

Missed pills, what's the evidence?

A large body of literature shows it is common for women to miss pills. Women who miss pills are at a higher risk of unplanned pregnancy. Hence "Two-2-tango" and the push to use condoms as a back up method.

Study 1

This study looks at women's own reports of the number of pills missed. Unfortunately it demonstrates that it is common for more pills to be missed than the woman remembers missing.

Abstract: Irregular use of the pill compromises the effectiveness of this highly reliable method. The consistency of pill-taking has traditionally been estimated through women's own reports of their patterns of pill use. In this study, self-reported data on pill-taking were compared with data from an electronic device measuring compliance among 103 women attending university health services and publicly funded family planning clinics. In three months of pill use, the electronic and self-reported data agreed on the number of days when pills were missed only 45% of the time; the level of agreement dropped from 55% in the first month to 38% in the third month. In each month, the proportion of women reporting no missed pills was much higher than the proportion recorded electronically (53-59% compared with 19-33%), and the proportion missing at least three pills according to the electronic data was triple that derived from the women's reports (30-51% vs. 10-14%). In addition, the electronic data recorded substantially more episodes in which women missed pills on two or more consecutive days (88 vs. 30).

Citation: Potter L, Oakley D, de Leon-Wong E, Canamar R. Measuring compliance among oral contraceptive users. *Fam Plann Perspect* 1996;28(4):154-8.

For those interested the full text can be downloaded from the web site of the journal Family Planning Perspectives, free of charge, <http://www.guttmacher.org/journals/psrh.html> .

Study 2

This study, amongst other things, looks at the reasons women miss pills. These are, not having a regular time of taking pills, having difficulty reading or understanding pill instructions and being given inadequate information from health care providers. It is important to make pill taking part of your daily routine, e.g. take a pill when you brush your teeth. Make sure you understand all the information your health care practitioner gives you. If not, ask and make sure you get a brochure of easy to read material. Ask for a number you can call if you have difficulties. Women who experienced side effects such as nausea, irregular bleeding, excessive hair growth and breast tenderness are also more likely to miss pills. It is important to discuss a change of pill if you have experienced these side effects and they don't settle within a few months.

Abstract: The contraceptive efficacy of oral contraceptives (OCs) depends on their proper and continued use, particularly with lower estrogen preparations. However, few studies have examined why women miss pills or discontinue OCs, and those that do tend to be small and to focus on adolescents. To address the issues of poor OC compliance and early OC discontinuation, we analyzed OC use in a convenience sample of 6,676 women between the ages of 16 and 30 from Denmark, France, Italy, Portugal, and the United Kingdom. Logistic

regression was used to examine the independent effect of each factor. Poor compliance was associated with a lack of established routine for pill-taking (relative risk [RR] = 3.3), failure to read and understand written materials that came with the OC package (RR = 2.2), not receiving adequate information or help about OCs from their health care provider (RR = 1.5), and occurrence of certain side effects, including hirsutism (RR = 2.1), nausea (RR = 1.4), bleeding irregularities (RR = 1.3), and breast tenderness (RR = 1.2). Women who were inconsistent OC users, missing one or more pills per cycle, were almost three times as likely to experience an unintended pregnancy while using OCs than were women who took their OCs consistently. Factors that predicted early discontinuation (women who wished to continue contraceptive protection but discontinued OC use) were primarily side effects, including nausea (RR = 2.1), bleeding (RR = 1.9), breast tenderness (RR = 1.8), mood changes (RR = 1.8), and weight gain

Citation: Rosenberg MJ, Waugh MS, Meehan TE. Use and misuse of oral contraceptives: risk indicators for poor pill taking and discontinuation. *Contraception* 1995;51(5):283-8.

The full text of this article is not available free of charge. The full text may be available in some university libraries or can be purchased by visiting, <http://www.sciencedirect.com/science>, the web site of the "Contraception" journal.

Study 3

This study looks at the number of pills women miss.

Abstract: CONTEXT: Oral contraceptive users' risk of accidental pregnancy may be higher than it should be, because of inconsistent pill-taking. However, few reliable data are available on pill users' everyday experiences with their method, especially characteristics that may affect consistency of use. METHODS: Two months after initiating or resuming oral contraceptive use, a nationwide sample of 943 women completed questionnaires examining their compliance with instructions for proper use, the quality of their interactions with their provider, their satisfaction with the method, and the frequency and costs of visits or calls to their providers because of pill-related side effects. Regression analyses were used to determine the factors associated with compliance difficulties and method dissatisfaction. RESULTS: In all, 47% of users missed one or more pills per cycle, and 22% missed two or more. Women who lacked an established pill-taking routine, who did not read and understand all of the informational material accompanying the pill package, or who experienced spotting or heavy bleeding had increased odds of missing two or more pills per cycle. Method satisfaction was most likely among women who were aware of the pill's noncontraceptive benefits, were satisfied with their relationship with their provider, had used the pill in the past and experienced few side effects. Some 22% of users called their provider at least once about pill-related side effects, and 9% made at least one visit for this reason; these women spent \$25 and \$62, respectively, to treat side effects. CONCLUSIONS: Improving pill use is a shared responsibility of the provider, the patient and, to a lesser degree, pill manufacturers. Awareness of potential difficulties such as inadequate counselling is a key step in helping women use oral contraceptives effectively.

Citation: Rosenberg MJ, Waugh MS, Burnhill MS. Compliance, counseling and satisfaction with oral contraceptives: a prospective evaluation. *Fam Plann Perspect* 1998;30(2):89-92, 104.

For those interested the full text can be downloaded from the web site of the journal Family Planning Perspectives, free of charge, <http://www.guttmacher.org/journals/psrh.html>

Study 4

This study examines how practitioners might help women to plan ahead for difficulties with pill taking, such as keeping a spare pack at a boyfriend's house, or planning in advance the time a woman will need to go to the pharmacy to get more pills.

Abstract: Inconsistent use of oral contraceptives (OCs) exposes women to risks of unintended pregnancy. This study explored women's self-described reasons for missed OC pills. Data from diary cards completed by 141 women were studied to see how reasons for missing pills were related to patterns of pill use. The findings suggest that practitioners might improve OC use by focusing on the reasons that women miss pills, thus providing a more tailored approach that addresses individual risks based on women's personal experiences.

Citation: Smith JD, Oakley D. Why do women miss oral contraceptive pills? An analysis of women's self-described reasons for missed pills. *J Midwifery Womens Health* 2005;50(5):380-5.

The full text of this article is not available free of charge. The full text may be available in some university libraries or can be purchased by visiting <http://www.jmwh.com/home> , the web site of the "Journal of Midwifery & Women's Health".