ELSEVIER

Contraception xx (2017) xxx – xxx

Contraception

Original research article

Offering the full range of contraceptive options: a survey of interest in vasectomy training in the US family planning community☆,☆☆,★,★★

Brian T. Nguyen[a,b,*], Andrea L. Jochim[c], Grace H. Shih[c]

[a]University of Chicago, Department of Obstetrics and Gynecology, Chicago, IL
[b]University of Southern California, Department of Obstetrics and Gynecology, Los Angeles, CA
[c]University of Washington, Department of Family Medicine, Seattle, WA

Received 6 October 2016; revised 2 January 2017; accepted 4 January 2017

Abstract

Objective: To assess current practices regarding female and male sterilization counseling and provision, as well as determine interest in providing vasectomy among family planning specialists.
Methods: Members of the US-based network of family planning fellowship physicians (current fellows, graduates and faculty) received a Web-based survey from November 2015 through January 2016 regarding current sterilization preferences and practices, as well as interest in obtaining training in vasectomy counseling and procedure.
Results: Nearly 60% (n=178/302) of family planning fellowship providers responded to the survey. While 62% (111/178) of respondents reported counseling their patients about vasectomy at least most of the time and 57% (102/178) recommended vasectomy over female sterilization, few (8/178; 4 trained in family medicine and 4 trained in obstetrics and gynecology) had performed a vasectomy in the last year. Nearly 90% (158/178) of respondents were somewhat or very interested in receiving training on vasectomy counseling; 58% (103/178) desired procedural training. Desire for training was associated with being male and receiving residency training in family medicine.
Conclusions: Few family planning fellowship physicians provide vasectomy, and the majority expressed being at least somewhat interested in receiving further training.
Implications: Vasectomy is more effective, safer and less expensive than female sterilization but is less common than female sterilization. One barrier to vasectomy access is the low number of vasectomy providers. Creating a structured vasectomy training program through the family planning fellowship may help to increase the number of vasectomy providers.

Keywords: Vasectomy; Vasectomy provider; Family planning; Medical education; Sterilization

1. Introduction

Worldwide estimates suggest that tubal occlusion is used nearly five times as commonly as vasectomy [1]. In the United States (US), data from the 2006–2008 National Survey of Family Growth (NSFG) showed that among married men between the ages of 15 and 44, 13% used vasectomy for permanent contraception while 21% of their partners used tubal sterilization — a difference of 2.5 million couples [2]. As urologists [3], family physicians [4] and obstetrician/gynecologists (OB/GYNs) [5] agree that vasectomy is more effective, safer and less expensive than female sterilization methods [1,6–8], its relative underutilization compared to female sterilization warrants further exploration. EngenderHealth, an international nongovernment organization committed to increasing access to family planning services, conducted a 2001 US survey of key healthcare administrators and providers to determine supply-side barriers to the provision of vasectomy. In their report, the lack of trained providers, rather than the demand for vasectomy services, was one of the most frequently cited barriers to vasectomy provision [9]. One study by EngenderHealth implemented a cost-free intervention to increase the

☆ Conflicts of Interest: Dr. Brian T. Nguyen serves on the medical advisory board for the Female Health Company, the products and services of which are unrelated to the content discussed in this article.
☆☆ Financial Disclosure: None of the authors have any related funding sources to report.
★ Publication Disclosure: This research has neither been presented nor published.
★★ IRB Approval: University of Washington Human Subjects Division (HSD) #50734.

* Corresponding author. Tel.: +1-714-854-2079.
E-mail address: brian.trung.nguyen@gmail.com (B.T. Nguyen).

http://dx.doi.org/10.1016/j.contraception.2017.01.002
0010-7824/

number of vasectomy providers in 17 US states; however, multiple family planning clinics were unable to retain enough regular providers to absorb the demand among low-income and uninsured men [10]. Furthermore, a 2007 unpublished study of vasectomy trends from California's Family Planning Access, Care, and Treatment program reported that high rates of denied insurance claims and few vasectomy providers contributed to low numbers of vasectomies performed [11]. In 2010, the number of publicly funded family planning clinics offering vasectomy also decreased to 7% from 25% in 2003 [12].

Providing vasectomy training to family planning specialists (physicians and advanced practitioners) in the fields of family medicine, internal medicine and OB/GYN may increase access to this safe, effective method of permanent sterilization. According to a 2011 survey of chief residents in family medicine, only 56% received vasectomy-related clinical experience [13]; in a similar survey, family medicine residents reported that vasectomy was one of their most infrequently performed procedures [14]. Furthermore, while OB/GYNs are more likely to discuss family planning with their patients than providers from other specialties [15,16], OB/GYNs are not routinely trained to perform vasectomy [17]. In addition, the American Board of Obstetrics and Gynecology explicitly prohibited its providers from providing vasectomy in 2013 [18]; however, the subsequent reversal of this stance in 2014 raises questions about current practices and interest in providing vasectomy among OB/GYNs.

The Fellowship in Family Planning (FFP) may be an important avenue to increase vasectomy providers, particularly given the special interest and skills of its graduates. Since 1991, the FFP has grown to include 30 academic institutions, training OB/GYNs and family medicine physicians to be experts in contraception and abortion [19]. According to FFP learning objectives, "Graduated fellows obtain clinical competence…[in] all available methods of contraception, including sterilization" [20]. In 2014, only three fellowship programs offered routine vasectomy training; this suggests potential barriers, as well as room for the exploration of further training opportunities. While there may exist other organized groups that could train more vasectomy providers, the fellowship is unique in its national scope and clear focus on training future leaders in family planning.

FFP-trained providers are poised to become leaders in the clinical application and research of contraceptive methods; the absence of more and consistent opportunities for vasectomy training is a gap. This study aims to assess the knowledge, perspectives, practices and interest of family planning fellowship physicians regarding the inclusion of vasectomy training in the fellowship.

2. Material and methods

The FFP maintains a secure listserv that includes all clinical members within the FFP network (current fellows, graduates and fellowship directors), as well as support staff. We retained only clinicians from the listserv and sent each provider an invitation to participate anonymously via REDCap (Research Electronic Data Capture, University of Chicago) data collection software [21]. From November 2015 through January 2016, we sent e-mail reminders at 2-week intervals, up to three times before classifying the provider as a nonrespondent. Participants did not receive any compensation and provided implicit consent for study by completing the survey. The University of Washington's Human Subjects Division approved this study.

The full survey consisted of 25 items, including basic demographic information, such as age, race/ethnicity and the region of the US in which providers practiced. The survey also included questions about current sterilization practices and familiarity with male services, queried via 5-point ordinal scales anchored from *never* to *always* and *not at all* to *very much*, respectively. We also determined provider preference for recommending vasectomy versus tubal ligation for a hypothetical couple desiring permanent contraception via visual analog scale from 1 (preference for vasectomy) to 100 (preference for tubal ligation) as follows: "Use the slider bar to select your likelihood of recommending MALE versus FEMALE sterilization for a healthy couple seeking interval permanent contraception." This variable was collapsed above and below the midpoint for ease of analysis. We also queried provider desire for procedural training via 5-point ordinal scale, whereby "some" and "a lot" of interest were collapsed to represent desire for training. Descriptive statistics and bivariate analysis examining factors associated with desire for procedural training were performed using chi-square and Fisher's Exact Tests as appropriate, via Stata Version 13.1 (StataCorp LP. 2013. College Station, TX, USA). We concluded the survey with an open-ended item for other comments from providers.

3. Results

As of November 2015, the fellowship listserv included 380 individuals. We excluded site-specific and national office support staff, duplicates and outdated contacts, leaving 302 possible providers; 178 replied, giving a response rate of 59%. Most respondents were female (91%) and 35–44 years old (52%) (Table 1). FFP providers were either family medicine (14%) or OB/GYN trained (84%); 69% of providers received FFP training. All regions of the US and major races/ethnicities were represented except for American Indian and Alaska Natives. The majority of respondents had fewer than 5 years of experience since the completion of their fellowship training (65%); 28% were still in training at the time of survey.

Fifty-seven percent (102/178) of respondents reported that vasectomy was their recommended method of sterilization (Table 2), regardless of specialty training (p=.26). While 62% of respondents counseled their sterilization-seeking patients about vasectomy at least most of the time, only 19% of providers make referrals as frequently. Few providers (four trained in family medicine and four trained in obstetrics and