



Paramedian approach in neuraxial anaesthesia – a national survey

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Introduction

The paramedian approach is frequently used as a rescue technique for difficult central neuraxial analgesia/anaesthesia [1]. Most of the training in this approach seems to be informal resulting in uncertainty and unfamiliarity when using this technique in an emergency, due to a lack of confidence.

We aimed to assess the views of anaesthetists within the health boards in Wales regarding the strategies used for difficult lumbar spinal/epidural placements and paramedian experience.

Methods

We designed a short eight question survey using Microsoft Forms, whose link was then forwarded to all the anaesthetic secretaries of the seven Welsh Health Boards. They were asked to disseminate the link to anaesthetists within their department. Data was collected over a period of 33 days.

Discussion

The paramedian approach is well recognised as a rescue rather than a primary technique for central neuraxial analgesia/anaesthesia and this survey supports this. Training in the technique seems to be mainly informal and adhoc. Although at a junior level, we agree that the focus should be on improving and perfecting the midline approach, what use is a rescue technique that is not taught or practiced frequently?

All grades expressed interest in, and would likely benefit from formal training workshops using ultrasound and neuroaxial simulators. Based on these results we therefore plan to run soon a workshop on Paramedian Approach and Sonoanatomy for lumbar neuroaxial placements.

References

1. Macpherson, F. Quondamaeo. M. Broom. Update on applied epidural anatomy. BJA Educaon 2022; 5: 182-189. [hps://doi.org/10.1016/j.bjae.2021.12.006](https://doi.org/10.1016/j.bjae.2021.12.006)

Results

• 137 responses with an average time to complete of 2:14 minutes. Powys Teaching Health Board was excluded as most anaesthetists cover other sites

Number of responses per Welsh Health Board	
Aneurin Bevan	35
Betsi Cadwaladar	8
Cardiff and Vale	33
Cwm Taf Morgannwg	18
Hywel Dda	4
Swansea Bay	39

Table 1 – Number of responses per Welsh Health Board

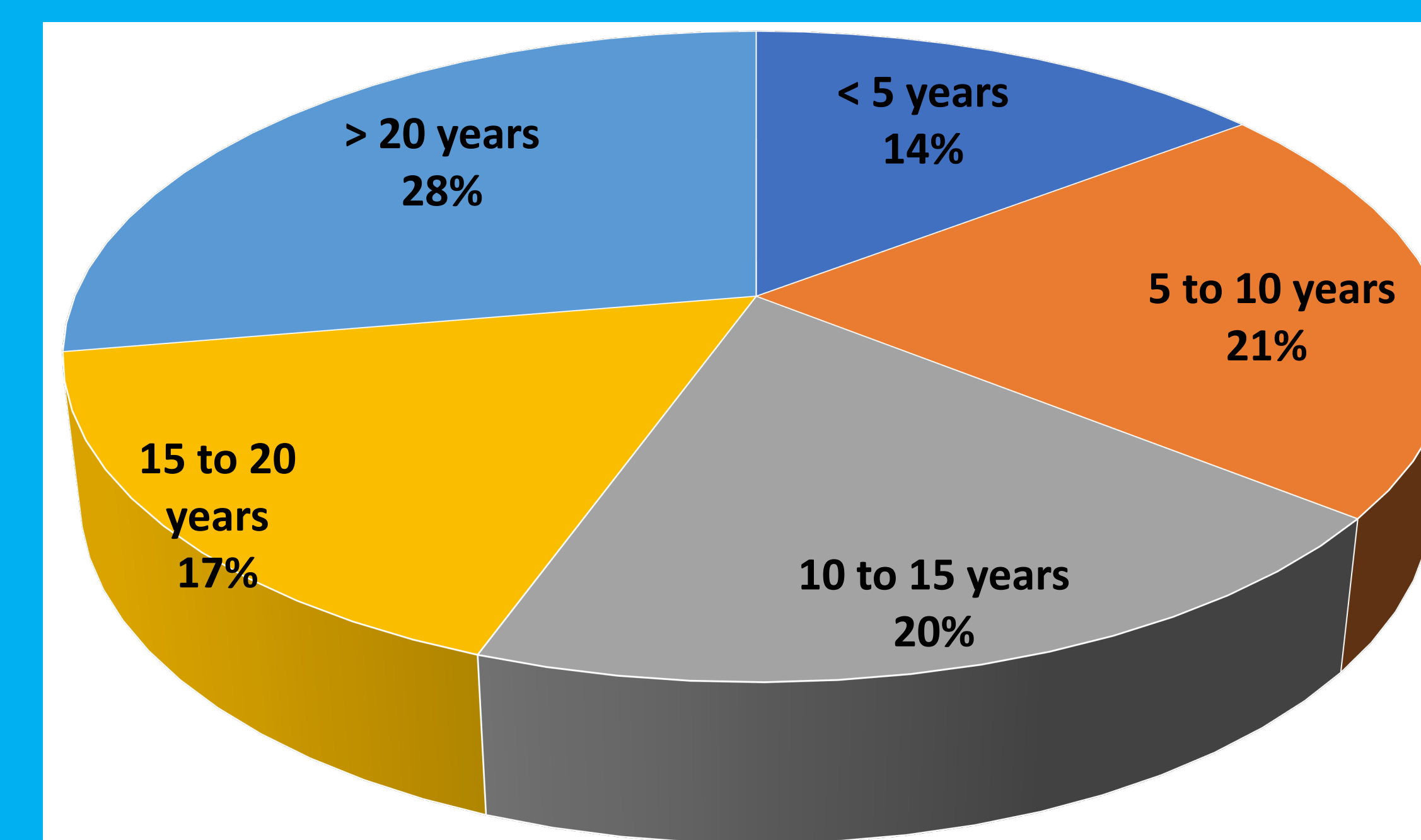


Figure 1 – Experience placing lumbar epidurals/spinals

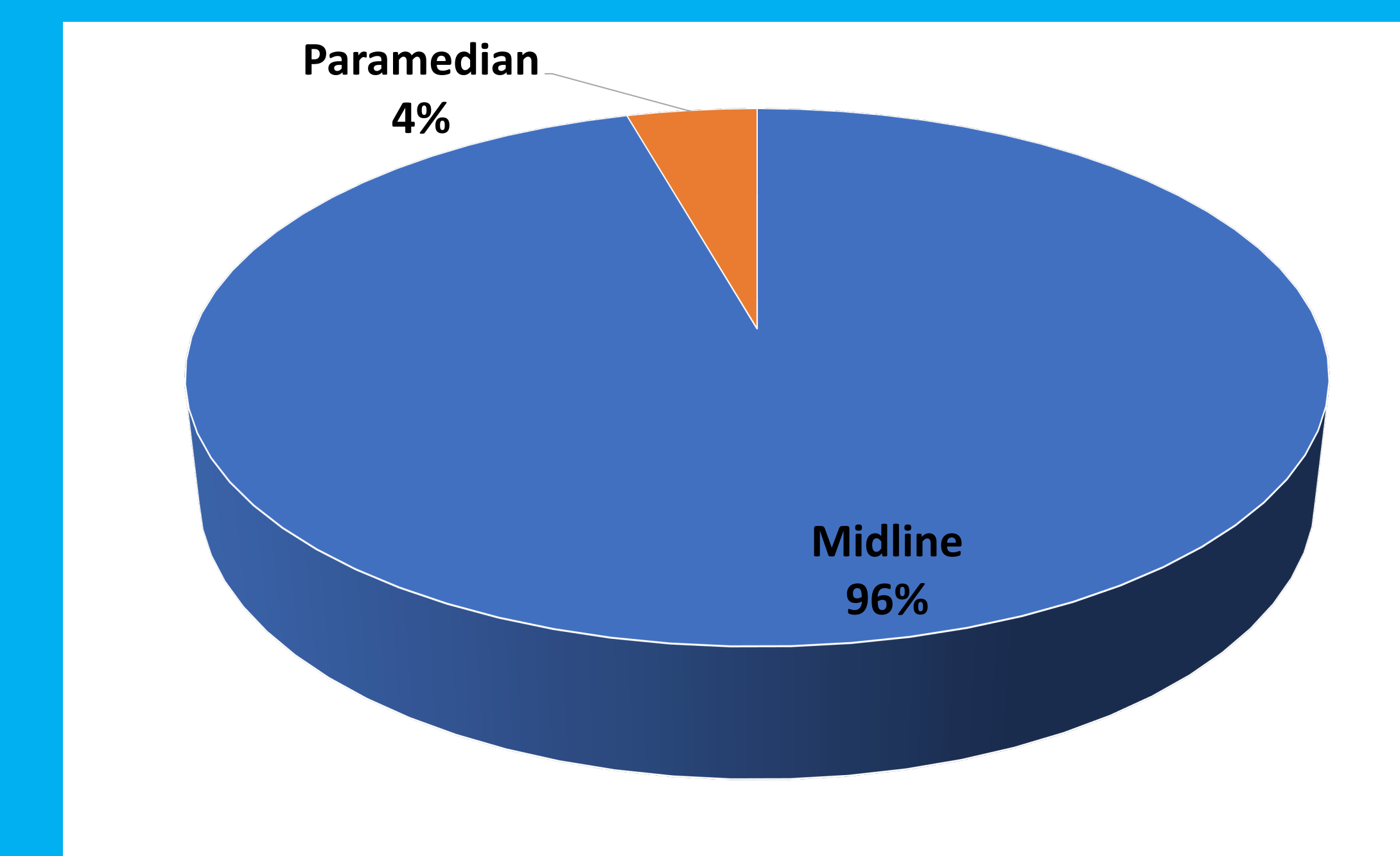


Figure 2 – Primary technique for lumbar spinals/ epidurals

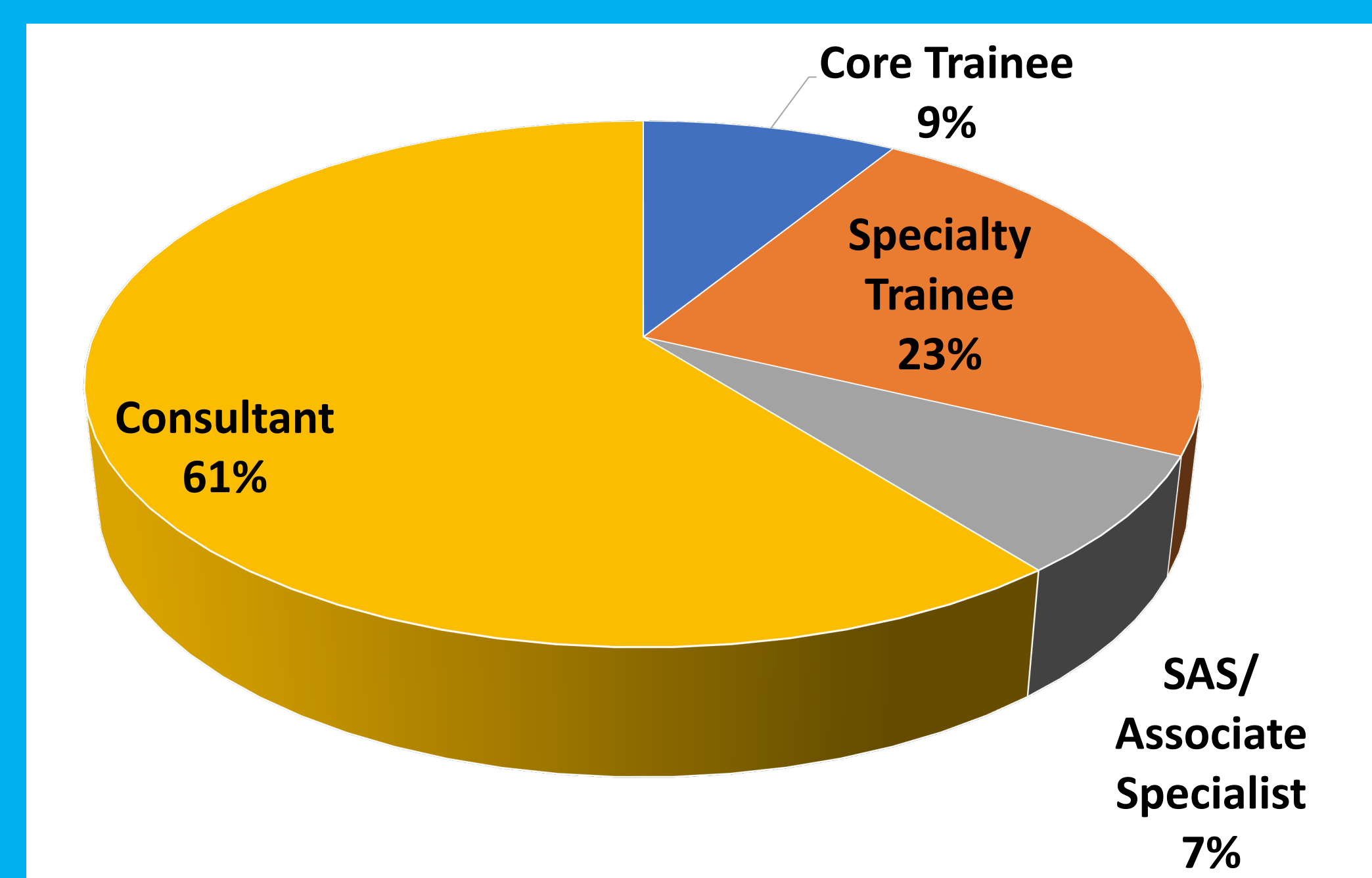


Figure 3 – Current grade

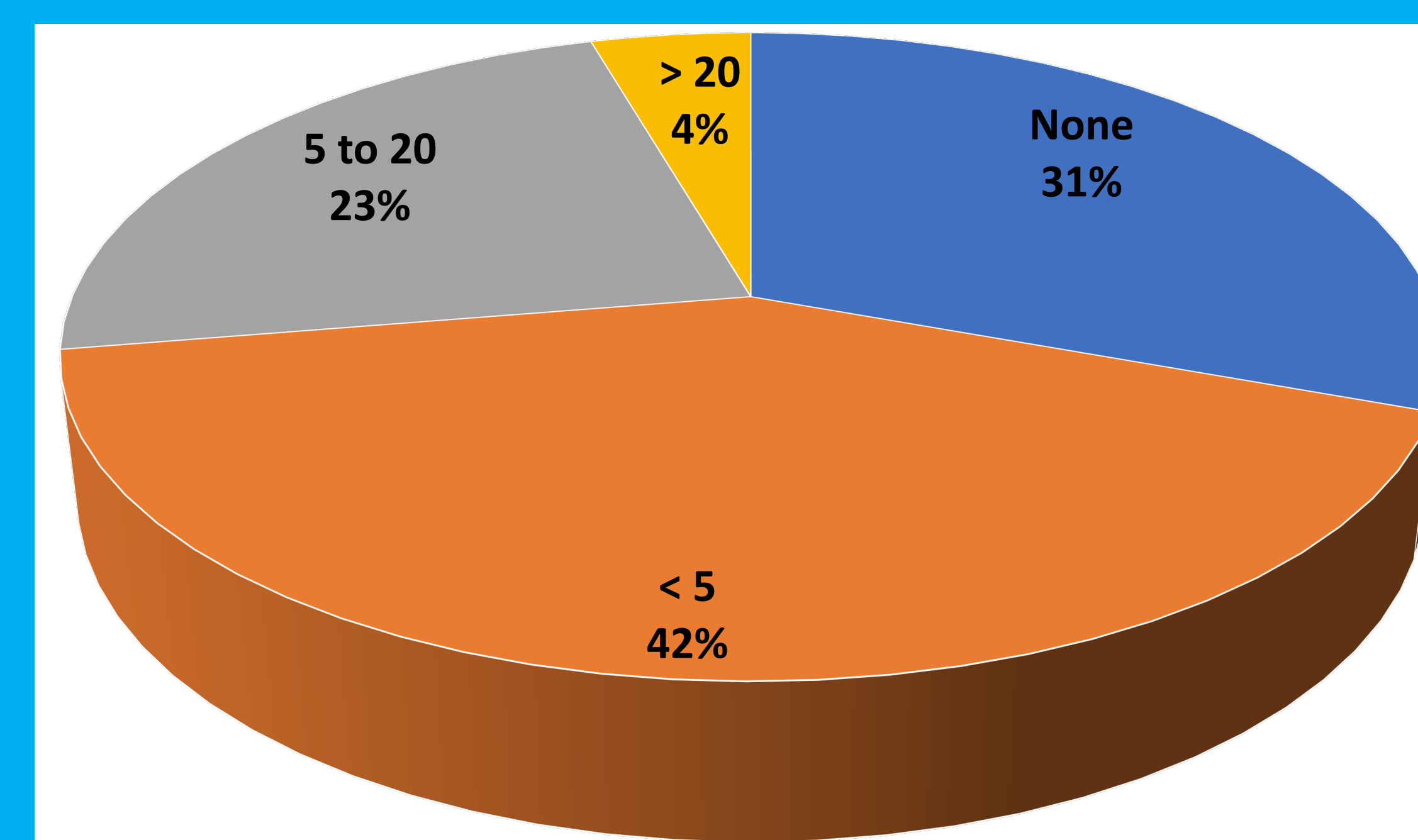


Figure 4 - Number of Paramedian techniques in last 12 months

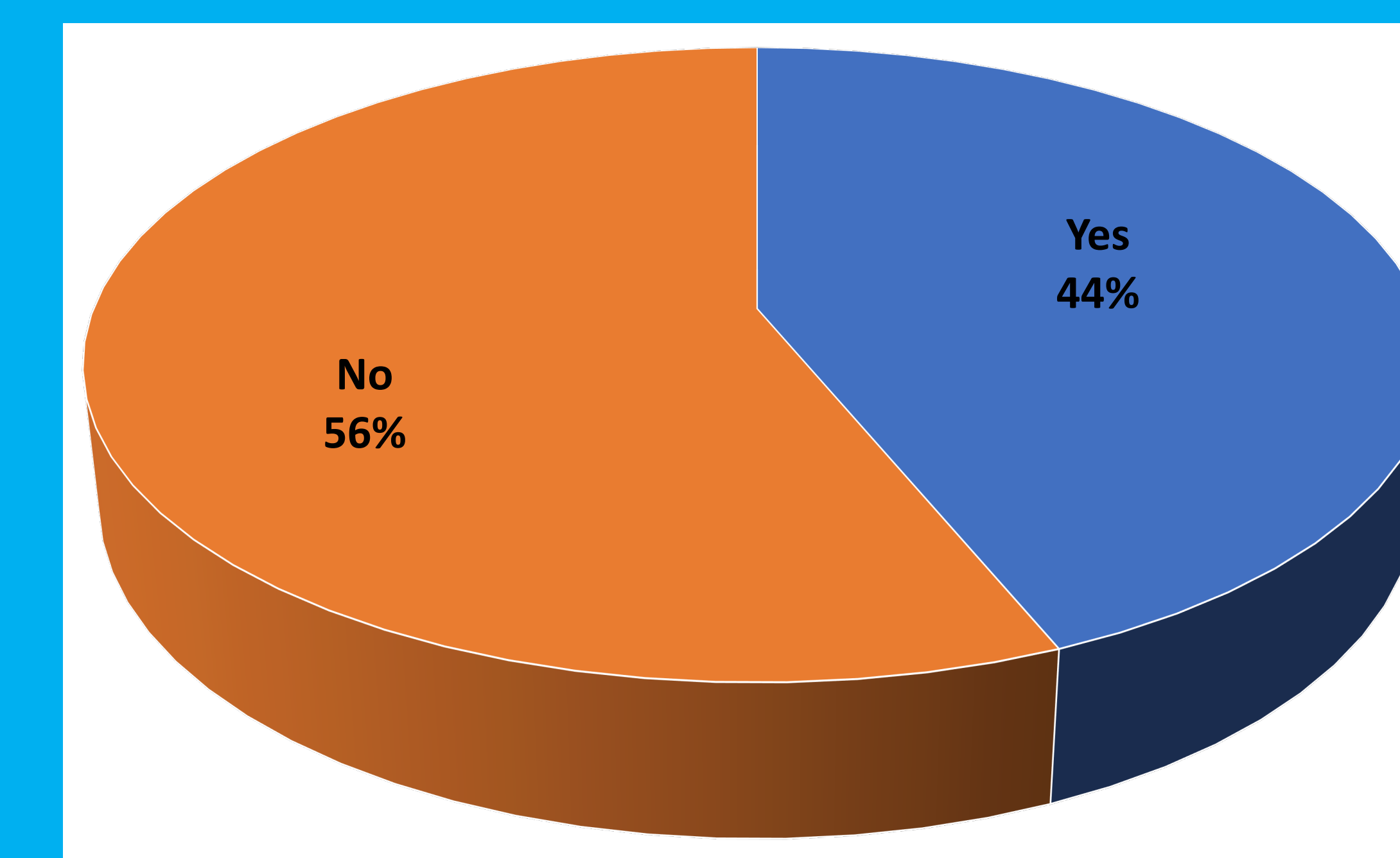


Figure 5 – Specific training received in paramedian approach

Rescue techniques employed if primary technique failed			
Different Space	99.4%	Paramedian approach	62.7%
Call for help	43.1%	Use of ultrasound	30.6%

Table 2 – Rescue techniques employed if primary technique failed