"OCULAR MORBIDITIES AMONG ELDERLY IN RURAL AREA OF BELAGAVI – A CROSS SECTIONAL STUDY"

Submitted By

(REG.NO. BD0115005)

Dissertation Work

Submitted to the

KLE University, Belagavi, Karnataka
In partial fulfillment of the requirements for the degree of

M. D. (Doctor of Medicine)

IN

COMMUNITY MEDICINE

DEPARTMENT OF COMMUNITY MEDICINE
JAWAHARLAL NEHRU MEDICAL COLLEGE,
BELAGAVI – 590010

APRIL - 2018

K L E UNIVERSITY,

BELAGAVI

Endorsement by the HOD, Principal / Head of the Institution

This is to certify that the dissertation entitled **'OCULAR MORBIDITIES AMONG ELDERLY IN RURAL AREA OF BELAGAVI – A CROSS SECTIONAL STUDY'** is a bonafide work done by **(REG.NO. BD0115005).**

Dr. (Mrs.) P. R. Walvekar $_{MD,PhD}$
Professor and Head,
Department of Community Medicine,
JNMC, Belagavi

Date:
Place: Belagavi

Dr. (Mrs.) N. S. Mahantshetti$_{MD}$
Principal,
J N Medical College,
Belagavi

Date:
Place: Belagavi

Undertaking

I, **(REG.NO. BD0115005)** hereby declare that the information and the data mentioned in my dissertation entitled **"OCULAR MORBIDITIES AMONG ELDERLY IN RURAL AREA OF BELAGAVI – A 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 that 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:

Place: Belagavi

LIST OF ABBREVIATION USED

Sl. No.	ABBREVIATION	EXPANSION OF THE ABBREVIATION
1	**NPCB**	National Programme for Control of Blindness
2	**RIOs**	Regional Institutes of Ophthalmology
3	**WHO**	World Health Organisation
4	**IAPB**	International Agency for Prevention of Blindness
5	**INGO**	International Non Governmental Organisation
6	**NGO**	Non Governmental Organisation
7	**DALY**	Disability Adjusted Life Years
8	**NSPB**	National Society for Prevention of Blindness
9	**PHC**	Primary Health Centre
10	**VI**	Visual Impairment
11	**AMD**	Age related macular degeneration
12	**NPDR**	Non-Proliferative Diabetic Retinopathy
13	**KLE**	Karnataka Lingayat Society
14	**PUC**	Pre University College
15	**SES**	Socio Economic Status
16	**DM**	Diabetes Mellitus
17	**BMI**	Body Mass Index
18	**SPSS**	Statistical Package for Social Sciences

19	**Kg**	Kilogram
20	**m**	Meter
21	**mm Hg**	Millimeter of Mercury
22	χ^2	Chi Square
23	**Df**	Degree of Freedom
24	**SD**	Standard Deviation
25	**ASHA**	Accredited Social Health Activist
26	**LPG**	Liquid Petroleum Gas

ABSTRACT

BACKGOUND AND OBJECTIVES:

Blindness and visual impairment by its sheer magnitude forms an enormous problem, not only in human suffering, but also in terms of economical loss and social burden.

Globally, 285 million people are visually impaired. The preventable causes are as high as 80% of the total global burden and are mainly seen in developing countries. Of the blind people in India, 82% are above the age of 50 years and around two thirds live in villages.

With introduction of universal eye health: a global action plan 2014–2019, dealing with reduction in avoidable blindness across the world, this study would help in enlightening the present scenario in this region. So the present study was conducted among elderly in rural area of Belagavi with the objectives to know the prevalence of ocular morbidities and their socio demographic determinants.

MATERIAL AND METHOD:

The present community based cross sectional study was conducted among individuals aged 60 years and above residing in the area covered under Vantamuri Primary Health Centre, Belagavi from 1st January to 31st December 2016. A sample size of 620 was calculated and obtained by population proportionate sampling from five subcentres under Vantamuri Primary Health Centre.

Data was collected from the study subject regarding socio-demographic variables and personal history. Detailed ocular examination was carried out, which included external eye examination using torch, visual acuity examination, confrontation test and fundus examination using ophthalmoscope. With the help of

predesigned and pretested questionnaire elderly individuals were interviewed face to face and data collection was done by house to house visit, after taking informed consent. Ethical clearance was obtained from Institutional Ethics Committee.

RESULTS:

The prevalence of ocular morbidities among elderly in rural area was 60.64%. Mean number of ocular morbidities per person was 1.78 $\pm$ 1.05. Prevalence of visual impairment and blindness among elderly was 28.07% and 2.90% respectively. Major causes for ocular morbidities were cataract, refractive error, retinopathies and glaucoma.

Ocular morbidity was significantly associated with age and literacy ($p < 0.05$). The number of ocular morbidity was significantly associated with age, sex, religion and literacy of the study participant ($p<0.05$).

CONCLUSION:

The present cross sectional study, reported a higher prevalence of ocular morbidities among elderly in rural area. Major causes for ocular morbidity include cataract, refractive error, retinopathies and glaucoma, all of which are preventable or treatable. Ocular morbidity favored people with higher age, female sex and illiterates. Treatment seeking behavior among the participant revealed more preference for private sector compared to government sector.

KEY WORDS: Ocular morbidity, Elderly population, Rural area, Cataract.

TABLE OF CONTENT

LIST OF TABLE

LIST OF GRAPH

LIST OF FIGURE

Introduction

INTRODUCTION

Among the senses provided by God, sense of sight is supreme. Vision helps us understand what is, rather than on what should be. If we are thinking on what you think should be, we can't help being dissatisfied. When we find the need of the present moment, we see its necessity. Loss of sight of a person should not remain just a statistics but a personal tragedy, not only for the individual concerned, but for all of us who claim to be concerned. Blindness and visual impairment by its sheer magnitude forms an enormous problem, not only in human suffering, but also in terms of economical loss and social burden[1].

Globally, 285 million people are visually impaired, of whom 246 million have low vision, 39 million are blind. About 90% of the world's visually impaired live in low-income settings[2]. World's one-third blind people live in South-East Asia region. Four out of every 12 people who become blind every minute in the world are from South-East Asia. With one quarter of global population and one third of world's blind, South-East Asia has particularly heavy burden of disease. Blindness in this region is truly a public health problem and it is estimated to cost US$ 5.6 billion annually to the countries of the region, in terms of loss of productivity, education and rehabilitation. Thus, it constitutes an additional burden to these already poor countries. The life expectancy of the blind persons is one – third less than that of their sighted peers, and most of them die within 10 years of becoming blind[3].

India has been labelled as an ageing nation with 8.6% of its population being more than 60 years old. In absolute terms the elderly population in India accounted for nearly 104 million in 2011[4]. The proportion is likely to reach 12% in 2031 and 17% in

2051. The aging population is a sign of successful development in medical sciences and technology, living standards, and education, but the elderly also raise unique social, economic, and clinical challenges, including a growing demand for increasingly complex healthcare services[5]. So, India is marching towards a future where the elderly population will be on rise[6]. India has 6.7 million blind people and the estimated national prevalence of blindness in general population is 1%. Of the blind people, 82% are above the age of 50 years[7].

In India, of the total elderly population, two-thirds live in villages. Ocular morbidity is more common in rural areas, female gender, and the poor. Visual health has been lagging and neglected in past few years, though there has been improvement in standard of people living in rural areas. Ocular morbidities if untreated reduce quality of life and economic productivity. The major reasons for the high prevalence of ocular morbidity in India may be increasing life expectancy, significantly more people aged above 40 years, poor access to eye care facilities in rural areas, misconceptions about cataract surgery, compromised water quality and environmental conditions, and lack of effective eye health education program[6].

The overall prevalence of ocular morbidities in India is reported to be high among elderly. An ocular morbid condition is defined as a condition in study subject, recognized or suspected, ocular or vision abnormality, which require treatment or surveillance[8]. Some of the ocular morbid conditions noted are Cataract, Refractive errors, Pterygium, Strabismus, Dacrocystitis, Corneal Blindness, Glaucoma and Posterior Segment Disorders. According to National Programme for Control of Blindness (NPCB) Pilot Survey 2001-2002, the prevalence of cataract in + 50 year population was 62.6%. In the same survey, prevalence of uncorrected refractive

errors, corneal opacity, glaucoma, posterior segment disorders was 19.7%, 0.9%, 5.8% and 4.7% respectively[9]. Epidemiological factors like age, sex, socioeconomic status, alcohol and tobacco consumption, exposure to cooking fuel etc. are associated with ocular morbid conditions[10].

The preventable causes are as high as 80 percent of the total global burden and are mainly seen in developing countries. The eye morbidity is multi-factorial; main causes being infections, poor nutrition and certain socio-cultural factors. Poor hygiene, sanitation and the climatic conditions can further aggravate the eye problems[10]. The role of smoking in cataractogenesis has been highlighted in various studies. Also alcohol consumption is a risk factor for cataract[11]. Approximately half the world's population and upto 90 percent rural households in developing countries still rely on unprocessed biomass fuels such as wood, dung and crop residues. It is believed that biomass fuel smoke results in the opacity of lens[12]. As most of the causes for blindness are preventable, there is a need to control the above mentioned factors by checking ocular diseases in early stages. Permanent visual disability can be prevented by giving necessary treatment in early stages.

In 1976, Government of India launched National Programme for Control of Blindness with the goal to reduce the prevalence of blindness from 1.4% to 0.3%. The main objectives of the programme in the 12th Five Year Plan period are to reduce the backlog of avoidable blindness, develop and strengthen the strategy for "Eye Health for All", to strengthen and upgrade Regional Institutes of Ophthalmology (RIOs), to strengthen the existing infrastructure facilities, to enhance community awareness on eye care, to increase and expand research for prevention of blindness and visual impairment and to secure participation of voluntary organizations. Various initiatives

undertaken during Five Year Plans under NPCB are targeted towards achieving the goal of reducing prevalence of blindness to 0.3% by the year 2020[13]. In 2016-17, under NPCB, 64,81,435 cataract surgeries and 4,04,677 other diseases such as diabetic retinopathy, glaucoma, squint etc were treated all over India. Of the cataract surgeries, 3,66,737 surgeries were conducted and 8,551 cases related to diabetic retinopathy, glaucoma and squint were treated in Karnataka[14].

The global initiative known as 'VISION 2020: The Right to Sight' was launched in 1999 and is now an established partnership between World Health Organisation (WHO) and the International Agency for Prevention of Blindness (IAPB). The vision of VISION 2020 is a world in which no one is needlessly blind and where those with unavoidable vision loss can achieve their full potential. Its aims are to eliminate the main causes of avoidable blindness by the year 2020 and to prevent the projected doubling of avoidable visual impairment between 1990 and 2020[15]. "VISION 2020: The Right to Sight – INDIA" is part of this global initiative in India. It is a collaborative effort of International Non Governmental Organisations (INGOs), Non Governmental Organisations (NGOs), eye care organisations in India and the Government to coordinate and advocate for improved eye care programs; to gain and share knowledge and together develop solutions to achieve quality, comprehensive and equitable eye care. It is governed by a Board of 16 members with the Joint Secretary, NPCB serving as an Advisor on the Board[16].

Though there are various programmes and strategies coming up, preventable blindness is reducing on a slower pace. This is mainly due to the illiteracy and ignorance of the people towards their health and health related conditions. Many elderly individuals do not even know if they are suffering from any illness, because it

hardly affects their daily routine. This increases the burden of ocular diseases. So to bring reduction of preventable blindness on a better pace, more of screening studies and camps need to be conducted where we can focus on elderly individuals, can treat them and bring blindness with other morbidities to a halt.

In developing countries, data regarding the prevalence of ocular morbidities among elderly in rural areas is scarce. Such studies will be beneficial in formulating programs to further reduce the burden of visual impairment and help in achieving Vision 2020: Right to Sight, global initiative to eliminate avoidable blindness, initiated by World Health Organisation. With introduction of universal eye health: a global action plan 2014–2019, dealing with reduction in avoidable blindness across the world, this study would help in enlightening the present scenario in this region. With this background, the present study was conducted among elderly in rural area of Belagavi to know the extent of ocular morbidities.

Objectives

OBJECTIVES OF THE STUDY

1. To study the prevalence of ocular morbidities among elderly in rural area.
2. To study socio-demographic determinants of ocular morbidities.

Review of Literature

REVIEW OF LITERATURE

Globally, 285 million people (4.25%) are estimated to be visually impaired: 39 million (14%) are blind and 246 (86%) have low vision. About 90% of the world's visually impaired live in low-income settings. 82% of people living with blindness are aged 50 and above. The number of people visually impaired from infectious diseases has reduced in the last 20 years according to global estimates work. 80% of all visual impairment can be prevented or cured[17]. Looking at the global distribution of avoidable blindness based on the population in each of the World Health Organisation (WHO) regions, we see the following: South East Asian 28%, Western Pacific 26%, African 16.6%, Eastern Mediterranean 10%, the American 9.6%, and European 9.6%. In India, 4.6% have vision loss and 0.7% have blindness per 100 population. It is assumed that by 2019, number of blind people above 50 years is going to increase from around 6 million to 9 million. India has 7.25% prevalence of visual impairment, being the highest in the world, as it spends very less in investments in health.

In spite of the progress made in surgical techniques in many countries during the last ten years, cataract (47.9%) remains the leading cause of visual impairment in all areas of the world, except for developed countries. Other main causes of visual impairment are glaucoma (12.3%), age-related macular degeneration (AMD) (8.7%), corneal opacities (5.1%), diabetic retinopathy (4.8%), childhood blindness (3.9%), trachoma (3.6%), and onchocerciasis (0.8%). The causes of avoidable visual impairment worldwide are all the above except for AMD. In the least-developed countries, and in particular Sub-Saharan Africa, the causes of avoidable blindness are primarily, cataract (50%), glaucoma (15%),

corneal opacities (10%), trachoma (6.8%), childhood blindness (5.3%) and onchocerciasis (4%). An analysis of the global distribution of visual impairment shows a disproportionately large prevalence in low-income developing countries. In these countries cataract and trachoma are the greatest causes of avoidable blindness. The lack of and inequity of access to prevention and eye care services severely limit in these regions of the world, the benefits that can be realized by modern medical advancements.

The lack of economic development is a factor that aggravates the prevalence of visual impairment. For this reason, blindness prevention programmes must concern themselves not only with the elimination of avoidable blindness but also with concurrent economic development. The costs of rehabilitation and care provided to the visually impaired are the most obvious. Less apparent but just as significant, however, are the indirect costs resulting from the loss of productivity.

The visually impaired person and his/her family face serious social challenges. Directly and indirectly visual impairment interferes with many daily activities. In the case of adults, the possibilities for gainful employment are severely limited as is their participation in many activities. To this is often added a loss of social status and self esteem. The physical limitations and psychosocial implications of visual impairment cannot be measured in exact monetary terms. Nevertheless, it is clear that they diminish the quality of life not only for blind persons, but for their families as well[18].

Data over the last 20 years shows that there has been significant progress in preventing and curing visual impairment in many countries. Furthermore, the massive reduction in onchocerciasis- and trachoma- related blindness is part of a significant reduction in the disease distribution and has substantially reduced the burden resulting from these infectious diseases. This has been achieved through a number of successful international public-private partnerships.

The largest civil society effort to prevent and cure blinding disease and rehabilitate people whose irreversibly visually impaired or blind is the SightFirst programme of the International Association of the Lions Club (LIONS). Among others, this programme supports the largest initiative to develop child eye care centres (45 national reference paediatric centres established in 35 countries so far), implemented in partnership with WHO. Visual impairment in adults has to be given importance in coming years.

In 2013, the World Health Assembly approved the 2014-19 Action Plan for the universal access to eye health, a roadmap for Member States, WHO Secretariat and international partners with the aim of achieving a measurable reduction of 25% of avoidable visual impairments by 2019. WHO works to strengthen national and country-level efforts to eliminate avoidable blindness, help national health care providers treat eye diseases, expand access to eye health services, and increase rehabilitation for people with residual visual impairment or who are blind. Building accessible and comprehensive health systems is the focus of this decade.

For the last two decades WHO has worked with a network of international partners and private sector to ensure that appropriate, updated, good quality eye care solutions were made available to the people in need. In response to the

increasing burden of chronic eye disease WHO is coordinating a global research effort to map services and policies for controlling diabetic retinopathy, glaucoma, age-related macular degeneration and refractive errors. Finally, to support comprehensive eye care systems, WHO continues to provide epidemiologic and public health technical support to its Member States[17].

The National Programme for Control of Blindness (NPCB) was launched in the year 1976 as a 100 per cent centrally sponsored programme and incorporates the earlier trachoma control programme started in the year 1968. The programme was launched with the goal to reduce the prevalence of blindness from 1.4 to 0.3 per cent. The problem of blindness is acute in rural areas, and hence the programme has tried to expand the accessibility of eye services in these areas. At present there are 80 central mobile units attached to medical colleges and 341 district mobile units to provide eye care in mobile eye camps. Most of the cataract surgeries in rural population are conducted through these mobile camps. The findings of the survey conducted during 2001-2002, in randomly selected districts of the states covered by World Bank Project shows that dependence on eye camps has reduced, except in remote and tribal areas; involvement of Primary Health Centre / Community Health Centre doctor in the programme has increased; higher percentage of cataract operated persons consult the doctor at an early stage; there is an increase in demand for modern techniques like intra-ocular lenses and suture-less surgeries; and about 84 per cent of cataract operated persons receive free spectacles from the health facilities.

During 2013-14 nearly 34,492 donated eyes were collected for corneal implantation. Hospital retrieval programme is the major strategy for collection of

donated eyes, which envisage motivation of relatives of terminally ill patients, accident victims and others with grave diseases to donate eyes. Eye donation fortnight is organized from 25th August to 8th September every year to promote eye donation/eye banking. Gujarat, Tamil Nadu, Maharashtra and Andhra Pradesh are leading states in this activity. The voluntary organizations such as Lions International and its branches, Rotary International and its branches, National Society for Prevention of Blindness (NSPB) India etc. are encouraged to organize eye camps in remote rural and urban areas as per guidelines, with the permission from the state authorities. They have been active in providing eye health education, preventive, rehabilitative and surgical services for control of blindness. Community health education is a built-in component at all levels of implementation of National Blindness Control Programme. The programme also includes regular eye check-up and provision of vitamin A prophylaxis and service facilities in rural areas[19].

Towards a global effort, VISION 2020 : The Right to Sight – the Global Initiative for the Elimination of Avoidable Blindness by the year 2020 was formally launched from W.H.O. Headquarters, Geneva in 1999. INDIA was among the 183 countries in the world signatories to the VISION 2020 The Right to Sight global initiative.

Member states were to establish national coordinating committees, which were to implement the national plans by 2007. The resolution also supported the mobilisation of resources to achieve a successful programme. In response to the acceptance of the Resolution, the VISION 2020 Tool Kit was developed to provide

guidance and support for Governments and health professionals at all stages of development in 2003.

In India, VISION 2020: The Right to Sight – INDIA was launched in 2004. This was in coordination with all International Non Governmental Organisations (INGOs) working in the area of blindness in India, the government, centres of excellence in eye care in India and premier eye institute, Dr RP Centre for Ophthalmic Sciences, AIIMS[20]. It helps in coordination of eye care programs, helps to gain and share knowledge and together develop solutions to achieve quality, comprehensive and equitable eye care services.

The 66th World Health Assembly unanimously approves **'Universal Eye Health: A Global Action Plan 2014-2019'.** The plan, building upon and replacing previous VISION 2020 and 2009 – 2013 Action Plans, commits governments to a 25% reduction in the prevalence of avoidable visual impairment by the year 2019 from the baseline of 2010.

In India, VISION 2020: The Right to Sight – INDIA held a national consultation in 2015 in collaboration with the WHO India, the Indian Health Ministry, International Agency for Prevention Blindness (IAPB) south Asia and INGOs to adopt the Global Action Plan report 2014 – 19 to chalk out a road map for India[20].

The vision of the global action plan is a world in which nobody is needlessly visually impaired, where those with unavoidable vision loss can achieve their full potential, and where there is universal access to comprehensive eye care services. The global action plan 2014–2019 aims to sustain and expand efforts by

Member States, the Secretariat and international partners to further improve eye health and to work towards attaining the vision just described. Its goal is to reduce avoidable visual impairment as a global public health problem and to secure access to rehabilitation services for the visually impaired. The purpose of the action plan is to achieve this goal by improving access to comprehensive eye care services that are integrated into health systems. Five principles and approaches underpin the plan: universal access and equity, human rights, evidence based practice, a life course approach, and empowerment of people with visual impairment[21].

A cross sectional study was conducted in five randomly selected villages of Wardha district, Maharashtra to study the magnitude and factors related to the prevalence of ocular diseases among the elderly population. The prevalence of ocular morbidities was 44.2%, in which 32% were with low vision and 12.2% were blind. Ocular morbidity rate was 1.21 lesions per elderly person and it increased significantly with increasing age. There was a high prevalence of refractive errors (40.8%), cataract (40.4%), aphakia (11.1%) followed by pterygium (5.2%), glaucoma (3.1%) and corneal opacities (3%)[22].

The study which was conducted at the Jasra and Saidabad blocks of Allahabad district, revealed that ocular morbidity was highest (40.92 %) among those aged above 60 years. A higher morbidity was also observed among females (53.60 %), illiterates (69.50 %) and those belonging to low socioeconomic status (42.86 %). The main causes of ocular morbidity in the study population were cataract (41.89 %), uncorrected refractive errors (21.59 %), xerophthalmia (10.20 %) and glaucoma (4.83 %)[23].

A community based study was undertaken in rural area of Hingna, Nagpur in 2005. The results revealed that overall prevalence of ocular morbidity was 32.11%. Tobacco smoking and alcohol consumption habits were found to be statistically significantly ($p<0.05$) associated with ocular morbidity. In females, 53.71 % of ocular morbid conditions were found in those using biomass as cooking fuel[24].

Another study was done in a rural field practice area of Centre for Community Medicine, All India Institute of Medical Sciences, New Delhi, to find the prevalence of impairment in rural elderly population. It illustrated that visual impairment was the most frequently observed condition in elderly. In the functional assessment, 23.6% of the subjects were blind in one eye and 16.4% were blind in both eyes[25].

A population based eye survey of older adults in rural part of Rajasthan was conducted. The prevalence of presenting and best-corrected visual acuity worse than 6/60 in both eyes was 11.9% and 6.1%, respectively. Presenting blindness was associated with increasing age, female gender, lack of schooling, and rural residence. Cataract was the principal cause of blindness in one or both eyes in 67.5% of blind persons, with uncorrected aphakia and other refractive error affecting 18.4% in at least one eye[26].

The cross-sectional study which was conducted in patients of rural area of Bundelkhand visiting the outdoor unit of Department of Ophthalmology, Maharani LaxmiBai Medical College, Jhansi. The prevalence of low vision was 37% while that of blindness was 13.7%. Ocular morbidity rate was 1.24 lesions per elderly person and it increased significantly with increasing age ($p<0.001$). Ocular diseases were found to be more prevalent among males, low socioeconomic status group and labourers ($p<0.001$). There was a high prevalence of refractive errors (43.4%),

cataract (41%), pterygium (18.8%), aphakia (14.2%) glaucoma (3.7%) and corneal opacities (3.2%). Prevalence of diseases of the lens and iris increased significantly with increasing age ($p<0.001$)[27].

A study conducted to describe the prevalence of cataract in older people in two areas of north and south India revealed that the prevalence of unoperated cataract in people aged ≥60 was 58% in north India (95% Confidence Interval [CI], 56–60) and 53% (95% CI, 51–55) in south India ($P = 0.01$). Nuclear cataract was the most common type: 48% (95% CI, 46–50) in north India and 38% (95% CI, 37–40) in south India ($P<0.0001$); corresponding figures for Posterior Segment Cataract were 21% (95% CI, 20–23) and 17% (95% CI, 16–19; $P = 0.003$), respectively, and for cortical cataract 7.6% (95% CI, 7–9) and 10.2% (95% CI, 9–11; $P<0.004$). Bilateral aphakia/pseudophakia was slightly higher in the south (15.5%) than in the north India (13.2%; $P<0.03$). The prevalence of any cataracts was similar in north India (73.8%) and south India (71.8%). The prevalence of unoperated cataract increased with age and was higher in women than men (odds ratio [OR], 1.8). Aphakia/pseudophakia was also more common in women, either unilateral (OR, 1.2; $P<0.02$) or bilateral (OR, 1.3; $P<0.002$)[28].

A cross-sectional study was conducted for visual impairment in elderly population in residential care in the South Indian state of Andhra Pradesh, in which 494 participants were examined. Among them, 78.1% were women and 72.1% had no formal schooling. The mean age of participants was 70 years (SD ±8.6 years). Visual Impairment (VI) was present in 280/494 individuals (56.9%; 95% CI 52.3 to 61.3). Over 80% of the VI was due to avoidable causes including cataract (57.1%) and uncorrected refractive errors (26.4%). Among 134 individuals who had undergone

bilateral cataract surgery, only 78 (58.2%) individuals had presenting visual acuity ≥6/18 and 13 (9.7%) participants were blind[29].

The chennai glaucoma study was conducted in subjects more than 40 years of age. Of 3924 subjects, 753 (19.2%; 321 males, 432 females) presented with a visual acuity of 3/60; 132 subjects (3.36%, 95% CI: 2.80 to 3.93) were diagnosed to be blind. Cataract was responsible in 74.62% of eyes; glaucoma, cystoid macular oedema, optic atrophy, and corneal scars accounted for 3.79% each. Bilateral causes of blindness were cataract (78.63%), glaucoma (4.29%), optic atrophy (3.42%), cystoids macular oedema, and corneal scars (2.56% each). In 19 eyes (7.2%) the blindness was probably related to cataract surgery. Blindness was positively associated with increasing age ($p = 0.0001$)[30].

A study was carried out in four villages in sub-center Kondur, under Primary Health Centre (PHC) Kondur, Villupuram district, Tamil Nadu. The prevalence of cataract among the population studied was 62.8% (95% CI: 57.5-67.9%). There was a significant increase in cataract with increase in age ($P < 0.001$). Only 13% (95% CI: 9.6-16.3%) of the persons with cataract were operated at the time of interview. The major barriers were no one to accompany (25.5%) and absence of felt need (22.6%). Less than one-fifth (17.8%) reported the awareness of cataract as a condition affecting eye. The facilitating factors were free surgery in camps (83.7%), self-decision due to defective vision (69.7%) and quality of service provided (65.1%). More than one-half (56.7%) of subjects diagnosed for cataract during the survey were willing to be operated[31].

The cross‑sectional which study was conducted in a tertiary health center in rural area of Maharashtra. Out of 746 patients, 400 (53.6%) were suffering from cataract. Senile cataract was the most common cause (54%). Fifty‑five percent patients were in the age group of 60–80 years and majority of them were from low socioeconomic strata[32].

A community based cross-sectional study in area covered by Rural Health Training Centre, Hingna which is under the administrative control of Department of Preventive and Social Medicine, Indira Gandhi Government Medical College, Nagpur. The results revealed that out of 925 study subjects 297(32.11%) had ocular morbidity. Common ocular morbidity were Myopia (13.62%), Conjunctival xerosis (12.11%), Hypermetropia (11.68%), Xerophthalmia (3.46%), Pterygium (2.92%), immature senile cataract (2.70%), Eye strain (2.49%), mature senile cataract (1.84%) and Presbyopia (0.86%). Females were more affected (36.58%) as compared to males (28.37%), [$\chi 2$ (Chi-square) = 7.09, $P< 0.05$]. It was observed that as the age increased the prevalence of ocular morbidity increased [$\chi 2=318.03$, $p<0.001$]. Higher prevalence of ocular morbid conditions was found in Illiterates 122 (40.94%) [$\chi 2 = 16.47$, $p<0.001$][33].

The study was carried out in three randomly selected intensive service programme villages of the rural field training centre, Kalyanpur of Medical College, Kanpur. It was observed that 76.1% residents had various ocular lesions in the sampled villages. The percentage prevalence of ocular lesions was maximum in village Khera while it was minimum in village Hora. The prevalence of various ocular lesions according to site and international classification revealed the commonest ocular leisons to be refractive error (22.99%) followed by trachomatous scarring

(16.36%) and follicles (11.02%). The average ocular leisons per case were 1.24 and the range being 1-3. About 49.3% cases had trachmatous lesions, the active trachoma cases were 15.4% and healed trachoma cases were 33.9% [34].

A community based cross-sectional study was conducted in the villages around Rural Health Training Centre, Satrikh of Hind Institute of Medical Sciences, Barabanki. Of the total 812 individuals interviewed, the prevalence of ocular morbidity was 41.3% (335 subjects had one or more ocular morbidity); with 88.8% elderly affected (age >65 years). Myopia was the most common ocular morbidity (14.8%), followed by cataract (14.3%) and hypermetropia (12.8%). Allergic and infective conjunctivitis affected 5.8% and 3.9%, respectively. The prevalence of Vitamin A deficiency disorder (including night blindness and bitot spots) was 1.3%[35].

The cross sectional study which was carried out to estimate the prevalence of ocular morbidities and its correlates in Shivankar Nagar slum, an urban field practice area of study institution. The prevalence of ocular morbidities was found to be 40.38%. Presbyopia was most common ocular morbid conditions in study subjects responsible for 19.81% of total ocular morbidities. Myopia was second most common 5.71%, followed by immature cataract 4.76%, pterygium 2.85%, hypermetropia 2.67%. Prevalence of chalazion, exophthalmus, glaucoma and colour blindness was 0.19% each[36].

A study was conducted in 1613 individuals from forty randomly selected families from each of the nine localities registered at Urban Health Training Center, Surajkund. They were tested for vision and eye examination. Prevalence of ocular morbidity was 53.0% with a significantly higher prevalence in females than males (56.2% vs 49.1%). Refractive errors were the major ocular morbidity (86.4%)

followed by cataract (22.5%). The ocular morbidity was significantly more prevalent in people aged >60 years (98.5%) than <60 years (44.3%), illiterates (75.7%) than literates (58.2%), widows/widowers (96.0%) than others (50.1%), clerk/shop owner group (69.0%) than other groups (63.6%), lower class (65.2%) than other socio economic classes (52.7%) and general category (57.8%) than other categories (36.7%)[10].

An epidemiology study was conducted in five adopted villages of a medical college in Wardha district, Maharastra. Among 974 persons, blindness (<6/60) was 7.2% in the study population and by WHO criteria (<3/60) was 5.4%. Blindness was found significantly associated with age and sex. Prevalence of low vision was found to be 29.3% and was found to be significantly associated with age, sex, caste, education, socioeconomic status and fuel used. Refractive error was the most common ocular disease (85%) in study population. It was found to be significantly associated age, caste, education, occupation and tobacco consumption. Proportion of cataract was 36.3% and was found to be significantly associated with age, sex, caste, education, occupation, socio-economic status, type of house, fuel used and blood pressure. Diabetic retinopathy was present in 8.9% study population and was found to be significantly associated with age, sex, education, type of house, fuel used, tobacco consumption and alcohol consumption. Glaucoma was present in 5.6% of the study population. Age related macular degeneration (AMD) was present in 6.6% of study population. AMD was found to be significantly associated with age and education[37].

A population based eye survey of older adults in Tirunelveli district of South India was conducted in 5795 people, among whom 5411 (93.37%) were examined. The prevalence of presenting and best corrected visual acuity >6/18 in both eyes was

59.4% and 75.7%, respectively. Presenting vision <6/60 in both eyes (the definition of blindness in India) was found in 11.0%, and in 4.6% with best correction. Presenting blindness was associated with older age, female sex, and illiteracy. Cataract was the principal cause of blindness in at least one eye in 70.6% of blind people. The prevalence of cataract surgery was 11.8%—with an estimated 56.5% of the cataract blind already operated on. Surgical coverage was inversely associated with illiteracy and with female sex in rural areas. Within the cataract operated sample, 31.7% had presenting visual acuity >6/18 in both eyes and 11.8% were <6/60; 40% were bilaterally operated on, with 63% pseudophakic. Presenting vision was <6/60 in 40.7% of aphakic eyes and in 5.1% of pseudophakic eyes; with best correction the percentages were 17.6% and 3.7%, respectively. Refractive error, including uncorrected aphakia, was the main cause of visual impairment in cataract operated eyes. Vision <6/18 was associated with cataract surgery in government, as opposed to that in non governmental / private facilities. Age, sex, literacy, and area of residence were not predictors of visual outcomes[38].

A population-based study was conducted in 25 village clusters of district Gurgaon, Haryana, India with 12,899 participants of all ages. Overall, 12,113 of 12,899 people (93.9% response rate) were examined during the household visits. Prevalence of corneal disease was 3.7% (95% CI 3.4% to 4.1%) and that of corneal blindness was 0.12% (95% CI 0.05% to 0.17%). Multivariable analysis demonstrated that corneal disease was significantly higher in the elderly ($p<0.0001$) and illiterates ($p<0.0001$). Common causes of corneal opacity in the study population were pterygium (34.5%), ocular trauma (22.3%) and infectious keratitis (14.9%). Corneal diseases contributing to blindness were post-surgical bullous keratopathy (46.2%) and corneal degenerations (23.1%) [39].

A community based retrospective study was conducted in the satellite clinic of Nepal Medical College Teaching Hospital at Jhaukhel Village Development Committee of Bhaktapur. A total of 395 patients were examined, where males comprised of 135 patients (32.9%) and females 265 patients (67.1%). The common ocular diseases observed in this study were refractive errors 22.5%, age related cataract 17.5%, extra ocular diseases like conjunctivitis 14.9% and conjunctival degenerations 10.8%[40].

The population based study on 500 of 560 eligible (89%) people aged 70 years or older was conducted in three rural communities in Finland. 23% of the study population (113/500) had diabetes mellitus. Signs of diabetic retinopathy were found in 24 people (21% of the diabetic population). Retinopathy changes were graded as mild to moderate non-proliferative retinopathy (NPDR) in 40 eyes (18 people), severe NPDR (preproliferative) in five eyes (four people), and proliferative in three eyes (two people). Preproliferative or proliferative changes were present in four people (3.5% of the diabetic population) and diabetic maculopathy was diagnosed in nine (8% of the diabetic population). In four people the visual acuity was reduced to a low vision level as a result of diabetic retinopathy[41].

This cross-sectional study evaluated 187 patients from three geriatric clinics in Rio de Janeiro. A total of 118 individuals with a visual acuity of ≤20/200 effectively participated in the study after meeting the inclusion and exclusion criteria. Of the 118 individuals with low visual acuity, 27.96% had cataract and 26.27% had refractive errors[42].

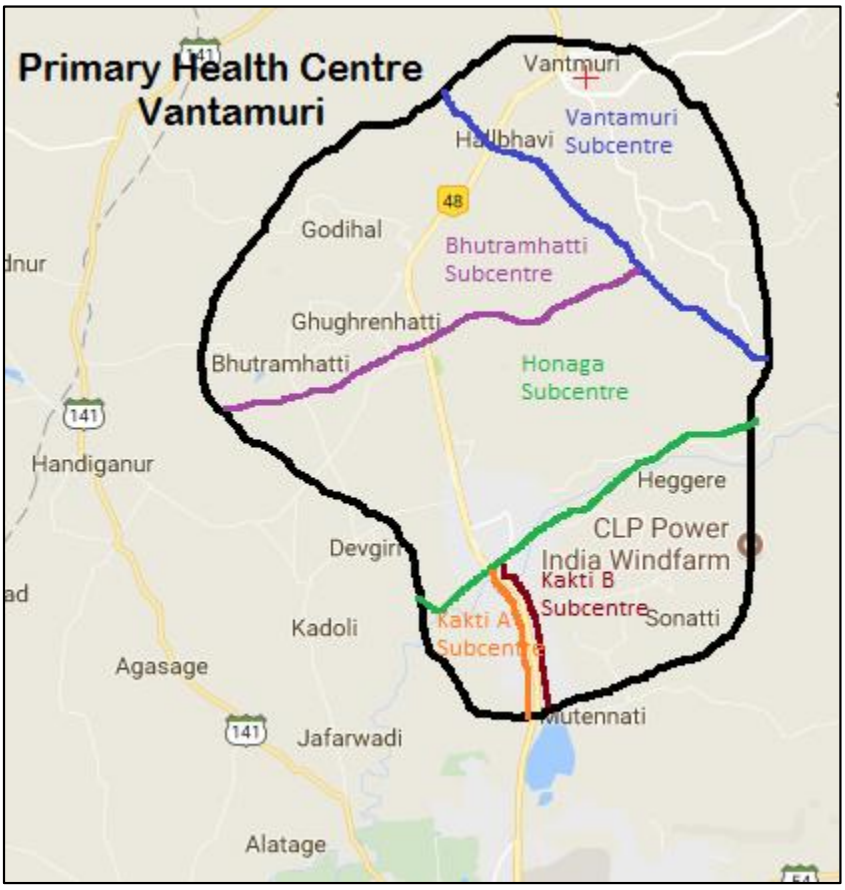
A cross-sectional survey for ocular morbidity was conducted among self selected patients in Kersa town, Ethiopia. A total of 214 patients were examined, where males comprised of 50.5%. Ocular diseases were quite prevalent among the study group. Conjunctivitis was the primary ocular morbidity accounting for 29%, followed by cataract (16.3%), presbyopia (15.4%), refractive errors (7.9%), Blepharitis (7.5%). Twenty four patients (11.2%) had uncorrected visual acuity of less than 6/60 in the better eye. The prevalence of visual impairment (less than 6/18) was 19.1% (41/214) in the study subjects[43].

Methodology

METHODOLOGY

STUDY AREA

The present study was conducted in areas covered under Primary Health Centre (PHC), Vantamuri which is the rural field practice area of Department of Community Medicine, Jawaharlal Nehru Medical College, Belagavi. Vantamuri PHC caters to 17 villages covered under five subcentres with population of 37628. The area covered under PHC has 51 anganwadi centres, 4 gram panchayats, 9 Village Health and Sanitation Committees.



Primary Health Centre Vantamuri

Fig. 1. Map showing area covered under Vantamuri Primary Health Centre

STUDY DESIGN

A community based cross sectional study.

STUDY PERIOD

One year – 1st January to 31st December 2016.

STUDY PARTICIPANTS

Individuals aged 60 years and above residing in the area covered under Vantamuri PHC, Belagavi

SAMPLE SIZE

Sample size was calculated by using the formula

$$n = \frac{4pq}{d^2}$$

where,

n = sample size

p = 44.2% (prevalence of ocular morbidities)[22]

q = (100 - p) = (100 - 44.2) = 55.8.

d = relative error 10% of p, i.e. 10% of 44.2% = 4.42 ≈ 4.

$$n = \frac{4 \times 44.2 \times 55.8}{4X4}$$

= 616.59 ≈ **620**.

SAMPLING METHOD

Population Proportionate to size sampling.

SAMPLING PROCEDURE

The population covered under Vantamuri PHC is 37628, individuals aged 60 years and above constitute 8%.[19]

Therefore, 37628 X 8 / 100 = 3010.

The PHC Vantamuri includes five subcentres. The voters list of the subcentre was obtained. Sampling frame was prepared by sorting out individuals aged 60 years and above. Study participants were further chosen by using Random number table

Name of Subcentre	Total population	Population aged 60 years and above	Number of individuals selected for study
VANTAMURI	7963	637	131
BHUTRAMATTI	5852	468	96
HONAGA	8063	645	133
KAKATI A	8435	675	139
KAKATI B	7315	585	121
TOTAL	**37628**	**3010**	**620**

INCLUSION CRITERIA

1) Individuals aged 60 years and above.
2) Permanent resident of study area (Atleast resident for one year).

EXCLUSION CRITERIA

1) Individuals who have history of ocular trauma.

ETHICAL CLEARANCE

The study was approved from Institutional Ethics Committee for Human Subject's Research, Jawaharlal Nehru Medical College, Belagavi. **(Letter no. – MDC/DOME/377)**

DATA COLLECTION

A pilot study was conducted using the predesigned questionnaire and required modifications were made. All the subjects were informed about the purpose of the study and after obtaining informed consent they were interviewed using pre-structured and pretested proforma. The elderly persons in the study population were interviewed at their homes. Data regarding socio-demographic variables, alcohol and tobacco consumption, indoor air pollution and previous history of diabetes, hypertension, or any ocular surgeries was collected.

The researcher underwent training in ophthalmology for one month to conduct ocular examination. External eye examination was done using torch light to identify any diseases of eye lids, lacrimal apparatus, conjunctiva, cornea and nystagmus. Each person was tested for visual acuity using Snellen's E charts (separately for distant and

near vision).A person was labelled blind when the visual acuity was less than counting fingers at three metres in the better eye. Confrontation test was performed to detect any gross diminution of field of vision. Fundoscopy was carried out by direct ophthalmoscope with dilatation of pupils whenever a person was found to have the visual acuity less than 6/9 or patient was a known case of hypertension or diabetes mellitus. Refractive error was crudely estimated from lens power readings of the ophthalmoscope. Any lenticular opacity visible with distant direct ophthalmoscope against a red reflex was labelled as cataract after external eye examination. Lacrimal sac disorders were diagnosed based on clinical signs and symptoms. Glaucoma suspects and other doubtful cases were referred for final diagnosis to ophthalmologist, KLE hospital, Belagavi.

TOOLS USED

- Profroma was used for recording of data regarding socio demographic profile, personal history and ocular examination.
- **Height** – The subject was asked to stand straight without footwear, with heels, buttocks and back straight and arms hanging by side. The height was measured from head to heel. The coinciding reading was measured to the nearest 0.1 cm using a metallic measuring tape.
- **Weight** – Body weight was measured without any foot wear and with minimal clothing to the nearest 0.1 kilogram using a standard portable adult weighing machine, which was standardized periodically during the study. The scale was adjusted to zero before each session and weight was recorded in kilogram.

- **Blood pressure** – Blood pressure of each individual was measured on right arm in sitting position at the home of the participant. A standard sphygmomanometer with manual readings was used for all the patients.
- **Snellen's E Vision chart** – This chart was used for testing far vision of the participant. Participant was made to sit approximately 6 metres from the chart, without his spectacles if he was previously diagnosed with refractive error and was asked to read the chart. If the participant was not able to read the largest letter, finger counting test was done and far vision was recorded.
- **Snellen's near vision chart** – This chart was held at approximately 25 cms from eye level and participant was made to read the chart without spectacles if he had them. The smallest line which he could read was taken as near vision of study subject.
- **Direct Ophthalmoscope** – Both the eyes of subject were instilled with, tropicamide eye drops, and were left for half an hour for dilatation. Once the dilatation of pupils was attained, fundus examination was done of both the eyes to find out any of the signs of retinopathies or age related changes.

DEFINITION OF STUDY VARIABLES

- **Age:** Age was recorded to the nearest completed years.
- **Illiterate:** A person who cannot read and write any language.
- **Primary school:** A person who has studied upto seventh standard.
- **Secondary school:** The person who has studied upto tenth standard.
- **Pre University College (PUC):** The person who has studied up to Pre-University College second year.
- **Degree:** A person who has completed a diploma course or is a Graduate or more.
- **Nuclear family:** The family consisting of married couple along with their dependent children.
- **Joint family:** It consists of more than one married couples and their children who live in the same household.
- **Broken family:** A family consists of widow/ widower/ divorcee living with or without their dependent children.
- **Socio-Economic status (SES) class:**[44]

  Per-capita income was classified using the Modified Prasad's classification.

  Modification was done with the aid of multiplication factor, which was obtained as below:

  Multiplication factor (MF) = Value of consumer price index [Average for the study period]/100

  Multiplication factor = 274.33/100 = **2.7433**

As our study period was from 1st January to 31st December 2016, the mean consumer price index for the period was considered.

The new income value can now be calculated using the following equation:

New income value = Old income value (Base 1960) × 4.93 × 4.63× MF

Socio Economic Status: Class	BG Prasad's Classification of 1961 (per capita income in rupees/month)	Modified BG Prasad's Classification for 2016 (per capita income in rupees/month)
I	100 and above	6261 and above
II	50 – 99	3131 – 6260
III	30 – 49	1879 – 3130
IV	15 – 29	939 – 1878
V	Below 15	Below 939

- **Tobacco:** The person who used smoke or smokeless form of tobacco for the last one year were considered as present users. Subject who used smoke or smokeless form earlier but left it for past one year were considered as past users of tobacco.
- **Alcohol:** The person who consumed alcohol for the last one year were considered as alcoholics. Subject who consumed alcohol earlier but left it for past one year were considered as past users.

- **Diabetes mellitus (DM):** Participants who told that they were suffering from diabetes and were on treatment were considered to be diabetic.
- **Hypertension:** As per Joint National Committee VII criteria (Joint National Committee in measurement, diagnoses and evaluation of cardiovascular disorders), a systolic blood pressure of ≥140 mm Hg, and / or a diastolic blood pressure of ≥ 90 mm Hg measured on two separate occasions, with a minimum interval of at least five minutes between two measurements; An average of two readings was calculated for estimating the final blood pressure or a self-reported history of taking antihypertensive medications, was defined as hypertension[45].
- **Body Mass Index (BMI):** After noting height and weight of participants, their BMI was calculated.

$$BMI = \text{Weight in kg} / (\text{Height in m})^2 \times 100$$

ASIAN CLASSIFICATION OF BMI:

CLASS	BODY MASS INDEX (BMI)
UNDERWEIGHT	< 18.5 kg/ m^2
NORMAL	18.5 – 22.9 kg/ m^2
OVERWEIGHT	23.0 – 27.5 kg/ m^2
OBESE	> 27.5 kg/ m^2

- **Nystagmus:** Regular and rhythmic to- and fro- involuntary oscillatory movements of the eyes.
- **Stye:** Acute suppurative inflammation of lash follicle and its associated glands of Zeis or Moll.
- **Chalazion:** Chronic non infective and non – suppurative lipogranulomatous inflammation of the meibomian gland.
- **Dacrocystitis:** Inflammation of the lacrimal sac is called dacrocystitis. Clinically, if swelling was visible with any copious or mucopurulent discharge.
- **Acute conjunctivitis:** Inflammation of conjunctiva and conjunctival hyperamemia associated with a discharge which may be watery, mucoid, mucopurulent or purulent.
- **Pterygium:** It is a triangular encroachment of the bulbar conjunctiva on to the cornea occurring in the palpebral aperture.
- **Refractive errors:** Hypermetropia or long sightedness is the refractive state of the eye wherein parallel rays of light coming from infinity are focussed behind the retina with accommodation at rest. Myopia or short sightedness is the refractive state of the eye wherein parallel rays of light coming from infinity are focussed in front of the retina with accommodation at rest.
- **Blindness:** WHO defines blindness as Visual acuity of less than 3/60 (snellen) or its equivalent or inability to count fingers in daylight at a distance of 3 metres.
- **Cataract:** Opacity in the lens or its capsule. Clinically, cataract refers to an opacification of sufficient severity to impair the vision.

If the lens appears greyish white but clear cortex can be seen and iris shadow is visible, it is called immature cataract. Opacification is diffuse and irregular. If the lens appears pearly white and whole cortex is involved, it is called mature cataract. Opacification is complete.

- **Glaucoma:** It is not a single disease process but a group of disorders characterized by a progressive optic neuropathy resulting in a characteristic appearance of optic disc and a specific pattern of irreversible visual field defects that are associated frequently but not invariably with raised intraocular pressure.
- **Diabetic Retinopathy:** Retinal changes seen in patients with diabetes mellitus. The changes include microaneurysms, retinal haemorrhages, retinal oedema, hard exudates, venous abnormalities, cotton wool spots.
- **Hypertensive Retinopathy:** Fundus changes occurring in patients suffering from systemic hypertension. The changes include arterial narrowing, arteriolar changes, superficial retinal haemorrhages, hard exudates, disc oedema, cotton wool spots[46].

STATISTICAL ANALYSIS

The data was tabulated and master chart was prepared. Data collected in the questionnaire was coded and entered in Microsoft excel sheet. Data was analyzed using Statistical Package for Social Sciences (SPSS), version 24.0 and the prevalence of each risk factor was expressed in terms of percentages. Statistical analysis was done using Pearson's Chi- Square test to find out the association between ocular morbidities and risk factors. A probability value (p value) of less than 0.05 was considered as significant.

Results

RESULTS

The present cross sectional study was conducted in areas covered under Vantamuri Primary Health Centre which is the field practice area of Department of Community Medicine, Jawaharlal Nehru Medical College, Belagavi during the period January to December 2016.

A total 620 participants aged 60 years and above participated in the study. The data obtained was tabulated and analyzed under following headings as below:

I. Socio – demographic profile of study participant

II. Relevant past history

III. Prevalence of ocular morbidity

IV. Association between ocular morbidity and socio demographic factors

I. SOCIO – DEMOGRAPHIC PROFILE OF STUDY PARTICIPANT

Table 1. Age and sex distribution of study participant

AGE (in years)	MALE n (%)	FEMALE n (%)
60 – 65	157 (62.06)	240 (65.39)
66 – 70	55 (21.74)	76 (20.71)
71 – 75	28 (11.07)	30 (8.17)
76 – 80	04 (1.58)	04 (1.09)
>80	09 (3.55)	17 (4.64)
TOTAL	**253 (100)**	**367 (100)**

In the current study, among 253 male participant 157 (62.06%) were in the age group of 60 to 65 years, 55 (21.74%) in the age group of 66 to 70 years, 28 (11.07%) in the age group of 71 to 75 years, 4 (1.58%) in the age group of 76 to 80 years and 9 (3.55%) were more than 80 years old. Out of 367 female participant 240 (65.39%) were in the age group of 60 to 65 years, 76 (20.71%) in the age group of 66 to 70 years, 30 (8.17%) in the age group of 71 to 75 years, 4 (1.09%) in the age group of 76 to 80 years and 17 (4.64%) were more than 80 years old. The mean age of the study participant was 65.26 $\pm$ 6.04 years. The mean age of the male and female participants was 65.45 $\pm$ 5.94 and 65.12 $\pm$ 6.11 years respectively. Out of 620 study participant, 367 (59.19%) were female and 253 (40.81%) were male.

Graph 1. (Table 1.): Age and sex distribution of study participant

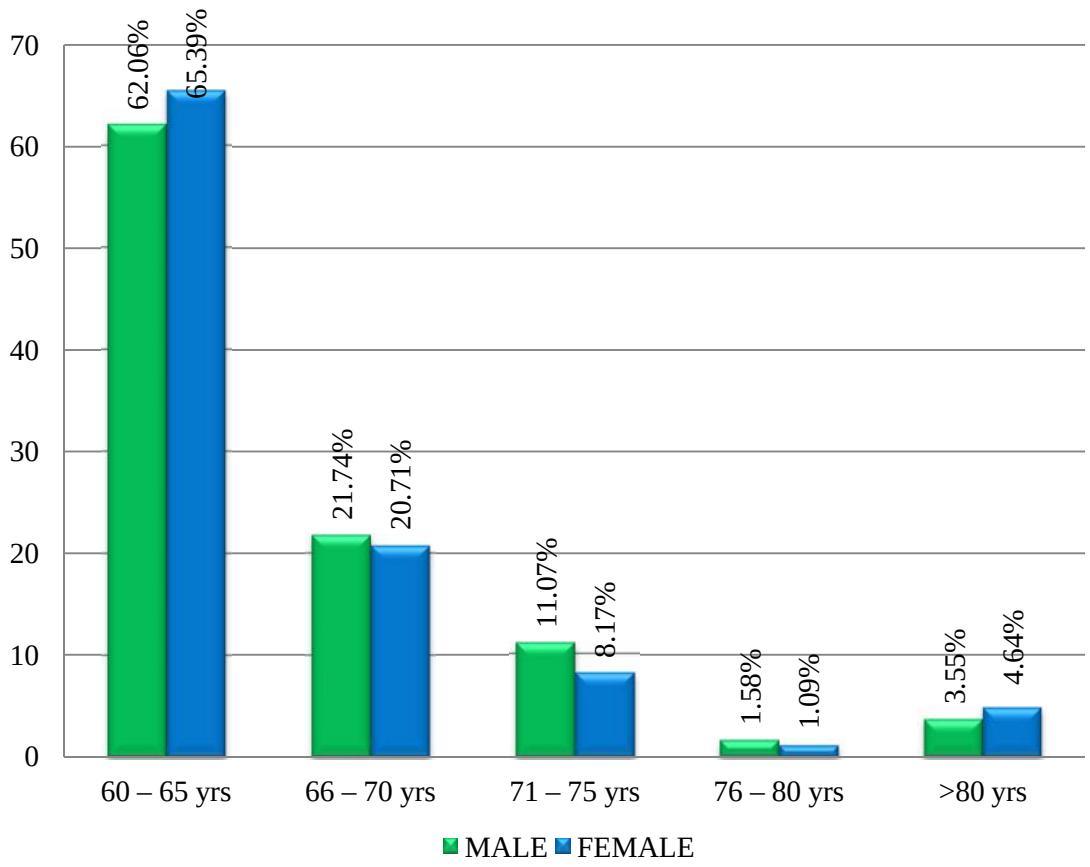


Table 2. Distribution of study participant according to Religion

RELIGION	NUMBER	PERCENTAGE
HINDU	579	93.38
MUSLIM	35	5.65
JAIN	06	0.97
TOTAL	**620**	**100**

In present study, 579 (93.38%) of subject were Hindus, 35 (5.65%) were Muslim and 6 (0.97%) were Jain.

Table 3. Literacy status of study participant

LITERACY STATUS	MALE n (%)	FEMALE n (%)
ILLITERATE	121 (47.83)	176 (47.96)
PRIMARY SCHOOL	85 (33.60)	143 (38.96)
SECONDARY SCHOOL	29 (11.46)	25 (6.81)
PUC	13 (5.14)	20 (5.45)
DEGREE	05 (1.97)	03 (0.82)
TOTAL	**253 (100)**	**367 (100)**

In the present study, among 253 male and 367 female participants, 121 (47.83%) and 176 (47.96%) were illiterate, 85 (33.60%) and 143 (38.96%) had completed primary schooling, 29 (11.46%) and 25 (6.81%) had completed secondary schooling, 13 (5.14%) and 20 (5.45%) had completed education till pre university and 5 (1.97%) and 3 (0.82%) had completed their graduation.

Graph 2. (Table 3.): Literacy status of study participant

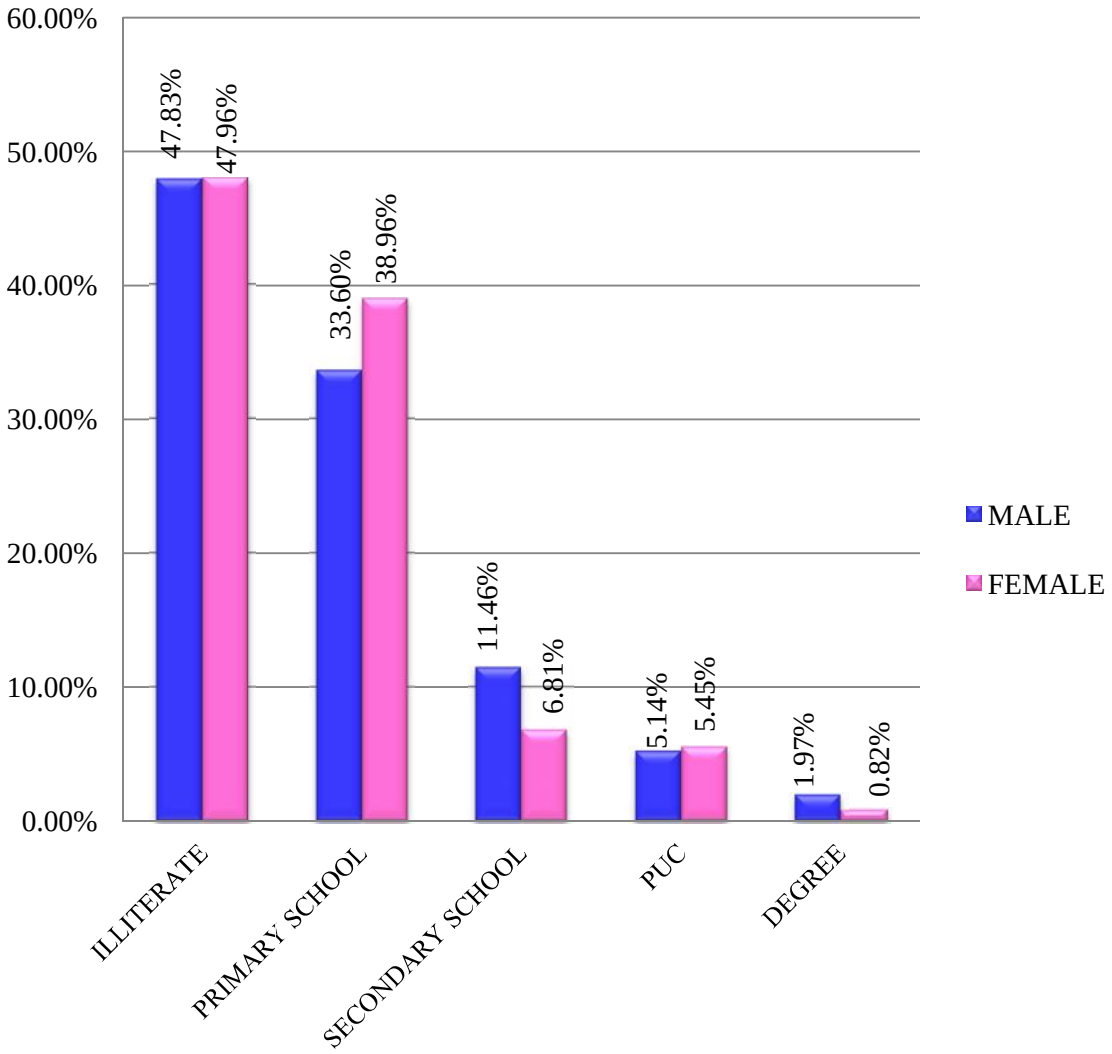


Table 4. Distribution of study participant according to Occupation

OCCUPATION	MALE n (%)	FEMALE n (%)
RETIRED	65 (25.69)	09 (2.45)
FARMER	135 (53.36)	81 (22.07)
INDUSTRY WORKER	53 (20.95)	25 (6.81)
HOUSEWIFE	--	252 (68.67)
TOTAL	**253 (100)**	**367 (100)**

In the present study, out of 253 male and 367 female participants, 65 (25.69%) and 9 (2.45%) had retired from their service, 135 (53.36%) and 81 (22.07%) were farmer, 53 (20.95%) and 25 (6.81%) were working in an industry and 252 (68.67%) female were housewives.

Graph 3. (Table 4.): Distribution of study participant according to Occupation

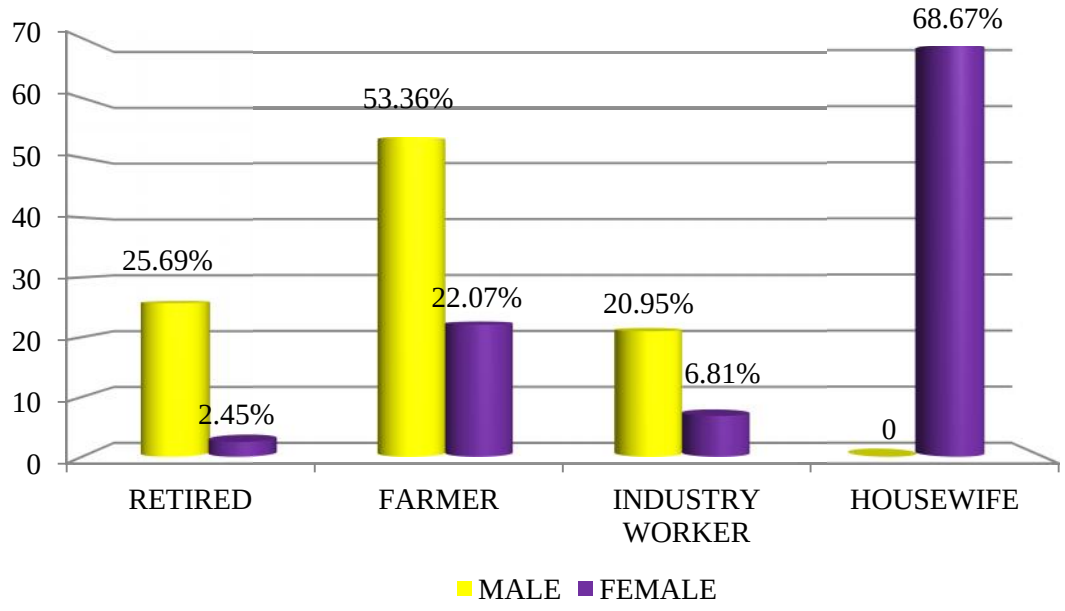


Table 5. Distribution of study participant according to Marital Status

MARITAL STATUS	NUMBER	PERCENTAGE
UNMARRIED	04	0.64
MARRIED	616	99.36
TOTAL	**620**	**100**

Of the study participants, 4 (0.64%) were unmarried and 616 (99.36%) were married.

Table 6. Distribution of study participant according to type of family

TYPE OF FAMILY	NUMBER	PERCENTAGE
NUCLEAR	166	26.77
JOINT	422	68.06
BROKEN	32	5.17
TOTAL	**620**	**100**

In the present study, 166 (26.77%) study subject were staying in nuclear family, 422 (68.06%) in joint family and 32 (5.17%) had broken family.

Table 7. Distribution of study participant according to Socio economic Status

SOCIO ECONOMIC STATUS	NUMBER	PERCENTAGE
CLASS I	120	19.35
CLASS II	38	6.13
CLASS III	180	29.04
CLASS IV	221	35.64
CLASS V	61	9.84
TOTAL	**620**	**100**

In the present study, 120 (19.35%) participants belonged to Class I of modified B. G. Prasad classification, 38 (6.13%) to Class II, 180 (29.04%) to Class III, 221 (35.64%) to Class IV and 61 (9.84%) to Class V.

Graph 4. (Table 7.): Distribution of study participant according to Socio economic Status

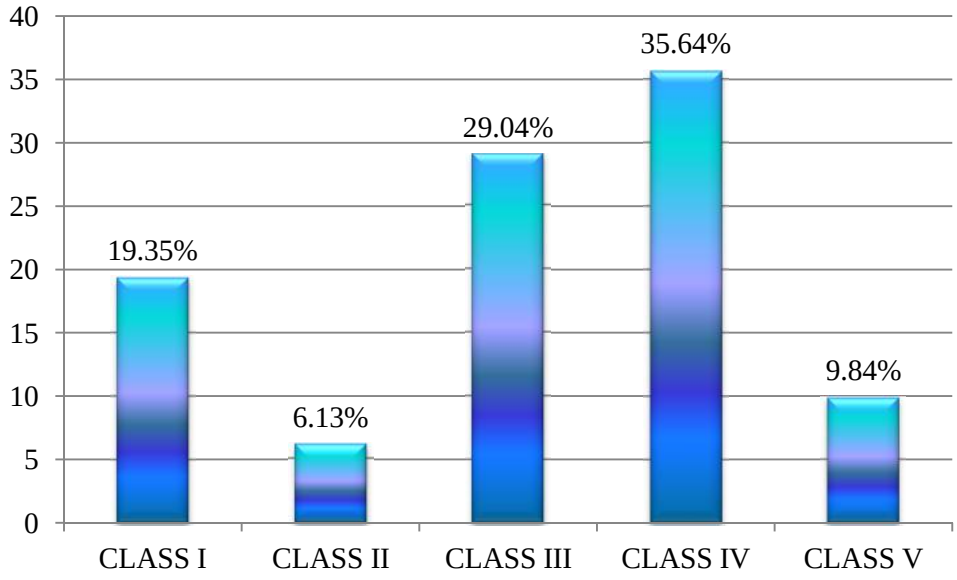


Table 8. Distribution of study participant according to use of tobacco

TOBACCO USE	NUMBER	PERCENTAGE
YES	232	37.42
NO	388	62.58
TOTAL	**620**	**100**

In the present study, 232 (37.42%) participant were users of any form of tobacco. Of the 232 participant who consumed tobacco, 29 (12.5%) were smokers, 172 (74.14%) chewed tobacco and 31 (13.36%) used tobacco in both forms. Nearly 125 (53.88%) were current users of any form of tobacco, where as 107 (46.12%) had used tobacco in the past.

Table 9. Distribution of study participant according to consumption of alcohol

ALCOHOL CONSUMPTION	NUMBER	PERCENTAGE
YES	94	15.16
NO	526	84.84
TOTAL	**620**	**100**

In the present study, 94 (15.16%) subject use to consume alcohol. Of the 94 participant, 77 (81.91%) were currently consuming alcohol, where as 17 (18.09%) had stopped alcohol consumption.

Table 10. Distribution of study participant according to fuel used for cooking

FUEL USED FOR COOKING	NUMBER	PERCENTAGE
BIOMASS	186	30.00
KEROSENE	12	1.93
LIQUID PETROLEUM GAS	422	68.07
TOTAL	**620**	**100**

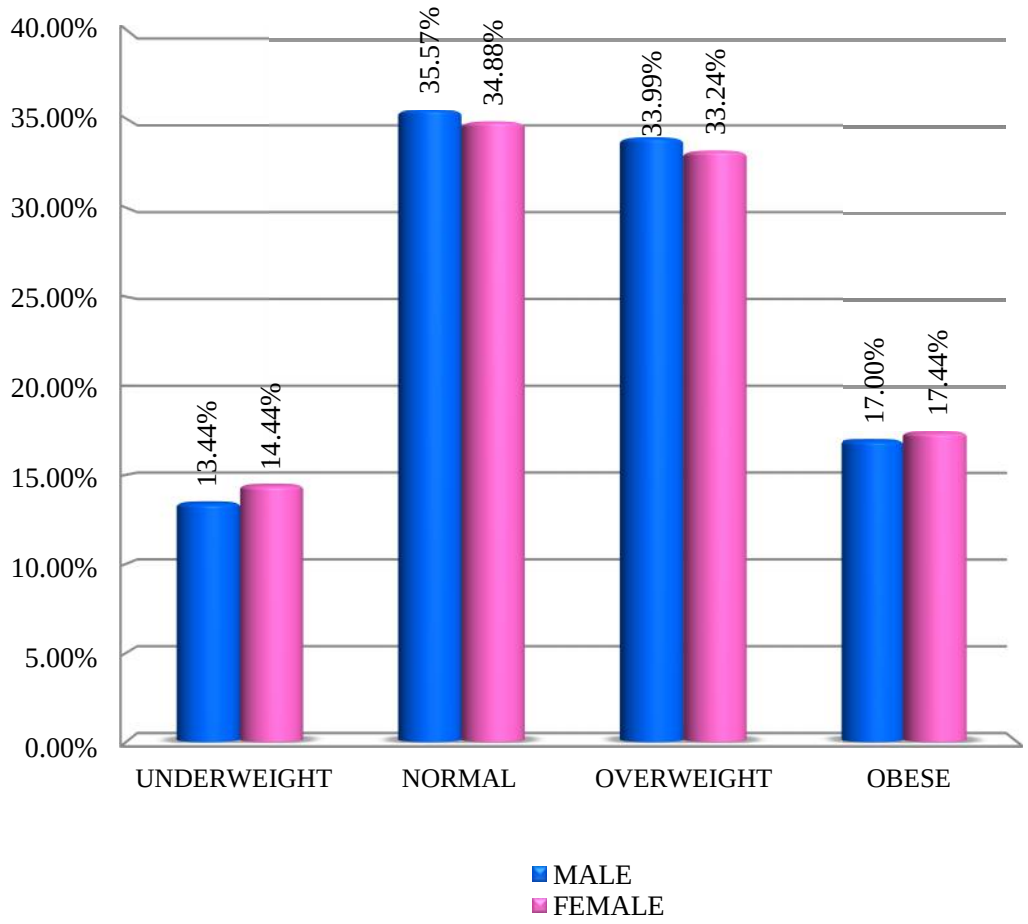
In the current study, 186 (30.00%) used biomass as cooking fuel, 12 (1.93%) used kerosene and 422 (68.07%) used Liquid Petroleum Gas. Of the participants who used biomass and kerosene for cooking, only 22 (11.12%) had smoke vent at their home. Thus, 176 (88.88%) participant were at risk of indoor air pollution.

Table 11. Distribution of study participant according to Body Mass Index

BODY MASS INDEX	MALE n (%)	FEMALE n (%)
UNDERWEIGHT (< 18.5 Kg/ m^2)	34 (13.44)	53 (14.44)
NORMAL (18.5 – 22.9 Kg/ m^2)	90 (35.57)	128 (34.88)
OVERWEIGHT (23.0 – 27.5 Kg/ m^2)	86 (33.99)	122 (33.24)
OBESE (> 27.5 Kg/ m^2)	43 (17.00)	64 (17.44)
TOTAL	**253 (100)**	**367 (100)**

In the present study, according to WHO Asian classification of Body Mass Index, out of 253 male and 367 female participants, 34 (13.44%) and 53 (14.44%) were underweight and 90 (35.57%) and 128 (34.88%) had normal Body Mass Index. Nearly 86 (33.99%) male and 122 (33.24%) female were overweight and 43 (17.00%) male and 64 (17.44%) female were obese. The mean Body Mass Index of study participant was 23.55 $\pm$ 4.49 Kg/m^2. The mean Body Mass Index of male and female participant was 23.63 $\pm$ 4.57 Kg/m^2 and 23.49 $\pm$ 4.43Kg/m^2 respectively.

Graph 5. (Table 11.): Distribution of study participant according to Body Mass Index



II. RELEVANT PAST HISTORY

Table 12. Distribution of study participant according to history of diabetes mellitus

HISTORY OF DIABETES MELLITUS	NUMBER	PERCENTAGE
PRESENT	132	21.29
ABSENT	488	78.71
TOTAL	**620**	**100**

In present study, 132 (21.29%) subject were suffering from diabetes mellitus. Of these study subjects, 31 (23.48%) had diabetes for less than 5 years, 74 (56.06%) had it for 5 to 10 years and 27 (20.46%) had diabetes for more than 10 years. One participant was not on regular treatment. The mean duration of diabetes mellitus was 8.42 $\pm$ 5.19 years, with range between 2 to 25 years.

Table 13. Distribution of study participant according to history of Hypertension

HISTORY OF HYPERTENSION		NUMBER	PERCENTAGE
PRESENT	OLD	123	19.84
	NEWLY DIAGNOSED	37	5.96
ABSENT		460	74.20
TOTAL		**620**	**100**

In present study, 160 (25.80%) subject were suffering from hypertension. Among them, 123 (19.84%) were known case of hypertension and 37 (5.96%) were newly diagnosed during the blood pressure examination on day of check up. Of these study subject, 41 (25.63%), had hypertension for less than 5 years, 78 (48.74%) had it for 5 to 10 years and 41 (25.63%) had for more than 10 years. One participant was not on regular treatment. The mean duration of hypertension was 10.21 $\pm$ 5.36 years with range between 0 to 25 years.

Table 14. Distribution of study participant according to history of ocular surgery

HISTORY OF OCULAR SURGERY	NUMBER	PERCENTAGE
PRESENT	44	7.10
ABSENT	576	92.90
TOTAL	**620**	**100**

Among the study participant, 44 (7.10%) had undergone an ocular surgery in the past. Of these 44 participant, 41 (93.18%) had undergone cataract surgery, 2 (4.54%) had undergone surgery for removal of pterygium and 1 (2.28%) had undergone surgery for glaucoma. Among these, 42 (95.45%) participant had undergone surgery within 10 years. Regarding health care, 7 (15.91%) of them had undergone surgery in government hospital, 20 (45.45%) at KLE hospital and 17 (38.64%) at other private hospitals.

III. PREVALENCE OF OCULAR MORBIDITY

Table 15. Prevalence of ocular morbidity

OCULAR MORBIDITY	NUMBER	PERCENTAGE
PRESENT	376	60.64
ABSENT	224	39.36
TOTAL	**620**	**100**

The prevalence of ocular morbidity in the present study was **60.64%.** Out of 376 study participant who had morbidity, 164 (43.62%) were male and 212 (56.38%) were female

Graph 6. (Table15.): Prevalence of ocular morbidity

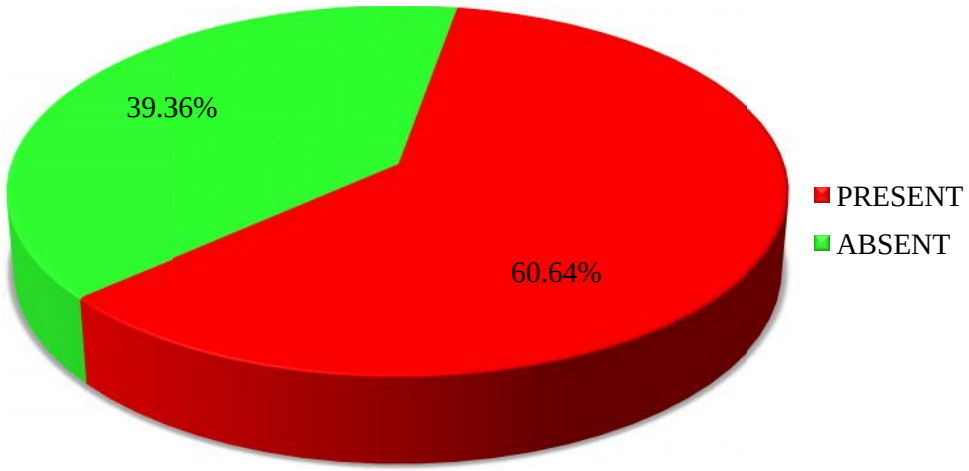


Table 16. Distribution of study participant according to number of ocular morbidity

NUMBER OF OCULAR MORBIDITY	NUMBER	PERCENTAGE
1	148	39.36
2	172	45.74
3	46	12.24
4	10	2.66
TOTAL	**376**	**100**

In the present study, 148 (39.36%) had one ocular morbidity, 172 (45.74%) had two, 46 (12.24%) had three and 10 (2.66%) had four morbidities. The mean number of ocular morbidity per person was 1.78 $\pm$ 1.05. The mean number of ocular morbidity in male and female study participant was 1.75$\pm$ 0.66 and 1.81 $\pm$ 0.82 respectively.

Graph 7. (Table 16.) Distribution of study participant according to number of ocular morbidity

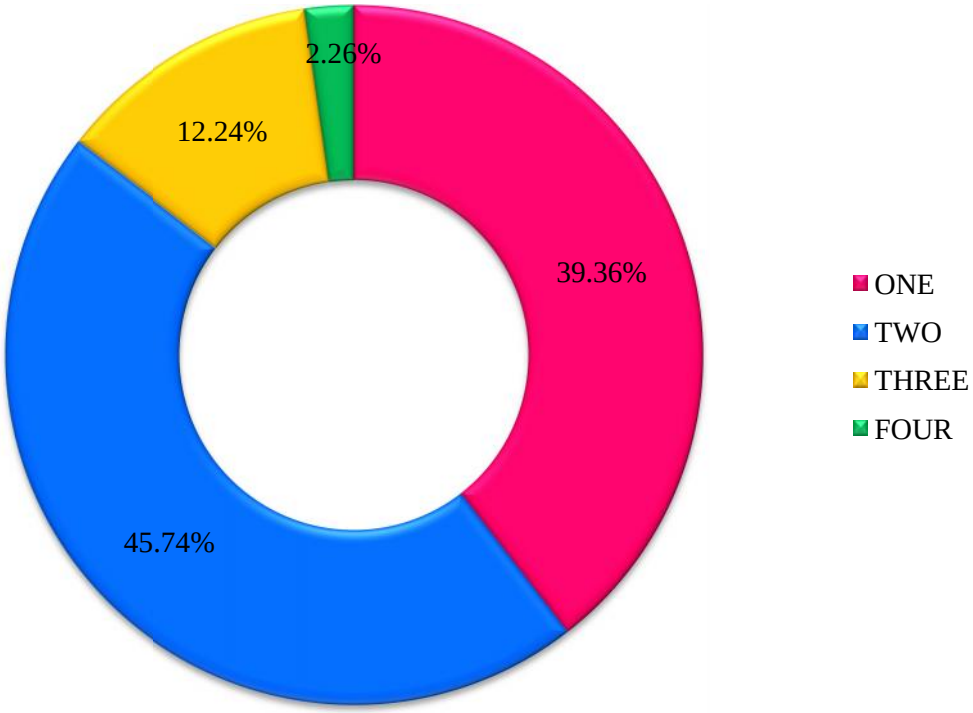
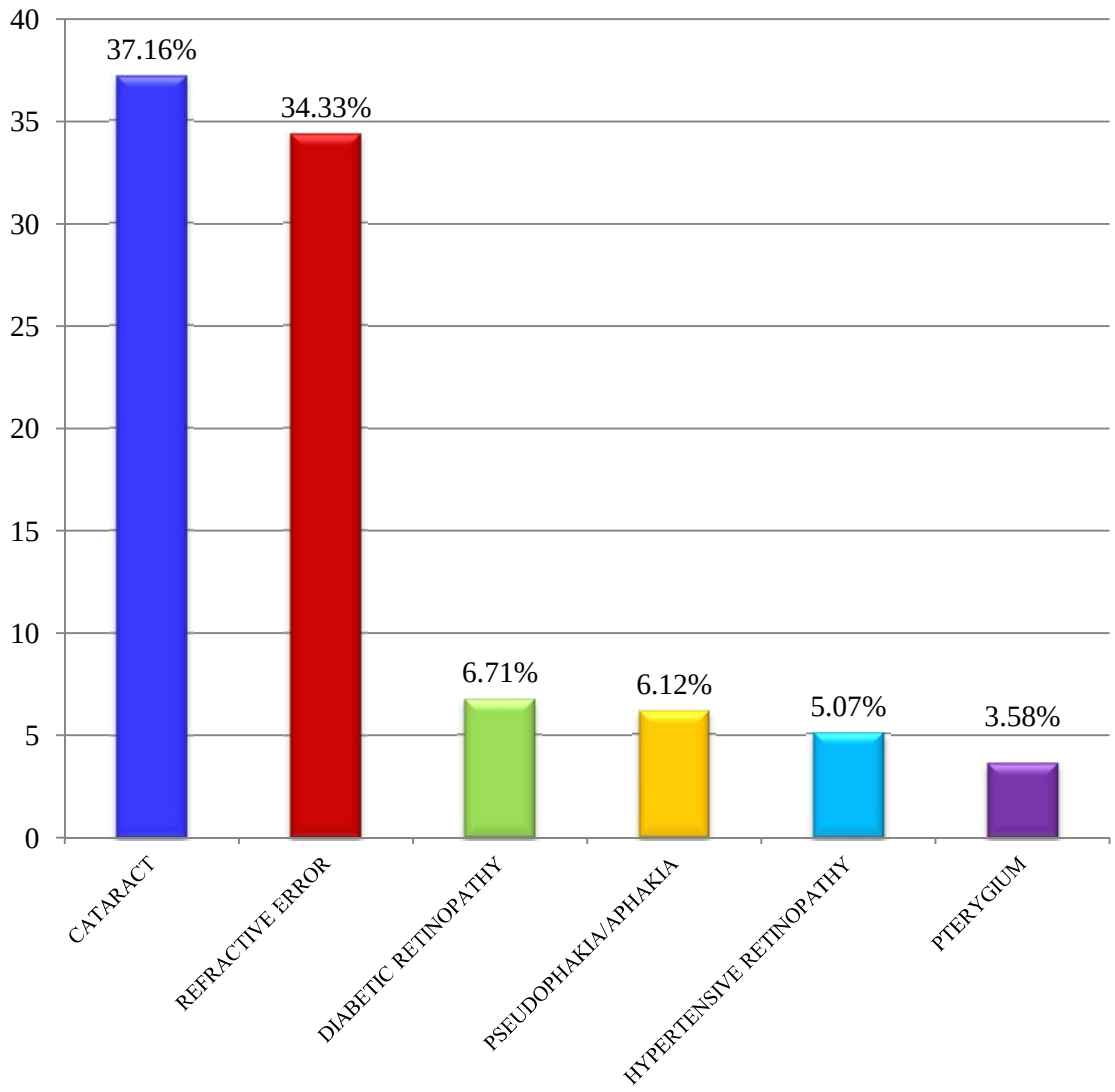


Table 17. Ocular morbidity pattern of study participant

OCULAR MORBIDITY	NUMBER	PERCENTAGE
CATARACT	249	37.16
REFRACTIVE ERROR	230	34.33
DIABETIC RETINOPATHY	45	6.71
PSEUDOPHAKIA/ APHAKIA	41	6.12
HYPERTENSIVE RETINOPATHY	34	5.07
PTERYGIUM	24	3.58
ACUTE CONJUNCTIVITIS	16	2.39
GLAUCOMA	10	1.49
STYE	07	1.04
NYSTAGMUS	05	0.75
CHALAZION	05	0.75
DACROCYSTITIS	04	0.60

***- Multiple options**

Graph 8. (Table 17.): Ocular morbidity pattern of study participant



In the present study, the total number of ocular morbidities observed were 670 among 376 study participant. Among the participant with ocular morbidity 249 (37.16%) had cataract, 230 (34.33%) had refractive error, 45 (6.71%) had diabetic retinopathy, 41 (6.12%) had pseudophakia / aphakia, 34 (5.07%) had hypertensive retinopathy, 24 (3.58%) had pterygium, 16 (2.39%) had acute conjunctivitis, 10 (1.49%) had glaucoma, 7 (1.04%) had stye, 5 (0.75%) had nystagmus, 5 (0.75%) had chalazion and 4 (0.60%) had dacrocystitis.

Table 18. Distribution of study participant according to cataract

CATARACT	NUMBER	PERCENTAGE
RIGHT EYE	18	7.23
LEFT EYE	19	7.63
BOTH EYES	212	85.14
TOTAL	**249**	**100**

In the current study, out of the 249 participant who had cataract, 18 (7.23%) had it only in right eye, 19 (7.63%) had in left eye and 212 (85.14%) had cataract in both eyes. Of them, 101 (40.56%) had immature and 148 (59.44%) had mature cataract respectively. Among the cataract cases 112 (44.98%) were male and 137 (55.02%) were female subjects.

Table 19. Distribution of study participant according to their visual acquity (WHO classification)

VISUAL ACQUITY	NUMBER	PERCENTAGE
NORMAL (6/6 TO 6/18)	428	69.03
VISUAL IMPAIRMENT (6/18 TO 6/60)	144	23.23
SEVERE VISUAL IMPAIRMENT (<6/60 TO 3/60)	30	4.84
BLINDNESS (<3/60 TO NO PERCEPTION OF LIGHT)	18	2.90
TOTAL	**620**	**100**

According to World Health Organization classification of visual acquity, 428 (69.03%) participant had normal vision, 144 (23.23%) had visual impairment, 30 (4.84%) had severe visual impairment and 18 (2.90%) participant were blind. Among 144 participant with visual impairment, 74 (51.39%) were male and 70 (48.61%) were female. Severe visual impairment constituted 13 (43.33%) male and 17 (56.67%) female. Blindness constituted to 7 (38.89%) male and 11 (61.11%) female subject respectively.

Graph 9. (Table 19.): Distribution of study participant according to their visual acquity (WHO classification)

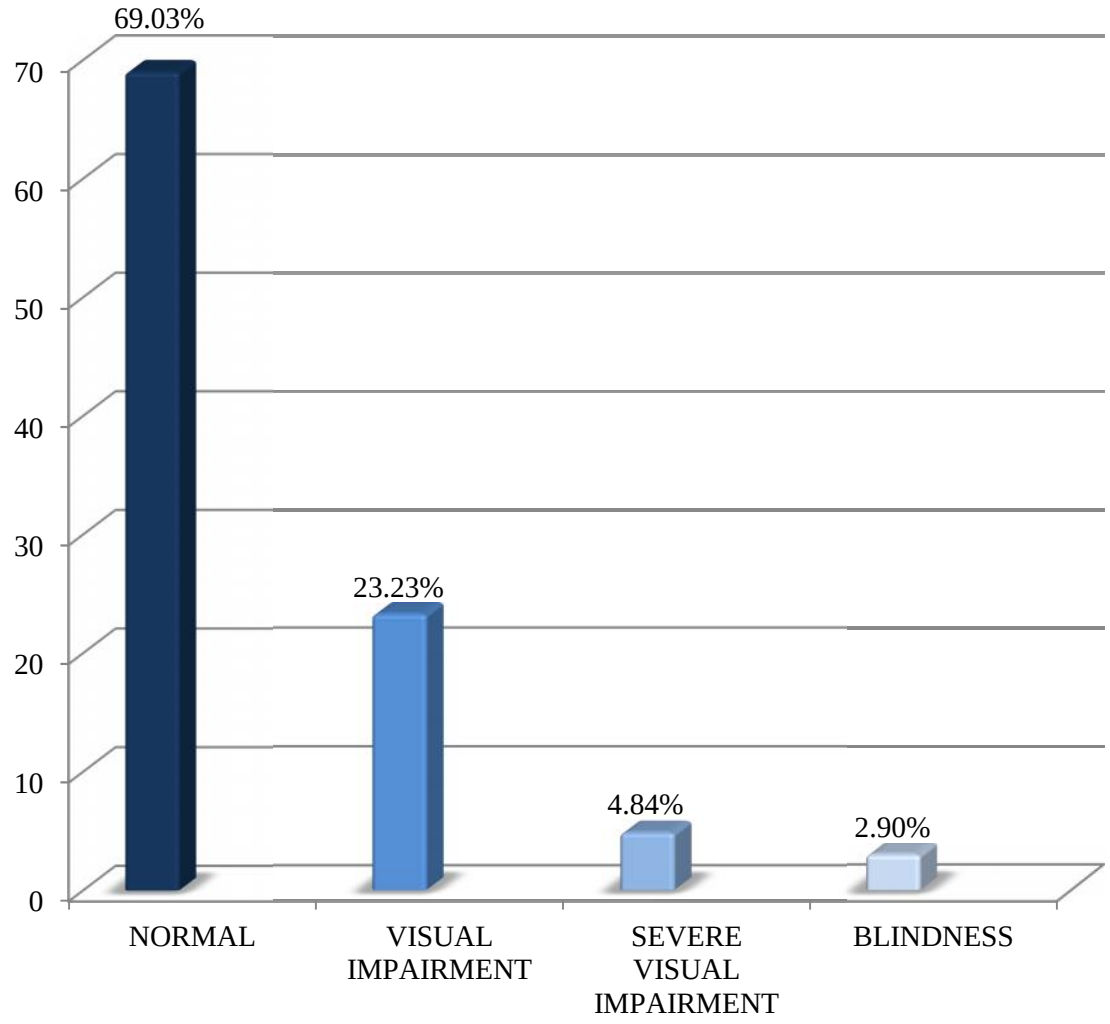


Table 20. Distribution of study participant according to their visual acquity (ICD –10 classification)

VISUAL ACQUITY CATEGORY	NUMBER	PERCENTAGE
CATEGORY 0 MILD OR NO VISUAL IMPAIRMENT (≥ 6/18)	428	69.03
CATEGORY 1 MODERATE VISUAL IMPAIRMENT (≥ 6/60)	144	23.23
CATEGORY 2 SEVERE VISUAL IMPAIRMENT (≥ 3/60)	30	4.84
CATEGORY 3 BLINDNESS (≥ 1/60)	10	1.61
CATEGORY 4 BLINDNESS (LIGHT PERCEPTION)	03	0.48
CATEGORY 5 BLINDNESS (NO LIGHT PERCEPTION)	05	0.81
TOTAL	**620**	**100**

According to ICD – 10 classification of visual acquity, 428 (69.03%) participant were under category 0, 144 (23.23%) under category 1, 30 (4.84%) under category 2, 10 (1.61%) under category 3, 3 (0.48%) under category 4 and 5 (0.81%) under category 5. Under blindness, out of 10 participant in category 3, 4 were male and 6 were female. In category 4, out of 3, 1 was male and 2 were female. Among 5 study participant in category 5 blindness, 2 were male and 3 were female.

Graph 10. (Table 20.): Distribution of study participant according to their visual acquity (ICD –10 classification)

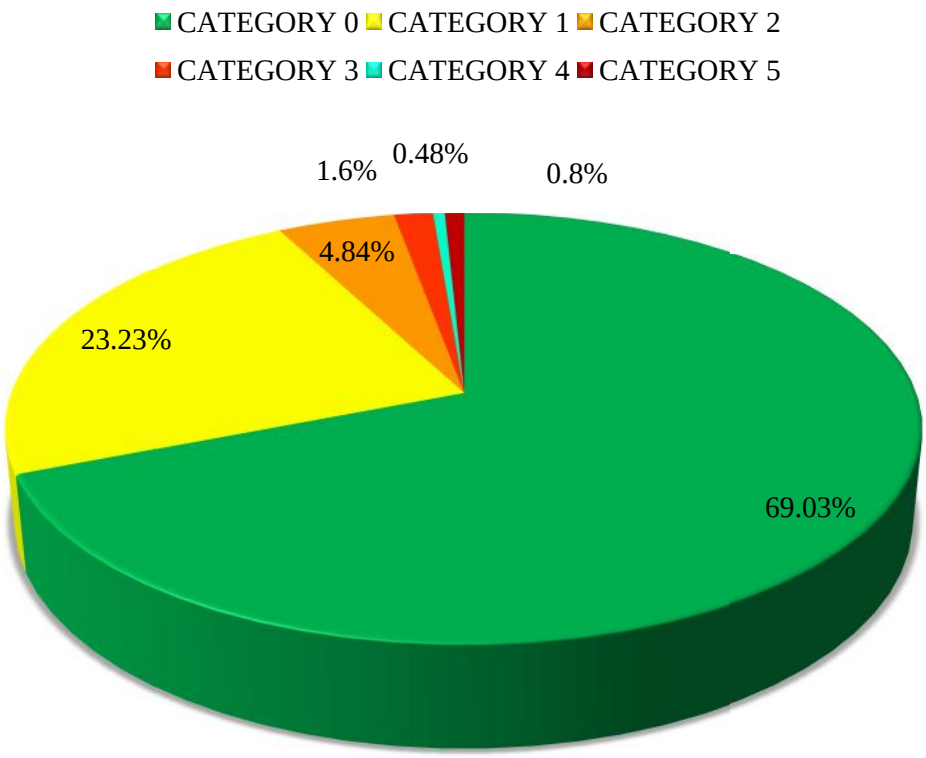


Table 21. Distribution of study participant according to diabetic retinopathy among diabetics

DIABETIC RETINOPATHY	NUMBER	PERCENTAGE
PRESENT	45	34.09
ABSENT	87	65.91
TOTAL	**132**	**100**

In the present study, out of the 132 known diabetic patients, 45 (34.09%) were found to have diabetic retinopathy, where as 87 (65.91%) did not have it.

Table 22. Distribution of study participant according to hypertensive retinopathy among hypertensives

HYPERTENSIVE RETINOPATHY	NUMBER	PERCENTAGE
PRESENT	34	21.25
ABSENT	126	78.75
TOTAL	**160**	**100**

In the present study, out of the 160 participant who had hypertension, 34 (21.25%) were having hypertensive retinopathy changes.

Table 23. Distribution of study participant according to treatment seeking behaviour

TREATMENT SEEKING BEHAVIOUR	NUMBER	PERCENTAGE
PRESENT	68	18.09
ABSENT	114	30.32
PARTIALLY PRESENT	194	51.59
TOTAL	**376**	**100**

In the current study, 68 (18.09%) participant had taken treatment for ocular morbidity, 194 (51.59%) had taken partial treatment and 114 (30.32%) had not seeked treatment.

Table 24. Distribution of study participant according to place of treatment

PLACE OF TREATMENT	NUMBER	PERCENTAGE
GOVERNMENT HOSPITAL	09	13.24
KLE HOSPITAL	31	45.59
PRIVATE HOSPITAL	28	41.17
TOTAL	**68**	**100**

Of the study participant who had got their ocular morbidity treated, 9 (13.24%) were treated in government hospital, 31 (45.59%) were treated at KLE hospital and 28 (41.47%) were treated at private hospital.

Table 25. Distribution of study participant according to reason for not taking treatment

REASON FOR NOT TAKING TREATMENT	NUMBER	PERCENTAGE
RECENTLY DIAGNOSED	100	32.47
IGNORANCE	208	67.53
TOTAL	**308**	**100**

Of the study participant who had got their ocular morbidity partially treated or not treated, 100 (32.47%) thought that the disease was recently diagnosed and 208 (67.55%) were ignorant about the disease and its complications.

IV. ASSOCIATION BETWEEN OCULAR MORBIDITY AND SOCIODEMOGRAPHIC FACTORS

Table 26. Association between age of study participant and ocular morbidity

	OCULAR MORBIDITY		
AGE (in years)	**PRESENT n (%)**	**ABSENT n (%)**	**TOTAL n (%)**
60 – 65	221 (55.66)	176 (44.34)	397 (100)
66 – 70	91 (69.46)	40 (30.54)	131 (100)
71 – 75	42 (72.41)	16 (27.59)	58 (100)
76 – 80	06 (75.00)	02 (25.00)	08 (100)
>80	16 (61.54)	10 (38.46)	26 (100)
TOTAL	**376 (60.64)**	**244 (39.36)**	**620 (100)**
$\varkappa^2$ = 12.46, df = 4, p = 0.01			

In the present study, out of 8 subject who were aged 76 to 80 years, 6 (75.00%) had ocular morbidity and 2 (25.00%) did not have. Similarly, out of 58 participant who were aged 71 to 75 years, 42 (72.41%) had ocular morbidity and 16 (27.59%) did not have. The prevalence rate of ocular morbidity was 55.66%, 69.46% and 61.54% among 60 to 65 years, 66 to 70 years and above age 80 years respectively. As the age increased the prevalence rate of ocular morbidity also increased. ($\varkappa^2$ = 12.46, p = 0.01)

Graph 11. (Table 26.): Association between age of study participant and ocular morbidity

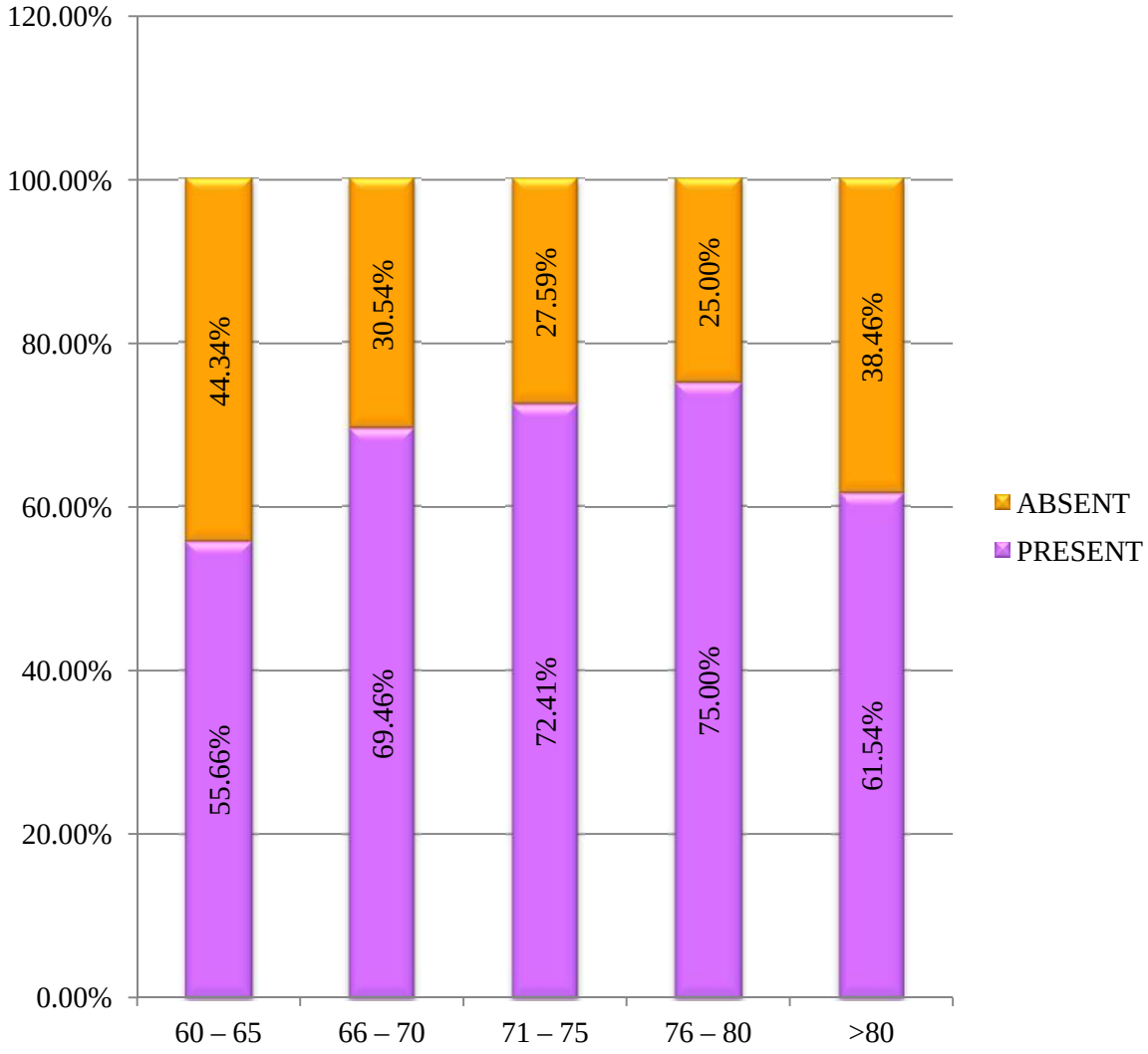


Table 27. Association between sex of study participant and ocular morbidity

	OCULAR MORBIDITY		
SEX	**PRESENT** **n (%)**	**ABSENT** **n (%)**	**TOTAL** **n (%)**
MALE	164 (64.82)	89 (35.18)	253 (100)
FEMALE	212 (57.77)	155 (42.23)	367 (100)
TOTAL	**376 (60.64)**	**244 (39.36)**	**620 (100)**
χ^2 = 3.12, df = 1, p = 0.07			

In the present study, among 253 male participant, 164 (64.82%) had an ocular morbidity and among 367 female participant, 212 (57.77%) had an ocular morbidity. Though male preponderance was seen, sex of the study participant was not significantly associated with prevalence of ocular morbidity.

Table 28. Association between religion of study participant and ocular morbidity

	OCULAR MORBIDITY		
RELIGION	**PRESENT** **n (%)**	**ABSENT** **n (%)**	**TOTAL** **n (%)**
HINDU	344 (59.41%)	235 (40.59%)	579 (100)
MUSLIM	27 (77.14%)	08 (22.86%)	35 (100)
JAIN	05 (83.33%)	01(16.67%)	06 (100)
TOTAL	**376 (60.64)**	**244 (39.36)**	**620 (100)**
$\chi^2 = 5.65$, df = 2, p = 0.06			

In the present study, among 579 Hindus, 344 (59.41%) had an ocular morbidity and 235 (40.59%) did not have. The prevalence rate of ocular morbidity was 27 (77.14%) and 5 (83.33%) among Muslim and Jain respectively. Although ocular morbidities were higher in participants belonging to Muslim and Jain religion, it was not significantly associated with prevalence of ocular morbidity.

Table 29. Association between literacy status of study participant and ocular morbidity

	OCULAR MORBIDITY		
LITERACY STATUS	**PRESENT n (%)**	**ABSENT n (%)**	**TOTAL n (%)**
ILLITERATE	200 (67.34%)	97 (32.66%)	297 (100)
PRIMARY	127 (55.70%)	101 (44.30%)	228 (100)
SECONDARY	28 (51.85%)	26 (48.15%)	54 (100)
PUC	18 (54.54%)	15 (45.46%)	33 (100)
DEGREE	03 (37.5%)	05 (63.5%)	8 (100)
TOTAL	**376 (60.64)**	**244 (39.36)**	**620 (100)**
$\varkappa^2 = 11.98$, df = 4, p = 0.02			

In the present study, out of 297 illiterate participant, 200 (67.34%) had an ocular morbidity and 97 (32.66%) did not have. The prevalence of ocular morbidity was almost similar in primary, secondary and PUC completed participants, which was 55.70%, 51.85% and 54.54% respectively. Out of 8 participant, who were degree holders, 3 (37.5%) had ocular morbidity where as 5 (63.5%) were not having any morbidity. Thus as the literacy level increased, prevalence of ocular morbidity decreased. ($\varkappa^2 = 11.98$, p = 0.02)

Graph 12. (Table 29.): Association between literacy status of study participant and ocular morbidity

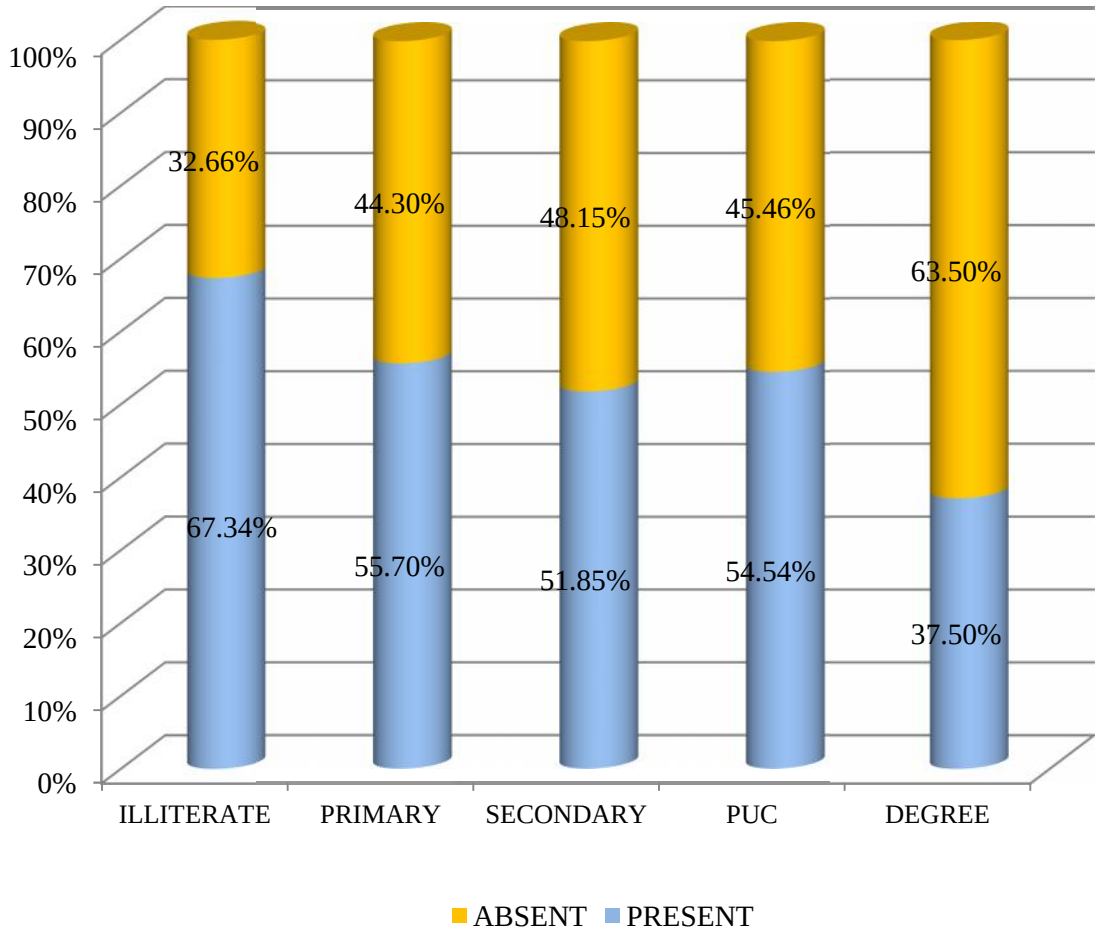


Table 30. Association between occupation of study participant and ocular morbidity

	OCULAR MORBIDITY		
OCCUPATION	**PRESENT** **n (%)**	**ABSENT** **n (%)**	**TOTAL** **n (%)**
RETIRED	54 (72.98)	20 (27.02)	74 (100)
FARMER	129 (59.72)	87 (40.28)	216 (100)
INDUSTRY WORKER	45 (57.69)	33 (42.31)	78 (100)
HOUSEWIFE	148 (58.73)	104 (41.27)	252 (100)
TOTAL	**376 (60.64)**	**244 (39.36)**	**620 (100)**
$\chi^2 = 5.46$, df = 3, p = 0.14			

Among 74 study participant who had retired from service, 54 (72.98%) had ocular morbidity and 20 (27.02%) did not have. Similar prevalence rate was seen in study population who were farmer, industry worker and housewives, that is, 59.72%, 57.69% and 58.73% respectively. Occupation of the study participant was not significantly associated with prevalence rate of ocular morbidity.

Table 31. Association between Socio economic status of study participant and ocular morbidity

	OCULAR MORBIDITY		
SOCIO ECONOMIC STATUS	**PRESENT n (%)**	**ABSENT n (%)**	**TOTAL n (%)**
CLASS I	69 (57.50)	51 (42.50)	120 (100)
CLASS II	21 (55.26)	17 (44.74)	38 (100)
CLASS III	111 (61.67)	69 (38.33)	180 (100)
CLASS IV	140 (63.35)	81 (36.65)	221 (100)
CLASS V	35 (57.38)	26 (42.62)	61 (100)
TOTAL	**376 (60.64)**	**244 (39.36)**	**620 (100)**
χ^2 = 1.99, df =4, p = 0.74			

In the present study, out of 221 and 180 study participants who belonged to classes IV and III, the prevalence rate of ocular morbidity was 63.35% and 61.67% respectively. Similarly the prevalence rate of ocular morbidity was 57.50%, 55.26% and 57.38% in study participants belonging to classes I, II and V respectively. Though prevalence rate was higher in study population belonging to class IV socio economic status, it was not significantly associated with prevalence rate of ocular morbidity.

Table 32. Association between age of study participant and number of ocular morbidity

	NUMBER OF OCULAR MORBIDITY			
AGE	**One n (%)**	**Two n (%)**	**> Three n (%)**	**TOTAL**
60 – 65	98 (44.35)	97 (43.89)	26 (11.76)	221 (100)
66 – 70	34 (37.36)	41 (45.06)	16 (17.58)	91 (100)
71 – 75	10 (23.81)	25 (59.52)	07 (16.67)	42 (100)
>75	06 (27.27)	09 (40.91)	07 (31.82)	22 (100)
TOTAL	148 (39.36)	172 (45.74)	56 (14.90)	376 (100)
$\varkappa^2 = 13.13$, df = 6, p = 0.04				

In the present study, out of 221 study participant between the age group of 60 to 65 years 98 (44.35%) had one ocular morbidity, 97 (43.89%) had two ocular morbidities and 26 (11.76%) had more than three ocular morbidities. In age group of 66 to 70 years out of 91, 34 (37.36%) had one ocular morbidity, 41 (45.06%) had two ocular morbidities and 16 (17.58%) had more than three ocular morbidities. In age group of 71 to 75 years among 42, 10 (23.81%) had one ocular morbidity, 25 (59.52%) had two ocular morbidities and 7 (16.67%) had more than three ocular morbidities. In age group of more than 75 years, out of 22, 6 (27.27%) had one ocular morbidity, 9 (40.91%) had two ocular morbidities and 7 (31.82%) had more than three ocular morbidities. Older age group was prone for more number of ocular morbidities, as the age increased the number of ocular morbidities also increased significantly. ($\varkappa^2 = 13.13$, p = 0.04)

Graph 13. (Table 32.): Association between age of study participant and number of ocular morbidity

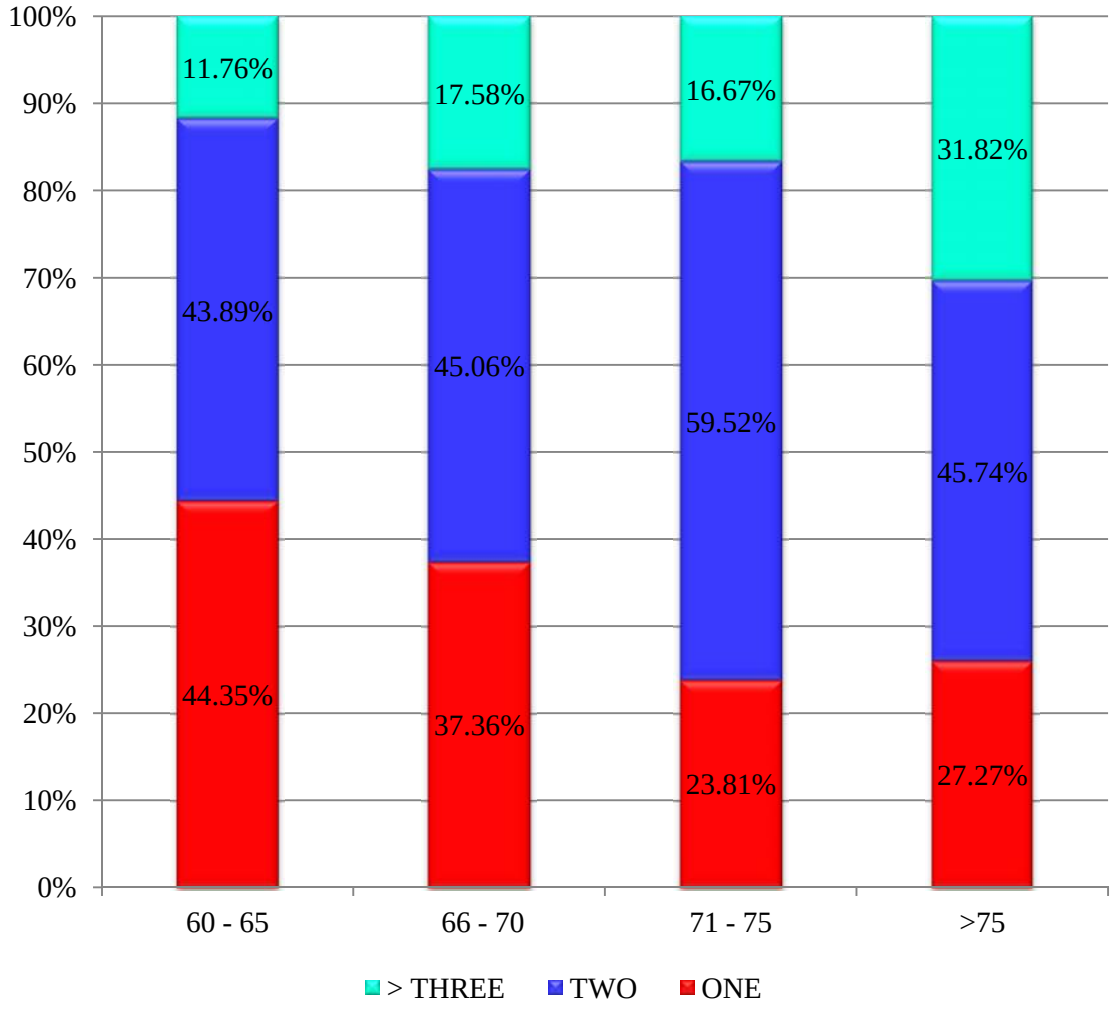


Table 33. Association between sex of study participant and number of ocular morbidity

	NUMBER OF OCULAR MORBIDITY			
SEX	**One** **n (%)**	**Two** **n (%)**	**> Three** **n (%)**	**TOTAL**
MALE	60 (36.59)	87 (53.05)	17 (10.36)	164 (100)
FEMALE	88 (41.51)	85 (40.09)	39 (18.40)	212 (100)
TOTAL	**148 (39.36)**	**172 (45.74)**	**56 (14.90)**	**376 (100)**
$\chi^2 = 7.97$, df = 2, p = 0.02				

In the current study, out of 212 female participant, 88 (41.51%) had one ocular morbidity, 85 (40.09%) had two ocular morbidities, and 39 (18.40%) had more than three ocular morbidities as compared to 164 male participant where 60 (36.59%), 87 (53.05%) and 17 (10.36%) had one, two and more than three ocular morbidities respectively. Statistically significant difference was noted among male and female participants in relation to number of ocular morbidities. ($\chi^2 = 7.97$, p = 0.02)

Graph 14. (Table 33.) Association between sex of study participant and number of ocular morbidity

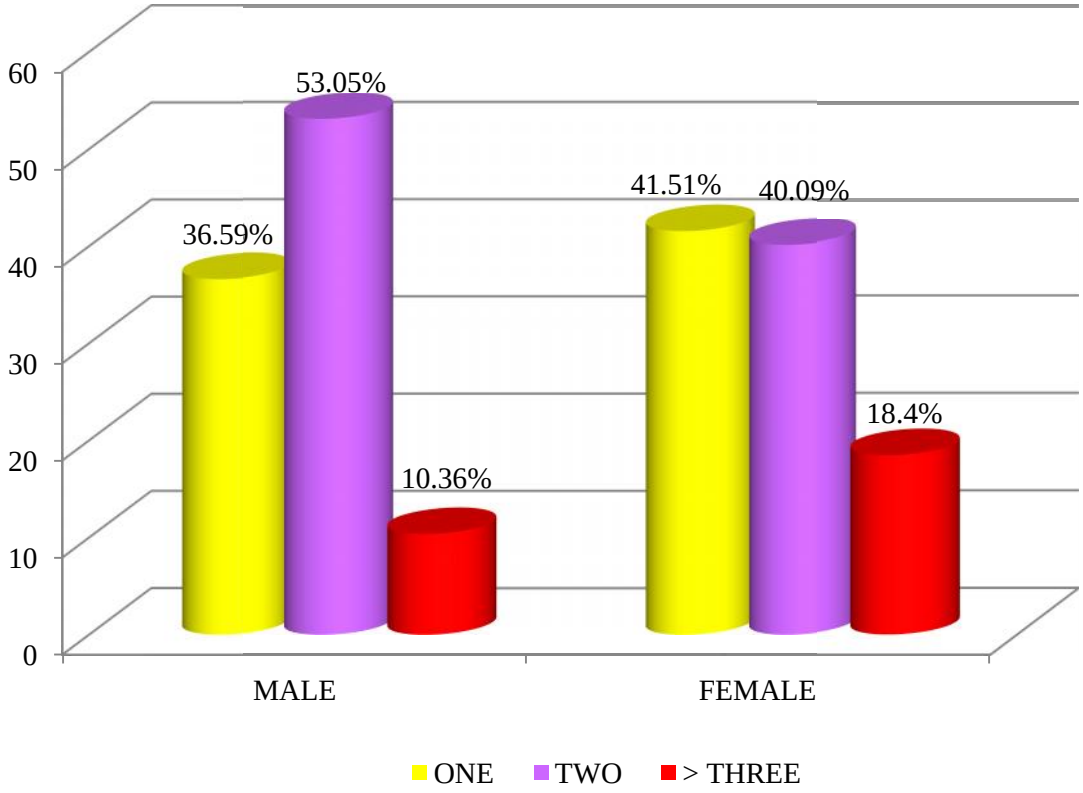


Table 34. Association between religion of study participant and number of ocular morbidity

	NUMBER OF OCULAR MORBIDITY			
RELIGION	**One** **n (%)**	**Two** **n (%)**	**> Three** **n (%)**	**TOTAL** **n (%)**
HINDU	144 (41.86)	149 (43.31)	51 (14.83)	344 (100)
MUSLIM AND JAIN	4 (12.50)	23 (71.88)	5 (15.62)	32 (100)
TOTAL	**148 (39.36)**	**172 (45.74)**	**56 (14.90)**	**376 (100)**
$\varkappa^2$ = 11.64, df = 2, p = 0.002				

In the present study, out of 344 Hindus, 144 (41.86%) had one ocular morbidity, 149 (43.31%) had two ocular morbidities and 51 (14.83%) had more than three ocular morbidities. Among 32 Muslim and Jain participants, 4 (12.50%) had one ocular morbidity, 23 (71.88%) had two ocular morbidities and 5 (15.62%) had more than three ocular morbidities. It shows that Muslim and Jain study participants had slightly higher number of ocular morbidities. ($\varkappa^2$ = 11.64, p = 0.002)

Graph 15. (Table 34.): Association between religion of study participant and number of ocular morbidity

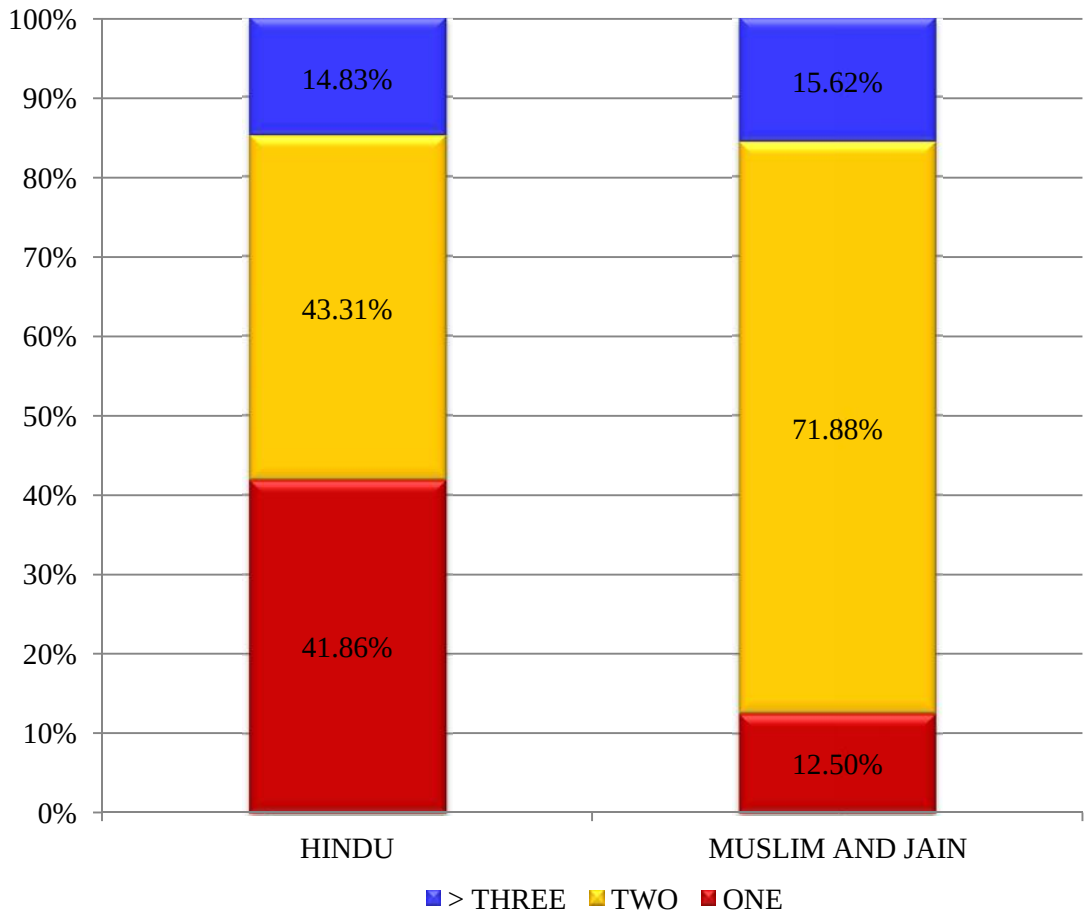


Table 35. Association between literacy status of study participant and number of ocular morbidity

LITERACY STATUS	NUMBER OF OCULAR MORBIDITY			
	One n (%)	Two n (%)	> Three n (%)	TOTAL n (%)
ILLITERATE	71 (35.50)	89 (44.50)	40 (20.00)	200 (100)
PRIMARY	61 (48.04)	56 (44.09)	10 (7.87)	127 (100)
SECONDARY AND ABOVE	16 (32.65)	27 (55.10)	06 (12.25)	49 (100)
TOTAL	**148 (39.36)**	**172 (45.74)**	**56 (14.90)**	**376 (100)**
χ^2 = 12.76, df = 4, p = 0.01				

Among 200 participant who were illiterates, 71 (35.50%) had one ocular morbidity, 89 (44.50%) had two ocular morbidities and 40 (20.00%) had more than three ocular morbidities. Among 127 participant who had completed primary education, 61 (48.04%) had one ocular morbidity, 56 (44.09%) had two ocular morbidities and 10 (7.87%) had more than three ocular morbidities. Among 49 study participant who had completed secondary schooling and above, 16 (32.65%) participant had one ocular morbidity, 27 (55.10%) had two ocular morbidities and 6 (12.25%) had more than three ocular morbidities. This clearly shows that there is decrease trend in number of ocular morbidities as the literacy status of the study participant increased. (χ^2 = 12.76, p = 0.01)

Graph 16. (Table 35.) Association between literacy status of study participant and number of ocular morbidity

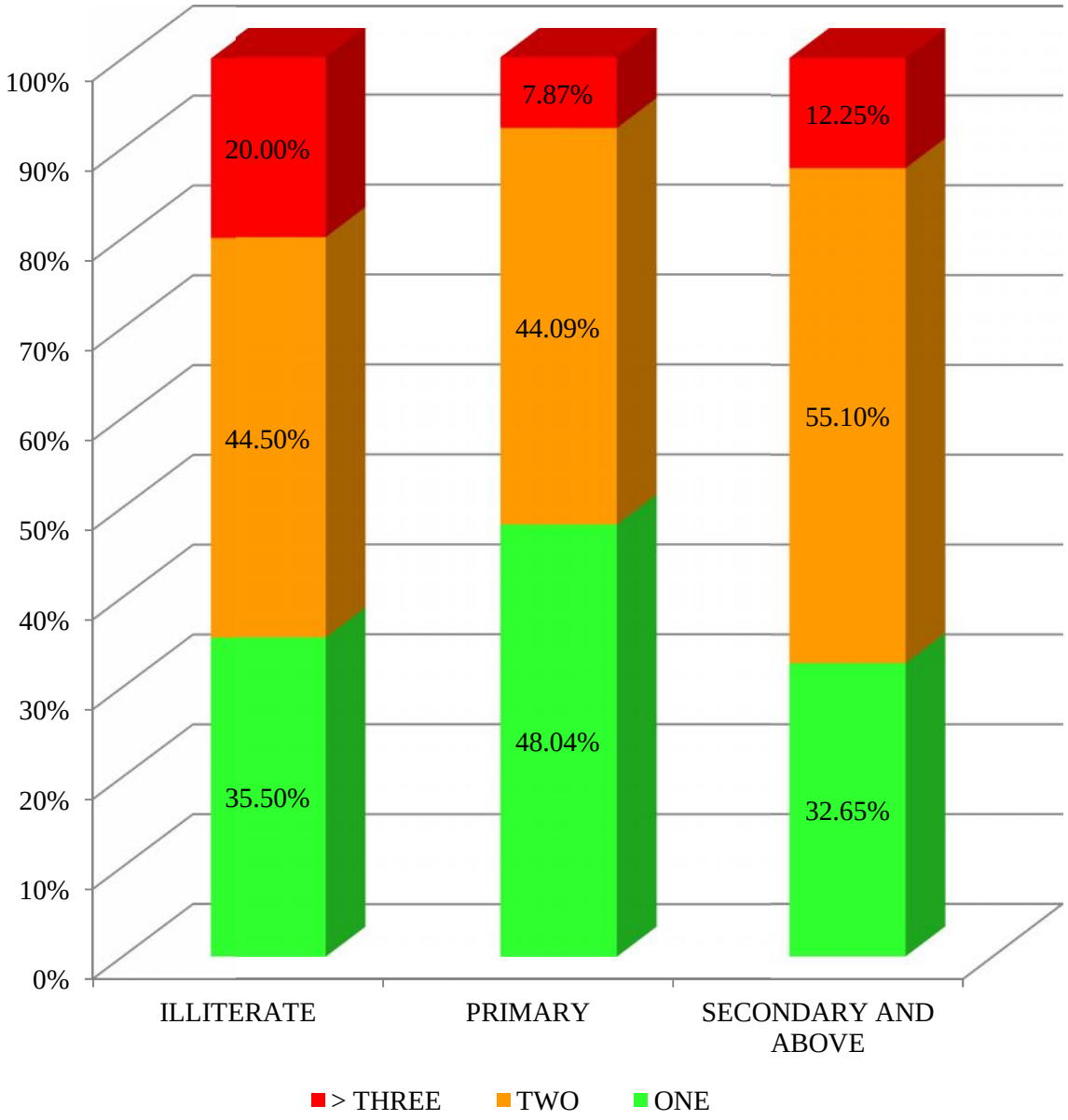


Table 36. Association between Socio economic status of study participant and number of ocular morbidity

	NUMBER OF OCULAR MORBIDITY			
SOCIO ECONOMIC STATUS	**One n (%)**	**Two n (%)**	**> Three n (%)**	**TOTAL n (%)**
CLASS I	34 (49.28)	23 (33.33)	12 (17.39)	69 (100)
CLASS II	07 (33.33)	11 (52.38)	03 (14.29)	21 (100)
CLASS III	37 (33.33)	58 (52.25)	16 (14.42)	111 (100)
CLASS IV	54 (38.57)	63 (45.00)	23 (16.43)	140 (100)
CLASS V	16 (45.71)	17 (48.57)	02 (5.72)	35 (100)
TOTAL	**148 (39.36)**	**172 (45.74)**	**56 (14.90)**	**376 (100)**
χ^2 = 9.47, df = 8, p = 0.30				

In the present study, among 69 and 21 study participants belonging to socio economic status classes I and II, 34 (49.28%) and 7 (33.33%), 23 (33.33%) and 11 (52.38%), 12 (17.39%) and 3 (14.29%) had one, two and more than three ocular morbidities respectively. Out of 111, 140 and 35 study participants belonging to classes III, IV and V, 37 (33.33%), 54 (38.57%) and 16 (45.71%), 58 (52.25%), 63 (45.00%) and 17 (48.57%), 16 (14.42%), 23 (16.43%) and 2 (5.72%) had one, two and more than three ocular morbidities respectively. No significant association was found between socio economic status of study participant and number of ocular morbidities.

Table 37. Association between age of study participant and cataract

	CATARACT		
AGE (in years)	**PRESENT n (%)**	**ABSENT n (%)**	**TOTAL n (%)**
60 – 65	153 (38.54)	244 (61.46)	397 (100)
66 – 70	53 (40.46)	78 (59.54)	131 (100)
71 – 75	28 (48.28)	30 (51.72)	58 (100)
76 – 80	04 (50.00)	04 (50.00)	08 (100)
>80	11 (42.31)	15 (57.69)	26 (100)
TOTAL	**249 (40.16)**	**371 (59.84)**	**620 (100)**
$\chi^2 = 2.40$, df = 4, p = 0.66			

In the present study, the prevalence rate of cataract was highest (50.00%) among study participant of age group 76 to 80 years, followed by 71 to 75 years (48.28%). The least (38.54%) prevalence rate of cataract was noted among study participant belonging to age group 60 to 65 years. The study results reveal that the prevalence rate of cataract gradually increases from 60 years of age to 80 years.

Table 38. Association between sex of study participant and cataract

	CATARACT		
SEX	**PRESENT** **n (%)**	**ABSENT** **n (%)**	**TOTAL** **n (%)**
MALE	112 (44.27)	141 (55.73)	253 (100)
FEMALE	137 (37.33)	230 (62.67)	367 (100)
TOTAL	**249 (40.16)**	**371 (59.84)**	**620 (100)**
χ^2 = 3.00, df = 1, p = 0.08			

In the present study, among 253 and 376 male and female participants, 44.27% and 37.33% had cataract respectively. Though slightly more number of cataract cases were seen among male participant, sex of the study subject was not significantly associated with prevalence rate of cataract.

Table 39. Association between religion of study participant and cataract

	CATARACT		
RELIGION	**PRESENT** **n (%)**	**ABSENT** **n (%)**	**TOTAL** **n (%)**
HINDU	222 (38.34)	357 (61.66)	579 (100)
MUSLIM	23 (65.71)	12 (34.29)	35 (100)
JAIN	04 (66.67)	02 (33.33)	06 (100)
TOTAL	**249 (40.16)**	**371 (59.84)**	**620 (100)**
$\varkappa^2$ = 12.06, df = 2, p = 0.002			

Among 35 and 6 study participants belonging to Muslim and Jain religion the prevalence rate of cataract was 65.71% and 66.67% respectively. The least (38.34%) prevalence rate of cataract was noted among study subject belonging to Hindu religion. There was statistically significant difference in the prevalence rate of cataract between Hindus and Non Hindus. ($\varkappa^2$ = 12.06, p = 0.002)

Graph.17. (Table 39.): Association between religion of study participant and cataract

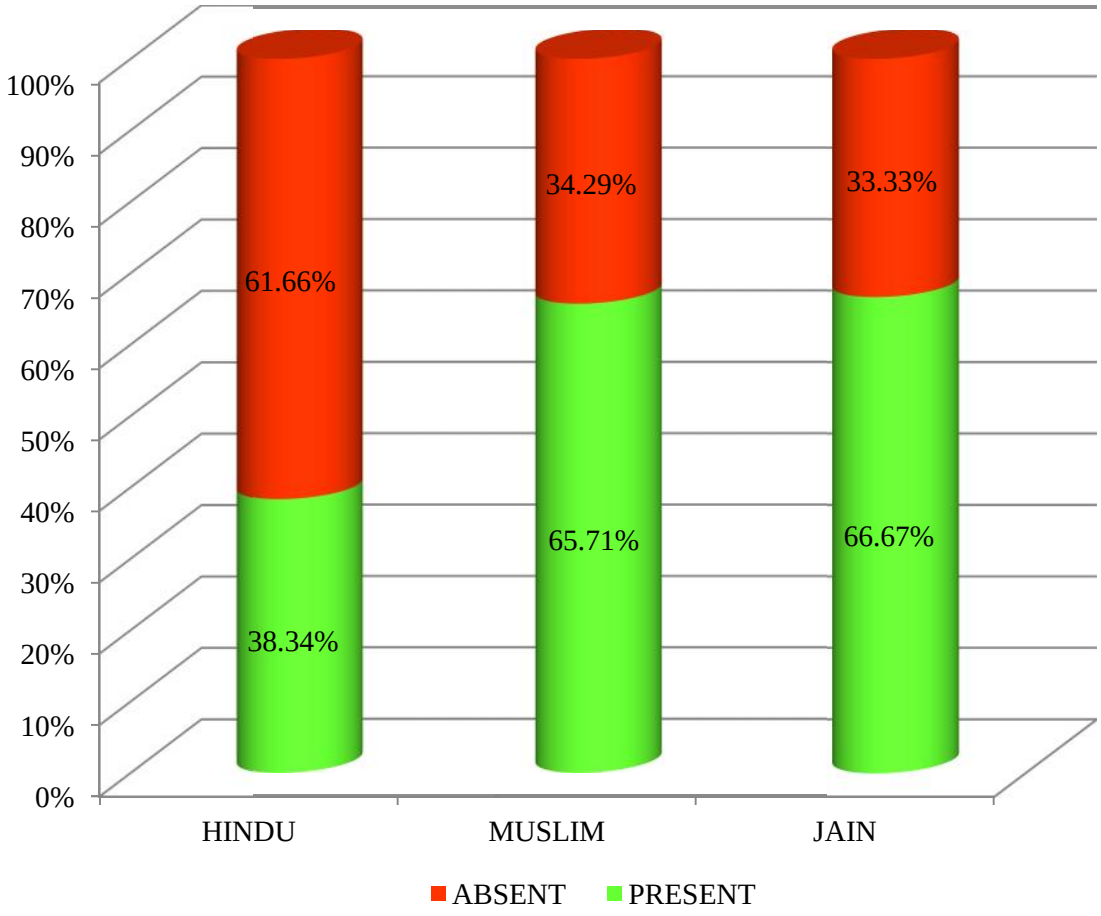


Table 40. Association between literacy status of study participant and cataract

	CATARACT		
LITERACY STATUS	**PRESENT n (%)**	**ABSENT n (%)**	**TOTAL n (%)**
ILLITERATE	148 (49.83)	149 (50.17)	297 (100)
PRIMARY	71 (31.14)	157 (68.86)	228 (100)
SECONDARY	17 (31.48)	37 (68.52)	54 (100)
PUC	12 (36.36)	21 (63.64)	33 (100)
DEGREE	01 (12.50)	07 (87.50)	8 (100)
TOTAL	**249 (40.16)**	**371 (59.84)**	**620 (100)**
$\varkappa^2 = 23.72$, df = 4, p = 0.00009			

In the present study, out of 297 illiterate study subject, 148 (49.83%) had cataract and 149 (50.17%) did not have. The prevalence rate of cataract was 31.14%, 31.48% and 36.36% among study participants who had education upto primary, secondary and PUC level respectively. Out of 8 participant who were degree holders only 1 (12.50%) had cataract. So as the literacy status of the participant increased, the prevalence rate of cataract decreased significantly. ($\varkappa^2 = 23.72$, p = 0.00009)

Graph 18. (Table 40.): Association between literacy status of study participant and cataract

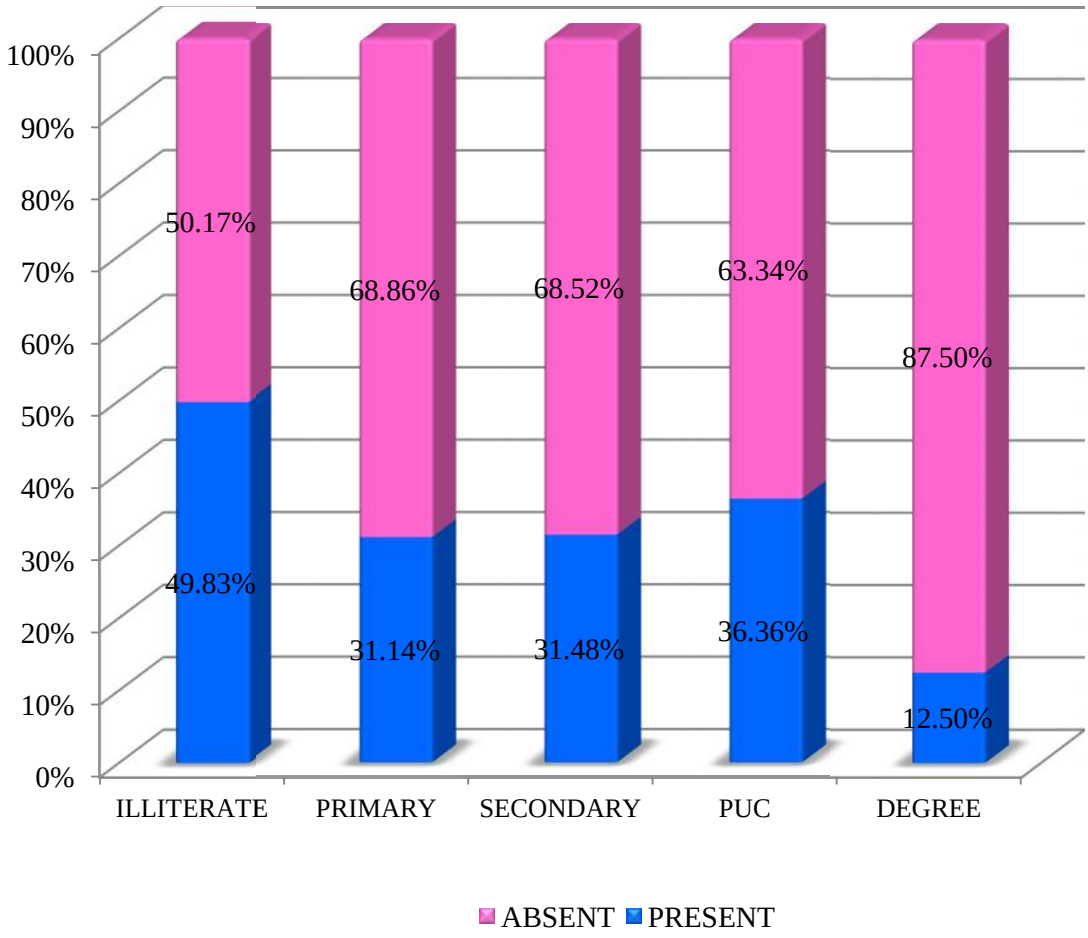


Table 41. Association between occupation of study participant and cataract

	CATARACT		
OCCUPATION	**PRESENT** **n (%)**	**ABSENT** **n (%)**	**TOTAL** **n (%)**
RETIRED	30 (40.54)	44 (59.46)	74 (100)
FARMER	85 (39.35)	131 (60.65)	216 (100)
INDUSTRY WORKER	34 (43.59)	44 (56.41)	78 (100)
HOUSEWIFE	100 (39.68)	152 (60.32)	252 (100)
TOTAL	**249 (40.16)**	**371(59.84)**	**620 (100)**
χ^2 = 0.47, df = 3, p = 0.93			

In the present study, out of 249 participant who had cataract, the prevalence rate was 43.59% in industry worker, 40.54% in retired from service, 39.68% in housewives and 39.35% in farmer. The prevalence of cataract was almost similar in all the groups, so occupation of study subject was not significantly associated.

Table 42. Association between Socio economic status of study participant and cataract

	CATARACT		
SOCIO ECONOMIC STATUS	**PRESENT n (%)**	**ABSENT n (%)**	**TOTAL n (%)**
CLASS I	44 (36.67)	76 (63.33)	120 (100)
CLASS II	13 (34.21)	25 (65.79)	38 (100)
CLASS III	75 (41.67)	105 (58.33)	180 (100)
CLASS IV	97 (43.89)	124 (56.11)	221 (100)
CLASS V	20 (32.79)	41 (67.21)	61 (100)
TOTAL	**249 (40.16)**	**371 (59.84)**	**620 (100)**
$\chi^2 = 3.99$, df =4, p = 0.41			

In the present study, out of 221 and 180 participants belonging to socio economic classes IV and III, the prevalence rate of cataract was 43.89% and 41.67% respectively. The prevalence rate of cataract was similar in study participants belonging to Class I (36.67%), Class II (34.21%) and Class V (32.79%). Socio economic status of study subject was not significantly associated with prevalence rate of cataract.

Table 43. Association between prevalence of indoor air pollution and cataract

	CATARACT		
INDOOR AIR POLLUTION	**PRESENT n (%)**	**ABSENT n (%)**	**TOTAL n (%)**
PRESENT	85 (48.29)	91 (51.71)	176 (100)
ABSENT	164 (36.94)	280 (63.06)	444 (100)
TOTAL	**249 (40.16)**	**371 (59.84)**	**620 (100)**
$\varkappa^2$ = 6.77, df = 1, p = 0.009			

In the present study, among 176 participant who had indoor air pollution at their home, 85 (48.29%) had cataract and 91 (51.71%) did not have. Out of 444 study participant who did not have indoor air pollution at their home, 164 (36.94%) had cataract and 280 (63.06%) did not have. Indoor air pollution was significantly associated with the prevalence rate of cataract among study participant. ($\varkappa^2$ = 6.77, p = 0.009)

Graph 19. (Table 43.): Association between prevalence of indoor air pollution and cataract

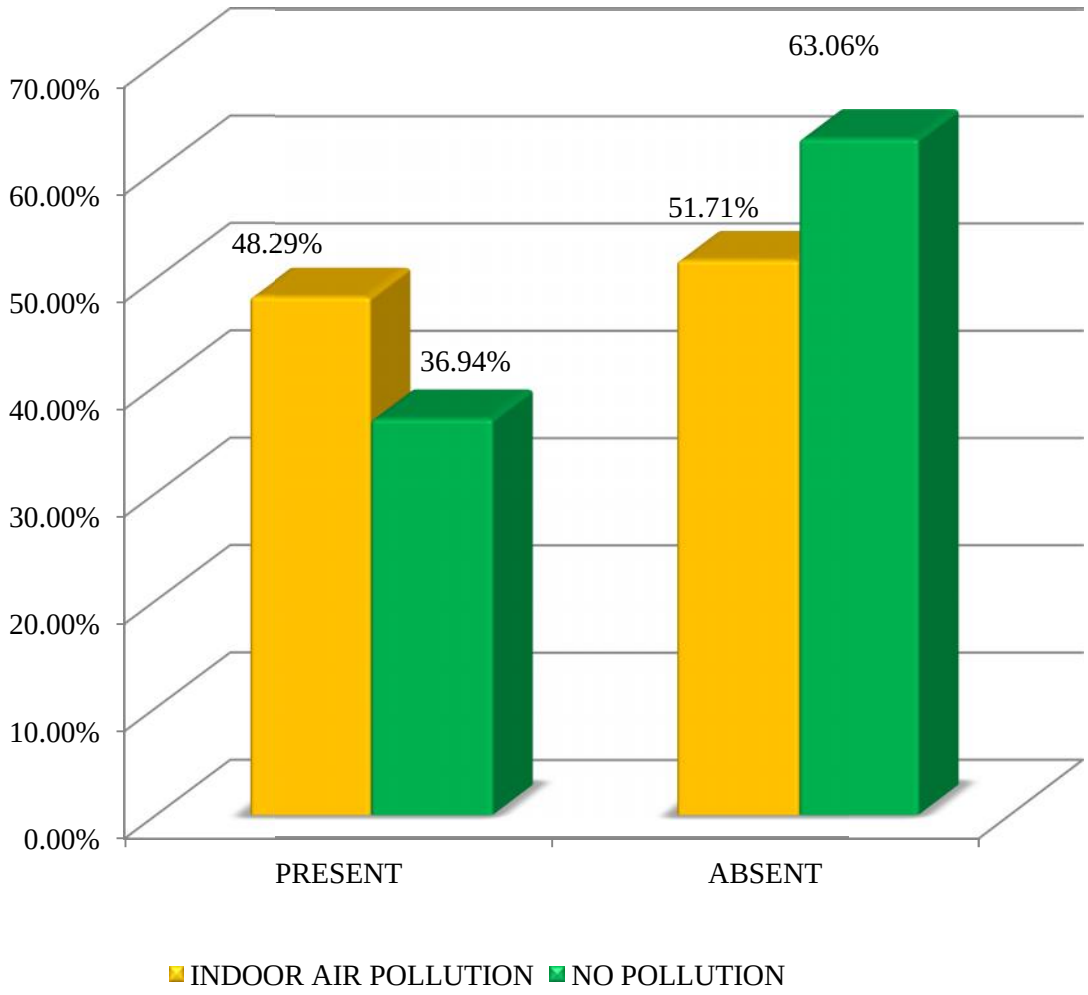


Table 44. Association between diabetes mellitus and cataract among study participant

	CATARACT		
DIABETES	**PRESENT** **n (%)**	**ABSENT** **n (%)**	**TOTAL** **n (%)**
PRESENT	49 (37.12)	83 (62.88)	132 (100)
ABSENT	200 (40.98)	288 (59.02)	488 (100)
TOTAL	**249 (40.16)**	**371 (59.84)**	**620 (100)**
χ^2 = 0.65, df = 1, p = 0.42			

Among 132 participant who had diabetes mellitus, the prevalence rate of cataract was 37.12%. Out of 488 participant who did not have diabetes, the prevalence rate was 40.98%. Though there was a difference in the prevalence rate between the groups, it was not statistically significant.

Table 45. Association between hypertension and cataract among study participant

	CATARACT		
HYPERTENSION	**PRESENT** **n (%)**	**ABSENT** **n (%)**	**TOTAL** **n (%)**
PRESENT	67 (41.87)	93 (58.13)	160 (100)
ABSENT	182 (39.56)	278 (60.44)	460 (100)
TOTAL	**249 (40.16)**	**371 (59.84)**	**620 (100)**
χ^2 = 0.26, df = 1, p = 0.61			

Among 160 participant who had hypertension, the prevalence rate of cataract was 41.87%. Out of 460 participant who did not have hypertension, the prevalence rate was 39.56%. As the prevalence rate of cataract was similar between both the groups, no significant association was noted.

Table 46. Association between tobacco consumption among study participant and cataract

	CATARACT		
TOBACCO CONSUMPTION	**PRESENT n (%)**	**ABSENT n (%)**	**TOTAL n (%)**
PRESENT	83 (35.78)	149 (64.22)	232 (100)
ABSENT	166 (42.78)	222 (57.22)	388 (100)
TOTAL	**249 (40.16)**	**371 (59.84)**	**620 (100)**
χ^2 = 2.97, df = 1, p = 0.08			

In the present study, among 232 participant who consumed tobacco, 83 (35.78%) had cataract and among 388 participant who did not consume tobacco, 166 (42.78%) had cataract. There was no significant association between tobacco consumption and prevalence rate of cataract.

Table 47. Association between alcohol consumption among study participant and cataract

	CATARACT		
ALCOHOL CONSUMPTION	**PRESENT n (%)**	**ABSENT n (%)**	**TOTAL n (%)**
PRESENT	40 (42.55)	54 (57.45)	94 (100)
ABSENT	209 (39.73)	317 (60.27)	526 (100)
TOTAL	**249 (40.16)**	**371 (59.84)**	**620 (100)**
χ^2 = 0.62, df = 1, p = 0.61			

In the present study, the prevalence rate of cataract was observed in 42.55% and 39.73% among participants who consumed alcohol and who did not consume alcohol respectively. A slight higher prevalence of cataract was seen among alcoholics but the difference was not statistically significant.

Table 48. Association between duration of diabetes in study participant and diabetic retinopathy

	DIABETIC RETINOPATHY		
DURATION OF DIABETES (in years)	**PRESENT n (%)**	**ABSENT n (%)**	**TOTAL n (%)**
≤10	22 (20.95)	83 (79.05)	105 (100)
>10	23 (85.18)	04 (14.82)	27 (100)
TOTAL	**45 (34.09)**	**87 (65.91)**	**132 (100)**
χ^2 = 39.44, df = 1, p = 0.00001			

Out of 27 study participant who had diabetes for more than 10 years, the prevalence rate of diabetic retinopathy was 85.18%. The prevalence rate of diabetic retinopathy among study participant who had diabetes for less than 10 years was 20.95%. As the duration of diabetes increased the prevalence rate of diabetic retinopathy also increased (χ^2 = 39.44, p = 0.00001).

Graph 20. (Table 48.): Association between duration of diabetes in study participant and diabetic retinopathy

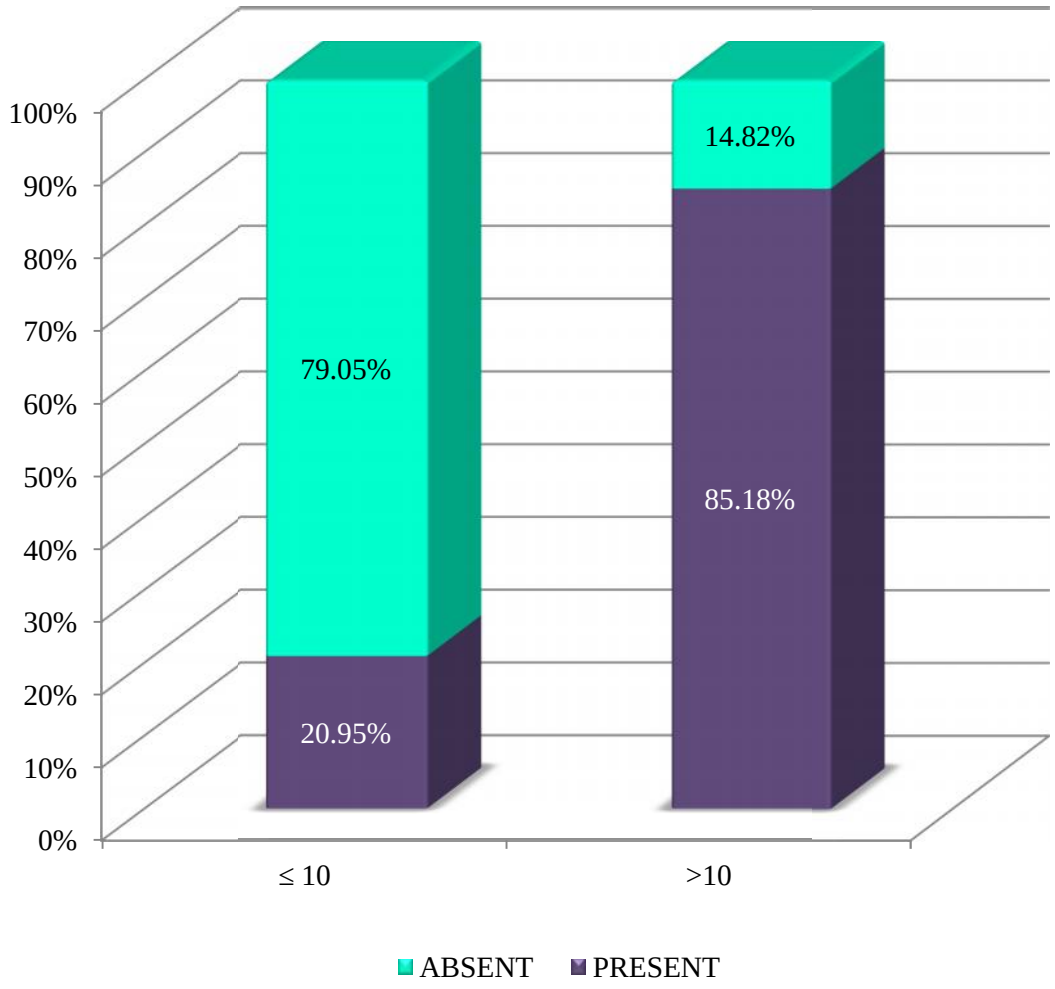
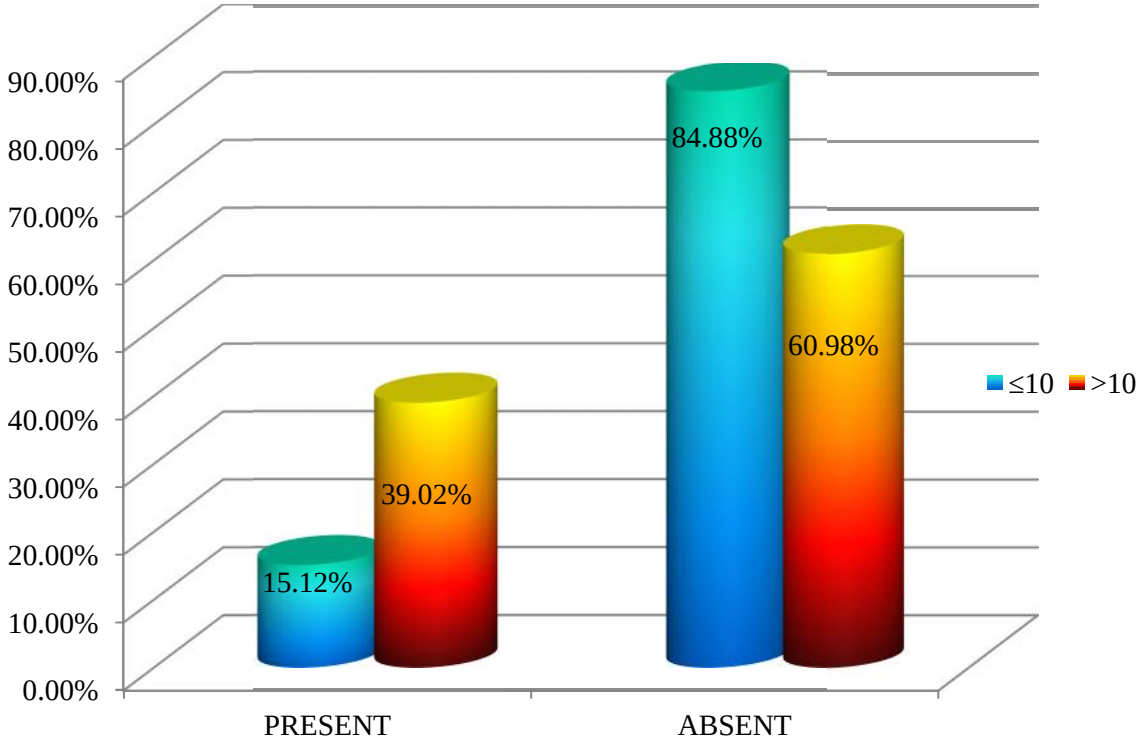


Table 49. Association between duration of hypertension in study participant and hypertensive retinopathy

	HYPERTENSIVE RETINOPATHY		
HYPERTENSION DURATION (in years)	**PRESENT n (%)**	**ABSENT n (%)**	**TOTAL n (%)**
≤10	18 (15.12)	101 (84.88)	119 (100)
>10	16 (39.02)	25 (60.98)	41 (100)
TOTAL	**34 (21.25)**	**126 ()**	**160 (100)**
χ^2 = 10.41, df = 1, p = 0.001			

In the present study, out of 41 participant who had hypertension more than 10 years 16 (39.02%) had hypertensive retinopathy and 25 (60.98%) did not. Among 119 participant who had hypertension for less than or equal to 10 years 18 (15.12%) had hypertensive retinopathy and 101 (84.88%) did not have. As the duration of hypertension increased there were more chances of developing hypertensive retinopathy changes. (χ^2 = 10.41, p = 0.001)

Graph 21. (Table 49.): Association between duration of hypertension in study participant and hypertensive retinopathy



Discussion

DISCUSSION

The present cross sectional study was conducted in areas covered under Vantamuri Primary Health Centre which is the field practice area of Department of Community Medicine, Jawaharlal Nehru Medical College, Belagavi during the period of January to December 2016.

TABLE 1: Age and sex distribution of study participant

In the present study, among male participant nearly two thirds (62.06%) were in the age group of 60 to 65 years, followed by 21.74% in the age group of 66 to 70 years. Similar trend was seen in female where almost two thirds (65.39%) were in the age group of 60 to 65 years, more than one fifth in (20.71%) in the age group of 66 to 70 years. The mean age of the study participant was 65.26 $\pm$ 6.04 years. The mean age of the male and female participant was 65.45 $\pm$ 5.94 and 65.12 $\pm$ 6.11 years respectively.

Out of 620 study participants, 59.19% were female and 40.81% were male. Female preponderance was seen as most of the women especially in rural areas tend to be at home during daytime and were available for interview.

A study conducted in Allahabad reported that majority (63.25%) of participant were in the age group of 60 to 70 years, followed by 70 to 80 years, which was similar to findings seen in our study. The mean age of elderly in rural area in this study was 68.96 $\pm$ 7.48 years, which was slightly higher than our study[11].

TABLE 2 and 3: Distribution of study participant according to Religion and literacy status

As our study was conducted in area predominantly occupied by Hindus, 93.38% of subjects were Hindus, 5.65% were Muslim and 0.97% were Jain. Among male study participant, nearly half of them (47.83%) were illiterate, 33.60% had completed primary schooling and almost one fifth had completed higher than secondary schooling. Among female participant, illiterates were almost similar as male (47.96%) but those who had completed primary schooling were a bit better compared to male (38.96%). Though majority of illiterates were female, they even dominated among participant who had completed schooling.

A study conducted in Barabanki, Uttar Pradesh, showed similar distribution of participant according to religion, where 93.5% were Hindus and 6.5% were Muslim[35].

A similar study conducted in Wardha, quoted 36.5% as illiteracy rate, of which nearly half of them were female, which was similar to our study[37]. The negligence of literacy during earlier decades has been highlighted in our study.

TABLE 4: Distribution of study participant according to Occupation

The present study revealed that, majority of male participant (53.36%) were farmer and more than two thirds (68.67%) of female participant were housewives. India being known as agricultural country, it was good to know that more than 50% participant were indulged in farming even at this age. The study area included an industrial estate, so some of the participant were working in industries.

A similar study conducted in Cheluvanatti village, Belagavi reported that among general population 45.6% were farmer and 35.7% were housewives[47]. As our

study participant were above age of 60 years, more of women who were housewives was observed.

TABLE 5, 6 and 7: Distribution of study participant according to Marital Status, type of family and Socio economic status

Of 620 study participant in the current study, almost all study participant were married except 4 (0.64%). It was noteworthy that majority (68.06%) of the study subject lived in joint family compared to nuclear family. Joint families were more as urbanization and nuclear family trend has not yet influenced the rural areas.

In our study, 35.64% belonged to Class IV Socio economic status according to modified B. G. Prasad Classification. About 29.04%, 19.35%, 9.84% and 6.13% participant belonged to Class III, Class I, Class V and Class II respectively.

In a study conducted in Allahabad, 97.75% participant were married which was nearly same as our study[11]. In relation to socio economic status, similar findings were seen in a studies conducted in Wardha and Barabanki, where majority belonged to class IV, followed by class III[35,37].

TABLE 8 and 9: Distribution of study participant according to tobacco and alcohol consumption

In the present study, nearly one third (37.42%) participant were consumers of tobacco. Among them, majority of subject (74.14%) chewed tobacco and others were either smoker or used tobacco in both forms. Nearly half of them were current users of any form of tobacco. Around 15.16% of study subject use to consume alcohol, of them almost 81.91% were currently consuming alcohol. The habit of tobacco chewing

and alcohol consumption is a bit high in rural area as it is used as stress buster to be relieved from daily routine activities.

A study conducted in Nagpur in urban slum showed 21.71% participant with habit of chewing tobacco, 8.75% consumed alcohol and 5.71% smoked tobacco[36]. Our study had a higher prevalence of tobacco chewing and alcohol consumption may be due to the inclusion of only elderly age group.

TABLE 10: Distribution of participant according to fuel used for cooking

In the present study, more than two thirds (68.07%) of study participant used Liquid Petroleum Gas as the cooking fuel. The remaining one third participant used either biomass or kerosene. Around (88.88%) participant were at risk of indoor air pollution, as they did not have smoke vents at home.

In a study conducted in Hingna, Nagpur district, around 50% used biomass, around 40% used Liquid Petroleum Gas and less than 5% used kerosene fuel for cooking[24]. A study conducted in Barabanki, showed nearly half (45.4%) of them using LPG and 31.3% using both wood and LPG for cooking[35].

In our study higher usage of LPG was noted, may be due to the introduction of various government schemes like Ujjwala and decreasing the LPG subsidy. Indoor air pollution was very high among users of biomass and kerosene, may be due to poverty, illiteracy and ignorance.

TABLE 11: Distribution of study participant according to Body Mass Index

In the present study, according to WHO Asian classification of Body Mass Index, out of 253 male and 367 female participants, 34 (13.44%) and 53 (14.44%) were underweight and 90 (35.57%) and 128 (34.88%) had normal Body Mass Index. Nearly 86 (33.99%) male and 122 (33.24%) female were overweight and 43 (17.00%) male and 64 (17.44%) female were obese. The mean Body Mass Index of study participant was 23.55 $\pm$ 4.49 Kg/m^2. The mean Body Mass Index of male participant was 23.63 $\pm$ 4.57 Kg/m^2. The mean Body Mass Index of female participant was 23.49 $\pm$ 4.43Kg/m^2.

A study carried out in Allahabad noted that nearly half of the individual were normal, one fourth were underweight and one fourth were overweight or obese[11]. This classification was with WHO world classification of Body mass Index. The Asian classification was not considered, so most of them were in normal BMI category. As in our study Asian classification was considered, it gave a more realistic view with the current rise of epidemic of non communicable diseases.

TABLE 12, 13 and 14: Distribution of study participant according to history of diabetes mellitus, Hypertension and Ocular surgery

In present study, 21.29% subject were diabetic. Of the diabetics, more than three fourth (79.54%) participant had it for less than 10 years. The mean duration of diabetes mellitus in study population was 8.42 $\pm$ 5.19 years with range between 2 to 25 years. About 25.80% study subject were diagnosed to have hypertension. Among them, 19.84% were known case and 5.96% were newly diagnosed case of hypertension. Of the hypertensives, nearly one fourth (25.63%) had hypertension for more than 10 years. The mean duration of hypertension in study subjects was 10.21 $\pm$ 5.36 years with range between 0 to 25 years.

In a study conducted in South Delhi, the prevalence of diabetes and hypertension among elderly was 24.0% and 67.0% respectively[48]. Prevalence of diabetes in our study was similar, but hypertension was lower compared to this study. Our study was conducted in rural area where individual are at lesser risk of chronic diseases as they are more active till the latter part of their lives, so probably this may be the reason for decreased prevalence in our study area.

Among the study participant, only 7.10% participant had undergone an ocular surgery in the past. Among them, 93.18% of them had undergone cataract surgery and 95.45% had undergone surgery within 10 years. Regarding health care, 15.91% had undergone surgery in government hospital, 45.45% and 38.64% preferred KLE and other private hospitals respectively.

A cross sectional study conducted in Prakasam district, revealed that 66% individual preferred Nongovernmental hospital for surgery compared to 23.9% for Governmental hospital or camp[29]. In our study slightly higher dependence was seen on private hospital. As the area covered in our study is field practice area of J N Medical College, which is connected to KLE Hospital, more individuals seek treatment from our hospital.

In India, people tend to seek treatment though private hospitals may be because of various reasons such as more hygienic environment, better care, newer technology and coverage in remote areas by camps. This was proven by the findings seen in our study. A study conducted in Villupuram district, Tamil nadu showed 83.2% participant were motivated by the fact that they were getting surgery done free of cost[31], which can be a boon or a bane to them. Next best motivation was self

motivation which has to be instilled among the patients, which may help in better approach to combat these morbidities.

TABLE 15: Prevalence of ocular morbidity

The prevalence of ocular morbidity in our study was **60.64%.** Out of 376 study participant, who had morbidity, 43.62% were male and 56.38% were female.

In various studies across India, prevalence of ocular morbidity varied from around 40 to 90%. A cross sectional study conducted in Jasra and Saidabad blocks of Allahabad, reported 40.92% ocular morbidity among elderly. A higher morbidity was seen among female (53.60%)[23]. A comparative study among elderly of urban and rural areas in Allahabad showed 66.5% prevalence of ocular morbidity among rural elderly individual[11].

A study conducted in Barabanki, revealed 88.8% ocular morbidity among elderly population in rural area[35]. Another study conducted in Kanpur revealed ocular morbidity prevalence to be 76.1% among rural individual[34]. A community based cross sectional study conducted in Hingna, Nagpur district, quoted prevalence rate of ocular morbidity as 89.29% among elderly[33]. A study conducted in meerut, showed ocular morbidity to be 98.5% among elderly[10]. Prevalence of ocular morbidity was 40.38% in a study conducted in urban slum in Nagpur[36].

The prevalence seen in our study was similar to findings seen in study conducted in Allahabad. Female gender (59.20%) was more prone for ocular morbidity, which was seen in a study in Jasra and Saidabad blocks of Allahabad. As very less such studies were conducted in southern part of India, we could not compare with more relevant studies in south.

TABLE 16: Distribution of study participant according to number of ocular morbidity

In the present study, almost half (45.75%) of the participant had two ocular morbidities, 39.35% individual had one ocular morbidity, 12.23% had three ocular morbidities and 2.67% had four ocular morbidities. The mean number of ocular morbidities per person was 1.78 $\pm$ 1.05 per person. The mean number of ocular morbidities in male was 1.75$\pm$ 0.66 per person and in female was 1.81 $\pm$ 0.82 per person.

A study conducted in Barabanki among rural people revealed that 59.4% individuals had one ocular condition, 33.5% had two conditions, 6.5% had three conditions and 0.6% had four conditions[35]. About 23.14% were having one ocular morbid condition while 7.14% were having two ocular morbid conditions, as noted by study conducted in Hingna, Nagpur[33]. In a study conducted in Kanpur, stated that average ocular lesion per case was 1.24 and the range was between one to three[34]. A cross sectional study carried out in Wardha district of Maharashtra revealed ocular morbidity rate as 1.21 lesions per elderly person[22]. Our study was conducted among elderly and the above mentioned studies were among general population so some differences were seen. In our study two ocular morbidities was commoner than one. The number of ocular lesions was more in female participant.

TABLE 17: Ocular morbidity pattern of study participant

Our study revealed that the most common ocular morbidity among elderly were cataract (37.16%), followed by refractive error (34.33%), diabetic retinopathy (6.71%), pseudophakia / aphakia (6.12%), hypertensive retinopathy (5.07%),

pterygium (3.58%), acute conjunctivitis (2.39%), glaucoma (1.49%), stye (1.04%), nystagmus (0.75%), chalazion (0.75%) and dacrocystitis (0.60%).

A similar study conducted in Wardha district, quoted diseases of the lens and iris (52.05%) to be most common group of ocular diseases. It comprised mainly of cataract (40.42%). The overall prevalence of diseases of the lids and lacrimal apparatus was 3.65%. Inflammatory conditions like chronic dacryocystitis, chalazion and blepharitis formed the commonest group of lesions in this category. Among diseases of cornea and conjunctiva, the degenerative conditions like pterygium and pingueculae predominated (7.65%) followed by corneal opacities. The prevalence of surgically operated cataract and aphakia was 10.95%. Among the miscellaneous group of eye diseases refractive error was found to be the most prevalent (40.75%)[22].

A study conducted in Bundelkhand, noted that the prevalence of cataract to be 41%, aphakia 14.2%, refractive error 43.4%, glaucoma 3.7% and corneal opacity 3.3%[27]. Another study conducted in Wardha district, revealed that refractive error (85%) to be the most common ocular morbidity among elderly followed by cataract (36.3%), dry eye (12.7%), diabetic retinopathy (8.9%) and glaucoma (5.6%)[37]. A study conducted in Tirunelveli district, showed most common ocular morbidity to be cataract (63.2%), followed by refractive error (19.7%) and other disorders all with prevalence of around 2%[38].

A community based retrospective study conducted in Bhaktapur, Nepal, listed the common ocular diseases as refractive error 22.5%, age related cataract 17.5%, extra ocular diseases like conjunctivitis 14.9%, conjunctival degenerations 10.8%[40]. A cross sectional study conducted in Rio de Janerio found that 27.96% participant to have cataract and 26.27% to have refractive error[42]. The findings in our study were

mostly similar to the observations seen in various studies with cataract topping the list followed by refractive error. As the age increased protein in the lens of eye starts fusing to form cataract, which might be the cause for higher prevalence of cataract.

TABLE 18: Distribution of study participant according to cataract

In the current study, out of 249 participant who had cataract, almost 85.14% cases were bilateral. Similar prevalence was seen in both right and left eyes with 7.23% and 7.63% respectively. Majority of cataract cases were mature cataract (59.44%). Female participant were slightly more prone for cataract (55.02%).

A cross sectional study conducted in Loni, noted 57% mature cataract cases and others were immature and hypermature. More than half (52.25%) of the total cataract cases were bilateral[32]. A study conducted in Tirunelveli district revealed that 58.1% cases were bilateral cataract and 12.5% had cataract only in one eye[38]. A study conducted in Wardha, stated 46.5% prevalence rate of cataract in female compared to 26.5% in male[37]. The findings in the present study were similar to the above mentioned studies with more than half cases being bilateral, mature cataract and among female subject.

TABLE 19 and 20: Distribution of study participant according to their visual acquity (WHO and ICD classification)

According to World Health Organisation classification of visual acquity, it was good to know that in our study, nearly 69.03% had normal vision, 28.07% had visual impairment and 2.90% participant were blind. Among 144 participant with visual impairment, more than half (51.39%) were male. This was subdued by female preponderance in severe visual impairment which constituted 56.67% female.

Blindness constituted to 38.89% in male and 61.11% in female respectively. Cataract was the most common cause for blindness.

According to ICD – 10 classification of visual acquity, 69.03% were under category 0, 23.23% under category 1, 4.84% under category 2, 1.61% under category 3, 0.48% under category 4 and 0.81% under category 5. Under blindness, out of 10 participants in category 3, 4 were male and 6 were female. In category 4, out of 3, 1 was male and 2 were female. Among 5 study participants in category 5 blindness, 2 were male and 3 were female.

A study carried out in Wardha district, showed prevalence of low vision to be 32% and blindness to be 12.2%. Nearly 55.7% participant had normal vision, 6.4% had blindness, 5.6% had near total blindness and 0.2% had total blindness[22]. Slightly lower findings were seen in our study where 1.61% were blind, 0.48% had near total blindness and 0.81% had total blindness.

A study conducted in Prakasam district, presented that 35.6% individual to have visual impairment and 21% to have blindness. Cataract was the most common cause for visual impairment[29].

The Chennai Glaucoma study revealed that 19.2% individual presented with visual impairment and 3.36% with blindness[30]. Our study had a higher prevalence of visual impairment may be because of over correction or misdiagnosis as researcher had only one month training in ophthalmology.

A study conducted in Tirunelveli district, reported presenting blindness according to Indian definition (<6/60 in both eyes) to be 11.0%. Cataract was the most common cause[38]. In our study 7.74% participant were found to be blind according to Indian definition which was almost similar.

The study conducted in Bundelkhand showed, 37.0% low vision and 13.7% blindness in study participant[27].

Our study had marginally lower prevalence of visual impairment and blindness compared to various above mentioned studies. As the literacy levels in southern part of India are better compared to northern part, the treatment seeking behaviour and apparoach towards the diseases changes, which may lead to better health care.

TABLE 21 and 22: Distribution of study participant according to diabetic retinopathy among diabetics and hypertensive retinopathy among hypertensives

In the present study, out of the 132 known diabetic patients, 34.09% were found to have diabetic retinopathy. The prevalence of diabetic retinopathy was 6.71%. Out of the 160 participants who had hypertension, 21.25% were having hypertensive retinopathy changes. Prevalence of hypertensive retinopathy was 5.07%.

In a study conducted in Wardha district, 8.9% individual were diagnosed to have diabetic retinopathy[37]. A study conducted in Villupuram district, Tamil Nadu, showed prevalence of diabetic retinopathy to be 32.53% among diabetics. Nearly half (46.7%) of the participants aged above 60 years had diabetic retinopathy[49]. The findings from these studies are very similar to our study.

In the present era, the epidemic of non communicable diseases is tightening its hold on community. This has led to higher cases of diabetes and hypertension further increasing their complications like diabetic or hypertensive retinopathies.

TABLE 23, 24 and 25: Distribution of study participant according to treatment seeking behavior, place of treatment and reason for not taking treatment

In the current study, 18.09% participant had approached a health facility for treatment of their ocular morbidity, 51.59% had taken partial treatment and 30.32% had not seeked treatment. Of the study participant who had got their ocular morbidity treated, majority (87.06%) participant preferred private sector. Of the study participant who had got their ocular morbidity partially treated or not treated, nearly one third (32.47%) thought that they were recently diagnosed to have the disease and other two thirds (67.53%) were ignorant about the disease and its complications.

A study conducted in Dibrugarh on knowledge and treatment seeking behavior revealed 100 % of community members, were aware of the social and economic implications of blindness/ visual impairment. All the community members (100 %) were aware that full treatment was available free of cost. About 66% of the people preferred Government health sector for the treatment of visual impairment. Majority (77%) of the studied individuals considered timely consultation of doctors and proper information as important steps for reducing the burden of blindness in the community[50].

The findings in our study differed from the study conducted in Dibrugarh. Most of the individuals may choose government hospitals just because of free treatment as the study also reveals that 100% participants were aware of that. Approach to the doctor was very less in our study compared to it. This can be analysed only during the plausibility of such situation, as the knowledge is not the only thing, implementation of knowledge is much important. Our study participants

were elderly so they were more ignorant and illiterate compared to their counterparts in other study.

TABLE 26: Association between age of study participant and ocular morbidity

In the present study, out of 8 subjects who were aged 76 to 80 years, 75.00% had ocular morbidity. Similarly, out of 58 participants who were aged 71 to 75 years, 72.41% had ocular morbidity. The prevalence rate of ocular morbidity was 55.66%, 69.46% and 61.54% among 60 to 65 years, 66 to 70 years and above age 80 years respectively. As the age increased the prevalence rate of ocular morbidity also increased ($\varkappa^2 = 12.46$, $p = 0.01$). This increase in prevalence rate as age increases can be due to various factors which include, weakening of their pupillary muscles leading to refractive error, coagulation of lens proteins leading to cataract, decrease in neurons as age increases leading to neural and retinal changes, association with other diseases like diabetes and hypertension leading to their complications, which cause ocular morbidity.

A similar study conducted among rural elderly in Wardha district, showed significant association between various ocular morbidities and increasing age ($p<0.05$)[37]. Similar studies conducted among rural population in Hingna, Nagpur and Meerut showed increase in prevalence of ocular morbidity with increasing age ($p<0.001$)[10,33].

TABLE 27 and 28: Association between sex and religion of study participant and ocular morbidity

In the present study, 64.82% male participant and 57.77% female participant had an ocular morbidity. Though male were more prone to ocular morbid conditions,

which may be due to genetics, more stress levels, work pattern, sex of the study participant was not significantly associated with prevalence of ocular morbidity. Among Hindus, 59.41% had an ocular morbidity. Though among Muslim, 77.14% and among Jain, 83.33% had an ocular morbidity, religion was not significantly associated with prevalence of ocular morbidity. This may be mainly due to the Hindus predominance in the area which led to less study subjects of other religion. If more subjects from other religion would have been obtained, significance could be proved.

In study carried out in Wardha district, the ocular diseases were found to be more prevalent among male (89.1%) than female (79.9%) ($p<0.001$)[22]. In a study conducted among urban population of Meerut revealed that ocular morbidity was significantly higher ($p<0.01$) in female (56.2%) than male (49.1%)[10].

TABLE 29: Association between literacy status of study participant and ocular morbidity

In the present study, out of 297 illiterate participant, 67.34% had an ocular morbidity. The prevalence of ocular morbidity was almost similar in primary, secondary and PUC completed participant, which was 55.70%, 51.85% and 54.54% respectively. Out of 8 participant, who were degree holders, 37.5% had ocular morbidity. Thus as the literacy level increased, prevalence of ocular morbidity decreased ($\chi^2 = 11.98$, $p = 0.02$). People with better education tend to be more attentive and concerned about their health and hygiene, which decreases the risk of morbidity, which may be the reason for lower prevalence of ocular morbidity.

A study conducted in Wardha, reported that various ocular morbidities like refractive error, cataract, dry eye, diabetic retinopathy and age related macular degeneration, all were significantly associated with educational status ($p<0.05$) [37].

This finding was similar to our study. Similar association among educational status and ocular morbidity was seen in studies conducted in Hingna and Meerut[33,10].

TABLE 30 and 31: Association between occupation and Socio economic status of study participant and ocular morbidity

Among 74 study participant who had retired from service, majority (72.98%) had ocular morbidity. Similar prevalence rate was seen in study population who were farmer, industry worker and housewives, that is, 59.72%, 57.69% and 58.73% respectively. Occupation of the study participant was not significantly associated with prevalence rate of ocular morbidity.

Out of 221 and 180 study participant who belonged to classes IV and III, the prevalence rate of ocular morbidity was 63.35% and 61.67% respectively. It was surprising to know that, though prevalence rate was higher in study population belonging to class IV socio economic status, it was not significantly associated with prevalence rate of ocular morbidity.

A study conducted in Wardha district, reported that the prevalence rate of ocular diseases differed significantly among individual from upper and middle socio economic status to those belonging to lower socio economic status ($p<0.001$). Landless labourers suffered from eye diseases more often than other occupational groups ($p<0.001$)[22]. In our study there was no statistical significant diference, but except class V SES, decreasing trend was seen from lower to upper class, but no such trend was seen in relation to occupation.

A study carried out in rural elderly individual in Bundelkhand, showed no significant association between Socio Economic Status and various ocular morbidities ($p>0.05$)[27]. Similar finding was obtained in our study.

A study conducted in Meerut, showed significant association between occupation and ocular morbidity, may be because they considered general population and was carried out in urban slum[10]. So these findings were not similar to our study.

TABLE 32 and 33: Association between age and sex of study participant and number of ocular morbidity

In the present study, out of 221 study participant between the age group of 60 to 65 years, almost half (44.35%) had one ocular morbidity, 43.89% had two ocular morbidities and 11.76% had more than three ocular morbidities. Similar results were seen in age group between 66 to 70 years, 71 to 75 years and more than 75 years. Older age group was prone for more number of ocular morbidities, as the age increased the number of ocular morbidities also increased significantly. (χ^2 = 13.13, p= 0.04)

In the current study, out of 212 female participant, 41.51% had one ocular morbidity, 40.09% had two ocular morbidities, and 18.40% had more than three ocular morbidities as compared to 164 male participant where 36.59%, 53.05% and 10.36% had one, two and more than three ocular morbidities respectively. Statistically significant difference was noted among male and female participant in relation to number of ocular morbidities (χ^2 = 7.97, p = 0.02).

In India, ignorance among women is high and they tend to be hesitant in seeking care, especially in rural areas. These may be the major contributors to increased number of morbidities per person in women.

TABLE 34, 35 and 36: Association between religion, literacy status and Socio economic status of study participant and number of ocular morbidity

In the present study, out of 344 Hindus, nearly half of participant had (41.86% and 43.31%) had one and two ocular morbidities and 14.83% had more than three

ocular morbidities respectively. Among 32 Muslim and Jain participant, more than two thirds (71.88%) had two ocular morbidities, others had one or more than three ocular morbidities. It shows that Muslim and Jain study participants had slightly higher number of ocular morbidities ($\varkappa^2$ = 11.64, p = 0.002). This enlightens the fact that Hindus are more conscious towards health and know the consequences of multiple morbidities. So majority of them approach health facility when a single morbidity is diagnosed.

Among 200 participant who were illiterates, about one third (35.50%) had one ocular morbidity, nearly half (44.50%) had two ocular morbidities and one fifth (20.00%) had more than three ocular morbidities. Among 127 participant who had completed primary education, almost half (48.04% and 44.09%) had one and two ocular morbidities and 7.87% had more than three ocular morbidities. Among 49 study participant who had completed secondary schooling and above, nearly one third (32.65%) participant had one ocular morbidity, more than half (55.10%) had two ocular morbidities and 12.25% had more than three ocular morbidities. This clearly shows that there is decrease trend in number of ocular morbidities as the literacy status of the study participant increased ($\varkappa^2$ = 12.76, p = 0.01). As the knowledge increases we tend to be more concerned about our surroundings, sense of attitude towards self changes, which might be the reason for decrease in number of ocular morbidity per person.

In the present study, among the study participant belonging to all socio economic status classes, almost half of them had one morbidity. Among participants of classes II and III, more than half had two ocular morbidities and among class I, one fifth had more than three ocular morbidities. No significant association was found between socio economic status of study participant and number of ocular morbidities.

TABLE 37: Association between age of study participant and cataract

In the present study, the prevalence rate of cataract was highest (50.00%) among study participant aged 76 to 80 years, followed by 71 to 75 years (48.28%). The least (38.54%) prevalence rate of cataract was noted among study participant belonging to age group 60 to 65 years. The study results reveal that the prevalence rate of cataract gradually increases from 60 years of age to 80 years. Inspite of this gradual increase, age of participant was not significantly associated with prevalence rate of cataract. As the age increases immature form of cataract converts to mature form, further decreasing the vision. Due to this reason older individuals may go in for surgeries and prevalence of cataract might be lower among them.

In a cross sectional study conducted in Loni, majority of patients (55%) suffering from cataract were in the age group of 60 – 80 years, and showed a significant association with age ($p<0.001$)[32]. As this study was carried out in general population, statistical significance may be seen. In a study conducted in Tirunelveli district, age was significantly associated with cataract ($p<0.01$)[38]. A study conducted in Villupuram district, Tamil Nadu, age was significantly associated with prevalence rate of cataract ($p<0.001$)[31]. Though there was increase in number of cataract cases as age increased, statistical significance was not seen in our study.

TABLE 38 and 39: Association between sex and religion of study participant and cataract

In the present study, nearly half (44.27%) of male participant and slightly more than one third (37.33%) of female participant had cataract. Though slightly more number of cataract cases were seen among male, sex of the study participants was not significantly associated with prevalence rate of cataract.

Among study participant belonging to Muslim and Jain religion, almost two third had cataract. Among Hindus, slightly more than one third had cataract. It was noteworthy that Hindus had less prevalence of cataract compared to Muslim and Jain participants and it was statistically significant ($\chi^2 = 12.06$, $p = 0.002$).

In a study conducted in Wardha district, the prevalence of cataract among elderly male was slightly higher than female but not statistically significant ($p>0.05$)[22]. A similar study conducted in Bundelkhand, revealed prevalence of cataract was not significantly associated with sex ($p = 0.43$)[27]. The results of our study were very similar to these studies.

Another study carried out in Loni, showed a different result, were statistical significant difference was seen between sex of the study population and prevalence rate of cataract ($p<0.05$)[32].

TABLE 40: Association between literacy status of study participant and cataract

In the present study, out of 297 illiterate study subject, almost half (49.83%) had cataract. The prevalence rate of cataract was around one third (31.14%, 31.48% and 36.36%) among study participant who had education upto primary, secondary and PUC level respectively. So as the literacy status of the participant increased, the prevalence rate of cataract decreased significantly ($\chi^2 = 23.72$, $p = 0.00009$), which in itself explains the reason for decreased prevalence in educated.

A cross sectional study carried out in Bundelkhand, reported statistical significant difference between literacy status of study population and prevalence rate of cataract ($p = 0.001$)[27]. A study conducted in Loni, revealed that prevalence rate of cataract to be statistically significantly associated with literacy status of study population ($p <0.05$)[32]. The cross sectional study conducted in Tiruvelneli district, also showed statistical significant difference between prevalence rate of cataract and

literacy status of study population ($p<0.05$)[38]. The findings in our study match the findings observed in all of these studies.

TABLE 41 and 42: Association between occupation and socio economic status of study participant and cataract

In the present study, out of 249 participant who had cataract, the prevalence rate was 43.59% in industry worker, 40.54% in retired from service, 39.68% in housewives and 39.35% in farmer. The prevalence of cataract was almost similar in all the groups, so occupation of study subject was not significantly associated.

In the present study, out of 221 and 180 participant belonging to socio economic classes IV and III, the prevalence rate of cataract was almost half (43.89% and 41.67% respectively). The prevalence rate of cataract was around one third in study participant belonging to Class I (36.67%), Class II (34.21%) and Class V (32.79%). Socio economic status of study subject was not significantly associated with prevalence rate of cataract.

A study conducted in Wardha district showed significant association between cataract and occupation ($p<0.05$)[37]. This difference was seen between our study and this study due to various reasons. These reasons include duration of occupation, type of work and exposure to risk factors causing cataract at their occupation.

A study undertaken in Bundelkhand, stated no significant association between socio economic status and cataract ($p = 0.81$)[27]. Similar study conducted in Loni also showed no significant difference between socio economic class and cataract ($p>0.05$)[32]. These findings were similar to our study. As there was almost similar distribution of cataract cases among various socio economic classes, significant difference could not be found.

TABLE 43: Association between prevalence of indoor air pollution and cataract

In the present study, among 176 participant who had indoor air pollution at their home, almost half (48.29%) had cataract. Indoor air pollution played a significant role in increasing the prevalence of cataract among study participant in our study ($\varkappa^2$ = 6.77, p = 0.009). Indoor air pollution is risk factor for cataract formation as eyes get more exposed to fumes as they have to blow into fire from time to time, causing irritation and dryness. It is believed that the toxins from biomass fuel smoke are absorbed systematically and get accumulated in lens resulting in opacity. They also lead to various other ocular morbidities. This can be decreased by promotion of usage of LPG stoves or building smoke vent at homes of the individual using biomass, wood or kerosene for cooking.

The cross sectional study conducted in Bundelkhand reported statistical association between fuel used for cooking and prevalence of cataract (0.031)[27]. Another study conducted in Wardha showed cataract and fuel used for cooking to be significantly associated ($p<0.05$)[37]. A study conducted in Hingna, Nagpur quoted that significant association was found between cooking fuel used and prevalence of ocular morbid conditions ($p<0.05$)[24]. The findings in these studies were similar to our study.

A study conducted in Barabanki, contrasted the findings of various studies, by showing no significant association between cooking fuel and ocular morbidity ($p>0.05$)[35].

TABLE 44 and 45: Association between diabetes mellitus and hypertension and cataract among study participant

Among 132 participant who had diabetes mellitus in our study, more than one third participant (37.12%) developed cataract. Though difference was observed in prevalence rate between both groups, it was not statistically significant.

Among hypertensive individual in our study, nearly two fifth (41.87%) had developed cataract. As the prevalence of cataract was similar among both the groups, no association was observed between hypertension and cataract.

Diabetes mellitus is one of the metabolic causes of cataract. Many of diabetes and hypertension patients proceed to develop cataract and other ocular morbidities.

A study conducted in Loni, Maharastra, reported 28.5% prevalence rate of cataract among diabetics[32]. This was a bit lower than the findings in our study. The study mentioned here was conducted in 2014, as diabetes is on a high in recent years, more patients tend to go into complications. So this discrepancy may be due to increased burden of diabetes recently.

TABLE 46 and 47: Association between tobacco consumption and alcohol consumption among study participant and cataract

In the present study, it was surprising to know that, among 232 participant who consumed tobacco, more than one third (35.78%) had cataract and among participant who did not consume tobacco, 42.78% had cataract. There was no significant association between tobacco consumption and prevalence rate of cataract. Cataract was observed in 42.55% participant with history of alcohol consumption. A slight higher prevalence of cataract was seen among alcoholics but the difference was not statistically significant.

In a study conducted at Hingna, Nagpur among rural population, Ocular morbidity was significantly associated with both tobacco and alcohol consumption among the study subjects ($p<0.05$)[24]. This was contradictory to the findings seen in our study may be because our study was focused on elderly individuals.

TABLE 48 and 49: Association between duration of diabetes and hypertension in study participant and diabetic and hypertensive retinopathy

Out of 27 study participant who had diabetes for more than 10 years, the prevalence rate of diabetic retinopathy was 85.18%. The prevalence rate of diabetic retinopathy among study participants who had diabetes for less than 10 years was 20.95%. As the duration of diabetes increased the prevalence rate of diabetic retinopathy also increased ($\varkappa^2 = 39.44$, $p = 0.00001$).

In the present study, hypertensive retinopathy changes were observed in nearly 40% participant who had hypertension for more than 10 years. As the duration of hypertension increased there were more chances of developing hypertensive retinopathy changes ($\varkappa^2 = 10.41$, $p = 0.001$).

In a study conducted in county of Oulu, Finland, reported more than 90% prevalence of diabetic retinopathy among individuals crossed 10 years of the disease. The duration was significantly associated with prevalence ($p<0.05$)[41]. As the duration of these disease increased, the prevalence of the complications caused by them also increased. To counteract the ever increasing prevalence, proper screening has to be done among people with systemic diseases.

Conclusion

CONCLUSION

The present cross sectional study, noted a prevalence rate of **60.64%** ocular morbidity among elderly in rural area. Ocular morbidity favoured people with higher age, female sex and illiterates. Major causes for ocular morbidity included cataract, refractive error, retinopathies and glaucoma, all of which are preventable or treatable. Number of ocular morbidities per person was significantly associated with age, sex, religion and literacy status of study participant.

The prevalence of visual impairment and blindness among rural elderly was 28.07% and 2.90% respectively. Cataract was the most common ocular morbidity, with prevalence rate of 37.16%. The risk factors for cataract included belonging to Muslim and Jain religion, lower literacy status and increased exposure to indoor air pollution. Diabetic and hypertensive retinopathies were significantly related to duration of illness by which they are caused respectively.

Treatment seeking behavior among the participant revealed more preference for private sector compared to government sector. Ignorance towards the effects of morbidity was the major setback for seeking treatment. Such behavior was more common in elderly female, who were the most affected by it.

Limitations

LIMITATIONS

The limitations of the present study were:

1. The present can be generalized to only rural elderly population. It can be generalized to urban slums or urban population with caution.

2. Ophthalmoscopic examination was carried out by researcher who had training for one month. So, some retina changes may be missed or misdiagnosed.

3. Some tests could not be performed like tonometry or precise refraction testing.

Recommendations

RECOMMENDATIONS

Based on the findings of our study, following recommendations are being suggested for improvement of ocular health among rural elderly:

- There is the need for more comprehensive studies targeting the identification of risk factors so as to design proper strategies to reduce the bulk of ocular morbidity.

- Development of screening procedures using simple diagnostic criteria can be utilized for training the field workers such as Male health worker, Female health worker and Accredited Social Health Activist (ASHA) for early detection of these conditions, easy referral and treatment.

- Public private partnership should be strengthened, which helps for better coverage of health services among more remote areas and most needy people. This helps in conducting more screening camps and further treatment for the diseased.

- Mobile health clinics equipped with all modern technologies can be the solution for curing the cases who are reluctant to seek care for their illness. This can be very well taken up by medical colleges in the surrounding areas.

- Health education, awareness creation and motivation programmes can be undertaken in the community by involvement of youth clubs or women organizations, targeting neglected groups such as elderly female. Early and prompt treatment should be emphasized. These programmes should encourage

and educate elderly about risk factors and complications of ocular morbid conditions, if ignored.

- Elderly should be made aware of the schemes and benefits they get from government and its role in helping them fight with various morbid conditions, by giving them free services or monetary benefits.

- Nongovernmental organizations can be encouraged to adopt rural areas and serve for betterment of community, by conducting various screening or surgical camps at rural setup.

- Strengthening of ongoing activities under the banner of National Programme for the Control of Blindness, and improving eye health care in our country.

Summary

SUMMARY

The present cross sectional study was undertaken in areas covered under Vantamuri Primary Health Centre which is the field practice area of Department of Community Medicine, Jawaharlal Nehru Medical College, Belagavi during the period January to December 2016, to gain knowledge on prevalence of ocular morbidity among elderly.

In the present study, majority (64.02%) of the participant were between the age group of 60 to 65 years and 59.19% were female. Maximum of the study subject were Hindus (93.38%), illiterates (47.90%) and almost half were housewives by occupation. Majority of participant were married (99.36%), lived in joint family (68.06%) and belonged to class IV Socio economic status (35. 64%). Among the study participant, 37.42% were users of tobacco, 15.16% were alcoholics and 88.88% were at risk of indoor air pollution. Among the study participant the prevalence of underweight, overweight and obese according to WHO Asian classification, was almost similar in male and female.

Nearly 21.29% subject were diabetic, 25.89% were hypertensive and only 7.10% had undergone ocular surgery with cataract surgery being the most common (93.18%), with almost 84.09% seeking care from private sector.

The prevalence of ocular morbidity in our study was 60.64% and nearly half (45.74%) of these participant had two ocular morbidities. The prevalence of various ocular morbidities among the study participant were, cataract (37.16%), refractive error (34.33%), diabetic retinopathy (6.71%), pseudophakia / aphakia (6.12%), hypertensive retinopathy (5.07%), pterygium (3.58%), acute conjunctivitis (2.39%),

glaucoma (1.49%), stye (1.04%), nystagmus (0.75%), chalazion (0.75%) and dacrocystitis (0.60%).

According to World Health Organization classification of visual acuity, visual impairment was 28.07% and blindness was 2.90% among study participant respectively. Among participant with visual impairment, more than half (51.39%) were male and among blind individual more than half (56.67%) female. Out of the 249 participant who had cataract, 85.14% cataract cases were bilateral, with 59.44% being mature type and female (55.02%) more affected. Prevalence rate of diabetic and hypertensive retinopathies according to their respective cases was 34.09% and 21.25% respectively. Only 18.09% participant having ocular morbidity seeked treatment, of which 87.06% preferred private sector. Nearly 67.53% were ignorant about the ocular morbid conditions they suffered.

The prevalence of ocular morbidity was significantly associated with increasing age and literacy status of study participant. There was no significant association between prevalence of ocular morbidity and sex, religion, occupation and socioeconomic status of study participant.

The number of ocular morbidity per individual was significantly associated with age, sex, religion and literacy status of study subject. The number of ocular morbidity per individual was not significantly associated with occupation and socio economic status of study population.

The prevalence of cataract was significantly associated with religion, literacy status and indoor air pollution. There was no significant association between

prevalence of cataract and age, sex, occupation, socioeconomic status, history of diabetes, hypertension, tobacco and alcohol consumption of study subject.

Diabetic retinopathy was significantly associated with duration of illness among diabetic participant and hypertensive retinopathy had similar significant association with duration of hypertension in participant diagnosed to have disease.

List of Reference

LIST OF REFERENCE

1. Thylefors B. Avoidable blindness. Bull World Health Organ 1999; 77:453.
2. Global data on visual impairment 2010. World Health Organisation; 2010. Accessed on: 6th July, 2017. Available from: http://www.who.int/blindness/GLOBALDATAFINALforweb.pdf?ua=1
3. Health Situation in South-East Asian Region New Delhi: WHO; 2002. Report No.: SEA/HS/222.
4. Ministry of statistics and programme implementation. Elderly in India. Government of India; 2016. Accessed on: 2nd August 2017. Available from: http://mospi.nic.in/sites/default/files/publication_reports/ElderlyinIndia_2016.pdf
5. Balasubramaninan D, Bansal AK, Basti S, Bhatt KS, Murthy JS, Rao CM. The biology of cataract. The Hyderabad cataract research group. Indian J Ophthalmol 1993; 41(4):153-171.
6. Rajan, Irudaya S. Population ageing and health in India. Mumbai: Centre for Enquiry into Health and Allied Themes; 2006. Accessed on: 2nd August 2017. Available at: www.cehat.org.
7. Ministry of Health and Family Welfare, Government of India. National Programme for Control of Blindness. Accessed on: 15th July 2017. Available at: http://npcb.nic.in/
8. Maureen S, Barnbay R, Cathereen W. Ocular and vision defects in preschool children. Br J Ophthalmol. 1993; 77:228-232.
9. Kishore J. J Kishore's National Health Programs of India. 12th edition: Centuary publications; 2017. 490-91.

10. Agrawal D, Singh JV, Sharma MK, Mitthal S. Ocular morbidity pattern of an urban population of Meerut. Ind J Prev Soc Med 2011; 42 (1):75-78.
11. Verma V, Prakash S, Parveen K, Shaikh S, Mishra N. A comparative study of morbidity pattern in elderly of rural and urban areas of Allahabad district, Uttar Pradesh, India. Int J Community Med Public Health 2016; 3:1152-6.
12. Indoor air pollution in India – a major environmental and public health concern. ICMR Bulletin 2000; 31(5):61-68.
13. Ministry of Health and Family Welfare, Government of India. About NPCB, National Programme for Control of Blindness. Accessed on: 15th July 2017. Available at: http://npcb.nic.in/index1.asp?linkid=29&langid=1
14. Ministry of Health and Family Welfare, Government of India. State wise targets & Achievement for various eye diseases during 2016-17. National Programme for Control of Blindness; 2017. Accessed on: 27th July 2017. Available at: http://npcb.nic.in/writereaddata/mainlinkfile/File324.pdf
15. World Health Organisation. Vision 2020 The Right to Sight: Global Initiative For The Elimination Of Avoidable Blindness Action Plan 2006–2011. Accessed on 27th July 2017. Available at: http://www.who.int/blindness/Vision2020_report.pdf
16. Vision 2020 The Right to Sight INDIA. About us: New Delhi; 2016. Accessed on 27th July 2017. Available at: http://www.vision2020india.org/about-us/brief-introduction-of-vision-2020/
17. World Health Organisation. Visual impairment and blindness; 2017. Accessed on: 19th August, 2017. Available at: http://www.who.int/mediacentre/factsheets/fs282/en/

18. World Health Organisation. Prevention of Blindness and Visual Impairment; 2017. Accessed on: 19th August, 2017. Available at: http://www.who.int/blindness/en/
19. Park K. Park's Textbook of Preventive and Social Medicine. 23rd edition: Banarasidas Bhanot publishers, Jabalpur; 2015.439-440.
20. Vision 2020 The right to sight India. New Delhi; 2016. Accessed on: 19th August, 2017. Available at: http://www.vision2020india.org
21. World health Organisation. Universal eye health: A global action plan 2014-2019, 2013: 7.
22. Singh MM, Murthy GV, Venkatraman R, Rao SP, Nayar S. A study of ocular morbidity among elderly population in a rural area of central India. Indian J Ophthalmol 1997; 45:61-65.
23. Singh A, Dwivedi S, Dabral SB, Bihari V, Rastogi AK, Kumar D. Ocular morbidity in the rural areas of Allahabad, India. Nepal J Ophthalmol 2012; 4(7):49-53.
24. Shrote KV, Thakre SS, Thakre SB, Brahmapurkar KP, Giri VC. Study of Some Epidemiological Determinants of Ocular Morbid Conditions in the Rural Area of Central India. IOSR Journal of Dental and Medical Sciences 2012; 2(1):34-38.
25. Goswami A, Reddaiah VP, Kapoor SK, Singh B, Singh U, Dey AB, et al. Prevalence and Determinants of Disability in the Rural Elderly Population in Northern India. IJPMR 2005; 16(2):39-44.
26. Murthy GV, Gupta S, Ellwein LB, Dada VK, Munoz SR, Bachani D. A population-based eye survey of older adults in a rural district of Rajasthan.

Central vision impairment, blindness and cataract surgery. Ophthalmology 2001; 108(I):679–85.

27. Jitendrakumar, Sirohi N, Tiwari N. Ocular Morbidity Among Elderly Population in Rural Areas of Bundelkhand. IOSR Journal of Dental and Medical Sciences 2016; 15(6)(VIII):5-10.
28. Vashist P, Talwar B, Gogoi M, Maraini G, Camparini M, Ravindran RD, et al. Prevalence of cataract in an older population in India: the India study of age-related eye disease. Ophthalmology 2011; 118:272–8.e1–2
29. Marmamula S, Ravuri CSLV, Boon MY, Khanna RC. A cross-sectional study of visual impairment in elderly population in residential care in the South Indian state of Andhra Pradesh: a cross-sectional study. BMJ Open 2013; 3:e002576.
30. Vijaya L, George R, Arvind H, Baskaran M, Raju P, Ramesh SV, et al. Prevalence and causes of blindness in the rural population of the Chennai Glaucoma Study. British Journal Ophthalmology 2006; 90: 407–410.
31. Aarthi R, Roy G, Kar SS, Srinivasan R. Prevalence of cataract among adults above 50 years in a rural community of Villupuram, Tamil Nadu. Int J Adv Med Health Res 2015; 2:50-4.
32. Avachat SS, Phalke V, Kambale S. Epidemiological correlates of cataract cases in tertiary health care center in rural area of Maharashtra. J Fam Med Primary Care 2014; 3:45-7.
33. Shrote KV, Thakre SS, Lanjewar AG, Brahmapurkar KP, Khakse GM. Ocular Morbid Conditions in the Rural Area of Central India. International Journal of Collaborative Research on Internal Medicine & Public Health 2012; 4(9):1692-1702.

34. Mehrotra S K, Maheshwari B B. Prevalence of ocular lesions in a rural community. Indian J Ophthalmol 1975; 23:17-20.
35. Kumar A, Srivastava AK, Mishra M, Srivastava VK. Prevalence of ocular morbidity in rural population of eastern Uttar Pradesh, India. Indian J Comm Health 2016; 28(3):275-279.
36. Khadse A, Narlawar U, Humne A, Ughade S, Dhanorkar A ,Wankhede K. Prevalence of ocular morbidities and its correlates in an urban slum of central India. Sch. J. App. Med. Sci. 2014; 2(2B):636-641.
37. Pisudde PM, Taywade ML, Sushma K, Mehendale AM, Shukla AK. An Epidemiological Study of Common Ocular Morbidities among Elderly Population in the Wardha, District, Maharashtra, India. Epidemiology 2015; 5:002.
38. Nirmalan K, Thulasiraj RD, Maneksha V, Rahmathullah R, Ramakrishnan R, Padmavathi A, et al. A population based eye survey of older adults in Tirunelveli district of south India: blindness, cataract surgery, and visual outcomes. Br J Ophthalmol 2002; 86:505–512.
39. Gupta N, Vashist P, Tandon R, Gupta SK, Dwivedi S, Mani K. Prevalence of corneal diseases in the rural Indian population: the Corneal Opacity Rural Epidemiological (CORE) study. British Journal of Ophthalmology 2015; 99:147-152.
40. Rizyal A, Shakya S, Shrestha RK and Shrestha S. A study of ocular morbidity of patients attending a satellite clinic in Bhaktapur, Nepal. Nepal Med Coll J 2010; 12(2): 87-89.
41. Heli H, Leila L. Diabetic retinopathy in people aged 70 years or older. The Oulu Eye Study. British Journal of Ophthalmology 1997; 81:214–217.

42. Damasceno NA, Ventura MP, Damasceno EF. Ocular diseases at geriatric clinics in Rio de Janeiro: social and epidemiological considerations among patients with motor locomotion deficit. Arq Bras Oftalmol. 2015; 78(1):40-3.
43. Zelalem Addisu Mehari. A study of ocular morbidity of patients attending ophthalmic outreach services in rural Ethiopia. International Journal of Medicine and Medical Sciences 2013; 3(4),450-454.
44. Labour Bureau Statistics, Government of India. Statistical data for labour; 2017. Accessed on 18th July 2017. Available at: http://labourbureaunew.gov.in/LBO_indtab.pdf
45. U.S. Department Of Health And Human Services. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure; 2004. Accessed 18th July 2017. Available at: https://www.nhlbi.nih.gov/files/docs/guidelines/jnc7full.pdf.
46. Khurana AK. Comprehensive Ophthalmology. 6th edition. New Delhi: Jaypee Brothers Medical Publishers; 2015.
47. Venkataramana , Amarnath RLC. Prevalence and pattern of ocular morbidity and factors influencing ocular morbidity in a rural population in south India: a community based cross sectional study. Int J Community Med Public Health 2017; 4:2939-45.
48. Goswami AK, Gupta SK, Kalaivani M, Nongkynrih B, Pandav CS. Burden of hypertension and diabetes among urban population aged ≥60 years in South Delhi: a community based study. J Clin Diagn Res. 2016; 10(3):LC01-5.
49. Nadarajan B, Saya GK, Krishna RB, Lakshminarayanan S. Prevalence of Diabetic Retinopathy and its Associated Factors in a Rural Area of Villupuram

District of Tamil Nadu, India. Journal of Clinical and Diagnostic Research 2017; 11(7):LC23-LC26.

50. Laskar NB. Assessment of Visual Impairment Related Knowledge and Health Care Seeking Behaviour of the Community in the District of Dibrugarh, in India. Journal of Contemporary Medical Research 2016; 3(4):1061-3.

Annexures

ANNEXURE – I – ETHICAL CLEARANCE CERTIFICATE

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

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

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

Ref: MDC/DOME/377 **Date: 18/11/2015**

Sub: Institutional Ethical Clearance for the study.

With reference to the above, we wish to inform you that your proposed research project titled **"OCULAR MORBIDITIES AMONG ELDERLY IN RURAL AREA OF BELAGAVI – A CROSS SECTIONAL STUDY",** is ethical and justifiable. The proposed research project has been cleared by the JNMC Institutional Ethics Committee on Human Subjects Research.

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

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

27

ANNEXURE – II – CONSENT FORM

OCULAR MORBIDITIES AMONG ELDERLY IN RURAL AREA OF BELAGAVI – A CROSS SECTIONAL STUDY

INVESTIGATORS: _____ _____

Introduction:

The overall prevalence of ocular morbidities in India is reported to be high among elderly. In India, the elderly account for 8% of the total population, of which two-thirds live in villages. The major reasons for the high prevalence of ocular morbidity in India may be significantly more people aged above 40 years, poor access to eye care facilities in rural areas, misconceptions about cataract surgery, compromised water quality, environmental conditions and lack of effective eye health education program.

Objective / Purpose of the study:

You are being invited to participate in the study to assess the prevalence of ocular morbidities among elderly. The study will be carried out in Vantamuri field practice area of Belagavi.

Procedures:

In this study you will have to answer a few prepared questions about your socio- demography, alcohol and tobacco consumption, indoor air pollution and previous history of diabetes, hypertension, or any ocular surgeries. Detailed ocular examination will be carried out, which includes external eye examination using torch, visual acuity and colour vision testing, followed by confrontation test. Refractive error will be assessed using ophthalmoscope followed by fundus examination after dilatation of pupils. The entire procedure may take 20-30 minutes. If you agree to participate, I will collect the required information during my visit.

Benefits:

You will be benefitted by the diagnosis done during the examination, and further you will be referred to Dept. Of Ophthalmology, KLE Hospital, Belagavi for the treatment. You will be benefited by health education given during this study. No risk is involved in the study.

Incentives:

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

Cost of participation:

You will not have any costs attached to your participation.

Legal rights:

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

Privacy and Confidentiality:

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

Withdrawal from the study:

Participation in this study is voluntary .If you don't wish to participate in this study you will not lose benefits to which you are entitled. You can withdraw from the study anytime if you wish to do so.

Authorization to publish the results:

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

Questions:

If you have any questions about rights as a research participant you can contact Dr Ganga Pilli, Chairman, JNMC Institutional Ethical Committee on Human Subjects Research on 0831-2471350.

CONSENT STATEMENT

"I have been explained all the contents of this consent form in my local language and have understood and clarified all my queries about the study to the best of my knowledge. Furthermore I recognise that I have the complete right to withdraw this consent at any point during the study. I understand that the information given by me will be confidential and will be used for research purpose only, further I am aware that the result of this research will be presented/published without disclosing any personal identification of the participants.

I hereby give my voluntary consent for participation in the study. I do sign the informed consent form in front of an eyewitness whom I recognise."

Name and Signature/left thumb impression of the Participant:

Name and Signature/left thumb impression of the Witness:

Name and Signature of the Researcher:

Date:

ANNEXURE – III – PROFORMA

OCULAR MORBIDITIES AMONG ELDERLY IN RURAL AREA OF BELAGAVI – A CROSS SECTIONAL STUDY

Sl no. _____

1) Name:

2) Age: _____ years

3) Sex:

4) Religion: Hindu / Muslim / Jain / Others

5) Occupation

6) Education: Illiterate / Primary / Secondary / PUC / Degree

7) Marital Status: Married / Unmarried

8) Type of family: Nuclear /Joint / Broken

9) Total Monthly Income:

10) No. of family members

11) Per Capita Income:

12) Socio-Economic Class:

13) Tobacco – Smoking/Smokeless/Both/ No habit

Present/ Past

14) Alcohol consumption – Yes / No

Present/ Past

15) Cooking fuel – Biomass / Kerosene stove / LPG

Smoke vent- Yes / No

16) Are you a known case of Diabetes Mellitus? Yes/No

(a) If yes, since how many years? _____

(b) On treatment / Not on treatment

17) Are you a known case of Hypertension? Yes/No

(a) If yes, since how many years? _____

(b) On treatment / Not on treatment

18) Any history of ocular surgeries? Yes/No

(a) If yes, which surgery? _____

(b) How many years back? _____

(c) Where was the surgery done? _____

19) Height:

20) Weight:

21) Body Mass Index:

22) Blood Pressure:

- **OCULAR EXAMINATION:**

23) External eye examination with torch light:

ON EXAMINATION	RIGHT EYE	LEFT EYE
NYSTAGMUS		
EYE LASHES		
EYE LIDS		
LACRIMAL APPARATUS		
CONJUNCTIVA		
SCLERA		
CORNEA		
IRIS		
PUPILLARY REACTION TO LIGHT		
LENS		

24) Visual acuity examination:

TEST	RIGHT EYE	LEFT EYE
FAR VISION		
NEAR VISION		
COLOUR VISION		

25) Confrontation test:

RIGHT EYE	LEFT EYE

26) Direct ophthalmoscopic examination:

TEST	RIGHT EYE	LEFT EYE
REFRACTIVE ERROR: YES / NO		
IF YES		
FUNDOSCOPY		

27) Ocular morbidity: Yes / No

a) If yes, treated / Not treated

i) If treated, where _____

ii) If not treated, why? _____

28) Total numbers of ocular lesions:

ANNEXURE – IV – KEY TO MASTER CHART

A. Serial number –

B. Age – _____ years

C. Sex –

1. Male
2. Female

D. Religion –

1. Hindu
2. Muslim
3. Jain

E. Occupation –

1. Retired
2. Housewife
3. Industry worker
4. Farmer

F. Education –

1. Illiterate
2. Primary school
3. Secondary school
4. Pre University College
5. Degree

G. Marital Status –

1. Married
2. Unmarried

H. Type of family –

1. Nuclear
2. Joint
3. Broken

I. Socio – Economic Class –

1. Class I
2. Class II
3. Class III
4. Class IV
5. Class V

J. Tobacco –

1. No
2. Yes

K. If yes –

1. No
2. Smokeless
3. Smoking
4. Both

L. If yes –

1. No
2. Present
3. Past

M. Alcohol consumption –

1. No
2. Yes

N. If yes –

1. No

2. Present

3. Past

O. Cooking fuel –

1. Biomass

2. Kerosene stove

3. LPG

P. Smoke vent –

1. Yes

2. No

Q. Known case of Diabetes Mellitus –

1. No

2. Yes

R. If yes,

since how many years? 1. No, _____years

S. If yes,

1. Not a Known Case

2. On treatment

3. Not on treatment

T. Are you a known case of Hypertension –

1. No

2. Yes

U. If yes,

since how many years? 1. No, _____years

V. If yes,

1. Not a Known Case

2. On treatment

3. Not on treatment

W. Any history of ocular surgeries –

1. No

2. Yes

X. If yes, which surgery?

1. No Surgery

2. Cataract

3. Pterygium

4. Glaucoma

Y. How many years back? 1. No, _____years

Z. Where was the surgery done?

1. No Surgery

2. KLE Hospital

3. Private Hospital

4. Government Hospital

AA. Height – _____cms

AB. Weight – _____ Kgs

AC. Body Mass Index – _____ Kg/m^2

AD. Systolic Blood Pressure – _____ mm/Hg

AE. Diastolic Blood Pressure – _____ mm/Hg

AF. Right Eye – Nystagmus –

1. Normal
2. Abnormal

AG. Right Eye – Eye lids –

1. Normal
2. Stye
3. Chalazion

AH. Right Eye – Lacrimal apparatus –

1. Normal
2. Dacrocystitis

AI. Right Eye – Conjunctiva –

1. Normal
2. Acute Conjunctivitis
3. Pterygium

AJ. Right Eye – Iris –

1. Normal

AK. Right Eye – Pupillary reaction to light –

1. Present
2. Absent

AL. Right Eye – Lens –

1. Normal
2. Immature Cataract
3. Mature Cataract
4. Pseudophakia/ Aphakia

AM.Left Eye – Nystagmus –

1. Normal
2. Abnormal

AN. Left Eye – Eye lids –

1. Normal
2. Stye
3. Chalazion

AO. Left Eye – Lacrimal apparatus –

1. Normal
2. Dacrocystitis

AP. Left Eye – Conjunctiva –

1. Normal
2. Acute Conjunctivitis
3. Pterygium

AQ. Left Eye – Iris –

1. Normal

AR. Left Eye – Pupillary reaction to light –

1. Present
2. Absent

AS. Left Eye – Lens –

1. Normal
2. Immature Cataract
3. Mature Cataract
4. Pseudophakia/ Aphakia

AT. Visual acquity – WHO Classification

1. Normal
2. Visual Impairment
3. Severe Visual Impairment
4. Blindness

AU. Visual acquity – ICD Classification

0. Category 0
1. Category 1
2. Category 2
3. Category 3
4. Category 4
5. Category 5

AV. Right Eye – Confrontation test –

1. Normal
2. Abnormal

AW. Left Eye – Confrontation test –

1. Normal
2. Abnormal

AX. Right Eye – Refractive Error –

1. Present
2. Absent

AY. Right Eye – Fundoscopy –

1. Normal
2. Diabetic retinopathy
3. Hypertensive Retinopathy

AZ. Left Eye – Refractive Error –

1. Present
2. Absent

BA. Left Eye – Fundoscopy –

1. Normal
2. Diabetic retinopathy
3. Hypertensive Retinopathy

BB. Ocular morbidity –

1. Present
2. Absent

BC. Total numbers of ocular lesions: _____

BD. If yes,

1. Treated
2. No morbidity
3. Not treated
4. Partially treated

BE. If treated, where

1. Not treated
2. No morbidity
3. KLE Hospital
4. Government Hospital
5. Private Hospital

BF. If not treated, why?

1. Treated
2. No morbidity
3. Recently diagnosed
4. Ignorance

Sl no.	Age	Sex	Religion	Occupation	Education	Marital status	Type of Family	Socio Economic Class	Tobacco			Alcohol		Cooking Fuel	Smoke Vent	Diabetes			Hypertension			History of Ocular surgeries				Height	Weight	BMI	Blood Pressure		Ocular Examination (Right Eye)							Ocular Examination (Left Eye)							Visual acquity		Confrontation Test		Ophthalmoscopic Examination (Rt Eye)		Ophthalmoscopic Examination (Lt Eye)		Ocular Morbidity			
									Yes/No	If Yes	Present /Past	Yes/ No	Present/Past			Yes/No	If yes, Years	Rx His	Yes/No	If yes, Years	Rx His	Yes/No	If yes, Surgery?	Yrs Back?	Where done				SBP	DBP	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Blindness stage (WHO)	Blindness stage (ICD)	Rt eye	Left eye	Refractive Error	Fundoscopy	Refractive Error	Fundoscopy	Yes/No	Number	If yes, Treated	If treaed, where
1	86	1	2	1	2	1	1	5	2	3	3	1	1	3	2	1	1	1	2	3	2	2	2	8	2	152	66	28.56648199	168	80	1	1	1	1	1	1	4	1	1	1	1	1	1	4	1	0	1	1	2	1	2	1	1	1	1	3
2	65	2	1	2	1	1	2	1	2	2	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	152	59	25.5367036	130	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
3	70	1	1	3	1	1	2	2	2	3	3	2	2	3	2	1	1	1	1	1	1	1	1	0	1	160	67	26.171875	126	72	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	3	1
4	60	1	1	4	1	1	2	4	2	4	2	2	2	3	2	1	1	1	1	1	1	1	1	0	1	169	70	24.50894577	140	90	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	1	3
5	71	1	1	1	1	1	1	1	1	1	1	2	2	3	1	2	16	2	1	1	1	2	2	2m	3	165	59	21.67125803	122	80	1	1	1	1	1	1	4	1	1	1	1	1	1	4	2	1	1	1	2	2	2	2	1	2	4	1
6	60	2	1	2	1	1	2	3	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	142	44	21.82106725	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
7	74	1	1	4	2	1	2	3	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	164	72	26.76977989	132	86	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
8	70	2	1	2	1	1	1	4	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	5	2	148	51	23.28341855	110	70	1	1	1	1	1	1	4	1	1	1	1	1	1	4	2	1	1	1	2	1	2	1	1	1	1	3
9	72	2	1	2	1	1	2	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	147	42	19.43634597	140	90	1	1	1	1	1	1	3	1	1	1	1	1	1	3	3	2	1	1	1	1	1	1	1	2	4	1
10	60	2	1	2	3	1	3	1	2	2	2	1	1	1	1	1	1	1	2	8	2	1	1	0	1	154	74	31.20256367	132	84	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	1	2	3	2	3	1	1	3	1
11	70	2	1	2	1	1	1	4	1	1	1	1	1	3	2	1	1	1	2	10	2	1	1	0	1	141	36	18.10774106	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
12	84	1	1	4	1	1	2	4	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	0	1	158	62	24.8357635	130	70	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	2	1	2	1	2	4	1
13	61	2	1	2	1	1	3	5	2	2	2	1	1	1	2	2	4	2	2	6	2	1	1	0	1	148	46	21.00073046	126	70	1	1	1	1	1	1	3	1	1	1	1	1	1	3	3	2	1	1	2	3	2	3	1	1	1	4
14	69	2	1	2	2	1	1	4	1	1	1	1	1	3	2	1	1	1	2	15	2	1	1	0	1	150	62	27.55555556	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
15	63	1	2	4	2	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	145	52	24.73246136	122	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
16	66	1	2	4	2	1	2	3	2	4	2	2	2	2	2	2	5	2	2	3	2	1	1	0	1	166	58	21.04804761	150	100	1	1	2	1	1	1	2	1	1	1	1	1	1	3	3	2	1	1	1	1	1	1	1	3	4	1
17	69	2	1	2	4	1	1	4	2	2	3	1	1	3	2	2	10	2	2	5	2	2	2	5	2	159	60	23.7332384	140	90	1	1	1	1	1	2	3	1	1	1	1	1	2	4	4	5	1	1	2	3	2	3	1	3	3	1
18	64	1	1	3	5	1	1	4	2	4	2	2	2	3	2	1	1	1	1	1	1	1	1	0	1	170	78	26.98961938	132	82	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
19	74	1	1	4	2	1	2	3	2	4	2	2	2	3	2	1	1	1	1	1	1	1	1	0	1	176	80	25.82644628	128	86	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
20	75	1	1	1	1	1	2	3	2	3	3	1	1	1	2	1	1	1	2	10	2	1	1	0	1	168	75	26.57312925	140	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	1	0	1	1	1	3	1	3	3	1		
21	67	2	1	2	1	1	2	4	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	0	1	152	68	29.43213296	110	78	1	1	1	2	1	1	1	1	1	1	2	1	1	1	1	0	1	1	2	1	2	1	1	1	1	5
22	60	2	1	2	2	1	2	3	1	1	1	1	1	3	2	2	3	2	1	1	1	1	1	0	1	145	58	27.5862069	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
23	84	2	1	2	1	1	2	4	2	2	3	1	1	3	2	1	1	1	2	25	2	2	2	8	3	149	50	22.52150804	140	90	1	1	1	1	1	1	4	1	1	1	1	1	1	3	2	1	1	1	1	3	1	3	1	4	4	1
24	64	1	1	1	4	1	2	1	2	2	3	2	3	3	2	2	10	2	2	5	2	1	1	0	1	165	62	22.77318641	136	82	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	1	5
25	77	2	1	2	2	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	151	54	23.68317179	122	80	1	3	1	1	1	1	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	2	3	1
26	62	1	1	4	2	1	2	4	2	4	2	2	2	3	2	1	1	1	1	1	1	2	3	5	4	173	81	27.06405159	132	84	1	1	1	3	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	1	4
27	82	2	1	2	1	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	65	29.67494522	134	76	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
28	61	2	1	2	2	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	147	58	26.84066824	110	72	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
29	69	2	1	2	1	1	1	3	1	1	1	1	1	2	2	2	5	2	1	1	1	1	1	0	1	143	56	27.38520221	120	74	1	1	1	3	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	3	4	1
30	69	2	1	2	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	53	23.55555556	134	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	4	3	1	1	1	1	1	1	1	2	4	1
31	70	1	2	1	1	1	1	1	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	162	48	18.28989483	160	100	1	1	1	1	1	1	3	1	1	1	1	1	1	3	3	2	1	1	1	1	1	1	1	2	4	1
32	61	1	1	3	2	1	2	5	1	1	1	1	1	1	2	1	1	1	2	6	2	1	1	0	1	152	75	32.46191136	192	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
33	73	1	1	1	1	1	2	1	2	3	2	2	2	3	2	1	1	1	1	1	1	1	1	0	1	155	56	23.30905307	140	78	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
34	65	2	1	4	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	150	50	22.22222222	108	82	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
35	68	1	1	4	1	1	1	5	1	1	1	2	2	1	1	2	20	2	1	1	1	1	1	0	1	152	65	28.13365651	120	84	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	1	1	1	2	2	2	1	2	3	1	
36	60	1	1	4	2	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	162	60	22.86236854	160	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
37	68	1	1	3	2	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	55	22.89281998	90	62	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
38	66	2	1	4	1	1	1	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	154	50	21.08281329	90	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
39	63	2	1	2	1	1	2	4	2	2	3	1	1	1	2	2	10	2	2	15	2	1	1	0	1	150	49	21.77777778	100	70	1	1	1	1	1	1	3	1	1	1	1	1	1	3	3	2	1	1	1	3	1	3	1	3	4	1
40	60	2	1	1	3	1	3	2	2	2	3	1	1	3	1	1	1	1	1	1	1	1	1	0	1	155	40	16.64932362	110	68	1	1	1	2	1	1	1	1	1	1	2	1	1	1	1	0	1	1	2	1	2	1	1	1	1	3
41	62	2	1	4	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	155	55	22.89281998	120	82	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
42	65	1	1	4	1	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	153	55	23.49523687	180	90	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	2	1	2	1	1	1	3	1
43	67	2	1	1	2	1	2	4	1	1	1	1	1	3	2	2	5	2	1	1	1	1	1	0	1	155	55	22.89281998	130	86	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
44	60	2	2	2	2	1	1	5	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	154	50	21.08281329	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
45	75	2	2	2	2	1	2	4	2	2	2	1	1	3	2	2	10	2	1	1	1	1	1	0	1	163	56	21.07719523	110	76	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	2	2	2	1	1	3	1
46	73	1	2	1	2	1	2	3	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	0	1	175	67	21.87755102	120	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
47	72	2	1	2	4	1	1	3	1	1	1	1	1	3	2	2	8	2	2	10	2	2	2	8	4	159	40	15.82215893	110	70	1	1	1	1	1	1	3	1	1	1	1	1	1	4	3	2	1	1	1	3	1	3	1	4	4	1
48	76	1	1	4	2	1	1	4	2	2	2	2	2	3	2	1	1	1	1	1	1	1	1	0	1	144	31	14.94984568	100	60	1	1	1	1	1	1	3	1	1	1	1	1	1	3	3	2	1	1	1	1	1	1	1	2	4	1
49	60	1	1	3	5	1	2	4	1	1	1	2	2	3	2	1	1	1	1	1	1	1	1	0	1	150	44	19.55555556	120	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
50	65	1	1	4	1	1	2	3	1	1	1	1	1	1	2	2	8	2	1	1	1	1	1	0	1	154	52	21.92612582	120	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	3	2	1	1	1	2	1	2	1	3	4	1
51	62	2	1	2	2	1	2	3	2	2	2	1	1	1	2	2	20	2	2	6	2	1	1	0	1	165	52	19.10009183	110	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	2	1	2	4	1
52	60	2	1	2	2	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	147	40	18.51080568	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
53	65	2	1	2	1	1	2	3	1	1	1	1	1	3	2	2	5	2	1	1	1	1	1	0	1	152	39	16.88019391	100	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	3
54	68	1	1	4	1	1	2	4	2	4	2	2	3	3	2	2	6	2	1	1	1	1	1	0	1	146	40	18.76524676	126	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2

Sl no.	Age	Sex	Religion	Occupation	Education	Marital status	Type of Family	Socio Economic Class	Tobacco			Alcohol		Cooking Fuel	Smoke Vent	Diabetes			Hypertension			History of Ocular surgeries				Height	Weight	BMI	Blood Pressure		Ocular Examination (Right Eye)							Ocular Examination (Left Eye)							Visual acquity		Confrontation Test		Ophthalmoscopic Examination (Rt Eye)		Ophthalmoscopic Examination (Lt Eye)		Ocular Morbidity				
									Yes/No	If Yes	Present /Past	Yes/ No	Present/Past			Yes/No	If yes, Years	Rx His	Yes/No	If yes, Years	Rx His	Yes/No	If yes, Surgery?	Yrs Back?	Where done				SBP	DBP	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Blindness stage (WHO)	Blindness stage (ICD)	Rt eye	Left eye	Refractive Error	Fundoscopy	Refractive Error	Fundoscopy	Yes/No	Number	If yes, Treated	If treated, where
55	60	2	1	2	1	1	2	1	2	2	3	1	1	3	2	2	15	2	1	1	1	1	1	0	1	146	40	18.76524676	140	84	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
56	74	1	1	1	1	1	2	4	1	1	1	2	2	3	2	2	20	2	1	1	1	1	1	0	1	156	47	19.31295201	110	70	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
57	62	1	1	4	1	1	2	4	2	4	2	2	2	2	2	1	1	1	1	1	1	1	1	0	1	155	56	23.30905307	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
58	70	2	1	2	2	1	2	4	2	2	3	1	1	3	1	2	15	2	1	1	1	1	1	0	1	152	58	25.10387812	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	1	2	2	2	2	1	1	3	1
59	65	2	1	2	1	1	1	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	155	52	21.64412071	108	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
60	60	2	1	2	1	1	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	144	45	21.70138889	132	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
61	65	1	1	3	4	1	1	1	2	2	3	1	1	3	2	2	12	2	2	12	2	1	1	0	1	160	36	14.0625	180	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
62	64	2	1	2	2	1	2	1	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	160	65	25.390625	140	90	1	1	1	3	1	1	1	1	1	1	3	1	1	1	1	0	1	1	2	1	2	1	1	1	3	1
63	68	1	1	1	1	1	2	5	1	1	1	2	2	1	2	2	6	2	1	1	1	1	1	0	1	160	66	25.78125	140	92	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	2	1	2	1	3	4	1
64	62	2	1	2	1	1	2	1	2	2	3	1	1	1	2	1	1	1	2	15	2	1	1	0	1	148	37	16.89189189	160	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	4	3	1	1	1	3	1	3	1	3	4	1
65	60	1	1	4	3	1	1	2	2	4	2	2	2	3	1	1	1	1	1	1	1	1	1	0	1	160	50	19.53125	126	76	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
66	62	2	1	2	1	1	2	5	1	1	1	1	1	3	2	1	1	1	2	8	2	1	1	0	1	165	39	14.32506887	140	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	3	2	3	1	1	3	1
67	64	1	1	4	1	1	2	1	1	1	1	1	1	3	2	1	1	1	2	5	2	1	1	0	1	164	59	21.93634741	106	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
68	67	2	1	2	2	1	1	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	152	42	18.17867036	110	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
69	60	2	1	2	1	1	2	3	1	1	1	1	1	1	2	2	8	2	1	1	1	1	1	0	1	163	35	13.17324702	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	2	2	2	1	1	3	1
70	60	2	1	2	2	1	3	4	1	1	1	1	1	1	1	1	1	1	2	10	2	1	1	0	1	162	60	22.86236854	164	110	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
71	66	2	1	2	3	1	1	2	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	165	62	22.77318641	150	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
72	60	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	160	70	27.34375	140	100	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	2	4	1
73	62	2	1	3	2	1	3	4	1	1	1	1	1	1	2	2	10	2	2	25	2	1	1	0	1	155	47	19.56295525	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	3	2	3	1	1	3	1
74	62	2	1	1	1	1	1	4	1	1	1	1	1	3	2	1	1	1	2	5	2	1	1	0	1	160	54	21.09375	150	100	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	0	1	1	2	1	2	1	1	1	3	1
75	63	2	1	4	2	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	153	60	25.6311675	106	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
76	60	1	2	4	1	1	2	4	1	1	1	2	2	3	2	1	1	1	1	1	1	1	1	0	1	167	60	21.51385851	120	70	1	1	1	1	1	1	2	1	1	1	1	1	1	3	1	0	1	1	1	1	1	1	1	2	4	1
77	60	2	1	3	2	1	1	3	2	2	3	1	1	3	2	2	10	2	1	1	1	1	1	0	1	159	70	27.68877813	102	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	1	2	2	2	2	1	1	1	3
78	64	1	1	4	4	1	1	3	2	2	3	2	2	3	2	2	15	2	1	1	1	1	1	0	1	160	44	17.1875	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	2	1	2	4	1
79	65	1	1	1	4	1	2	4	2	3	3	2	2	3	2	1	1	1	1	1	1	1	1	0	1	145	44	20.9274673	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
80	62	1	1	3	2	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	158	44	17.62538055	110	70	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
81	68	2	1	4	2	1	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	149	39	17.56677627	132	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	5
82	60	2	1	4	4	1	2	3	2	2	2	1	1	3	2	2	3	3	2	6	3	1	1	0	1	156	53	21.77843524	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
83	65	2	1	2	2	1	2	4	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	150	53	23.55555556	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
84	61	1	1	4	2	1	2	3	1	1	1	2	3	3	2	2	3	2	1	1	1	1	1	0	1	152	46	19.9099723	110	72	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	3	1
85	62	2	1	2	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	162	63	24.00548697	136	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
86	64	1	1	4	2	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	0	1	150	52	23.11111111	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
87	61	1	1	4	2	1	2	4	1	1	1	2	2	3	2	2	10	2	1	1	1	1	1	0	1	152	42	18.17867036	110	80	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	1	2	2	2	2	1	2	3	1
88	65	2	1	4	1	1	2	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	150	41	18.22222222	100	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
89	60	2	1	4	2	1	2	4	2	2	2	1	1	1	2	2	5	2	2	15	2	1	1	0	1	165	65	23.87511478	150	100	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
90	62	2	1	4	1	1	1	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	60	26.66666667	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	2	1	1	1	1	1	1	1	2	4	1
91	63	1	1	4	1	1	2	3	1	1	1	1	1	1	2	2	18	2	1	1	1	1	1	0	1	160	63	24.609375	112	78	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	2	1	2	1	3	4	1
92	62	2	1	4	1	1	2	1	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	0	1	155	65	27.05515088	118	80	1	1	1	2	1	1	2	1	1	1	2	1	1	2	1	0	1	1	1	1	1	1	1	3	4	1
93	62	1	1	4	2	1	1	1	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	165	55	20.2020202	120	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
94	70	2	1	2	1	1	2	5	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	162	48	18.28989483	130	70	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
95	60	1	1	4	3	1	3	1	2	4	2	1	1	3	1	2	20	2	1	1	1	1	1	0	1	160	72	28.125	110	76	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	1	1	1	2	2	2	2	1	2	3	1
96	60	2	1	2	1	1	1	2	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	154	74	31.20256367	108	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
97	63	1	1	4	3	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	159	80	31.64431787	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
98	86	2	1	2	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	161	80	30.86300683	140	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	3	2	2	2	1	2	1	1	1	3	1
99	65	2	1	2	4	1	1	3	2	2	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	170	81	28.02768166	130	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
100	70	2	1	2	1	1	2	3	2	2	3	1	1	1	1	1	1	1	1	1	1	1	1	0	1	151	56	24.5603263	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
101	60	2	1	2	2	1	2	4	1	1	1	1	1	1	2	1	1	1	2	7	2	1	1	0	1	165	50	18.36547291	150	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
102	71	1	1	1	3	1	1	2	2	4	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	146	40	18.76524676	100	60	1	1	1	1	1	1	3	1	1	1	1	1	1	2	3	2	1	1	1	1	1	1	1	2	4	1
103	60	2	1	2	2	1	1	1	2	2	2	1	1	1	2	2	5	2	1	1	1	1	1	0	1	152	65	28.13365651	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	3	1
104	74	2	1	2	2	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	154	65	27.40765728	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
105	70	2	2	2	2	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	65	29.67494522	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
106	72	1	2	1	2	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	168	76	26.92743764	110	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
107	60	2	1	2	1	1	2	4	1	1	1	1	1	3	2	2	12	2	1	1	1	2	2	2	3	155	80	33.29864724	130	90	1	1	1	1	1	1	3	1	1	1	1	1	1	4	3	2	1	1	2	2	2	2	1	3	4	1
108	70	1	1	1	1	1	2	3	1	1	1	1	1	3	2	2	12	2	1	1	1	1	0	1	159	65	25.71100827	130	90	1	1	1	1	1	1	3	1	1	1	1	1	1	3	1	0	1	1	1	2	1	2	1	3	4	1

Sl no.	Age	Sex	Religion	Occupation	Education	Marital status	Type of Family	Socio Economic Class	Tobacco			Alcohol		Cooking Fuel	Smoke Vent	Diabetes			Hypertension			History of Ocular surgeries				Height	Weight	BMI	Blood Pressure		Ocular Examination (Right Eye)							Ocular Examination (Left Eye)							Visual acquity		Confrontation Test		Ophthalmoscopic Examination (Rt Eye)		Ophthalmoscopic Examination (Lt Eye)		Ocular Morbidity			
									Yes/No	If Yes	Present /Past	Yes/ No	Present/Past			Yes/No	If yes, Years	Rx His	Yes/No	If yes, Years	Rx His	Yes/No	If yes, Surgery?	Yrs Back?	Where done				SBP	DBP	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Blindness stage (WHO)	Blindness stage (ICD)	Rt eye	Left eye	Refractive Error	Fundoscopy	Refractive Error	Fundoscopy	Yes/No	Number	If yes, Treated	If treated, where
109	84	1	1	1	2	1	2	3	2	3	2	2	2	3	2	2	6	2	1	1	1	1	1	0	1	160	69	26.953125	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
110	61	1	1	3	3	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	60	26.66666667	140	90	1	1	1	2	1	1	3	1	1	1	2	1	1	3	3	2	1	1	1	1	1	1	1	3	4	1
111	69	2	1	2	1	1	2	4	1	1	1	1	1	3	2	1	1	1	2	10	2	1	1	0	1	160	65	25.390625	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	3	2	3	1	1	1	4
112	63	2	1	2	2	1	1	3	1	1	1	1	1	3	2	2	3	2	1	1	1	1	1	0	1	155	80	33.29864724	110	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
113	66	2	1	2	2	1	1	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	150	50	22.22222222	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
114	69	1	1	1	2	1	2	4	1	1	1	1	1	3	2	2	10	2	2	15	2	1	1	0	1	150	70	31.11111111	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	3	2	3	1	1	3	1
115	64	2	1	2	2	1	2	3	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	145	30	14.26872771	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
116	74	1	3	4	1	1	2	4	2	2	3	1	1	3	2	2	8	2	2	10	2	1	1	0	1	149	47	21.17021756	170	110	1	1	1	1	1	1	3	1	1	1	1	1	1	3	4	3	1	1	1	2	1	2	1	3	4	1
117	75	1	2	1	3	1	2	1	2	3	3	2	3	3	2	2	15	2	2	5	2	1	1	0	1	148	56	25.56610665	130	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	1	1	2	2	2	2	1	2	3	1
118	67	2	1	2	2	1	2	4	1	1	1	1	1	1	1	2	6	2	1	1	1	1	1	0	1	148	58	26.47918188	160	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
119	60	2	1	2	1	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	155	76	31.63371488	140	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
120	84	2	1	2	1	1	2	4	2	2	2	1	1	2	2	1	1	1	2	10	2	2	2	15	3	148	30	13.69612856	140	80	1	1	1	1	1	1	4	1	1	1	1	1	1	4	2	1	1	1	1	3	1	3	4	1
121	64	1	1	3	2	1	2	3	2	2	2	1	1	2	2	1	1	1	1	1	1	1	1	0	1	154	53	22.34778209	140	100	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	0	1	1	2	1	2	1	1	1	1	3
122	77	2	1	2	1	1	2	3	1	1	1	1	1	1	1	2	4	2	1	1	1	1	1	0	1	144	54	26.04166667	140	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	2	1	2	1	3	4	1
123	62	1	1	3	4	1	2	1	1	1	1	1	1	3	2	1	1	1	2	25	2	1	1	0	1	150	49	21.77777778	136	86	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
124	82	2	1	2	1	1	1	1	2	2	2	1	1	3	2	1	1	1	1	1	1	2	2	5	4	148	58	26.47918188	132	84	1	1	1	1	1	1	4	1	1	1	1	1	1	3	3	2	1	1	1	1	1	1	1	3	4	1
125	61	1	1	4	1	1	2	5	1	1	1	2	2	3	2	2	6	2	2	6	2	1	1	0	1	152	46	19.9099723	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
126	69	2	1	2	1	1	1	1	1	1	1	2	2	3	2	1	1	1	1	1	1	1	1	0	1	156	57	23.42209073	160	100	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	1	5
127	69	1	1	3	1	1	1	2	2	2	2	2	3	1	1	1	1	1	1	1	1	1	1	0	1	152	65	28.13365651	120	84	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
128	66	2	1	2	2	1	2	5	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0	1	152	50	21.64127424	160	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	5
129	60	2	1	2	2	2	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	152	42	18.17867036	180	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
130	60	2	1	2	2	1	2	3	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	154	70	29.51593861	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
131	70	2	1	2	1	1	1	3	2	2	3	1	1	3	2	2	8	2	1	1	1	1	1	0	1	148	45	20.54419284	110	76	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1	2	1	2	4	1
132	60	1	1	3	1	1	2	4	1	1	1	1	1	3	2	2	5	2	2	6	2	1	1	0	1	145	80	38.04994055	108	80	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	1	2	1	2	1	3	4	1
133	63	2	1	2	4	1	2	2	1	1	1	1	1	3	2	2	4	2	1	1	1	1	1	0	1	152	60	25.96952909	126	76	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
134	65	2	1	2	3	1	1	1	2	2	3	1	1	3	2	2	10	2	1	1	1	1	1	0	1	148	40	18.26150475	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
135	70	2	2	2	2	1	2	4	1	1	1	1	1	3	2	2	6	2	1	1	1	1	1	0	1	152	66	28.56648199	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	2	2	2	1	1	3	1
136	60	1	2	4	2	1	3	4	1	1	1	1	1	3	2	2	2	2	2	5	2	1	1	0	1	152	59	25.5367036	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
137	73	2	1	2	1	1	1	5	2	2	3	1	1	3	2	2	20	2	1	1	1	1	1	0	1	160	67	26.171875	136	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	3	1	1	2	2	2	2	1	1	1	3
138	65	1	1	4	2	1	2	4	2	2	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	148	65	29.67494522	160	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	3	2	2	2	1	2	1	1	1	4	1
139	68	1	1	4	2	1	3	3	1	1	1	2	2	1	2	1	1	1	2	15	2	1	1	0	1	165	59	21.67125803	150	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	3	2	3	1	1	3	1
140	60	1	1	4	2	1	1	3	2	4	2	1	1	3	2	2	10	2	1	1	1	1	1	0	1	142	44	21.82106725	160	90	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	2	1	1	2	1	2	1	4	4	1
141	68	2	1	2	2	1	2	4	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	0	1	164	72	26.76977989	150	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
142	66	2	1	2	1	1	2	4	1	1	1	1	1	3	2	2	4	2	1	1	1	1	1	0	1	148	51	23.28341855	110	70	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	0	1	1	2	1	2	1	1	1	3	1
143	60	2	1	2	2	1	1	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	147	42	19.43634597	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	2	4	1
144	60	1	1	4	2	1	1	3	1	1	1	1	1	3	2	2	7	2	1	1	1	1	1	0	1	154	74	31.20256367	140	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
145	62	2	1	2	2	1	2	4	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	0	1	141	36	18.10774106	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
146	60	1	1	4	2	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	158	62	24.8357635	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
147	60	1	1	4	2	1	2	4	2	3	2	2	3	2	2	1	1	1	1	1	1	1	1	0	1	148	46	21.00073046	126	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
148	65	2	1	1	5	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	62	27.55555556	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	4
149	75	2	1	2	1	1	2	4	1	1	1	1	1	3	2	2	15	2	1	1	1	1	1	0	1	145	52	24.73246136	122	70	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	1	1	1	1	2	1	2	1	3	4	1
150	73	2	1	2	1	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	166	58	21.04804761	132	80	1	1	1	2	1	1	3	1	1	1	2	1	1	3	3	2	1	1	1	1	1	1	1	3	4	1
151	72	1	1	4	1	1	2	4	1	1	1	1	1	3	2	1	1	1	2	6	2	2	2	8	2	159	60	23.7332384	140	90	1	1	1	1	1	1	4	1	1	1	1	1	1	4	1	0	1	1	2	1	2	1	1	1	1	3
152	60	2	1	2	1	1	2	3	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	0	1	170	78	26.98961938	132	82	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
153	60	1	1	4	1	1	2	3	2	3	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	176	80	25.82644628	128	86	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
154	65	2	1	2	2	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	168	75	26.57312925	140	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
155	62	1	1	4	2	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	2	2	5	2	152	68	29.43213296	110	78	1	1	1	1	1	1	4	1	1	1	1	1	1	4	1	0	1	1	2	1	2	1	1	1	1	3
156	60	2	1	2	3	1	2	5	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	145	58	27.5862069	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
157	65	1	1	3	1	1	3	1	2	2	3	2	3	1	1	1	1	1	1	1	1	1	1	0	1	149	50	22.52150804	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	3	1
158	68	2	1	2	2	1	2	2	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	6	2	165	62	22.77318641	136	82	1	1	1	1	1	1	4	1	1	1	1	1	1	4	1	0	1	1	1	1	1	1	1	2	4	1
159	60	2	1	2	2	1	1	5	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	151	54	23.68317179	122	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
160	74	2	1	4	1	1	1	1	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	173	81	27.06405159	132	84	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	5
161	60	2	1	4	2	1	2	3	1	1	1	1	1	1	2	1	1	1	2	12	2	1	1	0	1	169	70	24.50894577	150	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	3	2	3	1	1	3	1
162	70	1	1	1	3	1	2	3	1	1	1	2	2	3	2	1	1	1	1	1	1	1	1	0	1	147	58	26.84066824	110	72	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	2	4	1

Sl no.	Age	Sex	Religion	Occupation	Education	Marital status	Type of Family	Socio Economic Class	Tobacco			Alcohol		Cooking Fuel	Smoke Vent	Diabetes			Hypertension			History of Ocular surgeries				Height	Weight	BMI	Blood Pressure		Ocular Examination (Right Eye)							Ocular Examination (Left Eye)							Visual acquity		Confrontation Test		Ophthalmoscopic Examination (Rt Eye)		Ophthalmoscopic Examination (Lt Eye)		Ocular Morbidity			
									Yes/No	If Yes	Present /Past	Yes/ No	Present/Past			Yes/No	If yes, Years	Rx His	Yes/No	If yes, Years	Rx His	Yes/No	If yes, Surgery?	Yrs Back?	Where done				SBP	DBP	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Blindness stage (WHO)	Blindness stage (ICD)	Rt eye	Left eye	Refractive Error	Fundoscopy	Refractive Error	Fundoscopy	Yes/No	Number	If yes, Treated	If treated, where
163	65	2	1	4	2	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	0	1	1	143	56	27.38520221	120	74	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
164	64	2	1	2	1	1	1	2	1	1	1	1	1	3	2	1	1	1	2	15	2	1	1	0	1	150	53	23.55555556	134	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	5
165	65	2	1	2	2	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	162	48	18.28989483	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
166	60	1	1	3	1	1	2	4	2	3	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	75	32.46191136	110	78	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	2	4	1
167	68	2	1	2	1	1	1	4	1	1	1	1	1	3	2	2	8	2	2	5	2	2	2	4	2	155	56	23.30905307	140	78	1	1	1	1	1	1	3	1	1	1	1	1	1	4	1	0	1	1	2	1	2	1	1	2	4	1
168	62	1	1	3	3	1	2	5	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	50	22.22222222	108	82	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
169	60	1	1	3	2	1	3	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	152	65	28.13365651	120	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
170	62	1	1	3	1	1	1	3	1	1	1	1	1	3	2	1	1	1	2	10	2	1	1	0	1	162	60	22.86236854	160	92	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
171	64	2	1	2	2	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	55	22.89281998	90	62	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
172	67	2	1	2	1	1	3	4	2	2	3	1	1	3	2	2	3	2	1	1	1	1	1	0	1	154	50	21.08281329	90	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
173	61	2	1	2	2	1	2	4	2	2	3	1	1	3	2	1	1	1	1	1	1	2	2	8	3	150	49	21.77777778	100	70	1	1	1	1	1	1	4	1	1	1	1	1	1	2	2	1	1	1	2	1	2	1	1	2	4	1
174	60	1	1	4	2	1	2	3	2	3	3	2	2	3	2	2	10	2	2	5	2	1	1	0	1	155	40	16.64932362	110	68	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	2	2	2	1	1	3	1
175	60	2	1	2	2	1	2	3	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	0	1	155	55	22.89281998	120	82	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
176	67	1	1	4	2	1	1	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	153	55	23.49523687	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
177	62	1	1	4	2	1	2	3	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	55	22.89281998	130	86	1	1	1	1	1	2	2	1	1	1	1	1	2	1	4	5	1	1	2	1	2	1	1	1	3	1
178	62	2	1	2	1	1	2	4	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	0	1	154	50	21.08281329	100	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
179	63	2	1	2	1	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	163	56	21.07719523	130	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
180	60	2	1	2	1	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	175	67	21.87755102	120	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
181	60	1	1	3	5	1	3	4	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	159	40	15.82215893	110	70	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
182	64	2	1	2	1	1	1	4	1	1	1	1	1	1	2	1	1	1	2	8	2	1	1	0	1	144	31	14.94984568	100	60	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	3	1
183	65	1	1	4	2	1	2	3	1	1	1	2	2	3	2	1	1	1	1	1	1	1	1	0	1	150	44	19.55555556	120	70	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
184	62	2	1	2	2	1	3	3	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	154	52	21.92612582	120	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	1	0	1	1	1	1	1	1	1	2	4	1
185	60	1	1	4	1	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	165	52	19.10009183	110	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
186	69	2	1	2	2	1	2	1	1	1	1	1	1	1	2	1	1	1	2	4	2	1	1	0	1	147	40	18.51080568	140	90	1	1	1	3	1	1	1	1	1	1	1	1	1	1	3	2	2	1	1	1	1	1	1	3	4	1
187	65	1	1	4	1	1	2	5	2	4	2	1	1	1	1	1	1	1	1	1	1	1	1	0	1	152	39	16.88019391	100	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	5
188	61	2	1	2	4	1	1	1	2	2	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	146	40	18.76524676	126	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
189	62	2	1	2	2	1	1	2	1	1	1	1	1	1	2	1	1	1	2	15	2	1	1	0	1	146	40	18.76524676	140	84	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
190	60	2	1	2	1	1	2	5	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	156	47	19.31295201	110	70	1	1	1	2	1	1	1	1	1	1	2	1	1	1	1	0	1	1	2	1	2	1	1	1	1	5
191	61	2	1	2	1	1	2	1	2	2	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	155	56	23.30905307	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
192	65	1	1	4	3	1	2	3	1	1	1	2	3	3	2	1	1	1	1	1	1	1	1	0	1	152	58	25.10387812	120	80	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	2	1	2	1	1	1	3	1
193	60	2	1	2	1	1	2	3	1	1	1	1	1	3	2	2	10	2	2	10	2	1	1	0	1	155	52	21.64412071	170	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
194	62	2	1	2	1	1	2	4	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	144	45	21.70138889	132	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
195	63	2	1	2	2	1	2	2	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	160	36	14.0625	110	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
196	60	1	1	4	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	160	65	25.390625	140	90	1	1	1	1	1	1	2	1	2	1	1	1	1	3	2	1	1	1	1	1	1	1	3	4	1
197	62	2	1	2	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	2	2	2	3	160	66	25.78125	140	92	1	1	1	1	1	1	3	1	1	1	1	1	1	4	1	0	1	1	1	1	1	1	3	4	1
198	70	1	1	1	3	1	2	4	2	4	2	1	1	1	2	2	25	2	2	25	2	1	1	0	1	148	37	16.89189189	160	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	2	1	2	1	3	4	1
199	68	1	1	1	1	1	2	5	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	0	1	160	50	19.53125	140	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
200	60	1	1	3	1	1	1	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	165	39	14.32506887	140	100	1	1	1	1	1	1	3	1	1	1	1	1	1	3	1	0	1	1	1	1	1	1	1	2	4	1
201	60	2	1	2	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	164	59	21.93634741	106	80	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	0	1	1	2	1	2	1	1	1	3	1
202	60	2	1	2	2	1	1	3	1	1	1	1	1	3	2	2	3	2	1	1	1	1	1	0	1	152	42	18.17867036	110	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	1	2	1	1	1	1	1	2	4	1
203	63	2	1	2	2	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	163	35	13.17324702	120	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
204	60	1	1	4	2	1	2	4	2	3	2	2	2	3	2	2	5	2	1	1	1	1	1	0	1	162	60	22.86236854	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	1	1	1	1	1	5
205	86	2	1	2	1	1	1	3	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	0	1	165	62	22.77318641	100	80	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	3	1
206	65	1	1	4	3	1	1	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	160	70	27.34375	140	100	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
207	70	1	1	1	2	1	2	4	1	1	1	1	1	3	2	1	1	1	2	5	2	1	1	0	1	155	47	19.56295525	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
208	60	2	1	2	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	160	54	21.09375	120	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
209	71	2	1	2	1	1	2	4	1	1	1	1	1	3	2	2	5	2	1	1	1	1	1	0	1	153	60	25.6311675	106	70	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	3	1
210	60	2	1	2	4	1	2	1	2	2	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	167	60	21.51385851	120	70	1	1	1	1	1	1	2	1	1	1	1	1	1	3	1	0	1	1	1	1	1	1	1	2	3	1
211	74	1	3	1	1	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	10	2	159	70	27.68877813	102	60	1	1	1	1	1	1	4	1	1	1	1	1	1	4	3	2	1	1	1	1	1	1	1	2	4	1
212	70	2	3	2	1	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	160	44	17.1875	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	3	1
213	72	1	3	1	1	1	2	4	2	2	3	2	2	1	2	1	1	1	1	1	1	1	0	1	0	145	44	20.9274673	130	70	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	3	1
214	60	2	3	2	2	1	2	3	2	2	3	1	1	3	2	1	1	1	2	15	2	1	1	0	1	158	44	17.62538055	110	70	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	3	1	3	1	3	4	1
215	70	1	1	1	2	1	1	3	1	1	1	1	1	3	2	2	14	2	1	1	1	2	2	5	4	149	39	17.56677627	132	90	1	1	1	1	1	1	4	1	1	1	1	1	1	4	2	1	1	1	2	2	2	2	1	2	4	1
216	84	2	1	2	2	1	1	1	2	2	2	1	1	3	2	1	1	1	1	1	1	1	0	1	1	156	53	21.77843524	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2

Sl no.	Age	Sex	Religion	Occupation	Education	Marital status	Type of Family	Socio Economic Class	Tobacco			Alcohol		Cooking Fuel	Smoke Vent	Diabetes			Hypertension			History of Ocular surgeries				Height	Weight	BMI	Blood Pressure		Ocular Examination (Right Eye)							Ocular Examination (Left Eye)							Visual acquity		Confrontation Test		Ophthalmoscopic Examination (Rt Eye)		Ophthalmoscopic Examination (Lt Eye)		Ocular Morbidity			
									Yes/No	If Yes	Present /Past	Yes/ No	Present/Past			Yes/No	If yes, Years	Rx His	Yes/No	If yes, Years	Rx His	Yes/No	If yes, Surgery?	Yrs Back?	Where done				SBP	DBP	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Blindness stage (WHO)	Blindness stage (ICD)	Rt eye	Left eye	Refractive Error	Fundoscopy	Refractive Error	Fundoscopy	Yes/No	Number	If yes, Treated	If treated, where
217	61	1	1	3	1	1	2	1	2	4	2	1	1	3	1	1	1	1	1	1	1	1	1	0	1	150	53	23.55555556	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
218	69	2	1	2	2	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	2	2	6	2	152	46	19.9099723	110	72	1	1	1	1	1	1	4	1	1	1	1	1	1	4	1	0	1	1	2	1	2	1	1	1	1	3
219	63	2	1	2	1	1	2	1	1	1	1	1	1	3	2	1	1	1	2	5	2	1	1	0	1	162	63	24.00548697	148	70	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
220	66	2	1	4	3	1	2	2	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	150	52	23.11111111	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	3
221	69	2	1	4	1	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	42	18.17867036	110	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
222	64	1	1	4	1	1	2	1	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	0	1	150	41	18.22222222	100	70	1	1	1	2	1	1	3	1	1	1	2	1	1	2	2	1	1	1	1	1	1	1	3	4	1
223	74	2	1	4	1	1	2	3	2	2	2	1	1	1	2	2	6	2	1	1	1	1	1	0	1	165	65	23.87511478	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
224	75	2	1	2	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	150	60	26.66666667	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
225	67	2	1	2	2	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	160	63	24.609375	112	78	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
226	60	1	1	4	3	1	2	2	1	1	1	1	1	3	2	1	1	1	2	5	2	1	1	0	1	155	65	27.05515088	118	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
227	84	2	1	2	1	1	1	1	1	1	1	1	1	3	2	2	10	2	1	1	1	2	2	8	3	165	55	20.2020202	120	80	2	1	1	1	1	1	3	2	1	1	1	1	1	4	2	1	1	1	1	1	1	1	4	1	3
228	64	1	1	4	2	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	162	48	18.28989483	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	3
229	77	1	1	1	1	1	1	4	2	3	3	2	2	3	2	1	1	1	1	1	1	1	1	0	1	160	72	28.125	110	74	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
230	62	1	1	4	2	1	1	5	2	2	3	2	2	1	2	1	1	1	1	1	1	1	1	0	1	154	74	31.20256367	120	60	1	1	1	1	1	1	3	1	1	1	1	1	1	3	1	0	1	1	1	1	1	1	2	4	1
231	82	2	1	2	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	159	80	31.64431787	108	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	3
232	61	2	1	2	2	1	2	3	1	1	1	1	1	1	2	2	5	2	2	10	2	1	1	0	1	161	80	30.86300683	140	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
233	69	2	1	2	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	2	2	4	2	170	81	28.02768166	130	80	1	1	1	1	1	1	4	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	3	4	1
234	69	1	1	1	1	1	1	4	2	2	2	1	1	3	2	2	8	2	1	1	1	1	1	0	1	151	56	24.5603263	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
235	63	2	1	2	3	1	2	4	2	2	2	1	1	2	1	1	1	1	1	1	1	1	1	0	1	165	50	18.36547291	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
236	60	1	1	1	2	1	2	3	1	1	1	1	1	3	2	1	1	1	2	12	2	1	1	0	1	146	40	18.76524676	100	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
237	63	1	1	1	1	1	1	3	1	1	1	2	2	1	2	2	5	2	1	1	1	1	1	0	1	152	65	28.13365651	130	70	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	3	1
238	65	2	1	2	2	1	2	4	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	154	65	27.40765728	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	3
239	70	2	1	2	1	1	2	3	1	1	1	1	1	3	1	1	1	1	2	15	2	1	1	0	1	148	65	29.67494522	130	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	3	1	3	1	3	4	1
240	60	2	1	2	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	168	76	26.92743764	110	80	1	1	1	1	1	1	2	1	2	1	3	1	1	3	2	1	1	1	1	1	1	1	4	4	1
241	73	1	1	1	1	1	2	1	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	80	33.29864724	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
242	65	2	1	2	2	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	159	65	25.71100827	130	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
243	68	1	1	3	3	1	2	4	1	1	1	2	3	1	2	1	1	1	1	1	1	1	1	0	1	160	69	26.953125	120	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	2	4	1
244	60	2	1	3	1	1	1	4	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	0	1	150	60	26.66666667	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
245	68	1	1	3	2	1	2	3	2	2	3	2	2	1	2	2	15	2	2	15	2	1	1	0	1	160	65	25.390625	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	1	2	2	2	2	1	1	1	5
246	66	2	1	4	2	1	1	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	80	33.29864724	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
247	60	1	1	4	2	1	2	1	2	4	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	150	50	22.22222222	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
248	60	2	1	4	2	1	2	1	2	2	3	1	1	3	2	1	1	1	2	10	2	1	1	0	1	150	70	31.11111111	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
249	62	2	1	4	2	1	1	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	145	30	14.26872771	130	70	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	3	1
250	60	2	1	4	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	149	47	21.17021756	120	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
251	60	2	1	4	4	1	2	2	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	56	25.56610665	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
252	60	1	1	4	1	1	1	5	2	2	3	2	2	1	2	1	1	1	1	1	1	1	1	0	1	148	58	26.47918188	130	90	1	1	1	1	1	1	3	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
253	75	2	1	4	1	1	1	1	1	1	1	1	1	1	2	2	5	2	1	1	1	1	1	0	1	155	76	31.63371488	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
254	73	2	1	4	1	1	2	3	2	2	2	1	1	3	2	1	1	1	2	5	2	1	1	0	1	148	41	18.71804237	140	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	3	1	3	1	3	4	1
255	72	2	1	4	3	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	154	53	22.34778209	140	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	4
256	60	1	1	3	1	1	2	4	1	1	1	1	1	3	2	2	5	2	1	1	1	1	1	0	1	144	54	26.04166667	140	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
257	60	2	1	3	1	1	2	2	1	1	1	1	1	3	2	2	10	2	1	1	1	1	1	0	1	150	49	21.77777778	136	86	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	2	2	2	1	1	3	1
258	60	1	1	3	2	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	58	26.47918188	140	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
259	65	1	1	4	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	46	19.9099723	124	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
260	60	1	1	4	1	1	2	4	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	0	1	156	57	23.42209073	140	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
261	60	2	1	4	3	1	2	5	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	65	28.13365651	126	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
262	60	2	1	4	1	1	2	4	1	1	1	1	1	1	1	2	6	2	2	6	2	1	1	0	1	152	50	21.64127424	130	100	1	1	1	2	1	1	1	1	1	1	2	1	1	1	1	0	1	1	2	1	2	1	1	1	1	4
263	60	2	1	4	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	42	18.17867036	100	70	1	1	1	2	1	1	2	1	1	1	2	1	1	2	1	0	1	1	1	1	1	1	1	3	4	1
264	60	1	1	4	1	1	1	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	154	70	29.51593861	170	110	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	1	3
265	64	2	1	4	2	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	45	20.54419284	132	80	1	1	1	1	1	1	1	1	1	1	1	1	1	2	4	3	1	2	2	1	2	1	1	2	3	1
266	60	1	1	4	2	1	1	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	145	80	38.04994055	140	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
267	60	1	1	4	2	1	2	3	2	3	3	2	2	3	2	1	1	1	1	1	1	1	1	0	1	152	60	25.96952909	140	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
268	61	2	1	2	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	60	27.39225712	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
269	60	2	1	2	1	1	2	4	1	1	1	1	1	3	1	2	5	2	1	1	1	1	1	0	1	152	66	28.56648199	130	70	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
270	62	2	1	2	1	1	1	3	2	2	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	152	59	25.5367036	130	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1

Sl no.	Age	Sex	Religion	Occupation	Education	Marital status	Type of Family	Socio Economic Class	Tobacco			Alcohol		Cooking Fuel	Smoke Vent	Diabetes			Hypertension			History of Ocular surgeries				Height	Weight	BMI	Blood Pressure		Ocular Examination (Right Eye)							Ocular Examination (Left Eye)							Visual acquity		Confrontation Test		Ophthalmoscopic Examination (Rt Eye)		Ophthalmoscopic Examination (Lt Eye)		Ocular Morbidity			
									Yes/No	If Yes	Present /Past	Yes/ No	Present/Past			Yes/No	If yes, Years	Rx His	Yes/No	If yes, Years	Rx His	Yes/No	If yes, Surgery?	Yrs Back?	Where done				SBP	DBP	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Blindness stage (WHO)	Blindness stage (ICD)	Rt eye	Left eye	Refractive Error	Fundoscopy	Refractive Error	Fundoscopy	Yes/No	Number	If yes, Treated	If treated, where
271	67	1	1	3	1	1	2	4	2	2	3	1	1	1	2	1	1	1	2	2	2	2	2	15	4	160	67	26.171875	126	72	1	1	1	1	1	1	4	1	1	1	1	1	1	4	1	0	1	1	2	1	2	1	1	1	1	4
272	60	2	1	3	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	148	65	29.67494522	134	76	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
273	71	1	1	3	1	1	1	4	2	4	2	2	3	1	2	1	1	1	1	1	1	1	1	0	1	165	59	21.67125803	122	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
274	60	2	1	4	1	1	2	4	2	2	2	1	1	1	1	1	1	1	1	1	1	1	0	1	142	44	21.82106725	130	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
275	69	1	1	4	4	1	1	4	1	1	1	2	2	1	2	2	10	2	1	1	1	2	2	5	2	164	72	26.76977989	132	86	1	1	1	1	1	1	4	1	1	1	1	1	1	4	1	0	1	1	1	1	1	1	2	3	1
276	60	1	1	4	1	2	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	51	23.28341855	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
277	64	1	1	4	2	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	147	42	19.43634597	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
278	60	2	1	4	2	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	2	2	5	3	154	74	31.20256367	130	80	1	1	1	1	1	1	4	1	1	1	1	1	1	4	1	0	1	1	2	1	2	1	1	1	1	5
279	68	2	1	4	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	141	36	18.10774106	140	90	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
280	60	2	1	4	1	1	2	5	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	158	62	24.8357635	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
281	67	2	1	4	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	46	21.00073046	126	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	5
282	60	1	1	4	2	1	2	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	62	27.55555556	130	90	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	2	4	1
283	63	2	1	2	3	1	1	4	1	1	1	1	1	1	2	2	5	2	2	10	2	1	1	0	1	145	52	24.73246136	122	70	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
284	60	2	1	2	1	1	2	1	1	1	1	1	1	3	2	1	1	1	2	15	2	1	1	0	1	166	58	21.04804761	150	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
285	60	2	1	2	1	1	1	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	159	60	23.7332384	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
286	64	1	1	3	1	1	2	3	2	3	3	1	1	3	2	1	1	1	2	5	2	1	1	0	1	170	78	26.98961938	132	82	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
287	65	2	1	3	1	1	2	4	2	2	3	1	1	3	2	2	8	2	2	8	2	2	2	5	3	176	80	25.82644628	128	86	1	1	1	1	1	1	3	1	1	1	1	1	1	4	1	0	1	1	2	1	2	1	1	2	4	1
288	62	1	1	3	3	1	2	2	2	3	3	2	2	3	2	1	1	1	1	1	1	1	1	0	1	168	75	26.57312925	140	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
289	60	1	1	4	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	68	29.43213296	110	78	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
290	60	1	1	4	1	1	2	4	1	1	1	1	1	3	2	1	1	1	2	10	2	1	1	0	1	145	58	27.5862069	130	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
291	65	2	1	4	2	1	2	4	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	149	50	22.52150804	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
292	61	2	1	4	2	1	2	5	2	2	2	1	1	3	1	2	3	2	1	1	1	1	1	0	1	165	62	22.77318641	136	82	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
293	62	2	1	4	2	1	2	4	1	1	1	1	1	3	2	1	1	1	2	25	2	2	2	8	2	151	54	23.68317179	122	80	1	1	1	1	1	1	4	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	3	4	1
294	60	1	1	4	1	1	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	173	81	27.06405159	132	84	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
295	61	2	1	4	2	1	2	3	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	0	1	169	70	24.50894577	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
296	65	1	1	4	2	1	1	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	147	58	26.84066824	110	72	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
297	60	1	1	4	1	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	143	56	27.38520221	120	74	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
298	62	2	3	2	2	1	1	3	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	150	53	23.55555556	134	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
299	63	2	2	4	3	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	162	48	18.28989483	120	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	3	1
300	60	2	2	2	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	75	32.46191136	120	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
301	62	1	2	3	1	1	2	3	2	4	2	2	2	3	2	1	1	1	1	1	1	1	1	0	1	155	56	23.30905307	140	78	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
302	70	2	1	3	2	1	2	4	2	2	3	1	1	1	2	1	1	1	2	6	2	1	1	0	1	150	50	22.22222222	108	82	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
303	60	1	1	3	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	65	28.13365651	140	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
304	60	2	1	4	1	1	1	4	2	2	2	1	1	3	1	1	1	1	1	1	1	1	1	0	1	162	60	22.86236854	120	70	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
305	60	1	1	4	3	1	2	4	2	3	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	155	55	22.89281998	90	62	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	2	4	1
306	81	2	1	4	1	1	2	4	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0	1	154	50	21.08281329	90	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
307	60	1	1	4	3	1	1	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	49	21.77777778	100	70	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	0	1	1	1	1	1	1	1	2	4	1
308	60	2	1	4	1	1	2	3	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	62	25.80645161	110	68	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
309	69	2	1	4	1	1	3	1	2	2	3	1	1	1	2	15	2	1	1	0	1	155	55	22.89281998	120	82	1	1	1	1	1	1	3	1	1	1	1	1	1	3	4	4	1	2	1	3	1	3	1	4	4	1
310	60	2	1	4	2	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	153	55	23.49523687	110	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
311	65	2	1	4	2	1	2	5	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	55	22.89281998	130	86	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	1	5
312	60	1	1	4	1	1	2	1	2	4	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	154	50	21.08281329	132	70	1	1	1	1	1	1	3	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
313	62	2	1	2	4	1	1	2	1	1	1	1	1	3	2	2	10	2	1	1	1	1	1	0	1	163	56	21.07719523	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
314	61	2	1	2	4	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	175	67	21.87755102	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
315	60	2	1	2	1	2	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	159	81	32.03987184	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
316	63	1	1	3	1	1	1	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	144	31	14.94984568	100	60	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
317	60	2	1	3	1	1	1	3	1	1	1	1	1	3	2	2	4	2	2	10	2	2	2	4	3	150	44	19.55555556	120	70	1	1	1	1	1	1	3	1	1	1	1	1	1	4	1	0	1	1	2	3	2	3	1	3	4	1
318	70	1	1	4	1	1	3	4	2	3	2	2	2	1	2	1	1	1	1	1	1	1	1	0	1	154	65	27.40765728	120	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
319	65	1	1	4	4	1	2	2	1	1	1	2	3	3	2	1	1	1	1	1	1	1	1	0	1	165	73	26.81359045	110	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
320	75	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	147	40	18.51080568	140	90	1	1	1	1	1	1	3	1	1	1	1	1	1	3	3	2	1	1	1	1	1	1	2	4	1
321	75	2	1	4	2	1	2	4	1	1	1	1	1	3	2	2	20	2	2	6	2	1	1	0	1	152	39	16.88019391	100	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	2	2	2	1	3	1
322	60	2	1	4	1	1	2	4	1	1	1	1	1	3	1	2	3	2	1	1	1	1	1	0	1	146	40	18.76524676	126	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
323	69	2	1	4	2	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	146	40	18.76524676	140	84	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
324	70	1	1	1	1	1	2	4	2	3	3	1	1	1	2	2	3	2	1	1	1	1	1	0	1	156	47	19.31295201	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2

Sl no.	Age	Sex	Religion	Occupation	Education	Marital status	Type of Family	Socio Economic Class	Tobacco			Alcohol		Cooking Fuel	Smoke Vent	Diabetes			Hypertension			History of Ocular surgeries				Height	Weight	BMI	Blood Pressure		Ocular Examination (Right Eye)							Ocular Examination (Left Eye)							Visual acquity		Confrontation Test		Ophthalmoscopic Examination (Rt Eye)		Ophthalmoscopic Examination (Lt Eye)		Ocular Morbidity				
									Yes/No	If Yes	Present /Past	Yes/ No	Present/Past			Yes/No	If yes, Years	Rx His	Yes/No	If yes, Years	Rx His	Yes/No	If yes, Surgery?	Yrs Back?	Where done				SBP	DBP	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Blindness stage (WHO)	Blindness stage (ICD)	Rt eye	Left eye	Refractive Error	Fundoscopy	Refractive Error	Fundoscopy	Yes/No	Number	If yes, Treated	If treaed, where
325	68	2	1	4	1	1	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	155	56	23.30905307	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
326	60	1	1	4	2	1	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	152	58	25.10387812	120	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
327	60	1	1	4	3	1	2	4	2	2	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	155	52	21.64412071	122	80	1	1	1	2	1	1	2	1	1	1	2	1	1	1	1	0	1	1	2	1	2	1	1	2	4	1
328	60	2	1	2	2	1	1	4	2	2	3	1	1	3	2	1	1	1	1	1	1	1	0	1	144	45	21.70138889	132	90	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
329	62	2	1	2	1	1	2	3	1	1	1	1	1	1	1	2	5	2	1	1	1	1	0	1	160	58	22.65625	124	70	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
330	70	2	1	2	2	1	1	3	2	2	2	1	1	3	2	1	1	1	1	1	1	1	0	1	160	65	25.390625	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
331	60	1	1	4	2	1	2	4	2	4	2	2	2	3	2	1	1	1	2	12	2	1	1	0	1	160	66	25.78125	140	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
332	75	2	1	3	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	67	30.58802045	120	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	3	1
333	60	1	1	3	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	160	50	19.53125	136	74	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	3	1
334	85	2	1	4	2	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	0	1	165	40	14.69237833	140	100	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
335	68	1	1	4	3	1	2	4	1	1	1	1	1	3	2	2	20	2	2	15	2	1	1	0	1	164	59	21.93634741	106	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	2	1	2	1	2	1	3
336	60	2	1	4	3	1	2	4	1	1	1	1	1	3	2	1	1	1	2	8	2	1	1	0	1	152	42	18.17867036	110	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
337	60	1	1	3	2	1	1	4	2	3	2	1	1	1	2	1	1	1	2	5	2	1	1	0	1	163	35	13.17324702	160	110	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
338	60	2	1	2	2	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	162	60	22.86236854	132	82	1	1	1	1	1	2	1	1	1	1	1	1	2	1	4	5	2	2	2	1	2	1	1	1	3	1
339	60	2	1	2	2	1	1	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	165	62	22.77318641	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
340	65	2	1	2	2	1	3	1	1	1	1	1	1	3	2	1	1	1	2	10	2	1	1	0	1	160	70	27.34375	140	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
341	60	2	1	2	2	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	47	19.56295525	90	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
342	60	1	1	4	1	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	160	54	21.09375	180	100	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	2	1	2	1	1	1	3	1
343	60	2	1	3	4	1	1	1	1	1	1	1	1	3	2	2	5	2	2	25	2	1	1	0	1	153	60	25.6311675	106	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
344	62	2	1	3	2	1	2	2	2	2	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	167	60	21.51385851	120	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
345	60	2	1	4	1	1	2	5	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	159	70	27.68877813	102	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
346	64	1	1	4	1	1	1	1	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	0	1	160	44	17.1875	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
347	60	2	1	4	3	1	1	3	1	1	1	1	1	3	2	2	10	2	1	1	1	1	1	0	1	145	52	24.73246136	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
348	69	1	1	3	1	1	2	3	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	0	1	158	61	24.43518667	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
349	61	1	1	4	1	1	2	4	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	149	63	28.37710013	132	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
350	60	1	1	3	2	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	156	53	21.77843524	140	90	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
351	60	2	1	3	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	150	53	23.55555556	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
352	67	2	1	4	1	1	2	4	2	2	2	1	1	3	1	2	3	2	1	1	1	1	1	0	1	152	46	19.9099723	110	72	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
353	60	2	1	4	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	162	63	24.00548697	116	70	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
354	73	1	1	4	1	1	2	5	1	1	1	2	2	1	2	2	10	2	1	1	1	1	1	0	1	150	52	23.11111111	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	2	2	2	1	1	3	1
355	60	2	1	3	1	1	2	4	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	0	1	152	42	18.17867036	110	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
356	69	1	1	4	2	1	2	3	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	0	1	150	51	22.66666667	100	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
357	60	1	1	3	2	1	2	3	1	1	1	1	1	1	2	2	5	2	1	1	1	1	1	0	1	165	65	23.87511478	110	80	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	2	4	1
358	66	2	1	3	1	1	1	4	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	150	60	26.66666667	130	90	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	1	5
359	60	2	1	4	2	1	2	4	2	2	3	1	1	1	2	15	2	1	1	0	1	160	63	24.609375	112	78	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	2	1	1	3	1
360	68	2	2	4	4	1	1	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	0	1	155	65	27.05515088	118	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
361	62	1	2	4	1	1	2	3	2	4	2	1	1	3	1	1	1	1	1	1	1	1	0	1	165	55	20.2020202	120	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
362	60	2	1	3	2	1	2	4	2	2	3	1	1	1	2	1	1	1	1	1	1	1	0	1	162	48	18.28989483	160	100	1	1	1	3	1	1	2	1	1	1	1	1	1	2	3	2	1	1	1	1	1	1	1	3	4	1
363	60	1	1	3	1	1	2	3	1	1	1	2	2	3	2	1	1	1	1	1	1	1	0	1	160	72	28.125	110	74	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
364	63	2	1	4	1	1	1	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	0	1	154	74	31.20256367	120	60	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
365	65	1	1	4	2	1	2	1	2	2	3	2	2	3	2	2	6	2	1	1	1	1	0	1	159	80	31.64431787	108	60	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
366	68	2	1	3	2	1	2	4	2	2	3	1	1	1	2	1	1	1	1	1	1	1	0	1	161	80	30.86300683	140	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	3	1
367	60	1	1	4	2	1	1	4	1	1	1	1	1	1	2	1	1	1	2	10	2	1	1	0	1	170	81	28.02768166	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	3	2	3	1	1	3	1
368	74	2	1	3	1	1	2	4	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	151	56	24.5603263	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
369	60	2	1	4	2	1	3	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	165	80	29.38475666	150	90	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
370	70	2	1	4	1	1	1	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	146	40	18.76524676	100	60	1	1	2	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	2	1	5
371	65	2	1	2	2	1	2	1	1	1	1	1	1	3	2	1	1	1	2	15	2	1	1	0	1	152	65	28.13365651	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
372	60	1	1	3	1	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	154	65	27.40765728	110	70	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	2	1	2	1	1	1	3	1
373	65	2	1	4	1	1	1	5	1	1	1	1	1	3	2	2	4	2	1	1	1	1	0	1	148	65	29.67494522	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
374	60	2	1	4	2	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	0	1	168	76	26.92743764	110	80	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	1	5
375	68	2	1	3	3	1	2	2	2	2	2	1	1	3	2	1	1	1	1	1	1	1	0	1	155	80	33.29864724	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
376	62	1	2	4	2	1	1	5	1	1	1	2	2	3	2	2	2	2	1	1	1	1	0	1	159	65	25.71100827	130	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
377	60	2	1	3	2	1	1	1	1	1	1	1	1	3	2	2	10	2	1	1	1	2	2	4	3	160	69	26.953125	120	80	1	1	1	1	1	1	3	1	1	1	1	1	1	4	1	0	1	1	2	2	2	2	1	3	4	1
378	62	1	1	4	2	1	2	3	1	1	1	2	2	3	2	1	1	1	1	1	1	1	0	1	150	60	26.66666667	140	90	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1

Sl no.	Age	Sex	Religion	Occupation	Education	Marital status	Type of Family	Socio Economic Class	Tobacco			Alcohol		Cooking Fuel	Smoke Vent	Diabetes			Hypertension			History of Ocular surgeries				Height	Weight	BMI	Blood Pressure		Ocular Examination (Right Eye)							Ocular Examination (Left Eye)							Visual acquity		Confrontation Test		Ophthalmoscopic Examination (Rt Eye)		Ophthalmoscopic Examination (Lt Eye)		Ocular Morbidity			
									Yes/No	If Yes	Present /Past	Yes/ No	Present/Past			Yes/No	If yes, Years	Rx His	Yes/No	If yes, Years	Rx His	Yes/No	If yes, Surgery?	Yrs Back?	Where done				SBP	DBP	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Blindness stage (WHO)	Blindness stage (ICD)	Rt eye	Left eye	Refractive Error	Fundoscopy	Refractive Error	Fundoscopy	Yes/No	Number	If yes, Treated	If treated, where
379	64	1	1	4	1	1	2	3	1	1	1	2	2	3	1	1	1	1	1	1	1	1	1	0	1	160	65	25.390625	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
380	67	1	1	3	1	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	155	80	33.29864724	110	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	2	1	2	1	1	1	3	1
381	60	2	1	4	3	1	2	2	1	1	1	1	1	1	2	1	1	1	2	10	2	1	1	0	1	150	50	22.22222222	130	90	1	1	1	2	1	1	1	1	1	1	2	1	1	1	1	0	1	1	2	1	2	1	1	1	3	1
382	65	2	1	4	1	1	2	1	1	1	1	1	1	3	2	2	4	2	1	1	1	1	1	0	1	150	70	31.11111111	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	3
383	60	2	1	3	1	1	2	4	2	2	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	145	30	14.26872771	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
384	68	1	1	4	2	1	2	4	2	2	3	2	3	3	2	2	7	2	2	15	2	1	1	0	1	149	47	21.17021756	170	110	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	2	2	2	1	1	3	1
385	62	2	1	3	1	1	1	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	56	25.56610665	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
386	62	1	1	4	1	1	2	4	2	4	2	2	2	3	1	1	1	1	2	10	2	1	1	0	1	148	78	35.60993426	160	90	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
387	63	1	1	4	1	1	2	3	2	4	2	2	2	3	2	1	1	1	2	5	2	1	1	0	1	155	76	31.63371488	150	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
388	60	2	1	2	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	65	29.67494522	140	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
389	82	2	1	2	1	1	1	4	1	1	1	1	1	3	2	2	15	2	2	10	2	1	1	0	1	154	53	22.34778209	140	100	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	1	1	1	1	3	1	3	1	3	4	1
390	64	2	1	2	1	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	144	54	26.04166667	140	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	2	4	1
391	65	1	1	4	1	1	2	3	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	0	1	150	49	21.77777778	136	86	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	3
392	62	2	1	4	2	1	1	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	58	26.47918188	110	70	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
393	66	1	1	4	2	1	3	4	2	3	2	2	2	3	2	1	1	1	2	6	2	1	1	0	1	152	46	19.9099723	124	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
394	60	2	1	2	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	156	57	23.42209073	140	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
395	65	1	1	3	5	1	1	4	1	1	1	2	2	3	2	1	1	1	2	20	2	1	1	0	1	152	65	28.13365651	150	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
396	61	2	1	2	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	50	21.64127424	130	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
397	62	1	1	3	1	1	3	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	42	18.17867036	100	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
398	60	2	1	2	1	1	1	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	154	70	29.51593861	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
399	61	2	1	2	2	1	2	4	2	2	3	1	1	2	2	1	1	1	1	1	1	1	1	0	1	148	45	20.54419284	132	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
400	65	2	1	2	1	1	2	3	2	2	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	145	80	38.04994055	140	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
401	60	2	1	2	4	1	1	3	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	60	25.96952909	140	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
402	62	1	1	3	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	5	2	1	1	0	1	148	40	18.26150475	130	70	1	1	1	3	1	1	3	1	1	1	3	1	1	2	3	2	1	1	1	1	1	1	1	3	4	1
403	63	2	1	2	2	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	66	28.56648199	138	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
404	62	2	1	2	3	1	2	5	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	59	25.5367036	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
405	62	2	1	2	2	1	2	1	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	160	67	26.171875	126	72	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
406	70	1	1	4	1	1	2	2	1	1	1	2	2	3	2	1	1	1	2	10	2	1	1	0	1	148	65	29.67494522	134	76	1	1	1	2	1	1	2	1	1	1	2	1	1	3	2	1	1	1	1	1	1	1	3	4	1
407	60	2	1	2	1	1	2	5	1	1	1	1	1	3	2	2	8	2	1	1	1	1	1	0	1	165	59	21.67125803	122	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
408	60	1	1	4	2	1	2	1	2	2	2	2	2	1	2	1	1	1	1	1	1	1	1	0	1	142	44	21.82106725	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
409	60	1	1	4	3	1	2	3	1	1	1	2	2	1	1	1	1	1	2	15	2	1	1	0	1	164	72	26.76977989	132	86	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
410	65	1	1	4	2	1	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	148	51	23.28341855	110	70	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
411	65	2	1	2	1	1	1	4	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	0	1	147	42	19.43634597	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
412	60	2	1	1	2	1	1	2	1	1	1	1	1	3	2	2	3	2	2	8	2	1	1	0	1	154	74	31.20256367	170	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	1	2	3	2	3	1	1	1	5
413	60	2	1	2	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	141	36	18.10774106	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
414	60	1	1	3	2	1	2	4	2	4	2	2	3	3	2	2	10	2	1	1	1	1	1	0	1	158	62	24.8357635	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	2	2	2	1	1	3	1
415	60	2	1	2	3	1	2	4	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	46	21.00073046	126	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
416	67	1	1	3	2	1	2	5	1	1	1	2	2	3	1	1	1	1	1	1	1	2	4	1	2	150	62	27.55555556	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	2	1	1	1	1	1	1	2	1	3
417	64	1	1	3	2	1	2	4	2	4	2	2	2	3	2	1	1	1	1	1	1	1	1	0	1	145	52	24.73246136	122	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
418	60	2	1	2	3	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	166	58	21.04804761	150	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
419	62	2	1	2	2	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	159	60	23.7332384	140	90	1	1	1	1	1	2	3	1	1	1	1	1	2	3	4	5	1	1	2	1	2	1	1	1	4	1
420	61	2	1	2	2	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	170	78	26.98961938	132	82	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
421	60	1	1	4	1	1	2	4	2	2	3	1	1	1	1	1	1	1	2	8	2	2	2	4	3	176	80	25.82644628	128	86	1	1	1	1	1	1	4	1	1	1	1	1	1	4	1	0	1	1	2	1	2	1	1	1	1	5
422	60	2	1	2	1	1	2	3	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	168	75	26.57312925	140	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
423	67	1	1	4	2	1	1	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	68	29.43213296	110	78	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
424	60	2	1	2	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	145	58	27.5862069	130	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
425	71	1	1	1	4	1	1	3	2	4	2	2	3	3	2	1	1	1	1	1	1	2	2	8	4	149	50	22.52150804	140	90	1	1	1	1	1	1	4	1	1	1	1	1	1	4	2	1	1	1	1	1	1	1	1	2	4	1
426	60	2	1	2	2	1	1	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	165	62	22.77318641	136	82	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
427	69	1	1	1	1	1	2	1	1	1	1	2	2	3	2	1	1	1	1	1	1	1	1	0	1	151	54	23.68317179	122	80	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	0	1	1	2	1	2	1	1	1	3	1
428	60	2	1	2	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	2	2	5	3	173	81	27.06405159	132	84	1	1	1	1	1	1	4	1	1	1	1	1	1	4	1	0	1	1	2	1	2	1	1	1	1	5
429	60	2	2	2	2	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	169	70	24.50894577	140	90	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	2	4	1
430	60	2	2	2	1	1	1	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	147	58	26.84066824	110	72	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
431	68	2	2	2	1	1	2	3	2	2	2	1	1	3	2	1	1	1	2	12	2	1	1	0	1	143	56	27.38520221	120	74	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	3	2	3	1	1	1	5
432	60	1	2	4	2	1	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	53	23.55555556	134	80	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	2	4	1

Sl no.	Age	Sex	Religion	Occupation	Education	Marital status	Type of Family	Socio Economic Class	Tobacco			Alcohol		Cooking Fuel	Smoke Vent	Diabetes			Hypertension			History of Ocular surgeries				Height	Weight	BMI	Blood Pressure		Ocular Examination (Right Eye)							Ocular Examination (Left Eye)							Visual acquity		Confrontation Test		Ophthalmoscopic Examination (Rt Eye)		Ophthalmoscopic Examination (Lt Eye)		Ocular Morbidity			
									Yes/No	If Yes	Present /Past	Yes/ No	Present/Past			Yes/No	If yes, Years	Rx His	Yes/No	If yes, Years	Rx His	Yes/No	If yes, Surgery?	Yrs Back?	Where done				SBP	DBP	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Blindness stage (WHO)	Blindness stage (ICD)	Rt eye	Left eye	Refractive Error	Fundoscopy	Refractive Error	Fundoscopy	Yes/No	Number	If yes, Treated	If treaed, where
433	65	2	2	2	2	1	1	1	1	1	1	1	1	3	2	2	10	2	1	1	1	1	1	0	1	162	48	18.28989483	120	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
434	60	2	2	2	1	1	2	1	1	1	1	1	1	3	2	1	1	1	2	15	2	1	1	0	1	152	75	32.46191136	192	98	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
435	63	2	2	2	3	1	1	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	56	23.30905307	140	78	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
436	75	1	2	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	150	50	22.22222222	108	82	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
437	60	2	1	2	1	1	2	2	1	1	1	1	1	3	2	1	1	1	2	5	2	2	2	10	2	152	65	28.13365651	150	110	1	1	1	3	1	1	3	1	1	1	1	1	1	4	3	2	1	1	1	1	1	1	1	4	1	3
438	65	1	1	1	1	1	3	5	1	1	1	1	1	1	2	2	15	2	1	1	1	1	1	0	1	162	60	22.86236854	110	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	2	2	2	1	1	3	1
439	68	1	1	1	3	1	1	1	1	1	1	2	2	3	1	1	1	1	1	1	1	1	1	0	1	155	55	22.89281998	90	62	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
440	60	1	1	4	2	1	2	3	2	3	2	1	1	1	2	1	1	1	2	10	2	1	1	0	1	154	50	21.08281329	90	60	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
441	60	2	1	2	2	1	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	49	21.77777778	100	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
442	60	2	1	2	4	1	1	4	1	1	1	1	1	3	2	2	3	2	1	1	1	1	1	0	1	155	40	16.64932362	110	68	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	1	4
443	70	2	1	2	1	1	1	2	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	5	3	155	55	22.89281998	120	82	1	1	1	1	1	1	4	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	3	4	1
444	62	1	1	4	2	1	2	1	1	1	1	1	1	3	2	2	5	2	2	5	2	1	1	0	1	153	55	23.49523687	180	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
445	63	2	1	2	3	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	55	22.89281998	130	86	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	3	4	1
446	65	1	1	4	1	1	2	4	2	3	3	1	1	3	1	1	1	1	1	1	1	1	1	0	1	154	50	21.08281329	132	70	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	3	1
447	86	1	1	1	1	1	2	5	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	163	56	21.07719523	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
448	65	2	1	2	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	175	67	21.87755102	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
449	70	2	1	2	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	159	40	15.82215893	110	70	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	3	1
450	60	2	1	2	1	1	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	144	38	18.32561728	100	60	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
451	71	1	1	2	1	1	2	4	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	0	1	150	44	19.55555556	120	70	1	1	1	1	1	1	3	1	1	1	1	1	1	3	4	3	1	1	1	1	1	1	1	2	4	1
452	61	2	1	2	1	1	2	4	2	2	2	1	1	3	2	1	1	1	2	8	2	1	1	0	1	154	52	21.92612582	120	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	3	2	3	1	2	1	3
453	74	1	1	1	2	1	2	3	1	1	1	2	2	3	2	2	5	2	1	1	1	1	1	0	1	165	52	19.10009183	110	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
454	70	2	1	2	1	1	1	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	147	40	18.51080568	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
455	72	1	1	1	1	1	2	4	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	49	21.20844875	100	60	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	3	1
456	60	2	1	2	2	2	1	3	1	1	1	1	1	3	2	1	1	1	2	5	2	1	1	0	1	146	40	18.76524676	126	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
457	70	1	1	1	3	1	2	4	1	1	1	1	1	3	2	2	8	2	1	1	1	1	1	0	1	146	42	19.7035091	140	84	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
458	84	2	1	2	2	1	2	1	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	156	47	19.31295201	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
459	61	2	1	2	1	1	2	4	1	1	1	1	1	3	2	1	1	1	2	15	2	1	1	0	1	155	56	23.30905307	110	70	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	3	1	3	4	1
460	69	2	1	2	1	1	1	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	58	25.10387812	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
461	63	2	1	2	3	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	52	21.64412071	130	60	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	0	1	1	2	1	2	1	1	1	3	1
462	66	1	1	4	1	1	2	3	2	2	3	1	1	1	2	2	3	2	1	1	1	1	1	0	1	144	45	21.70138889	132	90	1	1	1	1	1	1	3	1	1	1	1	1	1	2	3	2	1	1	2	1	2	1	1	1	3	1
463	69	2	1	4	1	1	1	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	160	56	21.875	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
464	64	2	1	1	2	1	2	1	1	1	1	1	1	3	2	2	10	2	2	10	2	1	1	0	1	160	65	25.390625	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	2	2	2	1	1	1	3
465	74	2	1	2	1	1	3	1	2	2	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	160	66	25.78125	140	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
466	75	1	1	1	1	1	1	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	37	16.89189189	120	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
467	67	2	1	2	2	1	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	4	3	160	50	19.53125	130	78	1	1	1	1	1	1	3	1	1	1	1	1	1	4	1	0	1	1	2	1	2	1	1	2	4	1
468	60	1	1	1	1	1	3	2	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	165	39	14.32506887	140	100	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
469	84	1	1	1	3	1	3	5	2	2	3	2	2	3	1	1	1	1	1	1	1	1	1	0	1	164	59	21.93634741	106	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
470	64	1	1	3	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	42	18.17867036	110	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
471	77	2	1	2	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	163	35	13.17324702	138	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	1	0	1	1	1	1	1	1	1	2	4	1
472	62	2	1	2	2	1	1	3	2	2	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	162	60	22.86236854	144	90	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	1	5
473	82	2	1	2	2	1	1	4	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	0	1	165	62	22.77318641	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
474	61	1	1	3	1	1	2	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	160	70	27.34375	140	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
475	69	2	1	2	4	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	47	19.56295525	90	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
476	69	1	1	1	4	1	2	4	2	3	2	1	1	1	2	1	1	1	1	1	1	1	1	0	1	160	54	21.09375	140	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
477	70	1	1	1	1	1	2	4	1	1	1	1	1	3	2	1	1	1	2	5	2	1	1	0	1	153	60	25.6311675	106	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
478	60	2	1	4	1	1	2	5	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	0	1	167	60	21.51385851	120	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
479	73	2	1	4	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	159	70	27.68877813	102	60	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
480	65	2	1	2	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	160	44	17.1875	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
481	68	1	1	1	4	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	2	2	7	2	145	48	22.82996433	132	76	1	1	1	1	1	1	4	1	1	1	1	1	1	4	1	0	1	1	2	1	2	1	1	1	1	3
482	60	2	1	2	1	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	158	45	18.02595738	110	70	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
483	68	1	1	1	2	1	2	4	2	2	3	2	2	1	2	2	10	2	1	1	1	1	1	0	1	149	39	17.56677627	132	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	3	1
484	66	2	1	2	1	1	1	3	2	2	3	1	1	1	2	1	1	1	2	15	2	1	1	0	1	156	53	21.77843524	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
485	60	1	1	4	2	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	2	2	4	2	150	53	23.55555556	140	90	1	1	1	1	1	1	4	1	1	1	1	1	1	4	1	0	1	1	1	1	1	1	1	2	4	1
486	60	2	1	2	1	1	1	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	152	46	19.9099723	110	72	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2

Sl no.	Age	Sex	Religion	Occupation	Education	Marital status	Type of Family	Socio Economic Class	Tobacco			Alcohol		Cooking Fuel	Smoke Vent	Diabetes			Hypertension			History of Ocular surgeries				Height	Weight	BMI	Blood Pressure		Ocular Examination (Right Eye)							Ocular Examination (Left Eye)							Visual acquity		Confrontation Test		Ophthalmoscopic Examination (Rt Eye)		Ophthalmoscopic Examination (Lt Eye)		Ocular Morbidity				
									Yes/No	If Yes	Present /Past	Yes/ No	Present/Past			Yes/No	If yes, Years	Rx His	Yes/No	If yes, Years	Rx His	Yes/No	If yes, Surgery?	Yrs Back?	Where done				SBP	DBP	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Blindness stage (WHO)	Blindness stage (ICD)	Rt eye	Left eye	Refractive Error	Fundoscopy	Refractive Error	Fundoscopy	Yes/No	Number	If yes, Treated	If treated, where
487	62	1	1	4	1	1	2	3	2	2	2	1	1	3	2	2	4	2	1	1	1	1	0	1	162	63	24.00548697	140	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
488	62	2	1	2	2	1	2	4	2	2	2	1	1	3	2	1	1	1	1	1	1	2	2	10	2	150	52	23.11111111	140	90	1	1	1	1	1	1	4	1	1	1	1	1	1	4	2	1	1	1	2	1	2	1	1	1	1	3
489	60	2	1	2	2	1	2	1	1	1	1	1	1	3	2	1	1	1	2	5	2	1	1	0	1	152	42	18.17867036	110	80	1	2	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	3	4	1
490	60	2	1	2	2	1	1	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	150	47	20.88888889	100	70	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	3	1
491	75	2	1	2	1	1	2	4	2	2	2	1	1	3	2	2	20	2	1	1	1	1	1	0	1	165	65	23.87511478	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	2	2	2	1	1	3	1
492	73	1	1	1	2	1	2	4	1	1	1	1	1	1	2	2	3	2	1	1	1	1	1	0	1	150	60	26.66666667	130	90	1	1	1	1	1	1	3	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
493	72	2	1	2	2	1	1	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	160	63	24.609375	112	78	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
494	60	2	1	2	2	1	2	3	2	2	2	1	1	3	2	2	3	2	1	1	1	1	1	0	1	155	65	27.05515088	118	80	1	1	1	2	1	1	1	1	1	1	2	1	1	1	1	0	1	1	2	1	2	1	1	1	1	3
495	60	2	1	2	2	1	3	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	165	55	20.2020202	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
496	65	1	1	3	1	1	1	1	1	1	1	1	1	3	1	1	1	1	2	5	2	1	1	0	1	162	48	18.28989483	160	100	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
497	62	2	1	2	2	1	2	5	2	2	2	1	1	1	2	1	1	1	2	2	5	2	1	28.125	110	74	1	1	1	1	1	1	3	1	1	1	1	1	1	1	4	1	0	1	1	2	1	2	1	1	2	4	1
498	60	1	1	4	3	1	2	1	2	2	3	1	1	3	2	1	1	1	1	1	1	1	0	1	154	74	31.20256367	120	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	0	2	2
499	65	1	1	1	2	1	1	2	1	1	1	2	3	3	2	2	5	2	1	1	1	1	0	1	159	68	26.89767019	108	60	1	1	1	1	1	2	1	1	1	1	1	1	2	1	4	5	1	1	1	1	1	1	1	1	4	1
500	68	1	1	4	1	1	2	5	2	4	2	1	1	3	2	1	1	1	1	1	1	1	0	1	161	80	30.86300683	140	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
501	63	2	1	2	2	1	2	1	2	2	3	1	1	3	2	1	1	1	1	1	1	1	0	1	170	92	31.83391003	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
502	74	2	1	2	2	1	1	3	1	1	1	1	1	3	2	1	1	1	2	10	2	1	1	0	1	151	56	24.5603263	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1	1	1	3	1	3	1	2	1	3
503	60	2	1	2	2	1	1	3	1	1	1	1	1	3	1	1	1	1	1	1	1	2	2	7	3	165	50	18.36547291	140	90	1	1	1	1	1	1	4	1	1	1	1	1	1	3	1	0	1	1	1	1	1	1	1	3	3	1
504	70	1	1	1	1	1	2	4	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	146	80	37.53049353	100	60	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	0	1	1	2	1	2	1	1	1	3	1
505	65	2	1	2	4	1	2	2	2	2	3	1	1	1	2	2	20	2	1	1	1	1	0	1	152	65	28.13365651	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2	2	2	2	1	2	4	1
506	60	1	1	4	2	1	2	1	1	1	1	1	1	3	2	1	1	1	2	12	2	1	1	0	1	154	65	27.40765728	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
507	65	1	1	4	2	1	2	4	2	4	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	65	29.67494522	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
508	60	2	1	2	1	1	2	4	2	2	2	1	1	3	1	1	1	1	1	1	1	1	1	0	1	168	76	26.92743764	110	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
509	68	2	1	2	3	1	2	5	1	1	1	1	1	3	2	1	1	1	2	15	2	1	1	0	1	155	80	33.29864724	130	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	1	1	1	2	3	2	3	1	2	3	1
510	62	2	1	2	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	159	65	25.71100827	130	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
511	60	1	1	4	1	1	2	3	1	1	1	2	2	3	2	1	1	1	1	1	1	1	1	0	1	160	69	26.953125	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
512	62	2	1	2	2	1	2	3	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	74	32.88888889	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
513	64	1	1	4	1	1	2	4	1	1	1	2	2	1	2	2	5	2	1	1	1	1	0	1	160	65	25.390625	130	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	2	4	1
514	67	2	1	2	1	1	1	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	155	80	33.29864724	136	86	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
515	68	1	1	4	3	1	2	3	1	1	1	1	1	3	2	1	1	1	2	20	2	1	1	0	1	150	50	22.22222222	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	3	2	3	1	1	3	1
516	66	2	1	2	1	1	1	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	70	31.11111111	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
517	60	1	1	4	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	145	30	14.26872771	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
518	60	2	1	2	1	1	2	3	1	1	1	1	1	3	2	1	1	1	2	10	2	1	1	0	1	149	47	21.17021756	170	110	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
519	62	2	1	2	2	1	2	4	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	56	25.56610665	130	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
520	62	2	1	2	1	1	1	1	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	58	26.47918188	130	90	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	3	1
521	63	2	1	2	2	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	76	31.63371488	140	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
522	60	1	1	4	4	1	2	4	1	1	1	1	1	1	2	2	3	2	1	1	1	1	1	0	1	148	30	13.69612856	140	80	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	2	4	1
523	60	2	1	2	5	1	1	4	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	0	1	154	53	22.34778209	140	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
524	64	2	1	2	2	1	2	3	2	2	2	1	1	1	2	2	10	2	2	5	2	1	1	0	1	144	54	26.04166667	140	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
525	65	2	1	2	1	1	3	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	49	21.77777778	136	86	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	3	1
526	62	1	1	4	1	1	1	1	1	1	1	2	2	3	1	1	1	1	1	1	1	1	1	0	1	148	58	26.47918188	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
527	60	2	1	2	2	1	2	1	2	2	2	1	1	3	2	2	5	2	1	1	1	1	0	1	152	46	19.9099723	124	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	2	2	2	1	1	3	1
528	60	1	1	4	1	1	3	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	0	1	156	57	23.42209073	140	80	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	2	1	5
529	65	1	1	3	4	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	0	1	152	65	28.13365651	150	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
530	61	1	1	3	1	1	2	2	2	2	2	1	1	3	2	1	1	1	1	1	1	1	0	1	152	50	21.64127424	130	100	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
531	62	2	1	2	2	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	42	18.17867036	100	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
532	69	2	1	2	1	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	154	70	29.51593861	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	3	2	2	2	1	2	1	1	1	4	1
533	61	2	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	148	45	20.54419284	132	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
534	65	1	1	3	1	1	2	3	2	2	3	2	2	1	2	1	1	1	1	1	1	1	1	0	1	145	80	38.04994055	140	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
535	60	2	1	2	1	1	2	4	1	1	1	1	1	1	2	2	6	2	2	6	2	1	1	0	1	152	60	25.96952909	160	100	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	1	1	2	2	2	2	1	2	3	1
536	62	1	1	4	2	1	2	2	2	4	2	1	1	3	2	1	1	1	1	1	1	1	1	0	1	148	40	18.26150475	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
537	63	1	1	4	3	1	2	1	2	3	3	1	1	3	2	1	1	1	1	1	1	1	0	1	152	66	28.56648199	138	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
538	74	2	1	2	2	1	2	4	1	1	1	1	1	3	1	1	1	1	1	1	1	1	0	1	152	59	25.5367036	130	80	1	1	1	3	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	2	1	1	1	3	1
539	62	2	1	2	2	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	0	1	160	67	26.171875	126	72	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
540	70	2	1	2	1	1	2	5	2	2	3	1	1	3	2	1	1	1	1	1	1	1	0	1	148	65	29.67494522	134	76	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1

Sl no.	Age	Sex	Religion	Occupation	Education	Marital status	Type of Family	Socio Economic Class	Tobacco			Alcohol		Cooking Fuel	Smoke Vent	Diabetes			Hypertension			History of Ocular surgeries				Height	Weight	BMI	Blood Pressure		Ocular Examination (Right Eye)							Ocular Examination (Left Eye)							Visual acquity		Confrontation Test		Ophthalmoscopic Examination (Rt Eye)		Ophthalmoscopic Examination (Lt Eye)		Ocular Morbidity			
									Yes/No	If Yes	Present /Past	Yes/ No	Present/Past			Yes/No	If yes, Years	Rx His	Yes/No	If yes, Years	Rx His	Yes/No	If yes, Surgery?	Yrs Back?	Where done				SBP	DBP	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Blindness stage (WHO)	Blindness stage (ICD)	Rt eye	Left eye	Refractive Error	Fundoscopy	Refractive Error	Fundoscopy	Yes/No	Number	If yes, Treated	If treated, where
541	69	1	2	4	1	1	1	4	2	2	3	2	2	3	2	1	1	1	1	1	1	1	1	0	1	165	59	21.67125803	122	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	2	4	1
542	80	2	1	2	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	142	44	21.82106725	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
543	60	1	1	4	3	1	2	3	2	4	2	2	2	3	2	2	4	2	1	1	1	1	1	0	1	164	72	26.76977989	132	86	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
544	60	2	1	2	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	2	2	5	4	148	51	23.28341855	110	70	1	1	1	2	1	1	4	1	1	1	2	1	1	2	1	0	1	1	1	1	1	1	1	4	1	3
545	60	1	1	4	1	1	1	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	147	42	19.43634597	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
546	60	2	1	2	2	1	2	3	1	1	1	1	1	3	2	2	2	2	1	1	1	1	1	0	1	154	74	31.20256367	120	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
547	79	1	1	1	1	1	2	3	1	1	1	1	1	3	2	2	10	2	2	5	2	1	1	0	1	141	36	18.10774106	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	3	2	3	1	1	1	3
548	62	2	1	2	1	1	1	4	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	0	1	158	62	24.8357635	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
549	60	2	1	2	3	1	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	148	46	21.00073046	126	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
550	60	2	1	2	1	1	3	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	150	62	27.55555556	130	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	1	3	1
551	60	2	1	4	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	145	52	24.73246136	122	70	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	2	1	2	1	1	2	4	1
552	60	1	1	4	1	1	2	4	1	1	1	1	1	3	2	2	4	2	1	1	1	1	1	0	1	166	58	21.04804761	140	90	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	2	1	2	1	1	3	1
553	85	2	2	2	1	1	3	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	159	60	23.7332384	130	70	1	1	1	3	1	1	2	1	1	1	3	1	1	2	2	1	1	1	1	1	1	1	1	3	4	1
554	60	2	2	2	2	1	1	4	2	2	3	1	1	3	2	1	1	1	2	15	2	1	1	0	1	170	78	26.98961938	120	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	3	1
555	67	2	2	2	2	1	2	3	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	176	80	25.82644628	110	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
556	70	1	2	1	4	1	2	3	2	3	3	2	2	3	1	1	1	1	1	1	1	1	1	0	1	168	75	26.57312925	110	80	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
557	65	2	1	4	5	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	68	29.43213296	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
558	73	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	145	58	27.5862069	140	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
559	75	1	1	1	1	1	2	5	2	2	2	1	1	3	2	2	15	2	1	1	1	1	1	0	1	149	50	22.52150804	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	2	2	2	1	1	3	1
560	66	1	1	4	1	1	2	1	2	2	2	1	1	3	2	1	1	1	2	5	2	1	1	0	1	165	62	22.77318641	130	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
561	69	2	1	3	2	1	2	2	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	151	54	23.68317179	120	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
562	70	2	1	4	2	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	173	81	27.06405159	132	84	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
563	68	2	1	4	4	1	2	1	2	2	2	1	1	3	1	1	1	1	1	1	1	1	1	0	1	169	70	24.50894577	130	70	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	2	1	2	1	1	1	3	1
564	60	1	1	3	1	1	2	3	1	1	1	2	2	3	2	1	1	1	1	1	1	1	1	0	1	147	58	26.84066824	120	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
565	60	2	1	4	2	1	2	3	1	1	1	1	1	3	2	2	20	2	1	1	1	1	1	0	1	143	56	27.38520221	120	74	1	1	1	1	1	1	1	1	3	1	1	1	1	1	2	1	1	1	2	2	2	2	1	2	1	3
566	60	1	1	4	1	1	2	4	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	53	23.55555556	134	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
567	62	1	1	1	2	1	1	2	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	0	1	162	48	18.28989483	118	80	1	1	1	1	1	1	2	1	1	1	1	1	1	3	4	3	1	1	1	1	1	1	1	2	4	1
568	70	2	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	8	3	152	75	32.46191136	140	90	1	1	1	2	1	1	4	1	1	1	2	1	1	2	1	0	1	1	1	1	1	1	1	4	1	5
569	74	2	1	4	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	56	23.30905307	140	78	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
570	75	2	1	2	2	1	2	4	2	2	3	1	1	1	2	1	1	1	1	1	1	1	1	0	1	150	50	22.22222222	108	82	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
571	87	1	2	1	3	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	152	41	17.74584488	120	70	1	1	1	1	1	1	3	1	1	1	1	1	1	3	3	2	1	1	1	1	1	1	1	2	4	1
572	65	2	1	3	2	1	2	4	1	1	1	1	1	3	2	1	1	1	2	10	2	1	1	0	1	162	60	22.86236854	160	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
573	68	1	1	1	1	1	2	3	2	3	3	2	3	3	2	1	1	1	1	1	1	1	1	0	1	155	55	22.89281998	90	62	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	5
574	60	2	1	4	2	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	154	50	21.08281329	90	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
575	60	1	1	4	2	1	2	4	1	1	1	2	2	3	2	1	1	1	1	1	1	1	1	0	1	150	49	21.77777778	100	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
576	60	2	1	4	2	1	2	4	2	2	3	1	1	3	2	1	1	1	2	12	2	1	1	0	1	155	40	16.64932362	110	68	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	2	3	1
577	70	1	1	1	1	1	2	3	2	2	3	1	1	1	2	2	8	2	2	8	2	1	1	0	1	155	55	22.89281998	120	82	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
578	60	2	1	4	2	1	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	153	55	23.49523687	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
579	63	2	1	1	3	1	1	4	2	2	2	1	1	1	2	1	1	1	2	15	2	1	1	0	1	155	55	22.89281998	130	86	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
580	65	2	1	2	1	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	154	50	21.08281329	130	70	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
581	85	2	1	4	2	1	1	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	163	56	21.07719523	120	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
582	65	1	1	4	2	1	1	1	1	1	1	1	1	3	2	2	3	2	1	1	1	1	1	0	1	175	67	21.87755102	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
583	70	2	1	2	2	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	159	40	15.82215893	110	70	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	2	4	1
584	60	2	1	2	2	1	2	4	2	2	2	1	1	3	2	2	10	2	1	1	1	1	1	0	1	144	37	17.8433642	100	60	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	2	1	2	1	1	3	1
585	71	2	1	2	1	1	2	4	1	1	1	1	1	3	2	1	1	1	2	20	2	1	1	0	1	150	44	19.55555556	120	70	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	3	1	3	1	3	4	1
586	60	1	1	3	1	1	1	3	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	0	1	154	52	21.92612582	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
587	74	2	1	3	4	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	165	52	19.10009183	110	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
588	70	1	1	1	2	1	2	1	1	1	1	1	1	1	2	1	1	1	2	10	2	1	1	0	1	147	50	23.1385071	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	3	2	3	1	1	3	1
589	72	1	1	4	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	1	152	40	17.31301939	100	60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
590	60	1	1	4	1	1	2	5	2	3	3	1	1	3	1	1	1	1	1	1	1	1	1	0	1	146	46	21.58003378	126	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
591	70	2	1	4	3	1	1	3	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	146	40	18.76524676	140	84	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	5
592	84	2	1	3	1	1	3	2	2	2	3	1	1	3	2	1	1	1	1	1	1	1	1	0	1	156	47	19.31295201	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
593	61	2	1	4	1	1	2	5	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	0	1	155	56	23.30905307	110	70	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	2	1	2	1	1	1	3	1
594	69	1	1	1	2	1	1	1	1	1	1	1	1	3	2	1	1	1	2	5	2	1	1	0	1	152	58	25.10387812	120	80	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0	1	1	2	1	2	1	1	1	1	5

Sl no.	Age	Sex	Religion	Occupation	Education	Marital status	Type of Family	Socio Economic Class	Tobacco			Alcohol		Cooking Fuel	Smoke Vent	Diabetes			Hypertension			History of Ocular surgeries				Height	Weight	BMI	Blood Pressure		Ocular Examination (Right Eye)							Ocular Examination (Left Eye)							Visual acquity		Confrontation Test		Ophthalmoscopic Examination (Rt Eye)		Ophthalmoscopic Examination (Lt Eye)		Ocular Morbidity			
									Yes/No	If Yes	Present /Past	Yes/ No	Present/Past			Yes/No	If yes, Years	Rx His	Yes/No	If yes, Years	Rx His	Yes/No	If yes, Surgery?	Yrs Back?	Where done				SBP	DBP	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Nystagmus	Eye lids	Lacrimal Apparatus	Conjunctiva	Iris	Pupillary reaction	Lens	Blindness stage (WHO)	Blindness stage (ICD)	Rt eye	Left eye	Refractive Error	Fundoscopy	Refractive Error	Fundoscopy	Yes/No	Number	If yes, Treated	If treated, where
595	63	2	1	1	1	1	1	3	2	2	2	1	1	3	1	1	1	1	1	1	1	1	0	1	1	155	52	21.64412071	110	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
596	66	1	1	4	1	1	2	3	2	2	2	1	1	3	2	1	1	1	1	1	1	1	0	1	1	144	45	21.70138889	132	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
597	69	1	1	4	3	1	2	5	1	1	1	1	1	2	2	1	1	1	1	1	1	1	0	1	1	160	42	16.40625	110	80	1	1	1	3	1	1	2	1	2	1	1	1	1	3	3	2	1	1	1	1	1	1	1	4	4	1
598	64	2	1	2	2	1	1	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0	1	1	160	65	25.390625	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
599	74	2	1	4	1	1	1	1	2	2	2	1	1	3	2	1	1	1	1	1	1	1	0	1	1	160	66	25.78125	140	92	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
600	75	2	2	2	1	1	2	4	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0	1	1	148	41	18.71804237	120	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
601	67	1	2	4	2	1	2	4	1	1	1	2	2	3	2	1	1	1	1	1	1	2	2	5	2	160	50	19.53125	140	70	1	1	1	1	1	1	4	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	3	4	1
602	60	2	1	2	2	1	2	5	2	2	2	1	1	3	2	1	1	1	1	1	1	1	0	1	1	165	39	14.32506887	140	100	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
603	84	1	1	1	2	1	2	4	1	1	1	1	1	3	2	2	10	2	1	1	1	1	0	1	1	164	59	21.93634741	106	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	2	2	2	1	1	3	1
604	64	2	1	2	4	1	2	3	1	1	1	1	1	3	2	1	1	1	1	1	1	2	3	10	2	152	42	18.17867036	110	80	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
605	77	1	1	1	5	1	2	3	2	4	2	1	1	3	2	1	1	1	2	5	2	1	1	0	1	163	35	13.17324702	160	110	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	4
606	62	2	1	2	2	1	2	4	2	2	3	1	1	3	2	1	1	1	1	1	1	1	0	1	1	162	60	22.86236854	130	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
607	82	1	1	1	1	1	2	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1	0	1	1	165	62	22.77318641	130	80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
608	61	2	1	2	1	1	2	3	1	1	1	1	1	3	2	2	15	2	1	1	1	1	0	1	1	160	70	27.34375	140	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	2	2	2	1	1	3	1
609	69	2	1	2	2	1	2	3	2	2	3	1	1	3	2	1	1	1	1	1	1	1	0	1	1	155	47	19.56295525	90	60	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	3	1
610	69	2	1	2	1	1	1	4	1	1	1	1	1	3	2	1	1	1	2	20	2	1	1	0	1	160	54	21.09375	150	100	1	1	1	1	1	1	3	1	1	1	1	1	1	3	2	1	1	1	1	3	1	3	1	3	4	1
611	70	2	1	2	4	1	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0	1	1	153	60	25.6311675	106	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
612	60	1	1	4	1	1	1	4	2	2	3	2	2	3	2	2	3	2	1	1	1	1	0	1	1	167	60	21.51385851	120	70	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	0	1	1	2	1	2	1	1	1	3	1
613	73	2	1	2	2	1	1	1	2	2	3	1	1	3	1	1	1	1	1	1	1	1	0	1	1	159	70	27.68877813	102	60	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
614	65	2	1	2	1	1	1	4	1	1	1	1	1	3	2	2	5	2	2	5	2	1	1	0	1	162	44	16.76573693	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
615	68	2	1	2	2	1	2	4	2	2	2	1	1	3	2	1	1	1	1	1	1	1	0	1	1	145	54	25.68370987	120	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	5
616	81	1	1	1	1	1	2	4	2	4	2	2	3	3	2	1	1	1	1	1	1	1	0	1	1	158	44	17.62538055	110	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2
617	68	2	1	2	1	1	1	3	1	1	1	1	1	3	2	1	1	1	1	1	1	1	0	1	1	149	45	20.26935724	132	90	1	1	1	1	1	1	2	1	1	1	1	1	1	2	1	0	1	1	1	1	1	1	1	2	4	1
618	66	1	1	4	2	1	2	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0	1	1	156	53	21.77843524	140	90	1	1	1	1	1	1	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	2	4	1
619	60	1	1	4	3	1	1	1	1	1	1	1	1	3	2	1	1	1	2	10	2	1	1	0	1	150	53	23.55555556	140	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	3	2	3	1	1	3	1
620	60	1	1	4	2	1	2	1	2	3	2	1	1	3	1	1	1	1	1	1	1	1	0	1	1	152	46	19.9099723	110	72	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	1	2	1	2	0	2	2

If not treated, Why
1
3
4
1
3
2
2
1
4
3
2
4
1
2
2
4
4
2
2
4
1
2
3
1
4
1
4
2
4
4
4
2
4
4
4
2
2
2
4
1
2
3
2
2
3
4
3
3
2
4
3
2
1
2

If not treated, Why
2
4
2
3
4
4
2
4
4
4
2
4
2
2
4
2
2
4
4
4
2
4
1
4
2
4
1
2
4
4
2
2
4
2
3
4
3
4
4
4
3
2
2
4
4
2
2
4
4
2
2
4
4
3

If not treated, Why
2
3
1
2
2
4
2
4
3
2
4
3
1
3
4
3
2
1
2
1
2
2
3
4
2
2
4
3
1
4
3
3
2
4
4
2
2
2
2
1
3
4
1
3
4
4
1
2
4
4
4
1
4
4

If not treated, Why
2
1
2
4
4
2
2
4
2
2
4
3
3
2
3
2
3
4
4
4
4
3
3
4
1
2
4
1
2
4
2
2
2
4
4
4
2
3
4
3
2
1
4
3
2
2
4
4
4
3
3
4
4
2

If not treated, Why
2
1
3
1
2
3
2
2
2
3
1
1
2
4
1
2
4
2
2
2
4
1
3
4
2
3
3
4
1
2
2
2
4
2
2
4
2
4
1
4
4
2
2
3
2
1
4
1
4
2
2
2
4
4

If not treated, Why
1
4
4
3
4
2
2
1
3
2
1
3
2
2
2
4
3
2
2
4
2
2
4
2
2
2
2
2
4
4
4
4
4
4
3
2
4
2
4
2
1
4
2
2
2
4
3
4
2
4
3
2
2
2

If not treated, Why
2
3
3
2
4
4
2
4
4
3
1
2
2
3
2
2
2
3
2
2
2
4
2
2
2
3
2
2
4
4
2
2
4
1
4
4
3
4
4
4
4
4
3
2
3
1
2
3
2
1
2
4
3
4

If not treated, Why
2
4
3
1
2
3
2
4
2
2
3
4
1
4
3
4
2
2
2
2
2
2
2
4
2
2
2
4
2
2
2
3
2
1
3
4
2
1
2
2
4
3
1
4
3
3
4
2
4
1
4
2
1
4

If not treated, Why
2
2
2
4
1
4
2
3
2
1
3
2
3
4
2
2
3
4
4
1
4
4
3
2
2
2
4
2
4
4
2
1
2
4
3
4
2
4
3
1
2
2
2
3
2
2
4
3
1
3
3
3
3
2

If not treated, Why
2
1
3
4
4
4
2
1
2
4
4
2
4
4
2
1
3
4
3
2
2
2
4
4
2
4
3
3
3
2
2
2
2
4
2
4
2
2
4
4
4
1
2
4
2
4
3
2
4
2
2
4
4
4

If not treated, Why
4
2
2
1
2
2
1
2
2
3
4
4
4
4
4
4
2
2
3
4
2
2
4
2
1
2
3
1
4
2
4
2
1
2
2
4
3
2
2
4
4
2
3
4
3
2
2
4
2
2
1
2
4
1

If not treated, Why
2
2
4
2
2
2
4
4
3
3
1
2
2
3
4
4
2
4
4
4
1
2
4
4
3
2