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FROM THE AMERICAN PEOPLE

The Rationale for Family Planning in the Former Soviet Union

Evidence from Europe, Eurasia, and the US



March 2009

The EUROPE AND EURASIA REGIONAL FAMILY PLANNING ACTIVITY is a three-year initiative funded by the U.S. Agency for International Development through contract GHS-I-05-03-00026-00. The Activity is a regional effort to leverage best practices in family planning in order to accelerate program implementation across the region to increase modern contraceptive use and decrease abortion rates.

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ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
CDC	Centers for Disease Control and Prevention
CIS	Commonwealth of Independent States
EU	European Union
HFA-DB	European “Health for All” database
HIV	Human Immunodeficiency Virus
IPPF	International Planned Parenthood Federation
IUD	Intrauterine device
MOH	Ministry of Health
PID	Pelvic inflammatory disease
STI	Sexually transmitted infection
TAR	Total abortion rate
TFR	Total fertility rate
UN	United Nations
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
WHO	World Health Organization

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Introduction

One of the many changes taking place in the last fifteen years in the former Soviet countries is the availability and increasing use of modern contraceptive methods. This trend is viewed with concern in some countries—policy makers may not be familiar with modern contraception and may question the need for government to ensure access to quality family planning services. Such policy makers may not be aware of the many benefits of family planning, including:

- Improved maternal and child health and survival
- Reduced abortion rates
- Preventing sexually transmitted infections, including HIV
- Cost effectiveness and reduced health care costs
- Supporting the rights of individuals and children, giving couples the ability to make life-changing decisions about starting a family and family size

Moreover, in some countries where fertility rates are low and the population is declining, there are concerns that family planning can accelerate such population declines. Data refuting this misperception are presented in this paper. This paper will also inform readers why governments in industrialized nations—including those with low fertility rates—support family planning services and present the many important benefits that improved access to such services confers upon individuals, families, and governments¹.

The countries included in this analysis include twelve countries that were part of the Soviet Union prior to its dissolution: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. (These countries also comprise the Commonwealth of Independent States².) This paper will refer to these countries as “the Region.” Throughout the paper data from the Region will be compared to data from the European Union (EU) and the United States (US). When direct comparisons to the EU and US are not available, global data are used.

The common political heritage shared by these nations in the Region has resulted in a distinct pattern of family planning use, one that is contrasted by contraceptive use patterns in other industrialized nations:

- Relatively low use of modern contraceptive methods
- Relatively high use of traditional methods
- Relatively high reliance on abortion to control fertility, rather than using contraception

¹ This paper is adapted from an earlier paper: “The Rationale for Family Planning in Ukraine” (Bossert, et al., *Together for Health* project, Kyiv, Ukraine, 2007)

² Georgia is scheduled to withdraw from the Commonwealth of Independent States in August 2009.

- A lingering distrust of modern contraception, and hormonal contraception in particular

Despite these common characteristics, however, reproductive health indicators among countries of the Region vary considerably. For example, the average number of children that a woman is likely to have in her lifetime (known as total fertility rate or TFR) ranges from 1.3 in Moldova and Ukraine to 3.3 in Tajikistan. Similarly, rates of modern contraceptive use among married women of reproductive age in the Region also vary greatly, from as low as 12% in Azerbaijan to 59% in Uzbekistan.

This paper presents five compelling reasons to support increased access to family planning in the region, regardless of current fertility levels:

- 1. Family planning is a human right.** These twelve countries, along with most countries in the world, are signatories to major human rights declarations and international consensus documents that include:
 - The right of women to have access to adequate health care facilities, including information, counseling and services in family planning
 - The right of a child to be born wanted and healthy
 - The right of couples to decide freely and responsibly the number, spacing, and timing of their children
- 2. Modern contraceptive methods are safe, effective, and confer many health benefits.** Many high-quality studies conducted worldwide following women over many years have clearly documented the safety of modern methods. Furthermore, significant health benefits are clearly proven to result from contraceptive use. To the extent that these health benefits protect a woman's fertility, they may even serve to increase total family size when couples decide at a later date to have more children. Lastly, maintaining adequate intervals between births has been shown directly to improve maternal, infant, and even child survival.
- 3. Contraception reduces reliance on abortion.** While abortion levels in the Region have declined in recent years, the combined abortion ratio in the Region is more than twice as high as that of the European Union. There are many reasons to support less reliance on abortion, including health benefits to women and their families and cost savings to clients and the health care system. Furthermore, evidence from low-fertility countries in the Region shows that increased use of modern contraception *replaces* abortion, rather than lowering fertility rates.
- 4. The benefits of family planning outweigh the costs.** Evidence from the Region as well as other countries throughout the world, including the EU and US indicates that contraceptives are among the most cost-effective health interventions a country can invest in. Furthermore, investments in family planning

are often offset by cost savings in abortion services and abortion-related complications, since abortion rates decline.

5. **Many governments support family planning and affordable contraceptives.**

Because contraception provides overwhelming benefits to the health of a nation, many governments have developed funding and structures to provide ready access to family planning services, counseling, and commodities. Different countries subsidize contraceptives to varying degrees, but they do so because they realize the importance of contraceptive availability and accessibility to improving the health and well-being of their nation.

I. Family Planning as a Human Right

Broad international consensus has clearly developed since the 1990s: Governments have a responsibility to protect and promote the rights of individuals and couples to control their reproductive lives and have access to family planning information and services. International agreements such as the declaration of the International Conference on Population and Development in Cairo in 1994 and the World Health Organization's (WHO's) Reproductive Health Strategy of 2004, among others, have made reproductive health and family planning major international priorities. Most recently, world leaders at the 2005 World Summit agreed to make universal access to reproductive health by 2015 a national strategy to attain the United Nations' Millennium Development Goals, asserting that "progress for women is progress for all," (United Nations Population Fund, 2005).

Enshrined in many international and national proclamations, laws, and international agreements, the importance of reproductive health and family planning has been a long-term doctrine in many countries. All of the countries in the Region are signatories to the many international agreements on human rights, including the International Covenant on Civil and Political Rights; the International Covenant on Economic, Social and Cultural Rights; the Convention on the Elimination of All Forms of Discrimination Against Women; the Convention on the Rights of the Child; and the international consensus documents from the International Conference on Population and Development and the Fourth World Conference on Women.

Couple's and Individual's Rights

The decision of whether to have a child, and when to do so, is internationally recognized as a fundamental human right. International declarations and agreements have explicitly identified reproductive health—and more specifically, access to family planning—as a basic human right.

- *The Universal Declaration of Human Rights* in 1968 asserted the human right "to marry and to found a family."

- *The 1994 International Conference on Population and Development* in Cairo: Paragraph 7.16: "...All countries should take steps to meet the family-planning needs of their population as soon as possible and should, in all cases by the year 2015, seek to provide universal access to a full range of safe and reliable family-planning methods and to related reproductive health services which are not against the law. The aim should be to assist couples and individuals to achieve their reproductive goals and give them the full opportunity to exercise the right to have children by choice."
- The European Union has several of its own human rights treaties, beginning with the *European Convention on the Protection of Human Rights and Fundamental Freedoms* (1950), which formally asserts that "men and women of marriageable age have the right to marry and found a family." The *European Social Charter* (1961) guarantees social and economic human rights, with a specific mention of the right to "accessible, effective health care facilities for the entire population."
- *The European Convention on Human Rights* also established the European Court of Human Rights, through which persons who feel their rights have been violated under these conventions may bring their case to the court. The status of reproductive rights as a human right has been confirmed through several cases, including the right to abortion for a woman in Poland, the paternity of a stillborn child in Russia, and the costs associated with the disabilities of a child that were not detected during the pregnancy of a woman in France (European Court of Human Rights, www.echr.coe.int).

Women's Rights

Although the rights of women are implied within all Human Rights declarations and conventions, their special reproductive status has also resulted in declarations that specifically address *women's* rights. Among these declarations are:

- *The Convention on the Elimination of All Forms of Discrimination against Women* (1981): Article 12.1. "State Parties shall take all appropriate measures to eliminate discrimination against women in the field of health care in order to ensure, on a basis of equality of men and women, access to health care services, including those relating to family planning." Article 14.2. "State Parties ... shall ensure to ... women [in rural areas] the right ... (b) to have access to adequate health care facilities, including information, counseling and services in family planning."
- *The WHO Reproductive Health Strategy* of 2004 defines a strategy for countries to use to improve reproductive and sexual health services. It cites as one of the core aspects of reproductive health: "...providing high-quality services for family planning, including infertility services; eliminating unsafe abortion; combating sexually transmitted infections including Human

Immunodeficiency Virus (HIV), reproductive tract infections, cervical cancer and other gynecological morbidities; and promoting sexual health,” (WHO, 2004a).

- *The 1995 United Nations Fourth World Conference on Women* (Beijing Conference) reaffirmed the need to continually guarantee that reproductive rights are considered an integral part of human rights.
- Other organizations, such as the *International Federation of Gynecology and Obstetrics* (FIGO), have acknowledged the need for women’s rights in order to achieve reproductive and sexual health. FIGO recognizes that “women’s health is often compromised not by lack of medical knowledge, but by infringements on women’s human rights.”
- *The Millennium Development Goals* are an ambitious agenda for reducing poverty and improving lives agreed upon by 189 member states (including all twelve countries in the Region) at the Millennium Summit in 2000. Three of the eight Millennium Development Goals are directly related to sexual and reproductive health: Reduce child mortality, improve maternal health, and combat HIV/AIDS. In October 2006, universal access to reproductive and sexual health services through the primary healthcare system was confirmed as a new target toward the goal of “improving maternal health,” (Family Care International, 2007; International Planned Parenthood Federation, 2006). This additional goal was proposed by the Millennium Project Task Force on Child Health and Maternal Health and endorsed by United Nations (UN) Secretary-General Kofi Annan who said:

“The Millennium Development Goals, particularly the eradication of extreme poverty and hunger, cannot be achieved if questions of population and reproductive health are not squarely addressed. And this means stronger efforts to promote women's rights and greater investment in education and health, including reproductive health and family planning.”

Children’s Rights

Avoidance of “unwanted pregnancies” and/or “unwanted births” is mentioned in many of the statements calling for access to family planning services. Inherent in this reasoning is the basic concept that every child should be “wanted.” The 1994 International Conference on Population and Development Program of Action made this concept explicit, stating:

“First and foremost among these responsibilities is to ensure that every child is a wanted child. The second responsibility is to recognize that children are the most important resource for the

future, and that greater investments in them by parents and societies are essential to the achievement of sustained economic growth and development.”

In addition, The Convention of the Rights of the Child (1990) stipulates: “State Parties shall ... take appropriate measures: (a) to diminish infant and child mortality ... (d) to ensure appropriate pre- and post-natal health care for expectant mothers ... (f) to develop preventive health care, guidance for parent and family planning education and services.”

Family planning is a successful intervention, one that has been directly proven to improve infant and child health, as well as decrease infant and child mortality (see *Family Planning Contributes to Healthy Infants, Children, and Mothers*, p. 7).

Although formal agreements are important assertions of rights, it is through the implementation of these rights at the national level that these guarantees are put into practice. In many countries, implementation has been inhibited by a variety of factors, including inadequate funding for reproductive health and family planning services, inadequate health systems and weak administrative structures, competing legal barriers, as well as broader social conditions of gender inequality and social norms about reproductive choices.

Key point 1: There is worldwide consensus that access to family planning services, counseling, and commodities is a basic human right, essential to the rights of the couple, the woman, and the child.

II. Family Planning as a Health Issue

Many of the declarations above make the link between family planning and health. This is because family planning has long been shown to provide many health benefits to a population. Contraception can reduce unwanted pregnancies, and thus, abortions, complications of pregnancy and childbirth (through preventing pregnancy), and lower the number of sexually transmitted infections, including HIV.

The role for contraception is indeed large. A global estimate of data in 2000 finds that every year, more than 120 million couples have an unmet need for contraception, and 80 million women have unintended pregnancies—45 million of which end in abortion. Over one-half of one million women die from complications associated with pregnancy, childbirth, and the postpartum period, and 340 million people acquire new gonorrhea, syphilis, chlamydia, or trichomonas infections (Glasier, 2006). Furthermore, modern contraceptive methods have long been proven to be safe. In fact,

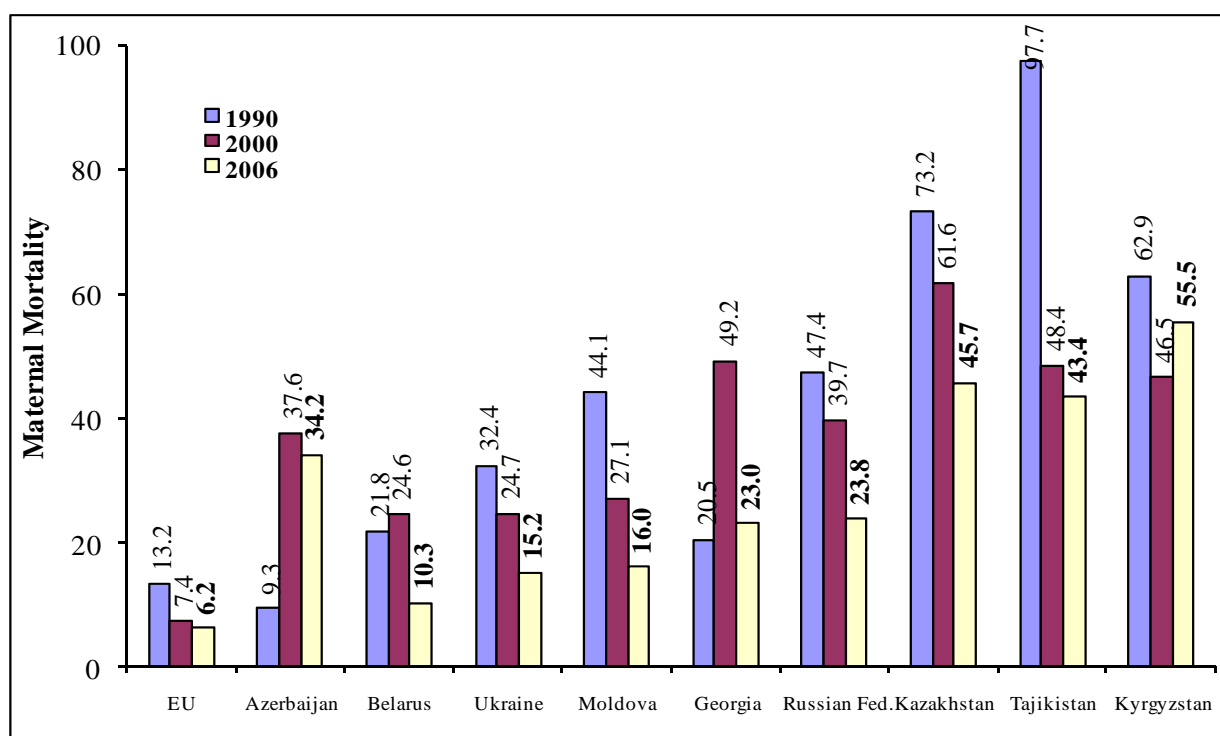
many direct health benefits result from contraceptive use, beyond preventing pregnancy.

Family Planning Contributes to Healthy Infants, Children, and Mothers

Avoiding unplanned and unwanted pregnancies is an important strategy to reduce infant and maternal mortality. Estimates find that as many as 50% of pregnancies are unplanned and 25% of pregnancies are unwanted in some countries (Donnay, 2000). Furthermore, complications of abortion are responsible for a large share of maternal deaths. For example, in Russia, abortion-related maternal mortality is roughly 10 times higher than in Western countries (Zhirova, 2004).

Over the last two decades, the maternal mortality rate in the Region has decreased considerably. In the Russian Federation, for example, the maternal mortality rate fell from 47 per 100,000 live births in 1990 to 24 per 100,000 in 2006. Still, this is nearly four times higher than the rate in the European Union, at about 6 maternal deaths per 100,000 live births (see Figure 1).

Figure 1. Maternal Mortality Rate (maternal deaths per 100,000 live births), Selected Countries, 1990–2006



WHO/Europe Health for All Database

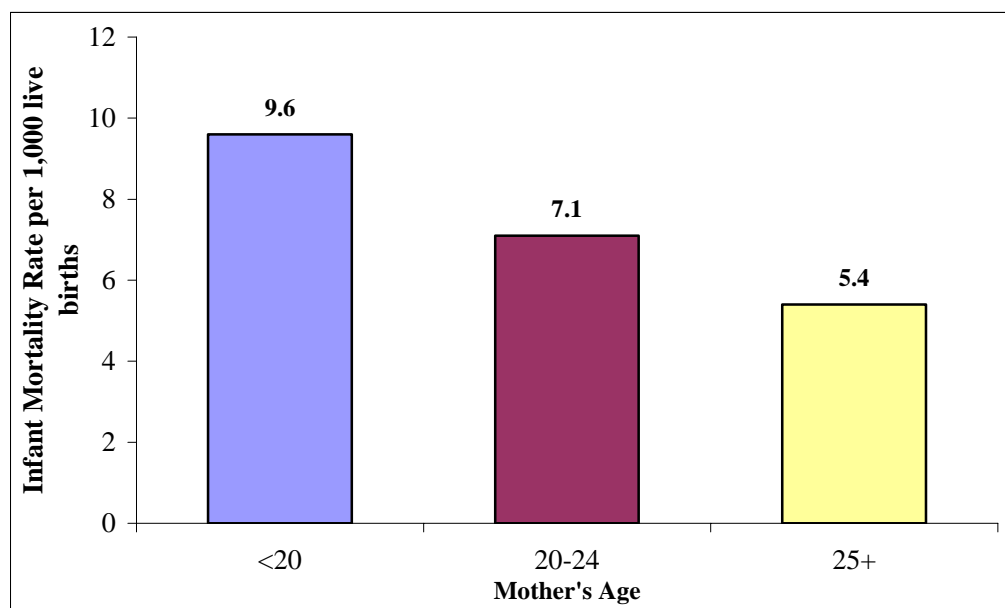
Family Planning Can Postpone Early Childbearing

Delaying the first birth of a child until age 20 is beneficial to the health of both mother and child. Pregnancy is the leading cause of death for young women ages 15 to 19 worldwide, resulting from complications of childbirth and unsafe abortion (UNFPA, 2004). These adolescent girls are twice as likely to die in childbirth as women in their 20s (UNFPA, 2004). The most common complications in pregnant adolescents include preterm labor, hypertensive disease, anemia, and poor maternal nutrition (Treffers, 2001).

In addition to safeguarding adolescent health, postponing childbearing also benefits young women by allowing them time to mature physically and mentally, to complete their education and be better prepared for the costs of supporting a newborn child (WHO, 2004a).

A global overview as well as a comprehensive review of the literature concluded that young mothers are more likely to have low birth-weight babies and are less likely to breastfeed their infants (Treffers, 2001; Koniak-Griffen, 2001). As such, the risk of infant death is higher among adolescents than with mothers over age 20. The risk of dying in the first year of life is typically 30% higher among babies whose mothers are aged 15 to 19 than among those born to mothers aged 20 to 29 (Alan Guttmacher Institute, 1997). Data from the United Kingdom show that infants born to young mothers are at increased risk of death compared to those born to mothers 25 years of age or older (Botting, 1998). The younger the age of the mother, the greater the risk of infant mortality (see Figure 2).

Figure 2. Infant Mortality by Mother's Age, England and Wales, 1994-1996



Botting, 1998

Countries in the Region have a higher level of adolescent pregnancies than other developed countries. In a review of 46 developed nations, adolescent childbearing rates were higher in 1995 than in 1970 in eight countries—Armenia, Belarus, Estonia, Georgia, Lithuania, Macedonia, the Russian Federation, and Ukraine. Only five of the 46 countries had rates of 70 or more pregnancies per 1,000 women aged 15-19 per year—Belarus, Bulgaria, Romania, the Russian Federation, and the U.S. (Alan Guttmacher Institute, 2001).

Young age at sexual debut contributes to these high levels of adolescent pregnancy, and teens in much of the Region are sexually active. For example, a study conducted by the Ukrainian Ministry of Health found that the average age of first sexual intercourse was 14 (Centers for Disease Control, 2003; Cromer, 1999). A WHO adolescent study found that 24% of girls age 15 and 47% of boys age 15 in Ukraine had had sexual intercourse (WHO, 2004c).

In countries in the Region where premarital sex is culturally unacceptable and less common than in Ukraine, the risk of early childbearing is still a concern due to early age at marriage. Married teens may be at increased risk of early childbearing, since the need for a bride to “prove” her fertility is common throughout many countries in the world—including more traditional European societies (Lucas, 1999). In Tajikistan, for example, nearly 15% of women ages 20-49 were married before they were 18 years of age (MICS Global Team, 2005). Women who marry at an early age also tend to have more pregnancies and births than women who married later in life (MICS Global Team, 2005), which are additional risk factors for poor reproductive health.

Family Planning Can Avoid Risky Late Pregnancies

Pregnancies at later ages are also a health concern for women and their children. As the age of pregnancy increases, increases in some health risks, including the risk of miscarriage, stillbirth, death of the newborn, gestational diabetes, pregnancy-induced hypertension, severe preeclampsia, and *placenta previa* also increase (Hanson, 1986; Huang, 2008; Jacobsson, 2004). Births to women over age 40 were found to be 2.7 times as risky as those in the lowest risk groups (Chen, 1974).

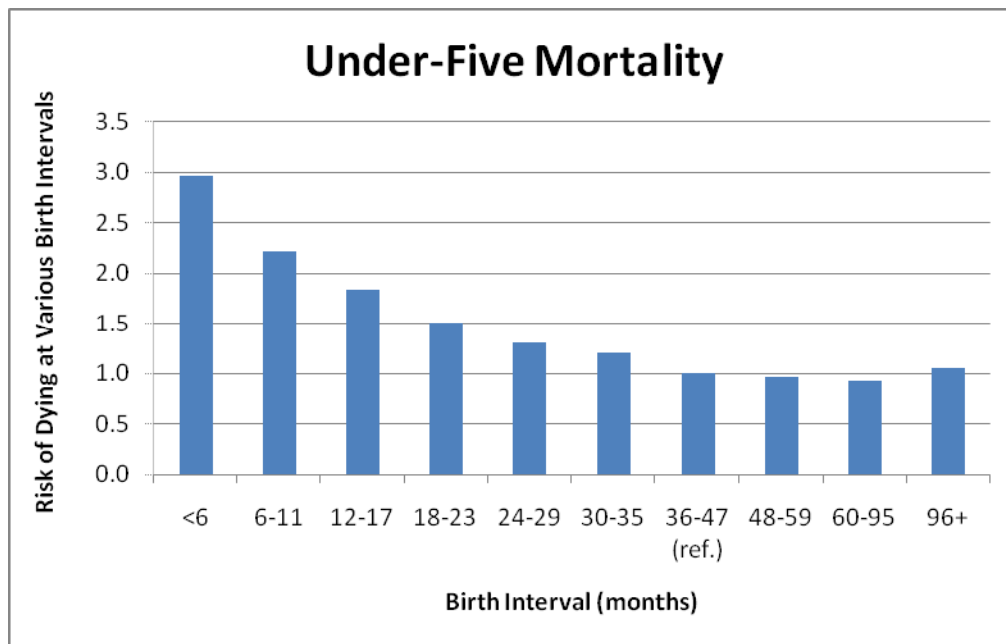
Family Planning Can Help with Healthy Birth Spacing

Appropriate birth intervals confer significant health benefits to mothers. A meta-analysis of 22 studies found that short birth intervals were associated with increased risk of uterine rupture, uteroplacental bleeding, maternal mortality, and other adverse maternal outcomes (Conde-Agudelo, 2007). Increased risk of adverse events to the health of the mother was found for intervals as short as 6 months or less after subsequent pregnancy, as well as for intervals up to 24 months between pregnancies (Conde-Agudelo, 2007).

Conversely, there are benefits to health when birth intervals are longer. Compared to women who give birth at 9 to 14 month intervals, women who have children at an interval of 27 to 32 months are 1.3 times more likely to avoid anemia, 1.7 times more likely to avoid third-trimester bleeding, and 2.5 times more likely to survive childbirth (Conde-Agudelo, 2000).

Sufficiently long birth intervals also protect the health and survival of neonates, infants, and children up to age five. Appropriate birth spacing is associated with to reduced risk of premature and/or low birth weight infants (Fuentes-Afflick, 2000; Gribble, 1993). The most comprehensive analysis clearly shows that 36 to 47 months between a birth and the next conception is the interval with the lowest risk of neonatal, infant, and under-five mortality (Rutstein, 2008) (see Figure 3).

Figure 3. Mortality Rates by Preceding Birth Intervals



Rutstein, 2008

In the Region, similar research on birth intervals yields the same findings as the global studies. In Kazakhstan, Kyrgyzstan, and Uzbekistan, mortality of children aged <36 months was 60% lower among those with birth intervals of 18 months or longer, after controlling for multiple factors (Akmatov, 2006).

Preventing Too Many Pregnancies

The literature is full of anecdotal evidence that too many pregnancies can be detrimental to the health of mothers, infants, and children. A common concern is that it may be advanced maternal age, and not the multiple pregnancies that are indeed the risk factor. A review of the literature examining the evidence for women with >5 and >10 pregnancies concluded that it is indeed likely that there is a linkage between multiple pregnancies, medical complications, and placental pathologies (Aliyu, 2005).

Studies show that having more than four births results in substantial health risks to the mother. For example, uterine prolapse and postpartum hemorrhage are more common among high-parity women (WHO, 2003a). Other studies show that low-income families with many children negatively affect child health through malnourishment, failure to recognize illness, inadequate attention and care, unfit clothing and shelter, and failure to take a child to see a doctor (Heaton, 2005).

Key point 2: Use of contraception leads to healthier mothers and infants through birth spacing and prevention of pregnancies among the very young, very old, and women with many children.

Modern Contraceptive Methods are Safe

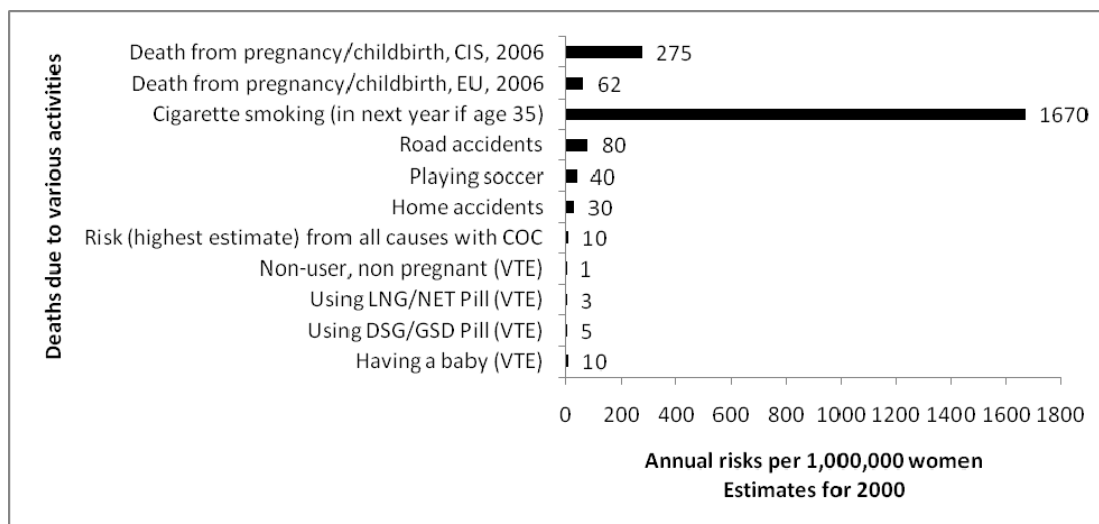
Modern contraceptives are among the most-studied drugs and devices in the world. These studies are rigorously conducted to ensure the safety and effectiveness of contraceptive methods so that governments, policy makers, medical personnel, and users can be sure that the benefits of contraceptive use outweigh any risks associated with the method.

As with all medications and medical devices, there are benefits as well as risks to their use. Fortunately, the risks associated with contraceptive use are extremely low. Some of the most widely publicized risks of combined oral contraceptives relate to adverse cardiovascular events, such as deep vein thrombosis (blood clot in the deep veins of the legs) and pulmonary embolism (blood clot in arteries leading to the lungs). Figure 4 helps place these risks in context—note that the rates presented are per *million* women.

The data in Figure 4 clearly show that, for women in the United Kingdom, the risk of venous thromboembolism (blood clots) due to oral contraceptive use is one-third to one-half the risk of such blood clots during pregnancy and childbirth (Guillebaud, 2004). Furthermore, a woman using combined oral contraceptives is eight times more likely to die from an auto accident than her contraceptive use. Others estimate that the risk of death from pregnancy (>20 weeks) and childbirth for women living in the US and the United Kingdom is 20 times higher than that from oral contraceptive use for a

young, healthy woman, and 1,000 times higher than the risk of death from using an IUD (Hatcher, 2004).

Figure 4. Comparison of Risks of Death Associated with Contraception, Childbirth, and Other Activities in the United Kingdom, 2000, EU, and CIS in 2006



Adapted from Guillebaud, 2004. EU and CIS data from WHO HFA-DB.

VTE = venous thromboembolism
LNG = levonorgestrel

DSG = desogestrel
NET = norethisterone

GSD = gestodene

Historical Concerns with Hormonal Contraceptives

Many in the Region were taught that certain contraceptives are harmful to health. Some of this is a result of misunderstanding the historical evidence that is no longer applicable to today’s contraceptive formulations. Worldwide studies in the 1960s and 1970s suggested that combined oral contraceptives were linked to increased risks of blood clots, heart attacks, and stroke (Royal College, 1967; Royal College, 1978; Vessey, 1968). The higher the dose of estrogen, the greater the risk of these adverse events (Gillium, 2000). As a result, high-dose pills stopped being used.

Unfortunately, it was primarily high-dose pills that were commonly available in the former Soviet block. The reputation of hormonal contraceptives was negatively affected by such research findings—a legacy that contributes to the reluctance of physicians to prescribe today’s low-dose oral contraceptives. Nearly all of the oral contraceptives available in the Region today have less than 50 mcg of estrogen (Hudgins, 2004). This dose is not only effective, but significantly reduces the risks of adverse cardiovascular events (Gillium, 2000).

Many misperceptions exist about combined oral contraceptives. Fortunately, there is a large body of research that proves these misperceptions to be false. For example, a comprehensive literature review and pooling of studies found no association between oral contraceptives and weight gain (Gallo, 2008b). A common concern worldwide is

that oral contraceptives can impair future fertility. Many studies show, however, that there is no delay in return to fertility after oral contraceptive use—that is, women who had used pills were equally likely to become pregnant over time as women who did not use any contraceptive method (WHO, 2007c; Hassan, 1994; Farrow, 2002). In fact, one study had a particularly interesting finding: Women who had used oral contraceptives for the longest period of time became pregnant faster than other women, including non-users (Farrow, 2002). Thus researchers believe that the use of oral contraceptives *improves* a woman’s future fertility—their protective effects on ectopic (extrauterine) pregnancies and many reproductive cancers are well known (see Combined Oral Contraceptives Provide Many Health Benefits, below).

Another common misperception is the one that oral contraceptives cause cancer. The opposite is true: The literature clearly shows a *protective* effect of oral contraceptives against many cancers (see Table 1, pp. 14-15). Countless studies have been undertaken to understand oral contraceptives and cancer, including meta-analyses of thousands of women (Marchbanks, 2002; Dumeaux, 2003 & 2005; Kahlenberg, 2006; Kumle, 2005; Vessey, 2006). Nonetheless, there are some unanswered questions regarding any association between oral contraceptives, breast cancer, and cervical cancer. A group of experts gathered by the WHO in 2006 to review the evidence for the Global Handbook concluded that findings are conflicting and difficult to interpret (WHO, 2007b). In general, the increases in risk are slight. Because so few women are affected, and because the health benefits of oral contraceptives are so numerous, the WHO does not recommend changing prescribing practices due to concerns about the increased risk of these cancers (WHO, 2004d).

Where the risks of using contraceptives outweigh the benefits of their use, WHO provides clear guidance on whether the method should be used. A special working group conducts systematic literature reviews on health conditions and contraceptive use, and then brings together a global expert group. This group reviews the evidence and reaches consensus on who can and cannot safely use each contraceptive method. The WHO Medical Eligibility Criteria delineate which contraceptives are contraindicated by certain health conditions (WHO, 2004d).

Key point 3: Modern contraceptive methods have been extensively studied for many years. Their safety has been well established, and risks and benefits are well known.

Combined Oral Contraceptives Provide Many Health Benefits

Combined oral contraceptives provide many health benefits beyond choosing when and if to become pregnant. There is excellent long-term evidence for oral contraceptives’ strong protective effect against ovarian and endometrial cancer (Schlesselman, 1995; Hannaford, 2007).

Generally, the longer the woman uses combined oral contraceptives, the greater the reduction in risk of these cancers. For example, compared to women who have never used oral contraceptives, the risk of endometrial cancer is reduced by 23% among those taking pills for one year, by 54% for women using pills for 4 years, by 66% for women taking pills for 8 years, and 72% for women using pills for 12 years (Schlesselman, 1995). Recent results from the Royal College of General Practitioners' study—including more than 45,000 women followed for over 30 years—found a 46% reduction in the risk of ovarian cancer among women who had ever used oral contraceptives, when compared to women who had never used pills (Hannaford, 2007).

Research on the many health benefits of oral contraceptives on women's health is summarized below.

Table 1. Non-Contraceptive Health Benefits of Combined Oral Contraceptives

Health Condition	Details and Results from Published Studies <i>Reductions in Risk Compared to Women Using no Contraception or A Non-hormonal Contraceptive Method</i>
Cancers	
Endometrial cancer	Endometrial cancer decreases by 40% with short term use and up to 80% with long term use (>10 years) (McLaughlin, 2007, Burkman, 2001).
Ovarian cancer	Oral contraceptive use for 12 years reduces ovarian cancer risk by 60% (McLaughlin, 2007). Overall 46% reduction in the risk of ovarian cancer (Hannaford, 2007). The protective effect lasts even after contraceptives use stops.
Colorectal cancer	Using oral contraceptives for 96 months or longer leads to a 40% lower risk for colorectal cancer than never using oral contraceptives (Martinez, 1997; Fernandez, 1998). Ever-users have a 25% reduction in risk of large bowel or rectal cancer, compared to never users (Hannaford, 2007).
Reproductive Conditions	
Ectopic pregnancy	Women using oral contraceptives have lower ectopic pregnancy rates than women not using any contraceptive method (Franks, 1990; Mol, 1999).
Pelvic inflammatory disease	Oral contraceptive use for 12 consecutive months decreases symptomatic pelvic inflammatory disease by 50-60%; pill users were 50% less likely to be hospitalized (Pasner, 1991; Rubin, 1982).
Dysfunctional uterine bleeding	Oral contraceptives reduce dysfunctional uterine bleeding in a randomized controlled trial (Davis, 2000).
Ovarian cysts	Oral contraceptives are associated with fewer functional ovarian cysts in some studies (Holt, 2003). In other studies this reduction is not very large or significant (Grimes, 2006).

Table 1. Non-Contraceptive Health Benefits of Combined Oral Contraceptives
(continued)

Health Condition	Details and Results from Published Studies <i>Reductions in Risk Compared to Women Using no Contraception or A Non-hormonal Contraceptive Method</i>
Polycystic ovary syndrome	Oral contraceptives are the most commonly used treatment for polycystic ovary syndrome, reducing androgenic symptoms and improving menstrual problems associated with this disease (Vrbikova, 2005).
Reproductive Conditions	
Endometriosis	Oral contraceptives are the first line of treatment for pelvic pain, heavy menstruation, and other symptoms associated with endometriosis (Vercillini, 2008).
Dysmenorrhea	Some studies have found that oral contraceptives reduce the risk of dysmenorrhea by 60% (Mishell, 1982). A review of the evidence found that no conclusions can be made about the efficacy of commonly used modern lower dose combined oral contraceptives for dysmenorrhea (Proctor, 2001).
Other	
Iron deficiency anemia	Women using oral contraceptives have higher iron blood stores than women not using any contraception (Frasinelli-Gunderson, 1985; Nilsson, 1967)
Bone mineral density	Oral contraceptives may increase bone mineral density (Warren, 2005). Ever use of OCs was associated with a 25% reduction in hip fracture risk (Michaelsson, 1999).
Acne	Oral contraceptives have been shown in randomized controlled trials to decrease acne more in the treatment group than in the placebo group (Redmond, 1997; Lucky, 1997; Arowojolu, 2007).

Non-contraceptive Benefits of Other Modern Contraceptives

The many health benefits of combined oral contraceptives are indeed striking. As one of the most-researched drugs, much evidence exists about this method. All modern contraceptive methods, however, confer non-contraceptive benefits on the user. Table 2 summarizes the evidence on other methods.

Table 2: Non-contraceptive Health Benefits of Other Contraceptives

Method	Health Benefits
<i>Details and Results from Published Studies</i>	
IUD	A review of seven studies found protection against endometrial cancer among IUD users in six; IUD users have fewer ectopic pregnancies than women not using any contraceptive method (Hubacher, 2002; Mishell, 1998; Sivin, 1991; Skjeldestad, 1997; Franks, 1990; Zhang, 1994; Mol 1995).
Condoms	Numerous clinical studies show that condoms can reduce the risk of a wide variety of sexually transmitted infections, including HIV, gonorrhea, chlamydia, trichomoniasis, syphilis, genital herpes, HPV infection and HPV-associated conditions (Steiner, 2007). Condom users had lower rates of infertility than non-users (Ness, 2004). Condoms help protect against ectopic pregnancies (Franks, 1990; Zhang, 1994; Mol 1995).
Progestin-only injectables (Depo-Provera)	Help protect against endometrial cancer, uterine fibroids, symptomatic pelvic inflammatory disease, iron-deficiency anemia and ectopic pregnancy; reduces sickle cell crises among women with sickle cell anemia and alleviates pelvic pain due to endometriosis (Lumbiganon, 1996; Gray, 1985; World Health Organization, 1998; de Abood, 1997; Vercellini, 1996; Winkel, 2003; Franks, 1990; Zhang, 1994; Mol 1995).
Implants	Help protect against symptomatic pelvic inflammatory disease, ectopic pregnancy, and iron-deficiency anemia (Fraser, 2000; Sivin, 2003; Franks, 1990; Zhang, 1994; Mol 1995).

Key point 4: Most modern contraceptives confer benefits to the health of the user. Benefits include long-term protection from deadly reproductive cancers, and treatment for reproductive and non-reproductive conditions.

Contraceptives, HIV/AIDS and Sexually Transmitted Infections

Condoms

In addition to preventing pregnancies, condoms protect against transmission of sexually transmitted infections (STIs), including HIV (Weller, 2002; Hearst, 2004; Ness, 2004; National Institute of Allergy and Infectious Diseases, National Institutes of Health, 2000; Steiner, 2007).

Systematic reviews of the scientific literature undertaken to quantify how effectively male latex condoms prevent HIV transmission found that consistent and correct

condom use prevents 80% to 95% of HIV transmission that would have occurred without condoms (Weller, 2002; Hearst, 2004). This means that condom use prevents 80% to 95% of HIV transmissions that would have occurred without condoms. (It does *not* mean that 5% to 20% of condom users will become infected with HIV.)

Condoms help reduce the risk of other STIs to varying degrees. In general, condoms are most effective against STIs that are spread through discharge, such as HIV, gonorrhea, and chlamydia. However, they also help protect against STIs that are spread through skin-to-skin contact, such as herpes and the human papillomavirus, the precursor to cervical cancer (Steiner, 2007; WHO, 2007b). Furthermore, research found that condom users were less likely to suffer from infertility than non-users (Ness, 2004).

The rate of other STIs also increased in the Region in the 1990s. According to WHO data, syphilis increased from 5.0 in 1990 to 206.8 in 1997 per 100,000 population. This trend has reversed in recent years, with reported incidence of syphilis decreasing to 41.4 per 100,000 in 2006 for the Region. However, new cases of syphilis are still *nine* times those for the EU (WHO, HFA-DB).

Key point 5: The use of condoms protects against HIV and other STIs, including chlamydia and gonorrhea, major causes of infertility.

Hormonal Contraceptives

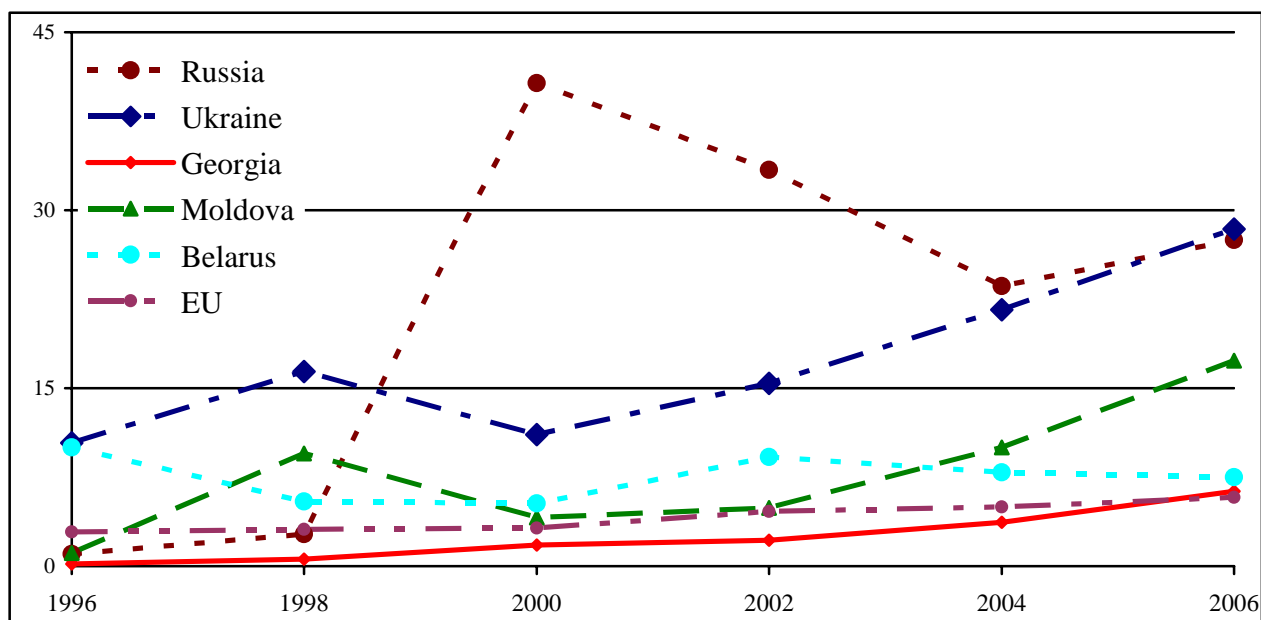
Conflicting evidence exists on whether hormonal contraceptives increase the risk of STIs, including HIV acquisition. A review of the best studies found a possible increased risk of chlamydial infection associated with the use of combined oral contraceptives and the use of Depo-Provera (Mohllajee, 2006). The WHO Guidelines Family Planning Steering Group also reviewed this evidence and concluded: “new evidence does not modify the current guidance, namely: there are no restrictions on the use of combined oral contraceptives and Depo-Provera by women at high risk of acquiring a STI (WHO, 2005a).

The WHO and partners convened a special meeting in 2005 to discuss any association between hormonal contraceptives and HIV in high-prevalence settings. Based on the findings, the group concluded that there should be no restrictions on the use of combined oral contraceptives and Depo-Provera for women at risk of HIV infection (WHO, 2005b).

HIV/AIDS is a serious concern in the Region. Figure 4 shows the incidence of HIV infection in several countries—that is, the rate at which new HIV infections occurred

during each year in the Region. To put the rates in perspective, data from the EU are also included. HIV incidence rates for Ukraine and the Russian Federation are about five times higher than that in the EU.

Figure 4: HIV Incidence per 100,000 Population



WHO/Europe Health for All Database

Ukraine has one of the fastest growing HIV/AIDS epidemics in the world, which can pose a threat to the country’s development (Zhylka, 2005). The annual new HIV diagnoses in Ukraine have doubled since 2001 (UNAIDS, 2008). Similar increases have been documented recently. HIV prevalence—that is, the proportion of the population with HIV at one point in time—rose from 11.14 per 100,000 in 2000 to 27.52 per 100,000 in 2006 (WHO, HFA-DB).

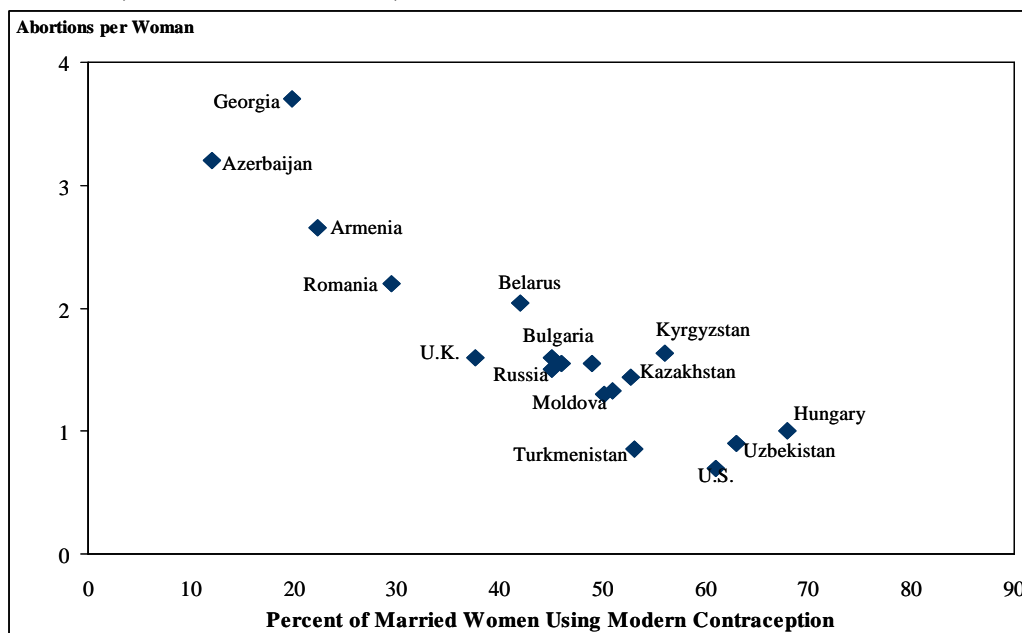
III. Contraception Reduces Abortion

The 1994 International Conference on Population and Development in Cairo declared that all governments should try to “reduce the recourse to abortion through expanded and improved family planning services” (WHO, 2004b and ICPD). The replacement of abortion with contraception is compelling: Contraception is safer than abortion as a means of fertility control. Furthermore, there is no evidence that shifting from abortion to contraception reduces fertility rates. Thus many countries strive to increase contraceptive use so that fewer abortions are necessary.

Increased use of contraception is related to fewer abortions

There is ample evidence that contraceptive use contributes to fewer abortions in the former Soviet countries (Westoff, 2005). Empirical evidence from developed countries shows that countries with higher contraceptive use tend to have lower abortion rates (see Figure 5).

Figure 5. Total Abortion Rate and Prevalence of Modern Contraceptive Methods, Selected Countries, Selected Years

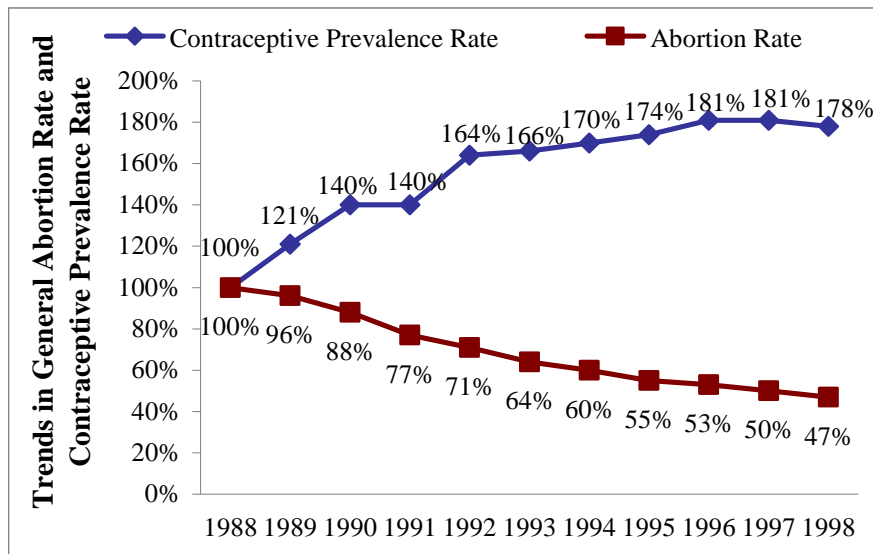


Westoff, 2005

The same pattern—decreasing abortions as a result of increased contraceptive use—has been observed through longitudinal analysis of twelve countries in Eastern Europe and Central Asia (Westoff, 2005). During the 1990s, there was an increase in the use of modern contraception in each country. This usually coincided with a steady decrease in abortion rates over the same period of time. Figure 6 shows the trends in contraceptive prevalence rates³ and general abortion rates in Russia over a decade. The outcome is clear: Modern contraceptive use increased by 78%, while concurrently, abortion decreased by 53%.

³ The contraceptive prevalence rate is the percentage of married women of reproductive age (ages 15-49) who are using (or whose partner is using) a contraceptive method at a particular point in time.

Figure 6. Trends in Abortion and Contraception in the Russian Federation



Adapted from Westoff, 2005

This figure shows the relative trends in abortion and contraceptive prevalence rates, starting from the values reported in 1988, which are considered to be 100%. The general abortion rate is the number of abortions per thousand women age 15-49.

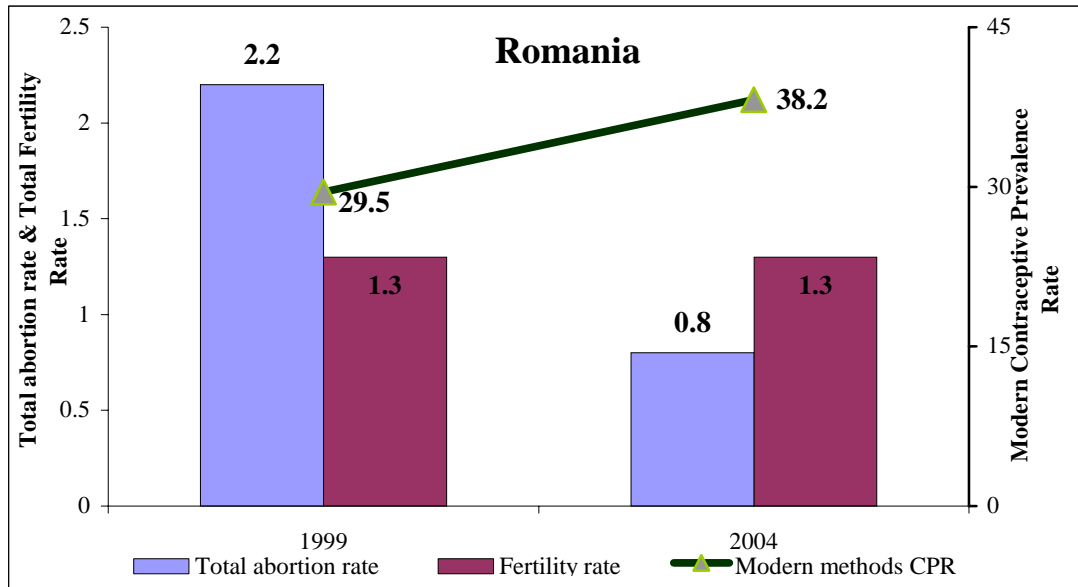
Contraception, Abortion and Fertility

Evidence from Cuba, Denmark, the Netherlands, and the United States suggests that, before fertility declines to a stable level, both abortion and contraceptive use tend to increase (Marston, 2003). Once fertility levels have stabilized at lower levels, contraception replaces abortion as the preferred method of fertility control, and thus does not contribute to continuing declines in fertility.

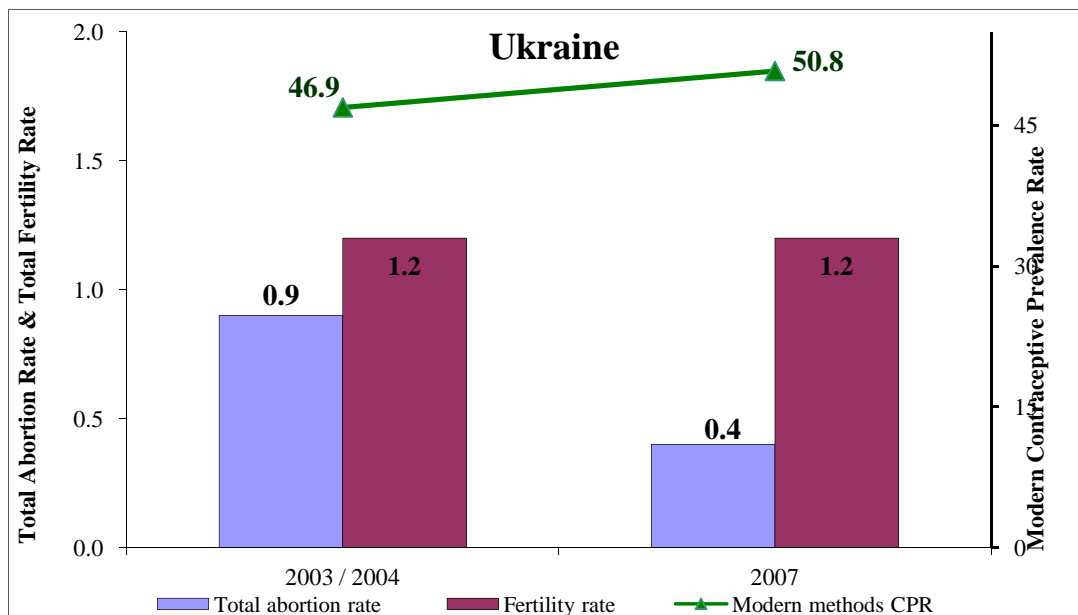
Several countries in Eastern Europe and the Region recently experienced this phenomenon. With the end of the pronatalist policies of the Ceausescu regime in Romania in 1989, there has been an increase in access to, and use of, reproductive health services. As the level of modern method use—primarily oral contraceptives and condoms—increased by about 25% from 1999 to 2004, the total abortion rate per woman decreased from 2.2 to 0.8. Meanwhile, the total fertility rate remained the same at 1.3 births per women (see Figure 7).

In Ukraine, the total abortion rate fell by half while contraceptive prevalence increased slightly, from 47% to 51%. The fertility rate remained unchanged (see Figure 7). Seemingly modest changes in contraceptive prevalence rates from one survey to another can have a considerable impact on reducing the abortion rates when the uptake is of an effective modern method. From 1999 to 2007, the use of traditional methods with high pregnancy rates decreased 10 percentage points, while use of condoms and oral contraceptives increased. Switching from less effective to more effective methods reduced unintended pregnancies, and thus, fewer abortions took place.

Figure 7. Concurrent Changes in the Total Abortion Rate, Modern Method Use, and Total Fertility Rate in Romania, Ukraine, and Georgia

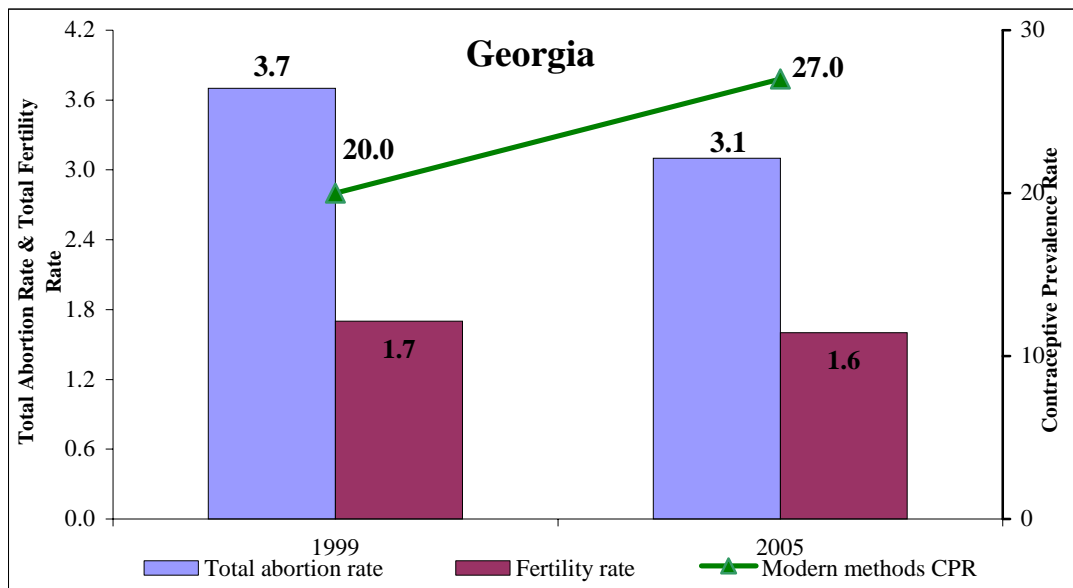


Romania 1999 and 2004 Reproductive Health Surveys



Guttmacher Institute, 2007; Willingness and Ability to Pay Survey, 2004; Ukraine DHS, 2007

Figure 7. Concurrent Changes in the Total Abortion Rate, Modern Method Use, and Total Fertility Rate in Romania, Ukraine, and Georgia



Georgia 1999 and 2005 Reproductive Health Surveys

Historically, Georgia has had one of the highest abortion rates in the world. The recent Reproductive Health Survey found that the total abortion rate has decreased 16% from 3.7 per woman per lifetime in 1999, to 3.1 in 2005. Modern contraceptive use increased from 20% to 27% during this time, with small increases in oral contraceptive, condom, and IUD use. Yet the fertility remained nearly the same. Data from the Region support the premise that contraception replaces abortion without reducing fertility levels.

Key point 6: In low fertility countries—6 of the 12 countries in the Region and many European countries—there is strong evidence that increased use of modern contraception lowers abortion, rather than further lowering fertility.

Health Effects of Abortion

Health Risks of Using Abortion as an Ongoing Way to Regulate Fertility

In 2000, of the 210 million women worldwide who became pregnant, 46 million pregnancies were voluntary terminated by abortion. Forty-one percent of these terminations—19 million in all—took place outside the legal health system, often by unskilled providers or in unhygienic conditions (WHO, 2004b; IPPF, 2006). At the 1994 International Conference on Population and Development in Cairo, governments agreed that abortion is risky and that all governments should try to “reduce the

recourse to abortion through expanded and improved family-planning services” (WHO, 2004b and International Conference on Population and Development, 1994). There are clear negative health implications of unsafe abortions. The most severe include death, sepsis, hemorrhage, genital and abdominal trauma, perforated uterus, and poisoning if harmful substances are ingested. Other possible secondary complications of unsafe abortions include reproductive tract infections, chronic pelvic pain, and pelvic inflammatory disease (Salter, 1993; WHO, 2003b).

Health Effects of Safe and Unsafe Abortion

While the evidence about unsafe abortions seems clear, numerous studies have examined some of the potential negative health effects of safe or uncomplicated abortions, often coming to inconclusive findings. For example, there is concern that abortion may have a negative impact on a woman’s future fertility (Ministry of Health Ukraine, 2000 and Steshenko and Irkina, 1999). However, a review of the literature studies found no association between safely induced abortion and secondary infertility⁴ or ectopic pregnancy (Atrash, 1990). The International Planned Parenthood Federation (IPPF) has concluded that there is no evidence that having an uncomplicated abortion has any bearing on future fertility (IPPF, 2006). Little research has been published on the issue of repeat abortion and effects on future reproduction, and no conclusions can be made (Atrash, 1990). There is a need for understanding this issue better, since repeat abortion is so common in the Region.

In the case where an infection complicates induced abortion, however, there may be some negative effects to a woman’s fertility (Atrash, 1990). Little has been published on this issue, thus it is difficult to assess. Nonetheless, the 2006 Azerbaijan Demographic and Health Survey (DHS) found that 11% of women who had abortions reported complications of the procedure within 30 days, with 4% reporting complications within six months. Furthermore, the Ukraine Reproductive Health Survey in 1999 found that 5% of women having abortions reported a re-hospitalization or extended hospitalization as a result, and 6% of such women reported long-term complications (Kiev International Institute of Sociology, et al., 2001).

To the extent that these complications are related to infection, the procedure may indeed contribute to fertility problems. Older studies have estimated that there are five to nine unsafe abortions in Ukraine per 1,000 women of reproductive age, two to three times the rate of Europe as a whole at three unsafe abortions per 1,000 women (WHO, 2004b, Glasier, 2006). Worldwide, studies indicate that of every five women who have an unsafe abortion, at least one suffers a reproductive tract infection as a result; and some of these infections are serious, leading to infertility (WHO, 2004d).

⁴ Secondary infertility is the inability to conceive or maintain a pregnancy after having successfully done so in the past.

There is some evidence, however, that abortion may have a negative effect on the health of infants born immediately after the abortion. A case-control study in France shows that women with a history of induced abortion were at higher risk of preterm delivery than those with no history of abortion (Moreau, 2005). A few other studies in France (Henriet, 2001) and Germany (Martius, 1998) also found an association with induced abortion and preterm birth. However, a study in China did not find a statistically significant relationship between a history of medically induced abortion and low birth weight for the first subsequent pregnancy (Yimin, 2004). A second Chinese study found that women who had an abortion using mifepristone (an antiprogesterone drug) had lower odds for preterm delivery than women who had no abortion (Chen, 2004).

Previously, conflicting evidence on the effect of abortion on breast cancer created concerns. A meta-analysis in 1996 found that women with a history of induced abortion had a 30% greater risk of breast cancer (Brind, 1996). In 2004 a pooled re-analysis of 53 studies including a total of 83,000 women with breast cancer from 16 countries found that pregnancies that end in spontaneous or induced abortion do not increase a woman's risk of breast cancer (Beral, 2004). The authors concluded that previous retrospective study findings found the opposite likely because women who had developed breast cancer were more likely to disclose an induced abortion than other women. In 2005, the author of the 1996 meta-analysis critically appraised ten prospective studies, and concluded that there is indeed a link between induced abortion and breast cancer (Brind, 2005).

Because of these conflicting findings, organizations convened meetings to try to come to an understanding of this complicated but important issue. The US National Cancer Institute, the British Government and IPPF concluded that there is no association between abortion and breast cancer (National Cancer Institute, 2006; Beral, 2004; IPPF, 2006). The WHO also reviewed this topic, and concluded that if only the most methodologically sound studies were used—that is, the studies least likely to be affected by recall bias—there was no evidence to support the theory that abortion increased the risk of breast cancer (WHO, 2000).

Key point 7: Safe, legal abortions have few long-term health effects. However, to the extent that even legal abortions have complications, they may have negative health effects, including infertility.

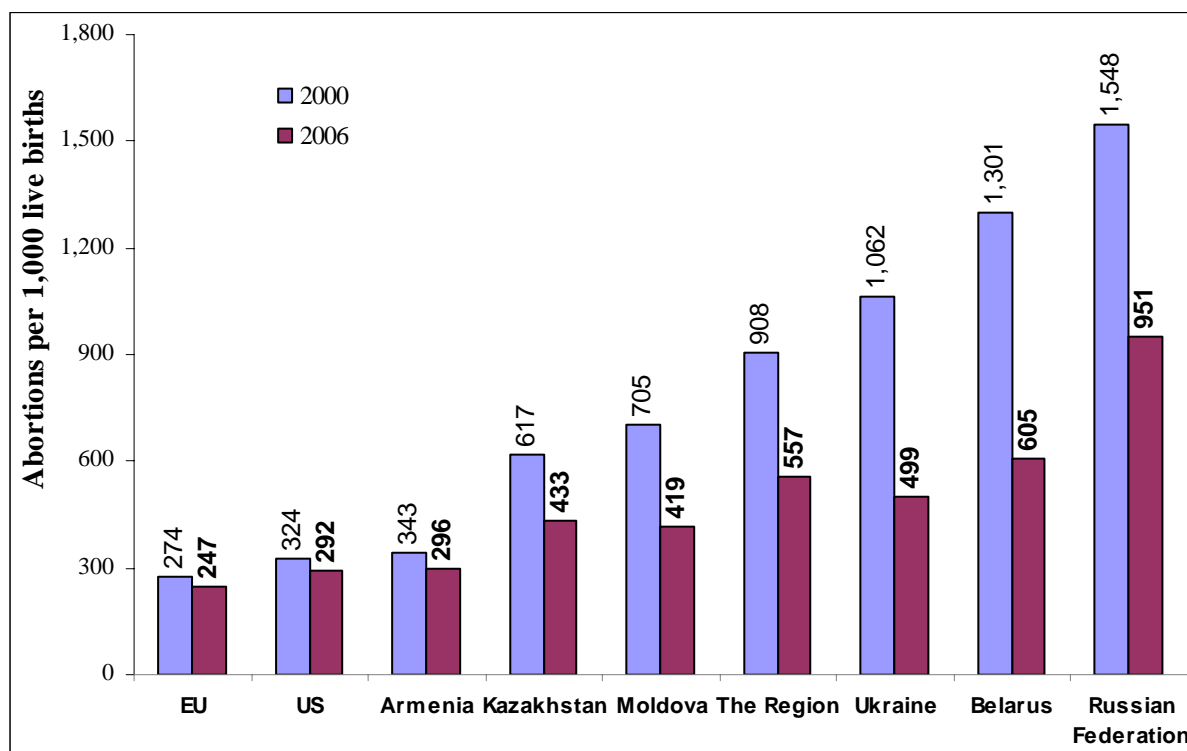
Contraception and Abortion: A Comparative Perspective

Levels of Abortion

In the Soviet Union, abortion, along with IUDs, was one of the most commonly used means of fertility control in the Region. In recent years, the abortion ratio (the number of abortions per 1,000 live births) has declined significantly. Recent data from the WHO's Health for All Database shows that the average abortion ratio in the Region decreased from 906 per 1,000 live births in 2000 to 557 per 1,000 live births in 2006, a decline of 40% (WHO, HFA-DB).

Despite the decline in abortions in the Region, the most recent comparative data show that abortion ratios are still quite high compared to other developed countries. The abortion ratio in the Region is 557, compared to that of the EU at 245 (see Figure 8).

Figure 8. Abortion Ratio, Selected Countries, 2000 and 2006



WHO/Europe Health for All Database; Alan Guttmacher for US data

In a global analysis of available data, abortion rates declined most dramatically in Eastern Europe and Central Asia from all of the studied countries between 1996 and 2003 (Sedgh, 2007). The declines in this region are a continuation of a trend that began in the early 1990s (Jones, 2002). In most countries in this region, the declines coincided with increases in access to and use of modern methods of contraception in place of traditional methods (which have played a prominent role in family planning

in these countries) and nonuse (CDC, 2003; Marston, 2003; Westoff, 2000) (see Contraceptive Method Mix, p. 26).

Key point 8: While abortion rates have declined in the Region, they are still significantly higher than in Western European countries and the United States.

Contraceptive Method Mix

Looking at the contraceptive method mix in a country—the distribution of contraceptive methods used by a population—can provide many insights about contraceptive use. The method mix reflects method choice, availability, accessibility, and potential biases to use of certain methods. It also helps identify whether the use is concentrated across the most effective, moderately effective, or least effective methods, which influences abortion rates. Lastly, the method mix indicates whether women have a narrow or broad choice of desirable alternatives to abortion. Here we analyze the method mix in the Region, and compare it the method mix in other parts of the world.

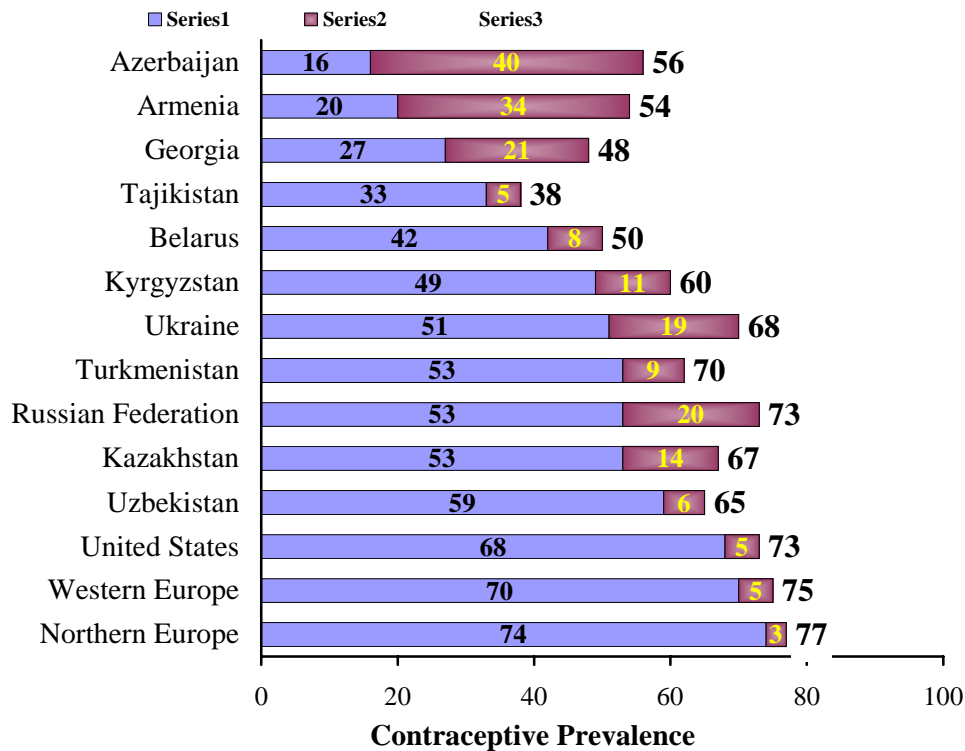
The contraceptive method mix in the Region is quite different from that in the EU and the US. Three key differences emerge:

1. In general, the use of *modern* contraception in the Region is lower than in EU countries while the use of less effective *traditional* methods—particularly withdrawal—is higher.
2. Two-thirds of the countries in the Region rely predominantly on one single contraceptive method which accounts for 50% or more of contraceptive use in the country. This is considered a “skewed” method mix (Sullivan, 2006).
3. The bias against certain methods in the Region—namely oral contraceptives—is evident when looking at the contraceptive method mix.

1. High Reliance on Ineffective Traditional Methods

Women in the Region still rely heavily on several traditional methods of contraception. In Azerbaijan, for example, one-third of married women rely on withdrawal—the highest of all countries. This represents nearly four times the percentage of women who use IUDs at 9%, the most popular modern method (2006 Azerbaijan DHS). Figure 9 illustrates the difference in reliance on modern and traditional methods for countries in the Region and several European countries.

Figure 9. Breakdown of Contraceptive Prevalence by Modern and Traditional Methods, Selected Countries, Various Years



UN, 2008; CDC, 2003 (for Russia); 2007 Ukraine DHS; 2006 Azerbaijan DHS
 Western Europe includes Austria, Belgium, France, Germany, the Netherlands, and Switzerland
 Northern Europe includes Denmark, Estonia, Finland, Latvia, Lithuania, Norway, Sweden, and the United Kingdom
 Data were not available for the EU, thus Western and Northern Europe were included as illustrative of contraceptive use patterns in EU countries.

Traditional methods are among the most *ineffective* methods of contraception. As such, the reliance on traditional methods is an important contributor to the high abortion rates in the region: Traditional method users are at increased risk of unintended pregnancy—a pregnancy likely to be terminated. In Azerbaijan, withdrawal is the most popular method. The total abortion rate (total number of abortions in an average woman’s lifetime) is 2.3 in this country. Figure 5 on p. 19 illustrates the relationship between abortion and traditional method use: The countries with the highest levels of traditional method use (Armenia, Azerbaijan, Georgia) have the highest total abortion rates.

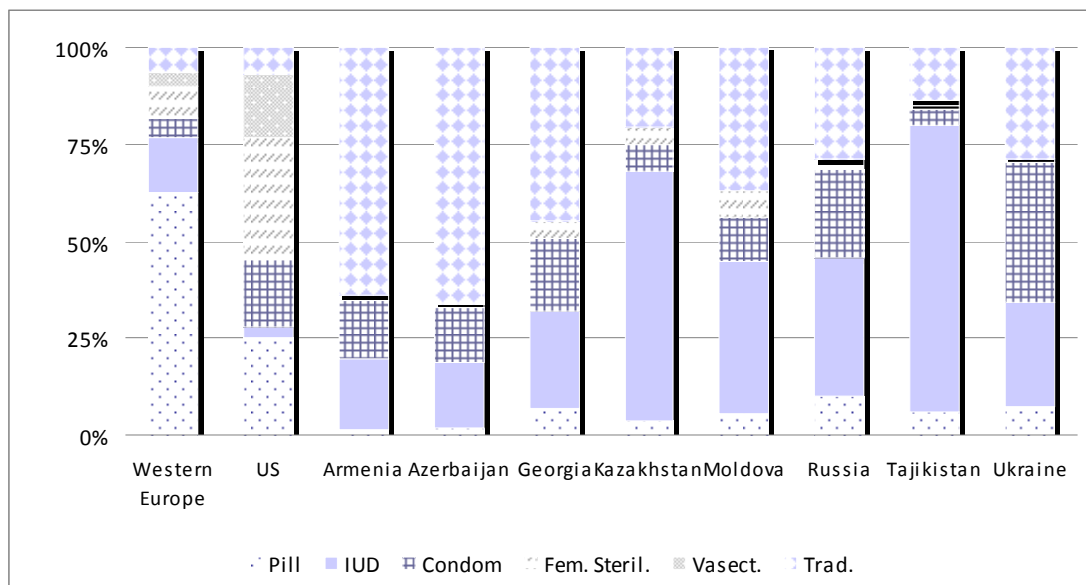
Key point 9: Most developed countries have less use of traditional methods in their method mix, leading to fewer method failures, and consequently, fewer abortions.

2. Skewed Method Mix: Overreliance on a Single Contraceptive Method

In eight of the twelve countries in the Region, over 50% of all contraceptive use is due to use of a single method. In Central Asian countries and Moldova, users rely predominantly on the IUD. In Armenia and Azerbaijan, contraceptive users rely primarily on withdrawal. Method skew in some countries reflects cultural preferences or social norms. Yet such an imbalanced method mix becomes problematic if it stems from restrictive population policies, lack of access to a broad range of methods, or provider bias (Sullivan, 2006).

In contrast, in the two EU countries with such “method skew,” the most predominant method is oral contraceptives. Fifty-four percent of all contraceptive users in France and 75% of users in Germany rely on pills (see Annex 1, p. 34). Figure 10 illustrates how one method can predominate all contraceptive use in a country.

Figure 10. Method Mix among Married Women of Reproductive Age, Selected Countries, 1988-2007



Source: UN, 2008; 2006 Azerbaijan DHS; CDC 2003 for the Russian Federation
Western Europe includes Austria, Belgium, France, Germany, the Netherlands, and Switzerland

3. Low Levels of Oral Contraceptive Use

Use of oral contraceptives as well as other hormonal methods is quite low in the Region. Oral contraceptive use accounts for only 2% to 13% of all contraceptive use. To compare, among selected EU countries, oral contraceptive use ranges from 18% to 75% of all contraceptive use, and are used by one-third of all married women as contraception. Annex 1 on p. 34 presents these data, and Figure 10 above shows how much oral contraceptive use differs between Western countries and the countries in the Region.

Key point 10: Compared to countries in the Region, other developed countries have a very different method mix. Couples in the EU and US are much more likely to rely on oral contraceptives and sterilization, and less likely to use ineffective traditional methods.

IV. Cost Benefit of Family Planning

Family Planning is a Cost-effective Intervention—Especially Compared to Abortion

The World Bank's landmark 1993 report, *Investing in Health* advised that governments, at a minimum, should spend their resources on a package of five essential clinical services considered to be very cost effective. One of these essential interventions was family planning. Family planning "could save as many as 850,000 children from dying every year and eliminate as many as 100,000 of the maternal deaths that occur annually."⁵ Adequate investment in family planning could avert an estimated 3% of the burden of disease worldwide (World Bank, 1993).

Studies show that providing contraceptive services is far more cost-effective than relying on induced abortion to control fertility. When analyzing the cost of contraception and abortion as methods of fertility regulation in Kazakhstan, the cost of providing contraceptives to the government was 3.2 times more effective than the cost of providing abortions (Rani, 2007). (The calculation did not include the capital costs of facilities, costs of treating complications, or costs to the recipient.) The researchers concluded:

"Assuming 80% of all abortions were avoidable through more effective delivery of family planning services, the savings would be enough to finance all immunization programs in Kazakhstan or could be directed to providing better family planning services, or towards other public health interventions."

After discovering that the expense of contraception was the primary reason that women in Romania were choosing abortion over contraception, the MOH doubled the fee for abortion in public clinics from \$2 US to \$4 US. (At the time, oral contraceptives cost approximately \$2 US per month, and emergency contraception \$4 US.) In a further effort to spur increases in modern method use, clinics were providing free contraceptives to women after abortion (Johnson, 2004).

⁵ Other highly cost-effective interventions cited in the report were: pregnancy-related care, tuberculosis control, control of sexually transmitted infections, and care for common serious illnesses of young children.

Reducing the cost of family planning to users can lead to a reduction of costs in the health care system—costs that are often not accounted for. These costs include staff, facility, equipment, drugs, supplies, treating complications that result from the procedure, the time for the procedure, overall time spent in the hospital, and overhead costs. Including these costs, the real cost of abortion in Romania was found to vary from \$5-15 US in the public sector to \$12-33 US in the private sector (Horga, 2001).

A costing study in Ukraine calculated that if women who use traditional methods and abortion shifted to using modern contraceptive methods, the result would be a savings of at least \$3.38 million US between 1999 and 2015 (Policy Project, 2005). Similarly, studies conducted by the Ukrainian MOH and international agencies in 2004 and 2005 found cost savings of using contraceptives: Compared to the costs of abortion and abortion-related complications, the cost savings on family planning was valued at more than \$600,000 US per year. Findings from another Ukraine survey calculated that the costs of abortion and management of abortion complications were nearly twice as high as the costs of providing contraception, at \$380,000 US and \$200,000 US, respectively (Zhylka, 2005). Clearly, procuring contraceptives costs governments much less than providing abortions.

Key point 11: Public sector investments in modern contraceptives may be cost-effective because they lead to lower expenditures for abortion and/or abortion-related complications in the public and private sectors.

V. Government Support for Family Planning

Governments Support Family Planning because it Works

Although modern contraception is legal in the Region, access is sometimes limited by the lack of government financing for contraceptives for disadvantaged populations, such as the poor, those with chronic conditions, young people, and others. Many other countries, especially those in the EU, have significant government programs to increase access to contraceptives, especially for low-income populations.

After the International Conference on Population and Development in Cairo in 1994, developed countries agreed to increase allocations to reproductive health programs by \$6.1 billion US annually by 2005 (Semelela, 2006). Many countries in Europe have taken this commitment seriously and invested in strong family planning and reproductive health programs. Table 3 below highlights the details of several of these programs.

Table 3. Government Commitment to Family Planning—Selected Examples

Public Provision of Contraceptives in the Region, Europe, and the US
<p>Albania: A key component of the National Contraceptive Security Strategy is the commitment of the Government of Albania (GoA) to increasingly assume the cost of procuring public sector contraceptives and setting the goal to achieve contraceptive independence from donor-supplied products by 2010. The GoA has demonstrated a commitment towards this goal and began budgeting for the procurement of public sector contraceptives in 2008 (John Snow, Inc., 2008).</p>
<p>France: Medical contraceptives (oral contraceptives and IUDs) are reimbursed by the public social security system (Sandier, 2004; Toulemon, 1998). Voluntary surgical sterilization is free of charge (Oddens, 1993). France began a national campaign to promote contraceptive use in 2000, when it was found that abortion rates had stabilized after a period of decline. This program, “Contraception: It’s up to you to choose your own,” was designed to educate women on contraceptive choices and help them choose the method they would most consistently use (Boonstra, 2000).</p>
<p>Germany: Germany has a comprehensive health insurance policy that ensures virtually universal access to a wide range of health services, including prescription drugs, and family planning services. Specific family planning services are mandated by law. The Social Code sets forth legally required health insurance with explicit rights to medical examinations and prescriptions for birth control devices (Busse, 2004; Center for Reproductive Rights, 1995). Voluntary surgical sterilization is free of charge (Oddens, 1993).</p>
<p>Great Britain: Family planning services are provided free by family doctors and a network of family planning clinics. Contraceptives for certain population groups are fully reimbursed by the National Health Service. A study on contraceptive expenditures found that users in the UK paid nothing for oral contraceptives and IUDs and paid the least for condoms of the countries in the study (Austria, Denmark, Italy, France, Spain, Sweden, and West Germany) (Oddens, 1993).</p>
<p>Italy: The Italian health care system is based on a national health service that provides universal coverage free of charge at the point of service. Contraceptives are provided through both public and private pharmacies (WHO, 2007a).</p>
<p>Romania: Family planning services are included in the minimum package of the public social insurance system, which is provided free to all population groups (insured or not) by public family doctors, family planning clinics, and obstetrician-gynecologists. Contraceptives are procured by government for rural areas and poor</p>

Public Provision of Contraceptives in the Region, Europe, and the US

urban areas, pupils, students, and women with chronic health conditions. In 2001, the Ministry of Public Health introduced a special family planning budget line and consistently increased the budget allocated for contraceptive procurement. Since 2001, when the budget was \$100,000 US, it has continuously increased to \$1.1 million US in 2004 and to \$1.8 million US in 2006 (Romanian Family Health Initiative, 2008).

Sweden: One of the initiatives of the National Institute of Public Health, established in 1992, is a focus on sexual and reproductive health programs. Preventive health care has been integrated into the primary health care system with midwives, district nurses, and general practitioners providing family planning services. There are small fees for all services; however, some services, such as IUDs, are free (Glennard, 2005; Oddens, 1993).

Ukraine: Ukraine has adopted National Reproductive Health Programs since 1995. The Reproductive Health of the Nation Program includes improving the family planning system as a key objective, and allocates \$18.7 million US over a ten-year period to update the legal and regulatory framework for family planning, procure contraceptives for certain disadvantaged populations, establish a National Family Planning/Reproductive Health Center, ensure postgraduate training on family planning for health workers, conduct public education campaigns, and conduct research (Ukraine Cabinet of Ministers Decree No. 1849, 2006; State Program “Reproductive Health of the Nation”).

United States: Family planning services and contraceptive methods are provided at prices based on people’s ability to pay in federally funded family planning clinics. The public health insurance program for the poor, Medicaid, pays for family planning services, including contraceptive methods, and many private insurance companies reimburse a significant part of contraceptive costs for their beneficiaries (Alan Guttmacher Institute, 2005 and Benson Gold, 1999). Governments at various levels procure contraceptives for disadvantaged populations. For example, the Washington State health department paid \$1.35 US per cycle for combined oral contraceptives in 2001—about 20 times lower than the price charged by the same manufacturers to a private pharmacy chain (Hatcher, 2004).

Key point 12: Most governments support access to family planning and contraception, developing and developed alike. Rationale for such support include recognition of their many health benefits, their ability to reduce abortion, the cost-benefits to the health care sector, and their support of fundamental human rights.

Conclusion

The family planning and reproductive health situation in former Soviet countries is unique and changing rapidly. Where once abortion was the primary means of making choices about one's fertility, modern contraceptive methods increasingly provide couples with the ability to time, space, and limit their children as they wish.

Despite the rather unique reproductive situation in the Region, the benefits that investments in family planning bring to a nation are evidence here as they are in the rest of the world—from the most impoverished, agrarian nation to the most industrialized, wealthiest country. Each country in the Region has committed to family planning to varying degrees as a strategy to improve the health and well-being of their people. Still, challenges remain to making a broad range of contraceptive methods widely available, accessible, and affordable in the Region. This paper provides evidence that investing in family planning benefits many, reduces overall costs to the health care sector, and can greatly improve the health and well-being of a population. As such, family planning should be a priority for the countries in the Region, as it is a priority for so many other countries in the world.

Annexes

Annex 1: Contraceptive Prevalence, Married Women of Reproductive Age

Region, Country, Year	Method of Contraception								
	Any	Modern	Pill	IUD	Condom	Fem. Steril.	Male Steril.	Other Modern ^a	Traditional
Core EU									
Austria, 1995/96	50.8	46.8	30.8	7.3	7.2	0.0	0.5	0.0	4.1
Belgium, 1991/92	78.4	74.3	46.7	5.0	4.7	10.9	7.0	0.0	4.1
Denmark, 1988	78.0	72.0	26.0	11.0	22.0	5.0	5.0	3.0	6.0
France, 2000	81.8	76.5	43.8	21.9	4.7	-----5.5-----		0.6	5.3
Germany, 1992	70.1	65.6	52.6	5.3	1.1	5.5	0.5	0.6	4.5
Italy, 1995/96	60.2 ^b	38.9	13.6	5.5	13.7	5.8	0.1	0.2	21.4
Netherlands, 1993	78.5	75.6	49.0	3.6	7.7	4.8	10.5	0.0	2.9
Norway, 1988/89	73.8	69.2	17.8	24.1	12.5	10.4	4.1	0.4	4.6
Spain, 1999	71.7	66.0	13.1	6.6	27.0	10.1	9.0	0.2	5.7
Switzerland, 1994/95	82.0	77.5	34.1	6.0	14.2	13.8	8.3	0.0	4.5
United King., 2005/06	82.0	82.0	26.0	7.0	25.0	14.0	20.0	9.0	8.0
Mathematical Mean	73.4	67.7	32.1	9.4	12.7	7.8	6.5	1.3	6.5
Central/Eastern Europe									
Belarus, 1995	50.4	42.1	6.7	29.0	4.8	0.8	0.0	0.8	8.3
Bulgaria, 1997	41.5	25.6	7.0	6.9	10.9	-----0.2-----		0.8	15.7
Czech Rep., 1997	72.0	62.6	23.1	13.9	12.7	7.2	5.1	0.7	9.5
Hungary, 1992/93	77.4	68.4	37.7	17.4	7.8	4.8	0.0	0.6	9.0
Moldova, 2005	67.8	43.8	3.6	25.2	7.4	4.7	0.0	3.0	24
Poland, 1991	49.4	19.0	2.3	5.7	9.1	0.0	0.0	1.9	30.4
Romania, 2004	70.0	38.0	14.0	7.0	12.0	3.0	0.0	2.0	32.0
Russian Fed., 1999	73.0	53.0	7.0	25.0	16.0	2.0	0.0	3.0	20.0
Ukraine, 2007	66.7	47.5	4.8	17.7	23.8	0.6	0.0	0.5	19.1
Mathematical Mean	63.1	44.4	11.8	16.4	11.6	2.5	0.7	1.4	18.6
Caucasus									
Armenia, 2005	53.1	19.5	0.8	9.4	8.1	0.6	0.0	0.6	33.6
Azerbaijan, 2006	51.1	14.3	1.1	9.2	2.2	0.4	0.0	1.3	36.8
Georgia, 2005	47.3	26.6	3.2	11.6	8.7	2.2	0.0	0.9	20.7
Mathematical Mean	50.5	20.1	1.7	10.1	6.3	1.1	0.0	0.9	30.4

Region, Country, Year	Method of Contraception								
	Any	Modern	Pill	IUD	Condom	Fem. Steril.	Male Steril.	Other Modern ^a	Traditional
Central Asia									
Kazakhstan, 1999	66.1	52.7	2.4	42.0	4.5	2.8	0.0	1.0	13.5
Kyrgyzstan, 1997	59.5	48.9	1.7	38.2	5.7	1.8	0.0	1.4	10.7
Tajikistan, 2005	37.9	33.1	2.1	26.3	1.4	0.4	0.4	2.4	4.9
Turkmenistan, 2000	61.8	53.1	1.2	39.0	2.0	1.8	0.0	8.9	8.7
Uzbekistan, 2006	64.9	59.3	2.3	49.7	2.1	2.1	0.1	3.0	5.6
Mathematical Mean	58.0	49.4	1.9	39.0	3.1	1.8	0.1	3.3	8.7
Baltic States									
Estonia, 1994	70.3	56.4	3.9	35.9	16.1	0.0	0.0	0.0	13.8
Latvia, 1995	48.0	39.3	8.0	19.8	9.6	-----1.5-----		0.0	8.7
Lithuania, 1994/5	46.6	30.5	3.2	13.9	13.1	0.0	0.0	0.0	16.0
Mathematical Mean	54.9	42.1	5.0	23.2	12.9	.5	0.0	0	12.8
Core EU	73.4	67.7	32.1	9.4	12.7	7.8	6.5	1.3	6.5
Former Soviet Union	58.7	41.7	6.8	22.1	8.9	1.9	0.1	1.6	17.1

All methods may not add to the total because some women use more than one method of contraception.

^a Other modern methods include vaginal barrier methods (diaphragm, cervical caps and spermicidal foams, jelly, cream and sponges), emergency contraception, female condom, and other modern methods not reported separately.

^b Includes some cases of sterilization for non-contraceptive reasons.

Data for Core EU, Central/Eastern European countries (except the Russian Federation and Ukraine), Caucasus (except Azerbaijan), and Central Asia are from UN, 2007 World Contraceptive Use. Data are for women ages 15-49.

Data for the Russian Federation are from CDC, 2003, and are for women ages 15-44 from three urban oblasts.

Data for Ukraine are from the 2007 Ukraine Demographic and Health Survey, for women ages 15-44 (Ukraine Center for Social Reforms, State Statistical Committee, Ministry of Health, Measure DHS, June 2008).

Data for Azerbaijan are from the 2006 Azerbaijan Demographic and Health Survey for women ages 15-44 years.

Annex 2. Abortion Ratios in an International Context, 2006
Core EU Countries and Central/Eastern European Countries

Region and Country	Abortions per 1,000 live births		
	<20 years	>35 years	All ages
<u>Core EU</u>			
Britain	841 ^b	215 ^b	279 ^b
France	1883 ^a	307 ^a	275 ^a
Germany	855	175	178
Spain	964 ^b	143 ^b	197 ^c
Italy	1145 ^b	271 ^b	244 ^b
Denmark	2834 ^c	322 ^c	237 ^b
Norway	1843	255	241
Sweden	4165 ^b	363 ^b	345 ^c
Austria	---	---	---
Belgium	---	---	141 ^c
Netherlands	1542 ^c	163 ^c	153 ^c
Switzerland	---	---	148 ^c
<u>Central/Eastern Europe</u>			
Russia	---	---	951
Czech Republic	663	622	240
Bulgaria	357	1289	504
Hungary	898	860	464
Poland	---	---	1
Romania	598	1629	685
Ukraine	468	1575	499
Moldova	289	1120	419
Belarus	698	1793	605
<u>Caucasus</u>			
Armenia	133	1691	296
Azerbaijan	48	448	140
Georgia	208	761	443
<u>Central Asia</u>			
Kazakhstan	284	760	433
Kyrgyzstan	135	163	97
Turkmenistan	---	---	154
Tajikistan	23	217	54
Uzbekistan	109 ^c	1073 ^c	85 ^c
<u>Baltic States</u>			
Estonia	1188	1037	631
Latvia	705	1088	530
Lithuania	351	714	305
Core EU	1786	246	222
Former Soviet Union	421	991	374

Source: WHO, Health for All Database

a Data for 2003

b Data for 2004

c Data for 2005

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