

THE ROLE OF SWASTHAVRITTA IN PROMOTION OF OCCUPATIONAL HEALTH

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ABSTRACT

Swasthavritta, also known as preventive and social medicine in the context of Ayurveda, plays a significant role in occupational health promotion. It focuses on promoting health and preventing diseases through lifestyle modification, proper diet, Yoga, and mental well-being. In the context of occupational health, *Swasthavritta* emphasizes the importance of maintaining a healthy lifestyle to prevent diseases that can be caused or exacerbated by workplace factors. This approach involves educating workers about the importance of balanced nutrition, regular exercise, stress management, and adequate rest, all of which contribute to overall health and will be helpful to reduce the risk of occupational diseases. The ultimate goal of occupational health is to prevent workplace-related illnesses and injuries through a variety of

actions mentioned in present article.

KEYWORD:– *Swasthavritta*, occupational health, *Yoga*, Mental well-being.

INTRODUCTION

Occupational health deals with all aspects of health and security in the workplace and has a strong focus on primary prevention of hazards. The health of the workers has several determinants, including risk factors at the place of work leading to cancers, accidents and musculoskeletal diseases, respiratory diseases, hearing loss, circulatory diseases, stress-related disorders, communicable diseases and others. Employment and functioning conditions

in the formal or informal economy embrace other important determinants which includes working hours, salary, workplace policies concerning maternity leave, health promotion and protection provisions, etc.

In country like India, large work place has been employed in diverse setting. About 90% of the total workforce in India is engaged in the informal economic against the global average of 60%. Today we have about 360 million workforce of which about 120 million are in the industrial sector.^[1]

Occupational health activities cover the whole variety of activities undertaken by employers, workers and their organizations, designers, architects, manufacturers and suppliers, occupational health professionals and practitioners, legislators and parliamentarians, labour and health inspectors, work analysts and work organization specialists, standardization organizations, universities and research institutions to protect workers' health and to encourage protection and health at work.

Ayurveda can address specific occupational hazards by promoting awareness about safety measures, proper ergonomics, and the effective use of personal protective equipment. By integrating these principles, Ayurveda can contribute to the promotion of health and well-being among workers, reducing the incidence of occupational diseases, and enhancing overall productivity and quality of life. Occupational health helps employers look at their current environment and work to reduce health risks and stay fulfill with evolving convention

AIM AND OBJECTIVES

1. The Promotion and Preservation of the highest degree of physical, mental, and social well-being of workers in all occupations.
2. The prevention amongst workers of departures from health caused by their working conditions.

MATERIAL AND METHODS

Occupational diseases can be defined as, any disorder associated with a particular occupation or industry. Such illness result from a variety of biological, chemical, physical, and psychological factors that are present in the place of work environment or are otherwise encountered in the course of employment.

Occupational medicine is concerned with the effects of all types of work on health and the effect of health on a worker's ability and efficiency.

Lung diseases

Occupational lung diseases comprise asbestosis among asbestos miners and those who work with friable asbestos insulation, as well as black lung (coal worker's pneumoconiosis) among coal miners, silicosis among miners and tunnel operators and byssinosis among workers in parts of the cotton textile industry. Occupational asthma has a vast number of occupations at risk. Bad indoor air quality may influence for diseases in the lungs as well as in other parts of the body.

Skin diseases

Occupational skin diseases are among the top five occupational diseases in many countries.^[2]

Occupational skin diseases and conditions are commonly due to chemicals and having wet hands for long periods while at work. Eczema is the most common, but urticaria, sunburn and skin cancer are also of concern.^[3]

Contact dermatitis due to irritation is inflammation of the skin which results from a contact with an irritant.^[4] It has been observed that this type of dermatitis does not need prior sensitization of the immune system. There have been studies to support that past or present atopic dermatitis is a risk for this type of dermatitis.^[5] Common irritants include detergents, acids, oils, organic solvents and reducing agents.^[6]

The acute type of this dermatitis develops on exposure of the skin to a strong irritant or caustic chemical. This revelation can occur as a result of accident at workplace. The irritant reaction starts to increase in its intensity within minutes to hours of exposure to the irritant and reaches its peak quickly. After the reaction has reached its peak level, it starts to heal. This procedure is known as decrescendo phenomenon.^[7] The most frequent potent irritants leading to this kind of dermatitis are acids and alkaline solutions.^[8] The symptoms include redness and swelling of the skin along with the creation of blisters. The chronic form occurs as a result of repeated exposure of the skin to weak irritants over long periods of time.^[9]

Clinical manifestations of the contact dermatitis are also modified by external factors such as environmental factors (mechanical pressure, temperature, and humidity) and predisposing

characteristics of the worker (age, sex, ethnic origin, preexisting skin disease, atopic skin diathesis, and anatomic region exposed).^[10]

Another occupational skin disorder is glove related hand urticaria. It has been reported as an occupational problem among the health care workers. This type of hand urticaria is believed to be due to repeated wearing and removal of the gloves. The reaction is caused by the latex or the nitrile present in the gloves.^[11]

High-risk occupations include:

- Hairdressing
- Catering
- Healthcare
- Printing
- Metal machining
- Motor vehicle repair
- Construction

Other diseases of concern

- Overuse syndrome among people who perform repetitive or forceful movements in constrictive postures
- Carpal tunnel syndrome among worker who work in the poultry industry and information technology
- Computer vision syndrome among people using information technology for hours
- Lead poisoning of workers in many industries that processed or employed lead or lead compounds
- Infectious diseases transmitted through unsanitary working conditions, such as whooping cough, or blood borne illnesses.

To prevent lung disease

To protect your staff from inhaling harmful substances like asbestos, implement specific guidelines to prevent this occupational disease.

A good way to do this is by conducting thorough risk assessments. You can also educate your employees about the dangers of breathing in harmful substances and supply PPE such as face and dust masks with the correct safety ratings.

How to prevent lead poisoning

Not only we absorb lead through breathing, it can enter in body through drinking, eating, smoking, or biting your nails. It is important to make sure you offer a designated eating area for anyone working with lead and ensure they wash their hands properly before eating.

You can manage the exposure of lead to your workers by carrying out regular risk assessments and also equipment maintenance. Train your staff to prevent lead poisoning.

It is significant to make sure that their work environment is spacious and well ventilated.

How to prevent carpal tunnel syndrome

The easiest way for you to make sure your staff are not at risk of developing the condition is by testing their work environment and daily tasks. Are they putting their hands or wrists in awkward positions?

You can redesign their work, which will reduce the pressure placed on their hands and educate your staff about the harms of repetitive movements.

How to prevent computer vision syndrome

Our eyes work harder and can strain if there is poor lighting, incorrect seating posture, and improper viewing distance from the digital screen.

If there is a glare on the monitor, it can also cause our eyes to strain. It is important to ensure that each worker's setup is proper. Once you have corrected their workstation to make sure that their eyes are not having to strain, there is special eyewear available. This can reduce glare and make it easier for our eyes to cope with long hours in front of the screen.

How to prevent skin conditions

- **Avoid** direct contact with chemicals, substances, products, and wet work. If it is possible, find a different material that is safer and eliminate the harmful substance from the work place. If not, make sure that gloves are made available for workers to use.
- **Protect** your skin from contamination and/or irritation by wearing PPE such as using a pre-work barrier cream to protect the skin specifically. Make sure you wash your hands before drinking and/or eating with a quality hand cleaner that eradicates industrial grimes.

Ayurveda aspect for promotion of occupational health^[8,9]

Ayurveda can decrease the intensity of occupational hazards. The immunity and overall strength of a person can be increased by *Ayurvedic* dietary advice and life style changes. This overall is called '*Ojas*' according to Ayurveda.

Dincharya promotes physical and mental health, enhances immunity, improves focus and concentration, and contributes to a balanced lifestyle. All of these aspects are fundamental for ensuring optimal occupational health and performance.

Dincharya, plays a significant role in occupational health. A well-structured daily routine can help individuals maintain good health and well-being, which is crucial for optimal performance in any occupation. Here's how *Dincharya* contributes to occupational health:

- 1) **Physical health:** A balanced daily routine typically includes exercise, which promotes physical fitness. Regular physical activity improves cardiovascular health, strengthens muscles, and enhances overall endurance, making individuals better equipped to handle the physical demands of their occupations.
- 2) **Mental health:** *Dincharya* often involves practices like meditation and relaxation techniques. These activities help in managing stress, anxiety, and depression, which are common challenges in various workplaces. A calm and focused mind can improve decision-making and problem-solving skills.
- 3) **Sleep quality:** Establishing a consistent sleep schedule as part of *Dincharya* ensures adequate rest. Quality sleep is essential for cognitive function, emotional well-being, and overall productivity. Sleep deprivation, on the other hand, can lead to reduced concentration, irritability, and impaired judgment factors that can compromise occupational performance and safety.
- 4) **Nutrition:** Following a regular eating schedule and consuming a balanced diet provides the body with the necessary nutrients for energy and vitality. Proper nutrition supports overall health, strengthens the immune system, and aids in faster recovery from illnesses, reducing absenteeism in the workplace.
- 5) **Hygiene:** *Dincharya* often emphasizes personal hygiene practices like regular bathing, dental care, and hand washing. These practices are essential in preventing the spread of infections in occupational settings, contributing to a healthier work environment.

- 6) **Work-Life balance:** *Dincharya* helps individuals establish boundaries between work and personal time. Maintaining a healthy work-life balance is crucial for preventing burnout and maintaining long-term occupational well-being.

Anjana can play a role in managing occupational diseases that affect the eyes. For example, in workplaces where employees are exposed to dust, chemicals, or other irritants, eye drops can provide relief from irritation and help prevent further damage. Certain occupational diseases, such as computer vision syndrome can also be managed with the use of specific *anjana* to alleviate symptoms.

Sadvritta, a concept from Ayurveda, emphasizes a disciplined and balanced lifestyle behaviour. In the context of occupational health, practicing *Sadvritta* can play a significant role. By promoting a balanced routine, healthy diet, and stress management techniques, *Sadvritta* can contribute to the overall well-being of individuals in the workplace. It improves mental health by improving interpersonal relationships with other workers, officers & management, enhances immunity, and increases productivity, thereby positively impacting occupational health.

Yoga plays a significant role in occupational health by promoting physical, mental, and emotional well-being among individuals in the workplace. Here are some aspects of its role in occupational health:

- 1) **Stress reduction:** Yoga techniques, including meditation and breathing exercises, help in reducing stress and anxiety. In high-pressure work environments, employees can use yoga to manage their stress levels effectively.
- 2) **Improved Posture and Flexibility:** Regular practice of yoga postures (*Asanas*) improves posture and flexibility, which is especially beneficial for people who have desk jobs. It can help prevent and alleviate back pain and other posture-related issues.
- 3) **Enhanced Focus and Concentration:** Yoga emphasizes mindfulness and concentration. Practicing yoga can enhance mental clarity, focus, and concentration leading to improved productivity and efficiency in the workplace.
- 4) **Prevention of Repetitive Strain Injuries (RSI):** Yoga stretches and exercises can prevent and alleviate the symptoms of RSI, a common issue among office workers who perform repetitive tasks.
- 5) **Better breathing:** Yoga emphasizes controlled breathing (*pranayama*), which can improve lung capacity and overall respiratory health. Proper breathing techniques are

essential, especially for individuals in jobs that require a lot of sitting and shallow breathing.

- 6) **Promotion of Work-Life Balance:** Encouraging yoga practices in the workplace promotes a healthy work-life balance. It provides employees with tools to manage their well-being, both at work and in their personal lives.
- 7) **Boosted immune system:** Regular yoga practice can strengthen the immune system, making individuals less susceptible to illnesses. Healthy employees mean fewer sick leaves and increased overall productivity.
- 8) **Team building:** Group yoga sessions can foster a sense of community and camaraderie among employees. It can improve interpersonal relationships and create a positive work environment.
- 9) **Injury prevention:** Yoga promotes overall body awareness and balance. This heightened awareness can help individuals avoid workplace injuries by being more mindful of their movements and posture.

Nidra, plays a crucial role in occupational health. Sufficient and good-quality sleep is essential for overall well-being and productivity in the workplace. Adequate sleep helps in cognitive function, concentration, decision-making, and emotional stability. Lack of sleep, on the other hand, can lead to fatigue, decreased alertness, impaired judgment, and an increased risk of accidents or injuries in the workplace. Therefore, promoting healthy sleep habits among employees is vital for ensuring their well-being and productivity in the workplace.

DISCUSSION

In the workplace, either through on-site classes or encouraging employees to practice at home, can have a positive impact on occupational health and create a healthier, more productive workforce. *Swasthviritta*, an ancient concept in Ayurveda, encompasses principles for maintaining health and preventing disease. In the context of occupational health, *Swasthviritta* plays a crucial role in several ways like *yoga* and Meditation, balanced diet, *Nidra*, *Swasthviritta* provides holistic guidelines that can contribute to the wellbeing at the work place. By integrating these principals into occupational health programs, employers can promote a healthier, happier and productive workforce.

CONCLUSION

Swasthavritta, a branch of Ayurveda, focuses on promoting and maintaining health through a balanced lifestyle. In the context of occupational health promotion, incorporating

Swasthavritta principles can lead to improved employee well-being. By emphasizing healthy routines, balanced nutrition, regular exercise, stress management, and adequate rest, *Swasthavritta* can contribute to reduce workplace-related health issues and enhance overall productivity. Implementing these principles in the workplace can create a positive environment, ensuring the well-being of employees and, consequently, improving occupational health.

REFERENCES

1. GOL. ESI Medical manual. New Delhi: DG Employees State Insurance Corporation, 2002, 2011; 4.
2. Kanerva's Occupational Dermatology. ISBN 978-3-642-02035-3. HSE (Health and Safety Executive of Great Britain) Skin at work Retrieved on, 2009; 20.
3. Chew, Ai-Lean; Maibach, Howard I. (2006-06-18). Irritant Dermatitis. ISBN 978-3-540-31294-9.
4. Coenraads, P. J.; Diepgen, T. L. (1998-02-01). "Risk for hand eczema in employees with past or present atopic dermatitis". *International Archives of Occupational and Environmental Health*, **71** (1): 7–13 ISSN 0340 0131.
5. Elsner, P. (1994-07-01). "Irritant dermatitis in the workplace". *Dermatologic Clinics*, **12** (3): 461–467. ISSN 0733-8635.
6. Wilhelm, Klaus Peter; Zhai, Hongbo; Maibach, Howard I. (2007-11-26). *Dermatotoxicology*. 978-0849397738.
7. Eichmann, A.; Amgwerd, D. (1992-05-05). "[Toxic contact dermatitis]". *Schweizerische Rundschau für Medicine Praxis Revue Suisse de Medicine Praxis*, **81** (19): 615–617. ISSN 1013-2058.
8. IAMJ, 2019; 7, 11: 2111. www.iamj.in
9. Ayushi International Interdisciplinary Research Journal (AIIRJ), Dec, 2019; 2349-638x P16-18. <http://www.aiirjournal.com/>