Abstract # 37

National Surveys of Performance of Sterile Technique for Neuraxial Analgesia in Israel: Before and After the Release of International Guidelines

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Background: We conducted a survey to assess sterile technique practices for neuraxial anesthesia in Israel before and after publication of international ASRA guidelines.1

Methods: The sampling frame was the general anesthesiology workforce in each of the four medical faculties in Israel. Representative hospitals had high volume maternity services. Data was collected anonymously over one week in each hospital; waves occurred in April 2006 and September 2009. Primary endpoint questions: handwashing, removal of wristwatch/jewelry, wearing mask, wearing hat/cap and wearing sterile gown; the answering option was: "always", "usually", "rarely" or "never". Primary endpoint for analysis: respondents who both wash their hands and wear a mask ("handwash-mask combo") - "always" vs "any other response". We used a generalized estimating equations (GEEs) model. Hospital was a random variable.

Results: 135/160 (in 2006) and 127/164 (in 2009) anesthesiologists responded to the surveys; response rate 84% and 77% respectively. Respondents constituted 23% of the national anesthesiologist workforce. Data is presented graphically for: compliance ("always") and non-compliance ("never"); overall data (Figure 1) and data broken down by resident vs attending vs time-expired "non-resident/non-attending" (NRNA). The main outcome "handwash-mask combo" increased after guideline publication (33%±24 vs 58%±21; p=0.0058). In addition, significant increases were seen for handwashing (37% ± 25 vs 63% ± 21; p=0.0028) and wearing of hat/cap (53% ± 26 vs 76% ± 14; p=0.0044). An apparent improvement in sterile technique from 2006 to 2009 is noted across all hospitals and all physician groups.

Conclusions: International guidelines may have exerted a significant impact on the practice of sterile technique by anesthesiologists.