2021-22 ANNUAL REPORT

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This year 2021-22

As we begin to recover from the second and third waves of COVID-19, we gradually began our outreach services, expanding outside Chennai and Tamil Nadu.

With support from Computer Age Management Services (CAMS), we were able to provide Occupational Optometry Services to about 2495 unorganized sector workers and 1900 of them benefited from spectacles. This year CAMS also supported us in providing cataract surgery to the unorganized sector workers, and about 41 of them got benefited from the services, and those workers were also provided with postoperative care and spectacles.

With support from National Securities Depository Limited (NSDL), we offered services to about 202 farmers and agriculture workers from rural villages of Sirunagar and Badhur in Chengalpattu and Thiruvannamalai districts in Tamil Nadu, and about 121 workers benefitted from spectacles intervention.

As the industries gradually got back from Work From Home to Working from the office, we offered our services to five companies/industries in Chennai, examining about 850 employees at their premises.

Academically, the teams presented their works at about six National conferences and won awards. An online survey conducted by the department, during the lockdown, to understand the effect of working from home got published in Clinical and Experimental Optometry.

2021-22 A GLANCE

74.3%

INCREASE FROM PREVIOUS YEAR

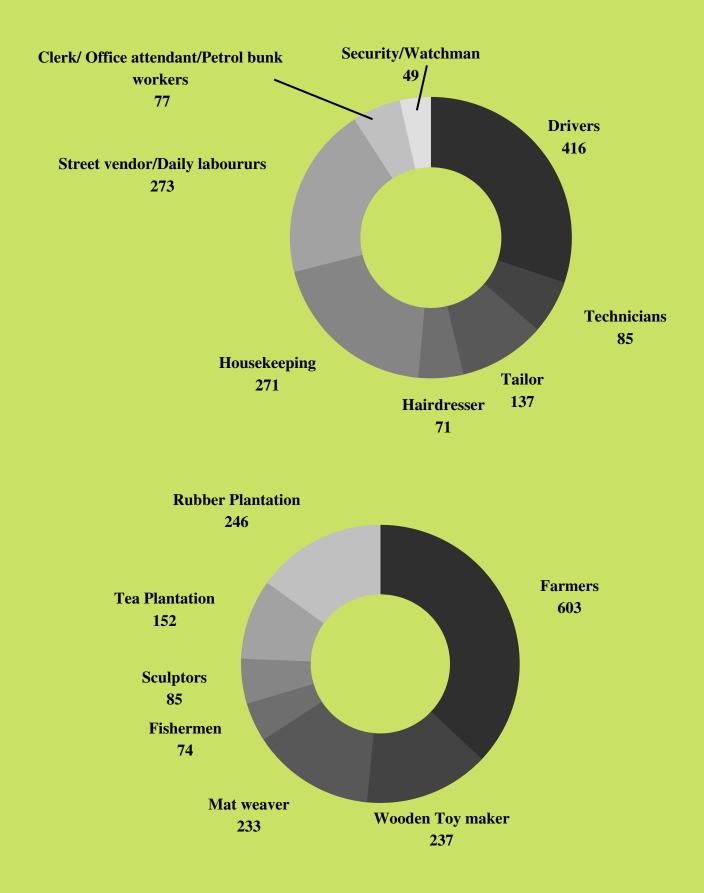
About 3011 unorganized sector workers were benefitted from the services till date and it is 74.3 % more than previous year where the team offered service to about 1379 workers last year.

SPECTACLE BENEFICIARY

About 76.1% of the working population benefitted from the spectacle intervention. This year about 2237 workers benefited from spectacles which is 50 % more than last year of about 1003 received spectacles. Also about 178 workers benefited from extra safety eyewear apart from regular spectacles.

76.1%

AN OVERVIEW



NEW VENTURES

01

02

MAT WEAVERS

Korai-grass mat weavers from Pathamadai, Tirunelveli district, was examined and was provided with refractive spectacles.

FISHER MEN

Fisher men from Kasimedu, Chennai, was provided with filter glasses following eye examination, to manage the glare during day time fishing.

WOODEN TOY MAKERS

03

Wooden toy makers of Channapatna, Karnataka, were examined and provided with safety glasses to keep them safe from wooden dust exposure during toy making.

04

FARMERS AND AGRICULTURE WORKERS

Farmers and Agriculture workers from various parts of Chennai and Tamil Nadu have been examined and provided spectacles that will keep them safe from farming injury as well as Ultraviolet radiation

RUBBER AND TEA PLANTATION WORKERS

05

Rubber and Tea plantations workers from Thodupuzha and Munnar districts of Kerala underwent comprehensive examination. They were also exposed to rubber milk/dust, insect bites, vegetative matters, and Ultraviolet radiation while at work.

MAT WEAVERS

01

Along the banks of Thamirabarani lies the small town of Pattamadai, where the famous grass (Korai) mats are weaved. The Korai grass is cultivated for this purpose, dried, dyed and weaved as mat, the major occupation of the locality. We were able to offer services to 224 local mat weavers, of which 151 were dispensed new glasses.



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FISHERMEN

02

Fishermen in the middle of the sea, are exposed to discomfort and, sometimes, disability glare from the sunlight reflected off the water. We did a trial with filter glasses for the fishermen to manage the glare. About 74 fishermen and related locals were examined and 52 workers were given new spectacles.









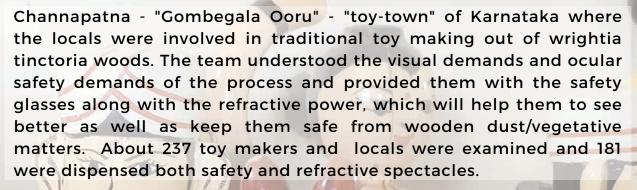




LAYIE



WOODEN TOY MAKERS







03











WOODEN TOY MAKERS



03

















ARTISANS OF INDIA





ARTISANS OF INDIA THANKS TO THE DOCTORS TEAM NET

FARMERS AND AGRICULTURE WORKERS

04

The farmers, in general, are exposed to plant/vegetative injuries and being outdoor workers they are also exposed to Ultraviolet radiation which is one of the factors causing cataracts and other ocular disease. About 290 Farmers and agriculture workers from various parts of Tamil Nadu like Tiruvallur, Chengalpattu, Madhuranthagam, Acharapakkam and Coimbatore underwent comprehensive eye examination. 208 of these workers benefited from the both refractive spectacles and safety spectacles along with head band, which keeps the spectacles from falling while they are working at the fields.







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04 FARMERS AND AGRICULTURE WORKERS























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RUBBER AND TEA PLANTATION WORKERS

Rubber plantation workers at Thodupuzha start their working early in the morning, even before sunrise, where they need to Tap the rubber trees, to collect the Latex. They are then sent to the factory for further process and transport. Similarly, at Tea plantations in Munnar the workers will be collecting the tea leaves, spraying pesticides, and process tea at the factory. During all these processes the workers are exposed to latex, rubber dust, pesticide and vegetative matters. About 246 workers from Rubber plantation and 152 workers from Tea plantation benefited from the services and about 342 of 398 workers benefited from the spectacles.



05



















RUBBER AND TEA PLANTATION WORKERS





















Unorganized sector

Supported by







Unorganized sector

Supported by

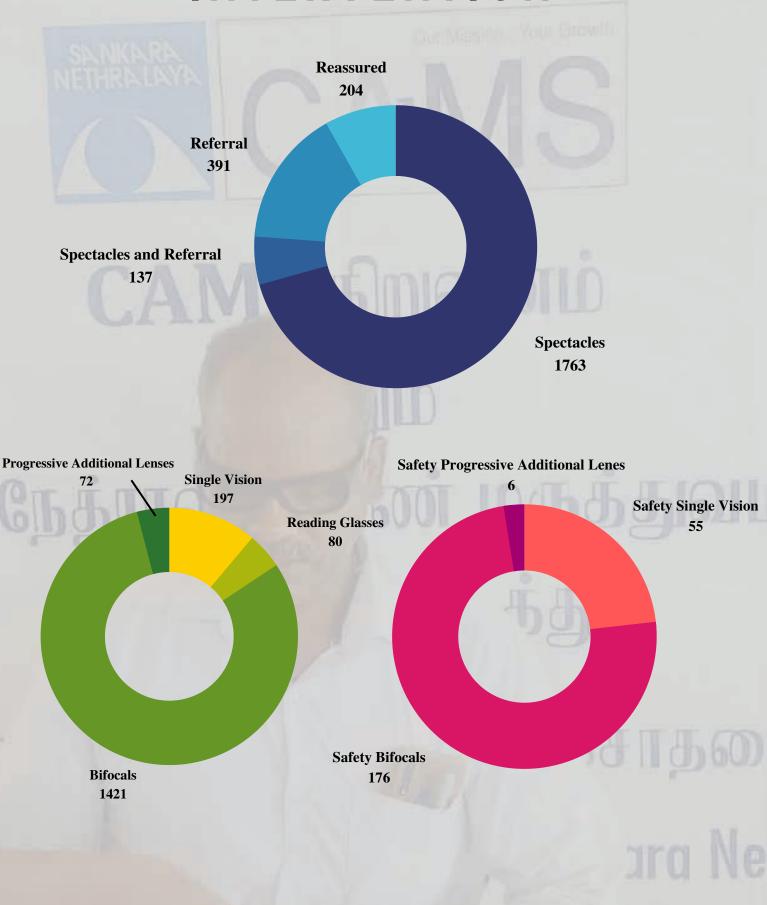


OOS TO UNORGANIZED SECTOR WORKERS

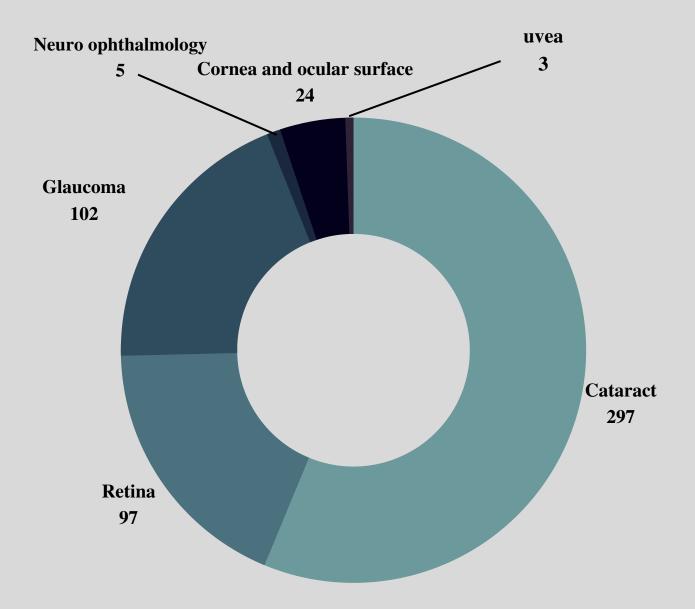
With support from Computer Age Management Services (CAMS), this year we were able to provide service to 2495 unorganized sector workers and 1900 benefited from spectacles, which includes both regular spectacles and as well as safety spectacles. These workers benefitted from various tints and coatings according to their visual needs and the nature of the job, for better visual comfort. Drivers were prescribed with Anti-Reflection coating, welders were given safety spectacles along with a green tint, symptomatic outdoor workers have been prescribed Photochromatic coatings, and fishermen were also prescribed green/brown tints.

This year CAMS also extended their support to cataract surgery for unorganized sector workers and about 41 workers benefited from the service and postoperative spectacles.

SPECTACLE INTERVENTION



REFERRAL



Unorganized sector

Supported by

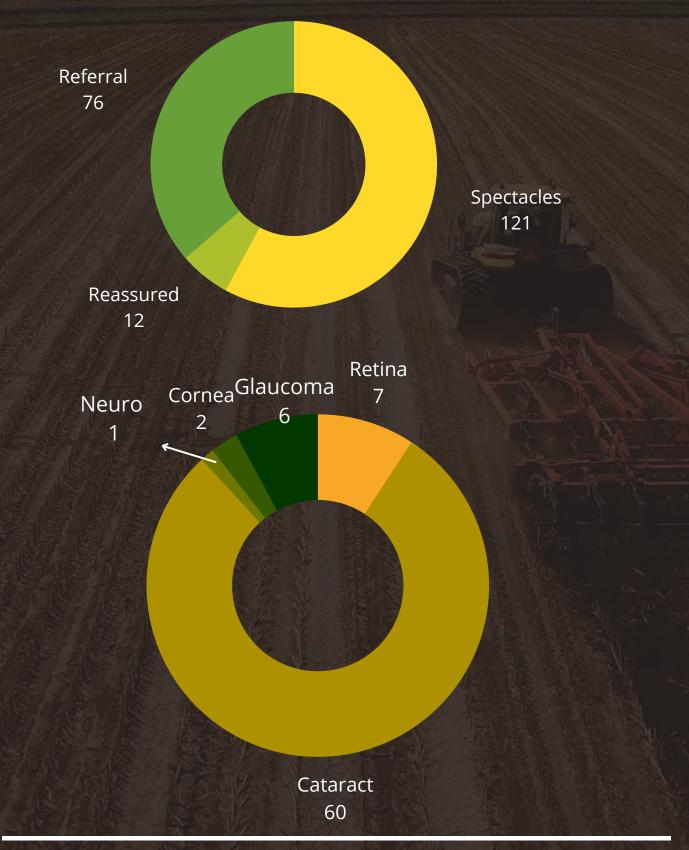


OOS TO AGRICULTURE WORKERS

Occupational Optometry Services was provided to 202 Agricultural workers from the rural village of Sirunagar and Badhur in Chengalpattu and Thiruvannamalai district in Tamil Nadu with support from the National Securities Depository Limited (NSDL) between 17th and 18th, March 2022. The workers underwent a Comprehensive eye examination and 121 spectacles have been dispensed on 29th March 2022. About 76 workers were referred for further eye examination to the tertiary eye care center. To motivate the workers to wear the spectacles during work, they were provided with head-bands, which will prevent the spectacles from falling down while they are working at farm fields. This will also ensure their safety at work by keeping them safe from ocular injuries.



OVERVIEW OF SPECTACLE AND REFERRAL INTERVENTION



Unorganized sector

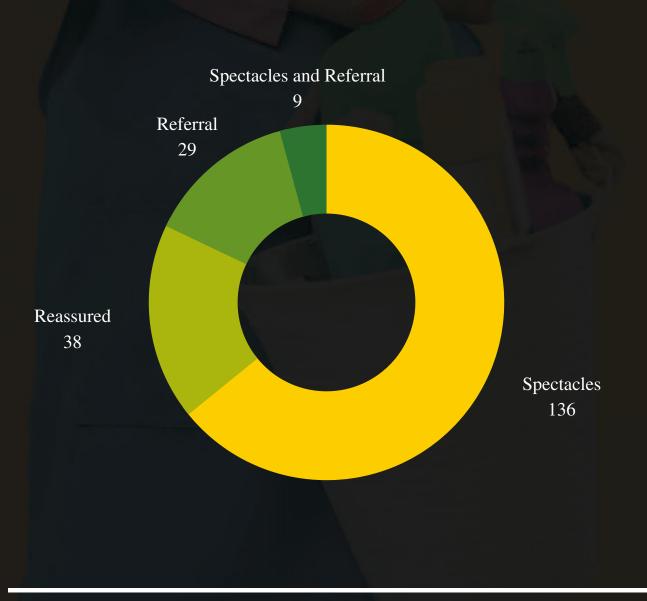
Supported by



OOS TO HOUSEKEEPING AND SECURITY GAURDS

Urjita Electronics, MEPZ, Chennai, as part of their CSR activity, supported OOS to provide service to the Housekeeping workers and security guards who are working at the MEPZ premises.

We have examined about 203 workers and of these, 145 were prescribed with spectacles, 38 were reassured and 29 were referred for further examination.



Unorganized sector

Supported by



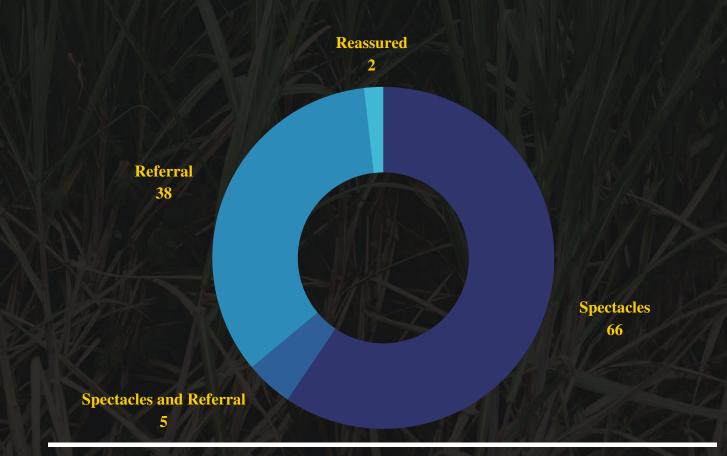


Better Life Through Better Sight[™]

OOS TO AGRICULTURE WORKERS

Occupational Optometry Services was provided to 111 Agricultural workers from the rural village of Thiruvallur district in Tamil Nadu with joint grant from the Essilor Vision Foundation and Optometry Council of India. The workers underwent a Comprehensive eye examination between 25th January and 26th January 2022. About 71 workers were provided with both Refractive safety eyewear with a headband to use while at work. Also, workers were provided with regular spectacles to use for other Activities of Daily living. About 23 of them were referred for further examination to the tertiary eye care center.

This work was taken up by various institution across the country. This was mainly to understand the occupational vision demand and hazards associated with the farming and utility of providing appropriate eye wear for better work performance and reduce injury rate. Also, Awareness material was posted in the local language at the camp site for the benefit of the working population.



OOS TO AGRICULTURE WORKERS

















Everyone should get their eyes examined once a year by an eye care specialist.

If you are a farmer, get your eyes examined regularly as exposure to sunlight and soil may affect your eyes.



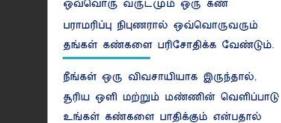








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உங்கள் கண்களை தவறாமல் பரிசோதிக்கவும்

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SPECTACLE DISTRIBUTION AWARENESS TALK















Industrial sector

Industrial sector

Alfa Rubbers and Springs Pvt Ltd



TVS Electronics



Intimate Fashions India Pvt Ltd



Michelin Tyres India



R K Industries



World Health Day 180 at 108

In view of World Health Day, on 7th April, National Health Mission (NHM), Tamil Nadu, have organized Health camp for their employees. Team Occupational Optometry Services offered comprehensive eye examination including fundus examination and counselling to 180 Government staffs of various sectors, 108 employees and other health workers.

♦ MEDICAL ♦ POLICE ● FIRE.

World Health Day

National Health Mission (NHM), Tamil Nadu



INSTRUMENT SUPPORT

National Securities Depository Limited (NSDL) have supported OOS by donating instruments Autorefractor, Trial box and Illuminated Visual Acuity Chart worth 5,18,420 rupees.

AUTO REFRACTOR WITH AUTO KERATOMETER

TRIAL BOX







ILLUMINATED VISUAL ACUITY CHART



Publications

The online survey on "Change in work pattern during COVID -19 and its impact on the eyes and body" conducted by the team in July 2020, got published in Clinical and Experimental Optometry in January 2022.

CLINICAL AND EXPERIMENTAL OPTOMETRY https://doi.org/10.1080/08164622.2022.2029682

RESEARCH

Changes in work patterns during COVID-19 lockdown and its impact on the eyes and body

Alisha Regmi, Janani Suresh and Rashima Asokan

Occupational Optometry Services, Medical Research Foundation, Sankara Nethralaya, Chennai, India

ABSTRACT

Clinical relevance: Greater usage of digital devices and change of work pattern as working from home have created an impact on both visual and musculoskeletal systems. Developing an understanding of these changes could assist in providing appropriate care.

Background: The current study aims to elicit the changes in work patterns due to COVID-19 lockdown and understand the impact of the usage of digital devices on the visual system and musculoskeletal system.

Methods: A survey was designed using Delphi technique and circulated through electronic communication sources using Google form to the working population and students across India, who consented to participate. The survey had components designed to develop an understanding of work patterns, digital device usage, associated visual/ocular symptoms, work-related musculoskeletal disorder (WRMSD) symptoms, and relevant information on psychological factors, and practice of yoga/exercises. **Results:** There were 1302 valid responses. Mean age of respondents was 24 (IQR 11) years and 548 (42.1%) were male. A total of 1231 (94.5%) reported having one or many visual and ocular symptoms associated with the use of digital devices and 1140 (87.6%) responses indicated WRMSD symptoms. Of the symptomatic respondents, 561 (43.1%) had reported visual/ocular symptoms and 586 (45%) WRMSD symptoms during lockdown, which they did not experience during regular work. Risk factors for visual/ocular symptoms and WRMSD were females, spending more than 6 h on digital devices, taking breaks from digital devices after 2 h, inability to maintain a fair sleep schedule, and inability to make ergonomic modifications at home.

Conclusions: A high prevalence of both visual/ocular symptoms (43.1%) and WRMSD symptoms (45%) was encountered during COVID-19 lockdown.

ARTICLE HISTORY

Received 4 June 2021 Revised 20 December 2021 Accepted 4 January 2022

Taylor & Francis

Check for updates

KEYWORDS

Dotometry

USTRALI

COVID-19; digital device; digital eye strain; musculoskeletal disorder; work from home

Forum: 2nd India Vision Institute Conference

Theme: Eye in a changing world Topic: Association of Life time Ocular UV exposure with Pseudo-exfoliation syndrome - A hospital based study Presenter: Ms. Ishwarya S, Optometrist Mode: Oral presentation

Forum: 2nd India Vision Institute Conference

Theme: Eye in a changing world Topic: Occupational Dispensing - Enhancing work productivity through task oriented Visual Correction. Presenter: Ms. Rupa Nivethikka R, Optometrist Mode: E Poster

Forum: 2nd India Vision Institute Conference

Theme: Eye in a changing world Topic: Knowledge, Attitude and Practice patterns on the eye care seeking behavior among unorganized sector workers in Chennai Presenter: Ms. Syed Ibrahim A, Optometrist Mode: Oral presentation

Forum: ARVO India - 27th Annual Meeting Indian Eye Research Group (IERG)

Topic: Evaluating the effect of ocular UV exposure as a major causative risk factor and risk modeling for pseudo exfoliation syndrome

Presenter: Ms. Ishwarya S, Optometrist

Mode: E- Poster

Forum: ARVO India - 27th Annual Meeting Indian Eye Research Group (IERG)

Topic: Ocular sun exposure damage and its association with pterygium and cataract among salt pan workers Presenter: Ms. Janani S, Optometrist Mode: E- Poster

Forum: Ruby banik and Swarnalatha Award presentation

Topic: Visual, ocular profile and perceived impact of photochromatic spectacles among salt pan workers in Marakkanam Town, Tamil Nadu Presenter: Ms. Janani S, Optometrist Mode: Oral Presentation

Forum: Ruby banik and Swarnalatha Award presentation

Topic: Impact of UV radiation and air pollution on ocular health among outdoor workers Presenter: Ms. Ishwarya S, Optometrist Mode: Oral Presentation

Forum: 72nd National Conference of IAOH - OCCUCON 2022

Topic: Ergonomics assessment and survey on work related visual and musculoskeletal disorders symptoms among Optometrists Presenter: Dr Rashima A, Optometrist Mode: Oral Presentation

Forum: 72nd National Conference of IAOH - OCCUCON 2022

Topic: Visual, ocular profile and perceived impact of photochromatic spectacles among saltpan workers in Marakkanam Town, Tamil Nadu. Presenter: Ms. Janani S, Optometrist Mode: Oral Presentation

Forum: 72nd National Conference of IAOH - OCCUCON 2022

Topic: Impact of UV and air pollution on ocular surface disorders with emphasis on cataract and pterygium among outdoor workers Presenter: Ms.Ishwarya S, Optometrist Mode: Oral Presentation

Forum: 72nd National Conference of IAOH - OCCUCON 2022

Topic: An occupational analysis on wooden toy maker's visual and ocular symptoms and requirements of prescription safety eye wear Presenter: Ms. Rupa Nivethikka R, Optometrist Mode: Oral Presentation

Forum: 72nd National Conference of IAOH - OCCUCON 2022

Topic: Assessment of Musculoskeletal and Sleep disorder along with visual and ocular profile among drivers Presenter: Ms. Dhanalakshmi S, Master's Student Mode: Oral Presentation

Forum: 20th Dr E Vaithilingam Memorial Scientific Session

Topic: Profile of referral patterns for color vision testing at the tertiary eye care center Presenter: Ms. Janani S, Optometrist Mode: E Poster

Forum: 20th Dr E Vaithilingam Memorial Scientific Session

Topic: The utility of CUVAF tool as marker of ocular ultra violet radiation exposure in detecting the development of pterygium Presenter: Ms.Ishwarya S, Optometrist Mode: Oral Presentation



Award Title: Best oral presentation under the theme of systemic and ocular disease

Forum: IVI 2021

Receiver: Ms.Ishwarya S, Optometrist

Topic: Association of Life time Ocular UV exposure with Pseudo-exfoliation syndrome - A hospital based study



Award Title: Best poster Forum : IERG 2021

Receiver: Ms.Ishwarya S, Optometrist

Topic: Evaluating the effect of ocular UV exposure as a major causative risk

factor and risk modeling for pseudo exfoliation syndrome





Award Title: Ruby banik and Swarnalatha Award for Research in **Clinical Sciences**

Receiver: Ms.Janani S, Optometrist

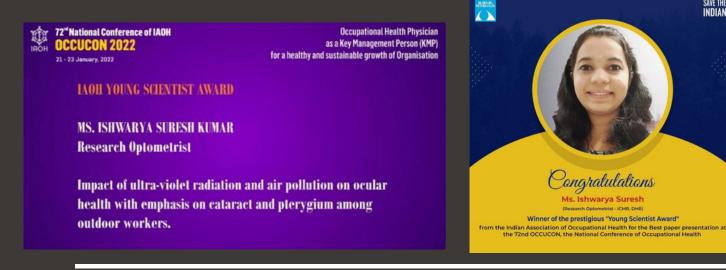
Topic: Visual, ocular profile and perceived impact of photochromatic spectacles among salt pan workers in Marakkanam Town, Tamil Nadu



Award Title: Young Scientist award Forum: OCCUCON 2022

Receiver: Ms.Ishwaraya S, Optometrist

Topic: Visual, ocular profile and perceived impact of photochromatic spectacles among salt pan workers in Marakkanam Town, Tamil Nadu



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SAVE THE E

Invited Lectures

Dr Rashima A, HOD - Occupational Optometry Services was invited for delivering lectures and talks on topics of Glaucoma, Occupational optometry and Research Methodology

- Cybersight and AI-Driven Diagnosis for Glaucoma
 - Topic: Role of optometrists in the management of preventable visual impairment and Glaucoma
- IVI in collaboration with the Optometric Association of Tamil Nanbargal (OATN)
 - Topic: Basic Research Methodology Workshop
- The Sankara Nethralaya Academy Webinar
 - Topic: Occupational Dispensing Panel Discussion
- IAPB Webinar:
 - Affordable & Sustainable Glaucoma Care (SEA) Mar 2021
- EyeCEP -2022
 - Topic: Occupational Optometry, "Update of research on occupational eye health Optometry Grand Rounds"
- Dr Agarwal's Institute of Optometry on Invitation
 Optic: Clinical Implications of OCT
- IVI's Excellence in Vision Science Lecture series
 - Topic: Dimensions of Research in Glaucoma Optometrist Perspective
- IVI's Studometry 22, 7
 - Topic: AN EYE FOR DETAIL Diagnostic Imaging in Optometry

Ongoing Research

Post Graduate Research

- Knowledge, Attitude, and Practice of eye care-seeking behavior on unorganized sector workers.
- Profile of occupational injury and its sequelae of visual impairment in a hospital-based set-up.
- Effect of visual and optical performance; on using blue light filters and computer application
- Role of various color vision tests and their impact on Driving

Under Graduate Research

- Visual impairment, coping strategies and impact on daily life among drivers
- Ergonomics assessment of optical and non-optical devices

Ultraviolet Safety Awareness Month JULY 2021

UV safety awareness happens every year in the month of July, promoted by organizations including the American Academy of Ophthalmology and the U.S. Department of Veterans Affairs emphasizing the health impact of UV on the body and eye.

This year team OOS planned interactive sessions, where the participants gained knowledge by being part of various sessions that happened in the month of July. This event was sponsored by Essilor India Pvt Ltd for danglers and participation rewards. Keen participation was received from various departments of SN including participation from SN Kolkata. The fun-filled learning that happened through various contests that were conducted for 3 weeks in the month of July displaying the themes: Basics of UV, causes & effects of UV, and management/protection from UV.

Amidst the busy work life, a total of 60 responses were received and creative posters were prepared by employees explaining the aspects of UV and protection against the effects. The winners chosen by lucky draw were awarded with Caps and Sun glasses sponsored by Essilor.



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Ultra Violet Safety Awareness Month JULY 2021

Winners of weekly events

	Contest	Winners	Department
Week 1	PEN IT TO WIN IT	Mr Jeysoorya	ESO-INTERN
Week 2	SUN-MAZE & UV CONNECTION	Ms Porkodi	GENETICS
Week 2	SUN-MAZE & UV CONNECTION	Ms Vijayalakshmi	OPTOMETRY
Week 3	SUN BLOCK AROUND THE CLOCK	Ms Mayuri	OPTICALS

Winners of Poster Competition

Name of the winners	Department	
Mr Vinoth Kumar	Information Technology	
Ms Swetha	Histopathology Lab	
Ms Usha V	Department of Patient Services	
Dr Wadke Vidya Arunkumar	Ophthalmologist - SNK	

Ultra Violet Safety Awareness Month JULY 2021

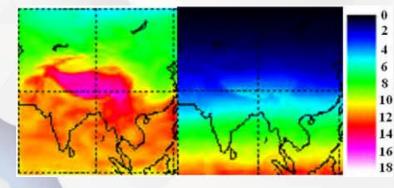




OCCUPATIONAL OPTOMETRY SERVICES Ultra Violet Safety Awareness Month

JULY 2021

Long term exposure to UV radiation can have health and ocular effects



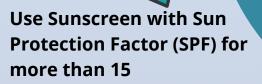
UV Index in India during summer and Winter Bhattacharya, R., Pal, S., Bhoumick, A., & Barman, P. (2012). Annual variability and distribution of ultraviolet index over India using TEMIS data. Int J Eng Sci Technol, 4, 4577.

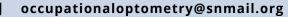
UV Index	Exposure Level
2 or less	Low
3 to 5	Moderate
6 to 8	High
8 to 10	Very High
11+	Extreme

The UV Index represents the amount of skindamaging UV radiation reaching the earth's surface at any instant in time









SN Health Bytes

The article titled "Go For a change" was submitted by the team OOS to the SN's first edition of E-Newsletter - SN Health Bytes. It emphasizes on the effect of "Monotony" at work place and need for Job/task rotation and its impact on effective working. Taking up Job rotation is observed to have positive effect on the employee by reducing the effect of Burnouts and Monotony.



Read More https://www.sankaranethralaya.org/sn-health-bytes/index.html

SN SAFETY QUIZ

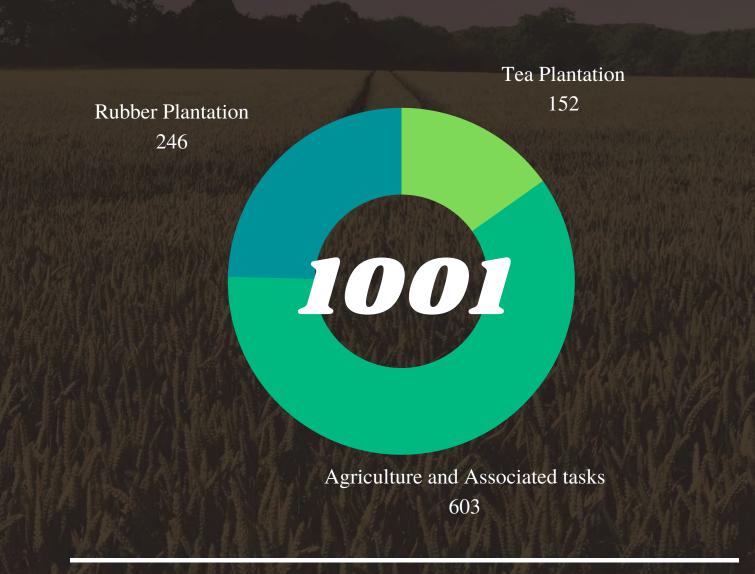
The team OOS was instrumental in planning and organizing the Safety Quiz, conducted as part of the Hospital Safety Week Celebration, on 31st March 2022. The questions included hospital safety norms, safety procedure/protocols and hazard management.



OOS's Green Revolution

The year 2021-22 was *"The Green Revolution Year"* for OOS, Where we offered services to about 1001 workers from Agriculture and related sectors from various districts of Tamil Nadu and Kerala.

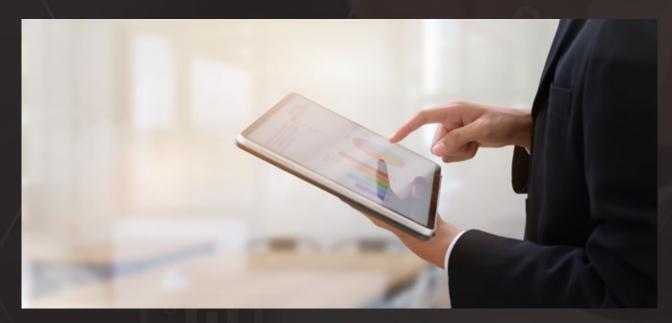
In Tamil Nadu, we examined farmers from Tiruvallur, Chengalpattu, Tiruvannamalai and Coimbatore. In Kerala, we examined people involved in Tea and Rubber Plantation in the districts of Thodupuzha, Iduki and Munnar.



DIGITAL OOS

After 3 years of planning and trials, We finally moved from Paper files to Electronic Medical Records this year. We first had our trial of EMR outside the SN is at Micheline Tyres Industry, were examined about 569 patients and data were simultaneously entered in EMR.

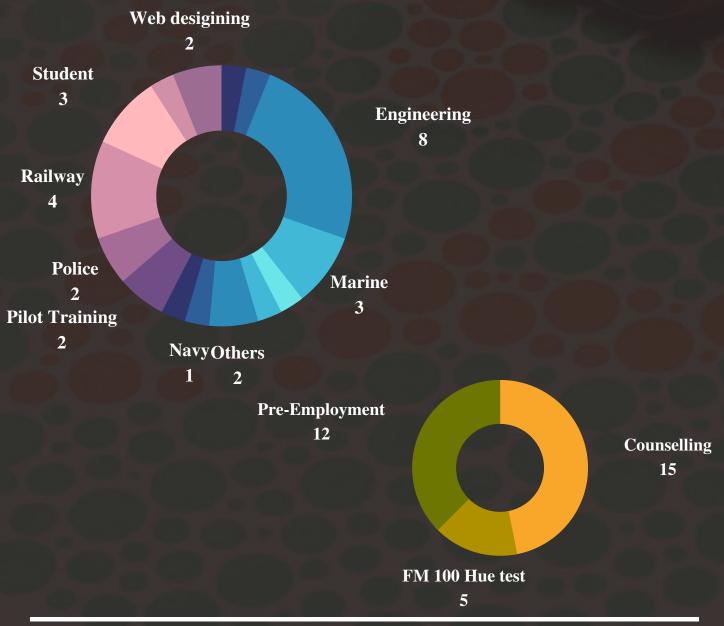
The EMR portal was created with specifications related to OOS, with additional tabs for Occupational History, specific test in relation to their occupations and one page report generation that to be given to employer/employee. Our Thanks to Department of IT and special thanks to Mr. Gowtham K , Programmer, IT Development - IT & Systems for his constant support and developing our needs. Now we have successfully synced the data to mainstream EMR.



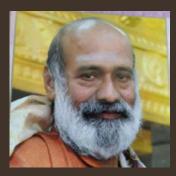
COLOR VISION CLINIC

Color Vision Clinic, part of the occupational optometry clinic was established at K N BIRVO Block, SN Main Campus, in 2020, aiming at providing Preemployment color vision testing and Color vision testing as part of the Periodic Medical Examination.

We have examined about 32 patients who have visited the clinic referred for Lantern Signal test and FM 100 hue test. Based on the test performance, recommendations were provided to the employer stating the type and severity of the defect. The patients were counseled about the fitness for the job or given suggestions to continue the current occupation/carrier choice.



FRIENDS OF OOS



Mr. Raman Social Worker



Mr. Baskar Creative Sculptors



Mr. Ravi Chandran K Driver- Auto



Mr Kumar Hair dressers



Lion Hari Narayanan Lions Club of Central Madras



Dr Meera Krishana CORD



Mr. Srikanth Alfa Rubbers and Springs Pvt Ltd



Ms Priya A CORD



Mr Syed Sait Mat Weaver

We would like to express our sincere gratitude to these people, who helped us in reaching many deserving unorganized sector workers across Chennai and various parts of Tamil Nadu.

Our Thanks to

- Undergrad and Post Grad Students of Elite School of optometry and The Sanakra Nethralaya Academy
- Department of Optical Services
- Department of Patient Services
- Department of Transport Services
- Department of Information Technology & Systems
- Department of Finance & Accounting Services
- Department of Events, Housekeeping & Utility Services
- Department of Security





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Contact Details

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