Creating Organizational and Policy Level Supports for Improving Patient Safety

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To start from:

- Governments are responsible for ensuring quality and safety in all health organizations (throughout the continuum of care) , public and private alike

Quality as one of the cornerstones of Health Reform

- Improving **quality and safety** in health service delivery as a goal
- National **Strategic Plans** in several countries include various sections on quality improvement and patient safety initiatives
- Support to **accreditation** initiatives

Patient Safety : ‘is’ , ‘was’ the forgotten Component in Health System Reform?

- Deficits in patient safety practices in different contexts
- There is information void: lack of basic, objective information on how well the health system is functioning and what would make it function well
- No systematic way to measure and improve quality and patient safety
- Lack of information for decision makers about patient safety practices
- Patient safety practices and associated outcomes in health organizations are sometimes unknown to senior management and policy makers

Patient Safety: Challenges and Concerns

- Difficulty recognizing errors
- Lack of information systems to identify errors
- Relationship of trust with providers
- Shortages of clinical professionals
- Concern about liability
- Culture of patient safety is lacking

Patient Safety in the Middle East

- Due to alarming incidents of adverse events resulting from quality problems, patient safety is now prominent on health policy agendas of many governments in many countries.

- Several countries have embarked on the development and implementation of accreditation programs.

However

- Many have accomplished less than expected in the patient safety agenda
- Huge variations in patient safety practices still exist inter and intra countries.
- In several countries, patient safety remains questionable and is questioned indeed by service users when they can voice their concerns

Challenges Facing the Implementation of Quality and Patient Safety Systems

- If one looks at the experience of many countries in the region in terms of quality improvement and patient safety, one could ask why have some health care organizations been so slow in improving patient safety practices and overall performance
- So why do they lag behind?
- ……..patient safety culture matters….

Patient Safety Culture

- Patient safety culture has become a significant issue for healthcare organizations striving to improve patient safety and some safety investigations have indicated that organizations need to change their culture to make it ‘easy to do the right thing, and hard to do the wrong thing’ for patient care (Kennedy, 2001).

- That is why assessment of patient safety culture in an organization is a key step in improve it.

- Baseline patient safety culture measurements are a necessary first step for organizational cultural change

Lebanese Patient Safety Culture study

- Conducted a baseline assessment of patient safety culture in Lebanese hospitals and understand factors (related to respondents and hospitals) that may affect patient safety consequently the most critical issues related to patient safety culture
- Explored the association between patient safety culture predictors and outcomes
- Sixty-eight hospitals agreed to participate in the study (53.9% of all Lebanese hospitals).
- Of the 12,250 questionnaires sent to hospitals, 6,807 were returned complete yielding an overall response rate of 55.56%.

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The current state of patient safety culture in Lebanese hospitals: a study at baseline

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Abstract

Objective. The objective of this study is to conduct a baseline assessment of patient safety culture in Lebanese hospitals.

Design. The study adopted a cross-sectional research design and utilized the *hospital survey on patient safety culture* (HSOPSC).

Setting. Sixty-eight Lebanese hospitals participated in the study (54% of all hospitals).

Participants. A total of 6807 hospital employees participated in the study including hospital-employed physicians, nurses, clinical and non-clinical staff, and others.

Main Outcome Measures. The HSOPSC measures 12 composites of patient safety culture. Two of the composites (frequency of events reported and overall perception of safety), in addition to questions on patient safety grade and number of events reported, are the four outcome variables.

Results. Survey respondents were primarily employed in medical and surgical units. The dimensions with the highest positive ratings were teamwork within units, hospital management support for patient safety, and organizational learning and continuous improvement, while those with lowest ratings included staffing and non-punitive response to error. Approximately 60% of respondents reported not completing any event reports in the past 12 months and over 70% gave their hospitals an 'excellent/very good' patient safety grade. Bivariate and multivariate analysis revealed significant differences across hospitals of different size and accreditation status.

Conclusions. Study findings provide evidence that can be used by policy makers, managers and leaders who are able to create the culture and commitment needed to identify and solve underlying systemic causes related to patient safety.

Keywords: patient safety culture, hospitals, hospital size, accreditation, Lebanon

El-Jardali et al. BMC Health Services Research 2011, 11:45
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Health Services Research

RESEARCH ARTICLE Open Access

Predictors and outcomes of patient safety culture in hospitals

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Abstract

Background: Developing a patient safety culture was one of the recommendations made by the Institute of Medicine to assist hospitals in improving patient safety. In recent years, a multitude of evidence, mostly originating from developed countries, has been published on patient safety culture. One of the first efforts to assess the culture of safety in the Eastern Mediterranean Region was by El-Jardali et al. (2010) in Lebanon. The study entitled "The Current State of Patient Safety Culture: a study at baseline" assessed the culture of safety in Lebanese hospitals. Based on study findings, the objective of this paper is to explore the association between patient safety culture predictors and outcomes, taking into consideration respondent and hospital characteristics. In addition, it will examine the correlation between patient safety culture composites.

Methods: Sixty-eight hospitals and 6,807 respondents participated in the study. The study which adopted a cross sectional research design utilized an Arabic-translated version of the Hospital Survey on Patient Safety Culture (HSOPSC). The HSOPSC measures 12 patient safety composites. Two of the composites, in addition to a patient safety grade and the number of events reported, represented the four outcome variables. Bivariate and mixed model regression analyses were used to examine the association between the patient safety culture predictors and outcomes.

Results: Significant correlations were observed among all patient safety culture composites but with differences in the strength of the correlation. Generalized Estimating Equations for the patient safety composite scores and respondent and hospital characteristics against the patient safety grade and the number of events reported revealed significant correlations. Significant correlations were also observed by linear mixed models of the same variables against the frequency of events reported and the overall perception of safety.

Conclusion: Event reporting, communication, patient safety leadership and management, staffing, and accreditation were identified as major patient safety culture predictors. Investing in practices that tackle these issues and prioritizing patient safety is essential in Lebanese hospitals in order to improve patient safety. In addition, further research is needed to understand the association between patient safety culture and clinical outcomes.

Integrating Patient Safety Standards Into the Accreditation Program: A Qualitative Study to Assess the Readiness of Lebanese Hospitals to Implement Into Routine Practice

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Introduction: Concerns about quality of care have led to the integration of patient safety standards and goals in national and international accreditation programs. Since 2005, two national hospital accreditation surveys have been conducted in Lebanon. In 2010, the Ministry of Health integrated patient safety standards into the current program. This study is one of the first efforts in Lebanon and the region to assess hospitals' readiness to integrate patient safety standards into routine practice.

Methods: This cross-sectional study sampled 6807 respondents from 68 hospitals in Lebanon. This paper will detail results from the qualitative thematic analysis of the responses on 5 open-ended questions added to the *Hospital Survey on Patient Safety Culture*. The emerging themes were compared across regions, accreditation status, and hospital size.

Results: Lebanese hospitals have made progress by recognizing patient safety as a major strategic goal and priority, but gaps still exist in implementation. Very few hospitals are ready for effective implementation of these standards. Staff education and training are needed. Public awareness about patient safety and integrating these concepts into health educational curricula were cited as important strategies among others for creating a culture of patient safety. Variations in responses across regions, accreditation status, and hospital size were discussed.

Discussion and Conclusions: Integrating patient safety initiatives into routine practices requires a cultural shift in health-care organizations. Before assessing whether hospitals comply with patient safety standards, it is important to provide them with sufficient training and education on how to successfully implement these standards. Study findings provide valuable lessons for Lebanon and other countries, which are in the process or currently mandating the implementation of patient safety standards and/or accreditation programs.

Key Words: patient safety culture, accreditation, qualitative, Lebanon

(*J Patient Saf* 2012;8: 97–103)

Study tool

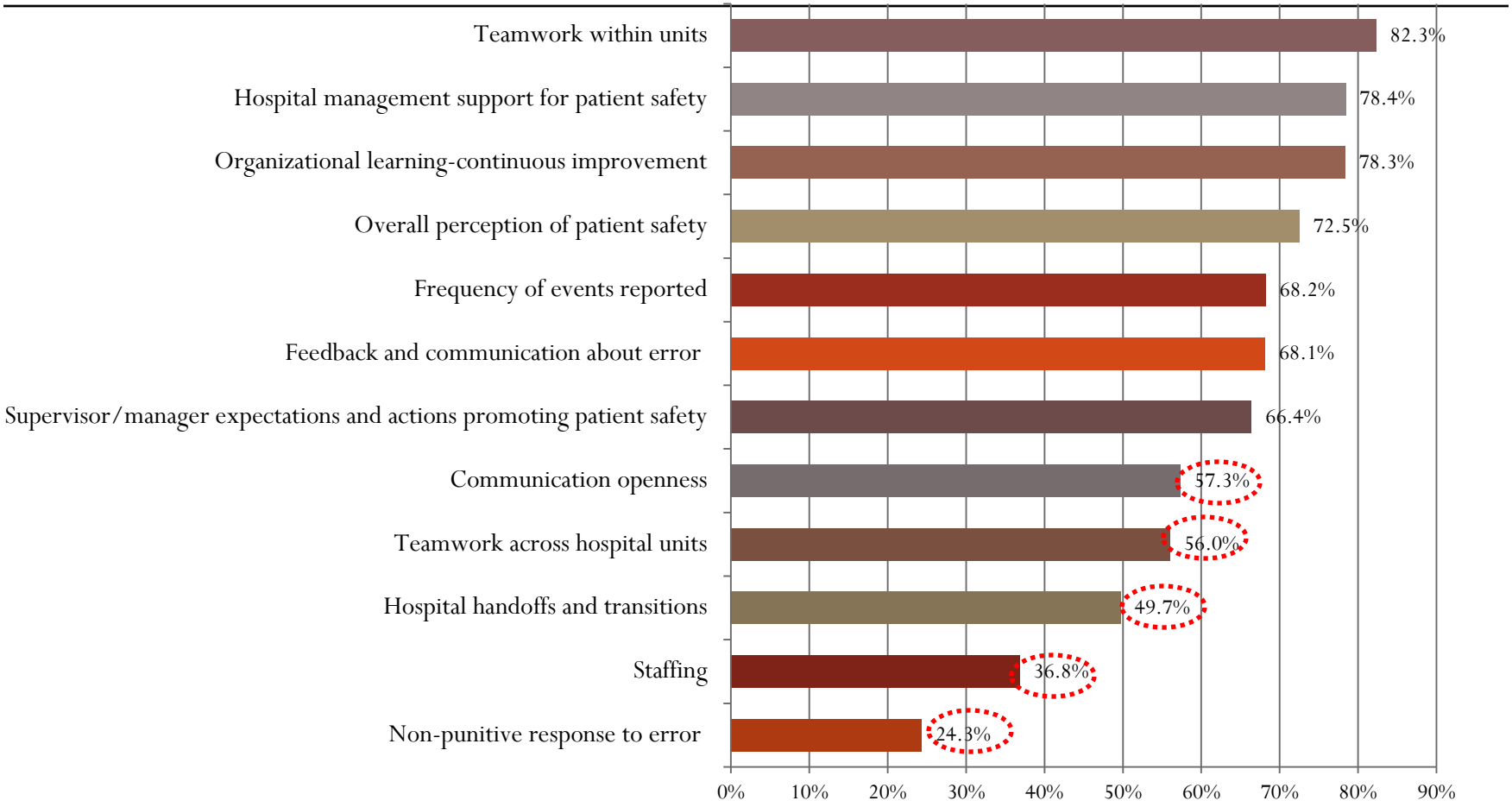
- The study adopted a cross-sectional design utilizing an adapted and customized version of the *Hospital Survey on Patient Safety Culture* (HSOPSC) developed by the Agency for Healthcare Research and Quality. The survey was translated to Arabic.
- The HSOPSC is composed of 42 items that measure 12 composites.
  - Frequency of Events Reported
  - Overall Perception of Safety
  - Supervisor/Manager Expectations and Actions Promoting Safety
  - Organizational Learning and Continuous Improvement
  - Teamwork Within Units
  - Communication Openness
  - Feedback and Communications About Error
  - Non-punitive Response to Error
  - Staffing
  - Hospital Management Support for Patient Safety
  - Hospital Handoffs and Transitions
  - Teamwork Across Hospital Units
- The survey targeted hospital staff including physicians, nurses, clinical and non-clinical staff, pharmacy and laboratory staff, dietary and radiology staff, supervisors, and hospital managers.

Data Analysis (continued)

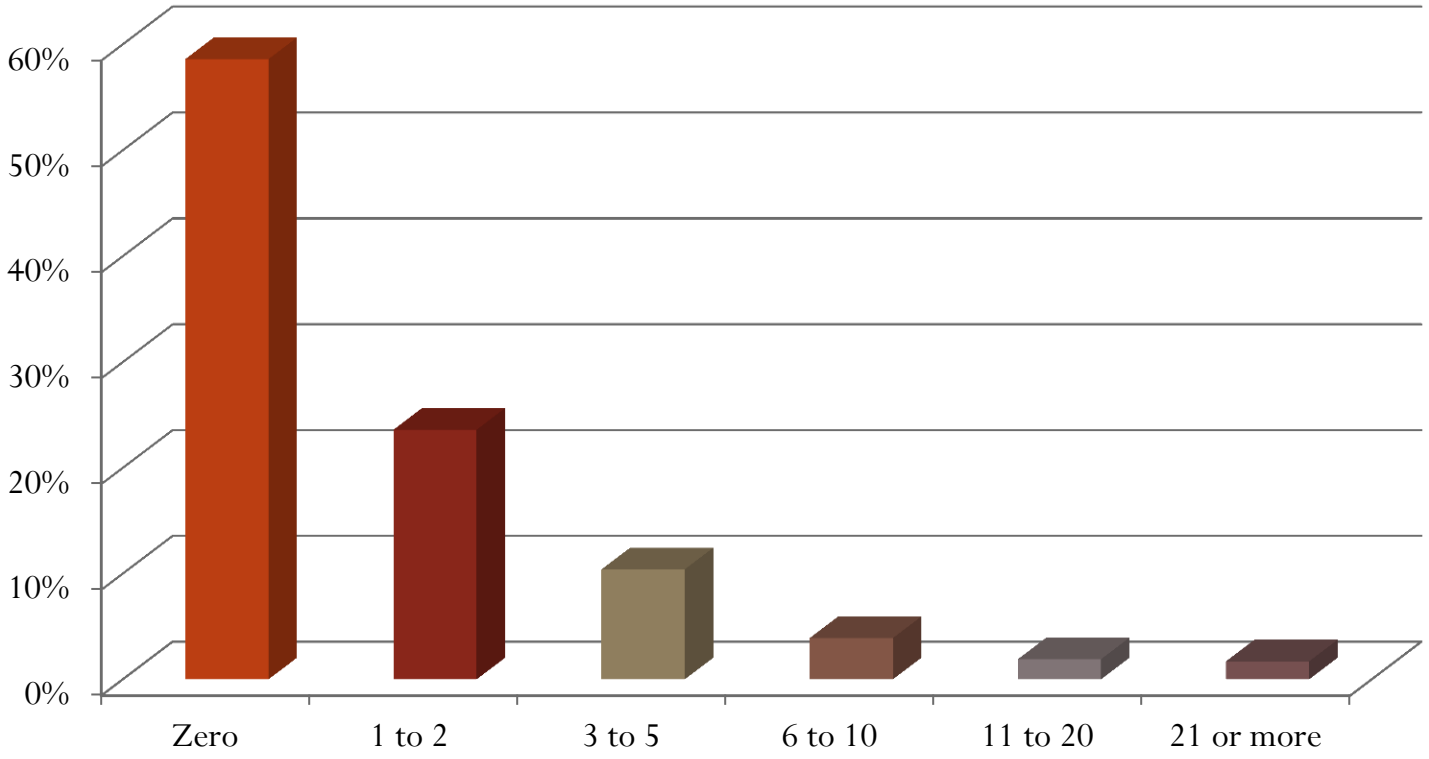
- Four outcome variables exist in the study tool:
  - Frequency of events reported
  - Overall perception of safety
  - patient safety grade
  - number of events reported

- The four outcome variables were regressed against the 10 composite scores, respondent's position in the hospital, accreditation status, and hospital size

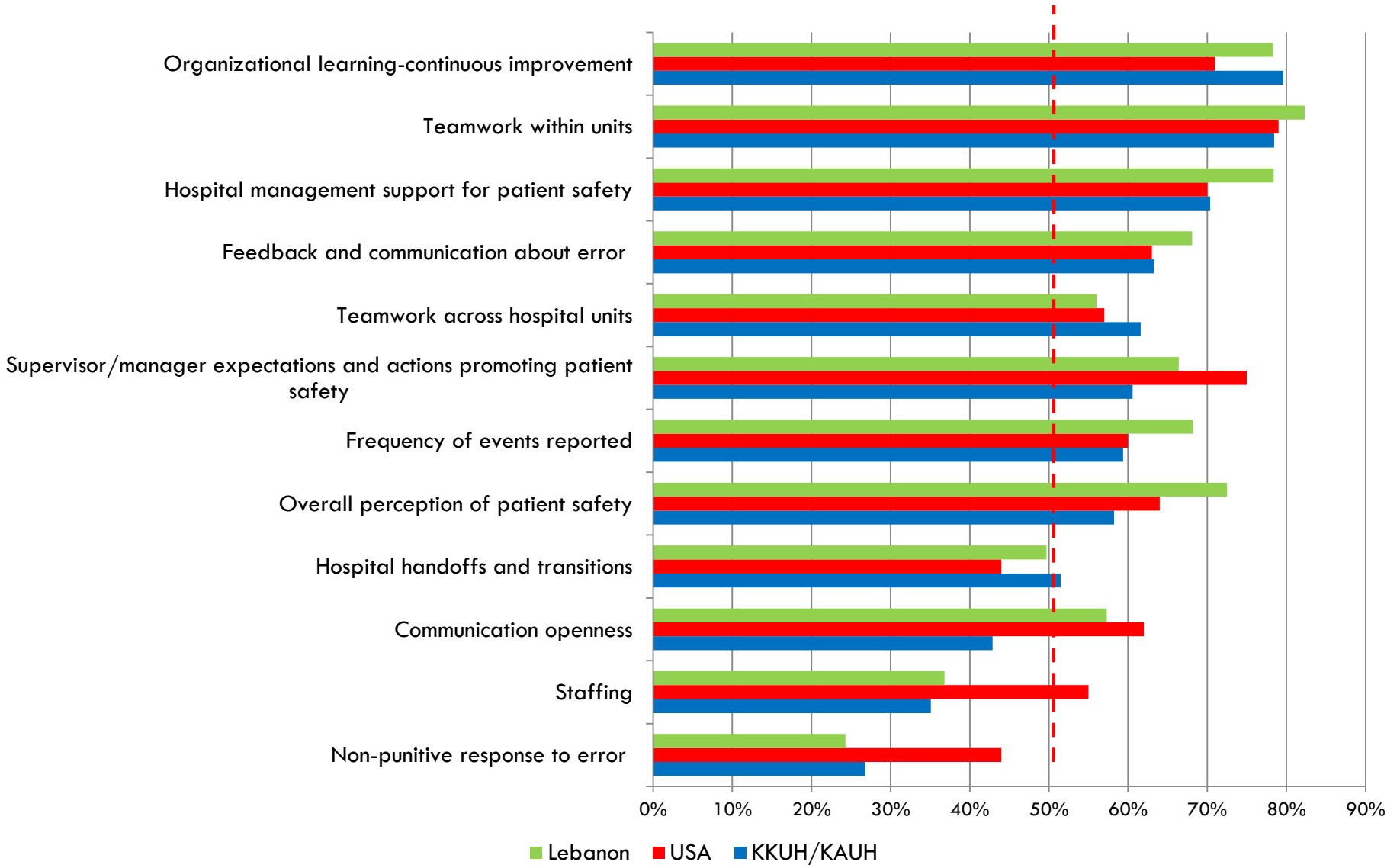
Composites and Outcomes



In the past 12 months, how many event reports have you filled out and submitted?



Benchmarking



Results by composite for physicians

- Healthcare providers also feel their mistakes are held against them when an event is reported (71.8%)
- 66% worry that reports of incidents and mistakes are merely kept in their personal files
- Around 50% of the physicians try to do too much too quickly when working under pressure
- Over 60% believe that mistakes do not happen by chance
- Over 60% reported no errors over the past 12 months

Determinants of Frequency of Events Reported

- Frequency of events reported increased with higher scores on
  - Organizational learning and continuous improvement
  - Communication and openness
  - Feedback and communication about errors
  - Non-punitive response to errors
  - Hospital management support for patient safety
  - Teamwork across hospital units

Determinants of Overall Perception of Safety

- Perception of patient safety improved with higher scores on
  - supervisor/manager expectations and actions promoting safety
  - organizational learning and continuous improvement
  - teamwork within hospital units
  - non-punitive response to error
  - hospital management support for patient safety
  - hospital handoffs and transitions
  - teamwork across hospital units
- Respondents working in accredited hospitals were found to have better perception of patient safety

Patient safety studies in developed countries

- It is estimated that between 44,000 and 98,000 Americans die each year from medical system failure.
- In the UK, 10% of patient admissions (approximately 850,000) result in injury costing the National Health Service (NHS) approximately £2 billion in extra hospital days (Department of Health 2007).
- In Australia, 16.6 % of admissions were associated with an adverse event and around half of them were preventable
  - When expressed as a rate of adverse events per admission, the rate was around 13 per cent compared to the rate of 3.7 per cent in the Harvard Medical Practice Study (Brennan et al. 1991)
- In Canada, the overall Adverse Event (AE) rate is 7.5% – 1 in 13 from hospital admission and ~ 37% are preventable.
  - 65% of AEs resulted in either no disability or minimal to moderate impairment with recovery within 6 months.
  - Patients with an AE had a longer hospital stay.
  - Potential cost savings are $300 million

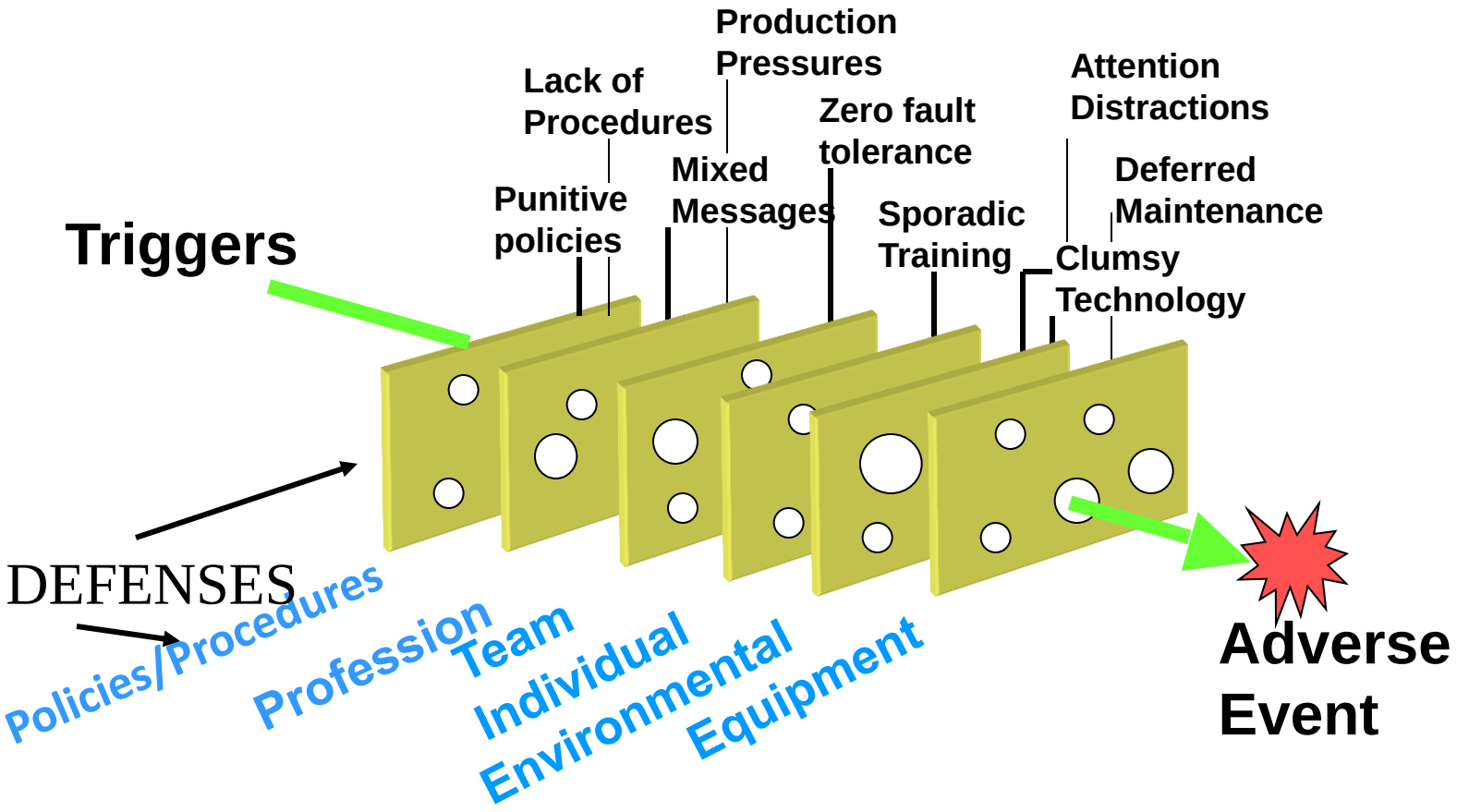
PATIENT SAFETY STUDY INCLUDING 6 EMR COUNTRIES

A retrospective medical record review of 15,548 records of hospital admissions eight countries (Egypt, Jordan, Kenya, Morocco, Tunisia, Sudan, South Africa and Yemen) found an 8.2% of the records reviewed at least one adverse event, with a range of 2.5% to 18.4% per country.

Of these events, 83% were judged to be preventable, while about 30% were associated with death of the patient.

Wilson et al (2012)BMJ

Person vs. System Approach Multi-Causal Theory "Swiss Cheese" diagram (Reason, 1991)



System Approach to Human Error

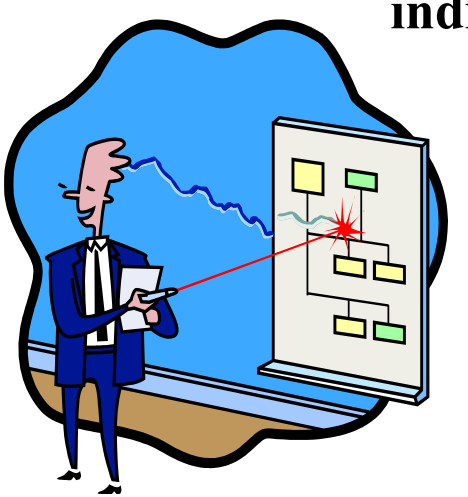
- Humans are fallible and errors are to be expected, even in the best organisations.

- Focus: conditions under which individuals work

Not *Who* caused the accident but *What* caused the accident?

"Medical errors most often result from a complex interplay of multiple factors. Only rarely are they due to the carelessness or misconduct of single individuals."

Lucien L. Leape



"We cannot change the human condition, but we can change the conditions under which humans work." (Reason 2000)

Organizational Supports for Improving Patient Safety

- Need to move away from a culture where information about errors and injuries is withheld to a transparent one that serves both patients and health care providers
- Strengthening the reporting system and the event reporting management system
- Conduct root cause analysis (RCA) and Failure Mode and Effect Analysis (FMEA)
- Promoting a system approach to clinical audits / MMR

Policy Supports for Improving Patient Safety

Accreditation

- Although it is not a measure of actual health outcomes…

- Accreditation is a positive indicator that the building blocks are in place, both structurally and from a process perspective, to be able to provide quality and safe care.

Incentives but some with mixed evidence

- Use of financial incentives to reward measured performance (Pay for Performance)
- Public reporting of process measures and outcomes
- Balanced Scorecards
- Etc.

Strategic / Value-based Purchasing

- Pay for performance (P4P) is increasingly being used to drive improvements in health care quality and safety.

- Pay-for-performance programs are being implemented in a growing number of developed countries, including the United States (US), United Kingdom (UK), Canada, Australia, New Zealand, and in a number of developing countries including now Qatar.

Public Reporting as an INCENTIVE?

Evidence:

- It is recommended to build the system for reporting and foster a culture of trust before public reporting

- No consistent evidence that the public release of performance data alone changes consumer behaviour or improves care,[3] effectiveness[5], patient safety[5], and patient-centeredness, [5] and risk- selection.[4]

- Public reporting strengthens the incentive to improve performance and increases accountability and educates the public about differences in health care.[6]

- Public reporting combined with financial incentives improved quality more than public reporting alone. [6]

3. Ketelaar et al. 2011. Description: Systematic review on the effect of publishing performance data
4. Henderson & Henderson 2010. A systematic review on public reporting
5. Fung et al. 2008. Systematic review
6. Custers et al. 2008

Opportunities

- The need for the development of incentives to improve the quality of care.
- Examples of such incentives include increased government support for and commitment to regulation, the inclusion of quality and safety criteria into financing systems (Ross et al. 2000), and the stimulation of community demand for quality services and patient safety.

Opportunities (Cont'd)

- Government needs to yield their funding power so as to influence behavior of health care organizations
- Enhancing leverage of funding flows to increase quality
- Improving contractual arrangements

In short, HEALTH POLICY is critical to ensuring quality and safety in health care organization

Context in Lebanon

- Up till late 1990 the reimbursement fees to hospitals were linked to classification based on structural related standards

- From 2001 onwards, the financial incentive is linked to an accreditation system with standards

- Currently there is no regular reporting of standardized and comparable hospital-based indicators in Lebanon and the MoPH started to use its hospitalization database to develop outcome or proxy indicators.

Context

- Evidence has shown that linking reimbursement to accreditation only is not sufficient and in many cases is inappropriate and unfair (*Ammar, W., Khalife, J., El-Jardali, F., Romanos, J., Harb, H., Hamadeh, G. and Dimassi, H. (2013)*
- Thus, health care purchasers should develop a staged incentive-based system for linking performance to reimbursement

In Lebanon

- While there has been significant investment in quality of healthcare in Lebanon, limited information is available about health outcomes.
- The Ministry of Public Health (MOPH) has recently implemented a new reimbursement formula that is based not only on accreditation but also on additional hospital performance indicators.
- While this new arrangement provides a good signal for providers, it requires enhancements so it can be optimal for improving patient outcomes.

In Lebanon

- *For hospitals: New Contracting Score = 40% Accreditation + 10% Patient Satisfaction + 35% CMI + 5% ICU proportion + 5% Surgical/Medical proportion + 5% Deduction proportion by MOPH auditing for inappropriate billing*
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- *For Primary Health Care: Introducing benefit package and new financial arrangement*

Final Words

- Policy makers, managers, providers and leaders are the only ones who are able to create the culture and commitment needed to identify and solve underlying systemic causes related to quality of care and patient safety

Thank you

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