had coitus on 22 days, on average, whereas those who had always been protected had had intercourse on 11 days. Women who had ever been at increased risk were also more likely to have had unprotected coitus during the first seven days of the study and during cycle three. These results were duplicated even when the 12 women who reported no sexual activity during the study were excluded from the analysis.

In the second stage, we used SUDAAN multiple logistic regression15 to determine predictors of unprotected intercourse among women who had had coitus at least once during the study. SUDAAN groups the observations by woman, thereby adjusting for the correlations among each woman’s responses. The dependent variable becomes whether or not the woman was at risk on each day she had coital activity, taking into account her use of backup contraception and pill-taking patterns. This analysis showed that three groups of women had a significantly elevated number of unprotected days: those with a lower level of perceived partner support for effective pill use, unmarried women and those who considered it not especially important to avoid pregnancy now (Table 2). As in the first stage of the analysis, the chance that a woman had unprotected intercourse was highest during the first seven study days and during cycle three.

Discussion

The pill-taking patterns documented here are similar to those in reports of medication-taking in general,16 despite two important advantages the pill has over other medications: The dial pack’s day-of-the-month contraceptive patterns are available when pills are missed. However, their vigilance may have lessened over time. And those with multiple missed-pills episodes may have felt less vulnerable each time they missed pills without becoming pregnant. Further follow-up was not possible, so we do not know whether or not missed-pills episodes in cycle three were a prelude to discontinuation.

In the first three cycles after initiating pill use, three out of four women in this study were always protected against pregnancy. Although the demographic and psychosocial variables that were tested did not predict the subgroups at increased risk, considering it not especially important to avoid pregnancy, perceiving a low level of partner support for pill use and being unmarried all predicted being at increased risk.

Clinicians can support effective pill use by understanding that using oral contraceptives daily is a complex process. Clinicians need to provide information that is relevant to a woman’s particular situation (e.g., marital status) that can help her estimate her risk of becoming pregnant, taking into account coital frequency.18 Clinicians also need to provide individualized care that is focused on maximizing women’s ability to identify and solve future problems in their use of the contraceptive methods they have chosen.19

Changes in how oral contraceptives are prescribed and packaged also may be helpful. Shortening the hormone-free interval to 4–5 days could reduce the proportion of users who are not fully protected hormonally. A shortened hormone-free interval is beginning to be discussed in the United States and is already routinely used in some countries.20 Adopting such modifications would mean, for instance, packaging 24 hormonal pills and only four placebo pills in each pack.

In addition, for the one woman out of four who does not take the pill consistently and also does not use a backup method, other alternatives should be considered. Emergency contraception is a reliable last resort for an occasional lapse, preventing 75% of pregnancies that might otherwise occur.21 Women who miss pills more often may benefit from rethinking the relative advantages of reversible methods such as the implant, injectables and IUDs.22

References


8. L. Potter et al., 1996, op. cit. (see reference 2).


11. L. Potter et al., 1996, op. cit. (see reference 2).

