

MENTAL HEALTH AND ACCIDENTS

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OVER one and a half centuries old, the **Indian Railways** are not only a historic legacy but a vital utility carrying more than 11 million people daily over two million kilometers of track. The railway network is also the economic backbone of India, which accounts for about 40 per cent of the country's goods traffic. It is also one of the largest and busiest rail networks in the world, transporting just under five billion passengers and almost 650 million tonnes of freight annually. IR is the world's largest commercial or utility employer, with more than 1.6 million employees. The railways traverse through the length and breadth of the country; the routes cover a total length of 63,940 km (39,230 miles). As of 2005 IR owns a total of 216,717 wagons, 39,936 coaches and 7,339 locomotives and runs a total of 14,244 trains daily, including about 8,002 passenger trains. (<http://en.wikipedia.org>, <http://www.indianrailways.gov.in>)

One of the main problems plaguing the Railways is the accident rate which stands at about Three hundred a year. Indian Railways have accepted the fact that given the size of operations, eliminating accidents is an unrealistic goal, and at best they can only minimize the accident rate. Contributing to the Railways' problems are the communication, safety and signalling equipment failures. Aging colonial-era bridges and tracks also require regular maintenance and upgrading. These factors compound the stress faced by the employees. **Human error is the primary cause (83%) blamed for mishaps.** (<http://en.wikipedia.org>, <http://www.indianrailways.gov.in>)

The quality of human resource is one of the founding pillars of any organisation. Therefore, a high level of positive physical and mental health in the human resource is of paramount importance to increase the quality of output at the cutting edge.

"The burden of mental illness on health and productivity in the United States and throughout the world has long been profoundly underestimated. Data developed by the massive Global Burden of Disease study, conducted by the World Health Organization, the World Bank, and Harvard University, reveal that mental illness, ranks **second** in the burden of disease in established market economies and the scenario in the developing economy is not encouraging. Mental ill health or distress is a major cause of sickness that causes absence from work, reduced productivity and staff turnover. Stress is the root cause of a lot mental ill health, especially anxiety and depression.

"Mental health" and "Mental illness" are not polar opposites but may be thought of as points on a continuum. **Mental health** is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity. Mental health is indispensable to personal well-being, family and interpersonal relationships, and contribution to community or society. (Murray & Lopez, 1996)

From early childhood until death, mental health is the springboard of thinking and communication skills, learning, emotional growth, resilience, and self-esteem. These are the ingredients of each individual's successful contribution to community and society.

In a Confederation of British Industry (CBI) survey of over 800 companies, 98% of respondents said they thought that the mental health of employees should be a company concern. Similarly, the large majority (81%) considered that the mental health of staff should be part of company policy. Despite their concerns, however, less than 1 in 10 of these companies had an official policy on mental health.

According to Indian labour institute Work-related stress is estimated to be the biggest occupational health problem, after musculoskeletal disorders such as back problems. Nearly 3 in every 10 employees will have a mental health problem in any one year – the great majority of which will be anxiety and depressive disorders.

Mental illness emerged from the Global Burden of Disease study as a surprisingly significant contributor to the burden of disease. The measure of calculating disease burden in this study, called Disability Adjusted Life Years (DALYs), allows comparison of the burden

Disease burden by selected illness categories in established market economies, see [Table-1](#) (WHO, WORLD Bank, Harvard University, 1990)

	Percent of Total DALYs*
All cardiovascular conditions	18.6
All mental illness**	15.4
All malignant diseases (cancer)	15.0
All respiratory conditions	4.8
All alcohol use	4.7<
All infectious and parasitic diseases	2.8
All drug use	1.5

* Disability-adjusted life year (DALY) is a measure that expresses years of life lost to premature death and years lived with a disability of specified severity and duration (Murray & Lopez, 1996).

In UK, Mental health problems account for the loss of over 91 million working days each year. Half of all days lost through mental ill-health are due to anxiety and stress conditions. Indian Railways as a single entity accounts for the loss of about 12 million working days per year!! Less than half are due to anxiety and stress. One percent of the Mandays is lost in Konkan Railway every year. One tenth is due to Stress and related conditions.

Mental ill-health among the workforce exerts a substantial cost. Stress-related sickness absences cost an estimated Rs 4 billion annually.

There are many other costs in addition to those of sickness absence. Ineffective working and poor interpersonal relations can substantially reduce productivity. Administrative as well as personal costs are involved in covering for absent employees. Additional costs are incurred when staff takes early retirement or medical severance on health grounds.

What can give rise to Stress at Work?

As per Penny Gray of Mental Health Foundation, UK, Work on the whole has a beneficial impact on mental health. It gives structure and purpose to the week, opportunities to meet people and make friends, and a means of increasing one's sense of self-worth and of being valued by others.

In certain circumstances, however, work can cause or contribute to stress and subsequent problems of anxiety and depression. Research has highlighted a number of work-related factors that can negatively affect well-being, namely,

Lack of control over work, Under-utilisation of skills, Too high a workload, impossible deadlines, Too low a workload, no or few challenges, High uncertainty, e.g. due to poorly defined roles and responsibilities, lack of clear priorities and targets, job insecurity, Low pay, Poor working conditions, e.g. noise,

overcrowding, excessive heat, inadequate breaks, Low interpersonal support, e.g. via inadequate or insensitive management, hostility from colleagues Undervalued social position etc.

No single factor alone is likely to be the cause of someone becoming stressed at work. Stress tends to build up over a period of time through a combination of circumstances, some of which may not be related to work at all. Problems in domestic relationships, money worries, even difficulties in traveling to work can contribute to reducing a person's ability to cope with stress in the workplace.

If sufficient numbers of staff are affected by stress, however, the problem can become a serious organizational one, manifesting as absenteeism, reduced productivity and customer complaints.

What are the Indicators of Individual Stress?

Increase in unexplained absences or sick leave, Poor performance, poor timekeeping, increased consumption of alcohol, tobacco or caffeine, frequent headaches or backaches, Withdrawal from social contact, Poor judgment/indecisiveness, Constant tiredness or low energy, unusual displays of emotion e.g. frequent irritability or tearfulness.

These can all be signs that stress has built to such an extent that an individual may be in danger of developing more severe anxiety or depression. Clearly this needs to be sensitively handled or the intervention may exacerbate the problem. (Penny Gray). **Effective help in the early stages can help to prevent long-term problems both for individuals and organisations.** The emphasis should be for providing a forum and giving the individual the opportunity to talk about, interact and get involved in the various health promotive activities initiated by the management.

Creating a Healthy Workplace

Konkan Railway has created a healthy work environment for their staff and has developed policies and procedures to ensure tangible results. A specific policy relating to physical and mental health at work is available. Staff feel free to be open up about stress they are experiencing, in the knowledge that they will be helped and supported to deal with their issues. Open communication channels within an organisation and actively discourage behaviors that contribute to stress, such as routine late working, taking work home at weekends, and competitive behaviour.

Effective stress prevention and management require tackling the problem at several levels simultaneously. Measures are available to minimize stress at source, reduce the negative effects of stress via education and management strategies and assist individuals who are experiencing the effects of stress. A few of the number of initiatives taken by the management to address the issue of stress and mental health are:

'Chaitanya'

.. **meaning awakening, awareness**, the word derived from Sanskrit, is one of the important projects, first of its kind, initiated by Konkan Railway where the participation of the employee not only addresses the issue of stress at work place but also gives an employee an opportunity to understand and eliminate the stress he or she would face at bringing up their children at home. This project facilitated the employees to embark on the 'journey of togetherness' in 'enlightened parenthood'.

An employee relieved of the stress related issues at home has a better performance level resulting in increased quality output. The project covered in two phases involves participation of spouse and children, where the **Occupational Stress Indicator (OSI)**, which includes scales to measure job satisfaction, mental and physical health, coping and support strategies, **Self rating questionnaire (SRQ)**, **Index of Parental Attitude (IPA)** to identify and assess source and levels of stress are carried out. Strategies and measures are tailored as per the requirements of an individual and as a group are formulated. The project has been very well received and has shown positive and tangible results.

'Yoga'

Rene Descartes conceptualized the distinction between the mind and the body. He viewed the "mind" as completely separable from the "body" (or "matter" in general). The mind (and spirit) was seen as the concern of organized religion, whereas the body was seen as the concern of physicians (Eisendrath & Feder, in press). This partitioning ushered in a separation between so-called "mental" and "physical" health. The Hindu philosophy always believed that the **Mind and Body are inseparables**.

Yoga, **meaning union or yoking** in Sanskrit, is the primary focus of Hinduism's diverse religious activities. YOGA is a science of the body, the mind, the consciousness and the soul. Yoga is a teaching of wisdom and knowledge which has been transmitted to mankind from the great Yogis and Rishis of ancient times, though its geographical origin lies in India, it is universal, all-valid, eternal knowledge.

There are several forms and paths of yoga that include meditation (Raja Yoga), devotional prayer (Bhakti Yoga), selfless service to others (Karma Yoga), practices for discrimination of truth and reality (Jnana Yoga), and even meditational forms of exercise and bodily upkeep (Hatha Yoga, a part of Raja Yoga). Yoga, as condified by Patanjali, is also one of the six major schools of Hindu philosophy and as such specifically refers to Raja Yoga, the royal path of divine meditation on the one Brahman.

Yoga is indicative of a broad range of practices that aim to, through physical, mental and spiritual activities, focus the individual on the true essence of reality, to achieve moksha or samadhi, liberation and enlightenment. A man who has taken up successful practice of Yoga is called a Yogi (also spelled Yogin), a woman Yogini. Experienced and dedicated teachers conduct yoga classes in a scheduled manner at the workplace, staff rooms, and in the staff clubs all over Konkan Railways.

Yoga's Effects On the Body: The following is only a partial list of yoga's benefits: Reduced stress, Sound sleep, Improvement of many medical conditions, Allergy and asthma symptom relief, Lower blood pressure, Weight reduction, Smoking cessation help, Lower heart rate, Spiritual growth Sense of well-being, Reduced anxiety and muscle tension, increased strength and flexibility slowed aging process (www.mayoclinic.com).

Yoga's benefits are so numerous; it gives a high payoff for the amount of effort involved.

Outcome Indicators

Konkan Railway is a technologically intensive, lean and young Human Resource organization. The management values the strength and the importance of the Human Resource. The proactive measures initiated in addressing the issue of promoting positive physical and mental health by introducing a sound policy and implementing various measures to combat various health related issues have yielded rich dividends. There has been an improvement in all facets of efficiency indicators in Konkan Railway. More important of them are listed below in table 2

Sr	Description	2005-06	2002-03	Remarks
1	Man Day loss	1%	1.8%	Reduced
2	Injured on Duty	08	36	Reduced
3	Participation of employees in various Health programs and projects	3,800	1,260	Improved involvement
4	Employees not found conforming to the Health standards on periodic health check up	02	11	Reduced
5	Employees not found following the stringent Rules of train operations	00	03	Reduced
6	Accidents in Konkan Railway	00	03	

Promoting positive health by a proactive organization, introduction of modern technologies, continuous training etc., has yielded improved quantitative and qualitative output by the Human resource that the 'Human error as a cause for Accidents' has been negated to a very large extent.

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