

# MP44-09 Cutting the Cord: A National Survey on Urology Resident Vasectomy Training

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## ABSTRACT

**BACKGROUND:** Vasectomy is one of the most common procedures urologists perform, usually under local anesthesia on the awake patient. Supervised resident performance of vasectomy in the awake patient has been demonstrated to be safe and well tolerated by patients, but resident exposure to vasectomy, especially in the office setting, may still be limited. The aim of this study is to better understand resident experiences with vasectomy training in the office and operating room and to identify potential barriers to learning the procedure.

**METHODS:** An 18-question survey was distributed by email to urology residents of the 135 ACGME accredited urology residencies in the United States. The anonymous survey asked residents to specify the total number of vasectomies they had performed, the environment where they performed the procedure (OR vs. office), their comfort level performing vasectomy independently, and any perceived barriers to learning the procedure. Demographic data collected included the AUA region of their training program and resident year of training.

**RESULTS:** A total of 119 residents responded to the survey (10% response rate). Each AUA section was represented, and respondents were fairly evenly distributed by post-graduate year. 37% of residents had performed 20 or fewer vasectomies by their final year of training. 24.4% said they had received no formal training in peri-operative counseling for patients considering vasectomy. When asked about their comfort level with vasectomy, only 64.5% of residents felt comfortable performing vasectomy in the office setting versus 89.1% who felt comfortable performing vasectomy in the operating room ( $p < 0.01$ ). While comfort level increased with year of training in both environments, 16.7% of residents in their final year of residency were uncomfortable performing vasectomy in the office. 61.5% of residents surveyed cited one or more barriers to learning vasectomy. The most commonly cited barriers were lack of surgical volume (38.7%), lack of vasectomies being performed in resident clinic (29.4%), and lack of resident autonomy when performing the procedure (22.7%).

**CONCLUSIONS:** While a majority of residents feel comfortable performing vasectomy independently, they are significantly less comfortable doing so in the office setting, even in their final year of training. Residents describe low volume of vasectomies performed and lack of autonomy as barriers to developing skill in this procedure. Allowing residents to spend more time in the outpatient setting to gain exposure to vasectomy, especially if the procedures are can be clustered in a single morning or afternoon clinic, may improve resident training in vasectomy and increase confidence in the procedure.

## INTRODUCTION

- Vasectomy is one of the most common outpatient procedures performed by urologists
- Ngyugen et al demonstrated that office vasectomy performed by urology residents is safe and well tolerated by patients<sup>1</sup>
- Resident exposure to office vasectomy may still be limited, and resident competency and comfort with vasectomy have not been assessed

<sup>1</sup> Nguyen, CT, Hernandez, AV, Gao, T, Thomas, AA, & Jones, JS (2008). Office Based Vasectomy Can be Performed by Supervised Urological Residents With Patient Pain and Morbidity Comparable to Those of a Staff Surgeon Procedure. *J Urology*, 180(4), 1451-1454.

## OBJECTIVE

The aim of our study was to understand resident experiences with vasectomy training including potential barriers to learning the procedure

## METHODS

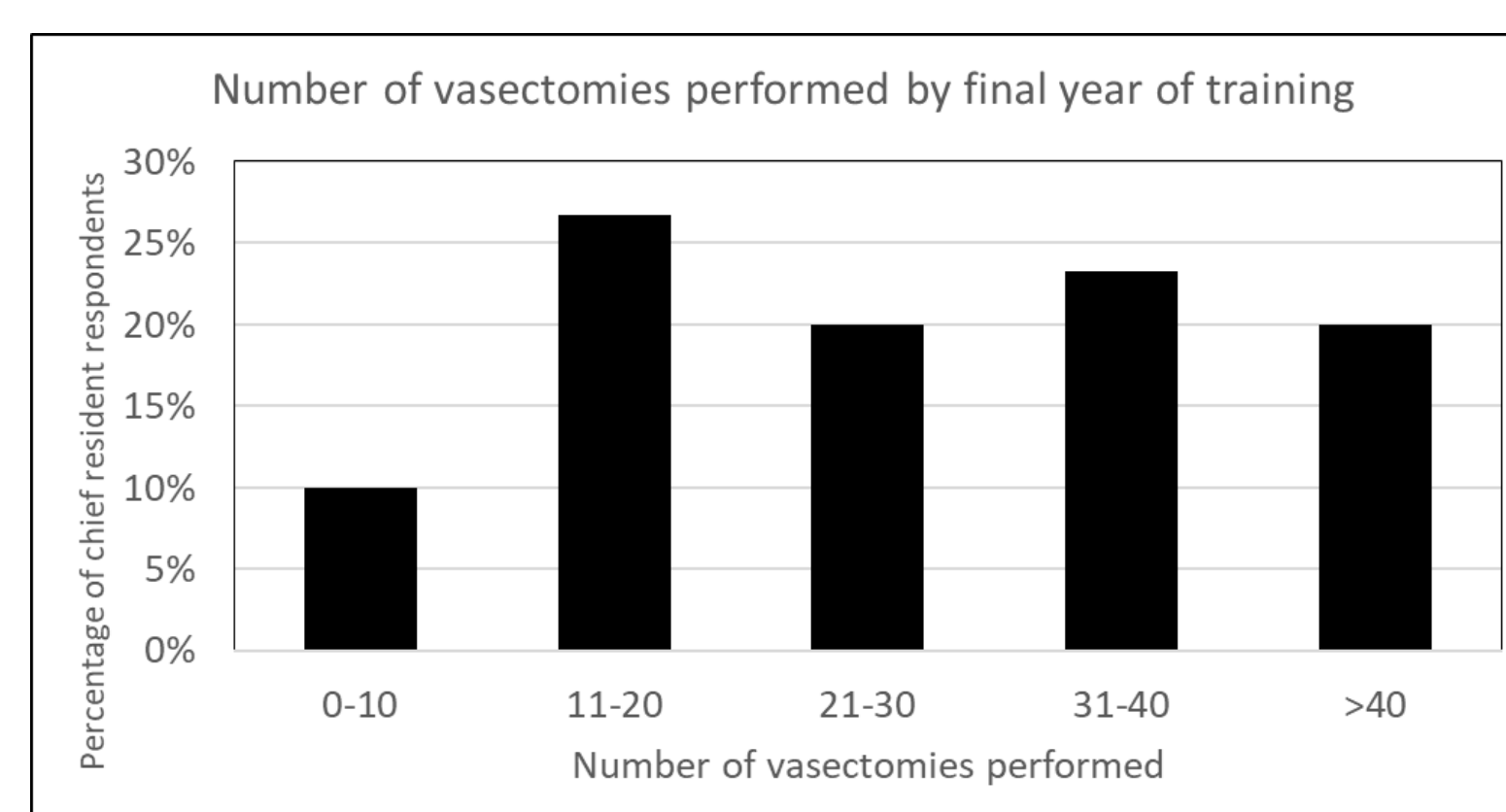
- An IRB-approved 18-question survey on SurveyMonkey™ was sent to residents at all 135 ACGME-accredited urology residency programs
- We assessed resident demographic data, number of vasectomies performed, comfort with the procedure, and environment where vasectomies were performed
- Residents were asked about perceived barriers to vasectomy training

## RESULTS

A		B	
Respondent	No. (%)	Respondent	No. (%)
Total	119 (10)	AUA Region	
Year of Training		Mid-Atlantic	10 (8)
Uro 1	34 (28.6)	New England	19 (16)
Uro 2	30 (25.2)	New York	2 (1.7)
Uro 3	27 (22.7)	North Central	15 (12.6)
Uro 4	28 (23.5)	Northeastern	6 (5)
		South Central	23 (19.3)
		Southeastern	28 (23.5)
		Western	16 (13.4)

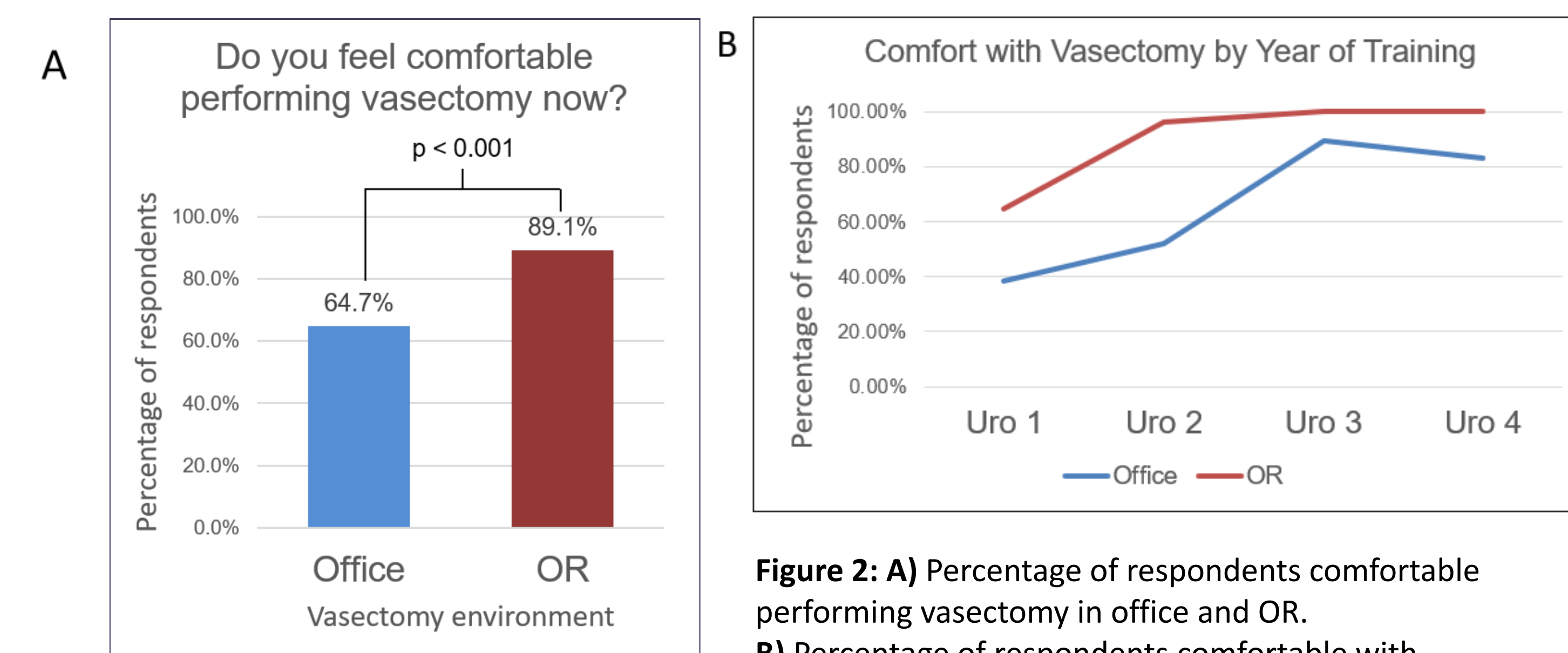
Respondents were evenly distributed by year of training, and all AUA regions were represented with a total of 119 respondents (10% response rate).

**Table 1:** Respondent demographics including A) current year of residency training and B) AUA region



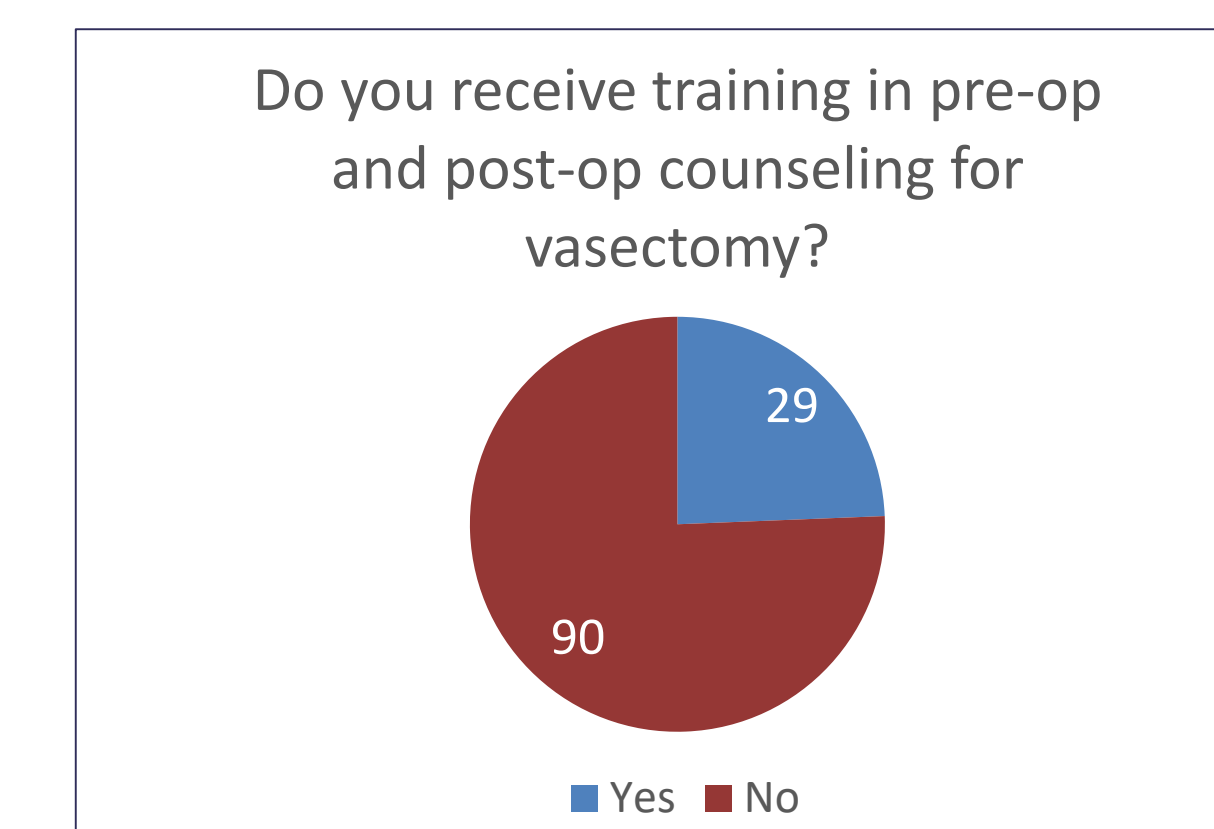
37% of residents had performed 20 or fewer vasectomies during their entire residency

**Figure 1:** Histogram demonstrating the total number of vasectomies performed by chief resident respondents



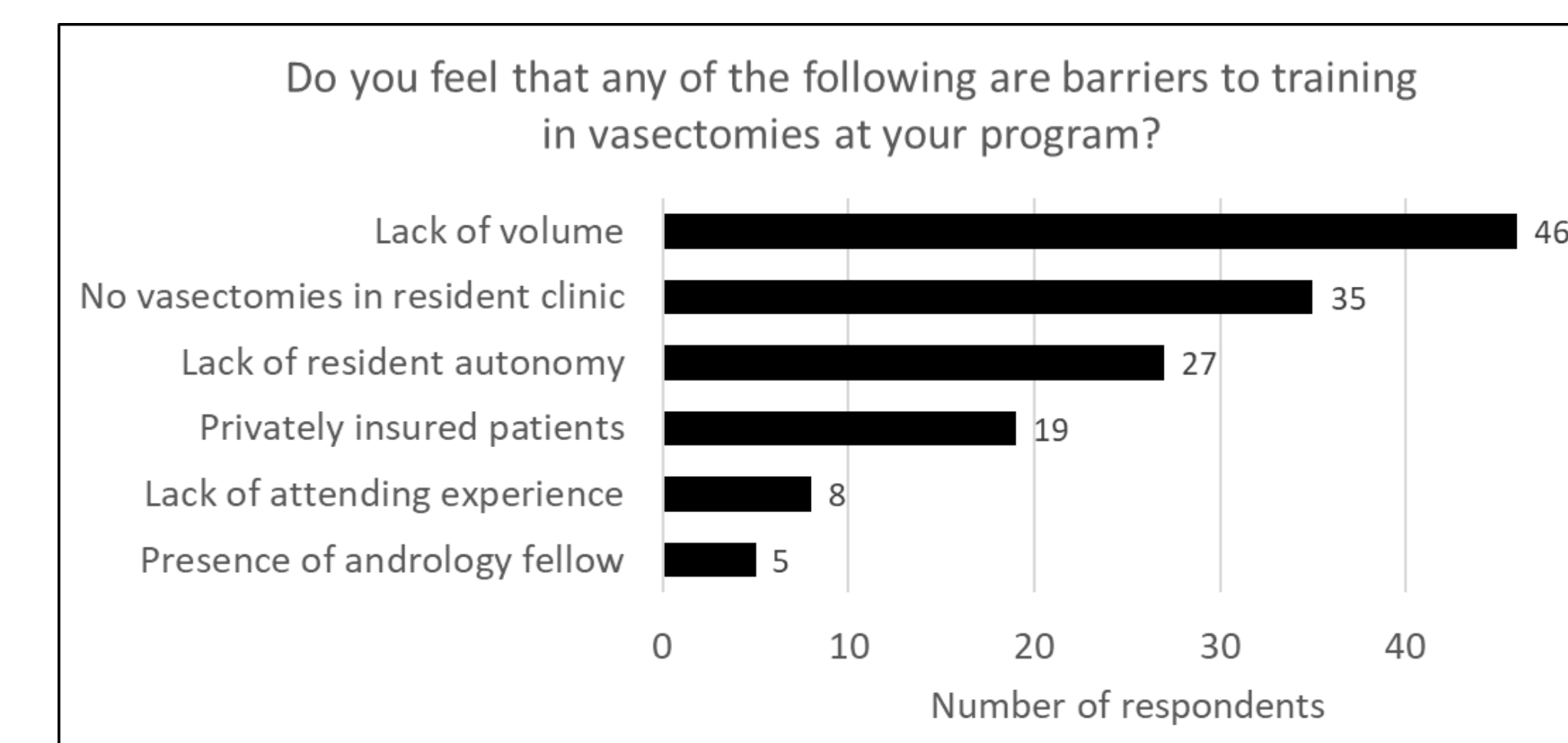
**Figure 2: A)** Percentage of respondents comfortable performing vasectomy in office and OR. **B)** Percentage of respondents comfortable with vasectomy by year of training and environment

Residents were significantly less comfortable performing vasectomy in the office versus in the operating room throughout all years of training, with 16.7% of residents in their final year of training reporting discomfort performing office vasectomy.



**Figure 3:** The number of respondents receiving training in pre- and post-vasectomy counseling

Only 24.4% of respondents said they were trained in pre- and post-operative counseling for patients seeking vasectomy



**Figure 4:** Number of respondents reporting that a given factor was a barrier to their learning vasectomy

61.5% of respondents cited one or more barriers to vasectomy training. The most commonly cited were lack of surgical volume (38.7%), lack of vasectomies being performed in resident clinic (29.4%), and lack of resident autonomy when performing the procedure (22.7%)

## CONCLUSIONS

- A majority of residents feel comfortable performing vasectomies but are less comfortable in the office versus the operating room
- Commonly cited barriers to vasectomy training include low surgical volume, especially in resident clinics, and lack of resident autonomy
- Targets for improvement:
  - Protect clinic time for residents to learn office-based procedures
  - Cluster vasectomy patients in clinic to improve resident accessibility
  - Include simulation for vasectomy training
  - Provide formal training in perioperative counseling for vasectomy