Understanding & Managing Clinical Risk

Patients Safety Course

College of Medicine

King Saud University

GENERAL INSTRUCTION TO ALL STUDENTS

- We will start at 11:15 AM to 12:15pm, we will go in ***breakout rooms*** to discuss the case for 15 minutes in **10 groups**. Each group about 8-10 students. They will discuss the six questions on the first slide among themselves. **At 11:30 all groups will come back and we will discuss the answers of the items of these six questions.**
- Be active all over the remaining 45 minutes
- I will be asking questions by names. Please, open your microphone and answer,
- Any extra participation/ Question could be made in chat-box, or raising hand
- ***No excuse that your microphone is not working, fix it before if any problem.***
- ***At the end ten minutes for the take-home messages at the end (What we have learned today), should be shared by you***

DISCUSSION QUESTIONS

1. What is our understanding about following 12 terms?

(1) Hazards (2) Risk (3) Error (4) Incidence (5)Litigation (6) Accountability (7) Registration (8) Credential (9)Accreditation (10) Adverse events (11) Sentinel event (12) Complaint

2. How we can **learn from errors**

3. What are **the factors** that are associated with the increased risk of error.

4. How we can **analyses an adverse event** to reduce errors?

5. What are the **risk-management principles**

6. How to **report risks / hazards** in the workplace

LEARNING OBJECTIVES

- By the end of this lecture you will be able to
  - Recall terminologies: **Hazards, Risk, litigation, incidence, accreditation**,
  - Recognize how we can **learn from errors.**
  - Identify **situational and personal factors** that are associated with the increased risk of error.
  - Participate in **analyses of adverse event** and practice strategies to reduce errors.
  - Recognize how to apply **risk-management principles** in the workplace.
  - Identify how to **report risks / hazards** in the workplace.

INTRODUCTION

- Hospitals are potentially dangerous places for patients as well as medical workers
- It's important to keep in mind that while there are a lot of potential hazards in hospitals
- To avoid problems, hospitals and health organizations use a variety of methods to manage risk
- **Risk management** is routine in most industries and has traditionally been associated with limiting litigation costs
- Usually associated with **patients taking legal action** against a health professional or hospital

CLINICAL RISK MANAGEMENT

- **Hazard:** is any activity, situation or, substance that potential to cause harm, including ill health, injury, loss of product and/or damage to plant and property.
  - **Blood borne Pathogens**
  - **Hazardous Chemicals**
  - **Stress**
- **Risk:** is the probability that harm (illness or injury) will actually occur.

- **Risk Management:** Organizational effort to identify, assess, control and evaluate the risk to reduce harm to patient, visitors and staff and protect the organization from financial loss

PURPOSE OF RISK MANAGEMENT

- Improve organizational and client safety
- Identify and minimize the risks and liability losses
- Protect the organization resources
- Support regulatory, accreditation compliance
- Creating and maintaining safe systems of care, designed to reduce adverse events and improve human performance

PROCESS USED TO MANAGE CLINICAL RISKS

The following simple four-step process is commonly used to manage clinical risks:

1. **Identify the risk;**
2. **Assess the frequency and severity of the risk;**
3. **Reduce or eliminate the risk;**
4. **Assess the costs saved by reducing the risk or the costs of not managing the risk.**

PROCESS USED TO MANAGE CLINICAL RISKS

1. IDENTIFY THE RISK:

Use the following data as a sources for risk identification:

- Adverse event reports.
- Mortality and morbidities reports.
- Patient complaints reports.

PROCESS USED TO MANAGE CLINICAL RISKS

2. Assess the frequency and severity of the risk:

SAC (Severity Assessment Code) Score:

- It is a matrix scoring system based on
  - Severity,
  - Consequences for whom?
  - likelihood of risks
- These scores are multiplied to get a rating for the risk

STEP 1 Consequences Table (For notification, consider the actual consequence or outcome using this table as a guide. The examples listed here are not exhaustive.)

		Serious	Major	Moderate	Minor	Minimum
CLINICAL CONSEQUENCE	Patient	Patients with **Death** unrelated to the natural course of the illness and differing from the immediate expected outcome of the patient management or: ■ **Suspected suicide**[1] ■ **Suspected homicide**[2] or any of the following: **The National Sentinel Events** ■ Procedures involving the wrong patient or body part ■ Suspected suicide in hospital ■ Retained instruments ■ Unintended material requiring surgical removal ■ Medication error involving the death of a patient ■ Intravascular gas embolism ■ Haemolytic blood transfusion ■ Maternal death associated with labour and delivery ■ Infant discharged to the wrong family	Patients suffering a **Major permanent loss of function (sensory, motor, physiologic or psychologic)** unrelated to the natural course of the illness and differing from the expected outcome of patient management or any of the following: ■ Suffering significant disfigurement as a result of the incident ■ Patient at significant risk due to being absent against medical advice ■ Threatened or actual physical or verbal assault of patient requiring external or police intervention	Patients with **Permanent reduction in bodily functioning (sensory, motor, physiologic, or psychologic)** unrelated to the natural course of the illness and differing from the expected outcome of patient management or any of the following: ■ Increased length of stay as a result of the incident ■ Surgical intervention required as a result of the incident	Patients requiring **Increased level of care including:** ■ **Review and evaluation** ■ **Additional investigations** ■ **Referral to another clinician**	Patients with **No injury or increased level of care or length of stay**
CORPORATE CONSEQUENCE	Staff	Death of staff member related to work incident or suicide, or hospitalisation of **3** or more staff	Permanent injury to staff member, hospitalisation of **2** staff, or lost time or restricted duty or illness for **2** or more staff or pending or actual WorkCover prosecution, or threatened or actual physical or verbal assault of staff requiring external or police intervention	Medical expenses, lost time or restricted duties or injury / illness for **1** or more staff	First aid treatment only with no lost time or restricted duties	No injury or review required
	Visitors	Death of visitor or hospitalisation of **3** or more visitors	Hospitalisation of up to **2** visitors related to the incident / injury or pending or actual WorkCover prosecution	Medical expenses incurred or treatment of up to **2** visitors not requiring hospitalisation	Evaluation and treatment with no expenses	No treatment required or refused treatment
	Services	Complete loss of service or output	Major loss of agency / service to users	Disruption to users due to agency problems	Reduced efficiency or disruption to agency working	Services: No loss of service
	Financial	**Loss of assets** replacement value due to damage, fire etc > $1M, **loss of cash/investments/assets** due to fraud, overpayment or theft >$100K or **WorkCover claims** > $100K	**Loss of assets** replacement value due to damage, fire etc $100K-$1M, **loss of cash/investments/assets** due to fraud, overpayment or theft $10K-$100K or **WorkCover claims** $50K-$100K	**Loss of assets** replacement value due to damage, fire etc $50K to $100K **or loss of cash/investments/assets** due to fraud, overpayment or theft to $10K	**Loss of assets** replacement value due to damage, fire etc to $50K	No financial loss
	Environmental	Toxic release off-site with detrimental effect. Fire requiring evacuation	Off-site release with no detrimental effects or fire that grows larger than an incipient stage	Off-site release contained with outside assistance or fire incipient stage or less	Off-site release contained without outside assistance	Nuisance releases

STEP 2 Likelihood Table

Probability Categories	Definition
Frequent	Is expected to occur again either immediately or within a short period of time (likely to occur most weeks or months)
Likely	Will probably occur in most circumstances (several times a year)
Possible	Possibly will recur – might occur at some time (may happen every 1 to 2 years)
Unlikely	Possibly will recur – could occur at some time in 2 to 5 years
Rare	Unlikely to recur – may occur only in exceptional circumstances (may happen every 5 to 30 years)

STEP 3 SAC Matrix

LIKELIHOOD	CONSEQUENCE				
	Serious	Major	Moderate	Minor	Minimum
Frequent	1	1	2	3	3
Likely	1	1	2	3	4
Possible	1	2	2	3	4
Unlikely	1	2	3	4	4
Rare	2	3	3	4	4

Process Used to Manage Clinical Risks

3. Reduce or eliminate the risk:

STEP 4 Action Required Table

	Action Required
1	**Extreme** risk – immediate action required – Reportable Incident Brief (RIB) for all SAC 1 incidents must be forwarded to the DoH within 24 hours. A Privileged Root Cause Analysis (RCA) investigation must be undertaken for all Clinical SAC 1 incidents with a report being submitted to the DoH.
2	**High** risk – need to notify senior management. Detailed investigation required. Ongoing monitoring of trended aggregated incident data may also identify and prioritise issues requiring a practice improvement project.
3	**Medium** risk – management responsibility must be specified – Aggregate data then undertake a practice improvement project. **Exception** – all financial losses must be reported to senior management.
4	**Low** risk – manage by routine procedures – Aggregate data then undertake a practice improvement project.
NB – An incident that rates a SAC 2, 3 or 4 should only be reported to the DoH if there is the potential for media interest or requires direct notification under existing DoH legislative reporting requirements or NSW DoH Policy Directive.	

ACTIVITIES COMMONLY USED TO MANAGE CLINICAL RISK

- **Incident monitoring:**
  - **An incident:** as an event or circumstance that could have or did lead to unintended and/or unnecessary harm to a person and/or a complaint, loss or damage.
  - **Incident monitoring:** refers to mechanisms for identifying, processing, analyzing and reporting incidents with a view to preventing their reoccurrence
  - The key to an effective reporting system is for staff to routinely report incidents and near misses.

Table B.6.1. Types of issues identified by incident monitoring

Type of incident	% of reports [a]
Falls	29
Injuries other than falls (e.g. burns, pressure injuries, physical assault, self-harm)	13
Medication errors (e.g. omission, overdose, underdose, wrong route, wrong medication)	12
Clinical process problems (e.g. wrong diagnosis, inappropriate treatment, poor care)	10
Equipment problems (e.g. unavailable, inappropriate, poor design, misuse, failure, malfunction)	8
Documentation problems (e.g. inadequate, incorrect, incomplete, out-of-date, unclear)	8
Hazardous environment (e.g. contamination, inadequate cleaning or sterilization)	7
Inadequate resources (e.g. staff absent, unavailable, inexperienced, poor orientation)	5
Logistical problems (e.g. problems with admission, treatment, transport, response to an emergency)	4
Administrative problems (e.g. inadequate supervision, lack of resource, poor management decisions)	2
Infusion problems (e.g. omission, wrong rate)	1
Infrastructure problems (e.g. power failure, insufficient beds)	1
Nutrition problems (e.g. fed when fasting, wrong food, food contaminated, problems when ordering)	1
Colloid or blood product problems (e.g. omission, underdose, overdose, storage problems)	1
Oxygen problems (e.g. omission, overdose, underdose, premature cessation, failure of supply)	1

[a] An incident may be assigned to more than one category.

Source: Runciman B, Merry A, Walton M. *Safety and ethics in health care: a guide to getting it right*, 2007 [3].

ACTIVITIES COMMONLY USED TO MANAGE CLINICAL RISK

- **Sentinel events:**
  - Is usually unexpected and involving a patient death or serious physical or psychological injury to a patient
    - e.g. surgery on the wrong patient or body site, incompatible blood transfusion.
  - Many health-care facilities have mandated the reporting of these types of events because of the significant risks associated with their repetition

ACTIVITIES COMMONLY USED TO MANAGE CLINICAL RISK

- The role of complaints in improving care
  - A complaint : is defined as an expression of dissatisfaction by a patient, family member with the provided health care.
  - Complaints often highlight problems that need addressing, such as poor communication or suboptimal decision making.
  - Communication problems are common causes of complaints, as are problems with treatment and diagnosis.

BENEFITS OF COMPLAINTS

- Assist the maintenance of high standards;
- Reduce the frequency of litigation;
- Help maintain trust in the profession;
- Encourage self-assessment;
- Protect the public.

ACTIVITIES COMMONLY USED TO MANAGE CLINICAL RISK

- Fitness-to-practice requirements
  - Accountability
  - Competency of healthcare professionals.
  - Are they practicing beyond their level of experience and skill? Are they unwell, suffering from stress or illness
    - Credentialing
    - Registration (licensure)
    - Accreditation

CREDENTIALING

- The process of assessing and conferring approval on a person's suitability to provide specific consumer/patient care and treatment services, within defined limits, based on an individual's license, education, training, experience, and competence.

ACCREDITATION

- Is a formal process to ensure delivery of safe, high-quality health care based on standards and processes devised and developed by health-care professionals for health-care services.

Accreditation Bodies:

- National Accreditation Program: CBAHI
- International Accreditation Program: Joint commission (US), Accreditation Canada(Canada)

REGISTRATION (LICENSURE)

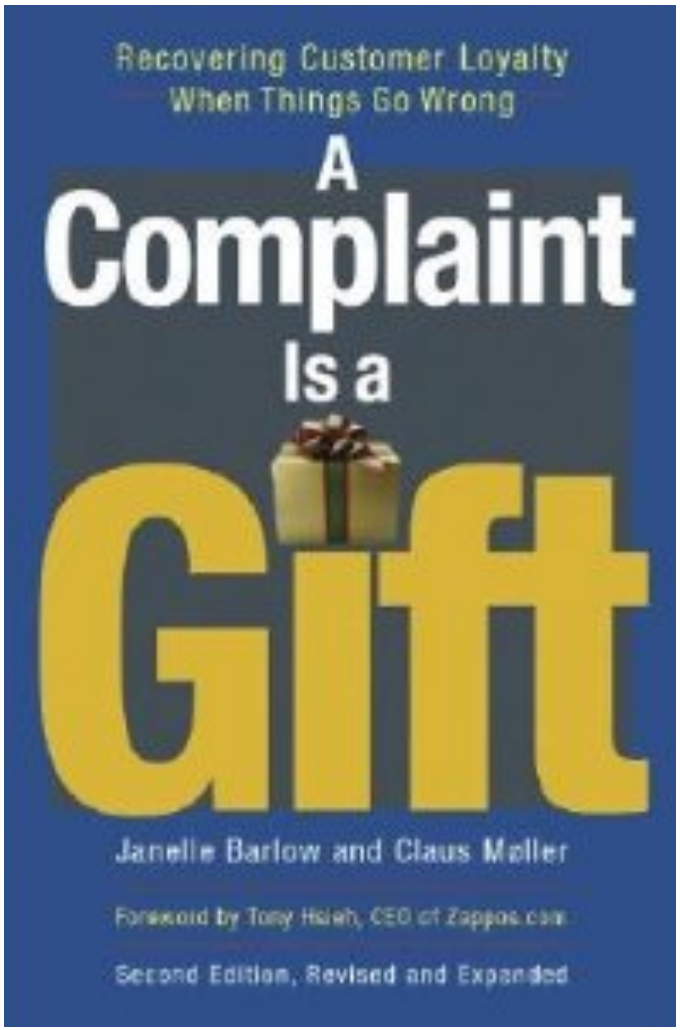
- Registration of health-care practitioners with a government authority, to protect the health and safety of the public through mechanisms designed to ensure that health practitioners are fit to practice.
- e.g. Saudi Commission for Health Specialties
- Proper registration/licensure is an important part of the credentialing and accreditation processes

Personal Strategies for Managing Risk and Reduce Errors

- **Care for one's self (eat well, sleep well and look after yourself);**
- Know your environment;
- Know your task(s);
- Prepare and plan (*what if*…);
- Build checks into your routine;
- Practice the good documentation:
  - A referral or request for consultation it is important to only include relevan and necessary information:
  - Keep accurate and complete health-care records
  - Provide sufficient information
  - Note any information relevant to the patient's diagnosis or treatment and outcomes;
  - Document the date and time

Personal Strategies for Managing Risk and Reduce Errors

- Report any risks or hazards/incidents in your workplace
- Participate in meetings to discuss risk management and patient safety
- Respond appropriately to patients and families after an adverse event
- Respond appropriately to complaints
- Ask if you do not know. Request that a more experienced person



SUMMARY

- Medical error is a complex issue, but error itself is an inevitable part of being human.
- These tips are known to limit the potential errors caused by humans
  - Avoid reliance on memory
  - Simplify process
  - Standardize common processes and procedures
  - Routinely use checklists
  - Decrease reliance on vigilance
- Learning from error can occur at both an individual level and an organizational level through incident reporting and analysis.
- Root cause analysis (RCA) is a highly structured systemic approach to incident analysis that is generally reserved for the most serious patient harm episodes

SUMMARY

- Health-care professionals are responsible for the treatment, care and clinical outcomes of their patients.
- Personal accountability is important, as any person in the chain might expose a patient to risk.
- One way for professionals to help prevent adverse events is to identify areas prone to errors.
- The proactive intervention of a systems approach for minimizing the opportunities for errors can prevent adverse events.
- Individuals can also work to maintain a safe clinical working environment by looking after their own health and responding appropriately to concerns from patients and colleagues.

Thank You !

Questions??