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1. **A Patient Safety Objective Structured Clinical Examination.**
   Singh R, Singh A, Fish R, McLean D, Anderson DR, Singh G.
   J Patient Saf. 2009(Jun); 5(2):55–60.
   This article describes the design of a method to evaluate patient safety learning and its application as part of a patient safety curriculum for medical residents. The evaluation employed an approach known as objective structured clinical examination (OSCE), which aims to enable assessment of clinical skills that may not be easily evaluable by conventional forms of testing. The authors administered the OSCE to two groups of residents, one that had completed the patient safety curriculum and another that had not. Results showed that residents in the first group demonstrated significantly greater patient safety-related skills such as error recognition and systems-oriented thinking than did those in the comparison group. While acknowledging the need for further research, the authors feel that the OSCE represents a promising technique for the evaluation of medical trainees. Three tables and two figures are included.

2. **A Report Card System Using Error Profile Analysis and Concurrent Morbidity and Mortality Review: Surgical Outcome Analysis, Part II.**
   Antonacci AC, Lam S, Lavarias V, Homel P, Eavey RA.
   J Surg Res. 2009(May 1); 153(1):95–104.
   This article describes an error analysis system that uses "report cards" to monitor and provide feedback on surgeons' performance at a large academic medical center. The authors describe the design of the system and present findings from an analysis of surgical adverse outcomes over a five-year period. They conclude that the system was effective both in providing individualized performance feedback and in identifying system-level issues, suggesting that such systems may be a useful approach for improving the efficacy of surgical event surveillance. Multiple tables are included.

3. **Do Patient Safety Events Increase Readmissions?**
   Friedman B, Encinosa W, Jiang HJ, Mutter R.
   Med Care. 2009(May); 47(5):583–590.
   This study examined the relationship between incidence of patient safety events and likelihood of hospital readmission in a large group of adult surgical patients. Using data from the AHRQ's Healthcare Cost and Utilization Project for a 1-year period representing almost 1.5 million patients, the authors assessed the joint and individual impact of nine patient safety indicators on in-hospital mortality, 1-month readmission, and 3-month readmission rates. Results showed that rates of all three outcomes were higher among patients who experienced an event than among those who did not; after adjustment for a number of confounding factors, relative risks of 3-month and 1-month readmission were 1.2 and 1.17 respectively, but only two of the safety indicators examined were individually predictive of higher readmission rates. Further details of the study findings, economic and policy implications, and possible directions for further research are discussed. Multiple tables are included.

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4. **Doctors' Views of Attitudes towards Peer Medical Error.**
Asghari F, Fotouhi A, Jafarian A.
Qual Saf Health Care. 2009(Jun); 18(3):209–212.
How doctors address medical errors made by their colleagues is a relatively unexamined issue. This study explored attitudes toward addressing medical errors made by one's peers through a survey of 400 general practitioners in Tehran, Iran. In a variety of scenarios involving discovery of an error committed by another doctor, respondents most frequently said they would inform their colleague of the error and encourage them to disclose the error to the patient, and wanted colleagues to take a similar approach in the event they themselves made an error. Two-thirds of respondents reported having discovered a peer's error during the preceding six months and a large majority (90%) reported having had minimal or no training concerning the issue. (The survey questions involved hypothetical situations and did not ask how respondents had handled actual errors.) Three tables are included.

5. **Educational Strategy to Reduce Medication Errors in a Neonatal Intensive Care Unit.**
Campino A, Lopez-Herrera MC, Lopez-de-Heredia I, Valls-i-Soler A.
Acta Paediatr. 2009(May); 98(5):782–785.
This study assessed the impact of a program designed to improve medication safety in the neonatal intensive care unit of a university hospital in Biscay, Spain. The intervention involved a combination of strategies including staff education, risk analysis and implementation of preventive practices, and standardization of processes. Results showed significant reduction in prescribing errors and medication safety incidents following implementation of the program. One table and one figure are included.

6. **Effect of a Pharmacist on Adverse Drug Events and Medication Errors in Outpatients with Cardiovascular Disease.**
Murray MD, Ritchey ME, Wu J, Tu W.
Arch Intern Med. 2009(Apr 27); 169(8):757–763.
This study sought to determine whether pharmacist intervention could reduce the incidence of medication-related adverse events and errors in the outpatient setting. The authors looked at secondary findings from two clinical trials involving a total of 800 patients with hypertension and/or cardiovascular disease that examined outpatient medication adherence as a primary outcome. In each study, patients in the intervention group received specially designed educational materials, electronic medication monitoring, and communication by the study pharmacist with patients' primary care providers, while those in the control group received standard pharmacy care. Results showed that pharmacist intervention was associated with significantly lower rates of adverse drug events and medication errors in the pooled study sample. Multiple tables are included.

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7. **Effect of Bar-Code-Assisted Medication Administration on Medication Error Rates in an Adult Medical Intensive Care Unit.**
DeYoung JL, VanderKooi ME, Barletta JF.
Am J Health-Syst Pharm. 2009(Jun 15); 66(12):1110–1115.
This study assessed the impact of a bar-code-assisted medication administration (BCMA) system on rates of medication error in the medical ICU of a community teaching hospital. The authors looked at data from direct observation of the medication administration process to compare rates of seven types of errors (wrong drug, wrong administration time, wrong route, wrong dose, omission, administration of a drug without an order, and documentation error) before and after BCMA implementation. Results showed that BCMA implementation was associated with a 56% reduction in frequency of medication errors, attributable entirely to a decrease in wrong-time errors, which were the commonest error type and accounted for most of the errors in both the before and after conditions. The authors comment on possible explanations for these results, their relationship to findings of other published studies, and clinical implications. Three tables are included.

8. **Effects of Shift Length on Quality of Patient Care and Health Provider Outcomes: Systematic Review.**
Estabrooks CA, Cummings GG, Olivo SA, Squires JE, Giblin C, Simpson N.
Qual Saf Health Care. 2009(Jun); 18(3):181–188.
This study sought to identify and assess systematically the available literature concerning the impact of work shift length on safety and quality of patient care and on providers' physical and mental wellbeing. A total of twelve studies were identified and analyzed with respect to outcomes and methodological quality. Findings among the existing studies varied and sometimes conflicted with one another concerning the impact of shift length on patient care, and particular provider outcomes were examined in too few studies to enable meaningful comparison. The authors note that these constraints along with other methodological limitations precluded effective meta-analysis of the studies examined, and that further and more rigorous research in this area is therefore needed. Two tables and one figure are included.

9. ***Errare Humanum Est*: Frequency of Laterality Errors in Radiology Reports.**
Sangwaiya MJ, Saini S, Blake MA, Dreyer KJ, Kalra MK.
Am J Roentgenol. 2009(May); 192(5):W239–W244.
This study sought to assess the frequency, characteristics, and clinical significance of laterality errors in a large sample of radiology reports from a tertiary care academic hospital. In a retrospective analysis of 1,065,322 reports, the authors identified 88 in which the clinical notes made mention of a side discrepancy between the radiographic image and the corresponding indication of laterality in the text of the report. Most of the errors were deemed clinically significant, and errors occurred almost twice as frequently in female patients as in males. The authors note that while the observed error rate is lower than has been found in other studies, this figure reflects only errors that had previously been detected; actual rates of error could be significantly higher. Implications of these findings and suggestions for reducing errors in the documentation of radiology findings are discussed. Two tables and one figure are included.

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10. **Errors and Omissions in Hospital Prescriptions: A Survey of Prescription Writing in a Hospital.**
Calligaris L, Panzera A, Arnoldo L, et al.
BMC Clin Pharmacol. 2009(May 13); 9(9).
Available at: http://www.biomedcentral.com/1472-6904/9/9
This study assessed the quality of written prescriptions as part of an ongoing quality improvement program at a university hospital in Udine, Italy. The authors analyzed 408 antibiotic prescriptions with respect to legibility, completeness of documentation, and various drug- and treatment-related factors. They found that almost one-quarter of prescriptions were illegible and almost 30% were incomplete, mainly because of missing date or physician signature. Quality tended to be higher in prescriptions involving uncommon drugs and was higher in prescriptions for ICU patients than in those for medical or surgical patients. One table is included.

11. **Ethics of Surgical Complications.**
Adedeji S, Sokol DK, Palser T, McKneally M.
World J Surg. 2009(Apr); 33(4):732–737.
This essay looks at the ethical considerations in the practice of surgery in general and with respect to surgical complications in particular. Using Beauchamp and Childress's "Four Principles" as a theoretical framework, the authors identify a variety of scenarios that surgeons may encounter and illustrate the surgeon's ethical obligations in each case. One table is included.

12. **Frequency of Failure to Inform Patients of Clinically Significant Outpatient Test Results.**
Casalino LP, Dunham D, Chin MH, et al.
Arch Intern Med. 2009(Jun 22); 169(12):1123–1129.
This study sought to determine how frequently primary care physicians failed to inform patients about clinically significant test results and to assess the impact of clinic processes and the use of electronic medical records on this tendency. In an analysis of 5,434 patient records from 23 primary care facilities, the authors found that failure to inform or to document that the patient had been informed occurred in 7.1% of cases in which abnormal results were present. Use of effective processes for managing test results, as determined by an independently derived "process score," was associated with lower rates of failure to inform. Four tables and one figure are included.

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13. **Impact of the 80-Hour Work Week on Mortality and Morbidity in Trauma Patients: An Analysis of the National Trauma Data Bank.**
Morrison CA, Wyatt MM, Carrick MM.
J Surg Res. 2009(Jun 1); 154(1):157–162.
This study assessed the effect of mandatory resident work hour limits on rates of morbidity and mortality in a large national sample of trauma patients. The authors used data from the National Trauma Data Bank to calculate and compare patient mortality and morbidity during two-year periods before and after implementation of the 80-hour work week in July 2003; they also compared outcomes in university versus nonteaching institutions. Results showed small but statistically significant overall reductions in mortality and morbidity following implementation of the 80-hour work week. Of note, aggregate reductions in mortality occurred only among the university hospitals; mortality in nonteaching hospitals as a group actually increased slightly during the post-implementation period. Further details and implications of these findings are discussed. Multiple tables are included.

14. **Interruptions in Healthcare: Theoretical Views.**
Grundgeiger T, Sanderson P.
Int J Med Inform. 2009(May); 78(5):293–307.
This study sought to synthesize existing evidence concerning the nature of interruptions in the healthcare environment and the relationship between interruptions and adverse events. The authors first summarize the existing literature on the subject and discuss possible reasons for the relative paucity of evidence on this issue. They then discuss potentially useful theoretical orientations and frameworks for future investigation, including prospective memory research and accident models such as those of Reason and Hollnagel. Two tables are included.

15. **Medicare Nonpayment, Hospital Falls, and Unintended Consequences.**
Inouye SK, Brown CJ, Tinetti ME.
N Engl J Med. 2009(Jun 4); 360(23):2390–2393.
Hospital falls are one of the conditions for which hospitals can no longer receive additional reimbursement under Medicare payment policy implemented in October 2008. In this editorial, the authors question the inclusion of hospital falls on this list. They debate the assumption that hospital falls are preventable and caution that an overly narrow focus on fall prevention may have serious unintended consequences.

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16. **Medication Errors in Neonates Admitted in Intensive Care Unit and Emergency Department.**
Suksham J, Basu S, Parmar VR.
Indian J Med Sci. 2009(Apr); 63(4):145–151.
This pilot study sought to identify medication errors among neonatal patients in the emergency department and neonatal intensive care unit at a teaching hospital in North India. In a retrospective analysis of 821 prescriptions from a 4-month period, the authors found that errors occurred with significant frequency and were approximately twice as common in neonatal patients treated in the ED as in patients in the NICU. Most of the errors were judged to have been preventable, and some had the potential to cause serious harm, although no serious or permanent harm actually occurred in these cases. Two tables and one figure are included.

17. **Safety on an Inpatient Pediatric Otolaryngology Service: Many Small Errors, Few Adverse Events.**
Shah RK, Lander L, Forbes P, Jenkins K, Healy GB, Roberson DW.
Laryngoscope. 2009(May); 119(5):871–879.
This study sought to characterize errors and adverse events (AEs) among patients admitted to the otolaryngology service of a tertiary care pediatric hospital. The authors reviewed charts for 50 randomly selected patients and recorded each instance of error or AE. The authors applied a "zero-defect" model that specified the most inclusive possible definition of error, encompassing everything from illegible handwriting to serious adverse events. Of a total of 553 errors and events detected through this process, most were charting or record-keeping lapses; there were 90 errors with no harm, and 26 minor and 8 moderate AEs. The significance of these findings and possibilities for further application of the study methods are discussed. Three tables, one figure, and two appendices are included.

18. **The Effect on Medication Errors of Pharmacists Charting Medication in an Emergency Department.**
Vasileff HM, Whitten LE, Pink JA, Goldsworthy SJ, Angley MT.
Pharm World Sci. 2009(Jun); 31(3):373–379.
This study assessed the impact of a process-based intervention on the incidence of medication errors in emergency department patients admitted to a South Australian university hospital. The authors compared patient medication charts between two groups: an intervention group, in which the medication history was obtained by a pharmacist before the patient was seen by the admitting physician; and a control group, in which the admitting physician took the initial medication history. Results showed that medication errors and discrepancies were significantly reduced in the intervention group as compared with the control, suggesting that pharmacist involvement in medication history-taking during the admissions process may be a useful strategy for improving medication safety. Three tables and one figure are included.

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19. **The Effects of Aviation-Style Non-Technical Skills Training on Technical Performance and Outcome in the Operating Theatre.**
McCulloch P, Mishra A, Handa A, Dale T, Hirst G, Catchpole K.
Qual Saf Health Care. 2009(Apr); 18(2):109–155.
This study assessed the impact of exposure to a crew resource management (CRM) team training program on surgical team members' safety-related attitudes, teamwork, and technical performance, as well as clinical outcomes at a UK teaching hospital. The authors found that overall technical skills, non-technical skills, and attitudes indicative of a culture of safety improved significantly following training; no significant effect on clinical outcomes was observed. The significance of these findings and possibilities for further research are discussed, specifically in relation to the use of "non-technical" training methods to improve technical proficiency.

20. **The Preparation and Administration of Intravenous Drugs before and after Protocol Implementation.**
Tromp M, Natsch S, Van Achterberg T.
Pharm World Sci. 2009(Jun); 31(3):413–420.
This pilot study sought to determine whether implementation of standardized procedures could reduce errors in the preparation and administration of intravenous medications at an academic medical center in The Netherlands. The authors compared data from direct observation of 72 nurses before and after implementation of the protocol, and found that use of the protocol was associated with significant reduction in errors. Three tables and an appendix are included.

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