

Medication Safety: International Initiatives and implications on GCC

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Outline

- International Initiatives.
- Studies in GCC.
- Future of Medication Safety in GCC.

Objectives

- To discuss the burden of medication errors worldwide.
- Describe some international initiatives.
- Discuss WHO initiatives including medication safety Challenge
- Discuss studies and initiatives in GCC countries.
- Discuss future of medication safety in GCC.

Burden of Medication Errors

- Incidence of ADEs:
 - USA: 6.5 per 100 admissions (28% preventable) (Bates et al., 1995).
 - Japan: 17 per 100 admissions (14% preventable) (Morimoto T et al. 2011).
 - Saudi Arabia: 8.5 per 100 admissions (30% preventable) (Aljadhey et al., 2013).
- Cost of injuries 3.5 billion in the US per year dollars (IOM; Honigman et al., 2001).

International Initiatives

- WHO: Patient safety solutions, patient safety curriculum.
- International Medication Safety Network.
- Country: ISMP and others.

Challenge on Medication Safety

- Burden of medication errors.
- Absence of global initiative.
- Absence of global monitoring system.

Goals of the Challenge

- Reduce medication errors.
- Improve medication errors reporting.
- Implementation of medication safety practices globally.

Framework of the Challenge

- Systems and practices of medications.
- Medicine.
- Patients.
- Health Care Professionals.

Process of the Challenge

- Planning.
- Consultative meeting in April 2016.
- Development of the Challenge.
- Launching and implementation.
- Campaign.
- Monitoring and Evaluation.

Monitoring and evaluation

- Establish a monitoring system for medication errors.
 - Pharmacovigilance example.
- Monitor the Challenge success.
- Evaluate the impact of interventions.

How to Monitor?

- Reporting:
 - Useful at institution level.
 - Underreporting.
 - Incomplete information.
- Active surveillance tools:
 - Expensive.
 - Require skills.

How to Monitor?

- First, decide on goals.
- Ideal monitoring system: valid, reliable, simple, affordable, target important outcomes.
- Several systems based on: country, institution, or setting.

Comments

- Materials Development.
- Implementation.
- Measurement and reporting.

Medication Safety in GCC

Qualitative Study

- Factors contributing to medication safety:
 - Unrestricted public access to medications,
 - Communication gaps,
 - Limited use of important technologies,
 - Lack of medication safety programs in hospitals.

Aljadhey H, Mahmoud MA, Hassali MA, Alrasheedy A, Alahmad A, Saleem F, Sheikh A, Murray M, Bates DW. Challenges to and the future of medication safety in Saudi Arabia: A qualitative study. Saudi Pharm J. 2014 Sep;22(4):326-32.

Errors Reporting

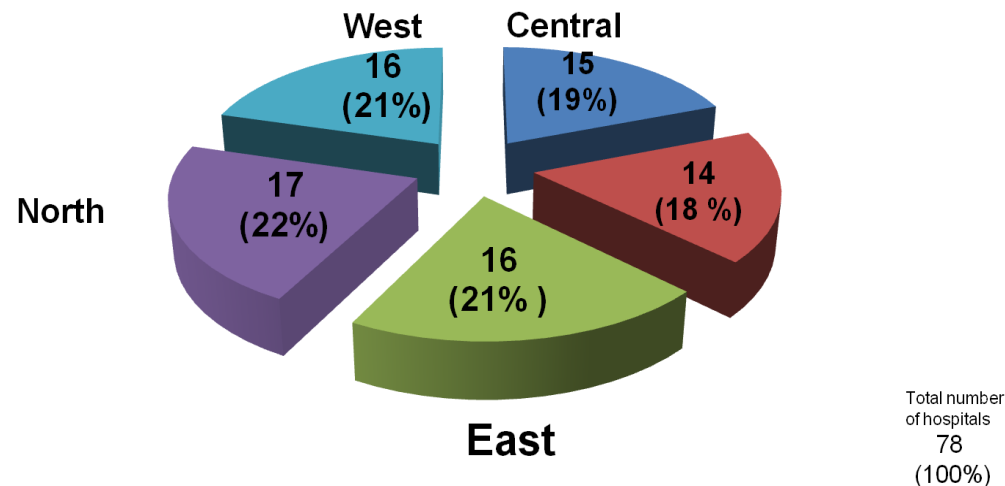
- Alshaikh M, Mayet A, Aljadhey H. Medication error reporting in a university teaching hospital in Saudi Arabia. J Patient Saf. 2013 Sep;9(3):145-9.
- Al-Khani S, Moharram A, Aljadhey H. Factors contributing to the identification and prevention of incorrect drug prescribing errors in outpatient setting. Saudi Pharm J. 2014 Nov;22 (5):429-32.

Practices Assessment

- Alkhani S, Ahmed Y, Bin-Sabbar N, Almogirah H, Alturki A, Albanyan H, Adam M, Saleem F, Aljadhey H, Hassali MA, Vaida AJ. Current practices for labeling medications in hospitals in Riyadh, Saudi Arabia. Saudi Pharm J. 2013 Oct;21(4):345-9.
- Aljadhey H, Alhusan A, Alburaikan K, Adam M, Murray M, Bates D. Medication Safety Practices in Hospitals: A national survey in Saudi Arabia. Saudi Pharmaceutical Journal. 2013;21:159-164

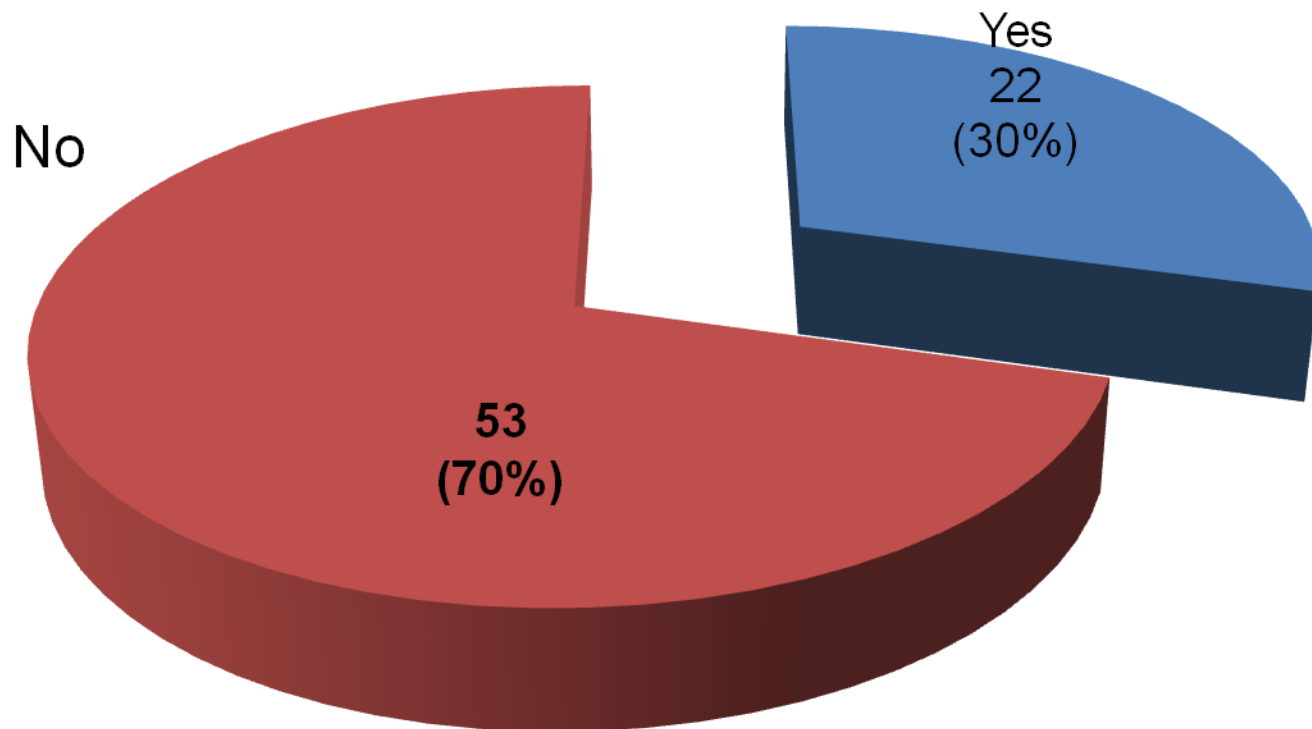
Hospital Surveys

- Survey of essential practices from: WHO safety solution, JCI, ISMP.



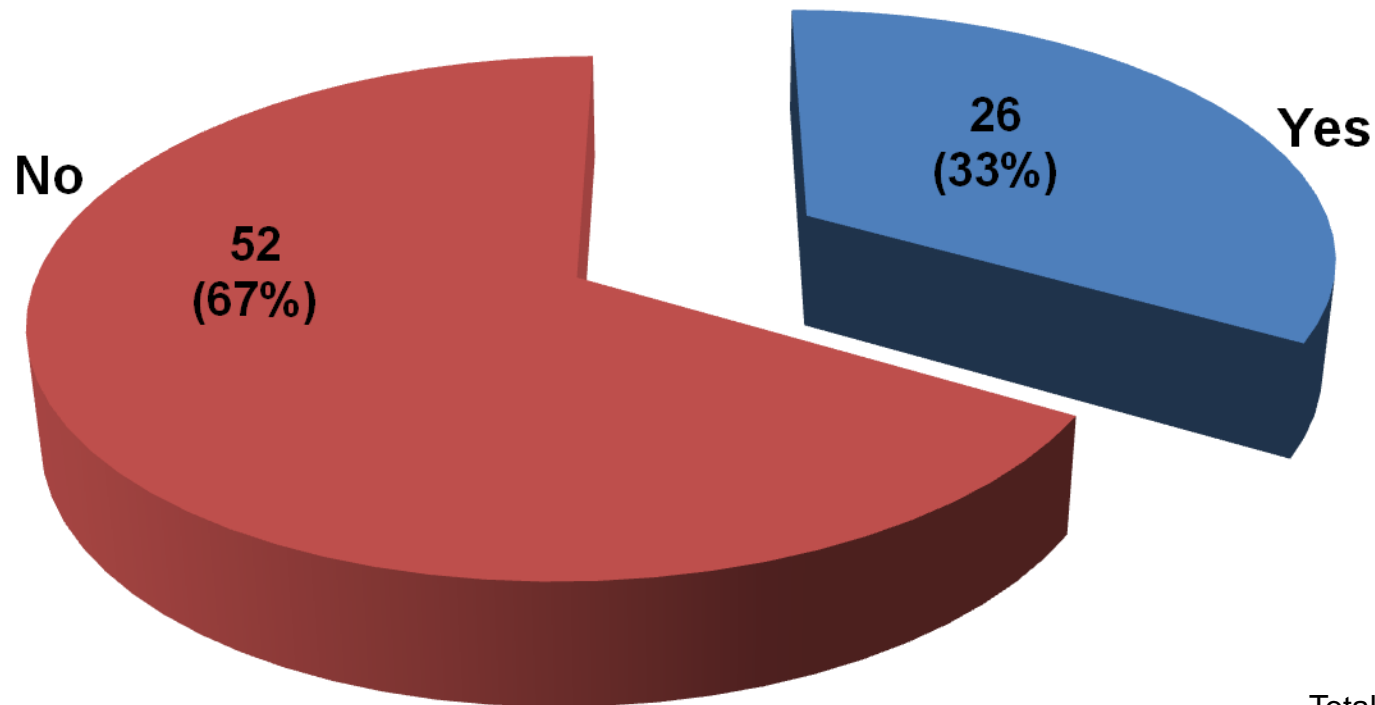
- Aljadhey H, Alhusan A, Alburaikan K, Adam M, Murray M, Bates D. Medication Safety Practices in Hospitals: A national survey in Saudi Arabia. Saudi Pharmaceutical Journal. 2013;21:159-164

Medication safety committee



Total Number
of hospitals
75
(100%)

List of LASA Medications



Total Number
of hospitals
78
(100%)

Medication at Transition in Care

- Incidence of ADEs two weeks after hospital discharge counseling.

Alghamdi S, Adam M, Alammari M, Al Bekairy A, Alwhaibi M, Mayet A, Aljadhey H. The Outcome Of Pharmacist Counseling At The Time Of Hospital Discharge: An Observational Nonrandomized Study. *Annals of Saudi Medicine*. 2012;32:492-497.

- Medication discrepancy ascertained by pharmacist after hospital admission.

Abu Yassin B, Aljadhey HS, Alsultan M, Alrashed S, Adam M, Bates D. Accuracy of the Medication History at Admission to Hospital in Saudi Arabia. *Saudi Pharmaceutical Journal* (2011) 19, 263–267.

Future in GCC

- Establishment of medication safety programs.
- Policies.
- Medication safety officer.
- Community pharmacies and home care.