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Physician characteristics and beliefs associated with use of pelvic examinations in asymptomatic women ☆

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ABSTRACT

Objective. To examine physicians' beliefs about the pelvic examination and identify physician characteristics associated with routine use of this procedure in the United States.

Methods. A total of 1250 United States family/general practitioners, internists, and obstetrician/gynecologists who participated in the 2009 *DocStyles* survey completed questions on beliefs regarding the utility of routine pelvic examinations for cancer screening. The survey also asked participants how often they performed this procedure as part of a well-woman exam, to screen for ovarian and other gynecologic cancers, to screen for sexually transmitted infections, and as a prerequisite for prescribing hormonal contraception.

Results. A total of 68.0% of obstetrician/gynecologists, 39.2% of family/general practitioners, and 18.7% of internists reported routinely performing pelvic examinations for all the purposes examined (<0.001). Adjusted analyses revealed that the factors most strongly associated with use of pelvic examinations for all purposes were being an obstetrician/gynecologist (odds ratio 8.5; 95% confidence interval 5.8–12.6) and believing that this procedure is useful to screen for gynecologic cancers (odds ratio 3.8; 95% confidence interval 2.6–5.5).

Conclusion. Misconceptions about the utility of pelvic examinations to screen for gynecologic cancers are common. More effective strategies to change physicians' beliefs regarding the value of performing pelvic examinations in asymptomatic women are needed.

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Introduction

The pelvic examination is regarded as a central part of well-woman visits and has traditionally been performed in conjunction with an annual Papanicolaou (Pap) test. In recent years, however, major U.S. guidelines have lengthened screening intervals for cervical cancer to three years and some up to five years (American College of Obstetricians and Gynecologists, 2009c; Saraiya et al., 2010; Saslow et al., 2012; US Preventive Services Task Force, 2012). While changes in cervical cancer screening guidelines could affect patient adherence to the routine pelvic examination, the value of performing this procedure remains unclear.

A growing body of literature questions the utility of pelvic examinations for clinical purposes in asymptomatic women. The pelvic examination is not an effective screening tool for ovarian cancer (Padilla et al., 2000, 2005; Stewart and Thistlethwaite, 2006) and is not recommended for this purpose (Smith et al., 2009; U.S. Preventive Services Task Force, 2004). Although the pelvic examination has been used to screen for sexually transmitted illnesses (STIs), urine testing and testing of self-obtained vaginal swabs have numerous advantages over this procedure (Chernesky et al., 2005; Schachter et al., 2005). Study results have shown pelvic examinations to be of no clinical benefit in screening for fibroids or ovarian cysts (Westhoff et al., 2011). Lastly, the safety of prescribing hormonal contraception without requiring pelvic examinations as a pre-requisite has been emphasized by the World Health Organization (WHO) and the American College of Obstetricians and Gynecologists (ACOG), among other organizations (Stewart et al., 2001; World Health Organization, 2004).

Stewart et al. (2001) noted that clinical practice guidelines have shifted from making specific recommendations about the pelvic examination as a hormonal contraception requirement to recommending that this procedure be performed as part of well-woman visits. In fact, this has been a general trend observed in ACOG guidelines, which have moved away from recommending the pelvic examination for specific purposes to simply making general recommendations for its inclusion in well-woman visits (Table 1).

The literature on pelvic examination practices is sparse and no studies to date have examined physicians' beliefs regarding the utility of these practices for screening purposes in the United States. Prior analyses conducted by the authors of this manuscript revealed that

☆ The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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Table 1
ACOG recommendations concerning the use of pelvic examinations in the United States, by purpose of examination, 1996–2011.

Year and type of publication	Purpose of pelvic examination			
	As part of a well-woman exam	To screen for ovarian and other gynecologic cancers	As a requirement for receipt of hormonal contraception	For STI screening
1996 Resource Manual[a]	Yearly when sexually active or by age 18, and routinely for females aged19–39. A rectovaginal and pelvic exam is recommended for women aged 40 and older.	Not addressed	The initial visit for oral contraceptives does not have to include a pelvic examination if the patient requests that it be deferred.	Recommended for women of all ages who are at high risk for STIs.[b]
1999 Educational Bulletin	Not addressed	Not addressed	A pelvic examination is not necessary prior to the initiation of oral contraceptives.[c]	Not addressed
December 2002 Committee Opinion no. 280	An annual gynecologic examination with an annual pelvic examination is recommended for preventive care.	There is no screening test that has been proven effective in screening asymptomatic women for ovarian cancer.	Not addressed	Not addressed
Aug 2003 Practice Bulletin no. 45	Regardless of the frequency of cervical cytology, women should be counseled that annual examinations, including pelvic examinations, are still recommended.	Not addressed	Not addressed	Not addressed
May 2009 Committee Opinion no. 431	Perform annual pelvic examinations in females aged 21 and older even if cervical cytology is not needed.	No screening modalities, including pelvic examination with or without rectal examination, have been shown to be effective for ovarian cancer screening.	Not addressed	Urine-based STD screening is an efficient means for accomplishing STD screening without a speculum examination.
December 2009 Practice Bulletin no. 109	Physicians should inform their patients that annual gynecologic exams may still be appropriate, even if cervical cytology is not performed at each visit.	Not addressed	Not addressed	Not addressed
December 2009 Committee Opinion no. 452	The first gynecologic visit does not necessarily include an internal pelvic examination. Periodic pelvic examinations for women aged 13–20, when indicated by medical history; periodically for women aged 21–39; and routinely for those aged ≥40.[d]	Not addressed	Not addressed	Periodic screening for *Chlamydia* and *Gonorrhea* is recommended for sexually active women aged ≤25.[e]
April 2011 Committee Opinion no. 483	Same as Committee Opinion no. 452	Not addressed	Not addressed	Same as Committee Opinion no. 452

Abbreviations: ACOG, American College of Obstetricians and Gynecologists; STIs, sexually transmitted infections.

[a] A 2007 edition of this book is available. The 1996 version is used in this table to show ACOG recommendations related to the pelvic examination since 1996.

[b] High risk groups are defined as having a history of multiple sexual partners or a sexual partner with multiple contacts, sexual contact with persons with culture-proven STD, history of repeated episodes of STDs, attendance at clinics for STDs.

[c] This statement is currently in use by ACOG.

[d] It is reasonable to discontinue pelvic exams in women age 65 or older when a woman's age or other health issues are such that she would not choose to intervene on conditions detected during the routine examination (statement issued by ACOG).

[e] Urine-based sexually transmitted disease screening is an efficient means of accomplishing such screening without a speculum examination (statement issued by ACOG).