gender: Male (1) / Female (2)

3.4. Marital status – Married (1) / Unmarried (2) / Broken (3) / widow (4)

3.5. Level of education: illiterate (1) / 1-5^{std} (2) / 6-10^{std} (3) / PUC (4) / Diploma (5) / Graduate (6) / Post graduate (7)

3.6. Occupation: Govt Job (1) / Private Job (2) / Self-employed (3) / Farmer (4) / laborer (5) / pensioner (6) / Others (7)

3.7. Type of diet: Veg (1) / Mixed diet (2)

3.8. Smoking: Yes (1) / No (2)

3.9. Alcohol: Yes (1) / No (2)

3.10. Tobacco: Yes (1) / No (2)

3.11. Illicit drug abuse: Yes (1) / No (2)

3.12. Do you have Diabetes: Yes (1) / No (2)

3.13. Do you have Hypertension? Yes (1) / No (2)

3.14. Do you have COPD? Yes (1) / No (2)

3.15. Do you have IHD? Yes (1) / No (2)

3.16. Do you have Cancer? Yes (1) / No (2)

3.17. In which wave you got affected? 1^{st} (1) / 2^{nd} (2) / 3^{rd} (3) / 4^{th} (4)

3.18. Have you been vaccinated before infection? Yes (1) / No (2)

3.19. If yes, how many doses have been done? 1 (1) / 2 (2) / booster (3)

3.20. Have you been Symptomatic during the course of illness?

(If yes, go to Q.no 3.23, If no, go to Q.no 3.24) Yes (1) / No (2)

III.1 For Asymptomatic & Non-hospitalized Symptomatic

3.21. Have you been isolated? Yes (1) / No (2)

3.22. If yes, where have you been isolated? At home (1) / COVID care centre (2)

3.23. Have you received any treatment? Yes (1) / No (2)

3.24. If yes, what type of treatment? Allopathy (1) / Alternative treatment (2)

III.2 For Hospitalized Symptomatic

3.25. If hospitalized, where were you admitted? COVID Ward (1) / ICU (2) / Both (3)

3.26. Received oxygen therapy? Yes (1) / No (2)

3.27. Lead time in reaching the hospital (in days): 0-3 (1) / 4-7 (2) / 8-14 (3) / >14 (4)

3.28. Time interval between onset of symptoms and ICU admissions (in days):

0-3 (1) / 4-7 (2) / 8-14 (3) / >14 (4)

3.29. Length of stay in the hospital (in days)? 0-3 (1) / 4-7 (2) / 8-14 (3) / >14 (4)

3.30. Length of stay in ICU (in days)? 0-3 (1) / 4-7 (2) / 8-14 (3) / >14 (4)

3.31. What was the outcome? Recovered (1) / Death (2)

3.32. If recovered, with Complications? Yes (1) / No (2)

3.33. Where have you have been treated?

Govt (1) / Private (2) / transferred from Govt to Private (3) /

transferred from Private to Govt (4)

3.34. What was the reason for opting Govt treatment facility?

Lack of money (1) / Self-interest (2)

3.35. What was reason for opting Private treatment facility?

Non availability of Beds in Govt setup (1) / Self-interest (2)

IV. Details of the Health seeking behavior & Mode of Payment

4.1. Did you take any self-medication during the illness? Yes (1) / No (2)

4.2. Where did you first visited after the onset of illness?

Sub-center (1) / PHC (2) / Private Practitioner (3) /

civil hospital (4) / KLE'S hospital (5) / others (6)

4.3. Did you take any alternate medicine during illness: Yes (1) / No (2)

4.4. If not insured, what was source of money paid?

Savings (1) / Loans (2) / Selling assets (3) / Borrowing (4)

4.5. Did the family receive any compensation from the government due to death?

Yes (1) / No (2)

4.6. Do you have the idea to avail insurance in future? Yes (1) / No (2)

V. Long COVID

5.1. Have you had any of the following symptoms three months after your illness?

a) Fatigue with bodily pains and / or symptoms of depression or anxiety (1)

b) Cognitive problems such as forgetfulness or difficulty in concentrating (2)

c) Respiratory problems with shortness of breath and persistent cough (3)

Annexure IV- Master chart

S.no	Age	Gender	Marital status	Educational status	Occupational status	Type of house	Type of family	Type of rationcard	Type of insurance	Nature of insurance	No of members in family	SES	Loss of job	Food difficulty	Commodity difficulty	Medical supplies difficulty	Precautions for Covid-19	Outsider visit	Prior covid in area	No of persons affected in family	No of person hospitalized in household	Diet	Smoking	Alcohol	Tobacco	Drug abuse	Diabetes	HTN	COPD	IHD	Covid wave of infection	Vaccinated before infection	Doses	Symptomatic during illness	Symptoms	Non hospitalized - place of isolation	Expenditure	Non hosp - Healthcare provider	Hospitalized - Symptomatics - place of admission	oxygen supply	Lead time in reaching hospital	Time interval between onset of symptoms and hospital admissions	Length of stay in hospital	Length of stay in ICU	Outcome	Recovery & Complications	Where treated	Reason for government hospitalization	Reason for private hospitalization	Expenditure	Self medication practices	First visit to healthcare provider	Alternate medicine	Source of money	Compensation	Idea to avail Insurance	Long covid
1	1	2	2	3	7	1	3	3	4	4	5	3	2	1	1	1	1	2	1	3	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
2	2	1	1	4	1	1	5	3	1	2	5	3	2	1	1	1	1	2	1	3	2	2	2	1	2	2	2	2	2	2	2	1	2	1	134	99	99	99	2	1	2	2	1	1	2	98	2	98	2	100000	2	3	2	99	1	4	99
3	2	2	1	3	8	2	1	2	4	4	3	2	2	1	1	1	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1	2	1	4	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	4	2	1	3	2	99
4	2	1	1	4	3	2	1	3	2	1	4	1	2	2	2	2	1	3	3	1	2	2	2	1	2	2	2	2	2	2	1	2	99	1	14	99	99	99	1	2	1	98	2	98	1	2	1	2	98	36400	2	3	2	1	3	4	99
5	2	1	1	3	2	1	3	1	4	4	4	2	2	2	2	1	1	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	99	1	14612	99	99	99	1	2	1	98	1	98	1	2	1	1	98	15600	1	4	2	4	3	1	3
6	3	1	1	2	2	1	3	1	2	1	5	1	2	2	2	2	1	2	1	2	2	2	2	1	2	2	2	1	2	2	2	2	99	1	123467	99	99	99	1	2	2	98	3	98	1	2	2	98	2	160000	2	5	2	99	3	4	1
7	2	2	1	2	8	1	2	2	4	4	6	3	1	1	1	1	1	3	3	3	2	2	2	2	1	2	2	2	2	2	2	2	99	1	145	99	99	99	1	2	2	98	2	98	1	2	2	98	1	80000	1	5	2	4	3	1	99
8	3	1	1	3	3	1	2	2	4	4	5	1	2	1	1	2	2	3	3	2	2	2	2	1	2	2	2	2	2	2	2	1	2	1	1610	99	99	99	1	2	3	98	3	98	1	2	1	2	98	72800	1	3	2	1	3	1	99
9	2	1	2	3	3	1	1	3	1	1	4	1	2	1	1	1	1	3	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	12458	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	4	99
10	2	1	2	2	2	1	1	1	4	4	4	1	2	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	1	2	99	1	1257	99	99	99	1	2	1	98	1	98	1	2	2	98	2	12000	1	2	2	1	3	1	1
11	4	2	3	3	9	1	4	3	4	4	5	3	2	2	2	2	1	1	3	1	2	1	2	2	2	2	2	1	2	2	2	2	99	1	12345	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	3	99
12	2	1	2	3	3	1	3	2	4	4	5	2	2	1	1	1	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	99	1	1248	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	2	2	1	3	1	99
13	2	1	1	3	2	1	3	1	4	4	4	2	2	2	2	1	1	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	99	1	14612	99	99	99	1	2	1	98	1	98	1	2	1	1	98	15600	1	4	2	4	3	1	3
14	2	1	1	2	3	1	2	2	4	4	6	2	2	1	1	2	2	1	1	2	1	2	2	1	1	2	2	2	2	2	2	2	99	1	246	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	1	99
15	3	1	1	2	3	1	2	2	4	4	6	2	1	1	1	1	1	2	1	3	2	2	1	1	2	2	2	2	2	3	2	2	99	1	4	3	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	1	4	3	3	99
16	2	2	1	3	8	1	1	2	2	4	4	3	2	2	2	1	1	1	1	2	2	1	2	2	2	2	2	2	2	2	2	2	99	1	14	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	3	3
17	3	1	1	6	2	2	1	1	2	2	4	1	1	1	1	1	1	2	1	2	2	2	2	1	2	2	2	2	2	2	2	2	99	1	14568	99	99	99	3	1	2	2	3	2	2	98	2	98	2	240000	1	3	2	12	2	4	3
18	2	2	1	4	8	1	2	1	4	4	6	2	2	2	2	2	1	2	1	6	1	1	2	2	2	2	2	2	2	2	2	2	99	2	99	3	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
19	2	2	2	2	7	1	2	1	4	4	6	2	2	2	2	2	1	2	1	6	1	1	2	2	2	2	2	2	2	2	2	1	2	1	1257	3	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
20	1	2	2	2	7	1	2	1	4	4	6	2	2	2	2	2	1	2	1	6	1	1	2	2	2	2	1	2	2	2	2	2	99	2	99	3	3778	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	3
21	2	1	1	4	1	1	2	1	1	3	6	2	2	2	2	2	1	2	1	6	1	2	2	1	2	2	2	2	2	2	1	3	1	123458	3	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	4	3
22	3	2	2	3	9	1	2	1	4	4	6	2	2	2	2	2	1	2	1	6	1	1	2	2	2	2	1	1	2	2	2	2	99	2	99	3	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
23	4	2	4	1	9	1	2	1	4	4	6	2	2	2	2	2	1	2	1	6	1	1	2	2	2	2	1	1	2	2	2	2	99	1	1456	3	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	5	2	1	3	2	3
24	1	2	2	2	7	1	2	1	4	4	6	2	2	2	2	2	1	2	1	6	1	1	2	2	2	2	2	2	2	2	2	2	99	2	99	3	3543	2	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	1	99
25	3	1	1	6	2	1	2	1	4	4	6	2	2	2	2	2	1	2	1	6	1	2	2	1	2	2	2	2	2	2	2	1	99	1	128	3	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	3	99
26	2	2	2	6	3	1	2	1	4	4	6	2	2	1	1	2	1	2	1	6	2	1	2	2	2	2	2	2	2	2	1	2	1	13689	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
27	2	2	2	6	2	1	2	1	2	3	6	2	2	1	1	2	1	2	1	6	2	1	2	2	2	2	2	2	2	2	1	2	1	12468	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
28	1	2	2	3	7	1	2	1	2	3	6	2	2	1	1	2	1	2	1	6	2	1	2	2	2	2	2	2	2	2	1	2	1	12468	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
29	2	2	2	6	7	1	3	1	2	3	6	2	2	1	1	2	1	2	1	6	2	1	2	2	2	2	2	2	2	2	1	2	1	1469	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	4	99
30	3	2	1	6	8	1	3	1	4	4	5	2	2	2	1	1	2	1	2	1	1	2	2	2	2	2	2	2	2	2	1	2	1	134	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
31	3	1	1	6	3	1	2	1	2	3	6	2	2	1	1	2	1	2	1	6	2	1	2	2	2	2	2	2	2	2	1	1	1	1234	99	99	99	1	2	3	98	2	98	1	1	2	98	2	120000	2	6	2	99	3	4	3
32	4	2	4	1	9	1	2	1	2	3	6	2	2	1	1	2	1	2	1	6	2	1	2	2	1	2	1	2	2	2	1	3	1	1245	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	99	1	6	2	1	3	4	3
33	3	1	1	4	3	1	2	3	4	4	6	4	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	1	2	2	2	2	99	1	124	99	99	99	3	1	1	1	4	3	1	2	2	98	1	425000	2	5	2	23	3	1	99
34	2	2	1	3	8	1	2	3	4	4	6	4	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	99	1	458	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	2	99
35	2	2	1	3	8	1	2	3	2	2	6	4	2	2	2	2	1	1	1	4	1	2	2	2	2	2	2	2	2	2	2	2	99	1	24	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	5	2	1	3	4	99
36	3	1	1	4	2	1	2	3	2	2	6	1	2	2	2	2	1	1	1	4	1	2	2	2	2	2	1	2	2	2	2	2	99	1	1246	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	4	99
37	4	1	1	3	5	1	2	2	4	4	6	4	2	1	1	1	2	1	1	2	1	2	2	2	1	1	2	2	2	2	2	2	99	1	1246	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	2	99
38	3	2	1	3	8	1	2	2	2	1	6	4	2	1	1	1	2	1	1	2	1	2	2	2	2	2	2	2	2	2	2	1	2	1	14678	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	4	99
39	4	2	1	1	9	1	3	2	2	2	3	6	2	2	1	1	1	1	2	2	1	1	1	2	2	2	2	2	2	2	3	1	1	1	12	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
40	2	2	1	3	8	2	1	2	4	4	4	2	1	1	1	2	2	2	1	1	1	2	2	2	2	2	2	2	2	2	2	1	1	1	12	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	2	99
41	4	1	1	4	1	1	1	1	1	2	4	1	2	2	2	2	1	1	1	3	1	2	2	2	2	2	1	1	1	2	1	2	1	1	12	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	5	1	1	3	4	13
42	2	2	2	2	8	1	1	1	4	4	4	1	2	2	2	2	1	1	1	3	1	2	2	2	2	2	2	2	2	2	2	2	99	1	18	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	5	1	1	3	1	99
43	2	2	2	5	2	1	1	1	4	4	4	1	2	2	2	2	1	1	1	3	1	2	2	2	2	2	2	2	2	2	1	1	2	99	1	3543	2	99	99	99	99	99	99	99	99	99	99	99	99	2	5	2	1	3	1	99
44	4	1	1	1	3	1	3	2	4	4	6	4	2	2	2	2	1	1	2	1	2	2	2	2	2	2	2	1	2	2	2	2	99	1	2345	99	99	99	1	1	1	98	3	98	1	1	2	98	1	50000	2	3	2	4	3	2	3
45	2	2	1	3	1	1	3	2	4	4	6	4	2	2	2	2	1	1	2	1	2	2	2	2	2	2	2	2	2	2	1	2	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	99	1	1	1	1	3	2	2
46	4	2	1	3	8	1	3	1	4	4	6	1	2	2	2	2	1	1	3	1	2	2	2	2	2	2	2	2	2	2	2	2	99	1	123	99	99	99	1	2	3	98	1	98	1	2	2	98	2	46000	2	3	2	1	3	1	99
47	3	1	1	3	2	1	3	1	4	4	5	2	2	1	1	1	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	124	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	1	1	3	2	99
48	3	1	1	4	1	1	3	1	1	3	6	2	2	1	1	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	1	3	1	126	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	4	99
49	4	1	1	2	9	1	3	2	1	1	5	2	2	1	1	2	1	2	1	1	2	1	2	2	2	2	1	1	2	1	2	1	3	1	18	99	99	99	1	1	1	98	1	98	1	2	2	98	2	36000	2	5	2	99	3	4	99
50	2	2	2	6	2	2	1	2	4	4	4	2	2	1	1	1	2	1	1	4	4	2	2	2	2	2	2	2	2	2	1	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	1	99
51	3	1	1	3	5	2	1	2	4	4	4	2	2	2	1	1	1	2	1	1	4	2	2	1	1	2	2	1	2	2	1	2	99	1	1	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	99
52	3	2	1	2	8	2	1	2	4	4	4	2	2	1	1	1	2	1	1	4	4	2	2	2	2	2	2	1	2	2	2	2	99	1	1246	99	99	99	1	1	2	98	3	98	1	2	2	98	1	200000	2	3	2	4	3	1	99
53	2	1	1	3	2	1	3	2	4	4	6	4	1	1	1	1	2	2	2	4	3	2	2	2	2	2	2	1	2	2	2	2	99	1	146	99	99	99	1	1	1	98	1	98	2	98	2	98	1	45000	2	3	2	2	2	3	99
54	4	2	4	1	8	1	3	2	4	4	6	4	1	1	1	1	2	2	2	4	3	2	2	2	1	2	1	1	2	2	2	1	1	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	2	3	3	99
55	3	2	3	3	4	1	3	2	4	4	6	4	1	1	1	1	2	2	2	4	3	2	2	2	2	2	2	2	2	2	2	2	99	1	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	1	99
56	4	1	1	4	1	3	2	2	4	4	6	4	1	1	1	1	2	2	2	4	3	2	2	2	2	2	2	1	1	2	2	2	99	1	135	99	99	99	2	1	1	1	1	1	2	98	2	98	1	17000	2	3	2	4	2	3	99
57	2	2	1	3	8	1	2	2	4	4	6	4	2	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1	1	2	99	99	99	99	1	2	1	98	2	98	1	2	1	2	98	36400	2	2	2	1	3	1	3
58	3	1	1	3	5	1	1	2	2	4	4	4	2	1	1	1	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	12459	2	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	2	99
59	2	1	2	5	2	1	2	2	4	4	6	3	2	2	2	2	1	1	1	1	1	2	2	1	1	2	2	2	2	2	2	1	1	2	99	2	3778	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	1	1	3	1	99
60	1	2	2	3	7	1	2	2	1	2	6	1	2	2	2	2	1	2	3	2	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	4	99

Annexure IV- Master chart

61	3	1	1	6	1	1	2	2	1	2	6	1	2	2	2	2	1	2	3	2	1	1	2	2	2	2	1	2	2	2	12	1	3	1	1268	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	4	99
62	3	1	1	6	2	1	4	1	4	4	4	3	2	1	1	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	1	2	99	1	4	99	99	99	2	1	1	1	2	2	2	98	2	98	2	150000	2	3	2	4	1	1	99
63	3	1	1	2	3	1	2	1	4	4	6	4	2	2	2	1	1	3	3	1	1	2	2	2	2	2	2	1	2	2	2	2	99	1	1	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	3
64	2	1	1	6	2	1	2	1	4	4	6	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	2	2	2	1	1	2	1	124	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	2	1	1	3	1	99
65	2	1	2	6	2	1	1	1	4	4	3	2	2	2	2	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	124	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
66	3	1	1	2	4	1	1	2	4	4	3	2	2	1	1	1	2	1	1	1	2	2	2	2	2	2	1	1	2	2	2	2	99	1	134	99	99	99	1	1	3	98	3	98	2	98	1	1	98	56000	2	3	2	1	2	1	99
67	2	1	2	6	7	1	3	2	4	4	6	3	2	1	1	1	1	2	1	1	1	2	2	2	2	2	2	2	2	2	1	2	99	1	12	3	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
68	3	1	1	3	6	1	1	1	1	3	5	2	2	2	2	2	1	2	1	1	2	2	2	2	2	2	1	1	2	2	1	2	99	1	1234	99	99	2	1	1	1	98	2	98	1	2	1	2	98	84000	2	1	2	1	3	4	1
69	3	1	1	4	4	1	2	2	4	4	6	4	2	1	1	2	1	2	1	1	2	2	2	2	2	2	1	1	2	2	2	2	99	1	123	99	99	2	3	1	1	1	3	2	1	2	2	98	1	400000	2	3	2	14	3	2	3
70	3	2	1	2	8	1	3	2	1	2	4	4	2	2	2	2	1	2	2	1	2	1	2	2	2	2	1	1	2	2	2	2	99	1	411	99	99	2	2	1	1	1	3	3	2	98	2	98	2	475000	2	3	2	1	1	4	99
71	3	1	1	3	2	1	1	1	1	1	3	3	2	1	1	1	2	1	1	1	2	2	2	2	2	2	2	1	2	2	2	2	99	1	5	99	99	99	3	1	2	2	4	3	1	1	2	98	2	900000	2	6	2	1	3	4	2
72	3	2	4	2	8	1	3	1	4	4	5	2	2	1	1	1	1	2	1	2	2	2	2	2	2	2	2	1	2	1	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	3	99
73	3	1	1	2	2	1	3	2	4	4	5	3	2	1	1	1	2	1	1	1	1	2	1	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
74	2	1	2	5	2	1	1	2	1	2	4	4	2	2	2	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	14	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
75	3	1	1	5	2	1	1	3	1	2	4	2	1	2	2	2	1	2	2	1	1	2	2	1	2	2	1	2	2	2	2	2	99	1	5	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	4	2	1	3	4	99
76	4	1	1	3	6	1	3	1	4	4	5	2	2	1	1	1	1	2	1	2	2	2	2	2	1	2	2	2	2	2	2	1	1	1	1234	99	99	2	3	1	2	2	2	2	2	98	2	98	1	300000	2	3	2	14	2	2	99
77	2	2	2	6	2	1	2	2	4	4	4	2	1	1	1	2	1	2	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	124	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	1	99
78	2	2	1	6	2	1	2	2	4	4	6	3	1	1	1	1	2	1	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	124	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	3	2	1	3	2	3
79	3	1	1	5	2	2	2	3	4	4	6	2	1	1	1	1	2	3	3	2	1	2	2	1	2	2	2	2	2	2	1	2	99	1	46	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	1	1	3	3	99
80	2	1	1	4	2	2	2	3	4	4	6	2	1	1	1	1	2	3	3	2	1	2	1	1	2	2	2	2	2	2	1	2	99	1	14	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	1	1	3	2	99
81	3	2	1	2	8	1	1	2	4	4	2	4	2	1	1	1	2	2	3	1	1	2	2	2	1	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	1
82	2	1	1	4	6	1	1	1	4	4	3	3	2	2	2	2	2	2	3	1	1	1	2	2	2	2	2	2	2	2	2	2	99	1	12411	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	1	99
83	2	1	1	3	2	1	3	2	4	4	6	3	1	2	2	2	1	2	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
84	2	1	1	3	2	1	2	2	2	1	6	2	2	1	1	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	1	2	99	1	14	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	4	2	1	3	4	99
85	3	1	1	2	2	1	3	2	4	4	5	3	2	1	1	1	2	1	1	1	1	2	1	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
86	2	1	2	5	2	1	1	2	1	2	4	4	2	2	2	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	14	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
87	3	1	1	5	2	1	1	3	1	2	4	2	1	2	2	2	1	2	2	1	1	2	2	1	2	2	1	2	2	2	2	2	99	1	5	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	4	2	1	3	4	99
88	3	1	1	2	2	1	2	2	1	2	4	2	2	1	1	2	1	2	1	1	2	2	2	1	2	2	1	1	2	2	1	2	99	2	99	99	99	99	1	2	1	98	2	98	1	2	1	2	98	36400	2	4	1	1	3	4	99
89	3	1	1	4	2	1	1	2	4	4	5	3	2	1	1	2	1	3	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	6	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
90	3	1	1	3	2	2	1	2	4	4	4	2	2	2	2	2	1	2	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
91	3	2	1	3	1	1	2	2	4	4	6	4	1	1	1	1	2	3	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	2	99
92	1	2	2	2	7	1	2	2	4	4	6	2	1	1	1	1	2	2	3	5	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	3778	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
93	1	1	2	2	7	1	2	2	4	4	6	3	1	1	1	1	2	2	3	5	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	3778	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
94	2	2	1	4	8	1	2	2	4	4	6	3	1	1	1	1	2	2	3	5	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
95	4	2	1	1	8	1	2	2	4	4	6	3	1	1	1	1	2	2	3	5	1	2	2	2	2	2	2	2	2	2	2	1	1	1	46	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	99
96	1	1	2	2	7	1	2	2	4	4	6	3	1	1	1	1	2	2	3	5	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
97	2	2	1	3	8	1	3	2	4	4	6	3	2	1	1	2	1	2	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	3	99
98	3	1	1	3	2	1	1	2	4	4	4	3	2	1	1	1	1	1	1	1	1	2	2	1	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	99
99	3	1	1	6	2	1	3	2	2	1	5	2	2	2	2	2	2	1	3	1	1	2	2	1	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	4	99
100	2	2	2	4	8	1	1	2	4	4	3	4	2	2	2	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
101	1	2	2	2	7	1	3	2	1	2	6	3	2	1	1	2	2	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
102	2	2	1	3	8	1	2	2	1	2	6	3	2	1	1	2	2	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
103	1	2	2	6	2	1	1	2	4	4	5	2	2	2	2	2	1	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	3	99
104	1	1	2	2	7	1	2	2	4	4	6	3	1	1	1	1	2	2	3	5	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
105	2	2	1	3	8	1	3	2	4	4	6	3	2	1	1	2	1	2	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	3	99
106	3	2	1	3	1	1	1	2	1	2	4	2	2	2	2	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	1	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
107	3	2	1	3	1	1	3	2	1	1	6	3	2	2	2	2	1	3	1	2	1	2	2	2	2	2	2	2	2	2	2	1	1	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
108	2	2	3	4	2	1	4	2	4	4	2	2	2	1	1	2	1	3	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	12	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	1	99
109	3	2	4	3	2	2	4	2	4	4	2	4	2	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	14	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
110	2	2	1	3	2	2	3	2	4	4	5	3	2	2	2	1	2	3	2	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	1	99
111	3	2	1	3	2	1	1	2	1	3	3	4	2	1	1	2	1	2	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	257	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	4	99
112	4	1	1	3	2	1	3	2	4	4	5	2	2	1	1	1	2	2	3	3	2	2	2	2	2	2	2	1	2	2	2	2	99	1	134	99	99	1	3	1	3	2	3	3	1	1	1	2	98	140000	2	3	2	1	3	1	12
113	3	1	1	3	3	1	3	2	4	4	5	2	2	1	1	1	1	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2	99	1	1	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	1	13
114	3	2	1	3	8	1	1	1	1	1	2	2	2	1	1	2	1	2	3	2	1	2	2	2	2	2	2	2	2	2	2	2	99	1	14	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
115	4	2	1	3	6	1	1	1	1	1	2	2	2	1	1	2	1	2	3	2	1	2	2	2	2	2	2	2	2	2	2	1	1	1	12	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
116	3	1	1	3	2	1	2	2	4	4	6	4	1	1	1	1	2	1	1	3	2	2	1	2	2	2	1	2	1	2	2	2	99	1	16	3	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	3	99
117	3	2	1	3	8	1	2	2	4	4	6	4	1	1	1	1	2	1	1	3	2	2	2	2	2	2	1	2	2	2	2	2	99	1	2346	99	99	99	2	1	2	2	3	3	2	98	2	98	1	150000	2	1	2	4	2	3	99
118	1	2	2	2	7	1	2	2	4	4	6	4	2	1	1	1	2	1	1	3	2	2	2	2	2	2	2	2	2	2	2	2	99	1	4	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
119	3	1	1	3	3	1	1	1	4	4	4	1	2	1	1	1	1	2	3	1	1	2	2	2	2	2	1	1	2	2	2	2	99	1	348	1	4743	2	99	99	99	99	99	99	2	99	99	99	99	99	2	1	2	1	2	3	99
120	2	2	1	6	1	1	3	2	1	3	4	2	2	2	2	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	1	1	1	24	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	4	99
121	4	1	1	3	6	1	3	2	4	4	5	2	2	2	2	2	1	3	3	2	1	2	2	2	2	2	1	1	2	2	2	1	1	1	4	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	2	99
122	3	2	1	3	8	1	3	2	4	4	5	2	2	2	2	2	1	3	3	2	1	1	2	2	2	2	1	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
123	3	2	1	3	2	1	1	2	1	3	3	4	2	1	1	2	1	2	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	257	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	4	99
124	4	1	1	3	2	1	3	2	4	4	5	2	2	1	1	1	2	2	3	3	2	2	2	2	2	2	2	1	2	2	2	2	99	1	134	99	99	1	2	1	2	2	2	2	2	98	1	2	98	40000	2	3	2	1	2	1	99
125	3	1	1	3	3	1	3	2	4	4	5	2	2	1	1	1	1	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2	99	1	1	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	1	13
126	3	2	4	3	8	1	3	2	4	4	5	2	2	1	1	1	1	2	3	3	2	2	2	2	2	2	2	1	2	2	2	2	99	2	99	1	3543	2	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	1	13
127	2	1	1	3	2	1	1	2	4	4	2	2	2	1	1	1	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	99	1	145	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
128	3	2	4	2	8	1	1	2	1	3	2	2	2	1	1	1	1	2	3	2	1	2	2	2	2	2	1	1	2	2	2	2	99	1	24	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
129	4	1	1	3	9	1	1	2	4	4	3	2	2	2	2	2	1	1	1	1	1	2	2	2	1	2	1	1	2	1	2	2	99	1	123458	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	1	99
130	2	1	2	5	3	1	1	2	4	4	3	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	3543	2	99	99	99	99	99	99	99	99	99	99	99	99	1	3	2	1	3	1	99
131	3	2	4	3	8	1	1	2	4	4	3	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	1	2	2	2	2	99	1	411	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	1	99
132	3	1	1	4	2	1	2	2	2	1	6	3	1	2	2	2	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	99	1	48	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
133	4	2	1	2	8	1	2	2	4	4	6	3	1	2	2	2	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	99	1	145	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	5	2	1	3	3	99
134	1	2	2	3	8	1	3	2	4	4	6	2	2	2	2	2	1	2	3	1	1	1	2	2	2	2	2	2	2	2	3	2	99	1	15	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	3	2	1	3	1	99
135	3	1	1	3	3	1	2	3	4	4	6	3	1	1	1	2	2	1	1	1	2	2	2	1	2	2	2	2	2	2	1	2	99	1	468	99	99	99	1	2	1	98	3	98	1	2	1	2	98	62400	2	1	2	1	3	1	99
136	2	2	1	4	8	1	1	2	1	2	3	3	2	1	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	1	2	99	1	4	99	99	99	1	2	1	98	3	98	1	2	1	2	98	72800	2	1	2	1	3	4	99
137	3	2	1	2	8	1	1	2	1	2	3	3	2	1	1	2	1	2	1	2	2	2	2	2	2	2	1	1	2	2	1	2	99	1	14	99	99	99	1	2	2	98	3	98	1	2	1	2	98	72800	2	1	2	1	3	4	99
138	3	1	1	3	2	1	3	2	4	4	6	3	2	2	2	1	1	3	1	2	1	2	2	2	2	2	2	1	2	2	2	2	99	1	24	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	99
139	3	1	1	4	3	1	1	2	4	4	4	2	2	1	1	1	1	2	3	1	2	2	1	2	2	2	1	2	2	2	2	2	99	1	127	99	99	99	3	1	2	1	1	1	2	98	1	2	98	30000	2	1	2	1	2	2	99
140	4	1	4	2	7	1	1	2	4	4	2	4	2	1	1	1	1	1	1	3	1	2	2	2	1	2	2	1	2	2	2	1	1	1	23	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	3
141	3	1	1	3	3	2	1	2	4	4	4	3	2	1	1	2	2	1	1	1	1	2	1	1	2	2	2	2	2	2	2	2	99	1	4	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	1	99

Annexure IV- Master chart

142	3	1	1	5	2	1	2	2	4	4	6	2	1	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	99	1	1248	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	3	1	1	3	1	99
143	2	2	1	4	8	1	3	3	4	4	6	2	2	2	2	2	1	2	3	4	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
144	4	2	1	2	9	1	3	3	4	4	6	2	2	2	2	2	1	2	3	4	1	2	2	2	2	2	1	1	2	2	2	2	99	1	2	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
145	3	1	1	6	2	1	3	3	4	4	6	2	2	2	2	2	1	2	3	4	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	1
146	1	1	2	2	9	1	3	3	4	4	6	2	2	2	2	2	1	2	3	4	1	1	2	2	2	2	2	2	2	2	2	2	99	2	99	1	3778	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
147	3	2	1	3	8	1	2	2	4	4	5	3	2	2	2	2	1	2	3	1	1	1	2	2	2	2	2	2	2	2	2	2	99	1	124	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	2	99
148	1	2	2	4	7	1	2	1	4	4	6	2	1	1	1	2	1	1	1	3	1	1	2	2	2	2	2	2	2	2	2	2	99	1	4	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
149	4	2	1	2	9	1	3	2	4	4	6	3	1	2	2	2	1	1	1	2	1	1	2	2	1	2	2	2	2	2	2	1	1	1	5	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	1
150	1	2	2	2	7	1	3	2	4	4	6	3	1	2	2	2	1	1	1	2	1	1	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
151	1	1	2	2	7	1	1	1	4	4	4	2	2	2	2	2	1	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
152	3	2	1	4	3	1	1	1	2	2	4	2	2	2	2	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	256	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
153	3	2	1	3	8	1	2	2	4	4	6	2	1	2	2	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	1248	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	99
154	3	2	1	3	8	1	1	2	4	4	3	2	2	1	1	2	1	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
155	2	2	1	6	2	1	1	2	4	4	3	2	2	1	1	2	1	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	99	1	4	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	1	99
156	3	1	1	6	2	1	3	2	2	1	5	2	2	2	2	2	1	2	2	1	1	2	2	2	2	2	2	2	2	2	3	1	1	1	248	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	4	99
157	3	1	1	4	2	1	2	2	1	2	6	3	2	2	2	2	1	1	3	1	1	2	2	2	2	2	2	2	2	2	3	1	2	1	4	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	3	1	1	3	4	99
158	2	2	1	5	8	1	1	2	4	4	4	2	2	2	2	2	1	1	2	1	1	2	2	2	2	2	2	2	2	2	3	1	2	1	1412	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	3	99
159	3	1	1	3	3	1	2	2	4	4	6	3	2	2	2	2	1	3	2	1	1	2	2	1	2	2	1	2	2	2	3	1	3	1	14	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	1	99
160	3	1	1	3	1	2	1	3	1	3	4	2	2	2	2	2	1	3	1	1	1	2	2	2	2	2	2	2	2	2	3	1	3	1	146	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
161	2	1	1	4	3	2	1	1	4	4	4	2	2	2	2	2	1	2	2	1	1	2	1	2	1	2	2	2	2	2	3	1	2	1	28	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	1	99
162	2	2	2	6	2	1	1	2	2	1	4	2	2	2	2	2	1	1	3	1	1	2	2	2	2	2	2	2	2	2	3	1	2	1	148	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	3	2	1	3	4	1
163	2	2	1	3	8	1	2	2	4	4	6	4	2	2	2	2	1	2	2	1	1	2	2	2	2	2	2	2	2	2	3	1	1	1	15	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	2	2	1	3	3	99
164	1	2	2	3	8	1	3	2	4	4	6	2	2	2	2	2	1	2	3	1	1	1	2	2	2	2	2	2	2	2	3	2	99	1	15	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	3	2	1	3	1	99
165	3	1	1	3	3	1	2	3	4	4	6	3	1	1	1	2	2	1	1	1	2	2	2	1	2	2	2	2	2	2	1	2	99	1	468	99	99	99	1	2	1	98	3	98	1	2	1	2	98	62400	2	1	2	1	3	1	99
166	2	2	1	4	8	1	1	2	1	2	3	3	2	1	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	1	2	99	1	4	99	99	99	1	2	1	98	3	98	1	2	1	2	98	72800	2	1	2	1	3	4	99
167	3	2	1	2	8	1	1	2	1	2	3	3	2	1	1	2	1	2	1	2	2	2	2	2	2	2	1	1	2	2	1	2	99	1	14	99	99	99	1	2	2	98	3	98	1	2	1	2	98	72800	2	1	2	1	3	4	99
168	2	1	1	3	3	1	2	2	4	4	6	4	2	1	1	1	2	2	1	1	2	2	2	2	2	2	2	2	2	2	1	2	99	1	4	99	99	99	1	2	1	98	2	98	1	2	1	2	98	36400	2	4	2	1	3	1	99
169	3	1	1	3	5	1	1	2	4	4	4	4	1	1	1	1	1	1	1	1	2	2	1	2	2	2	2	1	1	2	1	2	99	1	134	99	99	99	1	1	2	98	3	98	1	2	1	2	98	98000	1	1	2	1	3	2	99
170	2	2	1	6	8	1	2	2	4	4	6	3	2	1	1	1	2	1	1	2	3	2	2	2	2	2	2	2	2	2	1	2	99	1	14	99	99	99	1	2	2	98	3	98	1	2	1	2	98	52000	2	4	2	1	3	1	99
171	3	1	4	2	3	1	2	2	4	4	6	3	2	1	1	1	2	1	1	2	3	2	1	2	2	2	1	2	2	2	1	2	99	1	134	99	99	99	3	1	2	2	3	1	2	98	1	2	98	79000	2	4	2	1	2	1	99
172	2	2	1	4	8	1	3	3	4	4	6	2	2	2	2	2	1	3	3	4	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
173	4	2	1	2	9	1	3	3	4	4	6	2	2	2	2	2	1	3	3	4	1	2	2	2	2	2	1	1	2	1	2	2	99	1	2	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
174	3	1	1	6	2	1	3	3	4	4	6	2	2	2	2	2	1	2	3	4	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	1
175	1	1	2	2	9	1	3	3	4	4	6	2	2	2	2	2	1	2	3	4	1	1	2	2	2	2	2	2	2	2	2	2	99	2	99	1	3778	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
176	3	2	1	3	8	1	2	2	4	4	5	3	2	2	2	2	1	2	3	1	1	1	2	2	2	2	2	2	2	2	2	2	99	1	124	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	2	99
177	1	2	2	4	7	1	2	1	4	4	6	2	1	1	1	2	1	1	1	3	1	1	2	2	2	2	2	2	2	2	2	2	99	1	4	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
178	4	2	1	2	9	1	3	2	4	4	6	3	1	2	2	2	1	1	1	2	1	1	2	2	1	2	2	2	2	2	2	1	1	1	5	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	1
179	1	2	2	2	7	1	3	2	4	4	6	3	1	2	2	2	1	1	1	2	1	1	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
180	1	1	2	2	7	1	1	1	4	4	4	2	2	2	2	2	1	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
181	3	2	1	4	3	1	1	1	2	2	4	2	2	2	2	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	12	2	99	1	256	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
182	2	2	2	3	7	1	2	2	4	4	6	3	2	1	1	2	1	3	1	1	1	2	2	2	2	2	2	2	2	2	3	1	2	1	1411	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	1	99
183	2	1	1	3	1	2	1	3	4	4	1	1	2	2	2	2	1	3	1	1	1	2	2	2	2	2	2	2	2	2	3	1	3	1	1456	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
184	2	1	1	2	3	1	2	2	4	4	5	2	2	1	1	1	2	3	3	1	1	2	1	2	1	2	2	2	2	2	3	1	2	1	12	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	2	2	1	3	3	99
185	3	1	1	4	1	2	1	3	1	3	2	2	2	2	2	2	1	3	3	1	1	2	2	2	2	2	2	2	2	2	3	1	3	1	45	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	2	2	1	3	4	99
186	1	2	2	3	7	1	2	2	4	4	6	4	2	1	1	1	2	3	3	2	1	2	2	2	2	2	2	2	2	2	2	2	99	1	124	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	3	99
187	4	2	4	2	9	1	3	2	2	1	6	2	2	2	2	2	1	3	2	1	1	1	2	2	2	2	1	2	2	1	2	1	1	1	1	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	4	99
188	3	1	1	4	2	1	4	2	4	4	4	4	1	1	1	1	1	1	3	1	2	2	1	2	2	2	2	1	2	2	2	2	99	1	313	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	5	2	4	3	3	99
189	1	2	2	3	7	1	2	2	4	4	6	4	2	1	1	1	2	1	3	2	1	2	2	2	2	2	2	2	2	2	2	2	99	1	124	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	3	99
190	3	1	1	2	4	1	3	2	4	4	6	3	1	1	1	1	2	1	3	2	1	2	2	1	1	2	1	2	2	2	1	2	99	1	34511	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	2	2	1	3	3	1
191	4	1	1	2	3	1	2	2	4	4	6	2	2	1	1	2	1	2	3	1	2	2	1	1	1	2	2	1	2	2	1	2	99	1	1458	99	99	99	1	2	2	98	3	98	1	2	1	2	98	78000	2	2	2	1	3	1	99
192	2	1	2	3	1	2	1	3	1	3	1	1	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	2	2	2	1	2	99	1	4	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	4	99
193	2	1	1	4	2	1	1	1	4	4	3	2	2	2	2	2	1	2	1	1	2	2	2	2	2	2	2	2	2	2	1	2	99	1	12	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	1	99
194	3	1	1	2	4	1	3	2	4	4	6	3	1	1	1	1	2	1	3	2	1	2	2	1	1	2	1	2	2	2	1	2	99	1	34511	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	2	2	1	3	3	1
195	2	1	1	4	2	1	1	3	4	4	4	2	2	2	2	1	1	2	2	1	1	2	2	2	2	2	2	2	2	2	1	2	99	2	99	1	3778	3	99	99	99	99	99	99	99	99	99	99	99	99	1	3	2	1	3	3	99
196	2	1	1	6	3	1	2	2	4	4	6	1	2	2	2	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	99	1	16	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	1	99
197	3	1	1	3	4	1	3	2	4	4	6	4	2	1	1	1	1	3	1	1	1	2	2	2	1	2	2	1	2	2	1	2	99	1	48	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	2	99
198	3	2	1	2	8	1	2	2	4	4	6	3	1	1	1	2	1	1	2	1	1	2	2	2	1	2	2	1	2	2	2	2	99	1	14	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	3	99
199	3	2	1	3	1	1	4	2	4	4	4	3	2	1	1	1	2	2	1	1	2	2	2	2	2	2	2	2	2	2	1	2	99	1	12345	99	99	99	3	1	2	2	1	1	2	98	1	2	98	40000	1	4	2	1	1	3	99
200	3	1	1	4	1	1	1	1	1	3	3	3	2	2	2	2	1	1	3	1	1	2	2	2	2	2	2	2	2	2	1	2	99	1	4	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
201	2	2	1	4	8	1	2	3	4	4	6	4	2	1	1	1	2	2	3	1	1	2	2	2	2	2	2	2	2	2	1	2	99	1	28	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	3	99
202	3	2	1	2	8	1	2	2	4	4	6	4	1	1	1	2	1	2	2	3	1	2	2	2	1	2	2	2	1	2	1	2	99	1	4	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	2	1
203	3	1	1	6	2	1	2	2	2	2	6	3	2	2	2	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	1	2	99	1	146	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	2	2	1	3	4	99
204	3	1	1	4	3	1	2	2	4	4	6	4	1	1	1	2	1	2	2	3	1	2	2	2	1	2	2	2	2	2	1	2	99	1	6	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	1	99
205	4	1	4	1	8	1	2	2	4	4	6	4	1	1	1	2	1	3	2	3	1	2	2	2	1	2	2	1	1	1	1	2	99	1	13	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	2	3
206	3	2	1	3	8	1	2	2	4	4	6	4	2	2	2	2	2	3	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	1	2	2	1	3	1	99
207	2	2	1	3	8	1	3	2	4	4	6	3	1	1	1	1	1	2	3	1	1	2	2	2	2	2	2	2	2	2	1	2	99	1	48	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	5	2	1	3	2	99
208	1	1	2	2	7	1	2	2	4	4	6	4	2	1	1	1	2	2	1	2	1	1	2	2	2	2	2	2	2	2	1	2	99	1	14	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	1	1	3	1	99
209	3	1	1	4	2	1	1	1	2	3	4	1	2	2	2	2	1	2	1	1	1	1	2	2	2	2	2	1	2	2	2	2	99	1	146	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	4	99
210	4	1	3	2	6	1	3	1	2	1	5	1	2	1	1	2	1	2	3	1	2	1	2	2	2	2	1	1	2	2	1	2	99	1	13	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	14	3	4	13
211	3	1	1	3	3	1	2	2	4	4	6	4	1	1	1	2	2	1	1	1	1	2	2	2	2	2	2	2	2	2	1	2	99	1	14	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
212	2	1	1	3	2	1	1	3	4	4	4	2	2	2	2	2	1	2	1	1	1	2	1	2	2	2	2	2	2	2	1	2	99	1	4	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
213	2	2	1	3	7	2	2	2	4	4	5	3	2	1	1	1	2	3	1	1	2	2	2	2	2	2	2	2	2	2	2	2	99	2	99	99	99	99	1	2	1	98	3	98	1	2	1	2	98	62400	2	4	2	1	3	2	99
214	2	1	1	4	1	2	1	3	1	3	3	2	2	2	2	2	1	3	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
215	2	1	1	4	1	2	1	3	1	3	3	2	2	2	2	2	1	3	1	1	1	2	2	2	2	2	2	2	2	2	2	1	3	1	249	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	4	99
216	2	1	1	4	1	2	1	3	1	3	3	2	2	2	2	2	1	3	1	1	1	2	2	2	2	2	2	2	2	2	2	1	2	1	125	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
217	2	2	1	4	8	1	2	1	4	4	6	2	2	2	2	2	1	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	99	2	99	3	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
218	2	1	2	4	3	1	2	2	4	4	6	2	2	2	2	2	2	3	1	1	2	2	2	1	2	2	2	2	2	2	2	2	99	1	34	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	4	2	1	3	2	99
219	2	1	1	6	1	1	1	1	2	1	4	1	2	2	2	2	1	2	1	1	1	2	2	1	2	2	2	2	2	2	2	2	99	1	45	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	1
220	3	2	1	4	4	2	2	2	4	4	6	3	2	2	2	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	2	99
221	3	1	1	3	4	2	2	2	4	4	6	3	2	1	1	1	2	3	3	1	1	2	1	2	2	2	1	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	2	99
222	3	1	1	3	4	1	2	2	4	4	5	2	2	2	2	2	2	3	3	1	1	2	1	1	2	2	2	1	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	2	99

Annexure IV- Master chart

223	3	1	1	4	1	2	1	3	4	4	3	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1	2	2	99	2	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
224	2	1	1	3	1	2	1	3	1	3	3	2	2	2	2	2	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	1	99	2	99	2	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	4	99
225	2	2	2	5	2	1	1	1	4	4	4	1	2	2	2	2	1	1	1	3	1	2	2	2	2	2	2	2	2	2	2	1	1	2	99	1	3543	2	99	99	99	99	99	99	99	99	99	99	99	99	2	5	2	1	3	1	99
226	4	1	1	1	3	1	3	2	4	4	6	4	2	2	2	1	1	2	1	2	2	2	2	2	2	2	1	2	2	1	2	2	99	1	2345	99	99	99	1	1	1	98	3	98	1	1	2	98	1	50000	2	3	2	4	3	2	3
227	2	2	1	3	1	1	3	2	4	4	6	4	2	2	2	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	1	1	3	2	1
228	4	2	1	3	8	1	3	1	4	4	6	1	2	2	2	2	1	3	3	1	2	2	2	2	2	2	2	2	2	2	2	2	99	1	123	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	6	2	1	3	1	99
229	3	1	1	3	2	1	3	1	4	4	5	2	2	1	1	1	1	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	99	1	124	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	1	1	3	2	99
230	3	1	1	4	1	1	3	1	1	3	6	2	2	1	1	2	1	2	1	1	1	1	2	2	2	2	2	2	2	2	2	1	3	1	126	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	5	2	1	3	4	99
231	3	2	1	3	8	1	2	2	1	2	6	2	1	2	2	2	2	1	1	1	1	2	2	2	2	2	1	1	1	2	2	2	99	1	48	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	1	3	2	1	3	4	99
232	2	2	1	3	3	1	2	2	4	4	6	3	1	1	1	1	2	2	1	5	2	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	1	1
233	1	1	2	2	4	1	2	2	4	4	6	3	1	1	1	1	2	3	1	5	2	1	2	2	2	2	2	2	2	2	2	2	99	1	1	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
234	1	2	2	2	7	1	2	2	4	4	6	3	1	1	1	1	2	3	1	5	2	1	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
235	4	2	4	2	9	1	2	2	4	4	6	3	1	1	1	1	2	3	1	5	2	1	2	2	2	2	1	2	1	1	2	1	1	1	112	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	1	1
236	3	2	1	4	2	1	2	2	4	4	6	3	1	1	1	1	2	2	1	5	2	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	1	1	3	1	99
237	1	2	2	6	7	1	2	2	4	4	6	3	1	1	1	1	2	2	1	5	2	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
238	3	1	1	6	2	1	2	2	4	4	6	3	1	1	1	1	2	2	1	5	2	2	2	1	2	2	2	1	2	2	2	2	99	1	12358	99	99	99	3	1	2	1	2	1	1	1	4	98	2	190000	1	4	2	4	3	1	3
239	2	2	1	4	4	1	3	1	1	1	5	2	2	1	1	2	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
240	3	2	1	2	9	1	3	1	1	1	5	2	2	1	1	2	1	3	1	2	1	2	2	2	2	2	1	1	2	1	2	2	99	1	25	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	4	99
241	2	2	3	6	1	1	4	1	4	4	4	1	2	2	2	2	1	3	2	3	1	2	2	2	2	2	2	2	2	2	2	2	99	1	47	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	1
242	4	1	1	1	4	1	4	1	4	4	4	1	2	2	2	2	1	2	2	3	1	2	2	2	2	2	1	1	2	2	2	1	1	1	4679	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	12
243	4	2	4	1	4	1	4	1	4	4	4	1	2	2	2	2	1	3	2	3	1	2	2	2	1	2	2	1	2	2	2	1	1	1	46712	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	1
244	4	1	1	1	4	1	2	2	4	4	6	5	2	2	2	2	1	3	1	1	1	2	2	2	2	2	2	2	2	2	2	1	1	1	136	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	12
245	2	2	1	6	1	1	1	1	1	1	4	1	2	2	2	2	1	2	2	1	1	2	2	2	2	2	2	2	2	2	2	1	2	1	479	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	4	99
246	3	1	1	6	3	1	1	1	2	1	4	1	2	2	2	2	1	1	1	3	1	2	2	2	2	2	2	1	2	2	2	2	99	1	479	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	1
247	3	2	1	6	2	1	1	1	4	4	4	1	2	2	2	2	1	1	1	3	1	2	2	2	2	2	2	2	2	2	2	2	99	1	4712	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	99
248	1	1	2	2	7	1	1	1	4	4	3	1	2	2	2	1	1	2	1	3	1	1	2	2	2	2	2	2	2	2	2	2	99	1	46	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	1
249	2	2	1	6	1	1	1	1	4	4	3	1	2	2	2	2	1	2	1	3	1	1	2	2	2	2	2	2	2	2	2	2	99	1	23479	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	99
250	2	1	2	5	4	1	2	2	4	4	6	5	2	1	1	1	1	2	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	12467	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	2	2	1	3	1	99
251	2	1	1	2	4	1	2	2	4	4	6	5	2	1	1	1	1	3	1	2	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1246	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	1	99
252	2	1	1	2	4	1	2	2	4	4	6	5	2	1	1	1	1	3	1	2	1	1	2	2	2	2	2	2	2	2	2	2	99	1	469	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	1	1	3	1	99
253	3	1	1	3	5	1	1	2	4	4	4	4	2	1	1	1	1	3	3	1	1	2	2	1	2	2	2	2	2	2	2	2	99	1	126	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	1	1	3	3	13
254	2	1	1	3	3	1	2	2	4	4	5	2	2	1	1	2	1	2	1	1	1	2	2	2	1	2	2	2	2	2	2	2	99	1	12467	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	1	99
255	4	1	1	2	4	1	1	2	4	4	3	5	2	1	1	1	1	2	3	1	1	1	1	1	2	2	2	1	2	2	2	2	99	1	1246	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	1	3
256	3	1	1	2	4	1	1	2	4	4	4	4	2	1	1	1	1	1	1	2	1	2	1	1	1	2	2	2	2	2	2	1	2	1	1246	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	1	1	3	2	3
257	3	1	1	3	2	1	3	2	4	4	4	5	2	2	2	1	1	3	3	1	1	1	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	1	2	1	1	3	1	99
258	3	1	1	4	2	1	2	2	4	4	6	4	2	2	2	1	1	3	3	1	1	1	2	2	2	2	2	2	2	2	2	1	2	1	1269	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
259	3	1	1	3	5	1	2	2	4	4	6	4	2	1	1	1	1	2	3	1	2	1	2	1	1	2	2	2	2	2	2	2	99	1	123	2	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	1	13
260	3	2	1	2	8	1	2	2	4	4	6	4	2	2	2	2	1	3	1	1	1	2	2	2	2	2	2	2	2	2	2	1	1	1	4612	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	1
261	3	1	1	5	2	2	1	1	2	1	4	1	2	2	2	2	1	3	1	1	1	2	2	2	2	2	2	2	2	2	2	1	1	1	456	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	1
262	2	2	1	1	5	1	1	2	4	4	4	5	2	2	2	2	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	1
263	2	1	1	4	1	1	2	1	1	3	6	2	2	2	2	2	1	2	1	2	1	2	2	1	2	2	2	2	2	2	2	1	3	1	123458	3	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	4	3
264	3	1	1	4	2	1	2	3	2	2	6	1	2	2	2	2	1	1	1	4	1	2	2	2	2	2	1	2	2	2	2	2	99	1	1246	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	6	2	1	3	4	99
265	4	1	1	3	5	1	2	2	4	4	6	4	2	1	1	1	2	3	1	2	1	2	2	1	1	2	2	2	2	2	2	2	99	1	1246	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	2	99
266	3	1	1	2	3	1	2	2	4	4	6	2	1	1	1	1	1	2	1	3	2	2	1	1	2	2	2	2	2	2	3	2	99	1	4	3	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	1	4	3	3	99
267	2	2	1	3	8	1	1	2	4	4	3	2	2	1	1	1	1	3	2	2	1	2	2	2	2	2	2	2	2	2	2	2	99	1	14	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	3	3
268	3	1	1	6	2	2	1	1	2	2	4	1	1	1	1	1	1	2	1	2	2	2	2	1	2	2	2	2	2	2	2	2	99	1	14568	99	99	99	3	1	2	2	3	2	1	2	2	98	2	240000	1	3	2	12	3	4	3
269	2	2	1	4	8	1	2	1	4	4	6	2	2	2	2	2	1	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	99	2	99	3	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
270	2	2	2	2	7	1	2	1	4	4	6	2	2	2	2	2	1	2	1	1	1	1	2	2	2	2	2	2	2	2	2	1	2	1	1257	3	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
271	1	2	2	2	7	1	2	1	4	4	6	2	2	2	2	2	1	2	1	1	1	1	2	2	2	2	1	2	2	2	2	2	99	2	99	3	3778	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	3
272	2	1	1	4	1	1	2	1	1	3	6	2	2	2	2	2	1	2	1	1	1	2	2	1	2	2	2	2	2	2	2	1	3	1	123458	3	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	4	3
273	3	2	2	3	9	1	2	1	4	4	6	2	2	2	2	2	1	2	1	1	1	1	2	2	2	2	1	1	2	2	2	2	99	2	99	3	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
274	4	2	4	1	9	1	2	1	4	4	6	2	2	2	2	2	1	2	1	2	1	1	2	2	2	2	1	1	2	2	2	2	99	1	1456	3	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	5	2	1	3	2	3
275	1	2	2	2	7	1	2	1	4	4	6	2	2	2	2	2	1	2	1	2	1	1	2	2	2	2	2	2	2	2	2	2	99	2	99	3	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	1	99
276	3	1	1	6	2	1	2	1	4	4	6	2	2	2	2	2	1	2	1	1	1	2	2	1	2	2	2	2	2	2	2	2	99	1	128	3	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	3	99
277	2	2	2	6	3	1	2	1	4	4	6	2	2	1	1	2	1	2	1	1	2	1	2	2	2	2	2	2	2	2	2	1	2	1	13689	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
278	2	2	2	6	2	1	2	1	4	4	6	2	2	1	1	2	1	2	1	2	2	1	2	2	2	2	2	2	2	2	2	1	2	1	12468	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
279	1	2	2	3	7	1	2	1	4	4	6	2	2	1	1	2	1	2	1	2	2	1	2	2	2	2	2	2	2	2	2	1	2	1	12468	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
280	2	2	2	6	7	1	3	1	2	3	6	2	2	1	1	2	1	2	1	2	2	1	2	2	2	2	2	2	2	2	2	1	2	1	1469	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	4	99
281	3	2	1	6	8	1	3	1	4	4	5	2	2	1	1	2	1	3	1	2	1	1	2	2	2	2	2	2	2	2	2	1	2	1	134	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
282	3	1	1	6	3	1	2	1	2	3	6	2	2	1	1	2	1	3	1	1	2	1	2	2	2	2	2	2	2	2	2	1	1	1	1234	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	6	2	99	3	4	3
283	4	2	4	1	9	1	2	1	2	3	6	2	2	1	1	2	1	2	1	4	2	1	2	2	1	2	1	2	2	2	2	1	3	1	1245	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	6	2	1	3	4	3
284	3	1	1	4	3	1	2	3	4	4	6	4	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	1	2	2	2	2	99	1	124	99	99	99	3	1	1	3	4	3	1	2	2	98	1	425000	2	5	2	23	3	1	99
285	2	2	1	3	8	1	2	3	4	4	6	4	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	99	1	458	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	2	99
286	2	2	1	3	8	1	2	3	2	2	6	4	2	2	2	2	1	1	1	4	1	2	2	2	2	2	2	2	2	2	2	2	99	1	24	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	5	2	1	3	4	99
287	2	1	1	3	1	2	1	3	4	4	3	2	2	2	2	2	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	1	3	2	99	2	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	1	99
288	2	2	2	5	2	1	1	1	4	4	4	1	2	2	2	2	1	1	1	3	1	2	2	2	2	2	2	2	2	2	2	1	1	2	99	1	3543	2	99	99	99	99	99	99	99	99	99	99	99	99	2	5	2	1	3	1	99
289	4	1	1	1	3	1	3	2	4	4	6	4	2	2	2	1	1	2	1	2	2	2	2	2	2	2	1	2	2	1	2	2	99	1	2345	99	99	99	1	1	1	98	3	98	1	1	2	98	1	50000	2	3	2	4	3	2	3
290	2	2	1	3	1	1	3	2	4	4	6	4	2	2	2	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	1	1	3	2	2
291	4	2	1	3	8	1	3	1	4	4	6	1	2	2	2	2	1	1	3	1	2	2	2	2	2	2	2	2	2	2	2	2	99	1	123	99	99	99	1	2	3	98	1	98	1	2	2	98	2	55000	2	3	2	1	3	1	99
292	3	1	1	3	2	1	3	1	4	4	5	2	2	1	1	1	1	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	99	1	124	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	1	1	3	2	99
293	3	1	1	4	1	1	3	1	1	3	6	2	2	1	1	2	1	2	1	1	1	1	2	2	2	2	2	2	2	2	2	1	3	1	126	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	6	2	1	3	4	99
294	3	2	1	3	8	1	2	2	1	2	6	2	1	2	2	2	2	1	1	1	1	2	2	2	2	2	1	1	1	2	2	2	99	1	48	1	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	1	3	2	1	3	4	99
295	2	2	1	3	3	1	2	2	4	4	6	3	1	1	1	1	2	3	1	5	2	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	1	1
296	1	1	2	2	4	1	2	2	4	4	6	3	1	1	1	1	2	3	1	5	2	1	2	2	2	2	2	2	2	2	2	2	99	1	1	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
297	1	2	2	2	7	1	2	2	4	4	6	3	1	1	1	1	2	3	1	5	2	1	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
298	4	2	4	2	9	1	2	2	4	4	6	3	1	1	1	1	2	2	1	5	2	1	2	2	2	2	1	2	1	1	2	1	1	1	112	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	1	1
299	3	2	1	4	2	1	2	2	4	4	6	3	1	1	1	1	2	2	1	5	2	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	1	1	3	1	99
300	1	2	2	6	7	1	2	2	4	4	6	3	1	1	1	1	2	2	1	5	2	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
301	3	1	1	6	2	1	2	2	4	4	6	3	1	1	1	1	2	2	1	5	2	2	2	1	2	2	2	1	2	2	2	2	99	1	12358	99	99	99	3	1	2	1	2	1	1	1	4	98	2	200000	1	4	2	4	3	1	3
302	3	1	1	4	2	1	2	2	1	2	6	3	2	2	2	2	1	3	3	1	1	2	2	2	2	2	2	2	2	2	3	1	2	1	4	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	3	1	1	3	4	99
303	2	2	1	5	8	1	1	2	4	4	4	2	2	2	2	2	1	3	2	1	1	2	2	2	2	2	2	2	2	2	3	1	2	1	1412	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	3	99

Annexure IV- Master chart

304	3	1	1	3	3	1	2	2	4	4	6	3	2	2	2	2	1	2	2	1	1	2	2	1	2	2	1	2	2	2	3	1	3	1	14	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	1	99
305	3	1	1	3	1	2	1	3	1	3	4	2	2	2	2	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	3	1	3	1	146	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
306	2	1	1	4	3	2	1	1	4	4	4	2	2	2	2	2	1	2	2	1	1	2	1	2	1	2	2	2	2	2	3	1	2	1	28	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	1	99
307	2	2	2	6	2	1	1	2	2	1	4	2	2	2	2	2	1	1	3	1	1	2	2	2	2	2	2	2	2	2	3	1	2	1	148	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	3	2	1	3	4	1
308	2	2	1	3	8	1	2	2	4	4	6	4	2	2	2	2	1	2	2	1	1	2	2	2	2	2	2	2	2	2	3	1	1	1	15	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	2	2	1	3	3	99
309	1	2	2	3	8	1	3	2	4	4	6	2	2	2	2	2	1	2	3	1	1	1	2	2	2	2	2	2	2	2	3	2	99	1	15	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	3	2	1	3	1	99
310	3	1	1	3	3	1	2	3	4	4	6	3	1	1	1	2	2	1	1	1	2	2	2	1	2	2	2	2	2	2	1	2	99	1	468	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
311	2	2	1	4	8	1	1	2	1	2	3	3	2	1	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	1	2	99	1	4	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
312	3	2	1	2	8	1	1	2	1	2	3	3	2	1	1	2	1	3	1	2	2	2	2	2	2	2	1	1	2	2	1	2	99	1	14	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
313	2	1	1	3	3	1	2	2	4	4	6	4	2	1	1	1	2	3	1	1	2	2	2	2	2	2	2	2	2	2	1	2	99	1	4	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	4	2	1	3	1	99
314	3	1	1	3	5	1	1	2	4	4	4	4	1	1	1	1	1	1	1	1	2	2	1	2	2	2	2	1	1	2	1	2	99	1	134	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	2	99
315	1	2	2	3	7	1	3	3	4	4	5	3	2	1	1	1	1	3	1	3	2	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
316	2	1	1	4	1	1	5	3	1	2	5	3	2	1	1	1	1	2	1	3	2	2	2	1	2	2	2	2	2	2	2	1	2	1	134	99	99	99	3	1	2	2	3	1	1	2	2	98	2	100000	2	3	2	99	3	4	1
317	2	2	1	3	8	2	1	2	4	4	3	2	2	1	1	1	2	3	1	1	1	2	2	2	2	2	2	2	2	2	2	1	2	1	4	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	4	2	1	3	2	99
318	2	1	1	4	3	2	1	3	4	4	4	1	2	2	2	2	1	3	3	1	2	2	2	1	2	2	2	2	2	2	1	2	99	1	14	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	2	99
319	2	1	1	3	2	1	3	1	4	4	4	2	2	2	2	1	1	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	99	1	14612	99	99	99	1	2	1	98	1	98	1	2	1	1	98	15600	1	4	2	4	3	1	3
320	3	1	1	2	2	1	3	1	4	4	5	3	2	2	2	2	1	2	1	2	2	2	2	1	2	2	2	1	2	2	2	2	99	1	123467	99	99	99	1	2	2	98	3	98	1	2	2	98	2	180000	2	5	2	99	3	1	1
321	2	2	1	2	8	1	2	2	4	4	6	3	1	1	1	1	1	3	3	3	2	2	2	2	1	2	2	2	2	2	2	2	99	1	145	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	5	2	4	3	1	99
322	3	1	1	3	3	1	2	2	4	4	5	1	2	1	1	2	2	3	3	2	2	2	2	1	2	2	2	2	2	2	2	1	2	1	1610	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	3	2	1	3	1	99
323	2	1	2	3	3	1	1	3	1	1	4	1	2	1	1	1	1	3	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	12458	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	4	99
324	2	1	2	2	2	1	1	1	4	4	4	1	2	1	1	1	1	3	1	2	2	2	2	2	2	2	2	2	2	2	1	2	99	1	1257	99	99	99	1	2	1	98	1	98	1	2	2	98	2	20000	1	2	2	1	3	1	1
325	4	2	3	3	9	1	4	3	4	4	5	2	2	2	2	2	1	3	3	2	2	1	2	2	2	2	2	1	2	2	2	2	99	1	12345	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	2	2	1	3	3	99
326	2	1	2	3	3	1	3	2	4	4	5	2	2	1	1	1	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	99	1	1248	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	1	2	2	1	3	1	99
327	3	1	1	5	2	1	1	3	1	2	4	2	1	2	2	2	1	2	2	1	1	2	2	1	2	2	1	2	2	2	2	2	99	1	5	2	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	4	2	1	3	4	99
328	3	1	1	2	2	1	2	2	1	2	4	2	2	1	1	2	1	2	1	1	2	2	2	1	2	2	1	1	2	2	1	2	99	2	99	99	99	99	1	2	1	98	2	98	1	2	1	2	98	36400	2	4	1	1	3	4	99
329	3	1	1	4	2	1	1	2	4	4	5	3	2	1	1	2	1	3	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	1	6	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
330	3	1	1	3	2	2	1	2	4	4	4	2	2	2	2	2	1	2	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
331	3	2	1	3	1	1	2	2	4	4	6	4	1	1	1	1	2	3	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	2	99
332	1	2	2	2	7	1	2	2	4	4	6	2	1	1	1	1	2	2	3	5	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	3778	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
333	1	1	2	2	7	1	2	2	4	4	6	3	1	1	1	1	2	2	3	5	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	3778	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
334	2	2	1	4	8	1	2	2	4	4	6	3	1	1	1	1	2	2	3	5	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
335	4	2	1	1	8	1	2	2	4	4	6	3	1	1	1	1	2	2	3	5	1	2	2	2	2	2	2	2	2	2	2	1	1	1	46	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	99
336	1	1	2	2	7	1	2	2	4	4	6	3	1	1	1	1	2	2	3	5	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
337	2	2	1	3	8	1	3	2	4	4	6	3	2	1	1	2	1	2	3	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	3	99
338	3	1	1	3	2	1	1	2	4	4	4	3	2	1	1	1	1	3	1	1	1	2	2	1	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	99
339	3	1	1	6	2	1	3	2	2	1	5	2	2	2	2	2	2	3	3	1	1	2	2	1	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	4	99
340	2	2	2	4	8	1	1	2	4	4	3	4	2	2	2	2	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
341	1	2	2	2	7	1	3	2	4	4	6	3	2	1	1	2	2	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
342	2	2	1	3	8	1	2	2	1	2	6	3	2	1	1	2	2	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	4	99
343	1	2	2	6	2	1	1	2	4	4	5	2	2	2	2	2	1	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	99	2	99	1	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	1	1	3	3	99
344	3	2	2	3	9	1	2	1	4	4	6	2	2	2	2	2	1	2	1	3	1	1	2	2	2	2	1	1	2	2	2	2	99	2	99	3	1135	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
345	4	2	4	1	9	1	2	1	4	4	6	2	2	2	2	2	1	2	1	3	1	1	2	2	2	2	1	1	2	2	2	2	99	1	1456	3	4743	2	99	99	99	99	99	99	99	99	99	99	99	99	2	5	2	1	3	2	3
346	1	2	2	2	7	1	2	1	4	4	6	2	2	2	2	2	1	3	1	6	1	1	2	2	2	2	2	2	2	2	2	2	99	2	99	3	3543	2	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	1	99
347	3	1	1	6	2	1	2	1	4	4	6	2	2	2	2	2	1	3	1	6	1	2	2	1	2	2	2	2	2	2	2	2	99	1	128	3	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	3	99
348	2	2	2	6	3	1	2	1	4	4	6	2	2	1	1	2	1	3	1	6	2	1	2	2	2	2	2	2	2	2	2	1	2	1	13689	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	1	99
349	2	2	2	6	2	1	2	1	4	4	6	2	2	1	1	2	1	2	1	6	2	1	2	2	2	2	2	2	2	2	2	1	2	1	12468	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	99
350	1	2	2	3	7	1	2	1	4	4	6	2	2	1	1	2	1	2	1	6	2	1	2	2	2	2	2	2	2	2	2	1	2	1	12468	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	2	99
351	2	2	2	6	7	1	3	1	2	3	6	2	2	1	1	2	1	2	1	6	2	1	2	2	2	2	2	2	2	2	2	1	2	1	1469	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	1	2	1	3	4	99
352	3	2	1	6	8	1	3	1	4	4	5	2	2	1	1	2	1	3	1	2	1	1	2	2	2	2	2	2	2	2	2	1	2	1	134	1	2335	1	99	99	99	99	99	99	99	99	99	99	99	99	2	1	2	1	3	3	99
353	3	1	1	6	3	1	2	1	2	3	6	2	2	1	1	2	1	3	1	2	2	1	2	2	2	2	2	2	2	2	2	1	1	1	1234	99	99	99	1	2	3	98	2	98	1	1	2	98	2	120000	2	6	2	99	3	4	3
354	4	2	4	1	9	1	2	1	2	3	6	2	2	1	1	2	1	2	1	4	2	1	2	2	1	2	1	2	2	2	2	1	3	1	1245	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	1	6	2	1	3	4	3
355	3	1	1	4	3	1	2	3	4	4	6	4	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	1	2	2	2	2	99	1	124	99	99	99	3	1	1	1	4	3	1	2	2	98	1	330000	2	5	2	23	3	1	99
356	2	2	1	3	8	1	2	3	4	4	6	4	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	99	1	458	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	3	2	1	3	2	99
357	2	2	1	3	8	1	2	3	2	2	6	4	2	2	2	2	1	1	1	4	1	2	2	2	2	2	2	2	2	2	2	2	99	1	24	1	4978	3	99	99	99	99	99	99	99	99	99	99	99	99	2	5	2	1	3	4	99