Adverse Events and Safety in Health Care: Concepts and Definitions

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Case

- Patient underwent wound debridement
- Surgeon ordered stat antibiotic
- The patient had a penicillin allergy
- Difficulty communicating with pharmacy for stat medications
- Nurse borrowed antibiotic from another patient to shorten time to first dose
- Antibiotic was administered
- Anaphylactic reaction
Two Viewpoints on Human Error

1. The **person** (active failure) approach: Focus on acts and omissions by individuals
2. The **system** (latent failure) approach: Traces causal factors back to the system as a whole

Reason—Complex Systems

- Organizational & corporate culture
  - Management decisions & organizational processes
- Contributing factors affecting clinical practice
  - Error-producing conditions
  - Violation-producing conditions
- Care management problems
  - Errors
  - Violations
- Defense barriers

Source: Adapted from James Reason. (1990).
Definitions

- Error
- Adverse event
- Near miss

Caveat
Error

- The failure of a planned action to be completed as intended (i.e., error of execution) and the use of a wrong plan to achieve an aim (i.e., error of planning)
- Also includes failure of an unplanned action that should have been completed (omission)
- Refer to processes of care
**Iatrogenic injury**

- Injury originating from or caused by a physician (iatros, Greek for “physician”), including unintended or unnecessary harm or suffering arising from any aspect of health care management, including problems arising from acts of commission or omission.
- “Harm” generally refers to outcomes or results.
Definition Diagram: Harm

HARM
Adverse Event

- An event that results in unintended harm to the patient by an act of commission or omission rather than by the underlying disease or condition of the patient
- “Preventable harm”
- Both “preventable” and “unpreventable” are evolving concepts
Definition Diagram: Overlap
Near Miss

- An error of commission or omission that could have harmed the patient, but serious harm did not occur as a result of chance (e.g., the patient received a contraindicated drug but did not experience an adverse drug reaction); prevention (e.g., a potentially lethal overdose was prescribed, but a nurse identified the error before administering the medication); or mitigation (e.g., a lethal drug overdose was administered but discovered early and countered with an antidote)
Definition Diagram: Near Miss

NEAR MISS
ERROR

ADVERSE EVENT
HARM
Patient Safety

- The prevention of harm caused by errors of commission and omission
Summary

- Clarification of concepts and definitions illustrated by case study