

PREVENTIVE APPROACH TO OCCUPATIONAL HEALTH: A REVIEW**Vd. Sharmili S. Patil^{*1} and Dr. Yeshwant R. Patil²**¹P.G Scholar, Department of Swasthavritta and Yoga Government Ayurved College Nanded.²Professor and H.O.D. Department of Swasthavritta and Yoga, Government Ayurved College Nanded.Article Received on
25 Jan. 2020,Revised on 15 Feb. 2020,
Accepted on 05 March 2020

DOI: 10.20959/wjpr20204-17016

Corresponding Author*Vd. Sharmili S. Patil**P.G Scholar, Department of
Swasthavritta and Yoga
Government Ayurved
College Nanded.**ABSTRACT**

Work place is the environment in which many people spend longest portion of their time. An occupation is part of our life as well as source of identity of a person in the society. Occupational health is the promotion and maintenance of highest degree of physical, mental, and social well beings of all the workers in their respective occupations. An occupational disease is any chronic ailment that occurs as a result of work or occupational activity. Healthy occupational life is now easily achievable with nutritional counselling, exercise training, de-addiction program, regular medical check-ups and stress management techniques. Ayurveda is a science of life, guiding and maintaining health and curing disease. Ayurveda also upholds the importance of

occupation as a means and one of the steps in attaining *Purusharthas* or the ultimate goal in life. Ayurveda provides better solution through the guidelines of proper dietary management, lifestyle advices, panchakarma procedures like de-toxification, meditation etc. This review is done to understand the occupational health and its management through Ayurveda.

KEYWORDS: Occupation, *Purusharthas*, *Ayurveda*.**INTRODUCTION**

An occupation is a major part of our life. उद्योगं पुरुषलक्षणं | is a famous age-old proverb which means that an occupation is the identity of an individual, which indicates the importance of it in person's life. Synonyms of occupation- job, work, profession, employment.

Occupational hazard is a danger or hazard to workers that is inherent in a particular occupation.

Occupational health is multidisciplinary field concerned with the safety, Health and Welfare of people at work.

Preventive medicine and occupational health have the same aim- the prevention of disease and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the levels of application of preventive measures are the same – health promotion, specific protection, early diagnosis and treatment, disability limitation and rehabilitation; the tools are the same epidemiological approach, statistics, health screening, health education etc. Occupational health, therefore, is the application of preventive medicine in all places of employment.^[1]

Hence in this paper occupational health and its preventive approach through Ayurveda and Modern is described.

Aim and objective

1. Elaborative study of preventive occupational health through Ayurveda.
2. Understand occupational hazards and occupational health.
3. Management of occupational health through Ayurveda.

MATERIAL AND METHODS

Selection of study material

Classical texts of Ayurveda- *bruhatrayi* i.e *charak Samhita*, *sushrut Samhita* and *ashtanghridaym*. Park's textbook of preventive medicine, research papers, etc.

Method of study- Literary study.

DISCUSSION

Ergonomics: Greek word

Ergos- Work

Nomos- Law

Means fitting the right job to right worker.

Occupational environment: Means the sum of external conditions and influences which prevail at the place of work and which have a bearing on the health.

Domestic environment: Means the sum of external conditions and influences which prevail at the residing place and which have a bearing on the health.

Basically, there are three type of interactions

1. Man with physical, chemical and biological agents
2. Man with machine
3. Man with man or woman

So, we have 5 types of hazards

1. Physical hazards
2. Chemical hazards
3. Biological hazards
4. Mechanical hazards
5. Psychological hazards

1. Physical hazards.

Physical agents	Hazard
Heat	Heat hyperpyrexia, heat exhaustion, heat syncope, heat cramps, burns and local effect like prickly heat.
Cold	Trench foot, frostbite, chilblains.
Light	Occupational cataract, miner's nystagmus
Pressure	Caisson disease, air embolism, blast or explosion.
Noise	Occupational deafness
Radiation	Cancer, leukemia, aplastic anemia, pancytopenia
Mechanical factors	Injuries, accidents
Electricity	Burns

2. Chemical hazards.

Chemical agents	Hazards
Gases (CO ₂ , CO, HCN, CS ₂ , NH ₃ , N ₂ , H ₂ S, SO ₂)	Gas poisoning
Inorganic dust-	
Coal dust	Anthraxis
Silica	Silicosis
Asbestos	Asbestosis, lung cancer
Iron	Siderosis
Organic dust	
Cane dust	Bagassosis
Cotton dust	Byssinosis
Tobacco	Tobacosis
Hay dust/ grain dust	Farmer's lung
Metal and compounds	Lead, mercury, cadmium, manganese, chromium etc.
Chemicals	Acid, solvent, pesticides

3. Biological hazards

Brucellosis, Leptospirosis, Anthrax, Actinomycosis, Hydatidosis, Tetanus, Encephalitis, Fungal infection, etc.

4. Mechanical hazards: Accidents.

5. Psychological hazards

1. Psychological and behavioral changes

Hostility, aggressiveness, anxiety, depression, tiredness, alcoholism, drug abuse, sickness absenteeism

2. Psychosomatic diseases

Fatigue, headache, peptic ulcer, hypertension, cardiac diseases and rapid aging

Fact about occupational hazard

Occupational Health services are non-existent for a majority-85% of Indian workers in unorganized sector. Of the global 1.9 million cases, 17% are contributed by India. The adverse occupational factors cost 2%-14% of gross national product.^[2]

Occupational hazards in *ayurved*

xÉSÉiÉÑUÉ: ÉÉàì§ÉrÉ UÉeÉxÉâuÉMüÉxiÉjÉæuÉ uÉæzrÉÉ xÉWû
mÉhrÉeÉlūÉíPÉ:||27||^[3]

In *Charaksamhita siddhisthan adhyay 11 charaka* has mentioned *sadaturas* which means people who get ill often. They are as mentioned below

᳚᳚᳚᳚᳚᳚

Vedic priest is always busy in chanting holy hymns fail to attend the regimens good for their health, also they always suppress the natural urges, never take food on time, untimely voiding of stools and urine and other untimely regimens.

U᳚᳚᳚᳚᳚᳚᳚

They are always busy in their work of providing protection to the king so they forego the healthy regimens.

u᳚᳚᳚᳚᳚᳚

A courtesan has to fulfil the wishes of the men and their entertainment, hence fails to take care of her health.

m᳚᳚᳚᳚᳚᳚᳚

Merchants lead a very sedentary lifestyle, again because of their profession, hence prone to diseases.

Other occupations who are always busy with the work and don't give attention to their health are prone to disease.

Acharya Sushruta has mentioned the following factors as causatives of the *aupasrgika rogas*: *gatra sparsha, nishwasa, saha bhojana, saha shayya-asana, vastra mala anulepa* leading to diseases like *kushta, jwara, shosha* and *netra abhishyanda*.^[4] According to this reference, these diseases spreads from man to man. These can be compared to the biological hazards.

Management of occupational health

Charaka has explained the management of *sadatura* people in the *siddhisthana adhyaya 11*

x᳚᳚᳚᳚᳚᳚᳚ u᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚ ᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚ x᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚ ᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚
 ᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚
 x᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚ ᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚
 m᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚᳚ ||31||^[5]

Management of diseases in the above mentioned four kinds of people is by the administration of '*Phala varti*'. This alleviate the aggravated *vata dosha* because of suppression of urges and also cures *vibandha* and *sarvangaraja*.

Ayurvedic *dincharya* (daily regimen) that should be followed to remain healthy and decrease the intensity of occupational hazards. The good things that should be done daily are a part of *Dincharya*.

1. **Brahmmuhurat:** The first important point of Ayurvedic *Dincharya* is that we should get up in *Brahmmuhurat* i.e. early morning and for getting up early in the morning. Some glands start working only when we are sleeping and when it is dark. Due to wrong *dincharya* (routine), hormonal imbalance occurs. As per Ayurveda, increased *Vata dosha* results in increasing Pain; people who are suffering from musculoskeletal system disorders due to occupation, will be affected more. The Ayurvedic treatments which are helpful in reducing Vata disorders are: *Abhyang* (Massage), *Swedan* (steam) and *Basti*.
2. **Shouch Vidhi:** The first thing that we should do after awakening is that we should go to toilet. However, do not exert pressure for defecation. It can aggravate *Vata* and many other diseases like rectal prolapse.
3. **Yoga:** After going to toilet in the morning do some yogic exercises. Yoga can prevent breathing problems which may occur due to inhaled chemicals etc.
4. **Dantdhawan Vidhi:** *Khadir*, *Karanj*, *Arjun*, *Neem*, *yashtimadhu* etc. can be used as a *dantapavan* for cleaning teeth. Teeth should be rubbed with oil mixed *tejowati* and *saindhav namak*. Also use tongue cleaner to clean your tongue. These gives strength to your teeth and are helpful for removing stains from teeth which may be result of occupational hazards.
5. **Anjana:** *Anjana* is useful for healthy eyes. Apply *Sauviranjan* daily and *Rasanjan* once a week.^[6] This will remove dirt and foreign particles from eyes. So, these are good to control occupational hazards affecting eyes.
6. **Nasya:** *Nasa* is the opening to the brain.^[7] So, it is very useful in diseases of brain and upper trunk. People can do *pratimasha nasya* with *Anutail* or *ghee*. By the use of *Nasya* skin remains clear, wrinkle free, prevents greying of hairs and blackening of face. *Nasya*

will lubricate nasal passage. So *Nasya* will be helpful for these symptoms which may occur due to some occupations like over exposure to heat. Also, helpful for the people suffering from occupational hazards like Eye diseases, Headache and Respiratory problems.

7. **Gandush:** Keeping liquids like oil or *Ghrith* in your mouth is called *gandush*. Prevents dryness of mouth, teeth problems and damage of voice i.e. *Swarbhang*. These will prevent occupational hazards due to some hazardous liquids like petrol.

CONCLUSION

From above discussion we can conclude that any person working in their workplaces can prevent from any occupational hazards through Ayurveda by attempting above mentioned Karmas.

REFERENCES

1. Park K. Occupational health. park's textbook of preventive and social medicine, Reprint edition, 1997.
2. <https://oem.bmj.com>.
3. Bramhanand Tripathi, *Charak Samhita*, Chaukhamba Prakashan, Edition *Siddhistahna*, *phalamatrasiddhiadhyay*, 2006; 901(1): 11-27.
4. Acharya Sushruta. Kustha Nidanam In, Vaidya Yadavji Trikamji Acharya(ed). Sushruta Samhitha with Nibandha Sangraha commentary of Dalhanacharya, Reprint edition 2012. Varanasi: Chaukhamba Surbharati Prakashan, 2012; 289(6): 33-34.
5. Bramhanand Tripathi, *Charak Samhita*, Chaukhamba Prakashan, Edition *siddhistahna*, *phalamatrasiddhiadhyay*, 2006; 902(1): 11-31.
6. Kaviraj atridev Gupt, *Ashtanghridya*, Chaukhamba Prakashan, Edition *Sutrastahna*, *dinacharyaadhyaya*, 2008; 27: 2-5.
7. Kaviraj atridev Gupt, *Ashtanghridya*, Chaukhamba Prakashan, Edition *Sutrastahna*, *nasyavidhiadhyay*, 2008; 244: 20-1.