

# Old or new? Perceived value weightings for Obstetric GA techniques.

M McGarraghy, S Young  
Princess Royal Maternity, Glasgow



## Introduction

In recent years, the use of traditional drugs such as Thiopentone in obstetric practice has been questioned with national surveys suggesting respondents would support a change to drugs widely used such as propofol and rocuronium<sup>1,2</sup>. Using the novel method of opportunity cost analysis, we aimed to see whether our colleagues perceived newer techniques to have more or less value than the traditional ones in our unit guidelines.

## Methods

The project was approved by the departmental QI group who considered ethical permissions unnecessary. A power calculation suggested 35 subjects would have an 80% power to detect a 33% difference. Because of covid-19 restrictions we chose an on-line survey format and invited all the anaesthetists within the Glasgow Royal Infirmary to participate. Respondents were given a hypothetical scenario in which they were asked to imagine they were a pregnant woman in a healthcare system that charged for drugs used. They were asked how much they would be willing to pay for a series of drug combinations, being free to insert any figure between £0 and £100 for each answer. The results for "traditional" and "modern" drugs were compared.

## Results

The first 40 respondents from an emailed study link sent in February 2021 were analysed using 2 tailed T-tests.

	Mean	SD	P-Value
Thiopentone/Suxamethonium	£28.89	31.37	
Propofol/Rocuronium	£55.95	32.50	0.003*
Neostigmine	£12.40	15.44	
Sugammadex	£64.94	33.53	<0.001*
Morphine PCA	£36.86	31.82	
Oral opiates	£48.90	32.10	0.09 (NS)

Respondents would pay an average of £39.25 for a video-laryngoscope, £33.55 for a TAP block and £55.74 for ondansetron/dexamethasone.

Fig 1. Average value placed on various induction drug combinations

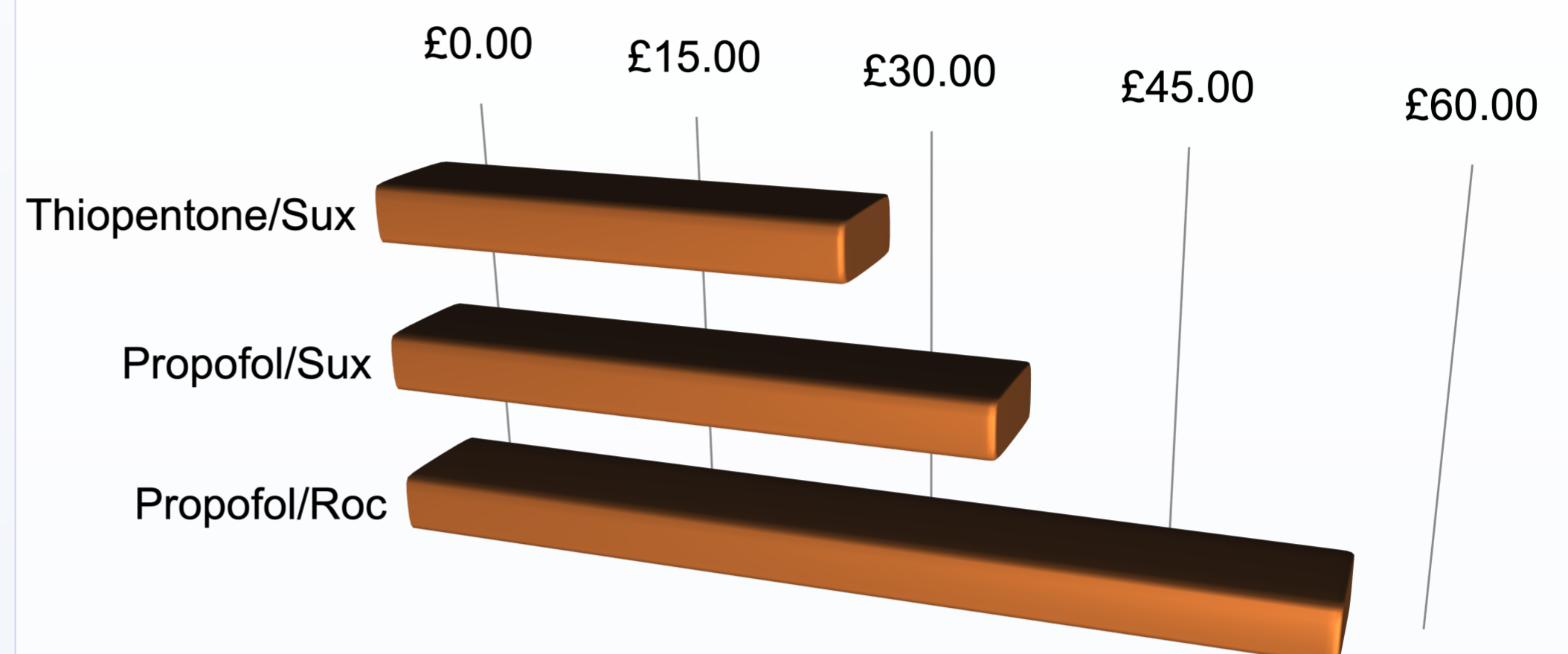


Fig 2. Average value placed on various reversal agents

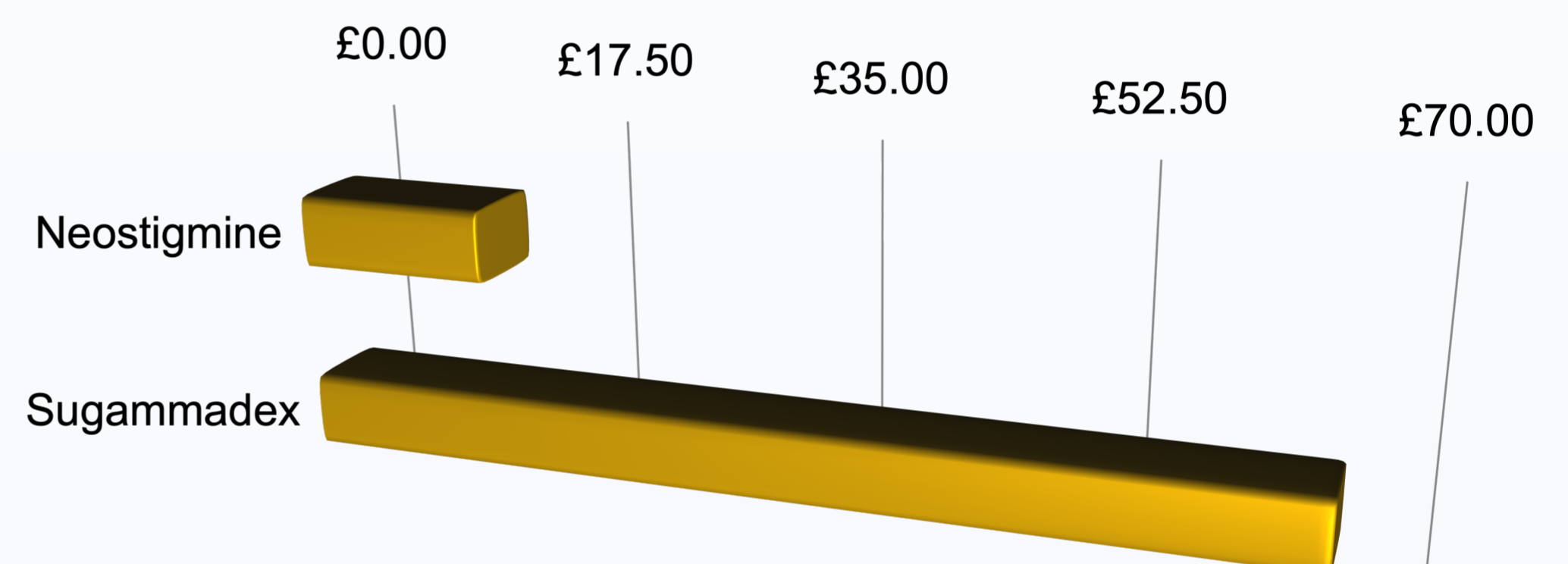
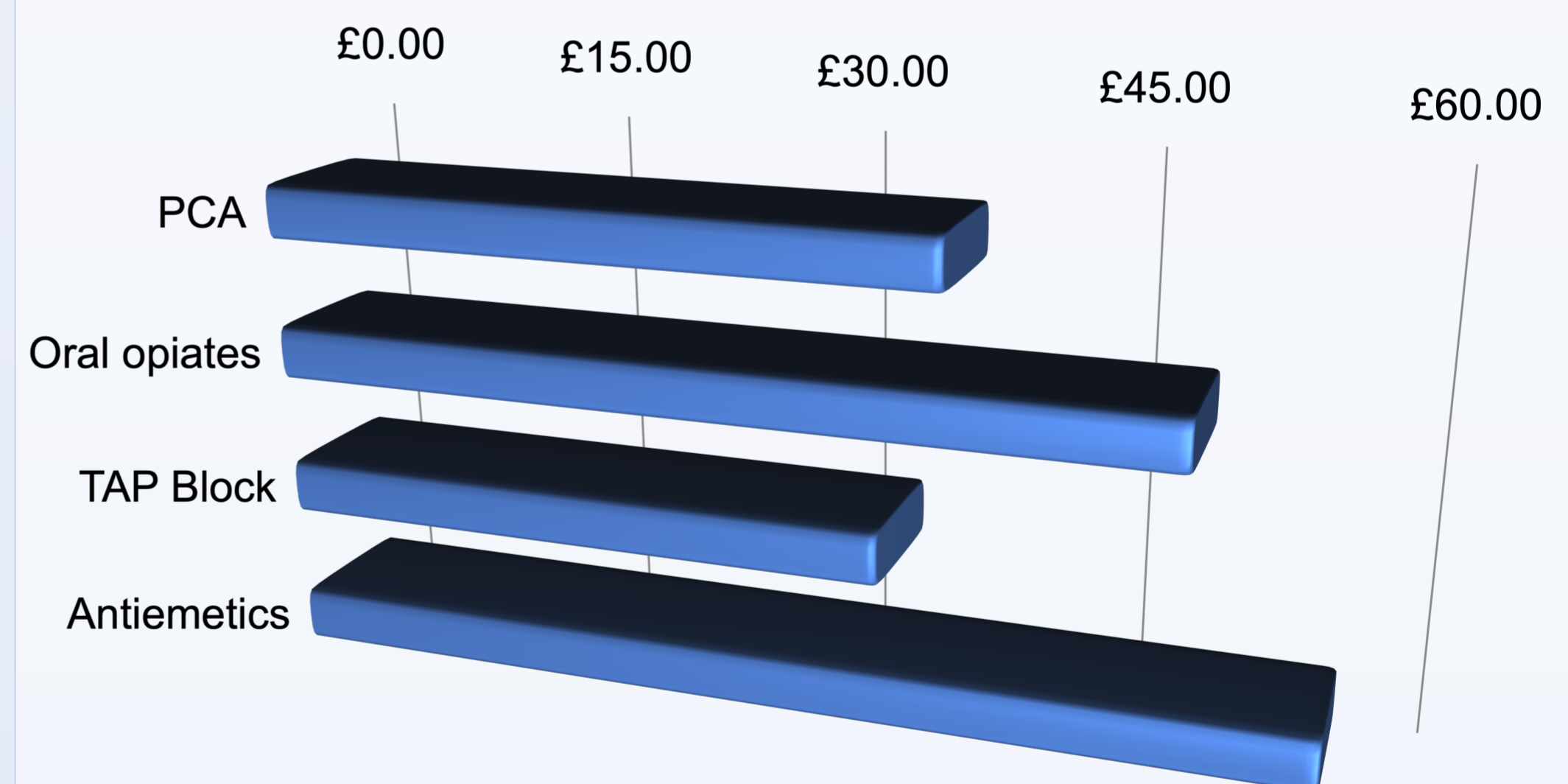


Fig 3. Average value placed on analgesics/ antiemetics



## Conclusion

Using an opportunity cost format, we have demonstrated a statistically significant value preference for "modern" over "traditional" drug techniques, with the exception of analgesia, amongst anaesthetists. As our published guidelines are for traditional methods, this has implications for practice moving forward.

## References

- Desai N, Wicker J, Sajayan A, Mendonca C. A survey of practice of rapid sequence induction for caesarean section in England. *Int J Obstet Anesth.* 2018 Nov;36:3-10. doi: 10.1016/j.ijoa.2018.05.008. Epub 2018 Jun 1. PMID: 30392651.
- Murdoch H, Scrutton M, Laxton CH. Choice of anaesthetic agents for caesarean section: a UK survey of current practice. *Int J Obstet Anesth.* 2013 Jan;22(1):31-5. doi: 10.1016/j.ijoa.2012.09.001. Epub 2012 Oct 31. PMID: 23122280.