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Dr. N. Krishnamurthy

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In India, there is a woeful lack of awareness about Occupational Safety and Health (OSH) and a disconcerting inability to evolve a philosophy and practice of risk management.

rguably, India is way ahead in many technical endeavours within our land and even globally. But among the many areas where much is left to be desired for the nation to claim its place in the world map, occupational safety and health (OSH) is a crucial one. We do not find a place in many OSH statistics of the International Labour Organisation, for instance.

In recent years, much headway has been made and continues to be made in OSH, and signs are encouraging that we will catch up with other advanced nations in the foreseeable future.

Having studied the history of developments in this area in India, and of the industrial and public response to the push towards improving safety culture in the nation, and having contributed to similar efforts elsewhere, and attempting to share that experience within India through courses and webinars, I have come to the conclusion that the main malaise afflicting us in many areas, is neither money nor skills, but lack of awareness of the OSH problem and the lack of will to implement the solution.

The subject is multifaceted, including, in the Indian context:

- Legislation and regulation (which are guite extensive and progressive),
- Education and training (which are sparse and disorganised),
- Dissemination and communication (which face enormous hurdles due to the size and variability of the population), and
- Implementation and enforcement (which involve citizen perception and acceptance of solutions). It will take volumes to analyse these aspects. I do not intend to cover them here. What I plan to do in this short article is to highlight the importance of what I consider an essential pre-requisite to OSH, namely risk management. This itself involves a vast area of knowledge, very much dependent on the industry and project as well as human factors.

I shall offer an overview of the subject, hoping to motivate readers to learn more and do something about the current situation.

Current status of risk management

India is a huge land and its professionals quite competent and hence, predictably, the output on even such an unfamiliar (and unpopular!) topic as risk management comprises numerous

papers (both from within and outside India) and government documents. Many Government regulations and some of the private company practices are world class.

What became clear to me in my studies and webinars is that because of the general lack of safety awareness, there is little appreciation of the importance of the need for risk management, let alone about how to analyse and manage risks at the workplace.

There are what I call 'spikes' of awareness around. For instance, some of the big companies do a pretty good job of risk management. ISO standards happen to be the world standard for risk management as for most other professional activities, and many in India have taken ISO 9001 and ISO 31000 training from certified training institutions.

But even ISO carefully avoids prescriptive procedures for risk assessment and controls, sticking to its principle of establishing only management concepts, and leaving detailed guidelines and specific procedures to the different industries and stakeholders.

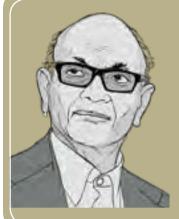
I have found that engineers who claim to have taken ISO and other courses, and have been practising risk management in their organisations for many years, mostly use risk matrices and follow risk analysis procedures given to them by their training organisations or their management without explanation or guidance on how the criteria and tools were developed.

Consequently, while the output looks slick, the safety analyst himself or the company itself may not have the insight to develop their own risk matrices and controls or even modify their templates for their specific needs and with their own resources.

What this means is that when it comes to implementing the relevant standards, every user may not be able to tailor the procedure to the specific demands of not only his project but also of each step of every task in a particular phase of the project. The 'one-size-fits-all' approach to risk management may at best be ineffective and, at worst, result in human injury, property loss, and/or environmental and other damage.

Ignorance and negligence of risk

With the exception of a few competent risk assessors, the large majority of our professionals view risk management as an unnecessary luxury,



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not realising that such an attitude perpetuates unnecessary accidents and injuries at worksites, and may even hinder our national productivity and progress.

As an example, consider the pie-chart below of fatalities from accidents in India in 2019:

Although not quite a workplace activity, most of travel is work-related. How many Indians know that every day, 500 people – that is one human being every three minutes - die on Indian roads! How many of us know that most of the fatalities are from two-wheeler drivers and pillion riders, and a big chunk of these in turn are because they did not wear a helmet?

I have discussed this in many ways and on many occasions. The general response is: "Oh, accidents happen to only riders who are rash or drunk or stupid ..., (take your pick!) - But I am cautious, sober, and smart, so it won't happen to me!" How do we convince them that accidents (by very definition) can happen to anybody, anywhere, anytime, and to the best of people, and most can be avoided or their impact minimised by some pre-planning?

This attitude amounts to ignorance or negligence and, as a result, many, if not most, citizens have become so inured to helmetless riding, beltless driving, and other dangerous behaviour on our roads (and elsewhere) which are contrary to norms or specifically forbidden by laws, that staggering statistics do not affect them.

Somehow, it must be brought to the conscience and consciousness of our people that most activities at the workplace carry the potential for danger, and it behoves every one of us to first learn about them, and next to do whatever we individually and collectively can to evaluate them so that we may either avoid them or mitigate their consequences.

It is only formal risk management that will, literally, save us.

What is risk management?

Risk management is simply the process of:

- (a) Identifying potential dangers in any activity or process;
- (b) Assessing the likelihood of them happen ing and the severity of their consequenc es, to us or to others, and to assets under our care or control; and,
- (c) Finding ways and means of bringing the risks to an acceptable or tolerable level.

This is not a new invention or discovery. It is what we instinctively, spontaneously do in our personal and family lives most of the time, adapting our actions to address situations that may pose a danger to us or those with us, analysing and avoiding or controlling the risks.

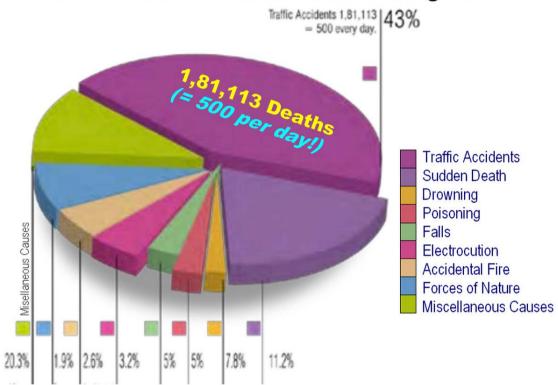
That is why most Indians will not take up mountaineering or wave surfing as a weekend hobby like the Westerners do.

That is why we take an umbrella if it looks like raining.

Whether we realise it or not, our mind (both conscious and sub-conscious) will analyse the possible consequences of our getting into potentially bad situations, and choose some preventive or protective measure against them.

However, we must formalise our analyses and procedures for professional use, aiming to satisfy any and all applicable regulations and good practice in letter and spirit.

Percentage Share of Various Major Causes of Accidental Deaths during 2019



Why do people take risks?

People take risks for various reasons, including the following:

• Ignorance

E.g., Not (or wrongly) wearing of COVID

- Negligence, carelessness --
 - E.g., Riding without helmet
- Necessity, livelihood, survival --

E.g., Working at heights without harness

- As a dare or challenge --
 - E.g., Two-wheeler racing
- Hobby, fun, entertainment --
 - E.g., Circus acts
- Fear, self-destruction --
 - E.g., Suicide
- Greed --

E.g., More profit.

Why risk management?

To explain further the role of risk management,

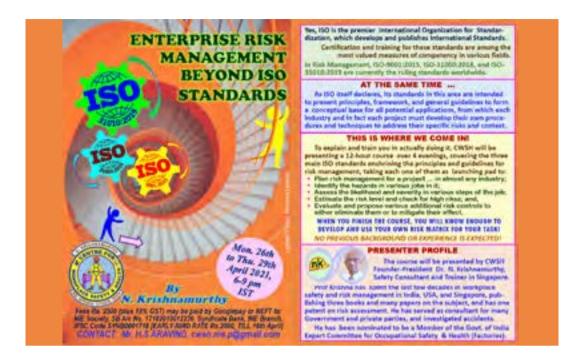
we need only ask why we: Read the weather report - Take out life insurance - Go for a medical check up - Set an alarm for next morning - Stretch out our hands walking in dark...

The answer is, to identify and avoid potential dangers.

Except that if and when we are responsible for others under our jurisdiction, or if our failure to foresee danger and control it will lead to some loss, we must do it more diligently and in a more organised way.

Risk management serves as a predictor, a 'leading indicator', of possible risks so that we can plan to avoid or reduce accidents, and hence injuries and deaths, and other losses. It is well established that companies that do risk management have a much better safety record with fewer accidents than those that do not.

Other benefits from risk management are that it: Facilitates appropriate optimum and realistic solutions to promote safety, and productivity;



Improves personnel morale, and reputation of the organisation;

Automatically enables meeting most legal requirements.

Philosophy of risk management

Let us admit it, there is no activity without some risk.

Risk management underlies our human need for survival and self-improvement. We must learn to discipline ourselves for our own welfare and common good, and in our professional lives, organise our thoughts and actions towards a pragmatic application of scientific principles to identify and assess risks, and plan and implement suitable safety measures.

There are many time-honoured guidelines to support this idea:

"Look before you leap."

"Hope for the best, but plan for the worst."

"Being forewarned is to be forearmed."

It is our right to expect our employers to protect us from dangers in our work. It is likewise our duty to protect our colleagues and employees, and our assets from harm or loss during their work with or for us.

In the professional arena, with responsibility for the health and safety of others, it would be wise to anticipate and be prepared to address danger, rather than smugly feel it won't happen and then have to face the adverse effects if and when they do.

My advice: Don't believe that a mishap won't happen to you. Rather, ask yourself whether you can afford its consequences if and when one should happen to you or to others under your care.

In short, we should proactively do risk assessment and control! Conclusion

Conclusion

What I have given is a bird's eye view of the necessity and utility of risk management to promote workplace safety by avoiding mishaps and reducing their adverse effects.

You might have heard the adage, attributed to the Chinese and Red Indians, which says:

"Give a man a fish, and you feed him for a day. Teach a man to fish, and you feed him for a lifetime."

Let us put it this way to emphasize that we need broad training to do good risk manage-

"Give a man a risk matrix and he will apply it in that project.

Teach him to design a risk matrix, and he will manage risk anywhere, any time."

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