

# **Management Support for Safety, ‘Incivility’ and Use of the Hands-free Technique by OR nurses**

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## **Background**

A stronger hospital safety climate has been linked to fewer injuries and more work practice compliance. Specifically, the dimensions: ‘minimal conflict/good communication’, ‘management support for safety’, ‘feedback/training’, ‘no hindrances to following universal precautions’, ‘engineering control/personal protection availability’, and, ‘cleanliness/orderliness’, has been linked to fewer needlesticks and increased compliance with universal precautions.

Consequently it was hypothesized, that use of the hands-free technique, a recommended surgical practice whereby no two people touch the same sharp item at the same time during surgery, could also depend on safety climate. Therefore, for a future survey, the Hands-free Technique and Safety Climate Questionnaire was developed, integrating HFT use questions with the same safety climate questions, to measure the exposure and outcome of primary interest, and seven, validated questions on work-related ‘incivility’, to further explore respect and justice in the workplace. Accordingly, a test-retest reliability study of the safety climate and HFT use items was conducted, confirming reliability.

The following study is based on data from the full version of the questionnaire administered the first time.

## **Objective**

The study’s aim was to estimate ‘incivility’ directed to operating room (OR) nurses from supervisors, physicians and co-workers, the relationship between ‘incivility’ and safety climate dimensions and the influence of types of ‘incivility’ and safety climate dimensions on use of the HFT.

## **Methods**

Questionnaires were self-administered by 87 OR nurses in Ontario and British Columbia.

## **Results**

Study nurses in the two provinces were comparable in age, gender and weekly hours worked scrubbed and circulating.

In the past 5 years, 67 % of study participants had experienced ‘incivility’ from doctors, 64% from co-workers and 49% from supervisors.

Statistically significant correlations were noted between doctor ‘incivility’ and 5 of the 6 safety climate dimensions, including ‘good communication/decreased conflict’ ( $r = -0.38$ ;  $p < 0.001$ ) and supervisor ‘incivility’, was statistically significantly correlated to two dimensions, including ‘good communication/decreased conflict’ ( $r = -0.32$ ;  $p =$

0.002); for co-worker 'incivility', the only statistically significant correlation was with 'good communication/decreased conflict' ( $r = -0.37$ ;  $p < 0.001$ ).

When logistic regression was used to examine the influence of the six safety climate dimensions and three types of 'incivility' on use of the HFT 75% or more during surgery, while controlling for age, a statistically significant relationship was only found with the 'management support for safety' dimension ( $p = 0.03$ ), although a borderline effect with supervisor 'incivility' ( $p = 0.06$ ), was also found.

### **Discussion**

As anticipated, an inverse relationship between 'incivility' from supervisors, physicians and co-workers, and better scores on the 'communication/conflict' dimension was observed. However, using logistic regression, only the 'management support for safety' dimension was directly related to HFT use, although an association between higher supervisor 'incivility' and lower HFT use, was also suggested.

While 'incivility' on the part of supervisors is experienced less frequently than 'incivility' on the part of physicians or co-workers, it may have a greater impact on safe work practices. Both, greater 'management support for safety' and lower supervisor 'incivility', appear to increase HFT use during surgery.

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