

Contraception Discontinuation and Switching in Developing Countries

Research Policy Brief

June 2012

Introduction

As contraceptive practice in a society becomes more widespread, the avoidance of unintended pregnancies becomes less dependent on rates of initial adoption and more dependent on the ability and willingness of couples to use methods with maximum effectiveness, to use them persistently and to switch quickly to alternative methods as and when the need arises. In populations where most couples have never tried any method of contraception, the vast majority of unintended pregnancies inevitably stem from avoidance, or never-use of contraception. Conversely, in populations where most adults have tried one or more contraceptive methods, the majority of unintended pregnancies are the result of the use of less effective methods, incorrect use of effective methods or abandonment of use. Thus, the study of use dynamics, and their relevance to an understanding of the ability of couples to achieve their reproductive intentions, has steadily grown in importance over the past 50 years, in line with the spread of contraceptive practice in developing regions.

Successful use of contraceptives depends on many factors. Important influences no doubt include the degree of commitment to regulating reproduction, inter-partner discussion and agreement on reproductive goals and the means to achieve them, and sociocultural factors that condition beliefs about particular methods. A growing body of evidence also supports the commonsense expectation that the quality of family planning services affects the ability of couples to use contraceptives successfully. Thus, information about the dynamics of contraceptive use will help to identify weaknesses in family planning services and suggest corrective action. For instance, discontinuation of use that is not followed by prompt recourse to an alternative method carries the possible implication that the range of readily accessible methods may need to be widened.

This policy brief presents selected findings from an analysis of 60 Demographic and Health Surveys (DHSs) that collected relevant information. The detailed results are available in Ali, Cleland and Shah (2012). The focus here is on surveys conducted in the recent past (2002–2009) in 19 developing countries.

Data and Methods

The contraceptive calendar takes the form of a grid in which contraceptive status is recorded for each calendar month over a five-year period preceding the survey. The unit of analysis is an episode of contraceptive use and events following discontinuation. An episode is defined as a period of uninterrupted use (in months) that may or may not have ended. Reasons for stopping use are recorded in calendars. These reasons were grouped into the following four categories: reported failure (i.e. the respondent became pregnant while using the method); a desire to become pregnant; no further need (i.e. sexual abstinence due to illness or marital dissolution); and method-related reasons. This final category includes reasons that imply some degree of dissatisfaction with the method, such

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as side-effects, health concerns, medical advice, problems of access and availability, desire to switch to a permanent method, inconvenience of use and cost.

Method-specific information was analysed for the six most commonly used reversible methods. Voluntary sterilization, the most prevalent method worldwide, was not analysed, because of its permanent nature.

Information on the intention status of recent live births (and current pregnancy, if any) is also used in the analysis. Births and current pregnancies are classified into those wanted at that time, those that were unwanted at any future time and those that occurred earlier than desired (mistimed). This information on intention status was linked to the calendar data, in order to investigate the reproductive consequences of discontinuation.

The data were analysed by life-table methods. Single-decrement life tables were applied to assess cause-specific discontinuation. This method provides estimates of the probability of discontinuation for a specific reason, in the absence of competing reasons for stopping.

Results

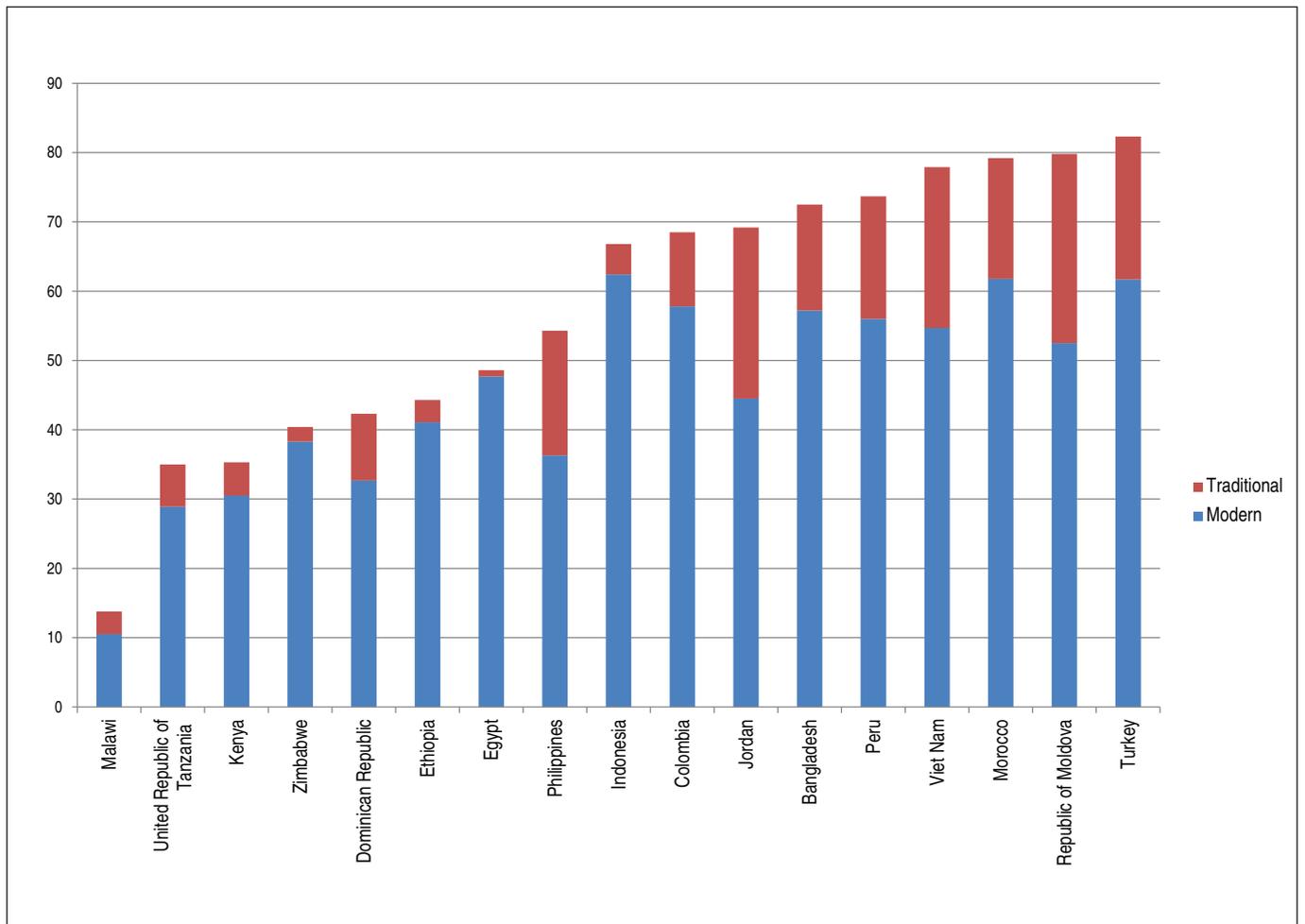
Overall discontinuation is remarkably high for all methods except intrauterine devices

For all methods and all 19 countries averaged together, 38% of couples had stopped use of their method within 12 months of starting. This figure is similar for pills, injectables, condoms, periodic abstinence and withdrawal, ranging from 40% to 50%. In contrast, only 13% of intrauterine device (IUD) users stopped within 12 months. The median length of IUD use is 56 months, compared with 12–16 months for other methods.

Reasons for discontinuation vary by method

Desire for another child is stated as a reason for stopping in the first year of use by only 6% of women, though by the end of the third year of use 23% have discontinued for this reason. Similarly, only 8% stop use in 12 months because they have no further need for contraceptive protection. For the four modern methods, reported failure is rare, varying between 1% for IUDs and 8% for condoms.

Figure1: Per cent who switched to a modern and to a traditional method within three months of method-related discontinuation, 17 countries



The dominant reason for stopping a modern reversible method is dissatisfaction, predominantly side-effects and/or health concerns for IUDs and hormonal methods, and inconvenience and desire for a more effective method for condoms. Users of injectable contraception are most likely to stop for these method-related reasons in the first year (35%), followed by pill users (25%), condom users (23%) and IUD users (9%). In contrast, reported failure is the most common cause of discontinuation of the two traditional methods, cited by 17% of those using periodic abstinence, and 15% of those using withdrawal. By the end of the third year of use, the probability of failure with these two methods is about 40%.

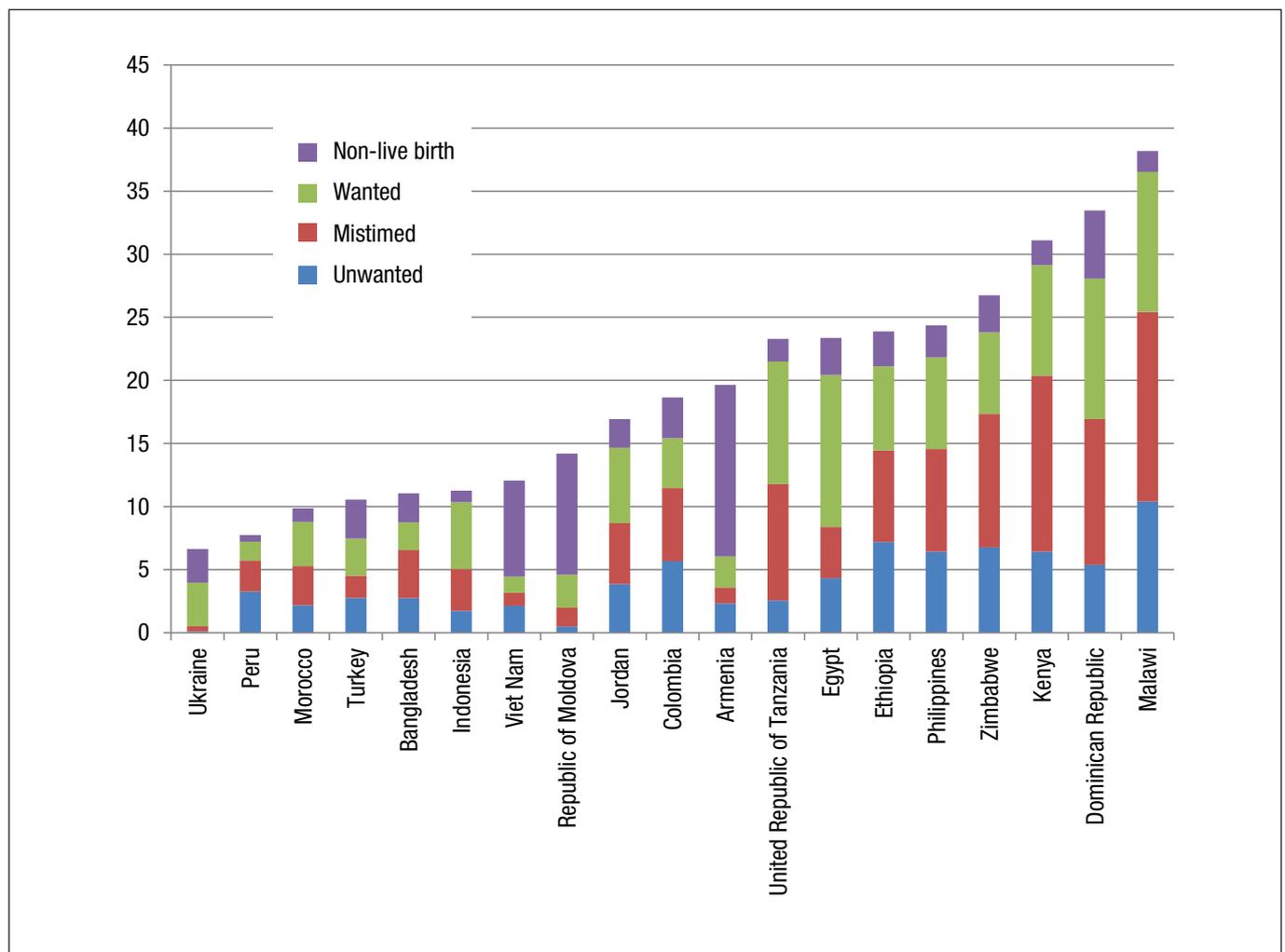
Discontinuation also varies markedly between countries

The median duration of contraceptive pill use varies from less than 10 months in Ethiopia, Peru and Turkey to over 20 months in Ukraine, Viet Nam and Zimbabwe; for injectables, the median is less than 4 months in Bangladesh and the Dominican Republic but over 20 months in Armenia, Egypt, Indonesia and Ukraine. The median duration of IUD use ranges from 24 months to over 60 months, and condom use ranges from 4 months to 38 months.

Switching to an alternative method following method-related discontinuation is low in many countries

Couples who stop using a method because of side-effects or other method-related reasons need to switch promptly to another method, to avoid the risk of an unintended pregnancy. Most switching occurs within the first 3 months and the percentage who switched to a modern or a traditional method within this window of time is shown in Figure 1, for 17 countries where the sample size was sufficiently large. In seven countries, less than half of couples switched and four of these are in sub-Saharan Africa. In contrast, nearly 80% switched in Morocco, the Republic of Moldova, Turkey and Viet Nam. In all countries, the majority of switchers chose a modern reversible method. Switching to sterilization was rare except in Colombia. Switching between the two hormonal methods was common in several countries. Thus, it appears that side-effects or health concerns with the pill do not deter women from trying injectables and vice versa.

Figure 2: Reproductive outcomes within 12 months of method-related discontinuation, 19 countries



Failure to switch after discontinuation is a common cause of unintended births

The reproductive consequences of method-related discontinuation are assessed in terms of the occurrence of births and pregnancies in the 12 months after discontinuation. The percentage who become pregnant is heavily conditioned by the amount of timely switching. The incidence of any pregnancy or live birth is over 30% in the Dominican Republic, Kenya and Malawi (all countries with low switching levels) and between 20% and 29% in Egypt, Ethiopia, the Philippines, the United Republic of Tanzania and Zimbabwe (Figure 2). DHS calendars do not distinguish between miscarriages and induced abortions but reporting of pregnancy losses is very low except in Armenia and the Republic of Moldova. Not all births or current pregnancies are classified by mothers as unintended; in four countries, over half are described as wanted. The incidence of mistimed or unwanted current pregnancies/births is highest, at over 15%, in the Dominican Republic, Kenya, Malawi and Zimbabwe.

Policy implications

- Discontinuation of the two hormonal methods because of side-effects and/or health concerns is very common in most of the study countries, particularly for injectables. Forewarning women about side-effects, and reassuring them with regard to safety, should be an important part of counselling. Of equal, and perhaps greater, importance, is advice that alternative methods are available if the initial method is found to be unsatisfactory.
- Overall discontinuation of periodic abstinence and withdrawal is no greater than for hormonal methods or condoms but the risk of accidental pregnancy is far greater. The merit of these two methods depends to a large extent on access to safe and affordable abortion.
- IUD users are distinguished by the relatively long duration of their IUD use and low failure rates. The reason is uncertain but the fact that discontinuation of this method typically requires a deliberate decision and a visit to a health-care provider for removal is probably part of the explanation. In contrast, discontinuation of pills, injectables and condoms is a passive act. The results strongly support efforts to promote IUDs in countries where they are not commonly used.
- The crucial importance of method switching is underscored by the results. Family planning service providers should anticipate that many couples will not immediately find a method that suits them. Alternatives need to be readily available and women need to be informed of this.

Huge intercountry differences in both discontinuation and switching have been documented. Dissemination of results to national family planning policy-makers should be useful in identifying specific weaknesses in current services. It is of particular concern that switching appears to be particularly low in the countries of sub-Saharan Africa, a region where unmet need for family planning is high.

Acknowledgements

This Brief was developed by Professor John Cleland, London School of Hygiene and Tropical Medicine, University of London. It is based on a collaborative study involving the WHO Department of Reproductive Health and Research and the WHO Regional Office for the Eastern Mediterranean.

Reference

Ali M, Cleland J, Shah I (2012) *Causes and consequences of contraceptive discontinuation: evidence from 60 Demographic and Health Surveys*. In press.

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WHO/RHR/12.15

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