

▪ *Continuing Education & Professional Development*
Irlen Syndrome
Awareness Message for Nurses



Rasha M. Anwar
Director of Irlen Egypt Center

Introduction:

In providing Nursing services to different healthy populations or patients, nurses need to have a threshold of knowledge about Irlen Syndrome (IS). This preliminary knowledge will help the nurses understand the challenges that (IS) causes for its sufferers. Consequently, this acquaintance will reflect on the nursing service provided to them. In this article, the different definitions and terms of **IS** will be provided first, and then its symptoms will be summarized.

Although Irlen Syndrome incidence is relatively high among the public (15%) and higher among different populations, as we will know in this article, awareness about it is generally not well spread enough, and among nurses specifically. Nurses need to understand how **IS** sufferers are helped, what modifications they need in the hospital environment, and what tools sufferers wear to deal with them properly and optimally manage the symptoms.

Irlen Syndrome is a visual processing disorder as the brain has difficulty processing the information received from the eyes. It is also known as

Meares-Irlen syndrome, scotopic sensitivity syndrome, or visual stress (VS).

Irlen Syndrome causes many symptoms namely, light sensitivity, reading problems, poor attention and concentration, strain and fatigue, headaches and migraines, print and environment distortions, as well as poor depth perception.

These symptoms affect the persons' quality of life for those suffering from **IS**. The degree of its effect varies from one person to another, as its severity comes on a spectrum, and each person's condition is unique. It is worth mentioning that **IS** symptoms are triggered by the environment especially bright and fluorescent lighting, glare, high contrast, bright colours, or patterns and stripes. It is also triggered by visually intensive activities.

There are two causes for **IS**. First, it could be hereditary and a predisposition in some families due to an unknown genetic disorder. Accordingly, one or more members of the family and the extended family could have it. So, infants, toddlers, children, adults, or seniors may have it. Meanwhile, it affects males and females equally. Second, it could be acquired, at any

age, due to accidents especially brain injuries, illness, or medical procedures such as operations and medications.

Irlen Syndrome spread in the public in any community is large reaching 15%, as published by The Irlen Institute. The incidence rates are much higher in specific populations namely: 46% in persons with learning disabilities and reading problems, 35% in head injuries and concussions, 33% in dyslexia, attention deficit and/or hyperactivity disorder, and 30% in autism. In addition, some medical conditions are comorbid with IS such as, Headaches & Migraine, Dizziness & Stomachaches, Light-Induced Epilepsy, Depression, Anxiety, Obsessive Compulsive Disorder (OCD), Stroke, Chronic Fatigue Syndrome (CFS), Autoimmune Diseases, Multiple Sclerosis (MS), Parkinson's Disease, Fibromyalgia, Viral Illnesses, Myasthenia Gravis.

Treatment of Irlen Syndrome is through using The Irlen Method which is a non-invasive technology that uses colored overlays and filters to improve the brain's ability to process visual information. Irlen Spectral Filters are precision-tinted for everyone, filtering out the exact wavelengths of light creating perceptual difficulties.

Concerning the learning and working environment of nurses, it is worth mentioning that the environment and activities triggers could affect the education and learning abilities of nurses before graduating and starting their careers. In a joint study published in 2016, conducted by five academic researchers from universities in Australia, Singapore, and Spain, on a sample of female nursing students. (Loew, Marsh, Rodríguez-Pérez, L. Jones, & Jones, 2021), researchers found that the combination of bright fluorescent lighting and ultra-white paper can make reading more arduous and reduce reading comfort. Therefore, the researchers recommended further studies as they anticipate that the visual stress will expectedly hinder the working abilities of undergraduate nurses as they enter the intensely illuminated hospital workplace, where rapid and accurate reading is crucial, and in which long hours, shiftwork and fatigue are the norm.

From my practice in diagnosing and treating **IS**, one of my clients refrained completely from enrolling in a nursing school, as the recommendation of her dad, due to her severe **IS** symptoms, especially light sensitivity and reading problems. She believed that the working environment would not be appropriate for her **IS** health conditions and would consequently affect the quality of the service she would render. On the other hand, it's of high importance that the nurses know the indicators of **IS** to help patients in highly illuminated hospitals and clinics. Some persons could be severe sufferers of light sensitivity and cannot bear the bright fluorescent lights. They could be subject to dizziness, nausea, fatigue, and or severe headaches and migraine. They may not be able to stay a long time inside the scanning and MRI units. Some patients with light-induced epilepsy could be subject to seizures when present in bright lights. Patients who wear spectral filters to protect them from the light need to be dealt with cautiously and with an understanding of their need to wear them.

It was reported by a colleague in India that it was noticed that a newly born infant with **IS**, started crying and stopped eating when the light was turned on in the hospital room, on the contrary, he became calm, stopped crying, and continued eating when the light was reduced.

When nurses are aware of **IS** symptoms and triggers, they will be more able to accommodate their patients and make the needed modifications in the environment to help them get their required health services.



Coloured overlays are most effective for individuals whose difficulties are isolated from reading.



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Source: www.irlen.com