

Adolescent Pregnancy, Abortion and Birth Rates across Countries

Gilda Sedgh

Lawrence Finer

Akinrinola Bankole

Susheela Singh

Michelle Eilers

Short Abstract

Levels of teen pregnancy, abortion and childbearing vary across countries, as do their implications. We assess recent levels and trends in these events. Birth, abortion and population data were obtained primarily from official statistics compiled by national government or multinational agencies. Among the 18 countries with reliable pregnancy estimates for 2010, the rate was lowest in Switzerland (8 pregnancies per 1,000 adolescents per year) and highest in New Zealand (57). Teen pregnancy rates are even higher in some former Soviet countries and Cuba where abortion data are incomplete, even though rates are underestimated in these countries. Of the 40 countries for which adolescent birth rates for 2010 are shown, the highest was in Cuba (53) followed by several former Soviet countries. The proportion of pregnancies that end in abortion ranges from 17% (Slovakia) to 69% (Sweden). We will review trends in teen pregnancy rates where feasible, and implications of findings.

Introduction

Teen^{*} pregnancies can influence women's education prospects, economic opportunities, maternal health and completed family size.¹ Although adolescent pregnancies, especially unintended pregnancies, might carry greater risk of adverse consequences in developing countries with limited resources and restrictive abortion laws, pregnancy and childbirth among young women in developed countries can also pose challenges to their social, economic and physical well-being. Periodic estimation of pregnancies, births and abortions among adolescents can bring attention to countries where the levels of any of these events are exceptionally high or low, and can motivate further research and policy action where needed.

The most recent reviews of adolescent pregnancy rates in developed countries and childbearing rates in developing countries covered trends up to the mid 1990s, and found that the incidence of these events had declined in the majority of countries for which evidence was available.^{2,3}

We examine levels of adolescent pregnancy, abortion[†] and childbearing in all developed and developing countries for which recent information could be obtained.[‡] We primarily present estimates for 2010, the year for which information is available for most countries, to enable cross-country comparisons. We examine trends in developed countries for which estimates for the mid 1990s were previously published, if estimates for both time periods are deemed reliable.

Of the different components of pregnancy outcomes (births, miscarriages and abortions), information on abortion incidence is most limited. While reliable evidence is available for many developed countries with liberal abortion laws, estimates of adolescent abortion rates, and therefore of pregnancy rates, are available for only a few developing countries. Thus the majority of findings presented here are for developed countries.

Data Sources

To estimate teen pregnancy rates we require data on numbers of abortions, births and females aged 15-19. For most countries, information on all three components was obtained, in descending order of preference, from countries' published vital statistics reports or compilations of these reports in United Nations Statistics Division Demographic Yearbook⁴⁻⁶ or the Transformative Monitoring for Enhanced Equity (TransMonEE) Database maintained by UNICEF.^{§7}

For the most part, abortion reports to government agencies include only procedures that were performed within the bounds of the law. Nearly all, if not all, abortions performed in countries with liberal abortion laws are legal; exceptions include,

* The terms "teens" and "adolescents" are used interchangeably in this report to refer to 15-19 year-olds.

† Unless otherwise indicated, "abortion" refers to induced abortions throughout this report.

‡ We employ the United Nations classification of developed and developing countries.

§ The TransMonee database encompasses indicators of the welfare of children, young people and women in Central and Eastern Europe.

for example, abortions performed after the legally allowed gestational limit or by unauthorized providers.

For a number of countries lacking reliable official counts of abortion incidence by age, we used abortion estimates from alternate sources. For the United States, we used findings for 2008 from a census of abortion providers conducted by independent researchers, as these data are more complete than government reports.^{**8} For a few countries with restrictive abortion laws, we will use estimates of age-specific abortion rates that have been made on the basis of nationally representative studies.

Countries were classified according to whether their abortion data were deemed reliable (ie, likely to include at least 90% of all legal abortions) or likely to be incomplete. Classifications were made on the basis of expert assessments obtained for a recent study of abortion incidence.⁸ Pregnancy rates will be shown separately for countries with abortion estimates from nationally representative studies. The potential sources and directions of error from these studies will be briefly discussed. These estimates include both legal and illegal abortions.

The incidence of miscarriage was estimated on the basis of data on births and abortions. Clinical studies of pregnancy loss by gestational age indicate that recognized miscarriages (at five or more weeks' gestation) are equal to approximately 20% of births plus 10% of induced abortions.⁹ Findings from recent surveys of women in the United States support these model-based estimates.¹⁰

Countries are only included if estimates of both births and abortions to teens are available. Pregnancy, abortion and birth rates are calculated as the number of events per 1,000 women 15-19 per years old. The age of the adolescent is measured as age at outcome.

Adolescent pregnancy rates in 2010 are presented for 40 countries, and abortion rates are deemed reliable for 18 of these countries. We separately present estimates for seven countries (four countries with complete abortion statistics and three countries with incomplete abortion) for which data were available for 2008 or 2009 but not 2010. Trends in adolescent birth and abortion rates from the mid-1990s to 2008-2010 will be presented for approximately 18 countries with consistently reliable statistics. Because pregnancy rates were computed differently in the earlier publication,^{††} trends in overall pregnancy rates are not shown.

Preliminary Results

Among the 18 countries with reliable pregnancy estimates for 2010, the rate was lowest in Switzerland (eight pregnancies per 1,000 adolescents per year) and highest in New Zealand (57) (Table 1 and Figure 1). Teen pregnancy rates are even higher in some former Soviet countries and Cuba where abortion data are incomplete, even though rates are underestimated in these countries. Among countries whose most recent estimates were for 2008 or 2009, the highest rates was in the United States in 2008 (68) (Table 2 and Figure 1).

^{**} Estimates of abortion by age in the US in 2010 are expected to become available in January 2014.

^{††} The published pregnancy rates for the mid 1990s excluded miscarriages.

The highest observed abortion rates among countries with complete abortion statistics in 2008-2010 were in New Zealand and England and Wales (22) in 2010. Teen abortion rates were below 10 per 1,000 women in about nine countries, and as high as 22 in New Zealand and England and Wales.

We will additionally examine differentials in rates of childbearing and in the proportions of pregnancies that end in abortion among adolescents.

In our final analysis, we expect to additionally present findings for developing countries with abortion estimates based on surveys of women or other nationally representative studies (Table 3), and trends in pregnancy, abortion and birth rates in developing countries.

Pending Conclusions

We will discuss findings in the context of broad social trends, and the implications of our findings for social, economic and public health programs and policies.

References

¹ References to be added with later draft.

² Singh S and Darroch J, Adolescent pregnancy and childbearing: Levels and trends in developed countries, IFPP 2000.

³ Singh S, Adolescent childbearing in developing countries: a global review, *Studies in Family Planning*, 1998, 29(2):117-136.

⁴ UN, *2011 Demographic Yearbook*, New York: UN, 2012.

⁵ UN, *2009-2010 Demographic Yearbook*, New York: UN, 2011.

⁶ UN, *2008 Demographic Yearbook*, New York: UN, 2009.

⁷ UNICEF, The Transformative Monitoring for Enhanced Equity (TransMonEE), *Database*, 2013, <<http://www.transmonee.org/>>, accessed Sept. 1, 2013.

⁸ Sedgh G et al., Legal abortion worldwide in 2008: levels and recent trends, *International Perspectives on Sexual and Reproductive Health*, 2011, 37(2):84-94.

⁹ Bongaarts, J and Potter RE, *Fertility, Biology and Behavior*, New York: Academic Press, 1983.

¹⁰ Finer LB and Henshaw SK, Disparities in rates of unintended pregnancy in the United States, 1994 and 2001, *Perspectives on Sexual and Reproductive Health*, 2006, 38(2), 90-96.

Table 1. Adolescent birth, abortion and pregnancy rates and percent of pregnancies ending in abortion, 2010.

Preliminary findings - do not post or disseminate.

Country	<u>Rates per 1,000 females 15-19 years old</u>			% of pregnancies that end in abortion
	Pregnancies	Abortions	Births	
<u>Countries with complete abortion statistics</u>				
Denmark	23	15	5	67
England and Wales	52	22	24	42
Estonia	41	19	17	46
Finland	23	12	8	52
France	26	15	8	59
Germany	17	5	9	33
Hungary	40	17	18	41
Iceland	33	15	13	47
Israel	25	9	13	35
New Zealand	57	22	28	38
Norway	26	14	8	55
Scotland	51	19	25	38
Singapore	15	8	5	55
Slovakia	34	6	23	17
Slovenia	13	7	5	50
Spain	24	13	11	54
Sweden	29	20	6	69
Switzerland	8	5	3	56
<u>Countries with incomplete official abortion statistics</u>				
Armenia *	39	5	28	12
Azerbaijan	60	2	49	3
Belarus	35	9	21	26
Bulgaria	69	16	43	23
Croatia	17	3	12	15
Cuba *	119	51	53	43
Czech Republic	22	7	12	33
Georgia *	68	9	49	13
Hungary	41	17	18	42
Japan	13	7	5	52
Kazakhstan *	39	5	28	12
Kyrgyzstan	48	7	34	14
Latvia	28	11	14	38
Lithuania	23	4	15	20
Moldova *	43	10	27	23
Montenegro	22	2	17	10
Romania	64	17	38	27
Russian Federation	53	19	27	36
Serbia	28	4	20	13
Tajikistan	u	1	u	u
TfYR of Macedonia	27	2	20	9
Ukraine	45	10	29	21

*Notes on country estimates:

Armenia: Abortion estimate might include miscarriages.

Cuba: Does not include menstrual regulations.

Georgia: Does not include Abkhazia and Tskhinvali.

Kazakhstan: Abortions cover procedures to women <=18 only.

Moldova: Does not include Transdniestr.

Table 2. Adolescent birth, abortion and pregnancy rates and percent of pregnancies ending in abortion, most recent year available (if earlier than 2010).

Preliminary findings - do not post or disseminate.

Country	Year	Rates per 1,000 females 15-19 years old			% of pregnancies that end in abortion
		Pregnancies	Abortions	Births	
<u>Countries with complete abortion statistics</u>					
Belgium	2009	21	8	10	38
Netherlands	2008	14	7	5	50
Portugal	2009	23	7	13	29
United States	2008	68	18	40	15
<u>Countries with incomplete abortion statistics</u>					
Canada	2009	34	15	14	45
Hong Kong	2009	10	5	4	51
Mongolia	2008	29	5	20	17

Table 3. Birth, abortion and pregnancy rates in countries with abortion estimates from nationally representative studies

Country	Source of abortion estimate	Year	<u>Rates per 1,000 females 15-19 years old</u>			% of pregnancies that end in abortion
			Pregnancies	Abortions	Births	
Armenia	DHS/RHS	2010	28	3	21	11
Albania	DHS/RHS	2009	23	1	18	4
Burkina Faso	AICM	2008	Pending	Pending	Pending	Pending
Ethiopia	AICM	2008	Pending	Pending	Pending	Pending
Kenya	AICM	2012	Pending	Pending	Pending	Pending
Mexico	AICM	2009	130	44	68	34
Romania	DHS/RHS	2008	Pending	Pending	Pending	Pending

Figure 1. Adolescent birth, abortion and miscarriage rates, 2010.
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