High contraceptive discontinuation results in millions of women having an unmet need for contraception. This study shows that contraceptive discontinuation also result in millions of unintended pregnancies and births.

**INTRODUCTION**

About 225 million women in developing countries are estimated to have an unmet need for modern methods of contraception, that is, they are sexually active and want to avoid a pregnancy but are not using an effective contraceptive method. Reducing unmet need for contraception helps women achieve their reproductive goals which is expected to reduce unintended fertility and the related adverse health consequences for the mother, her children, and family.

Unmet need is made up of two groups of women: those who have never used a modern method and those who initiated the use of a modern method but gave it up. It has been estimated that past users accounted for about 38 percent of unmet need in 34 countries and non-users accounted for the remaining 62 percent.¹ Both groups of women will contribute to unintended pregnancies and unintended births. It has also been estimated that the contribution of women with met need (those using contraception) to subsequent unwanted fertility varied from about 30 percent in Egypt and Taiwan to 54 percent in Peru.²

In an ideal situation, women would not experience contraceptive failure and discontinuation would have no impact on unintended birth. As this is not the case, this analysis seeks to understand the contribution of contraceptive discontinuation to unintended fertility in a broad set of countries.

**DATA AND METHODS**

This study used the most recent Demographic Health Survey (DHS) data from 36 developing countries to estimate the contribution of contraceptive discontinuation to unintended recent births. Information about recent births, their intendedness, and contraceptive use come from the 60-month reproductive calendar. In this analysis, the intendedness status reported for the birth itself takes precedence over the implied or reported reason for the discontinuation that preceded the birth. In 25 countries, the DHS reproductive calendar also included reasons for discontinuing a contraceptive method. We used this information to classify reasons for discontinuation into three categories: method failure, desire to become pregnant, and other reasons. We also computed the percent of unintended recent births attributable to each of these categories.

**RESULTS**

Figure 1 shows the percent of unintended recent births by contraceptive use prior to pregnancy in sub-Saharan Africa (SSA), other regions, and all countries combined.

![Figure 1. Percent of 74,313 unintended recent births by contraceptive use prior to pregnancy in 36 countries](image)

Figure 2 shows the percent of unintended recent births contributed by each of the three reasons for discontinuation of a method preceding pregnancy for the same three regions. For all countries combined, the discontinuation of contraception to become pregnant contributed relatively little (about 3 percent) to the overall number of unintended recent births. Most of the contribution to unintended recent births following contraceptive discontinuation comes from the sum of method failure and discontinuation for other reasons (switching failure). These two reasons contributed equally to unintended recent births in all countries combined (see Figure 2). In 14 out of 25 countries, most with low contraceptive prevalence, the contribution of method failure to unintended recent births is less than 10 percent. In other countries, this contribution varies from about 17 percent in Namibia and Pakistan to 34 percent in Indonesia and 41 percent in...
Bangladesh. In contrast, the contribution of switching failure is much higher: greater than 20 percent in 6 countries, between 10 and 20 percent in 10, and less than 10 percent in the remaining 9 countries. Data for each country can be found within the full report.

Country-level regression analysis revealed that the contribution of contraceptive discontinuation to unintended recent births increases with the use of modern methods but decreases as method composition at a given level of contraceptive prevalence shifts toward methods with higher effectiveness and longer continuation.

**DISCUSSION**

The study indicates that nonuse of contraception accounted for about two-thirds of unintended recent births in 36 countries, while contraceptive discontinuation accounted for the remaining one-third (about 33 percent of unintended recent births and 35 percent of unintended recent pregnancies). Extrapolating these results implies that about 25 million out of 74 million unintended pregnancies globally may have been the result of contraceptive discontinuation.

**ATTENTION TO ISSUES OF QUALITY OF CARE WILL BE EFFECTIVE IN REDUCING CONTRACEPTIVE DISCONTINUATION AND ITS CONTRIBUTION TO UNINTENDED BIRTHS.**

The contribution of method failure is relatively high because the use-effectiveness of modern methods is usually lower than their theoretical effectiveness, which may indicate that counseling to ensure that methods are used correctly and consistently is inadequate in many countries. Switching failures (method discontinuation for method-related reasons) also accounted for about 16 percent of unintended recent births. In contrast to method failure, switching failure or contraceptive discontinuation for other reasons may indicate that the method did not remain suitable to women’s needs and either they did not receive adequate information about switching to another method or services for other methods were unavailable. A reduction in method-specific discontinuation for other reasons requires that women receive information and encouragement about the possibility of switching to another method soon after the original method is no longer suitable.

**CONCLUSION**

High contraceptive discontinuation in the past without changes in fertility intentions has resulted in millions of unintended births. This contribution is likely to increase with the anticipated increase in the use of modern methods. Enabling current users to reduce method failure and encouraging them to switch to another method after discontinuing the use of the original method will be an effective strategy to reduce contraceptive discontinuation and its contribution to unintended births. The results of this study also suggest that simultaneous efforts are needed in countries with low contraceptive prevalence to improve service delivery structures, convert latent demand for contraception into actual use, and improve quality of care.

Attention to issues related to quality of care, such as counseling to ensure that a woman has the method she needs/wants and uses it correctly, will help women in all countries to avoid contraceptive discontinuation and associated unmet need and unintended fertility right from the beginning. As programs become more successful, quality of care will become key to expanding contraceptive use and reducing unintended births. A reduction in the level of contraceptive discontinuation and in its contribution to unintended births will require interventions to reduce method and switching failures. At the same time, maternal health programs should provide pre-pregnancy services to enable women to become pregnant effectively and safely.

**REFERENCES**


This brief is based on the article, Contribution of Contraceptive Discontinuation to Unintended Births in 36 Developing Countries, prepared by Anrudh K. Jain and William Winfrey for the Measuring and Monitoring Quality of Services and Quality of Care project funded by a grant from the David and Lucile Packard Foundation to the Population Council. We gratefully acknowledge the support and encouragement of the Foundation to continue research on the current state of quality of care.