

How to develop a patient Safety Program in developing countries

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Objectives

The Objectives of this workshop comprise :

- To review and discuss current situation of AEs and patient safety (PS) programs in our regions
- To try to analyze the problem; find the root causes and propose solutions
- To create consensus about how to approach it, considering rationality, resources available and given evidence

Overview

Important Terms

- **Patient Safety**..... Freedom from accidental injury (IOM)
- **Adverse Event**.... An injury caused by medical management rather than the underlying disease
Adverse Event is :
 - An injury or complication
 - Resulting in disability or prolonged length of stay
 - Caused by the health care, rather than their disease
 - *It measures 'harm', not simply a process failure*
- **Error**..... Failure of a planned action to be completed as intended (e.g., error of execution) or use of a wrong plan to achieve an aim (e.g., error of planning)
- **Near Miss or Close Call**.... Situation in which a medical error has been found and stopped before affecting a patient

Defining Patient Safety

- As the intellectual history of PS developed, it became increasingly important to define PS.
- Thought leaders began to examine their different assumptions;
- Is PS a way of doing things—i.e., a philosophy (with its own explanatory framework, ethical principles, and methods) and a discipline (with a body of expertise)?
- Or is it an attribute—i.e., a goal and a condition (being safe), a property that emerges from the system? .

- Linda Emanuel et al (2008), used the following definition of patient safety:

Patient safety is a discipline in the health care sector that applies safety science methods toward the goal of achieving a trustworthy system of health care delivery.

Patient safety is also an attribute of health care systems; it minimizes the incidence and impact of, and maximizes recovery from, adverse events.

This definition acknowledges that patient safety is both a way of doing things and an emergent discipline. It seeks to identify essential features of patient safety.

- The Institute of Medicine (IOM) defines **medical error** as the failure of a planned action to be completed as intended or the use of a wrong plan to achieve an aim.
- The most common adverse errors affecting patients include:
 - medication and transfusion errors,
 - infections,
 - complications of surgery (including wrong-site surgery),
 - suicide,
 - restraint-related injuries,
 - falls,
 - burns,
 - pressure ulcers,
 - misidentification, and
 - wrong diagnosis or treatment.

Scope and magnitude of the problem

Newspaper and television stories of catastrophic injuries occurring at the hands of clinicians spotlight the problem of medical error but provide little insight into its nature or magnitude.

Clinicians, patients, and policy-makers may underestimate the magnitude of risk and the extent of harm.

Epidemiology of medical error

BMJ 2000;320:774–7

Saul N Weingart, Ross McL Wilson, Robert W Gibberd, Bernadette Harrison

- The IOM report estimates **that reported medical error-related deaths exceed the combined numbers of deaths from motor and air crashes, suicides, falls, poisoning, and drowning**, despite the fact that such events are still seriously under-reported.
- Most errors occur in intensive care units, operating rooms, and emergency departments.
- Of the top 20 risk factors that account for 75% of all deaths annually, AEs in-hospital health care is number 11
- It's ahead of air pollution, alcohol and drugs, violence and road traffic injury,..... etc
- It's one third the size of tobacco related death

Adverse events in British hospitals: preliminary retrospective record review

Charles Vincent, Graham Neale, Maria Woloshynowych

Results 110 (10.8%) patients experienced an adverse event, with an overall rate of adverse events of 11.7% when multiple adverse events were included. About half of these events were judged preventable with ordinary standards of care. A third of adverse events led to moderate or greater disability or death.

The Medical Journal of Australia

6 November 1995
Volume 163, Number 9



Established 1914

Journal of the Australian Medical Association

The Quality in Australian Health Care Study

Ross McL Wilson, William B Runciman, Robert W Gibberd,
Bernadette T Harrison, Liza Newby and John D Hamilton

- 16.6% of hospitalizations associated with AE
- 50% of AEs were preventable
- 18.6% of AEs caused permanent disability/death
 - 13.7 % *permanent disability*
 - 4.9% *death*
- Operation 39.3%
- Admin system 10.6%
- Diagnosis 9.3%
- Therapy 8.4%
- Drug 6.7%
- Fracture 2.2%
- Falls 1.7%

The Canadian Adverse Events Study: the incidence of adverse events among hospital patients in Canada

Interpretation: The overall incidence rate of AEs of 7.5% in our study suggests that, of the almost 2.5 million annual hospital admissions in Canada, about 185 000 are associated with an AE and close to 70 000 of these are potentially preventable.

CMAJ2004;170(11):1678-86

The Scope of the problem in EMR

- On average, 4 million individuals from our Region are harmed every year in health care facilities
- Results of a 3 years EMRO research project (2005–2008) showed that :
 - AE rate for selected hospitals in EMR is 8.2%
 - 40% of cases experienced death or permanent disability
 - **50-80% of cases were Potentially preventable**

Riham El-Asady, Health Care Delivery Unit, WHO/EMRO, August, 2008

➤ **Classification of AEs in EMR** (Dr Ross Wilson, EMRO August 2008) :

- Therapeutic error 34.6%
- Diagnostic Error 20.0%
- Operative AE 17.7%
- Obstetric 8.1%
- Neonatal 7.2%
- Drug related AE 4.0%
- Non-surgical procedure 4.7%
- Fractures 1.9%
- Falls 0.7%
- Anesthesia 0.5%

➤ **Operative Error (technical) :**

- **Wound infection 46 (38%)**
- Bleeding 15 (11%)
- Other wound problem 5 (4%)
- Non-wound infection 15 (12%)
- technical 19 (16%)
- Other 22 (18%)

Another study in the EMR showed that:

- Post-operative infection among cardiac surgery cases 60%;
- 36.8% of antibiotic prescriptions inappropriate;
- overall rate of hospital-acquired infection ranged from 25-49%;
- adherence to correct hand-washing practice was only 30%
- 3 out of 4 injections given are unsafe; risk of abscesses, HBV, HCV, HIV transmission

Dr Sameen Siddiqi

Regional Adviser, Division of Health System, WHO EMRO, August 2008

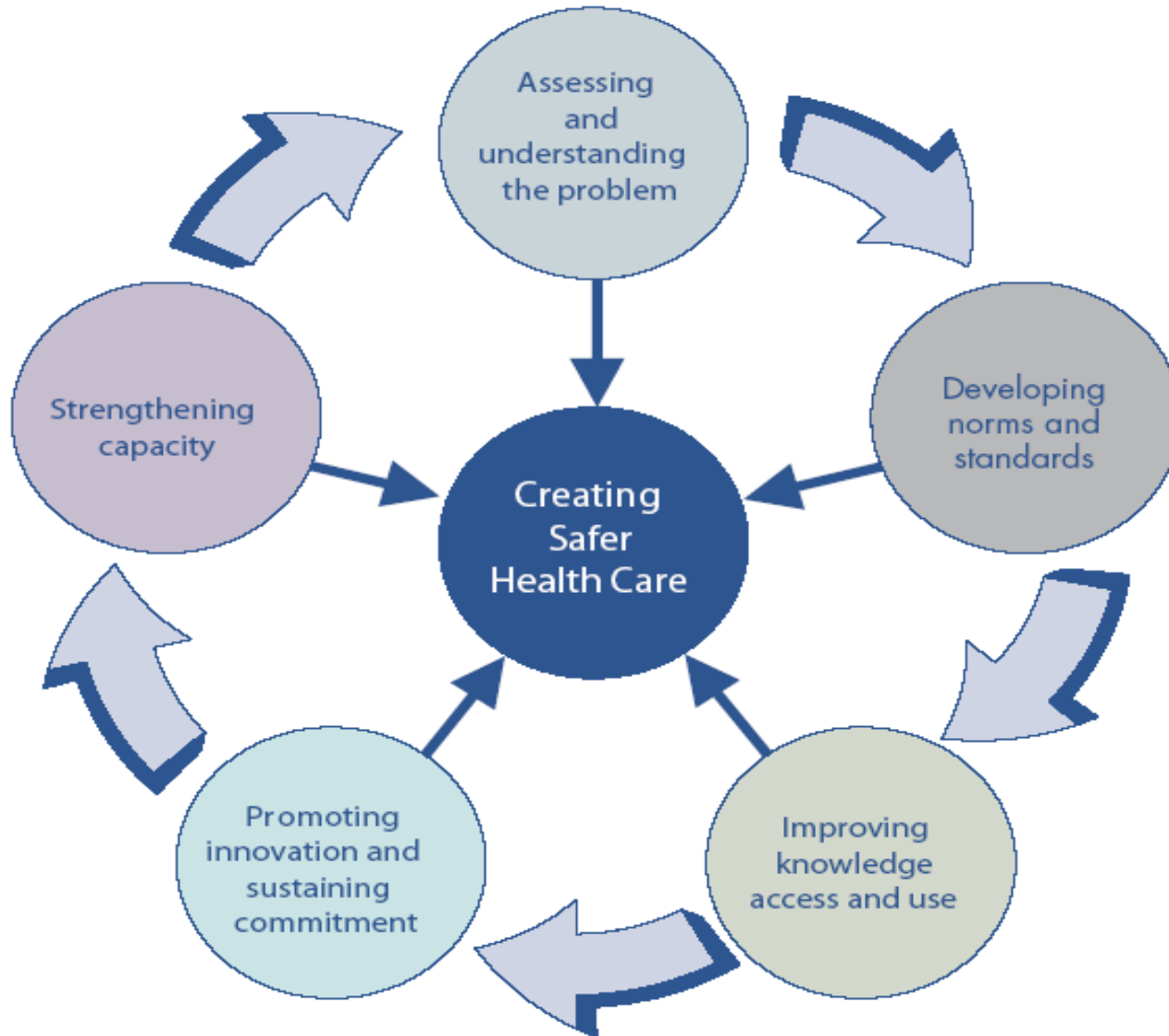
WHO response

World Alliance for Patient Safety (WAPS) Initiative

- Launched in 2004 and hosted by WHO with the following aim :
 - To coordinate, disseminate and accelerate improvements in patient safety worldwide,
 - To promote international collaboration and action between countries, WHO secretariat, experts, consumers, professionals & industry groups.



World Alliance for Patient Safety: Framework



EMRO's Response

I. Assessing problems of unsafe care

- Patient safety questionnaire developed and circulated
- Patient safety research in 6 countries (using MRR and alternative tools)
- Research network being expanded to more countries of the Region
- Developing an adverse event reporting system

II. Developing norms and establishing standards to reduce harm

- Performance measurement tool developed as part of The Patient Safety Friendly Hospital Initiative (PSFHI)
- Development and dissemination of patient safety solutions
- WHO hand hygiene guidelines and safe surgery checklist promoted in countries

III. Improving knowledge access, use and evaluating impact

- RC paper on patient safety (2005)
- Organized and hosted 6 regional workshops
- Patient safety research network for information exchange
- Field visits to country teams to evaluate impact

IV. Promoting innovation and sustaining commitment

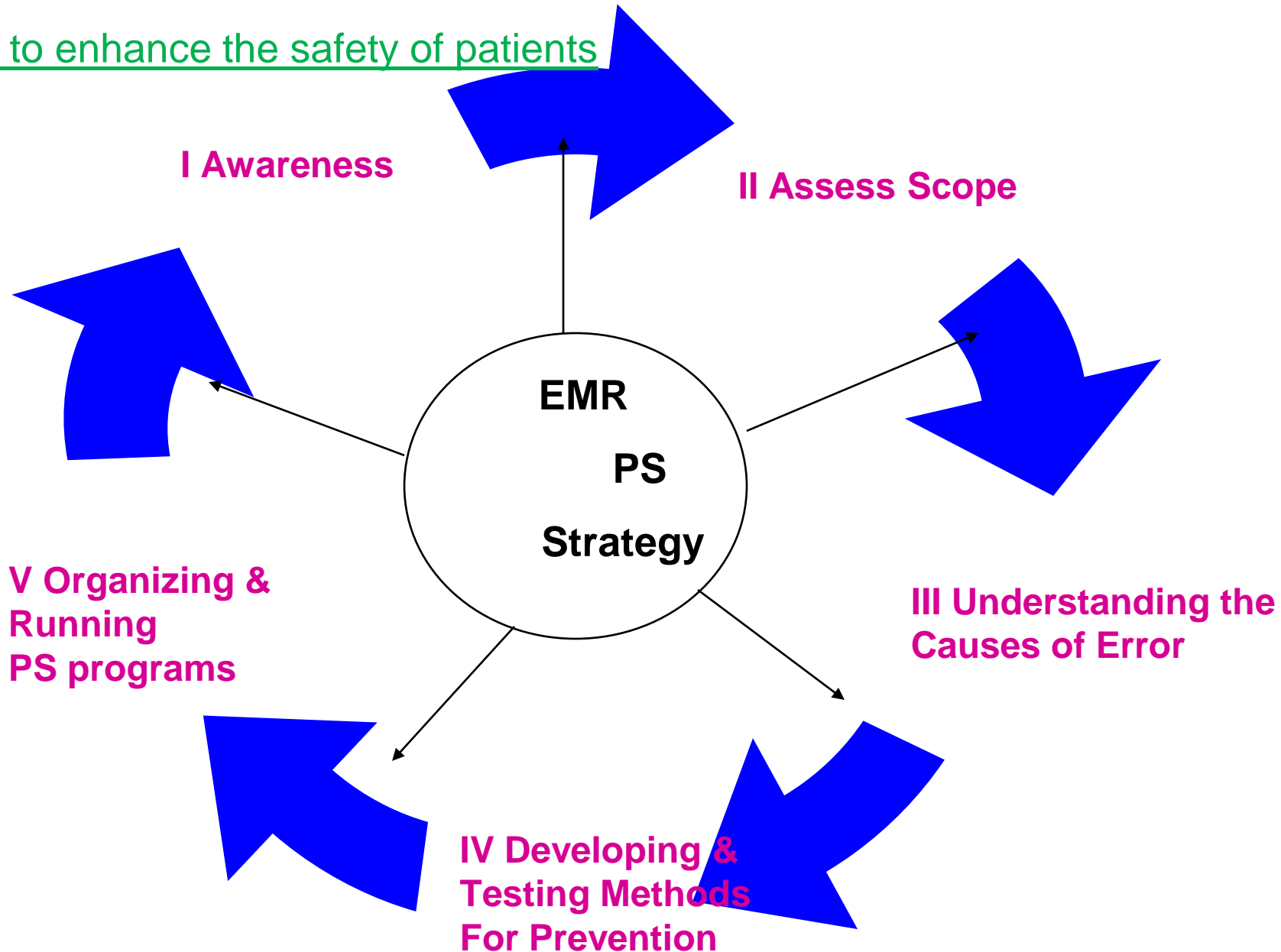
- Engaged the highest health authorities in many countries (e.g. MOH commitment to Clean Care, Safe Surgery)
- The Patient Safety Friendly Hospital Initiative
- Promoting innovative research (WHO small patient safety research grant)
- Promoting the introduction of PS in Medical School curricula

V. Strengthening capacity for patient safety

- Trained 6 country teams on assessment of harm and other areas
- Developed research mass comprising 27 hospitals in the Region
- Field visits for technical support
- Training on hand hygiene guideline implementation
- Strengthened the capacity of the Regional Office

Regional Strategy for Patient Safety

5 Axes to enhance the safety of patients



Patient Safety activities EMR

- Research for PS
- Clean Care is Safer Care initiative
- Safe Surgery Saves Life initiative
- PS Solutions
- Patient engagement
- Advocacy
- Collaboration
- PSFHI
- PS forum

Key achievements

Raising awareness to the problem of patient safety in the region.

- This has been achieved through various workshops, meeting and conferences .
- Several countries that have participated in the patient safety workshops were able to engage the press in the issue, further enhancing public knowledge on the topic.

Active training of several EMR countries on methods of AE reporting and hospital record acquisition and analysis for measurement of the degree of patient harm nationwide has been performed at EMRO.

Development of patient safety questionnaires by EMRO for completion by MOH officials. This process is a crucial prerequisite for the establishment of individual country patient safety profiles.

Inclusion of patient safety in national accreditation and quality assurance programs in several countries of EMR.

Establishment of measurement studies in the Region, which is a part of a world-wide endeavor to enhance patient safety.

- Six countries of EMR were involved in this set of studies
- The experience derived from these studies will likely reflect on a national and international level and will form the nucleus for a more wide-scale involvement from other countries within the Region.

Challenges facing implementation

- Integrating all PS activities
- Global information dissemination
- Culture
- Funding restrictions
- Providing technical and financial support for country-level activities

Future directions

- Expand research studies to other countries in the EMR
- Implement Patient Safety Friendly Hospital Initiative
- Build research capacity
 - Medical record review
 - Alternative tools for assessing patient safety
 - Develop analytical capacity
- Develop reporting systems for patient safety
- Engage civil society: “voice of the patients”
- Special initiatives
 - implementation of WHO hand hygiene guidelines
 - endorsement and implementation of Safe Surgery
 - promotion of patient safety education
- Implement patient safety solutions
- Integrate patient safety in health systems

Guideline for the working groups

- Attendants will be divided into groups of 10s, and each group will be allowed 30 minutes for interaction
- Each group will appoint a facilitator and a reporter
- Each group will interact to answer the following:
 - Give examples of adverse events in your healthcare facilities to show the magnitude of the problem in your country
 - Prioritize such events from your point of view
 - Elaborate on the most important one(s) to identify the root causes
 - Define one or more action areas to solve such problem(s)
 - Discuss the different tools that can be used within such action area (s)
 - Define the challenges that you might face during implementation , and discuss how to overcome
- The reporter of each group will present the group consensus within 3-5 minutes

Conclusion and Recommendations