## 5. Managing Fatigue at Workplace

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## **5.1 Introduction to Workplace Fatigue:**

Fatigue indicates a state in which an individual experiences extreme levels of exhaustion both physically and emotionally. It is a condition which is beyond the usual tiredness of a day-to-day work-life.

A person's daily activities can be greatly affected by physical and emotional fatigue. Fatigue can have prolonged effect on an individual and is not necessarily relieved by rest or sleep. The physical and emotional exhaustion can result from long-term and continued exposure to stressful situations at work environment and personal life. Fatigue can shoot up from a tussle to cope with the demands of a job with personal commitment. An individual can end up feeling drained which lead to lack of motivation to take initiative to do anything in all areas of areas of life.

Fatigue at workplace implies to the physical and emotional exhaustion that occurs due to demands of the work. An employee may experience headaches, weakness, sluggishness and sleepiness due to fatigue. An employee may also find it difficult to concentrate, be forgetful, and show lack of problem-solving ability along with irritation, emotional numbness and mood swings.

It stems from a work environment where the workload rises beyond the coping capacity of an individual. Situations at workplace like long working hours without sufficient breaks, night shifts or double shifts, poor work environment can lead to overstretching of the capacity of an employee to meet the demand of the situation. An individual can become less productive and be at high risk of making errors and accidents at workplace due to fatigue.

## 5.1.1 What Are the Different Types of Fatigue?

### **Physical Fatigue:**

When the muscles of the body cannot perform to its optimal level due to extreme and continuous physical activity, this can lead to physical fatigue.

Prevalence of weak or heavy muscles, slowed reflexes and movements, soreness or muscle cramps are the indicators of physical fatigue. During physical fatigue an employee may feel physically drained, with reduced strength or stamina, have frequent headaches or tension due to stress or overwork. The experience of constant tiredness with low energy, even after rest or sleep is an indicator of physical fatigue.

### Mental Fatigue:

When the brain is overworked due to continuous and prolonged periods of cognitive or intellectual activities leading to impairment of concentration, memory and decision-making abilities in an individual, it is known as mental fatigue.

An employee may experience difficulty in thinking clearly or processing information during mental fatigue. Rational confusion, lack of attention, forgetfulness, low capacity to handle stress are some of the indicators of mental fatigue.

## **Emotional Fatigue:**

When an individual is exposed to stress, anxiety or emotionally difficult situations leading to an overwhelming feeling of begin emotionally drained, it is known as emotional fatigue. During emotional fatigue an individual experiences reduced interest or enthusiasm for activities or relationships, frequent mood swings or irritability.

Apathy or disconnection from others, intensified sense of hopelessness, sadness or anger are the indicators of emotional fatigue. It is difficult for a person to maintain emotional resilience over time while undergoing emotional fatigue.

## **5.2 Sources of Workplace Fatigue:**

#### **Extended shift work:**

Working longer shifts than normal, especially without appropriate breaks, increases the risk of weariness. Double shifts and overtime are frequent causes.

#### Unbalanced work schedule:

The body's natural sleep-wake cycle is upset by night shifts, rotating shifts, and early morning hours, which causes weariness. Long workdays or late shifts can cut into the amount of time you have for relaxation, which can prolong sleep deprivation.

#### Overwork and a demanding job:

Mental energy can be depleted by tasks requiring a high level of focus, problem-solving, or multitasking, which can lead to cognitive weariness. Emotionally taxing jobs like customer service, counseling, and caregiving need a lot of emotional investment.

**Repeated tasks:** Performing the same things repeatedly without break for extended periods of time can wear you out both physically and mentally. These assignments may lower participation.

#### **Rest Periods and Recovery Time:**

Skipping lunch or taking infrequent, brief breaks during the workday might hasten the onset of weariness. Particularly in physically demanding or high-stress jobs, weariness can accumulate if there is not enough time off between shifts or on weekends to relax and recover.

#### **Working Conditions:**

Low light levels can cause eye strain and mental exhaustion, particularly in tasks requiring precision. Excessive noise levels or ongoing distractions at work might cause attention problems and mental fatigue.

Extreme heat or cold can physically deplete energy and increase the exhaustion of tasks. Over time, poor ergonomics can lead to physical exhaustion, muscle strain, and discomfort. Examples of these include unpleasant seating and improper body alignment.

#### Work-life equilibrium:

Insufficient time for personal life and lack of personal time can result in exhaustion and burnout. Fatigue is increased when interests are neglected or when work consumes all of one's time.

The blurred boundaries between business and home life can result in long work hours for remote workers. Fatigue might result from the lifestyle of remote workers, who are unable to switch off from their work.

#### Shift Work:

People who work night or rotating shifts frequently have their circadian rhythm—which controls sleep and wakefulness—out of whack, which can cause exhaustion and sleep difficulties. Pilots and flight attendants are examples of occupations where frequent time zone changes can upset circadian rhythms and result in exhaustion.

#### Aspects of the organization:

Excessive workloads, unreasonable deadlines, or a lack of resources can all contribute to exhaustion and burnout. Workers who are powerless over their jobs, schedules, or choices frequently feel more stressed and exhausted. Emotional exhaustion can be caused by inadequate communication, insufficient feedback, or a lack of social support from supervisors and coworkers.

#### **Traveling:**

Taking longer to get to and from work might cut into the employee's free time, which can lead to exhaustion. Workers who travel extensively for work may become weary and suffer from jet lag, especially when traveling across time zones.

## **5.3 Identifying Fatigue at Workplace:**

Fatigue at work place is a risk factor and is associated with health and safety of both the employee and his/her colleagues. It has a psychological aspect that means not having enough energy to do work and experience physical and emotional reluctance to endure a task.

A fatigued person receives a signal from his body that the ongoing activity either physical activity or mental activity should be ended. It is essential to identify and measure workplace fatigue for promoting employee well-being. Various tools and techniques can help employers and individuals assess fatigue levels.

## **5.3.1 Subjective Self- Assessment Tools:**

1. The fatigue Severity Scale is a widely used questionnaire that can measures the impact of fatigue on regular day-to-day activities. It is a 9-item scale that can measure the severity of fatigue and how it affects an individual's activities and lifestyles. Example: "My motivation is lower when I am fatigued." Respondents rate statements related to how fatigue affects their life on a scale of 1 to 7 with 1= strongly disagree to 7= strongly agree. Higher the score greater the fatigue. This scale can give an estimation of the severity of the fatigue an individual may be experiencing.

2. The Standard Sleepiness Scale can be used to quickly gauge an individual's level of alertness between the hours of 9:00 am and 9:00 pm. a straightforward self-report instrument designed to gauge an individual's degree of alertness or sleepiness at several periods of the day.

On a seven-point rating system, from "feeling active and vital" to "almost in reverie or falling asleep," participants can express how sleepy they are. Around 3 p.m., alertness reaches its lowest point and then starts to increase once more. To determine the level of alertness, the participant can rate how alert they are at several points throughout the day. This measure can identify both sleep deficiency and the need for additional sleep to lessen exhaustion.

## 5.3.2 Contemporary Gadgets:

- 1. Actigeaphy is a gadget that can indicate a person's sleep-wake cycle. It is a wrist-worn gadget that tracks patterns of activity and rest. The gadget can assist in providing data on sleep deprivation and quality, both of which can be signs of exhaustion.
- 2. Heart rate variability monitoring devices are useful tools for assessing stress and fatigue because they measure the differences in heartbeat duration. Because a lower heart rate indicates that the body is not able to recuperate from stress or exercise, it is frequently associated with higher degrees of exhaustion.

## **5.3.3 Performance-Based Tests:**

- 1. The psychomotor vigilance test is frequently used in shift work, transportation, and other safety-critical contexts to detect mental fatigue. This test is often used to evaluate continuous attention and reaction time. This type of exam may use either an aural or visual stimulus. Fatigue is indicated by slower measured reaction times.
- 2. A popular test called the Stroop test asks participants to identify a word's color that differs from the printed word in order to gauge their processing speed. Printing the words "blue" or "yellow" in red or blue ink and observing how people misread the color can serve as an illustration of the stroop effect. Printing the words "blue" in red ink or "yellow" in blue ink might demonstrate the stroop effect by seeing how participants misread the color.

## 5.3.4 Tools for Risk Management Related to Fatigue:

- 1. An examination of software device exhaustion A risk management tool called interDyne uses sleep patterns and work schedules to forecast weariness. Employees can analyze their shift patterns, workload, and rest periods to assist them determine the dangers of weariness.
- 2. A biomathematical method called Sleep, Activity, weariness and Task Effectiveness is used to predict an individual's level of weariness based on their sleep history, amount of time spent on a task, and regular sleep patterns. It is frequently used to control fatigue risks in industries like trucking and aviation, as it forecasts performance deficiencies caused by weariness.

## 5.4 Measures to Prevent Fatigue at Workplace:

Prevention of fatigue is necessary to maintain productivity and overall well-being at workplace. It is essential to prevent fatigue so that risk of accidents and errors can be reduced at workplaces. Following are some tips which can help prevent fatigue at workplace:

- Including brief breaks in the daily schedule helps staff members stay focused and refreshed.
- Limit overtime and leave time for relaxation in between tasks. Raise awareness on getting 7-9 hours of good sleep each night.
- Promote physical activity and quick strolls during brief pauses. Advice on consuming wholesome meals and snacks and staying hydrated.
- To lessen weariness, offer instruction in mindfulness, meditation, and breathing techniques.
- Make it possible to contact counseling services for help managing fatigue.
- Refrain from assigning excessive workloads to staff members as this may cause burnout.
- Raise awareness of time management and develop the ability to organize tasks according to the amount of energy needed.
- Encourage a positive work environment and create solid teams that can be relied on for assistance when things become tough.
- Reduce noise and maintain a controlled temperature to improve working circumstances and sustain alertness.
- Raise awareness of the symptoms of exhaustion and provide solutions to alleviate it. Stress the value of maintaining a work-life balance and your own health.

## 5.5 Need for Training and Education:

Workplace fatigue can be managed with proper training and education. Organization must equip employees with the knowledge and skills to recognize, address and diminish fatigue. Organizations can foster a healthier, more productive work environment. Following are some highlights that must be incorporated in training and education for combating fatigue at workplace:

- The aim of a training programme must be clearly outlined. There must be proper understanding of fatigue, its causes, and its impact on health and productivity.
- There must be discussions on factors contributing to workplace fatigue like long work hours, shift work, high-stress levels, inadequate rest, improper ergonomics and the measures required to mitigate them. There must be training on setting up ergonomic workstations to reduce physical strains.
- Highlighting the effect of fatigue on health, safety, productivity, and overall workplace morale is essential.
- Employees must be educated on how to recognise their own signs of fatigue like decreased concentration, irritability and physical indicators like headaches.
- Managers and peers must be trained to identify signs of fatigue like delay in reaction time, errors and absenteeism
- Orientation for time management and scheduling practices to avoid excessive workloads must be considered.
- Highlighting the importance of regular breaks and how to utilize them effectively must be carried on. Techniques such as mindfulness, meditation, and relaxation exercises to manage stress-related fatigue must be introduced. Coaching on the importance of quality sleep and strategies to improve sleep habits must be provided.
- Interactive sessions must be organised to engage employees, encouraging participation through discussions, role-playing, and group activities. Case studies and real-life examples must be incorporated to illustrate the impact of fatigue and effective management strategies
- Host sessions must be led by experts in occupational health, ergonomics, or psychology to provide in-depth knowledge and answer questions.
- Fatigue awareness and management training must be incorporated into the on boarding process to establish good work practices from the start.
- Leaders and managers must be motivated to demonstrate healthy fatigue management behaviours. An organizational culture that prioritizes well-being must be promoted.
- Channels must be built for employees to provide feedback on fatigue-related issues and training effectiveness. Regular meetings or forums where employees can share experiences and strategies for managing fatigue must be promoted

- Training should be provided to selected employees to act as fatigue management champions who can support and educate their staff. Mentorship programs where experienced employees can guide others in managing fatigue effective must be established.
- Roles and responsibilities for fatigue management within the organization must be clearly defined. Implementing mechanisms to ensure adherence to fatigue-related policies and training recommendations.
- There must be clear understanding of organizational policies regarding work hours, overtime, breaks, and fatigue management. Awareness must be spread about available resources, such as employee assistance programs (EAPs), counselling services, and fatigue management

## **5.6 Policies and Procedures:**

It is essential to undertake well-defined policies and procedures to manage workplace fatigue. Effective fatigue management policies address both causes and provide guidelines for employees and management to recognise and mitigate fatigue related risks. The company management's role in providing a safe working environment, setting reasonable work hours, offering breaks, and monitoring fatigue risks is crucial. It is also important to emphasize employees' role in managing their own fatigue, such as taking rest breaks, reporting fatigue, and following the policy guideline.

# Following are some tips to develop policies and procedures to manage workplace fatigue:

- The company's policy must mention in details about how managers and supervisors should monitor staff for signs of fatigue, adjust workloads, and ensure compliance with the policy.
- Company's policy must set limits on the number of consecutive hours an employee can work. For example, restrict shifts to a maximum of 8–12 hours and ensure a 10–12-hour rest period between shifts.
- There must be well defined policies and procedures for implementing fair and consistent shift rotation schedules to minimize fatigue, especially for night shifts.

- Mandatory rules in the company's policy must be established for rest breaks during shifts, for example, a 15-minute break for every 2–3 hours of work.
- Ensuring employees have at least one full day off per week and that extended rest periods are provided after long or demanding shifts must be part of the company policy.
- For remote employees, company policy must include setting boundaries to prevent overwork and encourage regular breaks to reduce screen fatigue and mental strain.
- The company policy must include procedures to identify workplace factors that can contribute to fatigue, such as long hours, high-stress levels, physical labour, shift work, and inadequate rest breaks.
- There must company procedures for assessing environmental contributors, such as poor lighting, noise, and uncomfortable workstations, which can exacerbate fatigue.
- Provision must be there in policies for employees to report if they feel fatigued and ensure they understand that reporting fatigue will not lead to negative consequences.
- Policies for offering confidential counselling and support services to help employees deal with work-related stress, fatigue, and personal issues affecting their energy levels and focus at work.
- Company policy must provide access to occupational health services for employees experiencing chronic fatigue to evaluate any underlying medical conditions and recommend appropriate interventions

## 5.7 Organizations Undertaking Fatigue Management:

## Tata Steel (Steel Manufacturing):

To decrease fatigue-related accidents and health issues, Tata Steel (Steel Manufacturing) developed a comprehensive Fatigue Risk System. They provided mandatory rest periods, minimized night shift repetitions, and optimized shift rotations. In order to prevent mishaps, they also installed fatigue detection systems in crucial processes and vehicles.

Tata Steel promoted physical and emotional health by offering access to wellness centers and educating people about good sleep hygiene. Tata Steel makes use of monitoring technology to guarantee that machine workers and drivers are attentive during their shifts.

#### Maruti Suzuki India Limited: (Makers of Automobiles):

Maruti Suzuki had taken steps to lessen worker tiredness on the assembly line. To treat physical strain and emotional exhaustion, the organization offers health check-ups, fitness programs, and mental health initiatives.

#### Indian Oil Corporation Limited (Oil and Gas):

To combat weariness, the organization placed a strong emphasis on limiting long work hours and providing regular breaks. The organization made sure that shift rotation procedures could balance day and night shifts, so as to minimize the workers' daily sleep schedule disruption. The implementation of counseling and health screening services aims to assist staff in addressing both physical and psychological exhaustion.

## Reliance Industries Limited: An oil and gas, telecommunication, and retail conglomerate

The organization made sure that workers adhered to set work schedules and took mandatory breaks in between shifts. Additionally, the business offers wellness programs that promote health and fitness and offers stress and fatigue management training.

#### Aditya Birla Group (Conglomerate: Chemicals, Metal, Textiles, and Cement):

Employees are educated about the dangers of fatigue and the significance of effectively managing it through periodic fatigue awareness training offered by the company. They manage health clinics and fitness centers. To lessen staff weariness, they encourage healthy lifestyle choices.

#### Hindustan Unilever Limited (FMCG,):

The business prioritized both physical and emotional wellness. It permits employees to have flexible work schedules, encourages regular breaks, and supports work-life balance. In order to address mental health issues, regulate stress, and lessen mental exhaustion, it offered an employee help program. The business offered ergonomic workplace layouts.

#### Wipro Limited (Information Technology):

Wipro encourages employees to take breaks and permits flexible work schedules, especially when working long hours or under pressure to meet deadlines. The business provides ergonomic workplace furniture to avoid physical strain from extended sitting or bad posture, which can also have an impact on mental health.

#### Infosys Limited (Information Technology):

The organization actively seeks out workers who may be at risk of burnout and provides assistance in the form of time-off policies, stress management classes, and guidance.

## **5.8 Conclusion:**

Extreme levels of physical and mental depletion are experienced by someone who is fatigued. The term "workplace exhaustion" refers to the mental and physical tiredness brought on by the demands of the job. Workplace fatigue is a risk factor that affects an employee's and his or her coworkers' health and safety. Measuring and identifying workplace weariness is crucial to advancing worker well-being. Employers need to give staff members the information and abilities they need to identify, deal with, and lessen fatigue. To control workplace weariness, clearly defined policies and procedures must be implemented. Common fatigue management techniques used by a number of top businesses include workplace ergonomics, tiredness monitoring technologies, and shift scheduling and optimization. By adopting these procedures, businesses can improve the general well-being of their workforce.

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