

Category:

Medical Education Research

Project title:

Using the Behavioural Change Wheel to explore environmentally sustainable anaesthetic practices and perceptions in the operating theatre: a qualitative study in Singapore General Hospital

Authors:

Ma Wai Wai Zaw¹, Leong Kah Mun², Cheryl Ho Wei Zhi², Sarah Lin¹, Xin Xiaohui³, Lie Sui An¹

¹ Department of Anaesthesiology, Singapore General Hospital, Singapore

² SingHealth Anaesthesiology Residency Program, Singapore

³ Health Services Research Unit, Singapore General Hospital, Singapore

Presenting authors:

Cheryl Ho Wei Zhi, Leong Kah Mun

Aim:

Surveys of anaesthesiologists in various countries show that despite a strong interest in implementing environmentally sustainable anaesthetic practices, less than a third did so. Some of the barriers reported include lack of support from hospital or OT leadership, staff attitudes, and inadequate information on recycling. Qualitative understanding of the capability, opportunity and motivational factors that influence “green” behaviour will help inform the design of effective interventions to promote environmentally sustainable practices in the OT.

Methodology:

21 semi-structured interviews with anaesthesiologists from SGH of varying seniority were conducted, with data saturation achieved. Interview questions addressed ‘Capability’, ‘Opportunity’, and ‘Motivation’ determinants of behaviour as per the Behaviour Change Wheel. Interviews were audio-recorded, transcribed, proofread and inductively coded using NVivo (released March 2020).

Results:

Preference for sevoflurane and syringe reuse were most commonly cited as existing green anaesthetic practices. However, several participants reported knowledge limitations and lack of formal teaching, discussions and feedback on individual efforts as impediments to sustainable anaesthetic practices. Environmental barriers raised include inadequate recycling facilities and abundance of readily accessible supplies. Interviewees also discussed the importance of habitual behaviour in improving skillset and reducing cognitive load required to perform green practices. General awareness of environmental issues and aggregation of marginal gains were reasons for green behaviour in the OT. Organization of practice played a significant role, as limited junior manpower and senior-junior power relationships influence conduct of anaesthetic practices. While senior anaesthetists described top-down directives to effect change, younger interviewees suggested incentivisation measures to improve sustainable measures in the OT.

Conclusion:

This study provides insight into the factors that influence the adoption of “green” practices in the OT. Measures that should be addressed to promote green anaesthetic practices include education and training, avenues for feedback on efforts, senior anaesthetist engagement and support, environmental restructuring, and policy designs that balance incentivisation and coercion.

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