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Contraceptive practices of women visiting a gynecology clinic in Beijing, China

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Contraceptive use in China has steadily increased since the 1-child policy was introduced in the late 1970s, with all-method prevalence at 86.9% in 2002 [1]. Although usage is high, the most popular contraceptive methods vary by region and age group [1,2], with recent studies indicating that such differences in usage may be attributable to lack of availability and information about specific methods [1–3]. The aim of the present study was to assess contraceptive practices among women of reproductive age visiting an obstetrics and gynecology clinic in Beijing, China.

Women were recruited from the Outpatient Gynecology Clinic at Peking University First Hospital, Beijing, China, between May 15 and July 25, 2008. All women attending the clinic were asked to complete a self-administered questionnaire regarding contraceptive knowledge and current contraception behavior. To ensure accuracy, the questionnaire was created in English, translated into Mandarin Chinese, and back-translated. The study protocol and all research instruments were reviewed and approved by the Institutional Review Boards of both the Chinese and the US institutions.

In total, 733 women were invited to participate, of whom 571 (77.9%) completed the questionnaire and were included in the analysis. Most respondents were married (82.5%) and of Han ethnicity (92.8%). The age of participants ranged from 18 to 66 years (mean 33.2 ± 8.3 years), and the majority had undergone at least some college education (62.7%). In total, 16.3% of women lived in households with a monthly income of more than US \$732—with more than half of households (54.5%) earning between US \$293 and US \$732 per month, and 27.1% earning less than US \$293 per month. Overall, 11.1% of participants had never used birth control methods, and 27.6%

reported no current use. Although 12.6% of the women were older than 44 years, menopausal status was not assessed; therefore, the percentage of women of reproductive age not currently using contraception may have been overestimated. Table 1 shows participant characteristics, and contraception use is shown in Table 2.

Whereas intrauterine devices (IUDs) were the predominant form of contraception in many previous studies in China [4], condoms were the

Table 1
Participant characteristics (n = 571).^a

Characteristic	Number
Previous abortion (n = 551)	286 (51.9)
Ever married (n = 570)	480 (84.2)
Currently sexually active (n = 557)	419 (75.2)
Currently pregnant (n = 551)	130 (23.6)
Previous spontaneous abortion (n = 529)	44 (8.3)
Source of contraception information (n = 553)	
Media	267 (48.3)
Doctor or nurse	165 (29.8)
Family-planning clinic	151 (27.3)
Friends	112 (20.3)
Partner	80 (14.5)
Family members	55 (9.9)
Pharmacies	38 (6.9)
Other	30 (5.4)
Source of contraception (n = 542)	
Obstetrician/gynecologist	155 (28.6)
Family-planning clinic	139 (25.6)
Pharmacy	125 (23.1)
Health department	95 (17.5)
Other	80 (14.8)
Internal medicine/family doctor	23 (4.2)
Age at first intercourse (n = 498)	
Median (range)	23 (16–35)
Mean ± SD	23.0 ± 3.0
Total number of sexual partners (n = 519)	
Median (range)	1 (0–10)
Mean ± SD	1.4 ± 1.1
Number of pregnancies (n = 528)	
Median (range)	1 (0–7)
Mean ± SD	1.7 ± 1.4
Number of previous induced abortions (n = 259)	
Median (range)	2 (1–6)
Mean ± SD	1.7 ± 0.9
Number of previous spontaneous abortions (n = 38)	
Median (range)	1 (1–2)
Mean ± SD	1.1 ± 0.2

^a Values are given as number (percentage) unless otherwise indicated.

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Table 2
Previous and current contraceptive use.^a

Type of contraception	Ever used	Currently using
Condom	359/497 (72.2)	256/408 (62.7)
Withdrawal	187/495 (37.8)	96/405 (23.7)
Rhythm	179/494 (31.3)	83/407 (20.4)
Oral contraceptive	139/495 (28.1)	30/406 (7.4)
Intrauterine device	106/496 (21.4)	68/406 (16.7)
Morning-after pill	137/494 (27.7)	33/405 (8.1)
Female barrier (diaphragm, vaginal ring, or spermicide)	61/497 (12.3)	23/405 (5.7)
Sterilization (either partner)	25/494 (5.1)	10/404 (2.5)
Other (Chinese herbs and natural methods; hormonal contraceptives such as patches, injections, or implanted hormones)	7/495 (1.4)	4/405 (1.0)

^a Values are given as number (percentage).

most commonly used method (62.7%) in the present study—with IUDs reported as the current/most recent form of contraception by only 16.7%. These findings are supported by a recent study in which condoms were the most commonly used contraceptive method for women attending a family-planning clinic in Shanghai [3]. In total, 21.1% of women reported currently using more than 1 method of contraception, 8.8% of whom reported using condoms in addition to another form. However, “current use” may not be the same as “simultaneous use,” so these findings should be interpreted with caution.

Of note, the median number of abortions was 2, indicating the need for further research into the use of induced abortion as a family-

planning method in China. Traditional methods such as withdrawal and rhythm were the second and third most commonly reported methods, respectively, which may indicate the need for more comprehensive family-planning education. The media was cited as the most common information source regarding contraception—ahead of doctors, nurses, and family-planning clinics; thus, evaluation of media messages may be warranted.

Despite the biases associated with recruiting women from a gynecology outpatient clinic at a large tertiary-care hospital—where women are likely to have more access to contraception than are women in other settings—the present study provided valuable information about the chosen methods of contraception in urban China.

Conflict of interest

The authors have no conflicts of interest.

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Accuracy of the Papanicolaou test in the detection of high-grade cervical lesions

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Cytohistologic correlation studies are an important component of quality assurance and, in addition to pathologists and gynecologists, cytologists should be informed about the performance of their laboratories. In the present study, we evaluated results from the laboratory at the Department of Pathology and Cytology, Celje General Hospital, Celje, Slovenia, which evaluates cervical smear samples and biopsies from 24 institutions in several regions of the country. The study was approved by the Ethics Committee of the hospital. The computerized database at the laboratory was searched for all women who underwent a Papanicolaou

(Pap) test and subsequent cervical biopsy after 0–6 months between January 1, 2006, and August 31, 2008. Most women underwent a colposcopically guided punch biopsy after a pathologic Pap test result. In rare cases in which there were normal cytology results, biopsy was performed because of clinical symptoms.

We investigated the effectiveness of cytology at detecting cervical intraepithelial neoplasia (CIN)2+. For each patient, diagnostic concordance between the Pap test and the biopsy was considered to be present when both results displayed a high-grade squamous intraepithelial lesion (HSIL) or atypical glandular cells (AGC)/CIN2+, or when both results indicated less than a high-grade lesion (normal or low-grade squamous intraepithelial lesion [LSIL]/CIN1). Atypical glandular cells were included in the HSIL group because the recommendations for further management are the same for both cytologic diagnoses [1]. The histologic diagnosis was used as the gold standard for calculating sensitivity, specificity, and positive and negative predictive value.

A total of 1529 women underwent a Pap test and subsequent cervical biopsy in the study period (Table 1). There was exact correlation between cytologic and histologic diagnoses in 934 (61.1%) of these cases. After the exclusion of atypical squamous cells of undetermined significance (ASCUS) and AGC results, for which no comparable histologic diagnoses existed, the rate of exact correlation was 73.0% (934 out of 1279 cases). Correlation within 1 grade was 96.2% (1230 out of 1279 cases).

Using HSIL or AGC as a threshold for detecting CIN2+, there were 607 true positives, 623 true negatives, 128 false positives, and 171 false negatives. The sensitivity of HSIL or AGC interpretations following Pap tests in

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