

Occupational Diseases In Textile Dyers - A Brief Review

Authors:

Clara G Sargunar¹ and Ravishankar S².

Institution:

1. Assistant Professor, PG and Research Dept. of Zoology, Government Arts College, Coimbatore, Tamil Nadu, India.

2. Associate Professor, PG and Research Dept. of Zoology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.

Corresponding author:
Clara G Sargunar.

ABSTRACT:

The textile industry not only accounts for a large percentage of India's industrial production and export earnings, but also generates employment in both organized and unorganized sectors. The industrial operations, specifically dyeing, encompasses many occupational diseases, which have either long term or short term health effects, depending on the type of exposure and its duration. The exposures to such chemicals may occur, through any route of entry, like inhalation or absorption. This study attempts a brief review of the occupational diseases caused by textile dyes and suggests mitigation measures.

Occupational skin diseases like Allergic Contact Dermatitis (ACD) and Irritant Contact Dermatitis (ICD), involving exposed sites, cause significant morbidity in textile industry workers. Occupational eczema and urticaria from reactive dyes, has also been reported. Dyes used by textile industries are known to be carcinogenic, teratogenic and mutagenic, with genotoxic risk to textile dyers. The International Agency for Research on Cancer (IARC) has classified various dyes as being associated with cancer in humans. The spraying of Acramin F system, led to Organizing Pneumonia (OP). Reactive dyes (Lanasol Yellow 4G) and carmine dye have been implicated as etiologic agents of occupational asthma and allergic rhinitis. Occupational exposure to vat dyes may result in sub-clinical adverse effects on the liver.

Strategies like, implementation of safety measures according to the type of work, periodic screening coupled with worker-oriented educational approaches, further epidemiological study, and modern Occupational Health Safety (OHS) legislation will help deal with this problem.

Keywords:

Occupational disease, textile dyes, carcinogen, mutagen.