PATIENT SAFETY CULTURE AND DENTISTRY

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Abstract

Patient safety and risk management together with quality and standards of oral healthcare are among important professional issues for dentistry. It can easily be seen that more and more emphasis is placed on these issues each year. Thus, dentists and their team members are expected to have a considerable amount of awareness, knowledge and concern for patient safety and risk management and the broad context of quality assurance/improvement (QA/I) in healthcare. Further, they are expected to fully implement the basic patient safety and quality measures into daily dental practice.

Key Words : Patient safety, Patient safety culture, Adverse events, Serious adverse events, Negligence.

From the olden times in India, doctors have been likened to gods with well-known phrases such as ***' vaidyo narayano harihi'*** means doctors are God.

Doctors even now command great respect in the Indian society not only because of the attitude of the people toward doctors but also because of numerous exemplary examples of doctors in India who have served the human kind with selflessness and complete dedication.

At the same time, there have been various instances of public abusing the doctors physically upon untoward incidents happening to the patient, in spite of best efforts by the doctors. It is not untrue to say that the corporate model of hospitals and clinics have changed the way the doctors treat the patients in terms of advancements enormously benefitting the public at large, it has burdened the public in terms of cost and in certain cases has led to unethical practices. Such changes have definitely influenced a lot on attitude of the public toward doctors.

In the present times, all the treating doctors, dentists particularly, because of the general perception and the high cost involved in dental treatment, have to be extra careful in preventing any serious injury to the patient and be well aware of the professional negligence and its consequences.

In view of the risks for errors and adverse events, as well as the risks for morbidity and mortality, the health care environment is considered to represent a context of high risk, and health care provision to represent a high hazard sector. The possibility of the occurrence of unexpected damage related to health care is present from the beginning of medical practice.

The possibility of the occurrence of unexpected damage related to health care is present from the beginning of medical practice. Although the serious consequences of errors and adverse events have been well demonstrated[1], the adoption of a safety culture and safety measures by the health care professions has taken longer than in other high-risk industries, such as aviation[3]. Despite the genuine concern for patient safety that is inherent in the practice of health care, its transformation into a specific body of knowledge is relatively recent and the objectification of the issue as a whole for health care practitioners, health managers and policymakers began to develop only at the

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beginning of the 1990s.

If we were to indicate a milestone that signalled the emergence of patient safety as a specific area of knowledge, we would undoubtedly select the publication of the Institute of Medicine study To Err is Human: Building a Safer Health System in 2000[4]. This study estimated that between 44,000 and 98,000 people died each year from medical errors in the USA.

India has faced several high-profile incidents in which the safety of patients was grossly neglected.

- the deaths of 14 patients in the J. J. Group of Hospitals following the administration of contaminated glycerol, an incident that was probed by the 1997 Lentin Commission (Visvanthan, 1999), the report of which held the physicians liable;
- the Hepatitis B epidemic in the district of Sabarkantha, Gujarat in which 94 persons died (Gandhi, 2009) the deaths of 18 pregnant women at Umaid Hospital in Jodhpur; (Gupta and Srinivasan, 2012) and most recently,
- the fire at the AMRI hospital and
- administration of Hepatitis Vaccine instead of Polio Vaccine in West Bengal (Nagral, 2012).

Recent Big Dental Mishaps in India-

- 3-year-old girl declared dead after dental procedure.

PUNE : A three-year-old girl was declared dead after taking root canal treatment from a pediatric dentist at Kothrud on June 29. The police, who have booked the dentist under section 304(A) of the IPC (causing death due to negligence), said they did not arrest him as the case would first be looked into by the district medical negligence committee – TOI Jul 3, 2015, 04.27 AM IST.

- Consumer forum tells dentist to pay Rs 2 lakh for faulty treatment

MUMBAI: Bring to book a dentist for faulty treatment, a consumer forum has recently ordered. The forum held Dr Jayesh Dube guilty of negligence and indulging in unfair trade practice and directed him to pay Rs 2 lakh compensation to a Mulund woman. – TOI Oct 12, 2015, 01.00 AM IST.

Dentists handle dangerous drugs and use advanced technical appliances (e.g. lasers, electrocautery, ionizing radiation) cause serious harm. Dentists and dental assistants come into contact with blood and body fluids that can transmit infectious diseases. Promotion of patient safety is an ethical obligation in any health care profession. Hippocratic principle promotes the principle "Primum Non Nocere" (first, do no harm).

BASIC DEFINITIONS RELATED TO PATIENT SAFETY

Patient safety

The reduction (or elimination as far as possible) of damage to patients resulting from health care processes or accidents associated with them.

Health risk management

Trying to identify, evaluate and treat problems that can cause harm to patients, lead to malpractice claims and cause unnecessary economic losses to health care providers.

Adverse event

Unexpected result of medical treatment that causes the prolongation of treatment, any type of morbidity, mortality or any other damage to which the patient should not have been exposed .

Error

Mistake by omission or commission in health care practice, whether in planning (error of planning) or execution (error of execution).

Incident ('near miss')

An event that almost causes harm to a patient and that is avoided by luck or by an act at the last moment. An example of a near miss is the administration of a penicillin-based antibiotic to an allergic patient because this information is missing from the patient's clinical records, which is avoided because the patient reads the prescription and reminds the practitioner of the allergy.

Accident

An accident is defined as a random event, that is unforeseen and unexpected, and causes damage to the patient or to materials or to health care staff Negligence

Negligence is defined as a mistake that is difficult to justify because it occurs through lack of knowledge or basic skills, the omission of minimal precautions, or neglect

WHAT IS PATIENT SAFETY CULTURE ?

- An organisation's culture of safety is the product of individual and group values, attitudes, perceptions, skills and patterns of behaviour which lead to commitment, style and ability in the management of the health and safety of an organisation.

Those organisations with a positive safety culture are characterised by communication based on mutual trust, by shared perceptions of the importance of safety and by trust in the effectiveness of measures for prevention.

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PATIENT SAFETY CULTURE NOW A VERY IMPORTANT ISSUE WORLDWIDE

MY OWN RESEARCH ON PATIENT SAFETY CULTURE

Topic: A Study on Patient Safety Culture among doctors and Nurses in a District Hospital of West Bengal.

Aims and Objectives : were

1. To assess the safety culture is prevailing among doctors and nurses working in Indian setting in a district hospital.

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2. To assess the Nurses Perception of Safety culture in their respective working units.

MATERIALS AND METHODS

- **Study Population :** The population was consisted of the doctors and nurses working in Purba Midnapore District Hospital during the period of study.
- **Type of study :** It was a cross sectional study.
- **Study Design :** In the cross sectional study doctors and nurses was selected randomly from the mentioned population.
- **Study Period :** From 1st March 2017 to 21st May 2017.
- **Sample Size :** As per study by Balamurugan et. al. out of the different dimension assessed teamwork within units (80.2%) was the highest positively rated dimension. Thus for this study p= 0.802. The number of patients required for this study was 50.38 ~ 50 with power 86%.

Data collection tool : "Hospital Survey on Patient Safety culture (HSOPSC) Questionnaire was used to collect the information from the doctors and nurses.

- **Statistical Software :** Sample size calculated with help of Epi Info (TM) 3.5.3. EPI INFO which is a trademark of the Centers for Disease Control and Prevention (CDC). The same software was used for statistical analysis of data of this study.

Statistical Analysis: Under descriptive statistical analysis different frequency tables was prepared along with the means and corresponding standard deviations of numeric variables. (Chi-square) test was used to test the association of different study variables. Z-test (Standard Normal Deviate) was used to test the significant difference between two proportions. T-test was used to compare the means. $p \leq 0.05$ was taken to be statistically significant and confidence intervals were set at 95%.

Conclusion : The median age of the respondents was 41.5 years so they were having adequate knowledge about the patients' services provided by the hospital. Doctors and nurses participated in the study. As per the respondents good relationship is prevailing among the staff and also with their respective higher authorities. They graded their working unit as very good. Most of them (88.0%) opined that hospital management provides a work climate that promotes patient safety and also giving top priority to patient safety. Thus the results of this study revealed that both the hospital authority and staff are aware about the patients' safety and are taking adequate measurements related to patients' safety.

Why to promote patient safety culture in dental practice?

- Firstly, patient safety is an ethical obligation in any health care profession.
- Secondly, Patient safety is closely linked to the concept of quality care.
- Thirdly, improving patient safety may imply better legal security for dental practitioners.

Important aspects of dental patient safety

Errors in clinical documents, information and referral of patients

(i) Histories which lack essential data (clinical and allergic background and updated information about medication)

(ii) Use of abbreviations (or bad handwriting) that lead to confusion on the part of other professionals at the same centre using the same history

(iii) Failure to provide adequate information to the patient about the procedure, its potential risks or recommendations that must be followed to avoid complications.

(iv) Inaccuracies in patient referrals to other professionals that may lead them to make mistakes.

Prescribing errors

(i) Errors in the indication for the drug (in relation to the type of drug, dose or duration of treatment)

(ii) Allergic reactions that occur because of a lack of adequate medical records

(iii) Drug interactions that occur because the prescribing practitioner lacks the relevant pharmacological knowledge or fails to update the list of drugs taken by the patient

(iv) Wrong dose of drug (especially common in children and in patients with alterations in the metabolism or elimination of drugs)

(v) Duplication of drugs (especially common with anti-inflammatories) because of a lack of coordination among the various professionals prescribing for the same patient

Surgical events

Surgery is one of the areas that produce more adverse events that threaten patient safety. It is therefore perceived as an area for strategic action by the World Health Organization

(i) Errors in treatment planning (sometimes associated with lack of adequate clinical records previous to treatment)

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(ii) Errors in the type of procedure performed (motivated by incorrect patient identification or inadequate clinical history)

(iii) Errors in the area of intervention (wrong-site surgery) that occur as a result of forgetfulness or the inappropriate interpretation of records by the professional

(iv) Errors in preoperative prophylaxis in medically compromised patients

(v) Errors in the monitoring and control of operated patients (no postoperative instruction sheet or lack of post-surgical control)

(vi) Post-surgical infections (detected late or inadequately treated)

Accidents

(i) The patient falls (due to poorly organised furniture, architectural barriers, slippery floors, etc.)

(ii) Heavy or sharp instruments or apparatus fall on the patient

(iii) The patient suffers accidental cuts and burns

(iv) The patient ingests or inhales small dental material

(v) The patient suffers eye damage

PECULIARITIES OF PATIENT SAFETY IN DENTISTRY

- Dental care is less aggressive than hospital care
- Dental health care settings are widely dispersed.
- Dental patients are usually ambulatory.
- Dental care is essentially carried out by private practitioners.
- Not all dental professionals are aware of the culture of patient safety

Basic Procedures/Practices for Dental Patient Safety

- 1 Develop a culture of safety and a health care system focused on prioritizing patient safety.
- 2 Look after the quality of clinical records.
- 3 Check the procedures for cleaning, disinfection, sterilization, and preservation of clinical instruments.
- 4 Exercise extreme caution when prescribing medications.
- 5 Limit the exposure of patients to ionizing radiation only to what is strictly necessary.
- 6 Never reuse packaging materials or substances intended for one clinical use only.
- 7 Protect the patient's eyes during dental procedures.
- 8 Establish barriers to prevent ingestion or inhalation of materials or small instruments.
- 9 Use a checklist in all oral surgical procedures.
- 10 Monitor the onset and progression of infection in the oral cavity.
- 11 Have an action protocol for life-threatening emergencies in the dental clinic.

HOW CAN WE APPLY PATIENT SAFETY MEASURES IN DENTAL PRACTICE?

- Educating staff regarding the patient safety culture.
- Understanding our current situation.
- Devising protocols to make manoeuvres and activities potentially less dangerous.
- Establishing 'safety instructions': these represent the 'red lines' over which we should not step in everyday practice.
- Sharing experiences in patient safety with our colleagues.

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