Global Nursing Education 2020: Human Factor future of patient safety culture- Reem Magadmi -Security Forces Hospital Program Dammam, KSA, Saudi Arabia

Abstract:

Understanding the science of safety and the core principles of high reliability are first steps in creating a true culture of safety wherein human factor can contribute in the improvement in healthcare delivery. In the world of healthcare, very little training in human factors is provided to staff, unlike the other safety-critical industries. Human factors research examines the environmental, organizational and job factor of human interacting with the system as well as physiological and psychological characteristics that influence behavior at work. Principle of safety science is a commitment to zero harm. Understanding and implementing the best practices can build high reliability organizations a roadmap to achieve exemplary clinical outcome. Topics highlighting several key safety principles including Just Culture, Professional bodies in healthcare organization, a range of human factors such as managerial, team and individual characteristics that influence the behavior of healthcare staff in relation to safe patient care and framework to demonstrate the role of human factors in patient safety and are known to reduce patient harm and improve the safety and quality of patient care. Best practices performed consistently over time have demonstrated superlative outcomes. Developing a model which demonstrated consistent application of leader rounding; hourly purposeful rounding and bedside shift report can influence how patient safety can be possibly achieved. A commitment to zero harm and application of best clinical and safety practices are critical steps in developing a culture of safety in healthcare organizations contributed significantly in reduction of patient harm a compelling reason for nurses in all healthcare settings to embrace safety science and the principles of high reliability.

In the world of healthcare, next to no preparation in human elements is given to staff, not at all like the other security basic ventures. In the United States more than 440,000 people kick the bucket every year because of preventable medical clinic mistakes. However human services keeps on falling behind other exceptionally complex associations, for example, the avionics and atomic businesses in generally speaking wellbeing rehearses. Understanding the study of security and the center standards of high dependability are initial phases in making a genuine culture of wellbeing wherein human factor can contribute in the improvement in medicinal services conveyance just as the accomplishment of phenomenal patient consideration conveyance result. Tolerant security is a worldwide test that requires information and aptitudes in numerous regions, including human variables and frameworks building. Some consideration settings or care circumstances are especially inclined to perils, blunders and framework disappointments. For example, in escalated care units (ICUs), patients are powerless, their consideration is mind boggling and includes different trains and shifted wellsprings of data and various exercises are acted in tolerant consideration; these variables add to
improving the probability and effect of clinical mistakes. Social insurance associations must make and encourage a situation where security will turn into a top need.

**Approach to Human Factors and Ergonomics:**

As referred to in WHO report (2009) human factors generally connected near Ergonomics which is the use of logical data concerning people to the structure of articles, frameworks and condition for human use. In a work setting, human components look into inspects the ecological hierarchical and occupation factor of human interfacing with the framework just as physiological and mental qualities that impact conduct at work. Rule of wellbeing science is a pledge to zero damage. Understanding and executing best practices that can assemble high dependability associations and critically supporting those practices, is a guide to accomplishing model clinical results. There are a few key security standards including simply culture, proficient bodies in medicinal services association, a scope of human factors, for example, administrative, group and individual attributes that impact the conduct of social insurance staff comparable to safe patient consideration and structure to show the job of human factors in understanding wellbeing and are known to diminish quiet damage and improve the security and nature of patient consideration.

**Implementation Approach**

A high reliability framework provides the structure needed for organizations to achieve desired safety and quality goals. Best practices performed consistently over time have demonstrated superlative outcomes. A hospital can develop a model which demonstrates that consistent application of leader rounding; hourly purposeful rounding and bedside shift report can influence how patient safety can be possibly achieved as well as a model to demonstrate the role of human factor in patient safety. Human factors consider three domains of system design: physical, cognitive and organizational. The physical domain focuses on how the human body and physical activity interacts with work design, for example, the layout of computer desks. The cognitive domain focuses on how mental processes interact with other elements of systems. This includes memory, information processing and decision making. The organizational domain focuses on how individuals and teams interact with tools and technologies. According to scientists, human factors approaches can be used to design systems that support health care providers to deliver safe patient care at the same time as reducing work injuries and improving the quality of people’s working life. Taking a human factors approach means that when safety incidents occur, it is important to have a non-punitive culture. Instead of blaming individuals for events, the systems approach focuses on building systems to reduce potential risks and prevent future error, building system defenses to reduce the likelihood of errors resulting in patient harm.
A systems approach is essential and it is human systems which are the critical factor in leading to unsustainability, and potentially can be changed to enable transition towards sustainability. Sociotechnical systems are systems with a human element and there is particular knowledge accumulated about them that is useful in design which produced a model of the organizational, human and technical components of sociotechnical system.

**CONCLUSION:**

Nurses are at the sharp finish of care. A commitment to zero harm and use of best clinical and security rehearses are basic strides in building up a culture of wellbeing in medicinal services associations. A recommendation for the more extensive selection of human factors in tolerant security rehearses was finished up by World Health Organization. The critical decrease in tolerant mischief that outcome is a convincing explanation behind medical attendants in all social insurance settings to grasp wellbeing science and the standards of high unwavering quality. The general human elements theory is that the framework ought to be intended to help crafted by individuals, instead of planning frameworks to which individuals must adapt.

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