Are affluent, well-educated, career-orientated women knowledgeable users of the oral contraceptive pill?

Megan van der Westhuizen, David Hall

Abstract
Objective Studies have shown poor knowledge of oral contraceptives among women attending government health clinics and women in rural areas. Little is known about the level of contraceptive knowledge in educated, affluent, career-orientated women, although it could be expected that access to information would be greater. The study objective was to describe the profile, knowledge and understanding of oral contraceptive users in a private general practice in Johannesburg, South Africa.

Methods Over a period of 3 months, all women attending a private general practice who were using an oral contraceptive were asked to complete an anonymous questionnaire. Informed written consent was obtained in all cases.

Results Fifty-one women participated in the study. Most women were nulliparous (71%), held a tertiary educational qualification (80%), were employed (84%) and were not concerned about the cost of their pill (65%). Most respondents (86%) obtained their information from a doctor. However, only 12% of women were aware of the danger of extending the active pill-free interval. Less than half (49%) were aware that their pill was less effective if taken more than 12 hours late and only 31% of women knew that their pill was effective again after taking seven active tablets.

Conclusions Educated, affluent women attending a private general practice lacked basic knowledge of the oral contraceptive pill. Consultations by practitioners need to be improved.


Key message points
- Most respondents (86%) obtained their information from a doctor.
- Only 12% of women were aware of the danger of extending the active pill-free interval.
- Only 21% of women knew that after skipping a pill, efficacy was regained after taking seven consecutive active tablets.
- Well-educated women are not necessarily knowledgeable on effective pill use.

Department of Obstetrics and Gynaecology, Tygerberg Hospital and Stellenbosch University, Tygerberg, South Africa
Megan van der Westhuizen, MB BCH, General Practitioner and Postgraduate Student
David Hall, FCODG(SA), MD, Associate Professor and Principal Specialist

Correspondence to: Professor David R Hall, Department of Obstetrics and Gynaecology, Stellenbosch University and Tygerberg Hospital, PO Box 19063, Tygerberg 7505, South Africa. Tel: +27 21 938 9095. Fax: +27 21 932 2455. E-mail: drh@sun.ac.za

Table 1 Characteristics of women included in the study

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest educational qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school certificate</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>College diploma</td>
<td>15</td>
<td>29</td>
</tr>
<tr>
<td>University degree</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Postgraduate degree</td>
<td>19</td>
<td>37</td>
</tr>
<tr>
<td>Tertiary qualification</td>
<td>41</td>
<td>80</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working but not studying</td>
<td>28</td>
<td>55</td>
</tr>
<tr>
<td>Working and studying</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Studying but not working</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Neither working nor studying</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Total working</td>
<td>43</td>
<td>85</td>
</tr>
<tr>
<td>Children (n)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>36</td>
<td>70</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
ARTICLE

Results

All the women (n = 51) who were approached to participate completed the questionnaire (this high participation rate probably reflects the nature of the doctor–patient relationship in private practice). The profile of the contraceptive users is described below. The age of the contraceptive users ranged from 14 to 44 years with a median age of 27 years. Their age distribution is shown in Figure 1. The characteristics of the study participants are shown in Table 1.

Most of the women in the study (n = 48; 94%) were established OCP users. All women were asked whether the financial cost of their pill was a determining factor for them. Only 12 (24%) women were concerned about the cost factor. Thirty-three (65%) women were not concerned about the costs, while six (12%) were undecided.

The replies to questions that tested knowledge related to the use of the OCP revealed the following. Only 25 (49%) of women answered correctly that extra precautions needed to be taken for 7 days when the pill was taken more than 12 hours late. Eighteen (35%) women placed this cut-off at 24 hours and eight (16%) were uncertain. Women were asked to indicate which were the most important pills not to skip in terms of efficacy. Six (12%) women answered correctly that this would be the first and/or last pill in the packet. Twenty-nine (57%) women believed that all pills were equally important while seven (14%) indicated that it would be most important not to skip a pill in the middle of the pack. Nine (18%) women were uncertain of the answer.

Knowledge of factors that may compromise the efficacy of the OCP is shown in Figure 2.

When asked when their pill would be effective again after skipping a tablet, or after compromise by vomiting or antibiotics, 16 (31%) women answered correctly that the pill would regain efficacy after seven active tablets. Sixteen (31%) women replied that the pill would be effective again after taking 14 active tablets while 11 (22%) answered that the pill would only be effective after taking a whole pack. Eight (16%) women were unsure. In answer to the question as to whether they were using a low- (≤35 µg ethinylestradiol) or high-dose (50 µg ethinylestradiol) pill, 20/22 women correctly identified their pill as a low-dose product. All eight women who thought they were taking a high-dose OCP were correct. However, 21 (41%) women were uncertain.

The sources of information for the participants were tested. Only seven (14%) women did not regard their doctor as the most important source of information. In fact, 38 (75%) women obtained their information solely from their doctor.

When asked why they had chosen their particular formulation of contraceptive pill, 40 (78%) women indicated that they had been advised by their doctor, whereas only four (8%) had been advised by a family planning clinic. Six (12%) women had chosen their pill on the advice of their employer and for whom the cost of the contraceptive pill was a determining factor. Such career-orientated women require reliable contraception but the reliability of the OCP is user dependent. This means that women must possess basic core knowledge related to everyday use of the pill. It seems reasonable to expect that well-educated and well-motivated women would be well informed but such knowledge was sadly lacking in this study. In contrast, Smith and Whitfield6 found that user knowledge of the OCP was higher among women attending an urban medical practice. A recent study amongst adolescents at an urban public hospital in El Salvador8 found that education and literacy predicted contraceptive knowledge; however, a questionnaire distributed to female university students in Canada revealed that they might not be equipped with adequate knowledge to practise efficacious pill use.9 A limitation of our study is that it was not a large one. This precluded the comparison of various subgroups in the analysis.

How could the lack of knowledge demonstrated in this study be improved? Some 86% of women in the study obtained their information regarding oral contraceptives from their doctor, while 78% had indicated that they had chosen to take their particular pill on the advice of their doctor. It is surprising that this group of women with easy access to information would rely so heavily on their doctors. However, better transfer of information from the doctor or other medical personnel to the patients would probably have benefited this group of women. This could be effected by counselling and provision of information sheets and package inserts, if they are read. Despite the fact that package inserts provide information regarding the ‘7 day rule’, 69% of women in the study were unaware that their pill would be effective again after taking seven consecutive active tablets.
Little et al. performed a randomised controlled trial amongst patients attending general practices in England. They showed that knowledge of factors compromising efficacy of the pill was good, but that knowledge of what action to take subsequently was poor. They concluded that women attending checkups for repeat prescriptions of the pill should be provided with educational leaflets to improve their knowledge. When this was combined with asking relevant questions the most knowledge was gained, although asking questions was more time consuming. Gilliam et al. studied a different group of women. They recruited 43 African–American adolescents and young adults from a low socioeconomic group. After one session of standardised counselling the participants completed a series of questions regarding importance, confidence and knowledge of oral contraceptives. Their results showed that despite high motivation and confidence in their ability to take the pill, many women did not fully understand the information that they had received. The important point for caregivers here is that motivation and confidence to use the OCP do not imply that there is sufficient knowledge of factors causing pill failure, subsequent action and emergency contraception.

In conclusion, well-educated, affluent women attending a private general practice lacked basic knowledge of the OCP. Initial and repeat consultations by doctors need to be improved. In South Africa, the recent reinforcement of the regulation requiring a prescription for an oral contraceptive provides doctors with an opportunity every 6 months to further patient education regarding the pill.

**Statements on funding and competing interests**

**Funding.** None identified.

**Competing interests.** None identified.

**References**


---

**But is she positive?**

Your next patient is pregnant but doesn’t want to be.

**Where** next? As a registered charity since 1968, **bpas** has offered affordable abortion care for women. We provide almost 50,000 abortions a year (including service agreements) and can offer all the professional help your patient needs.

**bpas** has a nationwide network of clinics and consultation centres. There are no long waits for appointments. We can offer a choice of times, clinics and procedures. All it takes to arrange an appointment is one call to the **bpas** Actionline on 08457 30 40 30.

**ACTIONLINE 08457 30 40 30**

bpas positively the best service