

# Geographic Distribution and Characteristics of Reproductive Urologists in the United States (MP26-08)

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## Background

- Infertility affects 8-15% of couples worldwide. 40-50% of infertile couples have a male factor<sup>1</sup>
- Analysis of data from the National Survey of Family Growth showed that up to 18% of couples undergoing fertility testing only had female partner evaluation<sup>2</sup>
- Low rates of male evaluation may be due to barriers of access to care
- We examined the geographic distribution of reproductive urologists relative to population density throughout the United States to determine whether restricted access to care could be contributing to the underutilization of male fertility evaluations

## Methods

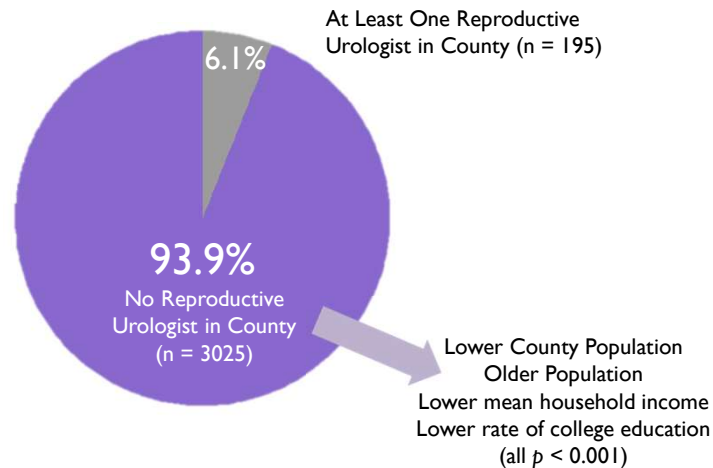
- We compiled a database of reproductive urologists using the Society for the Study of Male Reproduction (SSMR) and targeted Google searches
- Search results were evaluated for level of training and procedures offered
- Population data was abstracted from US Census Data (2010) and the American Community Survey 5-year estimates (2017)

### References

1. Kumar, N. and A.K. Singh, Trends of male factor infertility, an important cause of infertility: A review of literature. J Hum Reprod Sci, 2015, 8(4): p. 191-6.
2. Eisenberg, M.L., et al., Frequency of the male infertility evaluation: data from the national survey of family growth. J Urol, 2013, 189(3): p. 1030-4.

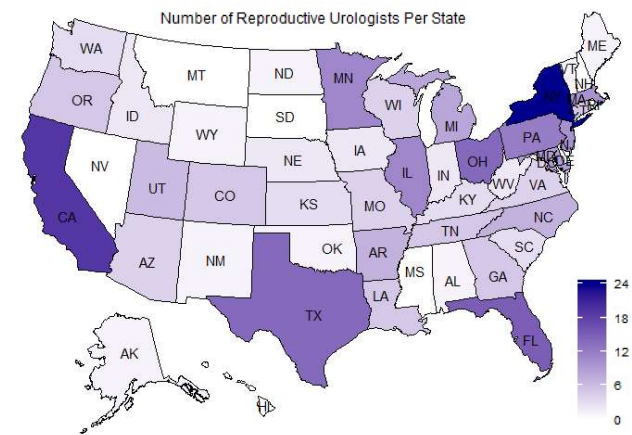
## Results

- 225 reproductive urologists were identified
- Most were fellowship-trained in male infertility or microsurgery (165, 64.7%)
- Fellowship-trained urologists were more likely to offer sperm extraction, varicocele repair, and vasectomy reversal (chi-square, all  $p < 0.001$ )
- Among the 3220 counties in the US, only 195 (6.1%) had a practicing reproductive urologist (**Figure 1**)
- State population was found to significantly correlate with the number of reproductive urologists (**Figure 2**,  $r = 0.83$ ,  $p < 0.001$ )
- Counties with a male infertility provider were more populous, had younger residents, higher income, and higher rate of college education
- 99% of rural counties (population  $< 50,000$ ) lacked a reproductive urologist



**Figure 1:** County Level Analysis of Reproductive Urologists

## Results (Cont.)



**Figure 2:** State Level Analysis of Reproductive Urologists

## Conclusions

- There are a small number of fellowship-trained reproductive urologists in the United States
- Majority of counties do not have a local reproductive specialist, regardless of fellowship training
- Smaller, more rural counties are more likely to not have a reproductive urologist
- These factors may contribute to the low rates of male partner evaluation, suggesting a potential role for telemedicine or other novel approaches to improve patient access.