

EVLB53

ePoster Viewing

Late breaker session: Other

Dress code and traffic flow in the operating room: a multicentre study of staff discipline during surgical procedures

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Background:

The discipline of healthcare professionals (HCPs) in operating room (OR) can compromise the patient safety and more specifically increase the infectious risk. This study assess the traffic flow and clothing of operating staff during surgical procedures.

Material/methods:

Multicenter observational study in 15 French healthcare facilities (university, public and private) performed from January to June 2015. Four surgical specialties were audited targeting specific procedures: arthroplasty with implant in orthopedic, C-section in obstetric, hernia/gallbladder in digestive and hysterectomy/tumorectomy in gynecology). The respect of clothing rules was assessed by the appropriate wearing of: mask, scrub suits, head covers, shoes cover and absence of jewels. The traffic flow was evaluated by the direct observation and collection of the number of persons in the OR at incision, and the number and reasons for entries/exits between the incision and wound closure. Details on centers, staffs and procedures were also collected. A form was built for the 2 themes and a dedicated observer was present in the OR.

Results:

Among 1615 professionals, non-conformity of clothing was observed for 26% of them who wore jewels, 25% of head cover and 5% of mask incorrectly placed, and 2% wore clothes under their scrub suits. 67% of sterile instruments boxes were open < 15 minutes before the incision. Entries/exits were collected during 212 procedures, including 25 total hip replacement, 16 total knee replacement, 17 C-sections, 22 hysterectomy/tumorectomy, 28 hernia, 10 gallbladder resection. Additional operations were also audited in preselected and other specialties (ophthalmology, vascular, dermatology). A majority were elective surgery and 12 (6%) urgent. The median number of persons in the OR at the incision was 5 (4 – 6) Min Max 2-10, non-significantly different according to the elective/urgent category, the type of hospital ($p=0.09$ and 0.1 , respectively). The median frequency of entries/exits was 10.6 (6-29) per hour varying from 0-93, significantly higher in university/public vs private hospitals ($p<0.001$), among nurses ($p=0.02$) and lower for non-surgical staffs (assistant nurses, visitors...) ($p<0.001$). Among the 817 reasons of entries/exits informed, 364 (44.5%) corresponded to a lack of material, 113 (13.8%) for communication and 107 (13.1%) were linked to the staff planning (switch of team members, breaks...). A positive tendency was found for the correlation between a weak respect of clothing rules and a high traffic flow during procedures ($p=0.12$).

Conclusions:

This study suggests the discipline (mainly the traffic flow) of HCPs in OR during procedures is sub-optimal. The improvement of staff planning's, organization, communications issues may improve these factors affecting patient safety.