



**PREVALENCE AND RISK FACTORS OF EARLY-ONSET PRESBYOPIA
AND ASTHENOPIC SYMPTOMS AMONG INFORMAL HANDCRAFT
WORKERS IN PAKISTAN: A CROSS-SECTIONAL STUDY**

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ABSTRACT

Refractive errors, pre-presbyopia, and asthenopic symptoms are common among individuals engaged in prolonged near work without regulated working hours.

- Refractive error refers to a visual condition in which parallel rays of light entering the eye fail to focus precisely on the retina, instead coming to a focus either in front of it, behind it, or at multiple focal points.
- Asthenopia (eye strain) is characterized by symptoms such as headache, nausea, vomiting, ocular discomfort, and blurred vision, often triggered by sustained visual tasks.
- Pre-presbyopia describes the early onset of near vision difficulties before the age of 40 years, usually due to premature decline in accommodative function.

Purpose: To determine the prevalence of early-onset presbyopia and asthenopic symptoms, and to identify associated visual and environmental risk factors among informal handcraft workers in Pakistan.

Methods: A community-based cross-sectional study was conducted among 100 informal handcraft workers (50 males, 50 females), aged 16–35 years, from Kot Qaisrani village (Dera Ghazi Khan) and Hussaina Gahi Bazaar (Multan). Assessments included visual acuity (logMAR charts), refractive status (retinoscopy), convergence (pencil push-up test), and asthenopic symptoms (structured questionnaire). Chi-square tests were applied to evaluate associations between symptoms

and potential risk factors.

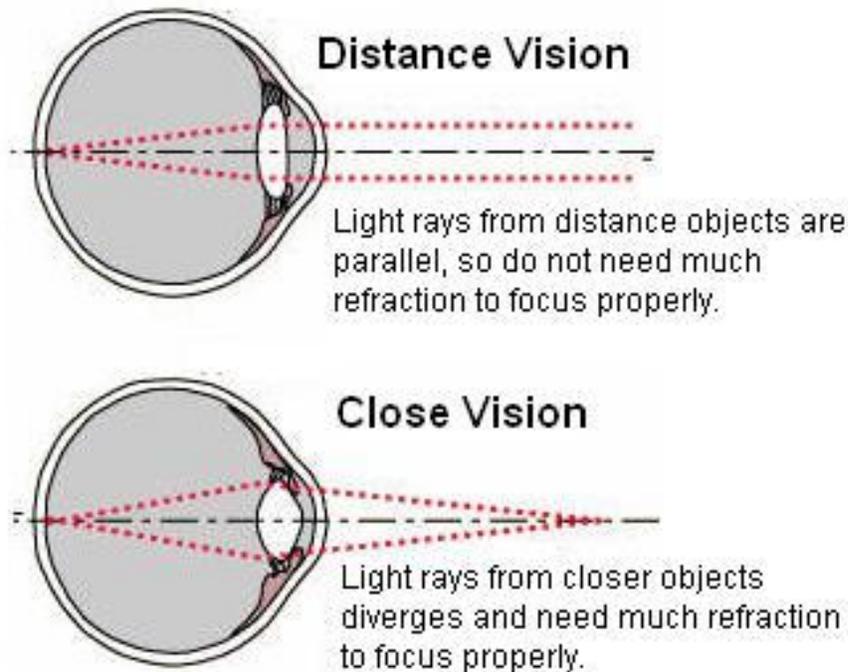
Results:

- Early-onset presbyopia: Prevalence 30% (N8–N12 near acuity).
- Asthenopia: Eye strain reported by 64%, significantly associated with reduced near vision ($p = 0.052$) and prolonged working hours.
- Convergence insufficiency: Present in 48%, strongly correlated with asthenopic symptoms.
- Headache: Reported by 72%, significantly associated with poorer near vision ($p = 0.008$).
- Refractive errors: 17% myopic, 9% hyperopic, 74% emmetropic.
- Near visual acuity: 70% N6, 17% N8, 13% N10–N12.
- Work conditions: 51% worked 9–12 hours/day, 91% reported insufficient rest, and 56% lacked adequate lighting.
- Eye care access: Only 20% had ever visited an eye care professional; 19% self-medicated with eye drops.

Early-onset presbyopia and asthenopic symptoms are highly prevalent among young handcraft workers. Major contributing factors include prolonged near work, poor lighting, lack of regular breaks, and convergence insufficiency. Preventive strategies—such as workplace ergonomic modifications, regular vision screening, and improved access to eye care—are urgently required to protect long-term ocular health in this vulnerable population.

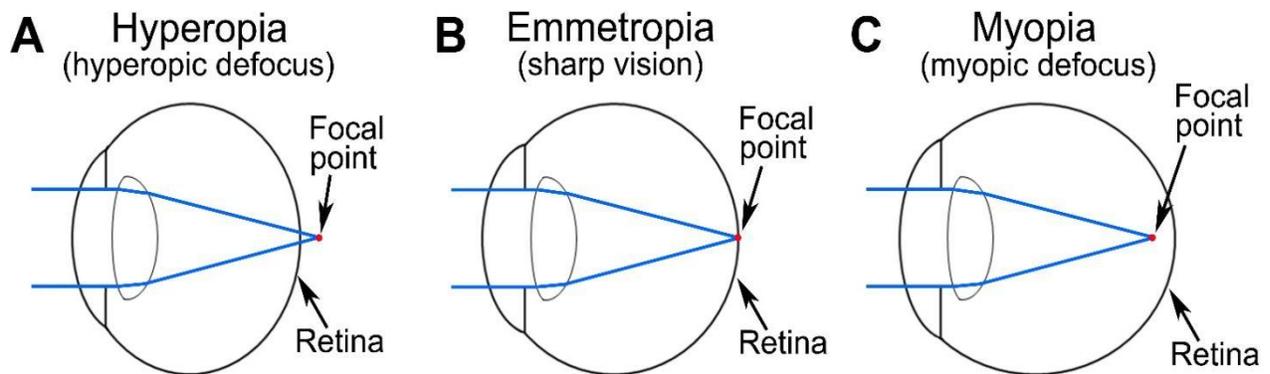
INTRODUCTION:

Presbyopia, the age-related decline in near focusing ability, typically manifests after the age of 40 but is increasingly reported among younger adults, a phenomenon termed early-onset presbyopia . Risk factors such as prolonged near work, poor lighting, uncorrected refractive errors, and inadequate visual ergonomics may accelerate accommodative decline . Asthenopia—characterized by eye strain, headache, and blurred near vision—is another frequent concern among individuals engaged in sustained near tasks. Informal handcraft workers represent a high-risk occupational group due to their extended working hours, visually demanding tasks, and often suboptimal workplace conditions . Unlike formal industrial sectors, informal workers frequently lack occupational health services, regular vision screenings, or awareness of preventive eye care measures . While presbyopia and asthenopia have been extensively studied in older populations, there is limited epidemiological data on their prevalence and risk factors among young adults in informal labor sectors of developing countries. This study aims to assess the prevalence of early-onset presbyopia and asthenopic symptoms, and to identify associated visual and environmental risk factors among informal handcraft workers in Pakistan. Understanding these associations is critical for designing targeted workplace interventions and public health strategies to prevent long-term visual morbidity in this underserved population.



(Thiruvelan, 2010).

Presbyopia, an age-related loss of accommodation typically occurring after 40 years, may present earlier as pre-presbyopia due to excessive near work, uncorrected hyperopia, systemic disease, ocular trauma, hormonal changes, nutritional deficiencies, or certain medications. Its symptoms often overlap with asthenopia, a condition of visual fatigue characterized by eye strain, headache, blurred vision, and occasionally nausea, commonly resulting from prolonged near tasks or binocular dysfunction such as convergence insufficiency. Refractive errors—myopia, hyperopia, and astigmatism—arise from abnormal ocular curvature or axial length, causing defocused retinal images and contributing to accommodative strain. In visually demanding occupations, especially among informal workers without regulated work–rest cycles, these visual problems may appear earlier, reduce productivity, and affect quality of life.



Astigmatism, accounting for approximately 13% of all refractive errors (Scott, 2006), is caused by irregular curvature of the cornea or, less commonly, the lens. This irregularity alters the path of incoming light, producing multiple focal points on the retina and resulting in blurred or distorted vision, often accompanied by asthenopic symptoms such as eye strain, headache, and visual fatigue. Patients may be able to read a visual acuity chart yet report that letters appear blurred or tilted. The etiology is often congenital, with a possible hereditary component, and its severity may change with age. Diagnosis is confirmed using keratometry or corneal topography, and management options include cylindrical spectacle lenses, toric contact lenses, or refractive surgery (Rose & Boskey, 2015).

1.MATERIALS AND METHODS:

Study Design and Participants

This was a community-based, cross-sectional study conducted using stratified sampling. Participants included males and females engaged in handcrafting occupations, a group at higher risk of developing asthenopia, refractive errors, convergence insufficiency, and pre-presbyopia due to prolonged near work.

Sampling Technique

Stratified sampling was applied, dividing the population into two strata:

1. Male handcrafters working in a local market.
2. Female handcrafters from a rural village working from home.

Study Setting and Duration

The study was conducted over a six-month period in Kot Qaisrani village, Tehsil Taunsa, District Dera Ghazi Khan, and Hussaina Gahi Bazaar, Multan, Pakistan.

Sample Size

A total of 100 participants were recruited, comprising 50 males and 50 females.

Inclusion Criteria

- Age 16–35 years.
- Engaged in handcrafting as the primary occupation.
- Presence of asthenopic symptoms.
- Refractive errors or spasm of accommodation.
- Pre-presbyopia.
- Both genders.
- Willingness to participate and provide informed consent.

Exclusion Criteria

- Amblyopia.
- Cataract or other media opacities.
- Low vision.
- History of ocular trauma or surgery.
- Known neurological disorders affecting vision.
- Glaucoma.
- Ocular allergies or active infections.

Ethical Considerations

The study was conducted in accordance with the Declaration of Helsinki. Written informed consent was obtained from all participants. Confidentiality was maintained throughout the study.

2.INSTRUMENTATION AND EXAMINATION:

Visual Acuity: Visual acuity was done at near and distance with logMAR Chart.

Distance visual acuity was taken at 4m and then converted into 6m and near visual acuity was taken at 25cm distance by the help of logMAR near acuity chart and was noted in N notation. This chart is used at reading distance 25cm. We asked the patient to read the chart at room illumination. The point at which patients can't read that was noticed and corrective lenses were given to treat the patients who were diagnosed with pre-presbyopia. Distance visual acuity was taken to screen out refractive errors and near visual acuity was taken to screen out the pre-presbyopic subjects. Visual acuity was taken monocularly.

Torch Light Examination: Torch light examination was done to examine the anterior structures of the eyes. We examined them to exclude the patients with cataract, allergies and infections in their eyes. Patients were also screened digitally for glaucoma because patients with glaucoma were excluded from our study.

Convergence Insufficiency: Convergence insufficiency is inability of our eyes to converge properly. It usually happens when a person is tired, weak or he/she does near work. A person with convergence insufficiency can have headache and eye strain after some near work. Irritation is also a symptom of convergence insufficiency. Convergence insufficiency in this research was checked by pencil push up technique.

Pencil Push up technique: A pencil was held in front of patient's eye. Nib of the pencil was upward and the pencil was kept vertical. Pencil was kept right in front of patient's eye at distance of arm length approximately then the pencil was moved slowly toward the patient's eye. Patients were instructed to focus at the tip of the pencil and they were asked to inform immediately when the tip of the pencil becomes double or blur. If the tip is blurred at 9 to 16cm and doubled at 6 to 7 cm than the convergence is normal if this is blurred or doubled at more than these distance than the patient is said to have convergence insufficiency.

Retinoscopy:

It is done to objectively measure the refractive error. A Heine B200 retinoscope (streak retinoscope) was used. In our study it was used to screen out the emmetropic, myopic, hypermetropic patients. Working distance lens was used to neutralize the movement. Hyperopia and myopia less than 1.5 shows with movement with streak retinoscopy and myopia more than 1.5 shows against movement. Oblique reflex was observed in astigmatism.

Ophthalmoscopy:

Distance Direct ophthalmoscopy was performed to check Bruckner's reflex. In Bruckner's reflex we see a fundus glow. If there is full fundus glow at distant direct ophthalmoscopy then patient is emmetropic, if there is a downward yellowish crescent then patient is myopic and if there is an upward crescent then patient is hypermetropic. Distant direct ophthalmoscopy was done to screen out the type of refractive error.

3.DATA COLLECTION :

Study Design and Participants

This was a community-based, cross-sectional study conducted using stratified sampling. Participants included males and females engaged in handcrafting occupations, as this group is at higher risk of developing asthenopia, refractive errors, convergence insufficiency, and pre-presbyopia due to prolonged near work.

Sampling Technique

Stratified sampling was employed, dividing the population into distinct strata and drawing a probability sample from each. The strata were:

1. Male handcrafters working in a local market.
2. Female handcrafters from a rural village working from home.

Study Setting

The study was conducted in Kot Qaisrani village, Tehsil Taunsa, District Dera Ghazi Khan and Hussaina Gahi Bazaar, Multan, Pakistan.

Study Duration

The study was carried out over a period of six months.

Sample Size

A total of 100 participants were recruited, comprising 50 males and 50 females.

Inclusion Criteria

- Adults aged 16–35 years engaged in handcrafting as their primary occupation.
- Presence of asthenopic symptoms.
- Refractive errors.
- Pre-presbyopia.
- Spasm of accommodation.
- Willingness to participate and provide informed consent.
- Both genders equally represented.

Exclusion Criteria

- Amblyopia.
- Cataract.
- Low vision.
- Neurological disorders affecting vision.
- Glaucoma.
- Ocular allergies or infections.
- Any condition causing hazy media.
- History of ocular trauma or surgery.
- Age below 15 years.

Ethical Considerations

The study followed the principles of the Declaration of Helsinki. Written informed consent was obtained from all participants, and confidentiality was maintained.

Procedure:

After obtaining informed consent, a detailed personal and medical history was recorded, including:

- Presence of systemic diseases (diabetes, hypertension, smoking history, or any other systemic illness affecting vision).
- Drug history.
- History of ocular trauma or previous ocular surgery.

Examination steps included:

1. Visual acuity assessment using a LogMAR chart at 4 m (distance) and 25 cm (near) to detect refractive errors or pre-presbyopia.
2. Torchlight examination to evaluate anterior segment and exclude participants based on exclusion criteria.
3. Retinoscopy to identify the type of refractive error.
4. Ophthalmoscopy to assess Bruckner's reflex.
5. Digital glaucoma screening to exclude glaucoma cases.

A structured proforma was completed with all patient information. A questionnaire was then administered to assess symptoms such as headache, eye strain, and nausea.

Management:

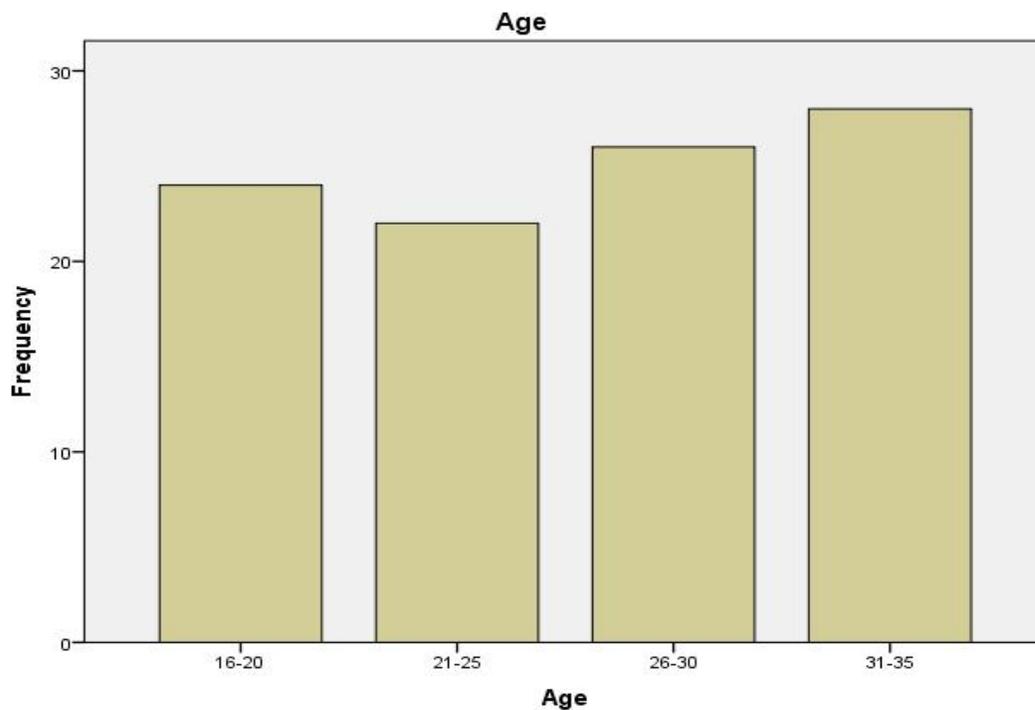
- Pre-presbyopia: Prescription glasses provided.
- Asthenopia: Advised short breaks during work.
- Convergence insufficiency: Recommended pencil push-up exercises.

4.RESULTS:

4.1 Age:

Total 100 number of patients were included in study in age range of 16-35 years. The frequency and percentage of age group 16-20 is 24%, 22% is from age 21-25, 26% are lye in the range from 26-30 and 28% are present from 31-35 (Table 4.1.1,Bar chart-1).

Table 4.1.1 Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16-20	24	24.0	24.0	24.0
	21-25	22	22.0	22.0	46.0
	26-30	26	26.0	26.0	72.0
	31-35	28	28.0	28.0	100.0
	Total	100	100.0	100.0	

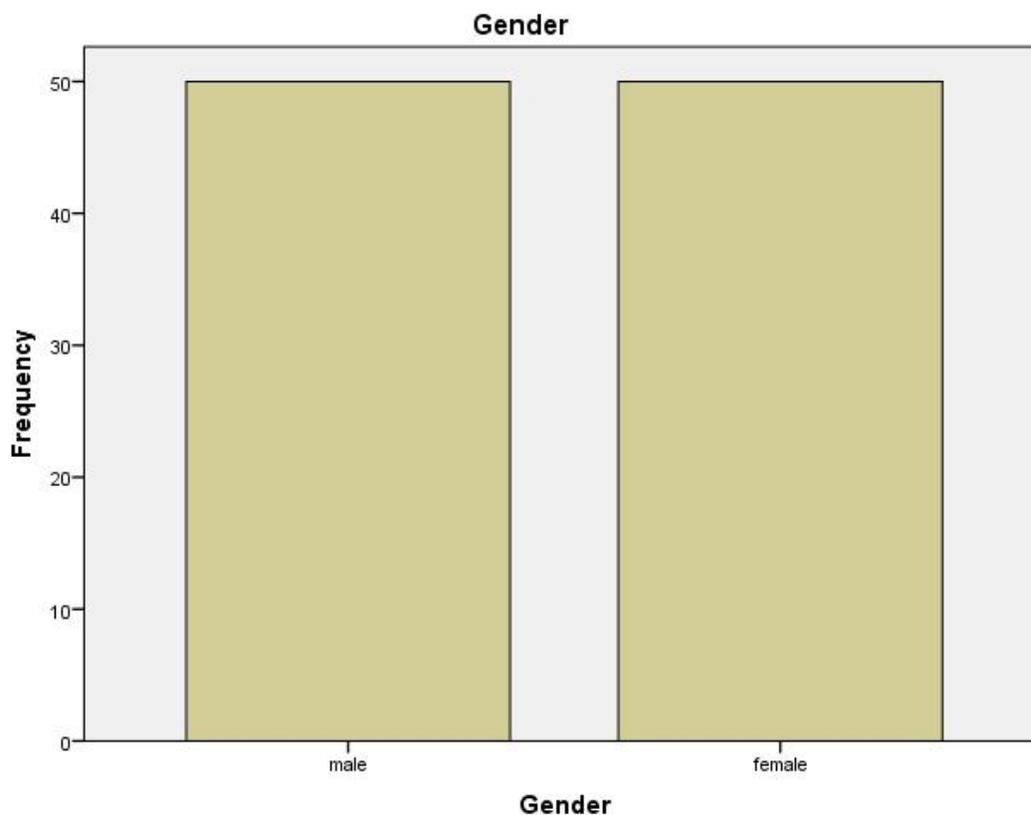


4.2 Gender:

Total number of person in this study is 100. Out of 100, 50 are males and 50 are females involved in handcrafting.

Table 4.2.1. Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent

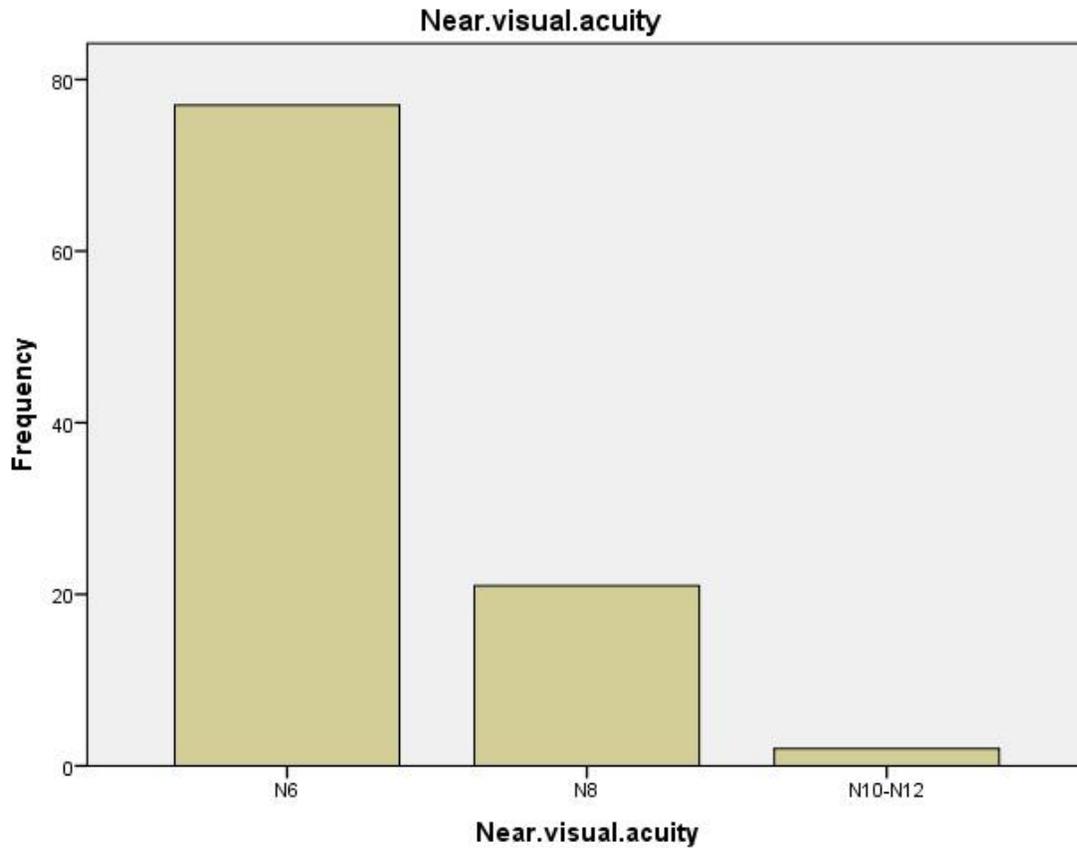
Valid	male	50	50.0	50.0	50.0
	female	50	50.0	50.0	100.0
	Total	100	100.0	100.0	



4.3 Near visual acuity:

Out of 100 people, the result of this study shows 70% have near visual acuity of N6. 17% have N8 and 13% are lying in the range of N10-N12. Statistical studies shows there is mean= 0.433, SD=0.71428 and variance = 0.51

Table 4.1.3. Near visual acuity					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	N6	70	70.0	70.0	70.0
	N8	17	17.0	17.0	87.0
	N10-N12	13	13.0	13.0	100.0
	Total	100	100.0	100.0	



Descriptive Statistics

Near visual acuity

N	Valid	100
	Missing	0
Mean		.4300
Std. Error of Mean		.07143
Median		.0000
Mode		.00
Std. Deviation		.71428
Variance		.510
Minimum		.00
Maximum		2.00

Distance visual acuity:

Both following tables 4.4. And 4.5. Shows distance visual acuity of 100 patients. 78% lies in the range having visual acuity of 6/6 to 6/9. 16% have distance visual acuity from 6/12-6/38 and only 2% has visual acuity from 6/48 to 6/60.

Table 4.1.4. Distance visual acuity RE					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0.00-0.2	78	78.0	78.0	78.0
	0.3-0.5	16	16.0	16.0	94.0
	0.6-0.8	4	4.0	4.0	98.0
	0.9-1.0	2	2.0	2.0	100.0
	Total	100	100.0	100.0	

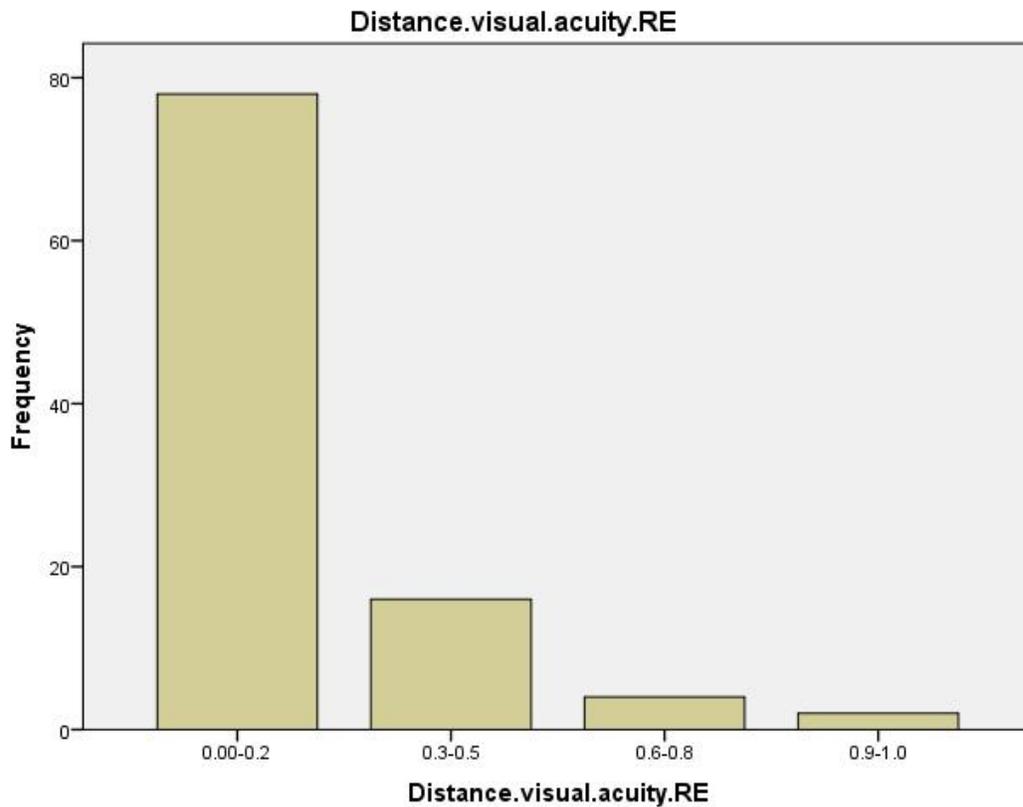
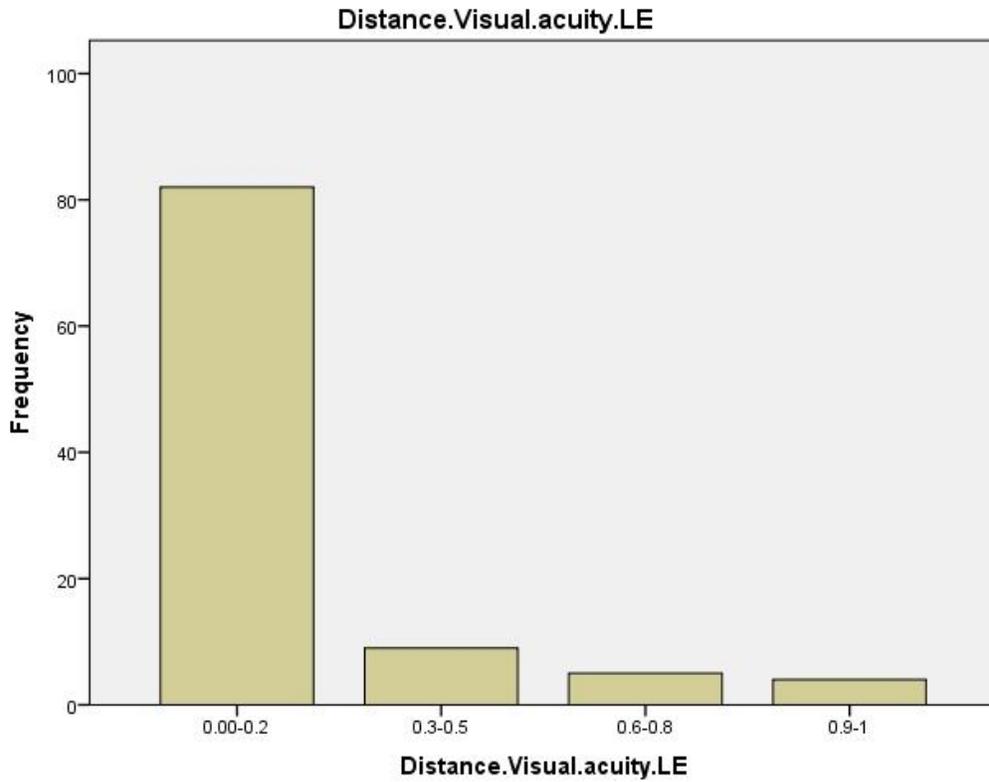


Table 4.1.5. Distance Visual acuity. LE					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0.00-0.2	82	82.0	82.0	82.0
	0.3-0.5	9	9.0	9.0	91.0
	0.6-0.8	5	5.0	5.0	96.0
	0.9-1	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

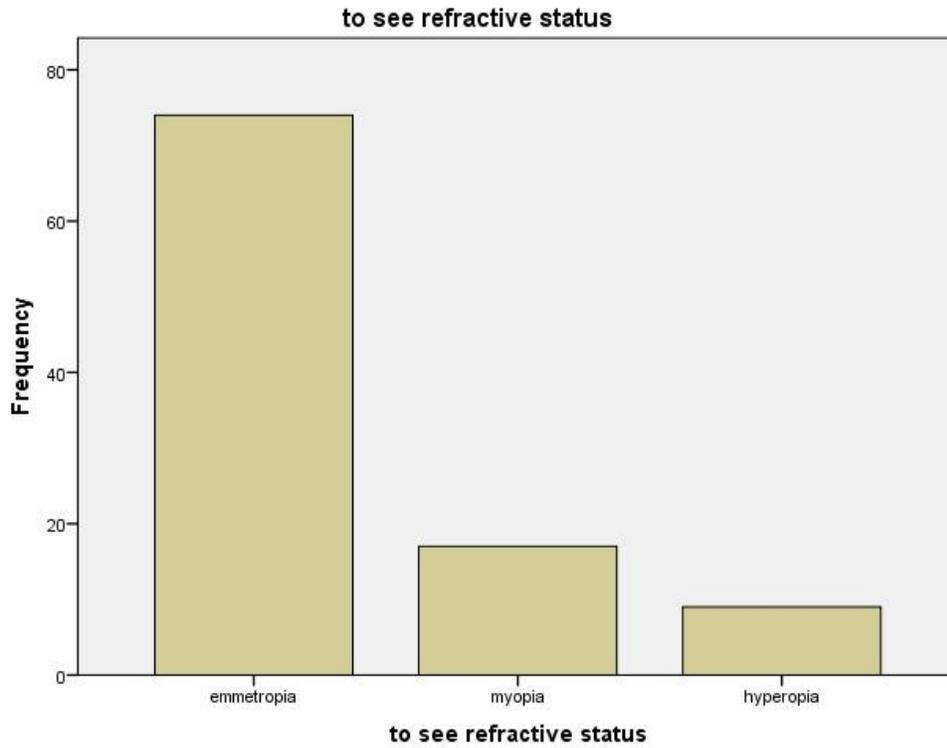


Refractive status:

Out of 100 people who are selected in this study mostly are emmetropes who have frequency and percentage 74%, 17% are myopic and 9% are hyperopic.

Table 4.1.6. Refractive status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Emmetropia	74	74.0	74.0	74.0
	Myopia	17	17.0	17.0	91.0
	Hyperopia	9	9.0	9.0	100.0
	Total	100	100.0	100.0	

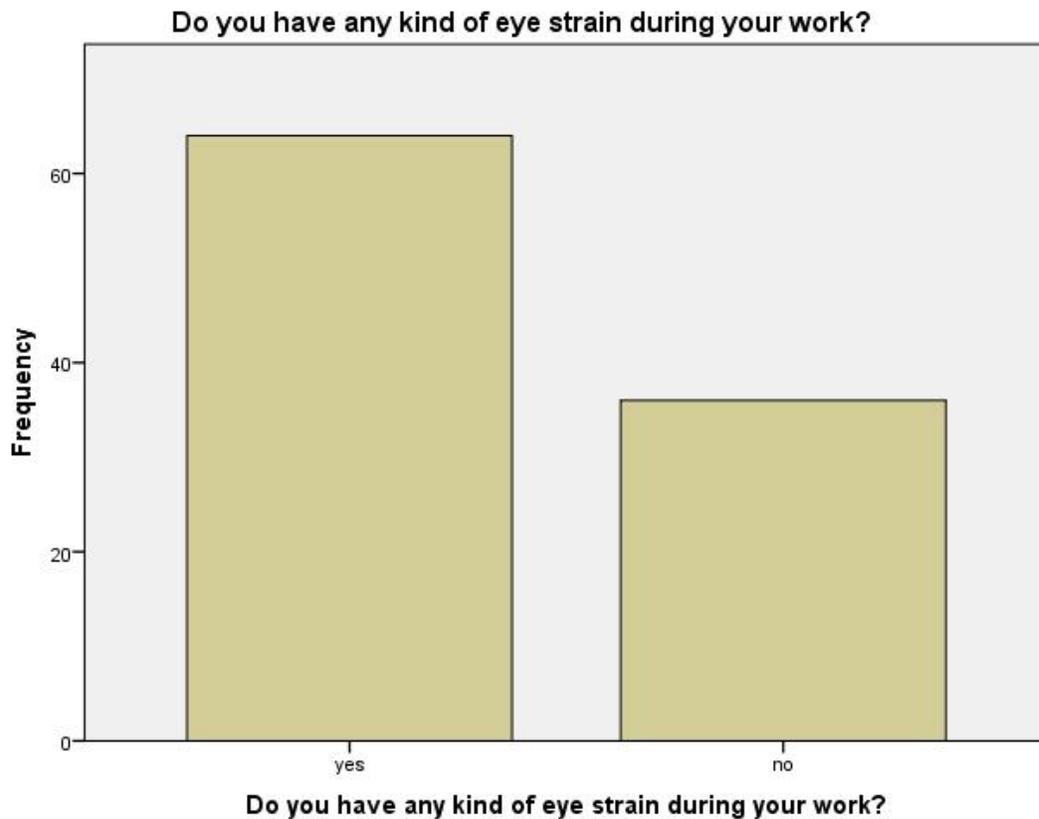


Eye strain:

Eye strain is main variable of this study, from 100 people the percentage of people having eye strain is 64%. And 34% haven't any eye strain. So eye strain is associated with near work.

Table 4.1.7. Eye strain

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	64	64.0	64.0	64.0
Valid no	36	36.0	36.0	100.0
Total	100	100.0	100.0	



Crosstab

Count

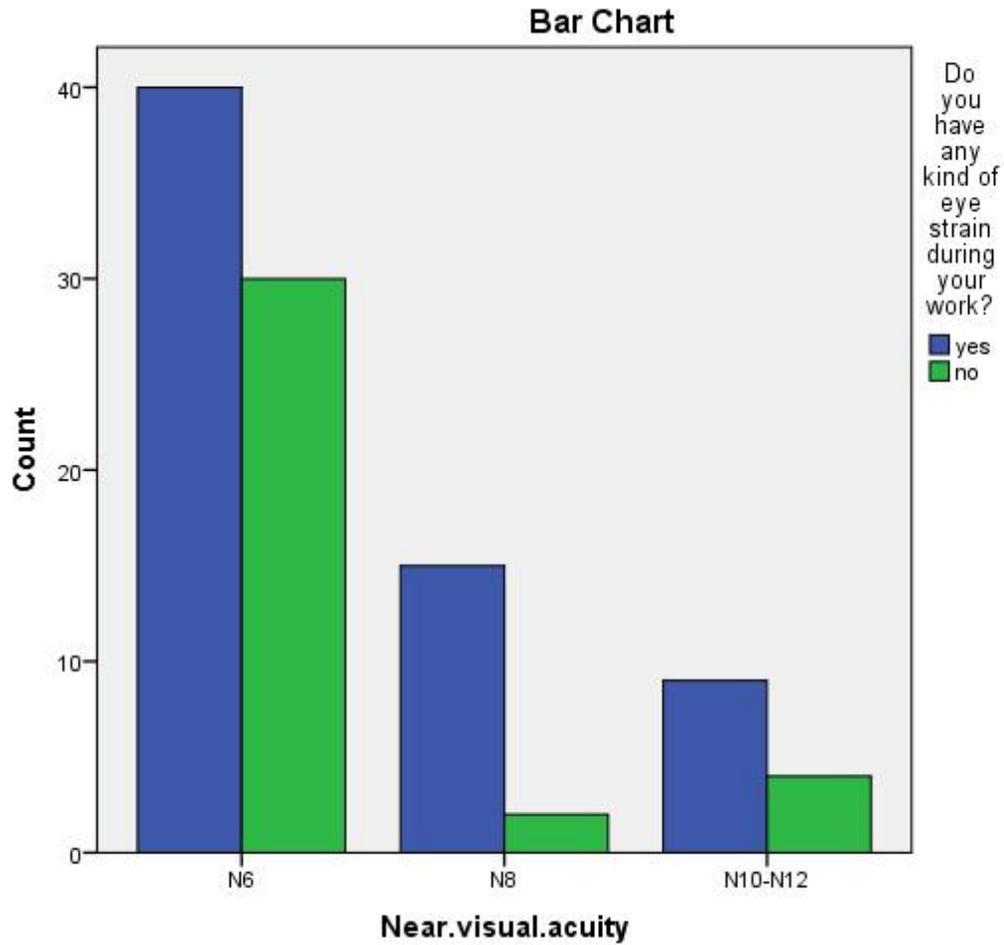
		Do you have any kind of eye strain during your work?		Total
		yes	no	
Near visual acuity	N6	40	30	70
	N8	15	2	17
	N10-N12	9	4	13
Total		64	36	100

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.917 ^a	2	.052

Likelihood Ratio	6.713	2	.035
Linear-by-Linear Association	2.555	1	.110
N of Valid Cases	100		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.68.

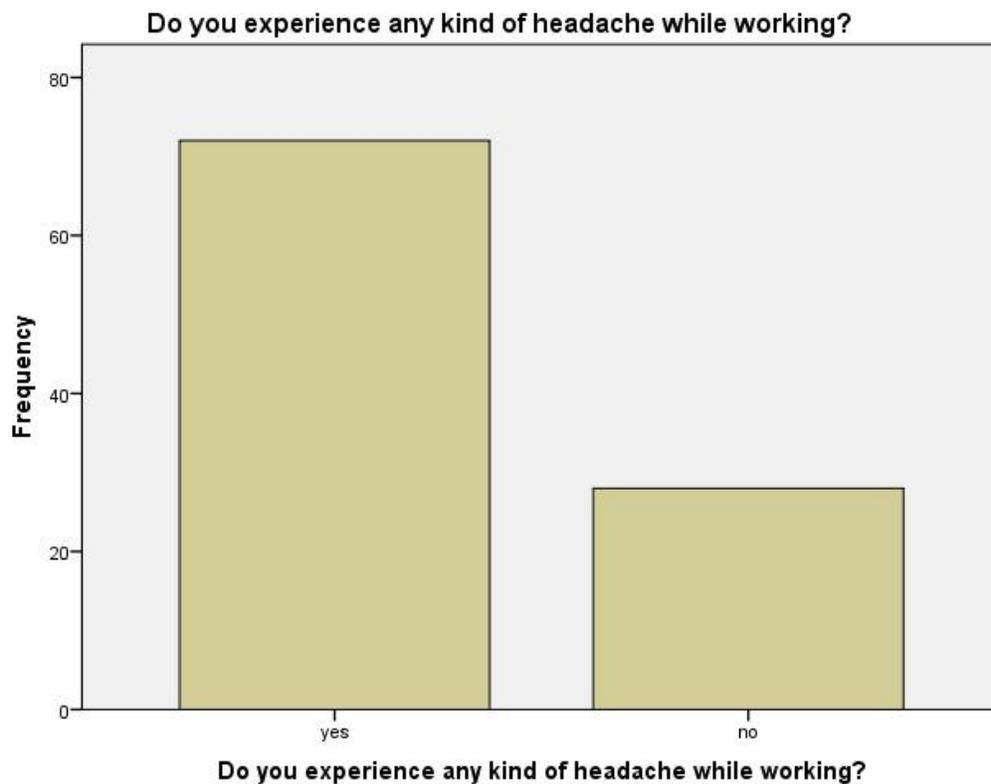


Headache:

Headache is also associated with asthenopia. 44% have experienced headache during near work having visual acuity N6 and 26% haven't any complain of headache. 16% people having visual acuity N8 suffered from headache and only 12% having range from N10-N12 suffering from headache.

Table 4.8. Headache

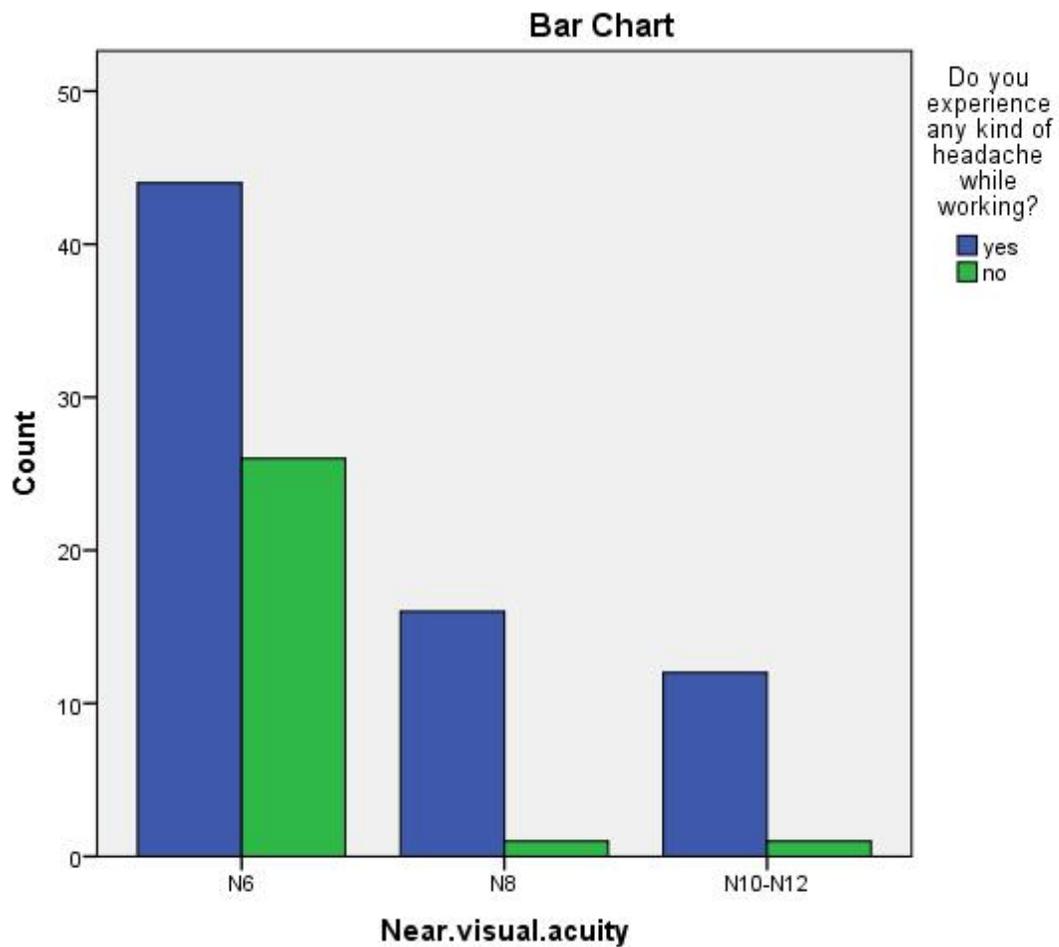
		Do you experience any kind of headache while working?		Total
		yes	No	
Near visual acuity	N6	44	26	70
	N8	16	1	17
	N10-N12	12	1	13
Total		72	28	100



Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.687 ^a	2	.008
Likelihood Ratio	11.574	2	.003
Linear-by-Linear Association	7.945	1	.005
N of Valid Cases	100		

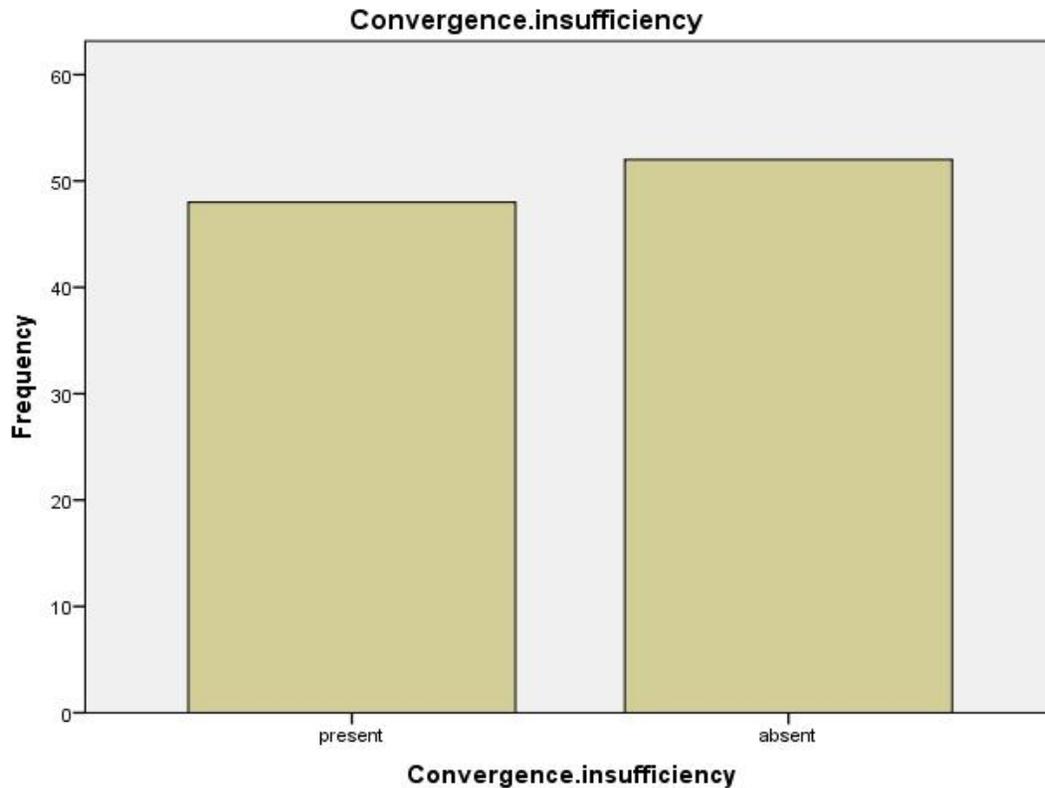
a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.64.

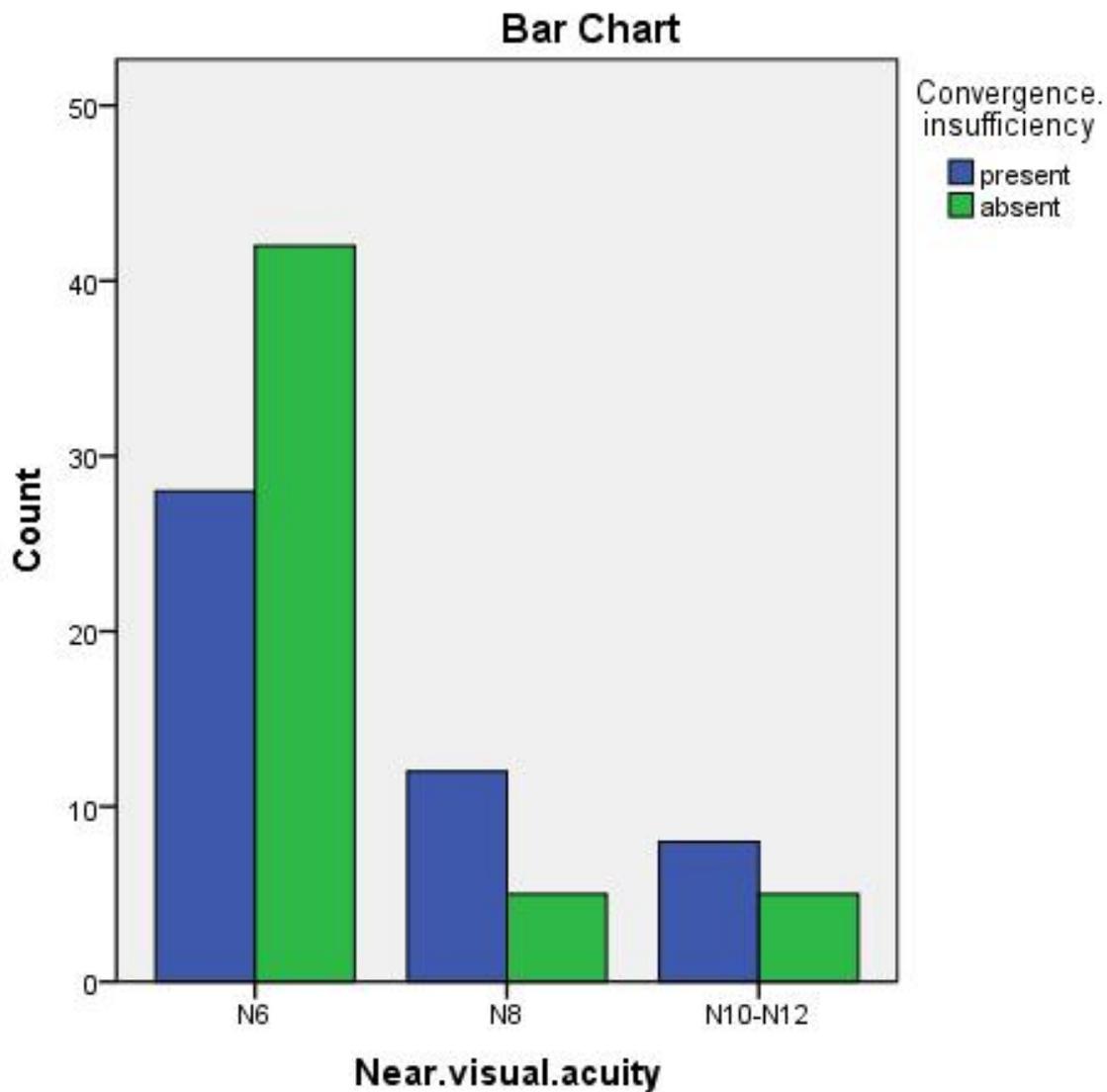


Convergence insufficiency:

Out of 100 people, 28% having near visual acuity N6 have convergence insufficiency and 42% haven't any convergence insufficiency. 12% people with N6 has presence of convergence insufficiency and 5% haven't any complains. 8% people with visual acuity N10-N12 have complains and 5% with same visual acuity haven't any complain.

Table 4.1.9. Convergence Insufficiency				
		Convergence Insufficiency		Total
		Present	absent	
Near visual acuity	N6	28	42	70
	N8	12	5	17
	N10-N12	8	5	13
Total		48	52	100

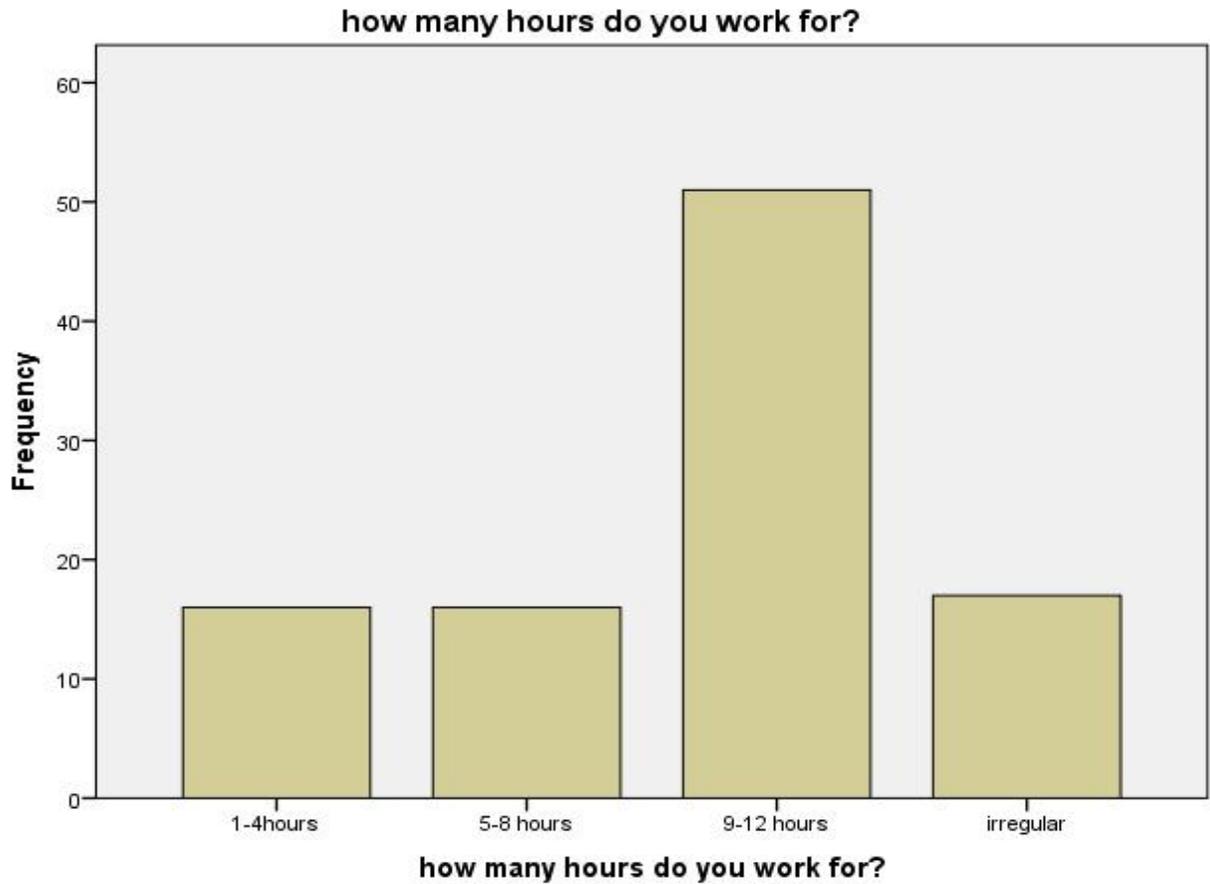




Working hours:

Total 100 people of this study, 51% people doing their work from 9-12 hours and 16% is frequency of working hours of 1-4 and 5-8 respectively. 17% has irregular working hours.

Table 4.1.10. working hours					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-4hours	16	16.0	16.0	16.0
	5-8 hours	16	16.0	16.0	32.0
	9-12 hours	51	51.0	51.0	83.0
	Irregular	17	17.0	17.0	100.0
	Total	100	100.0	100.0	

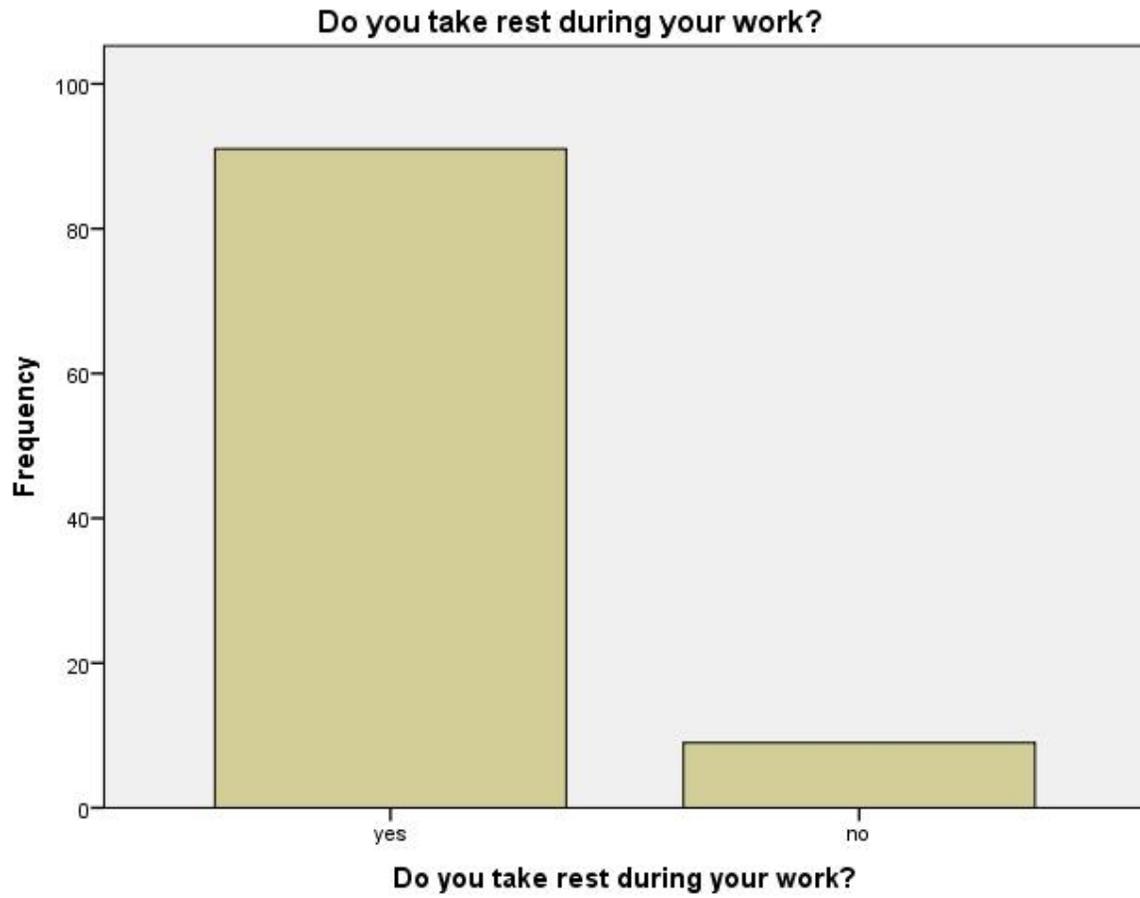


Rest during work:

Here 91% is frequency of people taking rest during work. This wasn't proper rest they took rest of 1-2 hours which was lunch break after doing work 9-12 hours.

Table 4.1.11. rest during work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	91	91.0	91.0	91.0
	No	9	9.0	9.0	100.0
	Total	100	100.0	100.0	

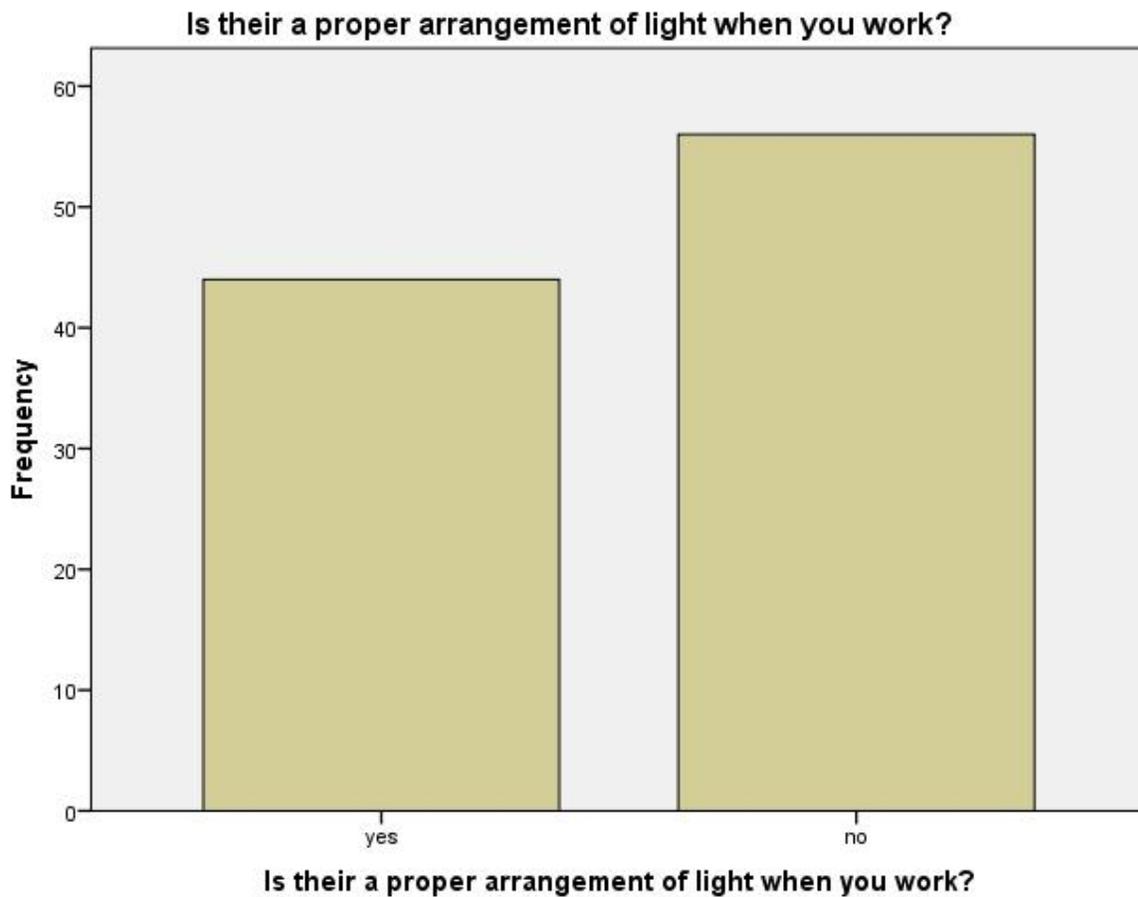


Illumination:

44% is the percentage of people out of 100 people who have good illumination at their work place. And 56% haven't any good illumination at their work place.

Table 4.1.12.Illumination

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	44	44.0	44.0	44.0
Valid No	56	56.0	56.0	100.0
Total	100	100.0	100.0	

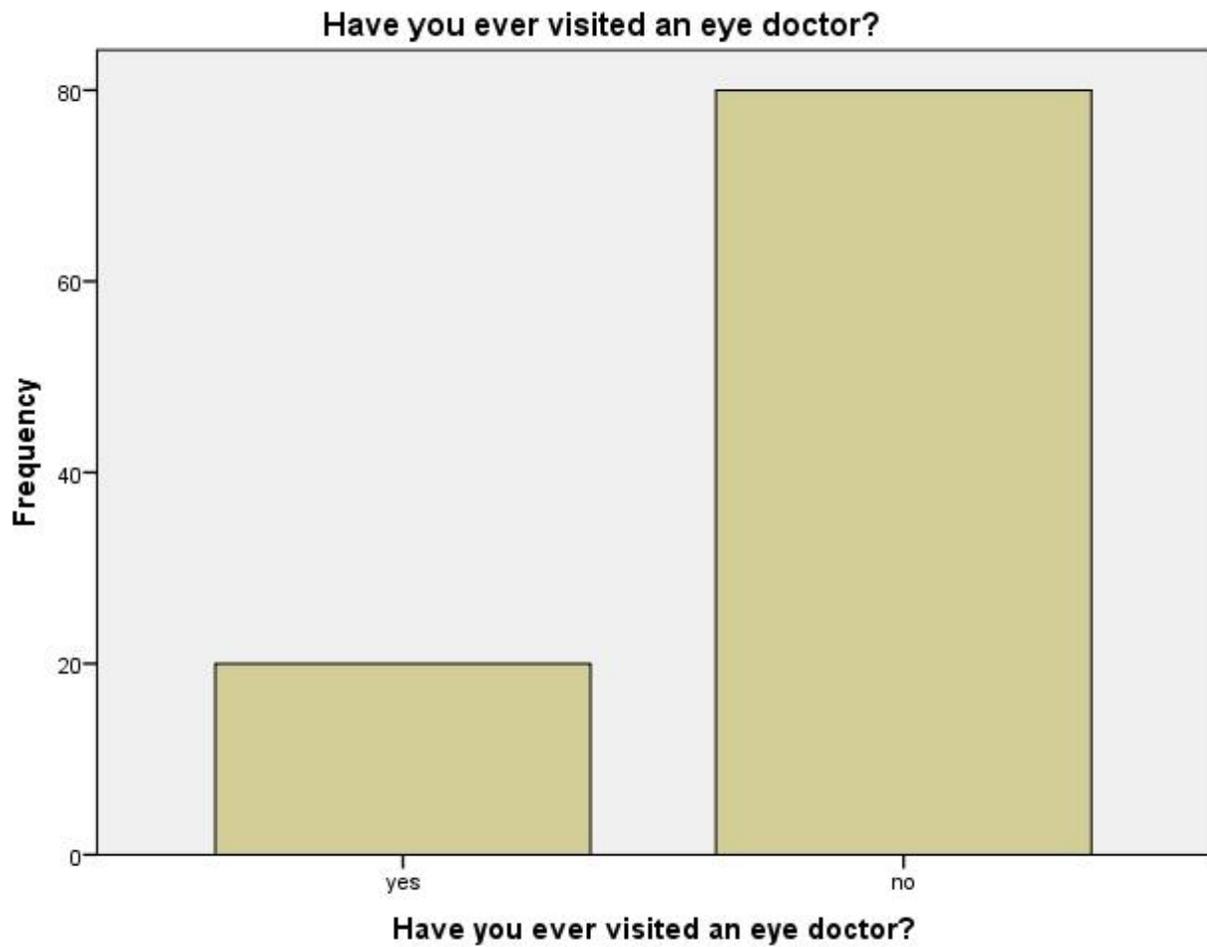


Doctor visit:

Only 20% of people have visit to doctor and 80% in this study haven't any visit to doctor. All were counseled to go for check up.

Table 4.1.13. doctor visit

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	20	20.0	20.0	20.0
	No	80	80.0	80.0	100.0
	Total	100	100.0	100.0	



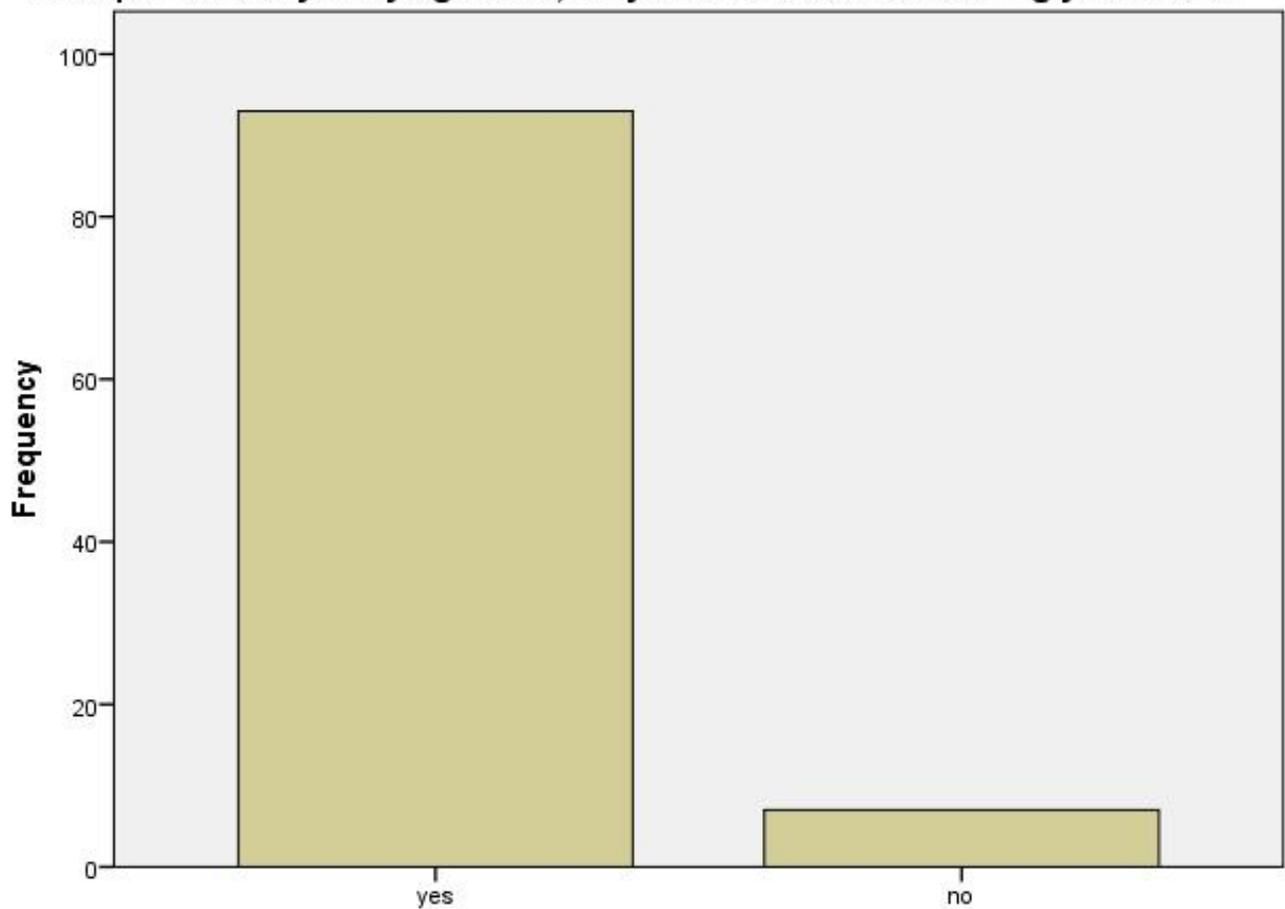
Use of glasses during work:

Out of 100 people, 93% are willing to use glasses during work when it is recommended after checking visual acuity and refractive status. Only 7% were not willing to wear it.

Table 4.1.14. use of glasses during work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	93	93.0	93.0	93.0
	No	7	7.0	7.0	100.0
	Total	100	100.0	100.0	

If we prescribed you eye glasses,will you be able to wear during your work?



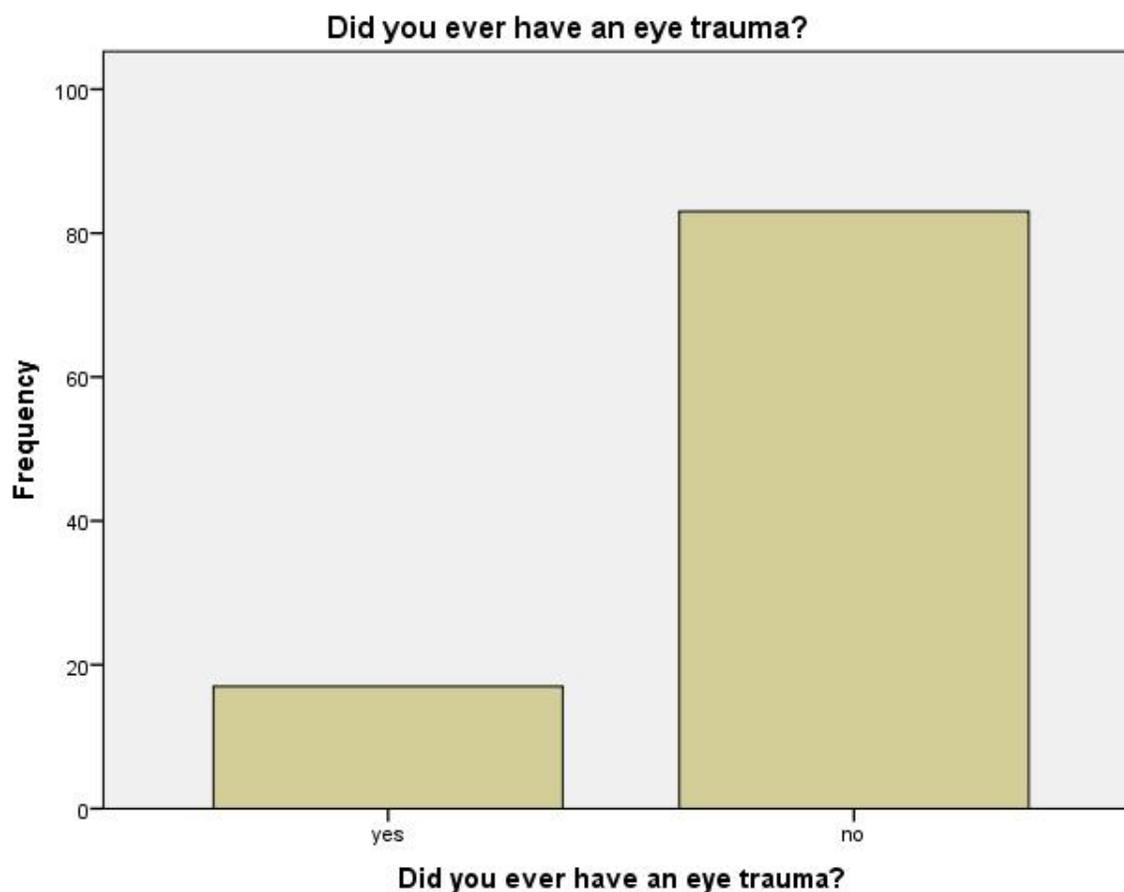
If we prescribed you eye glasses,will you be able to wear during your work?

Eye trauma:

Mostly people haven't any trauma in eye due to handcrafting their percentage is 83% and 17% have injury due to trauma.

Table 4.1.15. eye trauma

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	17	17.0	17.0	17.0
	No	83	83.0	83.0	100.0
	Total	100	100.0	100.0	

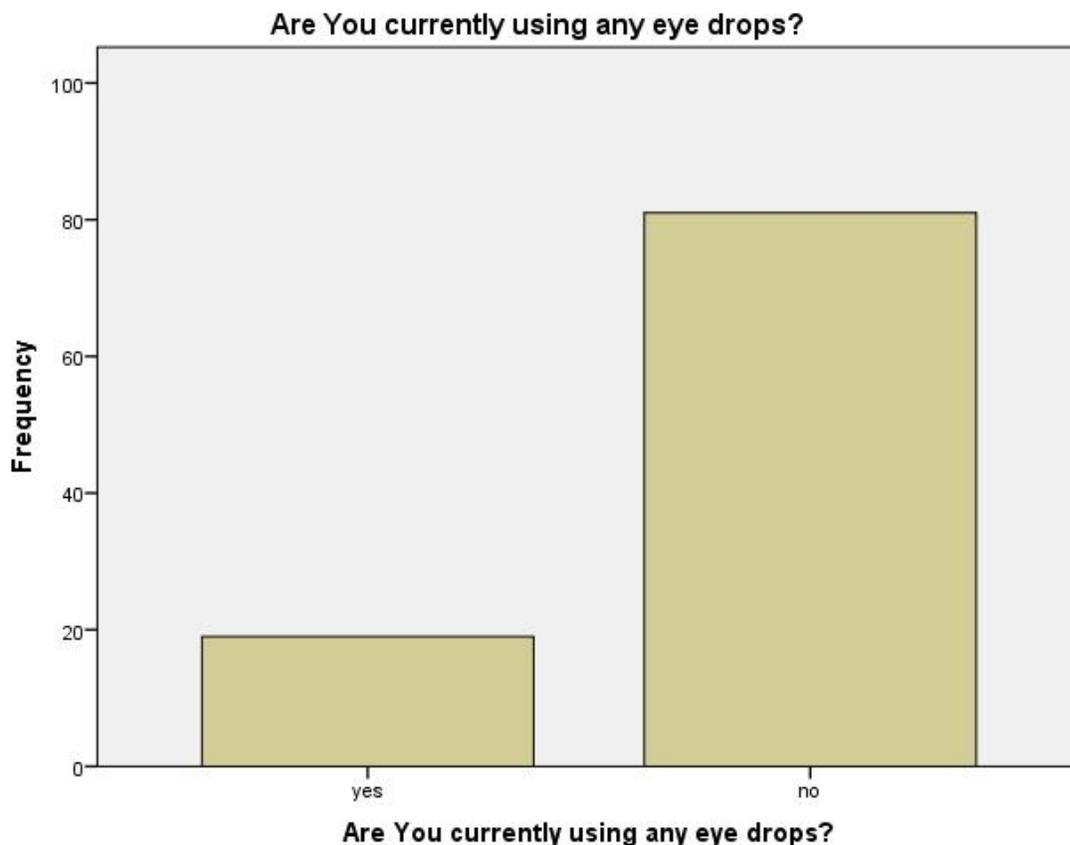


Eye Drops:

19% of people in this study using prednisolon eye drop when they felt fatigue in eyes. This percentage is of men. Women didn't use any eye drop to comfort eyes.

Table 4.1.16. eye drops

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	19	19.0	19.0	19.0
	No	81	81.0	81.0	100.0
	Total	100	100.0	100.0	



DISCUSSION:

The present study highlights the significant association between prolonged near work and various ocular problems, including asthenopia, headaches, and convergence insufficiency. Our findings demonstrate a high prevalence of these symptoms—over 60% reported asthenopia and nearly 70% experienced headaches—indicating a substantial burden of visual discomfort among individuals engaged in sustained near tasks. Additionally, convergence insufficiency was observed in approximately 48% of participants, underscoring the impact of near work on binocular vision anomalies. Environmental factors such as poor illumination were reported by 45% of participants, further emphasizing the multifactorial nature of visual strain [1-3]. Our results align with global estimates of presbyopia and related visual impairment, which affect over a billion people worldwide and contribute significantly to reduced quality of life and productivity losses [4,5]. Uncorrected presbyopia and refractive errors continue to pose major public health challenges, especially in rural and low-resource settings, where access to affordable vision correction remains limited [6,7]. Innovative treatment modalities, including pharmacological approaches such as pilocarpine and combination parasympathomimetic drugs, show promise as alternatives or adjuncts to traditional optical correction, with some studies demonstrating improved near visual acuity and patient satisfaction [8-10]. However, large-scale trials and long-term safety data are still needed to establish their role in routine clinical practice [11].

Advancements in surgical and laser-based presbyopia correction techniques, such as pseudophakic monovision and Presbyond® Laser Blended Vision, have achieved considerable success in improving spectacle independence with acceptable preservation of contrast sensitivity and stereopsis, although further research is needed to clarify their long-term functional outcomes

[12,13]. Meanwhile, optical devices such as multifocal and single vision contact lenses continue to influence gaze behavior and reading efficiency differently, which has important implications for individualized lens selection and patient counseling [14].

From a public health perspective, studies from diverse regions, including East Asia, Sub-Saharan Africa, and South Asia, confirm that while age-standardized rates of blindness and moderate-to-severe vision impairment have declined, the absolute number of affected individuals continues to rise due to population growth and aging [15-17]. Addressing barriers to refractive services and cataract surgery remains critical to reduce the burden of avoidable vision impairment globally [18,19].

In our sample, refractive errors were prevalent, with 20% myopia and 10% hyperopia, and pre-presbyopia was noted in half of those over 30 years. This supports the hypothesis that sustained accommodative effort may accelerate near vision difficulties, especially in occupations demanding continuous near fixation [20]. The high frequency of asthenopia and convergence insufficiency points to both refractive and functional strain contributing to ocular discomfort and diminished productivity. These symptoms are exacerbated by environmental factors such as poor lighting, inadequate working distances, and lack of breaks, which were common in the study population [21].

Therefore, environmental and ergonomic interventions—such as improving illumination, optimizing working distance, encouraging regular breaks (e.g., the 20-20-20 rule), and promoting visual hygiene—may alleviate symptoms and improve comfort [22]. Early detection and correction of refractive errors, alongside orthoptic exercises for convergence insufficiency, should be integrated into preventive eye care strategies to maintain visual health and work efficiency [23].

Limitations of this study include its cross-sectional design, which precludes causal inferences, and potential selection bias. Future longitudinal studies are warranted to evaluate the long-term effects of near work and the efficacy of targeted interventions.

In conclusion, our findings emphasize the need for comprehensive vision care approaches addressing refractive, accommodative, binocular, and environmental factors to prevent and mitigate near work–related ocular problems. Regular eye examinations, workplace ergonomics, and patient education remain cornerstone measures to preserve visual function and quality of life in populations engaged in prolonged near tasks.

CONCLUSION:

This study demonstrates a significant association between prolonged near work and multiple ocular problems, particularly asthenopia, refractive errors, pre-presbyopia, and convergence insufficiency. A substantial proportion of participants reported symptoms such as eye strain and headaches, and nearly half exhibited inadequate lighting conditions during near tasks. These findings highlight the need for preventive strategies, including regular visual breaks, proper workplace ergonomics, and routine eye examinations, to reduce the visual strain associated with excessive near work. Further research with larger and more diverse populations is warranted to strengthen these observations and guide public health interventions.

Recommendations:

Based on the findings of this study and the clinical examination of participants, the following recommendations were made:

1. **Optimize Lighting Conditions:** Patients were advised to work under adequate illumination to minimize visual strain and prevent asthenopia.

2. Correct Refractive Errors: Spectacles were prescribed to individuals with refractive errors and pre-presbyopia to improve visual clarity during near work.
3. Manage Convergence Insufficiency: Patients with convergence insufficiency were instructed to perform pencil push-up exercises and follow the 20-20-20 rule (every 20 minutes, look at an object 20 feet away for at least 20 seconds).
4. Educate on Safe Eye Practices: Individuals using prednisolone drops without medical supervision were counseled on the potential adverse effects of prolonged steroid use.
5. Discourage Harmful Traditional Practices: Participants were warned against unsafe methods such as using currency notes or the tongue to remove foreign bodies from the eye, due to the risk of infection and corneal injury.
6. Maintain Proper Working Distance: A working distance of 30–40 cm during near tasks was recommended.
7. Encourage Regular Eye Examinations: Routine ophthalmic check-ups were advised to detect and address ocular problems early.

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