

# Global Airway management of the Unstable cervical Spine Survey (GAUSS)

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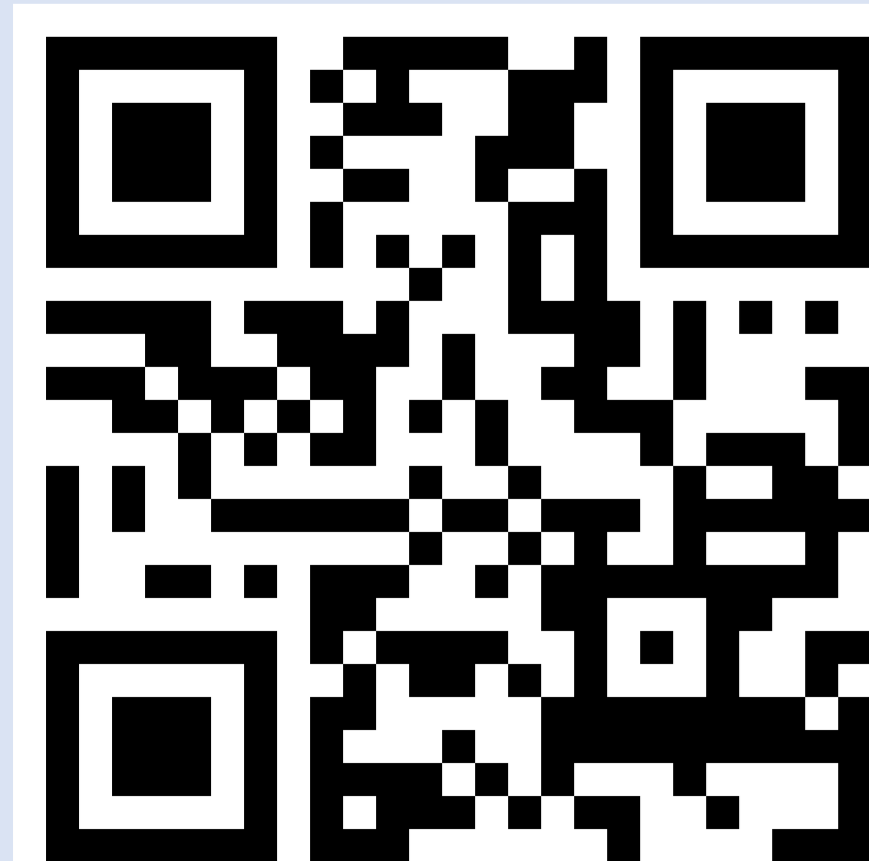
## Background

Awake fibreoptic intubation (AFOI) has traditionally been the recommended airway technique in unstable cervical fractures. Previous surveys of airway management have confirmed this preference, but most were conducted more than 15 years ago, before video laryngoscopy (VL) became widely available. **We queried whether VL has changed clinical practice and conducted a global online survey of physician anaesthesia providers** to ascertain current practices.

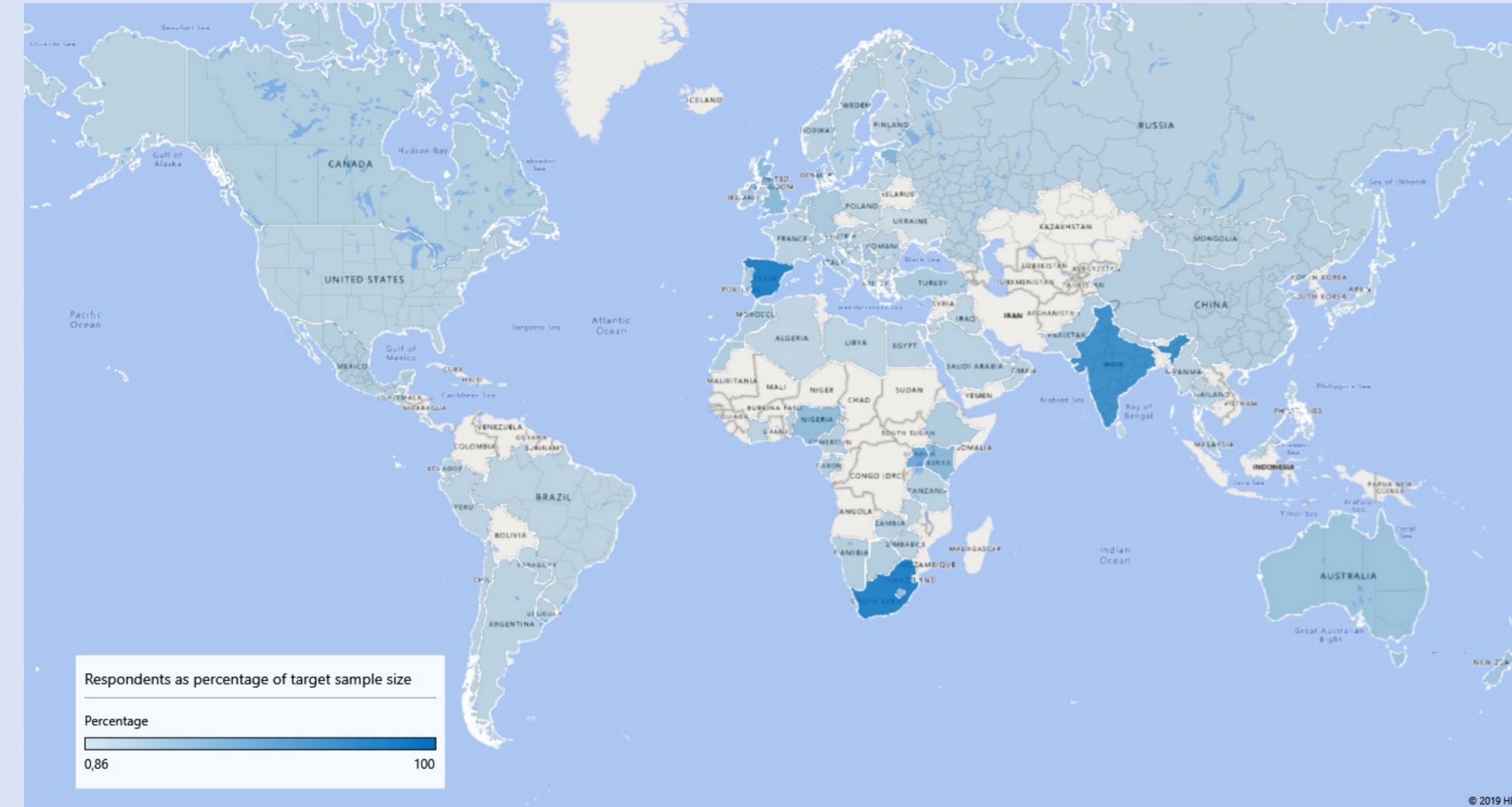
## Methods

With ethical approval, we created an electronic REDCap questionnaire featuring **two hypothetical patients** (one emergency and one urgent elective case) with unstable spinal injury. The questionnaire consisted of 29 close ended questions and was piloted on 20 airway experts from across the globe. Several modifications were made to ensure clarity and completeness of close ended options. **Respondents were asked about their training, experience, airway skills, current clinical setting and availability of airway equipment, and then questioned on their preferred airway strategy** in each case. The questionnaire was activated in January 2019 and distributed to physician anaesthesia providers through the WFSA member societies, the WFSA newsletter, and via social networks.

More info and references:



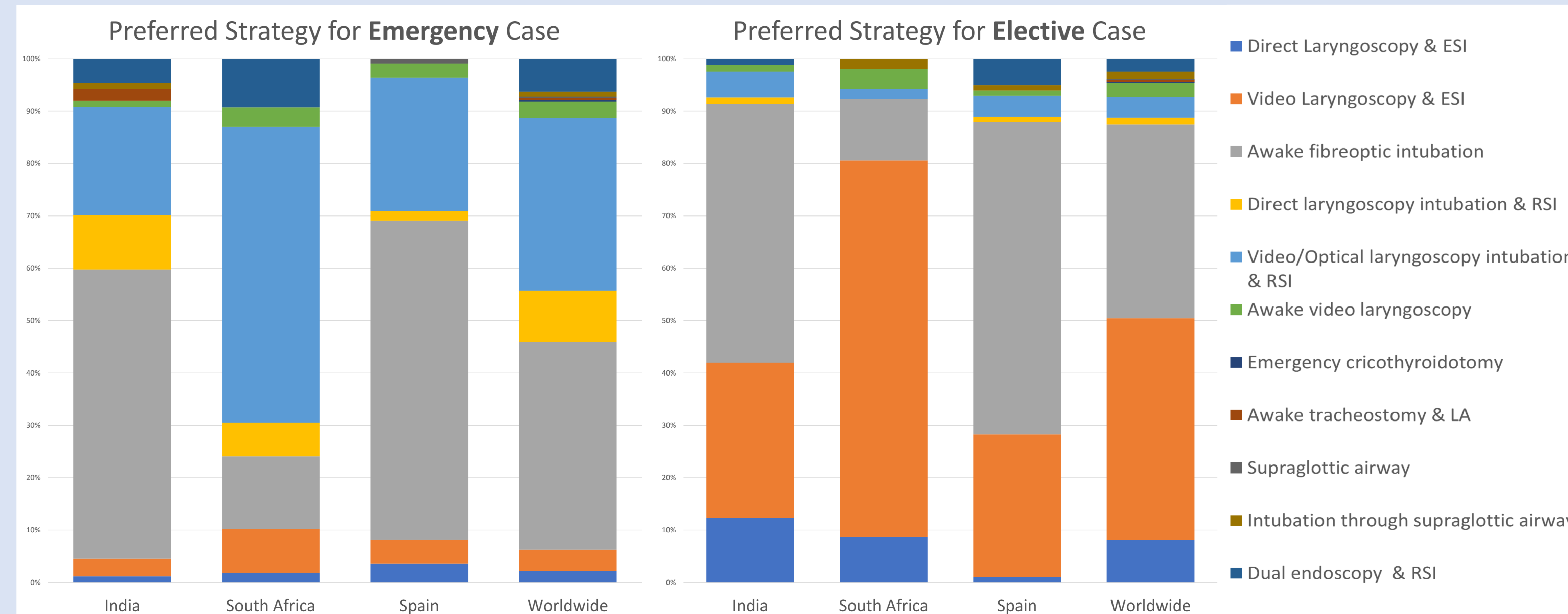
Acknowledgements:



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## Unstable cervical spine injury: How do you manage the airway?



## Results

We were able to reach our target sample size in three countries so far: India, Spain and South Africa. **Preliminary results exceed 1200 responses of which 852 from 98 countries** were deemed suitable for analysis.

**In the emergency case, 40% of participants (n = 303) preferred AFOI** while only 33% (n = 256) chose rapid sequence induction with VL intubation. **The majority selected elective sequence intubation with VL in the elective case (42%; n = 311),** with only 37% (n = 267) preferring AFOI.

**Significant regional variation in preference was found.** 60% of respondents from Spain (n = 67) preferred AFOI for the elective and emergency cases. In contrast, the majority of South African respondents preferred VL for both cases. (56% in the emergency case and 72% in the elective case).

## Discussion & Conclusions

The study is subject to several limitations: possible lack of instrument validity, measurement validity and response bias. The survey was only available in English. Of interest is how airway strategy preference seems to be greatly influenced by the country of practice. Further associations between demographics and clinical preference will be sought in the evaluation of the final data. There is a strong preference for VL in elective cases - traditionally a stronghold of fibreoptic intubation.

**Current practice in airway management of the unstable cervical spine patient is moving away from AFOI. VL appears to be at least as popular as AFOI.**