Promoting a 7 kg Surgical Crate Weight Limit at NZNO National Conference 2014

Conducting blinded lifting trials is a powerful strategy for raising awareness of the health risks associated with lifting heavy surgical crate weights. At the annual New Zealand Nurses Organisation conference in September 2014, delegates from the Perioperative Nurses College (PNC) took the opportunity to promote PNC's 7 kg surgical crate weight project. Conference delegates were invited to lift two identical looking crates, to guess the weight, and rank the effort required to lift each crate. One crate weighed 7 kg, representing the Australian Operating Room Nurses Association standard and the other crate weighed 11.3 kg representing the American Association of Perioperative Registered Nurses standard.

Eighty five delegates participated in the trial. The findings in Figure 1 show the delegate's perceptions around the amount of effort required to lift each crate. The vertical axis uses the Borg scale to rate perceived exertion. The horizontal axis is the number of delegates who participated in the lifting trial. Participates lifted the crates as a single straight up and down quick movement. The reality for perioperative nurses is that lifting surgical crates is not a one off movement. It is an accumulative risk of continual years of repetitive lifting and twisting in a workforce that is aging.





The Ministry of Health Chief Nurse, Dr Jane O'Malley was an invited guest at the NZNO conference and kindly agreed to participate in the crate weight blinded trial. On lifting the first crate, Dr O'Malley commented that the weight of the crate was similar to a 7 kg cabin carry bag. The PNC delegates explained that lifting orthopaedic surgical crates is comparable to traveling with 10 cabin bags; lifting each cabin bag at least 3 times; and then taking up to four flights a day. These flights may be scheduled or unscheduled at any time day or night, but instead of resting in flight, the perioperative nurse is scrubbing for an operation which involves repeated lifting and twisting. In addition it is proposed that around a third of surgical crate weights weigh more than the 7 kg recommendation. This analogy helps draw attention to the PNC 7Kg crate weight project, in a way that is relatable to non perioperative personnel. Dr O'Malley agreed that "lifting heavy surgical crates is a serious health and safety concern and applauds the perioperative nurses college for highlighting this issue".



Dr Jane O'Malley Ministry of Health Chief Nurse, feeling the strain during a surgical crate weight lifting trial

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