

Improving Healthcare Outcomes by Managing Human Factors

Day & Date: Saturday, 7th May 2016
Time: 2:00 pm to 3:00 pm
Venue: Auditorium, Symbiosis International University, Lavale campus, Pune
Speaker: Dr. Uttam Shiralkar
Report prepared by: Ms. Shivika Gupta, Student, MBA - HHM (2015-2017)
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Dr. Uttam Shiralkar, Consultant, National Health Services (NHS), UK, began with light jokes which amused the audience and refreshed them for the post-lunch session.

He said after being in three countries he found that a human factor system is culture specific, and we need to develop our own ways and decide what best for us. He said that there are 3 sub divisions of human factors: Organisation and human, Technology and human & Human himself.

Speaking of Institute of Medicine report of 1999, 'To err is human', that said every year 2000 patients die after an elective surgery in USA and 234 million surgical procedures are done each year, while chance of serious injuries in air travel are 1 in 36000. So it's not that bad doctors/nurses make mistakes-anybody can. Recalling few accidents like Bhopal gas tragedy, it has been recognised that managing human outcome can lead to better outcome and prevent accidents like this.

Safety critical industries e.g. nuclear industry have adopted human science principles for better work environment. Processes in medical surgeries are very critical still we perform these procedures as if it is as easy as riding a bicycle. This cannot go on and the human factor associated with it needs to be managed more efficiently to provide quality and safe care to the patients.

Stating the role of technology:

- Technology shifts the workload
- Automation makes the system more opaque
- Contributes to system complexity
- Over reliance on the accuracy
- Plays role in errors

Giving example of success of iPhones he said that, technology in healthcare needs to become user-friendly and how doctors handle machine comes under human- technology interaction which needs to be understood first and then the changes to improve this technology can be developed. Further Indian culture is very hierarchal, so a senior doing something wrong is often not addressed. To this he said we can handle it by either challenging him or by politely putting your point forward.

Human Factor approaches includes:

- Critical incident Analysis
- Naturalistic Decision making
- System analysis
- Root cause analysis- medical error 2 types active error and latent error- swiss cheese model

No matter how experienced a person, error can be made by anyone. He supported this by giving an incident of a very reputed hospital in US where the HOD couldn't correctly diagnose a patient.

He then had an experiment for the audience to test the rationality among human beings. The experiment proved that emotional angle comes into play while making a decision for win-loss situation.

Talking about transfer of care that requires inter human communication at the maximum level to reduce the chances of errors, he further said that problems in healthcare are of very serious nature. Following considerations should be made:

- Understand why we make errors

- Understand how system factors can threaten patient safety
- Improve safety culture of teams and organisation
- Improve design of healthcare system
- Appreciate how human factors tools can be used to reduce the likelihood of patient harm
- Identify what went wrong and predict what could go wrong

Human factor recognises the gap, shows what it is and how to reduce or eliminate the gap

The session ended by the videos of the Elaine Bromiley case