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### Authors

Yu, JM  
Henderson, JT  
Harper, CC  
[et al.](#)

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# Obstetrician-gynecologists' beliefs on the importance of pelvic examinations in assessing hormonal contraception eligibility<sup>☆,☆☆</sup>

Jean M. Yu<sup>a,\*</sup>, Jillian T. Henderson<sup>a,b</sup>, Cynthia C. Harper<sup>a</sup>, George F. Sawaya<sup>a</sup>

<sup>a</sup>Department of Obstetrics, Gynecology & Reproductive Sciences, University of California, San Francisco, CA

<sup>b</sup>Kaiser Permanente Center for Health Research, Northwest, Portland, OR

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## Abstract

**Objective:** To describe obstetrician-gynecologists' beliefs regarding the importance of pelvic examination (including external genitalia inspection, speculum examination, bimanual examination) in assessing hormonal contraception eligibility.

**Methods:** In a national probability survey, 1020 obstetrician-gynecologists drawn from the American Medical Association's Physician Masterfile rated importance of the examination in four categories: very, moderately, a little and not important.

**Results:** The response rate was 62% ( $n=521$ ). Seventy-nine percent considered at least one exam component to be of some importance (very, moderately, or a little importance). Bimanual examination was rated more often than external examination in each level of importance ( $p<.001$ ). Physicians who believed no component of the examination was important were more likely to be younger, female and in practice settings other than private practice.

**Conclusions:** Despite guidelines stating that pelvic examinations are unnecessary in assessing hormonal contraception eligibility, most obstetrician-gynecologists believe that they are of some importance. These attitudes may pose a barrier to contraception provision.

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*Keywords:* Gynecologic examinations; National survey; Reproductive health; Preventive health care

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## 1. Introduction

The World Health Organization [1], Centers for Disease Control and Prevention [2] and the American Congress of Obstetricians and Gynecologists [3] have recommendations regarding physical examination requirements for provision of hormonal contraception: a medical history and blood pressure measurement should be obtained, but pelvic examination need not be performed in asymptomatic women.

Despite these recommendations, prior surveys indicate that clinicians still require pelvic examinations before prescribing hormonal contraception [4,5]. The driving force behind this practice is unclear, and it is unknown whether any particular component of the pelvic examination is of greater perceived importance. Our study assessed US obstetrician-gynecologists' beliefs regarding the importance of pelvic examinations in general and of the components (external genitalia inspection, speculum examination, bimanual examination) for assessing hormonal contraception eligibility.

## 2. Methods

Our methods have been described in detail elsewhere [6]. Briefly, we surveyed 1020 US obstetrician-gynecologists identified through a national probability sample drawn from the American Medical Association's (AMA) Physician Masterfile, a comprehensive database of nearly one million physicians that includes members and nonmembers of the AMA updated weekly. We aimed for a sample of 500

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\* Corresponding author at: University of California, San Francisco, CA, Department of Obstetrics, Gynecology & Reproductive Sciences, 505 Parnassus Avenue, San Francisco, CA 94143. Tel.: +1 415 443 4223.

E-mail address: [jeanmyu@gmail.com](mailto:jeanmyu@gmail.com) (J.M. Yu).

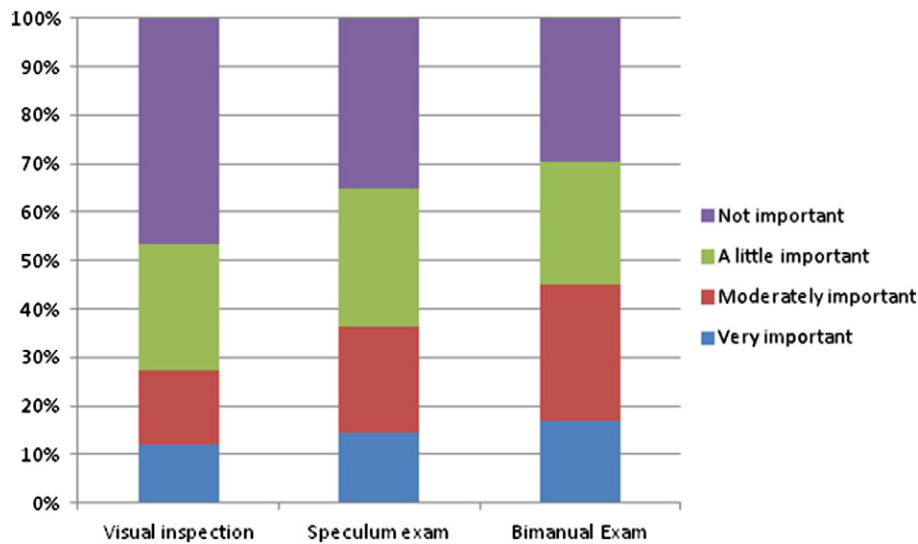


Fig. 1. Importance of pelvic examination components in assessing hormonal contraception eligibility. Survey of 521 US obstetrician-gynecologists. Differences in the importance of each component are significant ( $p < .001$ ).

eligible respondents to achieve population estimates with  $\pm 5\%$  precision. Data were collected from May 2010 through January 2011. The Committee on Human Research at the University of California, San Francisco, approved the study protocol.

The survey asked questions about routine gynecologic care [6]. A focus of the questionnaire was the provision of hormonal contraception and pelvic examinations. Providers were asked to rate the importance of three separate components of pelvic examinations (visual inspection of the external genitalia, speculum examination and bimanual pelvic examination) in asymptomatic women to assess eligibility for hormonal contraception. The four response categories were: very important, moderately important, a little important and not important.

Provider characteristics collected include age, gender, race/ethnicity and type of practice. We solicited information about practice setting including clinic volume, the proportion of patients with public health insurance, proportion of adolescent patients and geographical region. Differences in the importance of exam components were tested using the two-sided  $\chi^2$  test for comparison of categorical variables. Using bivariable and multivariable logistic regression analysis, we examined provider characteristics associated with believing no component of the pelvic examination is important for assessing eligibility for hormonal contraception.

### 3. Results

We mailed 1020 surveys and achieved a response rate of 62% ( $n=521$ ) [6]. Respondents were slightly younger than nonrespondents but did not otherwise differ in any measured characteristic. Seventy percent of respondents performed 30

or more gynecologic examinations per week, and the mean number of gynecologic patients seen per week was 85.

A majority of obstetrician-gynecologists (79%) considered at least one component of the gynecologic exam to be of some importance (very, moderately and a little importance) for assessing eligibility for hormonal contraception. Clinicians were more likely to consider the external genital examination not important (46.8%) than either the speculum examination (35.1%) or the bimanual examination (29.7%); differences overall in the importance of each exam component were significant ( $p < .001$ , Fig. 1). Twenty one percent of obstetrician-gynecologists ( $n=108$ ) believed that no component of the pelvic examination was important to assess eligibility for hormonal contraception, consistent with professional recommendations. These physicians were more likely to be younger [odds ratio (OR) 2.16, 95% confidence interval (CI) 1.12–4.17], female (OR 1.94, 95% CI 1.26–2.98) and in practice settings other than solo or group private practice (OR 1.75, 95% CI 1.13–2.70) (Table 1). In a parsimonious multivariable model adjusted for physician age, gender and practice characteristics, female gender and practice setting remained independent predictors of believing that pelvic examinations were of no importance in assessing eligibility for hormonal contraception.

### 4. Discussion

Despite long-standing guidelines stating that pelvic examinations are unnecessary prior to hormonal contraception provision, most obstetrician-gynecologists responding to our survey believed that they are of some importance. The specific components of the exam, however, vary in their perceived importance. Our findings could reflect long-held beliefs about the value of pelvic exams for other perceived

Table 1  
Characteristics of obstetrician-gynecologists who viewed no component of the gynecologic exam as important in assessing hormonal contraception eligibility, *N*=521

Characteristic ( <i>N</i> =521)	%	OR (95% CI)
Age		
30–39	28.9	<b>2.16 (1.12–4.17)</b>
40–49	23.5	1.63 (0.88–3.04)
50–59	15.6	0.99 (0.50–1.94)
60+	15.8	Ref
Race		
White, non-Hispanic	22.3	Ref
Non-white or Hispanic	16.7	0.70 (0.41–1.17)
Gender		
Female	26.1	<b>1.94 (1.26–2.98)</b>
Male	16.4	Ref
Region		
West	22.1	Ref
Midwest	21.6	0.97 (0.53–1.77)
South	21.2	0.81 (0.45–1.43)
Northeast	18.6	0.95 (0.51–1.75)
Practice setting		
University-based, hospital/clinic, HMO, other	27.2	<b>1.75 (1.13–2.70)</b>
Solo/group private practice	17.6	Ref
Number of gynecological examinations per week		
<30	24.5	Ref
>30	19.1	0.73 (0.47–1.14)
Percentage of patients using public insurance		
>25%	18.9	Ref
<25%	22.8	1.27 (0.83–1.94)
Percentage of patients aged 15–19 years:		
<25%	21.7	Ref
>25%	17.6	0.77 (0.45–1.33)

HMO indicates health maintenance organization.

health benefits [6,7], many of which have been recently questioned [8–10]. Nonetheless, our findings raise concern that these beliefs may continue to pose a barrier to contraception provision. Demonstration projects have shown that providing hormonal contraceptives without requiring a pelvic examination increases access to contraception and reproductive health services. Moreover, a majority of participating women feel that it is important to be able to begin contraception quickly and admit they associate pelvic examinations with fear and embarrassment [11].

Our results are limited in that survey data are self-reported and may not reflect actual clinical practice. The survey also did not specify what type of hormonal contraception, which could influence respondents' answers. However, responses were anonymous, and we were able to achieve a high response rate for a mailed physician survey. Questionnaires are subject to social desirability bias, which would

presumably increase responses to be more in favor of recommended guidelines.

With provisions of the Affordable Care Act expanding access to health insurance that includes contraceptive coverage in the United States, there is opportunity for obstetrician-gynecologists to provide more women with information and access to reproductive health services. Promoting clinician awareness of contemporary guidelines stating that women do not need pelvic examinations to safely use hormonal contraception is critical. Increasing the dissemination and visibility of current guidelines can help inform providers as well as patients. A detailed medical history and blood pressure measurement can sufficiently screen women for contraindications. Conditions such as hypertension, pregnancy, history of thromboembolic disease or stroke, migraine headaches with focal neurologic symptoms and smokers older than age 35 can be identified without the discomfort and inconvenience of a pelvic examination.

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