# Title:

Levels, trends and implications of unintended pregnancy worldwide

# **Background and objectives:**

The consequences of unintended pregnancies can be dire. More than half of women who experience an unintended pregnancy obtain an abortion in order to avoid having unwanted child. Although abortion is generally safe, many women resort to unsafe procedures, which are a threat to their health and survival. Unwanted and mistimed births also pose health risks and contribute to infant and maternal ill-health and death,<sup>1</sup> and many women go on to deliver children that they are ill-equipped to care for.

Estimates for 1995 of the incidence of unintended pregnancy and of how they were resolved were developed for the first time by the Guttmacher Institute and published a decade ago.<sup>2</sup> At that time it was found that about 38% of all pregnancies were unplanned and 22% ended in abortion. Estimates were also presented for the major regions and subregions of the world. These findings have been used to identify populations of women most in need of contraceptive services, and were subsequently used to evaluate the costs and benefits of investing in family planning programs.<sup>3</sup>

Since that time, updated information has become available: new estimates have been published on abortion levels and trends in all the major subregions of the world, and numerous surveys that collect information from women on the planning status of recent births have been conducted, primarily in developing countries. But information from these and other sources have not been brought together to present a comprehensive and detailed picture of the incidence and outcomes of unintended pregnancy, how these vary across subregions and how they might have changed over time. This information can provide useful context for further research on the components of unintended pregnancy and their determinants.

We propose to present updated estimates of the numbers, rates and distribution of all pregnancies by their planning status and outcomes (wanted births, induced abortion, mistimed or unwanted births and miscarriages). We will present and compare findings for developed and developing regions, and for major geographic regions and sub-regions of the world. We will also examine trends in unintended pregnancies and their outcomes over time. We will evaluate these trends in the context of trends in total fertility rates, rates of wanted fertility, contraceptive prevalence, contraceptive failure and unmet need for contraception) across regions and over time.

## Data sources:

A number of data sources are used to derive estimates of the two main inputs, births according to planning status and induced abortion, at the subregional, regional and worldwide levels. Regions are defined as they are by the United Nations.

Sources of data used to estimate births and their planning status: We are using United

Nations (UN) current estimates of live births by country and region; Demographic and Health Surveys (DHS) that have been conducted in more than 40 developing countries in the past 5 years and CDC surveys that have been conducted in several additional developing and some developed (Eastern European) countries; national and subnational surveys in a few countries in North, West and Southern Europe and in other developed and developing countries that are not part of the DHS or CDC series of surveys; and the 2002 National Survey of Family Growth in the United States. DHS and CDC data on the planning status of recent births will be used to estimate the proportion of births that are unwanted and mistimed for each region and sub-region of the developing world and for Eastern Europe. We will develop estimates of unwanted and mistimed births in North America and northern, southern and western Europe on the basis of information available from these parts of the world; and we will develop an estimate for the developed world that includes other developed countries outside of the above regions (ie, Oceania).

*Sources of data used to estimate induced abortion:* Estimates of abortion incidence for each major region and subregion of the world for 2003 were recently published.<sup>4</sup> This work combined World Health Organization's estimates of unsafe abortion with the Guttmacher Institute's estimates of the incidence of safe abortion.

*Estimates of spontaneous pregnancy loss*: The incidence of spontaneous pregnancy losses (miscarriages and stillbirths) will be calculated using a model-based approached derived from clinical studies.

#### **Preliminary findings**

Preliminary findings indicate that 42-43% of pregnancies in Europe and North America are unintended, and more than half of these end in abortion. In Latin America more than half of pregnancies are unintended and 44% end in abortion. In Africa, where desired fertility is still high, about a third of pregnancies are unintended, and 40% of these are terminated. The data that have been collected so far for Asia suggest, while a relatively small proportion of pregnancies in the region were unplanned in the 1990s, the proportion of pregnancies that end in induced abortion has increased. We are still compiling data on the percent of births that are unplanned in this region. (See figures)

Preliminary findings suggest that, in the developed world, the proportion of pregnancies that end in induced abortion has declined. In Europe, this decline has coincided with an increase in the proportion of pregnancies that are wanted births, suggesting that women are increasingly succeeding in avoiding unintended pregnancies, but in North America, it has coincided with an increase in unplanned births.

In developing regions, unplanned births have decreased slightly as a proportion of all pregnancies, and this has been offset by small increases in both wanted births and induced abortions. However, overall, there is relative stability over the recent decade in the distribution of pregnancies according to their outcomes in these regions.

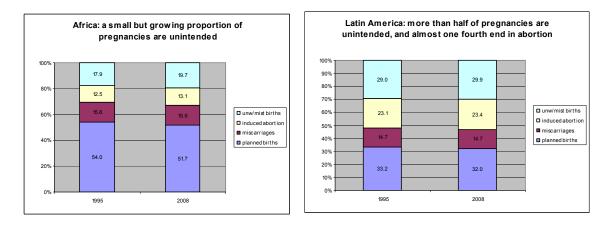
The worldwide pregnancy rate has declined from 160 pregnancies per 1000 women in 1995 to a rate of 137 in 2008. The unintended pregnancy rate fell from 61 to 50 per 1000

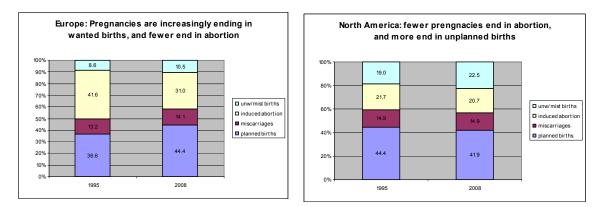
women over the same period (1995-2008), if we assume that unplanned births and induced abortions represent all unintended pregnancies.<sup>\*</sup> Both major world regions – the developed and developing world experienced substantial declines in the unintended pregnancy rate, but the decline was somewhat larger in the developed world (from a rate of 53 in 1995 to a rate of 39 in 2008); by comparison the decline in the developing world was from 62 to 51.

# Additional research

We will be comprehensively examining for all regions and subregions the absolute numbers of unintended pregnancies, unintended pregnancy rates and the proportional distribution of pregnancies by outcomes. We will compare trends over time and how these may differ among regions and subregions. In addition, we will also examine the levels and trends of unintended pregnancy in light of trends over time in total fertility, wanted fertility, contraceptive prevalence and unmet need for contraception, and assess how our findings on unintended pregnancy fit into the larger picture of women's fertility desires, and their efforts and ability to control their fertility.

## Preliminary figures – do not disseminate





<sup>\*</sup> We are evaluating whether, and if so how, to classify a proportion of spontaneous pregnancy losses as unplanned pregnancies.

<sup>1</sup> Brown SS and Eisenberg L, eds., *The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families*, Washington, DC: Institute of Medicine, 1995.

<sup>2</sup> The Alan Guttmacher Institute (AGI), *Sharing Responsibilities: Women, Society and Abortion Worldwide,* New York: AGI, 1999

<sup>3</sup> Singh S et al., *Adding It Up: The Benefits of Investing in Sexual and Reproductive Health Care*, New York: AGI and UNFPA, 2003.

<sup>4</sup> Sedgh G et al., Induced abortion: rates and trends worldwide, *Lancet*, 2007, 370(9595):1338–1345