



## AB068. An observational study, identifying, measuring and quantifying the interference of intraoperative distractions within the general surgery operating theatre

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**Background:** Surgical research has broadened to include an interest into the investigation of surgical workflow. Rigorous analysis of the surgical process has a particular focus on distractions. Distractions have the potential to increase surgeon stress, operative time and complications. Our study aims to objectively identify, classify and quantify distractions during the surgical process.

**Methods:** 46 general surgical procedures were observed within an Irish Hospital between June 2019 and October 2019. An established observational tool was used to apply a structured observation to all operations. Additionally, a nine-point ordinal behaviourally anchor scoring scale was used to assign an interference level to each distraction.

**Results:** Total operative observation time was 4,605 minutes

(mean =100.11 minutes, std. deviation 45.6 minutes). Overall, 855 intraoperative distractions were coded. On average, 18.58 distractions were coded per operation (std. deviation 6.649; range 5–34), with 11.14 distractions occurring per hour. Entering/exiting (n=380, 42.88%) and case-irrelevant-communication (n=251, 28.32%) occurred most frequently. Disruption rate was highest within the first (32%) and fourth operative quartiles (41%). Highest interference rates were observed from equipment issue and procedural interruptions. Anaesthetists initiated CIC more frequently (2.72 per operation), compared to nurses (1.57) and surgeons (1.17).

**Conclusions:** Our results confirm that distractions are prevalent within the operating theatre. Distractions contribute to significant interferences of surgical workflow. Steps can be taken to reduce overall prevalence and interference level by drawing upon a systems based perspective. However due to the ubiquitous nature of distractions, surgeons may need to develop skills to help them resume interrupted primary tasks so to negate the effects distraction have on surgical outcomes.

**Keywords:** Observation; interruptions; operating theatre; general surgery; distractions; surgical workflow

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