



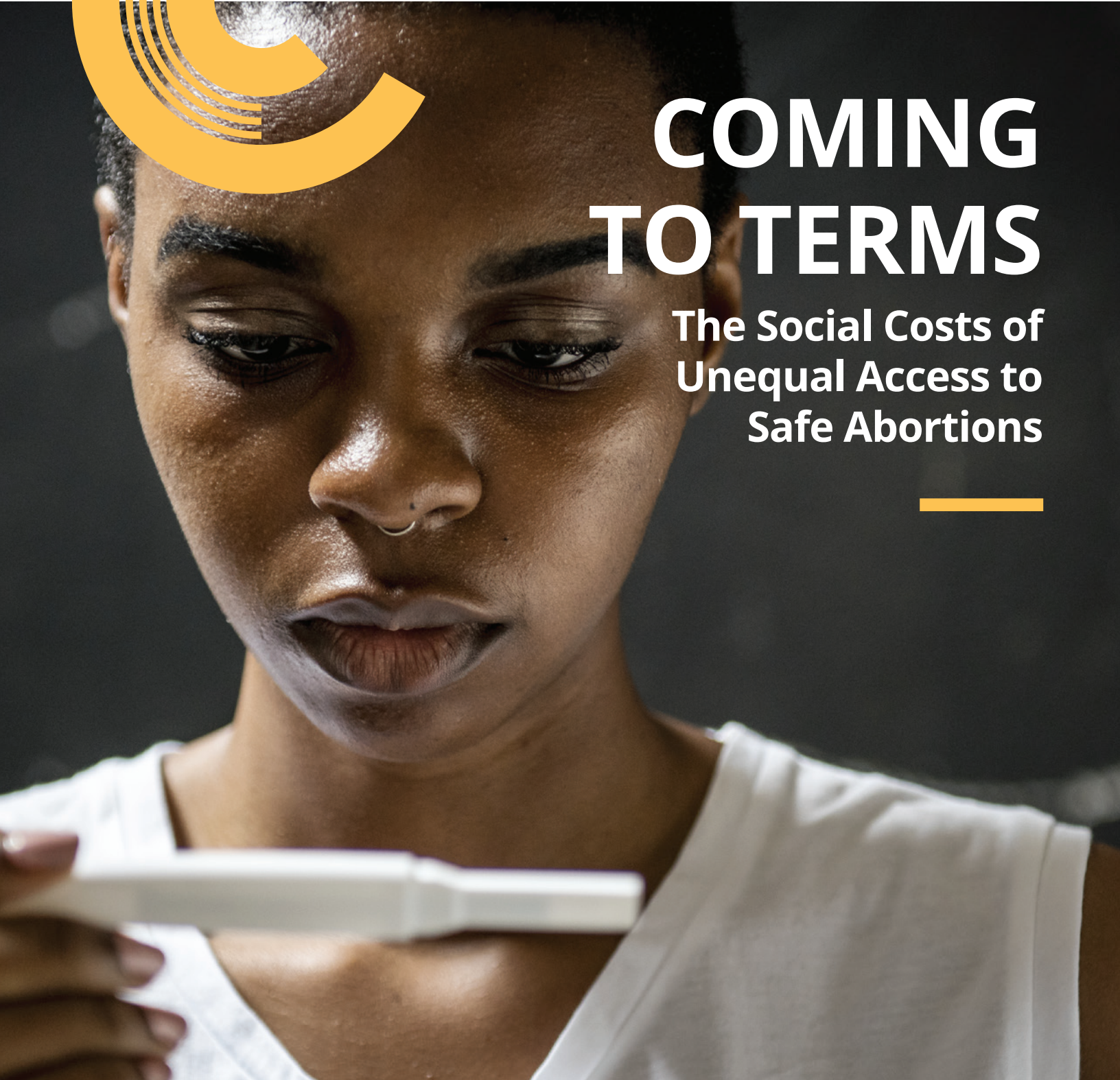
THIS PROJECT IS CO-FUNDED
BY THE EUROPEAN UNION

January 2021 | R2101



COMING TO TERMS

The Social Costs of
Unequal Access to
Safe Abortions



Coming to Terms

The Social Costs of Unequal Access to Safe Abortions

Caribbean Policy Research Institute (CAPRI)
Kingston, Jamaica

This study is co-funded by the European Union.

The views and opinions in this report do not necessarily represent those of the European Union.
The Caribbean Policy Research Institute is solely responsible for all its contents.

Table of CONTENTS

1	Introduction	2
2	Background	6
3	Barriers to Contraceptive Access and Unintended Pregnancies	10
4	Unsafe Abortion – a Preventable Cause of Maternal Death and Disability	16
	Economic Cost of Unsafe Abortion	20
5	Access to Abortion and Education	24
	Economic Impact of Women’s Education	28
6	Access to Abortion and Female Labour Market Participation	30
7	Born Unwanted: Restricted Access to Abortion and Adverse Outcomes for Children	34

	Access to Abortion and Crime Reduction	40
	Unwanted Childbearing and the Situation of Jamaican Children	41
8	The Economic Cost of Unwanted Childbearing in Jamaica	46
	Economic Impact of a Reduction in Crime	47
	The Cost of Adolescent Childbearing	48
9	Conclusion and Recommendations	50
	Recommendations	53
	References	55
	Appendix I	66



1

Introduction



The annual cost of treating major complications from unsafe abortions in the developing world, where nearly all unsafe terminations occur, is estimated to be over

US\$500m
A N N U A L L Y

Abortion is illegal in Jamaica. It is, however, easily obtainable, albeit with varying degrees of safety. In Jamaica, complications from abortion is the third leading cause of maternal death.¹ Complications from unsafe abortions burden the public health system and exact economic, societal, familial, and individual costs. The familial and individual costs are disproportionately borne by poor, vulnerable women and their dependents.² There are financial and opportunity costs of unsafe abortion morbidity and mortality as borne by the public health system when women seek treatment from complications arising from unsafe terminations (or attempted terminations.) Finally, there are legal costs: women who seek medical services to safely terminate a pregnancy, and medical practitioners who provide those services, risk arrest and prosecution.

The annual cost of treating major

The losses to the economies from lower productivity due to complications of unsafe abortions are estimated to be more than US\$400 million annually.

complications from unsafe abortions in the developing world, where nearly all unsafe terminations occur, is estimated to be over US\$500 million annually, equivalent to the entire GDP of Dominica. The indirect costs of unsafe abortion are even more substantial. They include the loss of productivity, the effects on children's health and education if a mother dies, and implications for babies who are born despite their mother's attempt to terminate, and whose health

may be compromised by that early injury. It is estimated that the cost of long-term morbidities could be many billions of dollars annually, while the losses to the economies from lower productivity due to complications of unsafe abortions are estimated to be more than US\$400 million annually. In addition, out-of-pocket expenses may amount to \$600 million.³

Access to safe termination of pregnancy services is associated with some positive

1 Kimone Francis, "Abortion Plea: Experts Urge repeal of Century-old Law," *Observer*, April 10, 2018, www.jamaicaobserver.com/front-page/abortion-plea-experts-urge-repeal-of-century-old-law_130154.

2 An analysis of 2005 data showed that the majority of women admitted to Ward 5 at Jubilee, where abortions and their complications are treated, were young, poor, unemployed, and lived in economically and socially deprived communities. The Abortion Policy Review Advisory Group, Final Report, 2007, www.japarliament.gov.jm/attachments/375_Abortion%20Policy%20Review%20Advisory%20Group%20Final%20Report.pdf.

3 Michael Vlassoff, Jessica Shearer, Damian Walker, and Henry Lucas, "Economic Impact of Unsafe Abortion-Related Morbidity and Mortality: Evidence and Estimation Challenges," IDS Research Report 59, Institute of Development Studies, December 2008, www.abortionresearchconsortium.org/reports/Rr59.pdf.

This report examines the negative societal and individual outcomes resulting from the unlawfulness of safe termination of pregnancy in Jamaica, and measures the economic impact of those negative outcomes.

impacts. A number of studies suggest that abortion access is correlated with favourable economic outcomes through better educational and labour force participation by women, and improved socioeconomic outcomes for children.⁴ Some studies have also found a positive correlation between access to safe abortion and decreased crime rates,⁵ which may be

particularly significant for Jamaica which has one of the world's highest rates of homicide.

Apart from medical considerations, the abortion question in Jamaica is largely debated as a religious, moral, and human rights/women's rights issue. Besides the costs to the public health system, the economic and societal costs of lack of

access to safe abortions have largely not been considered, nor have the economic benefits of the legalization of abortion. This report examines the negative societal and individual outcomes resulting from the unlawfulness of safe termination of pregnancy in Jamaica, and measures the economic impact of those negative outcomes.

4 Anna Bernstein and Kelly M. Jones, "The Economic Effects of Abortion Access: A Review of the Evidence," Institute for Women's Policy Research, 2019, https://iwpr.org/wp-content/uploads/2019/07/B379_Abortion-Access_rfinal.pdf.

5 John J Donohue and Steven D Levitt, "The Impact of Legalized Abortion on Crime over the Last Two Decades," National Bureau of Economic Research, May, 2019, www.nber.org/papers/w25863.pdf; Cristian Pop-Eleches, "The Impact of an Abortion Ban on Socio-Economic Outcomes of Children: Evidence from Romania," October 2005, www.columbia.edu/~cp2124/papers/unwanted_latest.pdf; François Abel, Raul Magni Berton and Laurent Weill, "Abortion and Crime: Cross-country Evidence from Europe," *International Review of Law and Economics* 40 (October 2014): 24-35, <https://doi.org/10.1016/j.irle.2014.08.001>.

HOLY BIBLE

Apart from
MEDICAL
considerations,
the abortion question in Jamaica
is largely debated as a
RELIGIOUS, MORAL,
and
HUMAN RIGHTS / WOMEN'S RIGHTS
issue.

A number of studies suggest that abortion access is correlated with favourable economic outcomes through better educational and labour force participation by women, and improved socioeconomic outcomes for children.





2

Background



The problem of unsafe abortions and corresponding

**HIGH RATES OF
MATERNAL DEATHS**

has been acknowledged by
the Government of Jamaica
as far back as

1975

In Jamaica, termination of a pregnancy is illegal under the *Offences Against the Person Act* of 1864, with a maximum penalty of life imprisonment with or without hard labour. Despite these severe penalties, the law provides no exceptions to its proscription against abortion. The general criminal law of necessity, however, allows an abortion to be performed to save the life of a pregnant woman. It has also been interpreted that the English landmark case *Rex v. Bourne* (1938) would be applicable in Jamaica as the abortion provisions are essentially identical to the ones in that case, and under common law principles Jamaica could look to British case law as an authoritative interpretation of that law. In the English case, the court held that if the doctor is of the opinion that the probable consequence of continuance of the pregnancy will be physically or mentally injurious to the pregnant woman, then the termination of that pregnancy is an act towards the preservation of the life of that woman, and is therefore lawful.

That precedent has been applied in



In
2005

the MOH issued a
statement recognizing the

RISKS POSED TO WOMEN'S HEALTH

by unsafe abortions and
the high public health
costs of managing
the complications of
unsafe abortions.

Jamaica since 1975 when the then-Minister of Health embraced it in a policy paper. However, the applicability of Bourne's case has never been tested in a Jamaican court. The Bourne principle merely provides a person performing an abortion with a defence against a criminal charge, but does not shield that person from criminal prosecution, and

thus the burden is on the accused to establish that the abortion was lawful. Since the law is not unequivocal, only a few medical practitioners perform abortions, their services are not openly accessible, and are relatively expensive.⁶ This convoluted legal situation results in a situation where women who can afford it have access to safe abortions from medical practitioners, but poorer women are unable to reliably access these services, and so resort to attempts to terminate their pregnancies themselves, or they go to non-professionals, thereby putting themselves in danger.

The problem of unsafe abortions and corresponding high rates of maternal deaths was acknowledged by the Government of Jamaica as far back as 1975. Medical practitioners and government officials alike have long accepted that the law is flawed and needs to be reformed. In 1975, the Minister of Health issued a Statement of Policy on Abortion which called for an amendment of the *Offences Against the Person Act* to clarify when abortion would be lawful in

⁶ The Abortion Policy Review Advisory Group, Final Report, 2007; "Women of the World: Laws and Policies Affecting their Reproductive Lives, Latin America and Caribbean, Jamaica," The Center for Reproductive Law and Policy, https://reproductiverights.org/sites/default/files/documents/wowlac_jamaica.pdf.

The problem of unsafe abortions and corresponding high rates of maternal deaths has been acknowledged by the Government of Jamaica as far back as 1975. Medical practitioners and government officials alike have long accepted that the law is flawed and needs to be reformed.

Jamaica, and to take steps to make rape, carnal abuse, and incest lawful grounds for abortion. However, no action towards legal reform followed due to strong opposition by religious institutions. The following year the Ministry of Health established a Fertility Management Unit at the Glen Vincent Health Centre in Kingston, where it was said that medical practitioners performed safe terminations of pregnancies with little opposition. In 1990-91 the health ministry further outlined the criteria by which a patient could be eligible for termination of a pregnancy. (The Glen Vincent Health Centre closed in the mid-1990s due to lack of funding and inadequate staffing.)⁷

In 2005, the Ministry of Health issued a statement recognizing the risks posed to women's health by unsafe abortions and the high public health costs of managing the complications of unsafe abortions. A government-appointed Abortion Policy Review Group was formed towards the objective of reducing maternal mortality (and morbidity) in Jamaica by 75 percent by 2015, in keeping with the Millennium Development Goals for improving maternal health. In 2007, the group's final report recommended that the relevant sections of the *Offences Against the Person Act* be repealed and replaced with a *Termination of Pregnancy Act*, which would indicate the conditions under which terminations of pregnancy are lawful. A Joint Select Committee of Parliament was then appointed to carry

The Parliament has a duty to take a stand. I have a duty to take a stand, not on either side of the debate, but a stand about protecting the lives of women, particularly poor women, regardless of public opinion about the value of their lives.

– Juliet Cuthbert-Flynn

that process forward. However, when the recommendations were made public, there was vigorous opposition from religious groups to the legislative change, and the process stalled.⁸

A decade later the abortion question was again raised. In June 2018 the JLP Member of Parliament Juliet Cuthbert-Flynn tabled a parliamentary member's motion calling for the House of Representatives to proceed with the recommendations made more than ten years earlier. She stated: "The Parliament has a duty to take a stand. I have a duty to take a stand, not on either side of the debate, but a stand about protecting the lives of women, particularly poor women, regardless of public opinion about the

value of their lives."⁹

Later that same year the Joint Select Committee that had been established in January 2017 to review the sexual offences legislation, was tasked with also reviewing the *Offences Against the Person Act* in relation to abortion. (That committee was also reviewing the buggery aspect of the Act.)¹⁰ That Committee, in December 2018, recommended that any amendment of the existing laws concerning abortion should be considered by the Parliament as whole, rather than task the committee to make recommendations; further, the Committee opined, matters of broad public divide, such as abortion and buggery, should be put to a referendum^{11, 12}

7 Abortion Policy Review Advisory Group, 2007.

8 Shakira Maxwell, "Fighting a Losing Battle? Defending Women's Reproductive Rights in Twenty-First Century Jamaica," *Social and Economic Studies* 61, no. 3 (September 2012): 95-115. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=223387.

9 Balford Henry, "Cuthbert Flynn Urges Parliament to Legalise Abortion," *Observer*, October 12, 2018, www.jamaicaobserver.com/news/cuthbert-flynn-urges-parliament-to-legalise-abortion_146584?profile=1373.

10 The sections 76, 77, and 79 of the Offences against the Person Act criminalize consensual same-sex conduct.

11 Prime Minister Andrew Holness has promised to put these issues to a referendum. While advocating for a referendum on these matters (abortion and buggery) might appear to be a progressive view, it is actually the opposite. Referenda are usually held on issues that deal with the fundamental rules of the political system, such as constitutional issues, transfers of powers to supranational organizations, and territorial issues. These types of issues are seen as requiring legitimation by a popular majority even if a referendum is not required in the constitution. Civil rights in general, especially the rights of minorities, are considered to be inappropriate to put to a popular vote, as referenda are a majoritarian device. Generally, there are strategic reasons behind initiating this type of ad-hoc or optional referendum. In many cases referenda are promoted in order to remove a difficult issue from the political agenda, so that the party in government can avoid taking responsibility for the decision, especially if the issue could have a damaging effect on their electoral success. It is usually considered that the majority of Jamaican voters would not support the repeal of the sections relevant to abortion and buggery in the Offences Against the Person Act, and so a referendum on the matters would be a neat way to remove the issue from the political agenda, while cementing the law at the same time. See CAPRI, "The Economic and Societal Cost of Sexuality-based Discrimination in Jamaica," 2019, www.capricaribbean.org/documents/economic-and-societal-costs-sexuality-based-discrimination-jamaica.

12 "Report of the Joint Select Committee Appointed to Complete the Review of the Sexual Offences Act Along With the Offences Against the Person Act, the Domestic

Notwithstanding these recommendations, the House of Representatives voted to refer the resolution on abortion to the Parliamentary Human Resource and Social Development Committee.¹³ In March 2020 the 11-member committee (chaired by Opposition MP and Roman Catholic deacon Ronald Thwaites,) after hearing representation from over 70 local and overseas individuals and institutions, and receiving over 900 emails over a nearly-two-year period, recommended that the Parliament take a conscience vote to determine whether or not Jamaica should legalize abortion.¹⁴

In January 2021, following the Argentine Senate's landmark decision in December 2020 to legalise abortion, the issue was resuscitated in the Parliament and in the public debate. At least one other member of parliament and State Minister, and a government Senator, publicly stood with Minister Cuthbert-Flynn saying that if the matter comes before the Parliament, they will vote to repeal the law. In a rare display of bi-partisan support, the opposition spokesperson on health declared that he would join his fellow members on a vote to legalise abortion if the matter comes before the Parliament.¹⁵

Violence Act, Child Care and Protection Act," Houses of Parliament (Jamaica), December 2018, <https://japarliament.gov.jm/attachments/article/2050/JSC%20Sexual%20Offences%20Report.pdf>.

13 Balford Henry, "House Committee Takes on Abortion Issue," *Observer*, December 21, 2018, www.jamaicaobserver.com/news/house-committee-takes-on-abortion-issue_152694?profile=&template=PrinterVersion.

14 Balford Henry, "House Committee."

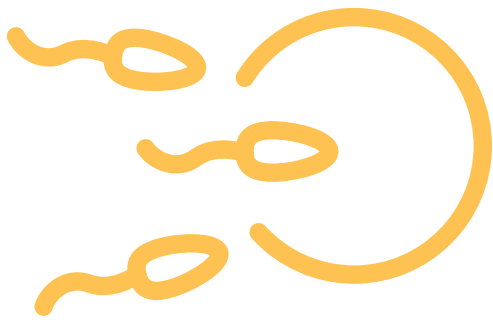
15 Ricardo Brooks, "Parliamentary Support Growing for Push to Legalise Abortion in Jamaica," *Nationwide Radio*, January 13, 2021, <https://nationwideradiojm.com/parliamentary-support-growing-for-push-to-legalise-abortion-in-jamaica>.



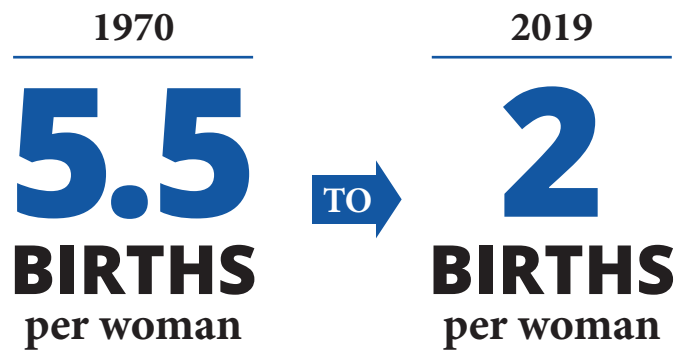


3

Barriers to Contraceptive Access and Unintended Pregnancies



Jamaica has been successful in reducing the total fertility rate from



Globally, the vast majority of abortions results from unintended pregnancies; that is, pregnancies that are either mistimed or unwanted.¹⁶ While some of the unintended pregnancies may turn out to be happy surprises, the others tend to lead to a broad range of issues, including health risks for the mother and child, malnutrition, abuse and neglect, as well as to cycles of high fertility, lower educational and employment potential, and poverty. These challenges may transfer across generations. Further, unintended pregnancies are an important public health issue, that can lead to unsafe abortions and maternal deaths.¹⁷ Unintended pregnancy may be a result of either non-use of contraceptives, contraceptive failure, or incorrect use of contraceptives. Hence, access to family planning services and adequate sex education are crucial in order to prevent unintended pregnancies. That

notwithstanding, women's ability to prevent pregnancies may be hindered by other social, cultural, and financial barriers.

Jamaica was one of the first countries in the Latin American and Caribbean region to establish a family planning agency, and the country has been successful in reducing the total fertility rate from 5.5 births per woman in 1970 to two in 2019.¹⁸ Although the use of contraception has steadily increased, in 2008, when the latest Reproductive Health Survey was conducted, just under 50 percent of live births in Jamaica were unintended at the time of conception. The pregnancy was reported as unwanted, meaning that the pregnancy occurred when no children, or no more children were desired, in 16 percent of the cases.¹⁹ It is a common problem in Jamaica that pregnancies ended in induced abortions are underreported, and since the majority

of the pregnancies ending in abortion are either mistimed or unwanted, unplanned pregnancies are underreported to the extent that abortions are underreported. Additionally, the actual incidences of unwanted pregnancies might be higher than 16 percent as when the result of pregnancy is a live birth, the description of pregnancy as wanted or unwanted might be influenced by retrospective rationalization and ambivalence about the pregnancy intention. Parents are likely to be reluctant to openly admit to not wanting their children. The proportion of unplanned conceptions in the survey was higher (59 percent) among currently pregnant women than it was among women who had a live birth in the last five years (46 percent,) which could also indicate that some of these pregnancies may not have been carried to term.²⁰

Despite the success in reducing the total fertility rate, Jamaica's adolescent fertility

16 Guttmacher Institute, "Induced Abortion Worldwide," Fact sheet, July 2020, www.guttmacher.org/fact-sheet/induced-abortion-worldwide.

17 "High Rates of Unintended Pregnancies Linked to Gaps Family Planning Services: New WHO Study," World Health Organization, October 25, 2019, www.who.int/news-room/detail/25-10-2019-high-rates-of-unintended-pregnancies-linked-to-gaps-in-family-planning-services-new-who-study.

18 World Bank, "Fertility rate, total - Jamaica," accessed January 18, 2021, <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=JM>.

19 According to that study, the actual number and proportion of unintended pregnancies might be even higher, as the report only included pregnancies leading to birth and women still pregnant at the time of the survey.

20 Florina Serbanescu, Alicia Ruiz, and Danielle Suchdev, "Reproductive Health Survey Jamaica 2008: Final Report," Atlanta, GA (USA) and Kingston, Jamaica, 2010, <https://evaw-global-database.unwomen.org/fr/countries/americas/jamaica/2008/reproductive-health-survey-jamaica-2008>.

It is a common problem in Jamaica that pregnancies ended in induced abortions are underreported, and since the majority of the pregnancies ending in abortion are either mistimed or unwanted, unplanned pregnancies are underreported to the extent that abortions are underreported.

rate remains comparatively high with 51 births per thousand in 2018. Although that too has decreased from 75 in 2008, the rate is still considerably higher than the average rate in the group of upper middle-income countries (33 births per thousand, which includes Jamaica).²¹ Most of these births are results of unintended pregnancies. Nearly all (94 percent) of the respondents in a 2009 study interviewing 250 currently pregnant females between 15 and 17 years of age in Jamaica reported that the pregnancy was unintended, all of them saying the time was not right to get pregnant, and that they should have been older. Further, 80 percent said they were unhappy when they learned that they were pregnant, and less than half (41 percent) reported using contraceptives when they became pregnant.²²

Early sexual debut, which increases the risk of teenage pregnancy, is common in Jamaica. Twelve percent of young women and 35 percent of young men reported having had sexual intercourse before age fifteen.²³ Similarly, 14 percent of the women surveyed in a 2016 study reported having had their first sexual experience before the age of 15, and 53 percent had had their first sexual intercourse between ages 15 and 17.²⁴

Experiences of sexual coercion and violence were common among many sexually active young women. In 2008, almost half of sexually active females between 15 and 24 years of age in Jamaica reported being coerced into having sex at

Experiences of sexual coercion and violence were common among many sexually active young women.

the time of their first sexual encounter. Of all the women in the survey, 12 percent reported having been physically forced to have sexual intercourse at some time in their lives. Half of the women reported forced sexual intercourse prior to age 20, and two-thirds before age 25.²⁵ Similarly, in 2016, one-third of the women whose age of first sexual intercourse was below the age of 15 reported that this experience was forced.²⁶ Further, half of the participants in a study of 750 females between 15 and 17 years of age reported having experienced sexual coercion or violence.²⁷ If a young woman cannot choose whether or not to engage in sexual activity, she is likely to be powerless to make decisions on contraceptive use and protect herself from unintended pregnancy.

Another barrier hindering adolescent

girls' ability to avoid unintended pregnancy is Jamaica's policy and legislative position on adolescent reproductive health, which stands in stark contrast to the realities of adolescent sexual behaviour. Under Jamaican law, the age of consent is 16 years, meaning that any sexual contact with a person under the age of 16 is considered statutory rape.²⁸ The official sexual education policy of the Ministry of Education is based on abstinence-only education, and although it mirrors the legal framework, it does not provide sexually active adolescents with adequate information about sex or reproduction.

Government agencies and health care providers have expressed concerns about how to legally respond to adolescents under the age of consent who are sexually active and in need of reproductive health information and services.²⁹ This concern is particularly pronounced as the Child Care and Protection Act (CCPA) 2004 mandates reporting any knowledge of sexual activity of adolescents under the age of consent. Moreover, it is often interpreted that the healthcare providers are not protected under section 9 (1) of the CCPA, which considers them to be exposing the minor, if they provide such minor with contraceptive advice and treatment. This is so in spite of the fact that the Reproductive Health Policy Guidelines for Health Professionals (2004) permits health professionals to provide counselling upon contraceptive advice and treatment for sexually active

21 World Bank, "Adolescents Fertility Rate – Jamaica," accessed January 18, 2021, <https://data.worldbank.org/indicator/SP.ADO.TFRT?locations=JM>.

22 Joy Noel Baumgartner, Cynthia Waszak Geary, Heidi Tucker, and Maxine Wedderburn, "The Influence of Early Sexual Debut and Sexual Violence on Adolescent Pregnancy: a Matched Case-control Study in Jamaica." *International Perspectives on Sexual and Reproductive Health* 35, no. 1 (March 2009): 21–28, <https://doi.org/10.1363/iffp.35.021.09>.

23 Serbanescu et al, "Reproductive Health."

24 Carol Watson Williams, "Women's Health Survey 2016 Jamaica: Final Report," Co-publication of the Statistical Institute of Jamaica, Inter-American Development Bank and the United Nations Entity for Gender Equality and the Empowerment of Women, June 2018, <http://dx.doi.org/10.18235/0001170>.

25 The majority of perpetrators was known to the women: a family member, a teacher, or a community or religious leader. Serbanescu et al, "Reproductive Health"; "Jamaica's Silent Children," People and Power Series, Al Jazeera, October 3, 2015, www.aljazeera.com/programmes/peopleandpower/2015/09/jamaica-silent-children-150930144953156.html.

26 Watson Williams, "Women's Health Survey."

27 Baumgartner et al, "Early Sexual Debut."

28 Age of Consent, Jamaica, www.ageofconsent.net/world/jamaica. Jamaica does not have close-in-age exemptions as in some other jurisdictions, thus two individuals, both under the age of 16, willingly engaging in sexual activity can also be prosecuted under statutory rape, although that rarely happens.

29 Government agencies include: the National Family Planning Board, the National HIV/AIDS Prevention Programme, and the Ministry of Health of Wellness.

girls under 16 years old who cannot be persuaded to abstain from sex, and are considered mature enough to understand the implications of sexual activity.³⁰

Poorer women are more likely to have unintended pregnancies than their better off counterparts, and adolescents from lower socioeconomic brackets are at higher risk of unintended pregnancies than adolescents from wealthier backgrounds. In 2008, about twice as many young women in rural areas or in urban areas than in the Kingston Metropolitan Area had begun childbearing. The proportion of teenage pregnancies decreased significantly with educational attainment and wealth status of the household.³¹

Low socioeconomic status is also associated with higher fertility rates among the adult population. Rural and poor women are more likely to have a larger number of children and have unmet contraceptive needs, than educated and urban women. This is not unique to Jamaica. Several studies from other countries have shown that low socioeconomic status is a risk factor for unintended pregnancy.³² Economic deprivation can cause a significant financial barrier to contraceptive access; however, studies have shown that even after financial barriers are removed, low socioeconomic status is still associated with a higher rate of unintended pregnancies.³³



Even where subsidized family planning resources, and a variety of contraceptive methods are readily available at an affordable cost, women may not access or utilize them. In Jamaica, the Ministry of Health and Wellness (MOHW) and National Family Planning Board (NFPB) provide such resources, but some women do not take advantage of these due to “issues such as low negotiation skills, unwillingness of the partner, and low contraceptive knowledge plagued by various myths.”³⁴ This is in line with global studies that have shown that financial or physical barriers to lack of access to

family planning services are no longer the main reasons for women not using contraceptives. In many countries the main reasons are personal, educational, or cultural barriers, such as the stigma attached to unmarried women’s sexual activity and use of contraceptive services, fear of potential side-effects, perceptions of low risk of pregnancy, and women’s low level of decision-making power.³⁵ All these factors likely have a stronger influence on women with lower socioeconomic status and educational attainment.

30 Tazhmoye V. Crawford, Donovan A. McGrowder and Alexay Crawford, “Access to Contraception by Minors in Jamaica: a Public Health Concern,” *North American Journal of Medical Science* 1, no.5 (October 2009): 247–255, <https://doi.org/10.4297/naajms.2009.5247>.

31 Serbanescu et al, “Reproductive Health.”

32 Abigail Iseyemi, QiuHong Zhao, Colleen McNicholas, and Jeffrey F. Peipert, “Socioeconomic Status as a Risk Factor for Unintended Pregnancy in the Contraceptive CHOICE Project.” *Obstetrics and gynecology*, 130 no. 3 (September 2017): 609–615, <https://doi.org/10.1097/AOG.0000000000002189>; Reza Omani-Samani et al, “Socioeconomic Inequality of Unintended Pregnancy in the Iranian Population: a Decomposition Approach,” *BMC Public health* 18, article no. 607 (May 2018), <https://doi.org/10.1186/s12889-018-5515-5>; Laya Font-Ribera, Gloria Pérez, Joaquin Salvador, and Carme Borrell, “Socioeconomic Inequalities in Unintended Pregnancy and Abortion Decision,” *Journal of urban health: bulletin of the New York Academy of Medicine*, 85, no. 1 (February 2008): 125–135, <https://doi.org/10.1007/s11524-007-9233-z>; Amy Metcalf, Rachel Talavlikar, Beatrice du Prey, and Suzanne C. Tough, “Exploring the Relationship Between Socioeconomic Factors, Method of Contraception and Unintended Pregnancy,” *Reproductive Health* 13, article no 28 (March 2016), <https://doi.org/10.1186/s12978-016-0151-y>.

33 Iseyemi et al, “Socioeconomic Status as a Risk Factor.”

34 Lovette Byfield, executive director of NFPB, quoted in “Women Urged to Make Use of Available Contraceptive Methods,” *Gleaner*, July 10, 2018, <http://jamaica-gleaner.com/article/health/20180711/women-urged-make-use-available-contraceptive-methods>.

35 Marian Strakey, “Barriers to Effective Contraceptive Use,” Population Connection, January 28, 2015, www.populationconnection.org/barriers-to-effective-contraceptive-use/; Gilda Sedgh and Rubina Hussain, “Reasons for Contraceptive Nonuse among Women Having Unmet Need for Contraception in Developing Countries,” *Studies in Family Planning* 45, no. 2 (June 2014): 151–169, <https://doi.org/10.1111/j.1728-4465.2014.00382.x>

When women's decision-making autonomy is low, her contraceptive access may depend on her partner's preferences. Studies have shown that Jamaican men are sometimes reluctant to use contraceptives; over one in five of the male partners of sexually active females had refused to use a condom when asked.³⁶ Eight percent had forced sex without a condom, 7 percent had refused to have sex with a condom, 3 percent had threatened to end the relationship, and 1 percent had threatened physical harm. A woman's increased level of education was related to increased likelihood in her suggesting condom use and decreased likelihood of negative reactions from her partner.³⁷

Women's decision-making autonomy can be impeded by economic dependency and experience of intimate partner violence. A subscription to more traditional gender norms may affect women's power to negotiate about contraceptive use. These factors are widely present in Jamaican society. Although Jamaican women are better educated than men, a sizable wage gap persists.³⁸ In 2020, Jamaican women earned 62 percent of their male counterparts' income.³⁹ Women are also



Studies have
shown that over
1 in 5
of the male partners
of sexually active females had
**refused to use
a condom**
when asked

disproportionally represented in the labour force and their unemployment rates are significantly higher.⁴⁰ Young women experience particularly high rates of unemployment, which increases their vulnerabilities and exposes them to threats of exploitation and poverty.⁴¹ When women are economically dependent on their partners, their ability to negotiate contraceptive methods tends to be lower. This issue is particularly relevant in cross-generational relationships where young women engage in sexual activity with older men either for basic needs (housing and food), financial benefits, or due to

coercion.⁴² One survey found that 19 percent of females aged 15-19 in Jamaica had had non-marital sex with a partner 10 years or more older than themselves in the last 12 months.⁴³

Experiences of intimate partner violence are associated with poor use of contraceptives and increased risk of unwanted pregnancies.⁴⁴ Although official data on intimate partner violence in Jamaica is sparse, studies have identified it as one of the most prevalent forms of violence on the island.⁴⁵ Thirty-five percent of Jamaican women have experienced at least one form of intimate partner violence (verbal, physical, or sexual) during their lifetime, and 17 percent had been subjected to some form of intimate partner violence in the past 12 months.⁴⁶ Similarly, a 2016 survey on gender-based violence showed that more than one in every four women (28 percent) in Jamaica had experienced intimate partner violence in their lifetime.⁴⁷ Although intimate partner violence can affect anyone regardless of economic or social status, both in Jamaica and globally, lower educational attainment and wealth status are associated with higher prevalence of

36 Serbanescu et al. "Reproductive Health"; Elisa Sobó, "Abortion Traditions in Rural Jamaica," *Social Science and Medicine* 42, no. 4 (February 1996): 495-508, [https://doi.org/10.1016/0277-9536\(95\)00172-7](https://doi.org/10.1016/0277-9536(95)00172-7).

37 Serbanescu et al, Reproductive Health."

38 World Economic Forum, The Global Gender Report 2018," Insight report, Geneva: World Economic Forum, 2018, www3.weforum.org/docs/WEF_GGGR_2018.pdf.

39 Marina Pasquali, "Jamaica: Labor Market Gender Gap Index 2020, by Area," Statista, March 11, 2020, www.statista.com/statistics/803809/jamaica-gender-gap-labor-market-category/.

40 In January 2020 5.9% of men and 9% of women were unemployed. Statistical Institute of Jamaica, "Main Labour Force Indicators," accessed January 18, 2021, <https://statinja.gov.jm/LabourForce/NewLFS.aspx>.

41 Watson Williams, "Women's Health Survey."

42 Kay-Anne Darlington, Tania Basta, and Rafael Obregon, "Cross-generational Relationships in Rural Jamaica," *Vulnerable Children and Youth Studies: An International Interdisciplinary Journal for Research, Policy and Care* 7, no. 2 (June 2012): 1-11, <https://doi.org/10.1080/17450128.2011.647729>.

43 Hope Entreprises Ltd, "2008 HIV/AIDS Knowledge Attitudes and Behavior Survey, Jamaica," (UNFPA, 2008), <https://caribbean.unfpa.org/en/publications/2008-hiv-aids-knowledge-attitudes-and-behavior-survey-jamaica-0>.

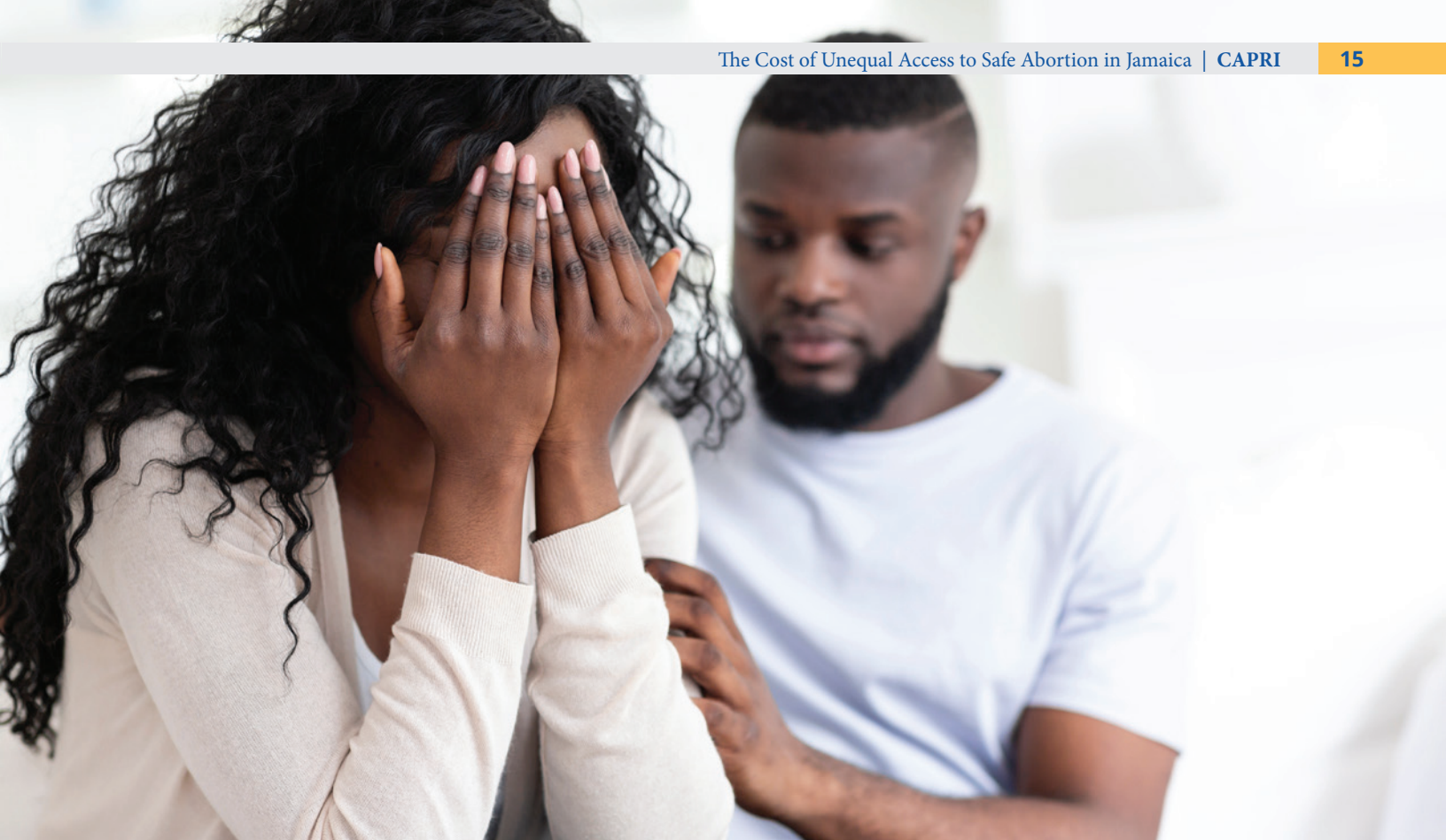
44 Ghose Bishwajit and Yaya Sanni, "Domestic Violence: a Hidden Barrier to Contraceptive Use Among Women in Nigeria," *Open Access Journal Contraception* 9 (January 2018): 21-28, <https://doi.org/10.2147/OAJC.S154733>; Rob Stephenson, Michael A. Koenig, Rajib Acharya, and Tarun K. Roy, "Domestic Violence, Contraceptive Use, and Unwanted Pregnancy in Rural India," *Studies in family planning*, 39, no. 3 (August 2008): 177-186, <https://doi.org/10.1111/j.1728-4465.2008.165.x>; Sarkar Narendra Nath, "The Impact of Intimate Partner Violence on Women's Reproductive Health and Pregnancy Outcome," *Journal Obstetrics Gynaecology* 28, no. 3 (April 2008): 266-271, <https://doi.org/10.1080/01443610802042415>; Kinsey Hasstedt and Andrea Rowan, "Understanding Intimate Partner Violence as a Sexual and Reproductive Health and Rights Issue in the United States," *Guttmacher Policy Review* 19 (July 2016): 37-45, www.guttmacher.org/gpr/2016/07/understanding-intimate-partner-violence-sexual-and-reproductive-health-and-rights-issue.

45 Sarah Bott, Allesandra Guedes, Mary Goodwin, and Jennifer Adams Mendoza, "Violence Against Women in Latin America and the Caribbean: A Comparative Analysis of Population-based Data from 12 countries," Washington, DC: Pan American Health Organization, 2012, <https://iris.paho.org/handle/10665.2/3471>;

Inter-American Commission on Human Rights (IACHR), "Report on the Situation of Human Rights in Jamaica," August 10, 2012, www.oas.org/en/iachr/docs/pdf/Jamaica2012eng.pdf.

46 Serbanescu et al, Reproductive Health."

47 Watson Williams, "Women's Health Survey."



intimate partner violence.⁴⁸

Jamaican women who have experienced intimate partner violence have a higher number of unintended and unwanted pregnancies.⁴⁹ Intimate partner violence is also strongly associated with early age of first birth and higher number of births. A study found that 35 percent of Jamaican women who had their first birth at age 15 or younger, and 27 percent of women who had first birth at the age of 15-17, had experienced intimate partner violence, decreasing to 24 percent in the 18-20 age group, and to 18 percent in the age group 21-24. In contrast, only ten percent of those who had their first child when they were over 25 years had experienced intimate partner violence. A similar pattern was found on the number of births: 34 percent of women who had

over five births had experienced intimate partner violence, 23 percent of women who had three to four births, and 19 percent of women who had one to two births had experienced intimate partner violence. Of women who had not given birth, 12 percent had experience intimate partner violence.⁵⁰

Traditional patriarchal attitudes that are prevalent in Jamaica hamper women's negotiation power on contraceptive use, and can also create a barrier to contraceptive access, particularly for unmarried young women. A study on minors' contraceptive access found that young females face more challenges on access to contraceptive methods than do males. Such challenges derive from traditional gender norms characterizing females as promiscuous for engaging

in sexual activities, while males are encouraged in sexual activity for the sake of promoting their masculinity and for fear of being thought to be homosexual.⁵¹

While effective and accessible family planning services and resources are crucial to improving women's sexual and reproductive health, not all unintended pregnancies can be prevented as women are not always able to determine and control all circumstances of their lives. Constant and proper use of contraceptives is very effective at preventing pregnancy, but even then, contraceptive failures may occur. Women may also face other barriers to contraceptive access which includes financial difficulties and lack of female education and empowerment. In sum, even with access to contraception, women in the lower socioeconomic

48 Serbanescu et al, "Reproductive Health"; Watson Williams, "Women's Health Survey," World Health Organization/London School of Hygiene and Tropical Medicine, "Preventing Intimate Partner and Sexual Violence Against Women: Taking Action and Generating Evidence," Geneva: World Health Organization, 2010, www.who.int/violence_injury_prevention/publications/violence/9789241564007_eng.pdf?ua=1; Fernanda Monteiro de Castro Bhone, Carla Ferreira de Paula Gebara, Ana Regina Noto, Marcel de Toledo Vieira, and Lélío Moura Lourenço, "Socioeconomic Factors and Intimate Partner Violence: A Household Survey," *Trends in Psychology*, 27, no. 1 (November 2019): 205-218, <https://doi.org/10.9788/tp2019.1-15>.

49 Bott et al, "Violence Against Women"; Delores E. Smith, "Prevalence of Intimate Partner Violence in Jamaica: Implications for Prevention and Intervention," *International Journal of Child, Youth and Family Studies* 7, no. 3-4 (August 2016): 343-363, <https://doi.org/10.18357/ijcyfs73-4201616089>.

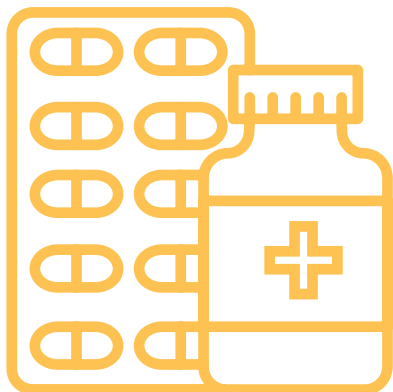
50 Bott et al, "Violence Against Women."

51 Crawford et al, "Access to Contraception."



4

Unsafe Abortion: A Preventable Cause of Maternal Death and Disability



Number of
**adolescent
pregnancies**
terminated each year in
Jamaica could be as high as

5000

There are no official figures for the number of abortions conducted in Jamaica each year as most of these abortions are clandestine. The estimates vary between 10 to 37 percent of all pregnancies ending up in abortion, meaning that an estimated 6,000–22,000 abortions are performed in the country every year.⁵²

While most abortions result from unintended pregnancies, the reasons for women seeking abortion are often far more complex than simply not wanting to be pregnant, and are often motivated by more than one factor. The most common reasons for women seeking abortion are socioeconomic concerns such as poverty,

disruption of education or employment, the desire to provide schooling for existing children, or no support from the partner. Some women also seek abortion because of family-building preferences, including the desire to postpone childbearing or achieve a certain spacing between births, as recommended by the World Health Organization to optimize infant and maternal health.⁵³ Some have relationship problems with the husband or partner, and adding a child would further complicate the situation. Sometimes pregnancy can be a risk to maternal or foetal health. And sometimes the pregnancy is a result of rape or incest.⁵⁴

The rate among adolescents is most

likely higher than for adults. A 2009 study among expectant women in Jamaica indicated that adolescents are at particular risk of repeated unintended pregnancies: 21 percent of expectant teenagers reported a previous abortion.⁵⁵ A 2006 study estimated that between 1,350 and 4,912 adolescent pregnancies are terminated each year in Jamaica.⁵⁶ If the rate was applicable in 2019 that would mean that between 20 to 50 percent of teenage pregnancies end in abortion.⁵⁷ An even higher estimate can be drawn from a 2009 study amongst 238 sexually active Jamaican youth between nine and 17 years of age. The survey found that 26 percent of the young women had become pregnant. Of the 79 pregnancies only three

52 Ryon Jones, "Botched Abortions - More Than 100 Cases Seen at VJH Since Start of This Year," *Gleaner*, November 2, 2017, <http://jamaica-gleaner.com/article/lead-stories/20171105/botched-abortions-more-100-cases-seen-vjh-start-year>; The Guttmacher Institute, "Abortion in Latin America and Caribbean," March 2018, www.guttmacher.org/sites/default/files/factsheet/ib_www-latin-america.pdf; Livern Barrett, "Casual Murders - Inconvenient Pregnancies Account for 95% of Abortions in Ja, Says Doctor," *Gleaner*, January 31, 2019, <http://jamaica-gleaner.com/article/lead-stories/20190131/casual-murders-inconvenient-pregnancies-account-95-abortions-ja-says>.

53 World Health Organization, Report of a WHO Technical Consultation on Birth Spacing," Geneva, Switzerland 13-15 June 2005, www.who.int/maternal_child_adolescent/documents/birth_spacing05/en/.

54 David A. Grimes et al, "Unsafe Abortion: The Preventable Pandemic," *The Lancet Sexual and Reproductive Health Series* 368, no. 9550 (November 2006): 1908-1919, [https://doi.org/10.1016/S0140-6736\(06\)69481-6](https://doi.org/10.1016/S0140-6736(06)69481-6); Akinrinola Bankole, Susheela Singh, and Taylor Haas, "Reasons Why Women Have Induced Abortions: Evidence from 27 countries," *International Family Planning Perspectives* 24, no. 3 (September 1998): 117-127, 152, www.guttmacher.org/sites/default/files/article_files/2411798.pdf.

55 Sonia Alexander, "Community Dental and Maternal Health Study, Jamaica: Does Oral Health Care in Pregnancy Make a Difference?" PhD dissertation Mona: UWI, 2009.

56 Zadie Neufville, "Jamaica: For an Abortion Law That Reaches the Poor," *Inter Press Service*, June, 14, 2009, www.ipsnews.net/2009/06/jamaica-for-an-abortion-law-that-reaches-the-poor/.

57 According to Statistical Institute of Jamaica the number births to teenage mothers in 2019 was 4486, on average 15 % of all pregnancies end up in miscarriage, which makes the total number of teenage pregnancies to be 5159. Statistical Institute of Jamaica, "Births to Teenage Mothers," health statistics, accessed September 15, 2020, https://statinja.gov.jm/Demo_SocialStats/Health.aspx.

While most abortions result from unintended pregnancies, the reasons for women seeking abortion are often far more complex than simply not wanting to be pregnant.

resulted in live births, while the majority (70 percent) of the pregnancies ended in criminal abortion.⁵⁸ As most of these abortions are performed outside of the formal health system, those women do not receive post-abortion counselling, which according to WHO recommendations, should include family planning and reproductive health services, and would increase contraceptive knowledge and uptake, and reduce repeated unintended pregnancies.⁵⁹

Since safe abortion services are not widely, nor in most cases, legally accessible, many of these abortions are unsafe, performed by untrained or poorly trained providers, and present a high risk of complications. Often women try to manage their own abortion using pills bought from the black market, concoctions whether their own or obtained from someone else, or by self-attempted physical harm.⁶⁰ Deaths due to complications from abortion are mainly caused by severe infections or bleeding caused by an unsafe abortion procedure, or due to organ damage.⁶¹ The Senior Medical Officer at the Victoria Jubilee Hospital (VJH, or Jubilee, Jamaica's specialist maternity hospital) said in 2017: "The problem is very large. My estimate is that certainly more than 10

Since safe abortion services are not, widely nor, in most cases, legally accessible, many of these abortions are unsafe, performed by untrained or poorly trained providers, and present a high risk of complications.

percent of pregnancies in Jamaica end up in abortion, and people have found other means other than physicians in at least 50 percent of cases. At least one woman loses her life from this each year."⁶²

Unsafe abortion is a significant and yet highly preventable cause of death.⁶³ It contributes to the country's unacceptably high maternal mortality ratio, which in 2018 was 97 per 100,000, a ratio that is 16 times higher than in the European Union, and six times higher than in the United States.⁶⁴ Complications from abortion is the third leading direct cause of maternal deaths,⁶⁵ it is the second leading cause of maternal deaths among adolescents.⁶⁶ The United Nations has set a target to reduce

maternal mortality to 70 per 100,000 by 2030. In order to achieve this, Jamaica needs to reduce its maternal mortality by nearly 30 percent in the next ten years.⁶⁷ While the risks associated with childbirth cannot be totally eliminated, the deaths due to unsafe abortion are unnecessary and almost entirely preventable.⁶⁸ When induced abortion is performed by a trained provider using correct WHO-approved medical techniques and drugs, and under hygienic conditions, it is a safe medical procedure. Almost every one of the deaths and disabilities caused by unsafe abortion could have been prevented through sex education, family planning, and the provision of safe and legal induced abortion and post-abortion

58 Crawford et al, "Access to Contraception."

59 World Health Organization, "Ensuring Human Rights in the Provision of Contraceptive Information and Services. Guidance and Recommendations," Geneva: World Health Organization, 2014, www.who.int/reproductivehealth/publications/family_planning/human-rights-contraception/en/.

60 WHO describes abortion as unsafe when a pregnancy is terminated either by persons lacking the necessary skills or in an environment that does not conform to minimal medical standards, or both. They are less safe, when done using outdated methods like sharp curettage even if the provider is trained or if women using tablets do not have access to proper information or to a trained person if they need help. Abortions are dangerous or least safe when they involve ingestion of caustic substances or untrained persons use dangerous methods such as insertion of foreign bodies, or use of traditional concoctions. Preventing Unsafe Abortion," World Health Organization June, 26, 2019, www.who.int/news-room/fact-sheets/detail/preventing-unsafe-abortion.

61 World Health Organization, Unsafe Abortion Incidence and Mortality: Local and Regional Levels in 2008 and Trends During 1990-2008," World Health Organization, 2012, <https://apps.who.int/iris/handle/10665/75173/>

62 Ryon Jones, Botched Abortions - More Than 100 Cases Seen at VJH Since Start of This Year," *Gleaner*, November 2, 2017, <http://jamaica-gleaner.com/article/lead-stories/20171105/botched-abortions-more-100-cases-seen-vjh-start-year>.

63 Jamaica National Integrated Strategic Plan for Sexual and Reproductive health 2014-2019, <https://moh.gov.jm/wp-content/uploads/2016/05/Final-National-Integrated-Strategic-Plan-2014-2019-with-SRH-Validation.pdf>.

64 Statistical Institute of Jamaica, "Health Statistics," accessed January 18, 2021, https://statinja.gov.jm/Demo_SocialStats/Health.aspx#; World Bank <https://data.worldbank.org/indicator/SH.STA.MMRT?locations=EU-US-JM>. In 2017, maternal mortality ratio in the European Union was 6 / 100,000 and in the United States 19 / 100,000.

65 Affette McCaw-Binns, LV Campbell, and SS Spence, "The Evolving Contribution of Non-communicable Diseases to Maternal Mortality in Jamaica, 1998-2015: a Population-based Study," *International Journal of Gynecology and Obstetrics* 125, no. 10 (September 2018):1254-126, <https://doi.org/10.1111/1471-0528.15154>; Affette McCaw-Binns and Jashnet Mullings, "Epidemiological Surveillance of Maternal Mortality (1981-2012) Country: Jamaica," UNFPA, 2014, www.msh.org/sites/default/files/gtr_casestudy_jamaica_eng.pdf.

66 Affette McCaw-Binns, "Preventing Deaths from Abortions," Presentation in June 17, 2019.

67 UN Sustainable Development Goals, Goal 3: Healthy lives and Well-being, accessed January 18, 2021, www.un.org/sustainabledevelopment/health/.

68 World Health Organization, "Unsafe Abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2008," 6th Edition, Geneva: World Health Organization, 2011, <https://apps.who.int/iris/handle/10665/44529>.

care.⁶⁹ Evidence from global studies has shown that the removal of restrictions on abortion access has resulted in a reduction in maternal mortality due to reduced numbers of unsafe abortions.⁷⁰ For example, when Romania imposed strict restrictions on abortion access in 1966, maternal deaths increased dramatically reaching a peak in 1989 of 169 deaths per 100,000 live births. Abortion accounted for 87 percent of these deaths. The following year, when abortion was re-legalized, maternal deaths declined by half (84 deaths per 100,000).⁷¹

Deaths are only one aspect of this problem: the far more common consequence of unsafe abortion is morbidity (the condition of suffering from a disease or medical condition). There are no official figures of the complications related to unsafe abortions in Jamaica, and the estimates vary. In 2016, 4 percent of the women treated at Victoria Jubilee for conditions threatening the pregnancy admitted to having attempted to abort the pregnancy by their own means. Given that there is no requirement or obligation for women to admit to this unlawful act, it is likely that the percentage is higher. The following year, between January and



United Nations has set
a target to reduce
maternal mortality to
70 per 100,000

by 2030

In order to achieve this,
Jamaica needs to reduce its
maternal mortality by nearly

30%

in the next 10 years.

September 2017, 8 percent of the 1,088 expectant mothers presented to Jubilee with bleeding in early pregnancy admitted to having attempted an abortion, while an additional 47 had complications that suggested that they attempted to terminate the pregnancy.⁷² This suggests that 13 percent of the complications of bleeding in early pregnancy were due to attempted abortion. When the abortion is attempted by using an orally administered abortifacient, instead of by other more

dangerous methods, the complications are similar to complications from spontaneous miscarriage, and the doctor cannot tell the difference.⁷³ Hence, even 13 percent is most likely an underestimate. A 2014 study which employed a more rigorous interview process of expectant mothers with complications found that 43 percent of them had attempted to terminate their pregnancies.⁷⁴

Since the early 21st century, illegal use of misoprostol (orally administered abortifacient) has reduced abortion-related mortality and morbidity by replacing more dangerous methods of unsafe abortion.⁷⁵ Misoprostol is used to prevent and treat several conditions unrelated to abortion, and is thus widely available.^{76,77} In Jamaica, it is sold under the brand name Cytotec on the black market and is available without a doctor's prescription. In 2011, the pill was reported to cost around J\$6,000 to J\$7,000.⁷⁸ Although considered relatively safe and effective, in the absence of clear instructions, serious complications may occur. When women do not know the proper dosage, they might take either too much of the drug causing side effects, such as vomiting, nausea,

69 World Health Organization, "Safe Abortion. Technical and Policy Guidance for Health Systems," 2nd Edition, Geneva: World Health Organization, 2012, www.who.int/reproductivehealth/publications/unsafe_abortion/9789241548434/en/.

70 World Health Organization, "Safe Abortion."

71 Brooke R. Johnson, Mihai Horga and Peter Fajans, "A Strategic Assessment of Abortion and Contraception in Romania," *Reproductive Health Matters* 12 (sup24), (November 2004): 184-194, [https://doi.org/10.1016/S0968-8080\(04\)24023-X](https://doi.org/10.1016/S0968-8080(04)24023-X).

72 Dr. Orville Morgan, Senior Medical Officer, Victoria Jubilee Hospital, TOP VJH," Powerpoint presentation sent to author by Dr. Morgan; Ryon Jones, Botched Abortions - More Than 100 Cases Seen at VJH Since Start of This Year," *Gleaner*, November 2, 2017, <http://jamaica-gleaner.com/article/lead-stories/20171105/botched-abortions-more-100-cases-seen-vjh-start-year>.

73 National Women's Health Network, "Health facts: Abortion with Pill and Spontaneous Miscarriage," <https://nwhn.org/abortion-pills-vs-miscarriage-demystifying-experience/>.

74 Ryon Jones, Botched Abortions"; Dr. Morgan, "TOP VJH."

75 Affette McCaw-Binns, Jashnet Mullings, and Yvette Holder, Vital Registration and Under-reporting of Maternal Mortality in Jamaica," *International Journal of Gynecology and Obstetrics* 128, no. 1 (January 2015): 62-67, <https://doi.org/10.1016/j.ijgo.2014.07.023>.

76 Andrea Rowan, "Prosecuting Women for Self-Inducing Abortion: Counterproductive and Lacking Compassion," *Guttmacher Policy Review* 18, no. 3 (September 2015): 70-76, www.guttmacher.org/gpr/2015/09/prosecuting-women-self-inducing-abortion-counterproductive-and-lacking-compassion#.

77 Misoprostol was originally used for the prevention and treatment of gastric ulcers but has become a common drug to terminate a pregnancy, particularly in countries where clinical abortion services are not legally accessible. In most countries where abortions are legal on broad grounds, misoprostol is used in hospitals and clinics to induce abortion, along with mifepristone, another effective abortifacient. However, as the primary use of mifepristone is abortion, it is not approved in many countries, such as Jamaica, that maintain strict abortion laws. These two drugs combined are effective and safe for inducing abortion. Abortion treatment that only contains misoprostol is less effective. Notwithstanding the risk of potential complications, such as incomplete abortion, WHO has issued guidelines for abortion using misoprostol alone where mifepristone is not available, while stressing the importance of access to post-abortion care services for treatment of potential complications. Jennifer Tang, Nathalie Kapp, Monica Dragoman, Joao Paulo de Souza, "WHO Recommendations for Misoprostol Use for Obstetric and Gynecologic Indications," *International Journal of Gynecology & Obstetrics* 121, no. 2 (May 2013): 186-189, <https://doi.org/10.1016/j.ijgo.2012.12.009>.

78 Donna Hussey-Whyte, Black Market Abortion Pills in High Demand," *Jamaica Observer*, May 29, 2011, www.womenonwaves.org/en/media/inline/2014/7/11/black_market_abortion_pills_in_high_demand_news_jamaicaobserver.pdf; Abortion for sale - Black Market Thrives on Baby-killing Pills," *Gleaner*, May 6, 2012, <http://jamaica-gleaner.com/gleaner/20120506/lead/lead2.html>; Abortion: by Any Means Necessary," *Jamaica Observer*, September 30, 2019, www.jamaicaobserver.com/all-woman/abortion-by-any-means-necessary_175789.

diarrhoea, chills, and fever, or too little causing incomplete abortion or ongoing pregnancy. If women with incomplete abortion are unable to access urgent medical attention, they are at risk of complications such as haemorrhage (prolonged and profuse bleeding).⁷⁹ The pill is effective at terminating a pregnancy at any stage of gestation.⁸⁰ In countries where abortion is legally accessible, a termination of pregnancy after 12 weeks, if performed, is done under medical supervision as the risks associated with abortion are elevated at a later stage of gestation. However, when bought on the black market women may attempt to self-induce an abortion at a late stage of gestation, which increases the risks of complications, including life-threatening ones such as uterine rupture.⁸¹

Another risk associated with self-administration of misoprostol is possible birth defects if the termination of pregnancy fails and the baby is born despite attempted abortion. Exposure to misoprostol during the first trimester of pregnancy has been associated with several birth defects, including Möbius syndrome (congenital neurological disorder characterized by facial paralysis), and malformations such as construction ring and clubfoot.⁸² As one Jamaican ob/gyn described a typical scenario: “These patients will insert the tablets at home. Many of them will bleed, and when they bleed, they think the pregnancy has gone, and they continue living their life until they end up at my office three or four months’ pregnant, realizing that the baby is still inside.”⁸³

Economic Cost of Unsafe Abortion

Unsafe abortion-related mortality and morbidity have an economic impact, especially in low- and middle-income countries where access to safe abortion is restricted. The adverse economic consequences of abortion-related mortality and morbidity come from direct and indirect costs. Direct costs are linked to providing health care for women as a result of abortion complications, including cost of supplies and staff time, whereas indirect costs are linked to consequences of death or disability to the women themselves, their households, and to the society, such as loss of human capital and productivity. Several studies have shown that treating

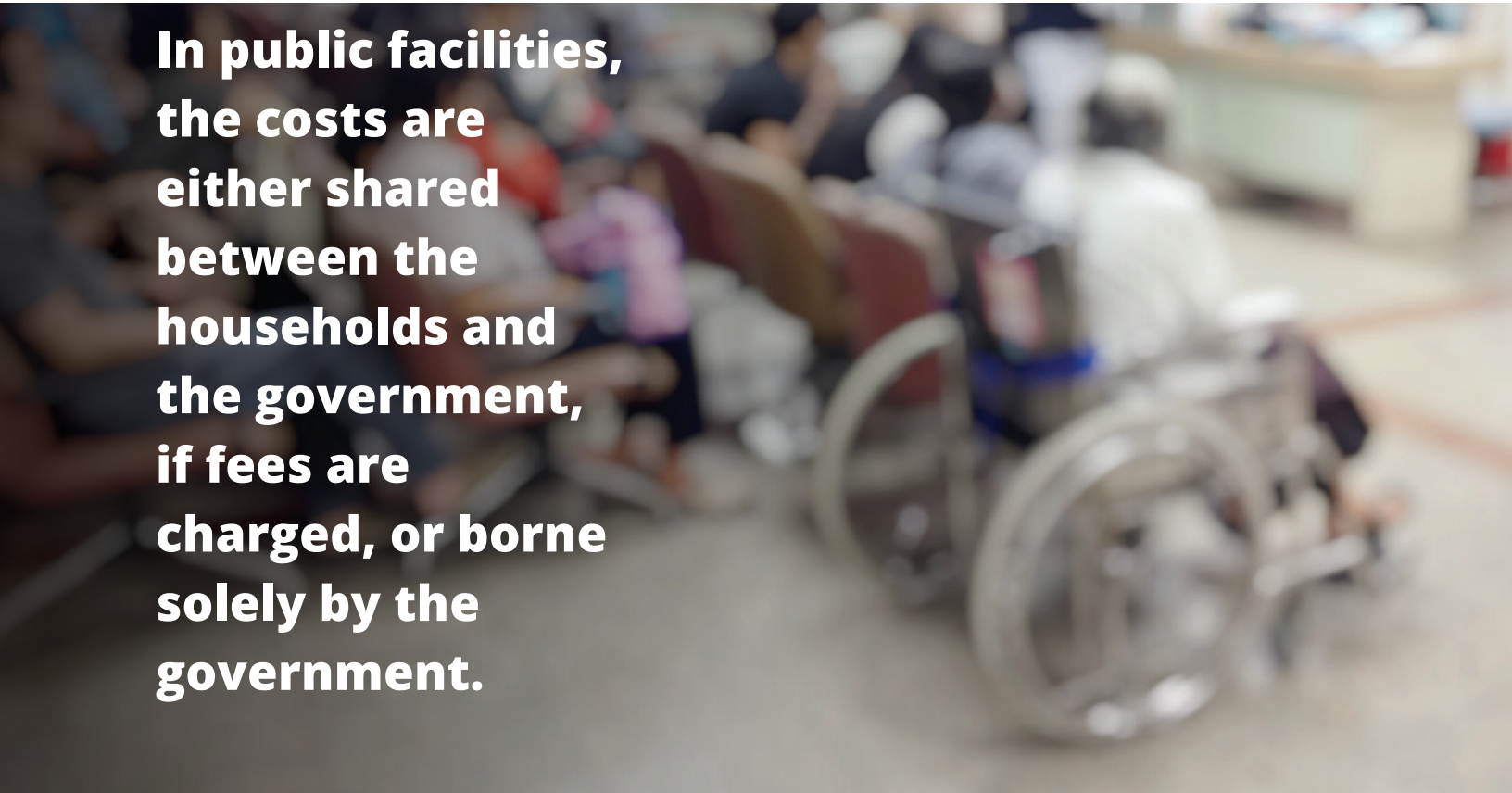
79 Shelley Clark et al, “Misoprostol Use in Obstetrics and Gynecology in Brazil, Jamaica, and the United States,” *International Journal of Gynecology & Obstetric* 76, no. 1 (January 2002): 65-74, [https://doi.org/10.1016/S0020-7292\(01\)00567-7](https://doi.org/10.1016/S0020-7292(01)00567-7).

80 Jodie Dodd and Caroline Crowther, “Misoprostol for Induction of Labour to Terminate Pregnancy in the Second or Third Trimester for Women with a Fetal Anomaly or After Intrauterine Fetal Death,” *Cochrane Database of Systematic Reviews* 4, art. no. CD004901 (April 2010), <https://doi.org/10.1002/14651858.CD004901.pub2>.

81 Eliana Teixeira et al, “Uterine Rupture Following Misoprostol Improper Use,” *European Journal of Obstetrics and Gynecology and Reproductive Biology* 234 (March 2019): E63-E64, <https://doi.org/10.1016/j.ejogrb.2018.08.295>.

82 Catherine Vauzelle, Delphine Beghin, Marie-Pierre Cournot, and Elisabeth Elefant, “Birth Defects After Exposure to Misoprostol in the First Trimester of Pregnancy: Prospective Follow-up Study,” *Reproductive Toxicology* 36, (April 2013): 98-103, <https://doi.org/10.1016/j.reprotox.2012.11.009>.

83 Brian Walkers, “Jcans Not Willing to Admit to Abortions – Abrahams,” *Gleaner* May 16, 2018, <http://jamaica-gleaner.com/article/lead-stories/20180517/jcans-not-willing-admit-abortions-abrahams>. The WHO-recommended method of medical abortion is 800 µg of misoprostol administered by vaginal or sub-lingual routes.



**In public facilities,
the costs are
either shared
between the
households and
the government,
if fees are
charged, or borne
solely by the
government.**

the complications from unsafe abortions heavily burdens the public health systems, especially in developing countries where nearly all unsafe abortions occur, and uses up the scarce medical resources that could be used for other critical health services.⁸⁴ This is particularly relevant in the Jamaican context where the public health system is already considered inefficient, lacking in human resources, and undermined by poor infrastructure and equipment.⁸⁵

The annual cost for treating complications from unsafe abortions in the developing world is estimated at US\$375 to US\$838 million.⁸⁶ In Mexico City alone, before the legalization of abortion in 2007, unsafe abortion was estimated to cost the city's health system US\$2.6 million annually. In addition, it was estimated that the city's health system could annually save US\$1.6 million with access to safe abortion.⁸⁷ Although no follow-up study has been conducted, that calculation is supported by a more recent global study that estimated that the average cost for post-abortion care resulting from unsafe abortions is more than twice the average cost of safe abortion procedures.⁸⁸

The direct medical costs of the treatment are borne by the household or by the government, depending on where women suffering from complications obtain care. In public facilities, the costs are either shared between the households and the



government, if fees are charged, or borne solely by the government.⁸⁹ In Jamaica, most women relying on unsafe abortion procedures are from lower socioeconomic backgrounds, and are thus likely to seek care from public healthcare providers.⁹⁰ Jamaica has a no user fee policy, and the health sector is largely funded by the government.⁹¹ Therefore, the cost of treating complications from unsafe abortion is largely borne by taxpayers.

Costs are difficult to estimate. In order to estimate the direct cost of treating complications from unsafe abortions to the public health system it would be necessary to know the number of women treated from complications resulting from unsafe abortions and the average cost of treatment per post-abortion complication. However, given that unsafe abortions and the complications

resulting from them are underreported, no absolute figure can be given. There is also no estimate on the average cost of post-abortion care in Jamaica. However, a 2006 global study has estimated average costs for post-abortion complications in Latin America and Caribbean at US\$94 per case. This estimate does not take into account the overhead and capital costs, and is thus an underestimate. The study estimated that direct costs account for 72 percent, overheads 16 percent, and capital 12 percent of total costs. The average cost with capital and overhead costs added, in 2006, was estimated to be US\$130 (in 2020 US\$166).⁹² A more recent Colombian study found that an average direct cost per case was US\$141. That study estimated that indirect costs, particularly overhead costs, account for two-thirds of the total cost per case, and estimated that the average total cost of

84 Michael Vlassoff, Jessica Shearer, Damian Walker, and Henry Lucas, "Economic Impact of Unsafe Abortion-Related Morbidity and Mortality: Evidence and Estimation Challenges," IDS Research Report 59, Institute of Development Studies, December 2008, www.abortiorresearchconsortium.org/reports/Rr59.pdf; Carol Levin et al, "Exploring the Costs and Economic Consequences of Unsafe Abortion in Mexico City Before Legalisation," *Reproductive Health Matters*, 17, no. 33 (June 2009): 120-132, [https://doi.org/10.1016/S0968-8080\(09\)33432-1](https://doi.org/10.1016/S0968-8080(09)33432-1); Susheela Singh, Jacqueline E. Darroch and Lori S. Ashford, "Adding It Up: The Costs and Benefits of Investing in Sexual and Reproductive Health," New York: Guttmacher Institute, (December 2014) www.guttmacher.org/sites/default/files/report_pdf/addingitup2014.pdf.

85 Shiyao Chao, "Jamaica's Effort in Improving Universal Access within Fiscal Constraints," UNICO Studies Series 6, Washington DC: The World Bank, January 2013, <http://documents1.worldbank.org/curated/en/408381468044133381/pdf/750050NWP0Box30n0FiscalConstraints.pdf>; "Free health care: A farce?" *Gleaner*, December 6, 2016, <http://jamaica-gleaner.com/article/lead-stories/20161207/free-health-care-farce>.

86 Vlassoff et al, "Economic Impact."

87 Carol Levin et al, "Exploring the costs."

88 Singh et al, "Adding It Up."

89 Vlassoff et al, "Estimates of Health Care System Costs of Unsafe Abortion In Africa and Latin America," *International Perspectives on Sexual and Reproductive Health* 35, no. 3 (September 2009): 114-121, <https://doi.org/10.1363/ipsrh.35.114.09>.

90 Paul A. Bourne et al, "Public and Private Health Care Utilization Differences Between Socioeconomic Strata in Jamaica," *Patient Relation Outcome Measures* 1 (September 2010): 81-91, <https://doi.org/10.2147/PROM.S11868>.

91 Chao, "Jamaica's Effort in Improving."

92 Vlassoff et al, "Estimates of Health Care System."



a post-abortion-complications case in Colombia was US\$429.⁹³

Given that up to 43 percent of complications in early pregnancy may be due to unsafe abortion, expenses in these ranges would represent a heavy economic burden to the public health system. In addition to the cost to public health system, complications from unsafe abortions incur out-of-pocket expenses to women themselves and their households. These expenses include transportation costs to and from health facilities, food and possible lodging while awaiting treatment, lost income while seeking treatment and during the treatment, and post-recuperation, as well as the lost income of household members caring for women after complications due to unsafe abortion. Since many women who suffer from unsafe abortion-related complications in Jamaica are already poor, such expenses can push them and their families further into poverty. Many women who have had unsafe abortion do not seek medical care for the complications because they either consider their complications as

not serious, or fear abortion-related stigma, ill-treatment by hospital staff, or legal reprisals.⁹⁴ Consequently, many women suffer at home which can make complications more severe and cause chronic illness or even death. Between 1995 and 2015, on average 17.4 percent of abortion-related deaths in Jamaica occurred at home.⁹⁵

Disability or death due to abortion-related complications incur indirect and even more substantial costs to households and to society. Women's death leads to a reduction in household income, and morbidity results in reduced productivity among women as well as among her household members, who are required to take care of the women when ill, as well as, often, their offspring. The loss of income and productivity results in a reduction in the country's gross domestic product.

Further, losing a mother can have a devastating effect on children's lives and can compromise their health, education, and well-being.⁹⁶ Chronic illness due to abortion-related complications, in turn,

can reduce the labour force participation of the woman for long periods of time or even permanently, which can push a household into poverty, meaning that fewer resources might be available for children's education and well-being. Thus, the adverse effects of abortion-related morbidity and mortality can transfer between generations: when such children enter adulthood with little education and knowledge, they are less well-equipped to raise their own children out of poverty, and to invest in those children's education. Education, along with health, is a form of human capital that is a fundamental requirement for a country's economic development. It affects a country's economic development through human capital development, which leads to increased productivity and wages. Therefore, the loss of human capital due to abortion-related morbidity and mortality can affect a country's economic growth across generations. However, these long-term consequences are difficult to estimate quantitatively.

The majority of the lost healthy life years from abortion and miscarriage can be

93 Elena Prada, Isaac Maddow-Zimet, and Fatima Juarez, "The Cost of Postabortion Care and Legal Abortion In Colombia," *International Perspectives on Sexual and Reproductive Health* 39, no. 3 (September 2013): 114–123, <https://doi.org/10.1363/3911413>.

94 World Health Organization, "Safe Abortion".

95 Affette McCaw-Binns, "Evidence & Policy: the Thorny Issue of Reforming 19th Century Law on Abortion in a Commonwealth Country," Public lecture, Elizabeth Blackwell Institute for Health Research, University of Bristol, June 4, 2018.

96 Susheela Singh, "Global Consequences of Unsafe Abortion," *Women's Health* 6, no. 6 (November 2010): 849–860, <https://doi.org/10.2217/WHE.10.70>; Olufemi Aworinde et al, "Tackling Unsafe Abortion: A Public Health Perspective." *European Journal of Biomedical and Pharmaceutical Studies* 5, no. 4 (April 2018): 95–99, https://www.ejbps.com/ejbps/abstract_id/4153.

attributed to unsafe abortion since both in-clinic and medication abortions are safe when done by trained professionals. In countries where access to abortion is not restricted, by legal or other means, nearly all induced abortions are safe and rarely cause serious complications. Miscarriage, in turn, sometimes causes complications, but deaths are very rarely associated with miscarriage, and if a woman suffering from complications after miscarriage (such as prolonged bleeding or incomplete miscarriage) can access medical care, long-term consequences are uncommon.

The loss of economic output due to unsafe abortion-related mortality and morbidity can be measured by using the concept of disability-adjusted life years, DALYs.⁹⁷ One lost DALY can be thought of as one lost year of “healthy” life. The Global Health Data Exchange, a data catalogue on population health created and supported by the Institute for Health Metrics and Evaluation, estimates the total annual DALYs lost from maternal abortion and miscarriage for Jamaica to be 156.5.⁹⁸ In OECD countries where abortion is legal, the number of DALYs lost per 100,000 of the population due to safe abortion and miscarriage⁹⁹ varies from 0.2 in Iceland to 1.7 in Latvia, the mean rate being 0.7.¹⁰⁰ In Jamaica the corresponding rate is 5.6 is eight times higher. Thus, an estimated 19.7 DALYs are lost in Jamaica due to miscarriage and legal abortion, and the remaining 136.9 are lost due unsafe abortion. This is in line with the informed estimate that 85 percent of abortion-related maternal

The value of an extra year of healthy life—as a result of successfully treating a disease, for example—is worth considerably more than the extra market income that will be earned in the year.

deaths are due to unsafe, illegal abortion, while only 15 percent occurred due to spontaneous foetal loss or miscarriage.¹⁰¹

The most common approach to calculating the economic cost of disability-adjusted life years comes from the WHO’s Commission on Macroeconomics and Health: “the economics literature on the value of life has a very strong and consistent conclusion: the value of an extra year of healthy life—as a result of successfully treating a disease, for example—is worth considerably more than the extra market income that will be

earned in the year.”¹⁰² The Commission proposed that the health impact can be translated into economic loss by valuing one DALY as one to three times a country’s per capita income. This range has been adopted by many researchers to estimate the overall economic cost of a year of life lost, as well as in studies that measure the cost-effectiveness of different health interventions.¹⁰³ In this study, and in the absence of further information, we select the mid-point of the range of multiples, which is two times. Since the GDP per capita in Jamaica in 2017 was US\$5,069,¹⁰⁴ then the total economic cost of a life-year, twice that, is US\$10,138. Therefore, we estimate the total economic cost to Jamaica of disability-adjusted life years lost due to unsafe abortions to be US\$1.4 million annually.

In sum, costs incurred by unsafe abortions go far beyond the usual calculation of what is incurred when a woman seeks help for complications from a botched abortion at a public health facility. Abortion-related mortality and morbidity exact costs out of pocket costs for the women suffering from injury, as well as lost wages when they can’t work; these are women who are, almost without exception, already poor. Those costs are also passed on to the household, and especially to the injured woman’s children, whose wellbeing and education suffer. Finally there are the economic and societal costs of the healthy life years lost to unsafe abortion morbidity in the form of lower economic output and lost productivity.

97 The cost of a disease or condition is measured by estimating the number of years of life lost (YLLs), as well as the number of years lived with a disability (YLDs), due to the condition. Adding YLLs and YLDs provides the measure of DALYs.

98 Global Burden of Disease Compare, <https://vizhub.healthdata.org/gbd-compare>.

99 See Appendix 1.

100 Global Burden of Disease Compare, <https://vizhub.healthdata.org/gbd-compare>.

101 Affette McCaw-Binns, Preventing Deaths from Abortion, presentation in June 17, 2019.

102 Macroeconomics and Health: Investing in Health for Economic Development, Report of the Commission on Macroeconomics and Health, WHO, 2001, <https://apps.who.int/iris/bitstream/handle/10665/42435/924154550X.pdf;sequence=1>.

103 Eg. Elliot Marseille et al, “Thresholds for the Cost-effectiveness of Interventions: Alternative Approaches,” *Bulletin World Health Organization* 93, no. 2 (February 2015): 118–124, <http://dx.doi.org/10.2471/BLT.14.138206>; “Making Choices in Health: WHO Guide To Cost-Effectiveness Analysis,” WHO, 2003, www.who.int/choice/publications/p_2003_generalised_cea.pdf.

104 World Bank, “GDP per capita – Jamaica,” accessed January 18, 2021, <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=JM>.



5

Access to Abortion and Education

In Jamaica, pregnancy is the highest risk factor for girls to drop out from school.



In 2019

13%

of all births
occurred to

**teenage
mothers**

Legal access to abortion services has an important effect on women's human capital accumulation.¹⁰⁵ A study focusing on abortion legalization in the 1970s in the U.S. found that access to abortion had a particularly strong effect on black women's educational attainment, and that group at the time had more restricted access to contraceptives and a higher number of teenage pregnancies than white women. The study found that the legalization of abortion reduced the number of births and out-of-wedlock childbearing among black teenagers, which translated into an increase in black

women's high school graduation, college entrance, and college graduation rates. The effect was particularly large for college graduation which increased by nearly 10 percent.¹⁰⁶ Another study found that more liberal abortion laws in Sub-Saharan Africa were associated with higher female secondary school enrolment: easier abortion access significantly reduces the probability of a girl dropping out of school as a result of unintended pregnancy, which consequently enhances parental investment in the human capital of their daughters, thus reducing the gender gap in education.¹⁰⁷

Early childbearing can have detrimental effects on young women's educational achievements.¹⁰⁸ Globally teenage pregnancy is among the leading reasons for girls not completing secondary education. In the U.S., only 40 percent of adolescents who become pregnant finish high school, and less than 2 percent of those who have a child before age 18 finish college by age 30.¹⁰⁹ In Mexico, a teenage pregnancy significantly reduced school attendance in both the short and long term, suggesting that girls who drop out due to a pregnancy often do not continue their education at a later stage of their

105 Joshua D Angrist and William N. Evans, "Schooling and Labour Market Consequences of the 1970 State Abortion Reforms," National Bureau of Economic Research, Working Paper 5406 (January 1996), www.nber.org/papers/w5406.pdf; Leonid V. Azarnert, "Abortion and Human Capital Accumulation: A Contribution to the Understanding of the Gender Gap in Education," *Scottish Journal of Political Economy, Scottish Economic Society*, 56, no. 5 (November 2009): 559-579, <https://ideas.repec.org/p/biu/wpaper/2008-06.html>; Libertad González, Sergi Jiménez-Martín, Natalia Nollenberger, and Judit Vall Castello, "The Effect of Abortion Legalization on Fertility, Marriage, and Long-term Outcomes for Women," Working Papers 1035, Barcelona Graduate School of Economics, April 2018, www.barcelonagse.eu/sites/default/files/working_paper_pdfs/1035.pdf; Institute for Women Policy Research, "The Economic Effects of Abortion Access: A Review of the Evidence", Fact Sheet, July 2019, http://iwpr.org/wp-content/uploads/2020/07/B377_Abortion-Access-Fact-Sheet_final.pdf.

106 Angrist and Evans, "Schooling and Labour Market Consequences"; Institute for Women Policy Research, "The Economic Effects."

107 Azarnert, "Abortion and Human Capital Accumulation."

108 Barmao-Kiptanui, Catherine, Jonah Nyaga Kindiki, and Joseph K. Lelan, "Impact of Teenage Motherhood on the Academic Performance in Public Primary Schools in Bungoma County, Kenya," *International Journal of Educational Administration and Policy Studies*, 7, no.2 (March 2015): 61-71, <https://doi.org/10.5897/IJEAPS2014.0383>; Lisa Shuger, "Teen Pregnancy and High School Dropout: What Communities are Doing to Address These Issues," Washington, DC: The National Campaign to Prevent Teen and Unplanned Pregnancy and America's Promise Alliance, June 2012, www.colorincolorado.org/research/teen-pregnancy-high-school-dropout-what-communities-can-do-address-these-issues; Eva Olimpia Arceo-Gómez and Raymundo M. Campos-Vázquez, "Teenage Pregnancy in Mexico: Evolution and Consequences," MPRA 44532, University Library of Munich, Germany, November 2011, https://mpra.ub.uni-muenchen.de/44532/1/MPRA_paper_44532.pdf; Sandra L. Hofferth and Kristian A. Moore, "Early Childbearing and Later Economic Well-Being," *American Sociological Review* 44, no. 5 (October 1979): 784-81, <https://pubmed.ncbi.nlm.nih.gov/533035/>; David Levine and Gary Painter, "The Schooling Costs of Teenage Out-of-Wedlock Childbearing: Analysis with a Within-School Propensity-Score-Matching Estimator," *Review of Economics and Statistics* 85, no. 4 (February 2003): 884-900, <https://doi.org/10.1162/00346530372815790>.

109 Shuger, "Teen Pregnancy and High School Dropout."

In the 1970s in the U.S., access to abortion had a particularly strong effect on black women's educational attainment, who at the time had more restricted access to contraceptives and a higher number of teenage pregnancies than white women.

life.¹¹⁰ Educational attainment itself can be a protective factor against adolescent pregnancy. Studies have found that adolescents with low levels of education or who are not enrolled in school are more likely to become pregnant.¹¹¹ Therefore, dropping out from school as a result of unintended pregnancy can lead to a repeat cycle of teenage pregnancies and further hamper young women's educational achievements and future prospects.

In Jamaica, pregnancy is the highest risk factor for girls to drop out from school.¹¹² In 2019, 13 percent of all births occurred to mothers under 20 years.¹¹³ Many of these girls never continue their education.¹¹⁴ The majority of adolescent mothers in Jamaica come from the lower socioeconomic brackets. A 2017 study found that nearly seven out of ten pregnant teenagers enrolled in the Women's Centre of Jamaica Foundation (WCJF, a state agency responsible for the reintegration of teen mothers to formal school system) were predominantly from poor rural and inner-city communities characterized by crime, gang warfare, single-parent, and extended-family households with low earning capacity and multiple mouths to feed.¹¹⁵ The exclusion from education further increases their vulnerabilities and puts them at risk of exploitation and repeated teenage pregnancy. A 2001 study found that 60 percent of the girls who had a baby and



60%

**of the girls
who had a baby**

**and did not continue
their education
had a subsequent
pregnancy while still
in their adolescence**

did not continue their education had a subsequent pregnancy while still in their adolescence.¹¹⁶

In Jamaica, according to the 1980 Education Regulations, an adolescent who becomes pregnant is expelled from school during her pregnancy. Until 2013 those teen mothers relied on the Ministry of Education's discretion to continue their education after giving birth. The practice led to many instances where young mothers were denied access to schools to complete their secondary education as they were feared to corrupt the school's morals or the reputation of the institution.¹¹⁷ The practice was in stark difference to Jamaica's development goals as outlined in Vision 2030, whose stated aim is to empower all Jamaicans to achieve their fullest potential through education

and training. Further, the discrimination against adolescent mothers in education violated commitments Jamaica has made under several human rights agreements that acknowledge education as a fundamental human right. In many cases this practice also caused the girls to be doubly victimized as oftentimes young girls' other rights were already violated when they become pregnant. In Jamaica many girls who become pregnant in their adolescence are victims of incest, carnal abuse, or rape.¹¹⁸

In 2013, the Jamaican government established the National Policy for the Reintegration for School-Age Mothers into the Formal School System in order to ensure that adolescent mothers can continue their education, making it mandatory for institutions to reintegrate teen mothers. According to the policy, girls age 17 or under who become pregnant while in school are referred to WCJF's centre or outreach site where they are offered academic instruction, group and individual counselling, and vocational training. Four to six months after giving birth, the girls are intended to be reintegrated into the formal school system. However, the girls are not required to enrol into the WCJF programme and many girls choose not to.¹¹⁹ Some may make their own arrangements to continue education while others might need an immediate job to support themselves and their child.¹²⁰ It is not uncommon

110 Arceo-Gómez and Campos-Vázquez, "Teenage Pregnancy in Mexico."

111 Rebekah Mohr, Jose Carbajal, and Bonita B. Sharma, "The Influence of Educational Attainment on Teenage Pregnancy in Low-Income Countries: A Systematic Literature Review," *Journal of Social Work in the Global Community* 4, no. 1 (December 2019): 19–31, <https://doi.org/10.5590/JSWGC.2019.04.1.02>.

112 Women's Center Jamaica Foundation, Reintegration Policy, accessed November 9, 2020, <https://womenscentreja.com/policy/>.

113 Statistical Institute of Jamaica, "Births to Teenage Mothers," health statistics, accessed November 9, 2020, https://statinja.gov.jm/Demo_SocialStats/Health.aspx.

114 Dasmine Kennedy, "Jamaica's Policy for the School Reintegration of School-Age Mothers How Are We Doing and Where Do We Need to Go?" Center for Universal at Brookings. Echidna Global Scholars Program, Policy Brief, November 2017, www.brookings.edu/wp-content/uploads/2017/11/dasmine-kennedy_final_20171101_web.pdf.

115 Kennedy, "Jamaica's Policy for the School Reintegration."

116 Vonna L. Caleb-Drayton et al, "The impact of the Women's Centre of Jamaica Foundation Programme for adolescent mothers on repeat pregnancies" *The West Indian Medical Journal* 49, no. 4 (January 2001):316-26, www.researchgate.net/publication/12118900_The_impact_of_the_Women's_Centre_of_Jamaica_Foundation_Programme_for_adolescent_mothers_on_repeat_pregnancies.

117 Nadine Wilson-Harris, "Not Wanted! Schools refusing to accept teenage mothers," *Gleaner*, June 27, 2018, <http://jamaica-gleaner.com/article/news/20170702/not-wanted-schools-refusing-accept-teenage-mothers>.

118 National Policy for the Reintegration for School-Age Mothers. 2013. Ministry of Education.

119 On average, the WCJF is reaching annually about half of the expectant teen mothers. Women's Centre of Jamaica Foundation, Programme for Adolescent Mothers (PAM), accessed October 3, 2020, <https://womenscentreja.com/pam>.

120 Kennedy, "Jamaica's Policy for the School Reintegration."

Stigma and discrimination as well as financial and child-care related problems are major barriers for teen mothers to continue their education. Further, some schools still refuse to accept the girls back in their schools.



in Jamaica that teen mothers are left to manage on their own with little support from the father of the child, or even from their own parents. There have also been cases where the teen has been forced to move out of her family home once her family learned about the pregnancy.¹²¹

Despite the policy, the majority of teen mothers never reintegrate into the formal school system. During the 2019–2020 academic term, the WCJF had 1,016 teen mothers enrolled, while only 381 girls were reintegrated into formal school system. The rate has slightly improved from previous years: between 2012 and 2016 only 34 percent of participants in the WCJF programme were reintegrated into the formal school system.¹²² Although some of the remaining girls

may have been able to sit their Caribbean Secondary Education Certificate Exam (CSEC) at the WCJF without the need for reintegration, several adolescent girls in Jamaica are not able to finish their secondary education due to unintended pregnancy.

Stigma and discrimination as well as financial and child-care related problems are major barriers for teen mothers to continue their education.¹²³ Further, some schools still refuse to accept the girls back in their schools. As there are no penalty provisions in the policy, principals can deny the teen mothers access to school without fear of sanctions. In 2017, a study found that 50 percent of principals who participated in the survey thought that the teen mothers negatively influence

other girls in their schools.¹²⁴ The discrimination does not end there: even if a teen mother is successfully reintegrated into the formal school system, some girls face discrimination by school officials and students alike. At some schools, the reintegrated girls are put into one class, for no other reason than because they are adolescent mothers. There have also been instances where a school did not allow a student to graduate only because she was an adolescent mother, regardless of the fact that her performance was on par with her peers, and sometimes even above the peers' performance. These girls often resort to continue their education at a private school, if they can afford it, or they discontinue their academic pursuits.¹²⁵

121 Ryon Jones, "High School Moms – Hardship Forcing Clarendon Girls Into Teenage Pregnancy," *Gleaner*, November 19, 2016, jamaica-gleaner.com/article/lead-stories/20161120/high-school-moms-hardship-forcing-clarendon-girls-teenage-pregnancy; Women Center Jamaica Foundation, *Our Success Stories*, accessed October 3, 2020, <https://womenscentreja.com/>.

122 Kennedy, "Jamaica's Policy for the School Reintegration."

123 Kennedy, "Jamaica's Policy for the School Reintegration.," Nadine Wilson-Harris, "Not Wanted! Schools refusing to accept teenage mothers," *Gleaner*, June 27, 2018, <http://jamaica-gleaner.com/article/news/20170702/not-wanted-schools-refusing-accept-teenage-mothers>.

124 Kennedy, "Jamaica's Policy for the School Reintegration."

125 Nadine Wilson-Harris, "Not Wanted!"

Continuing education can be a challenge for a young mother. The success stories from WCJF illustrate the difficulties many girls face. They include community backlash, parental disappointment, financial struggles, and the burden of childcare.¹²⁶ Lack of financial support and inadequate assistance with child care often results in teen mothers' frequent absenteeism, which may depress their academic performance and even prevent them from completing their secondary education. There is no official data available on teen mothers' academic performance, nor on their tertiary or other post-secondary education enrolment and graduation rates in Jamaica. However, the enrolment and graduation rates can be expected to be low. Even if a teen mother manages to complete her secondary education with an academic record allowing her to enrol in tertiary education, without childcare support and financial assistance, it would be very difficult to maintain herself and the child throughout her studies. Taken that the majority of teenage pregnancies occur in girls from lower socioeconomic income brackets, financial assistance is likely not readily available. Particularly in the social and cultural context of a stigma attached to teenage pregnancy, a young mother might not be seen as worth investing in. The situation is not much better if the unintended pregnancy occurs when

Even if a teen mother manages to complete her secondary education with an academic record allowing her to enrol in tertiary education, without childcare support and financial assistance, it would be very difficult to maintain herself and the child throughout her studies.

enrolled in tertiary education. In the U.S. only 33 percent of college students with children attain a degree or certificate within six years of enrolment.¹²⁷

Economic Impact of Women's Education

Unintended pregnancy carried to term can have negative effects on young women's achievement of education, economic security and aspirations.¹²⁸ This comes with societal and economic costs. For the 2017-18 academic term, the WCJF received a subvention of about J\$132,000 per teen mother to support their continuing education during pregnancy.¹²⁹ With over one thousand girls enrolled each year this amounts to an annual cost of over J\$1.3 million. However, the cost of not supporting their education would be even more

substantial.

Education contributes to human capital development. When young women are excluded from education their opportunities to form human capital are diminished. Human capital development affects a country's economic growth through increased labour productivity and wages.¹³⁰ A number of studies have shown that underinvestment in women's education has had a detrimental effect on the macroeconomic level. A World Bank study found that 1 percent increase in women in secondary education results in an annual income increase of 0.3 percent per capita.¹³¹ Another World Bank study estimated in 2018 that the loss of human capital wealth incurred due to lower lifetime income and productivity, as a result of many adult women not benefiting from secondary education in

126 For example, a girl who became pregnant at the age 14 reports, "During that time I faced a lot of verbal abuse from community members. People told my mom that she was wasting her money on me. This made me devalue myself even more, and it destroyed my self-esteem." Another girl shared, "There were many times I was late for school because taking my son to his grandmother's house was quite the distance. I would usually pick him up in the evenings, and at times I was so tired from this routine, that I would cry myself to sleep. There were many days I went to school with no lunch, and there were many days where I just couldn't go to school at all. There were even days when I went to school and just cried because my child's father was discouraging. Just like everyone else, he believed I was a failure. Even his mother said I was 'no good.'" Women Center Jamaica Foundation, *Our Success Stories*, accessed October 3, 2020, <https://womenscentreja.com/>. See also Nadine Wilson-Harris, "It's Not an Easy Road" – Teen Moms Share Their Challenges in an Appeal to Young Women to Avoid Sex," *Gleaner*, October 12, 2017, <http://jamaica-gleaner.com/article/lead-stories/20171015/its-not-easy-road-teen-moms-share-their-challenges-appeal-young-girls>.

127 "4.8 Million College Students Are Raising Children," Fact Sheet, Institute for Women's Policy Research, November 2014, https://iwpr.org/wp-content/uploads/2020/08/C424_Student-Parents_final-1.pdf.

128 Diana Greene Foster et al, "Socioeconomic Outcomes of Women Who Receive and Women Who Are Denied Wanted Abortions in the United States," *American Journal of Public Health* 108, no. 3 (March 2018): 407-413, <https://doi.org/10.2105/AJPH.2017.304247>; Lauren J. Ralph et al, "A Prospective Cohort Study of the Effect of Receiving versus Being Denied an Abortion on Educational Attainment," *Women's Health Issues* 29, no. (November 2019): 455-464, <https://doi.org/10.1016/j.whi.2019.09.004>; Ushma D. Upadhyay, M. Antonia Biggs, and Diana Greene Foster, "The Effect of Abortion on Having and Achieving Aspirational One-year Plans," *BMC Women's health* 15, article no. 102 (November 2015), <https://doi.org/10.1016/10.1186/s12905-015-0259-1>.

129 Kennedy, "Jamaica's Policy for the School Reintegration."

130 Robert Barro, "Human Capital and Growth," *American Economic review* 91, no. 2 (May 2001): 12-17, <https://doi.org/10.1257/aer.91.2.12>.

131 David Dollar, and Robert Gatti, "Gender Inequality, Income, and Growth: Are Good Times Good for Women?" Development Research Group/Poverty Reduction and Economic Management Network, Washington, D.C.: The World Bank, 1991, <http://darp.lse.ac.uk/frankweb/courses/EC501/DG.pdf>.

their youth, globally, ranges from US\$15 trillion to US\$30 trillion.¹³² Therefore, in order to maximize economic gains through education it is crucial that every child completes secondary education. This has also been acknowledged in the United Nations Sustainable Development Goals, which aim to ensure that by 2030 all girls and boys complete free, equitable, and quality primary and secondary education.¹³³

Even more economic gains can be achieved through tertiary education. The World Bank study estimated that globally, women with tertiary education are expected to earn almost three times as much as their non-educated counterparts.¹³⁴ Another World Bank study estimated that the average annual rate of return to tertiary education for a female is 17 percent.¹³⁵ This is considerably more than the average return from any other investment.¹³⁶ In 2003, the World Bank estimated that in Jamaica a woman with secondary education earns during her lifetime US\$20,600 more than her peers with only primary education, while a woman with a university degree is estimated to earn during her lifetime US\$115,400 more than her peers.¹³⁷ The estimates are based on 1997 household surveys and reflect the size of the

Jamaican economy at the time. Inflation-adjusted the equivalent numbers in 2020 would be US\$33,600 for secondary level and US\$186,200 for university level. This, however, does not take into account the increase in wages since 1997 that could further widen the gap. The Brookings Institution has estimated that the average college graduate in the U.S. earns roughly \$570,000 more than the average person with a high school diploma only.¹³⁸

The increase in wages contributes to economic growth and a country's gross domestic product (GDP) through increased taxes and consumer spending. For example, more than half of the GDP growth in OECD countries is related to labour income growth among tertiary-educated individuals.¹³⁹ Other ways education spurs economic growth are through increased productivity of the educated labour force, and innovation. This is particularly important in today's world where the labour market demands highly skilled workers as global economic growth is driven by knowledge and information-based technologies.¹⁴⁰ In this era of the knowledge economy, highly skilled individuals are a key driving force of economic development, and they also determine where companies will choose to locate and grow.¹⁴¹ A

country's investment in education – ie the human capital of its people – can thus have another indirect effect on economy. Companies, especially those in knowledge-intensive fields, are attracted to places with highly skilled people, and therefore a large pool of skilled labour helps to attract investment, both local and foreign.

The Jamaican economy is characterized by decades of low growth. The World Bank has identified low productivity caused by deficiencies in human capital and entrepreneurship as the primary reasons for the country's poor economic performance.¹⁴² With high levels of migration of its educated labour force Jamaica cannot afford one segment of its youths to be excluded from completing an education, pursuing their career goals, and contributing to the economic development of the country. Moreover, Jamaica's development plan requires that every child is provided with quality education in order to achieve their fullest potential, and consequently for the country to achieve developed country status by 2030. High levels of teenage births can thus hamper the country's human capital development which is required for economic growth.

132 The estimate is based on the assumption that women with secondary education earn almost twice as much during their lifetime than women with no education. By contrast completing only primary education does not have an effect on lifetime earnings as compared to not having an education at all. Quentin Wodon, Claudio Montenegro, Hoa Nguyen, and Adenike Onagoruwa, "Missed Opportunities: The High Cost of Not Educating Girls," *The Cost of Not Educating Girls Notes Series*. Washington, DC: The World Bank, July 2018, www.worldbank.org/en/topic/education/publication/missed-opportunities-the-high-cost-of-not-educating-girls.

133 The United Nations, Sustainable Development Goals, Goal 4 Quality Education, accessed October 3, <https://www.un.org/sustainabledevelopment/education/>.

134 Wodon et al, "Missed Opportunities."

135 Claudio E. Montenegro and Harry Anthony Patrinos, "Comparable Estimates of Returns to Schooling Around the World," Policy Research Working Paper no. 7020, Washington DC: The World Bank, 2014, <https://openknowledge.worldbank.org/handle/10986/20340>.

136 It is more than double the average return over the last 60 years experienced in the stock market (6.8 percent), and more than five times the return to investments in corporate bonds (2.9 percent), gold (2.3 percent), long-term government bonds (2.2 percent), or housing (0.4 percent). Michael Greenstone and Adam Looney, "Where is the Best Place to Invest \$102,000 — In Stocks, Bonds, or a College Degree?" June 25, 2011, The Brookings Institution, www.brookings.edu/research/where-is-the-best-place-to-invest-102000-in-stocks-bonds-or-a-college-degree.

137 World Bank, "Caribbean Youth Development: Issues and Policy Directions," World Bank Country Study, Washington, DC: World Bank, 2003, <https://openknowledge.worldbank.org/handle/10986/15165>.

138 Greenstone and Looney, "Where is the Best Place to Invest."

139 OECD, "How Does Education Affect the Economy?," in *Education at a Glance 2012: Highlights*, Paris: OECD Publishing, 2012, https://doi.org/10.1787/eag_highlights-2012-15-en.

140 World Economic Forum, "Human Capital Report 2015," Employment, Skills and Human Capital Global Challenge Insight Report, 2015, <http://reports.weforum.org/human-capital-report-2015/the-human-capital-index>.

141 The former CEO of Hewlett-Packard demonstrated the needs of modern day corporations by telling a group of U.S. governors: "Keep your tax incentives and highway interchanges; we will go where the highly skilled people are." Carly Fiorina, Annual Meeting of the National Governors Association in Washington, DC, Winter 2000, quoted in Richard Florida, *The Rise of the Creative Class, Revisited*. New York: Basic Books, 2012.

142 World Bank, "Jamaica – Country Economic Memorandum: Unlocking Growth," World Bank Other Operational Studies 2756, The World Bank, 2011, <https://ideas.org/p/wbk/wbopr/2756.html>.



6

Access to Abortion and Female Labour Market Participation



A teen giving birth can reduce her probability of **future employment** by over

50%

A number of studies have shown that the removal of legal restrictions on access to abortion has increased women's labour force participation and career development.¹⁴³ The link between labour force participation and number of children in the family is well documented.¹⁴⁴ One study found that, on average, a birth reduces a woman's labour supply by almost two years during her reproductive life.¹⁴⁵ The negative effect of a birth on labour force participation is significantly higher when the birth is not planned.¹⁴⁶

Access to safe, legal abortion reduces

fertility rates, and promotes women's ability to choose the right time for each pregnancy to suit her life circumstances and career track; these can have an important effect on employment rates. Legal access to safe termination of pregnancy services may also advance women's employment and career development due to a lower probability of sudden exit from the labour market as a result of unintended pregnancy. This may in turn encourage women to invest more in their human capital through education and training as the rate of return is higher.¹⁴⁷ Employers may also be more

likely to hire a woman, and invest in them through training, when the probability of sudden exit due to unplanned pregnancy is lower.¹⁴⁸

Postponing childbearing may be particularly important for young women allowing their participation in the workforce. Having a child at a young age can particularly affect a woman's ability to participate in the labour market.¹⁴⁹ One study found that a teen giving birth can reduce her probability of future employment by over 50 percent.¹⁵⁰ Research has shown that postponing one's first birth can also increase wage

143 Joshua D Angrist, and William N. Evans, "Schooling and Labour Market Consequences of the 1970 State Abortion Reforms," National Bureau of Economic Research, Working Paper 5406 (January 1996), www.nber.org/papers/w5406.pdf; David E. Kalist, "Abortion and Female Labor Force Participation: Evidence Prior to Roe v. Wade," *Journal of Labor Research* 25, no. 3 (September 2004): 503–14, <https://link.springer.com/article/10.1007/s12122-004-1028-3>; Eirin Molland, "Benefits from Delay? The Effect of Abortion Availability on Young Women and Their Children," *Labour Economics* 43 (December 2016): 6–28, <https://doi.org/10.1016/j.labeco.2016.06.011>; Linda Nihlwing, "The Impact of Abortion Reforms on Female Labour Force Participation and Education in Mexico," Lund University, School of Economics and Management, Student papers, June 2019, <https://lup.lub.lu.se/student-papers/search/publication/8979948>.

144 Joshua D Angrist, and Williams N. Evans, "Children and Their Parents' Labor Supply: Evidence from Exogenous Variation in Family Size," *The American Economic Review*, 88, no. 3 (February 1998): 450–477, <https://doi.org/10.3386/w5778>; Martha Bailey, "More Power to the Pill: The Impact of Contraceptive Freedom on Women's Life Cycle Labor Supply," *The Quarterly Journal of Economics*, 121, no. 1 (February 2006): 289–320, <https://doi.org/10.1093/qje/121.1.289>; David Bloom, and David Canning, "Contraception and the Celtic Tiger," *The Economic and Social Review* 34, no. 3 (Winter 2003): 229–247, www.tara.tcd.ie/handle/2262/60947.

145 David Bloom, David Canning, Günther Fink, and Jocelyn E. Finlay, "Fertility, Female Labor Force Participation, and the Demographic Dividend," *Journal of Economic Growth* 14 (May 2009): 79–101, <https://doi.org/10.1007/s10887-009-9039-9>.

146 Ana Nuevo-Chiquero, "The Labor Force Effects of Unplanned Childbearing," *Labour Economics* 29 (August 2014): 91–101, <https://doi.org/10.1016/j.labeco.2014.07.006>.

147 Kalist, "Abortion and Female Labor Force Participation."

148 E.g. Research by British-based business-to-consultant matchmaking platform Worksome, found that 44 percent of business leaders did not hire a woman who was not pregnant in case she got pregnant in the future. Anna Jordan, "Men and Women Bosses Both Discriminate Over Maternity Leaves Fears," smallbusiness.co.uk, February 11, 2019, <https://smallbusiness.co.uk/tips-avoiding-pregnancy-discrimination-2537414/>.

149 Angrist and Evans, "Schooling and Labour Market"; Molland, "Benefits from Delay?"

150 Angrist and Evans, "Schooling and Labour Market"; Bernstein and Jones, "The Economic Effects of Abortion Access."

Legal access to safe termination of pregnancy services may also advance women's employment and career development due to a lower probability of sudden exit from the labour market as a result of unintended pregnancy.

growth and career prospects.¹⁵¹

In Jamaica, women's participation rate in labour force has historically been lower than men's.¹⁵² In January 2020, nearly three times as many women in their prime working age (25–54 years) were outside the labour force than men in that same age group. Despite the fact that women generally have higher levels of education and they dominate in labour force categories “Professionals with Degree or Diploma,” and “Vocational with Certificate,”¹⁵³ their unemployment rates are also consistently higher.¹⁵⁴ Unemployment rates are particularly high among women with low levels of education, and they are significantly worse off in the labour market than men with similar backgrounds. Such a high level of economic inactivity among women not only increases their vulnerability and economic dependency, but is also harmful for economic growth.

Research on gender parity has estimated that if, globally, women played an identical role in labour markets to that of men, as much as \$28 trillion, or 26 percent, could be added to the global annual GDP by 2025, compared with the “business as usual” scenario. That notwithstanding, the researchers acknowledge that attaining full parity in the labour market

is not realistic in the short term. However, they estimate that even in a “best in region” scenario in which all countries match the rate of improvement of the fastest-improving country in their region, \$12 trillion, or 11 percent, could be added to global annual GDP in 2025.¹⁵⁵ Such results are supported by another study by the International Monetary Fund (IMF) which also found that the economic gains from reducing the barriers to women's labour force participation are larger than previously thought: gender parity not only increases the size of a labour force but also accelerates growth through the gender diversity effect on productivity and innovation, as women bring new skills to the workplace. The IMF estimates that closing the gender gap in terms of gender inequality in the bottom half of the countries in their sample would increase GDP by an average 35 percent. Four-fifths of the gains come from adding workers to the labour force, and one-fifth from the gender diversity effect on productivity.¹⁵⁶

It is estimated that legal reforms on abortion access in several U.S. states prior to *Roe v. Wade* (a landmark case of the U.S. Supreme Court ruling that the Constitution protects a pregnant woman's liberty to have an abortion)

increased women's labour force participation by 2 percent. The effect was higher among black women whose participation rates increased by 7 percent, indicating that removing restrictions on safe termination of pregnancy services particularly benefits women from lower socioeconomic backgrounds.¹⁵⁷ If the labour force participation among women in Jamaica increased by 2 percent, there would be nearly 12,000 more females in the labour force, which would add \$207 million to the country's annual economic output.¹⁵⁸ The gender diversity effect on productivity would add an additional \$41 million annually.¹⁵⁹

While it is difficult to know how much the removal of legal restrictions on safe access to abortion would increase the labour force participation among females in Jamaica, given that women of lower socioeconomic background are affected most by the legal restrictions and the high levels of teenage pregnancies in the country, the effect could be large.

151 Amalia R. Miller, “The Effects of Motherhood Timing on Career Path.” *Journal Population Economics* 24, no. 3 (July 2011): 1071–1100, <https://doi.org/10.1007/s00148-009-0296-x>; Jane Leber Herr, “Does it Pay to Delay? Understanding the Effect of First Birth Timing on Women's Wage Growth,” University of California, Berkeley, Job Market Paper, November 2007, https://eml.berkeley.edu/~webfac/cbrown/e251_f07/Herr.pdf?origin=publication_detail?origin=publication_detail.

152 In January 2020, women's labour force participation rate was 60 percent compared with 72 percent for males. Statistical Institute of Jamaica, “Main Labour Force Indicators,” accessed October 18, 2020, <https://statinja.gov.jm/LabourForce/NewLFS.aspx>.

153 “Economic and Social Survey Jamaica 2018,” Planning Institute of Jamaica, 2019.

154 The unemployment rate for women in 2020 was 9 percent and for men 5.9 percent. STATIN, “Main Labour Force indicators.” This is so regardless that in general employment rates in Jamaica are much higher for those with university degrees, followed with post-secondary vocational training, than for those with secondary or primary degree only. FHI 360, “Jamaica Sector Labor Market Assessment.” USAID, 2017, www.fhi360.org/sites/default/files/media/documents/resource-jamaica-lma-may-2017.pdf.

155 Jonathan Woetzel et al, “The Power of Parity: How Advancing Women's Equality Can Add \$12 trillion to Global Growth,” McKinsey Global Institute, September 2015, www.mckinsey.com/featured-insights/employment-and-growth/how-advancing-womens-equality-can-add-12-trillion-to-global-growth.

156 Johnathan D. Ostry, Jorge Alvarez, Raphael Espinoza, and Chris Papageorgiou, “Economic Gains from Gender Inclusion: New Mechanisms, New Evidence,” IMF Staff Discussion Note (October 2018), www.weforum.org/agenda/2018/12/economic-gains-from-gender-inclusion-even-greater-than-you-thought/.

157 Kalist “Abortion and Female Labor Force Participation.” Angrist and Evan estimated that legal reforms on abortion access increased black women's labour force participation by 1.6 percent. Although the studies use similar approach, they differ in two key ways. Kalist used data Current Population Survey rather than Census, and it also used smaller group of states that had actually repealed legal restrictions on abortion. Angrist and Evans in turn used larger group of states that had either repeal or moderately reformed their abortion laws. Research have, however, shown that fertility declined only in those five repeal states, not in the ten reform states that had only moderately relaxed their abortion laws, and hence the larger effect found in Kalist study is likely to be more accurate.

158 In January 2020 the size of employed female labour force was 578,800 persons. STATIN, “Main Labour Force Indicators.” If the labour force participation among females grew by 2 percent the size would be 590,376 persons, meaning 11,576 more females in the labour force. According to International Labour Organization (ILO) in 2019 the Output per Worker in Jamaica was \$17,901. ($11,576 \times 17,901 = 207,221,976$.) ILO, “Statistics on Labour Productivity,” accessed October 18, 2020, <https://ilostat.ilo.org/topics/labour-productivity/>.

159 Four fifth of the gains come from adding workers to the labour force and one fifth from the gender diversity effect on productivity. Ostry et al “Economic Gains.”

If the labour force participation
among women in Jamaica
increased by

2%

there would be nearly

12,000

more females in the labour
force, which would add

\$207m

to the country's annual
economic output.





7

Born Unwanted: Restricted Access to Abortion and Adverse Outcomes for Children



In Goteborg, Sweden ... children who were born to women who were denied abortions:

- ▶ **Were at greater risk for psychosocial problems**
- ▶ **Received more psychiatric attention**
- ▶ **Were more often engaged in criminal activity**
- ▶ **Did more poorly in school**

A large body of evidence shows that unwanted childbearing is associated with adverse outcomes for children, both for the children resulting from unintended pregnancy as well as for their siblings.¹⁶⁰ Births after an unwanted pregnancy are associated with poorer health characteristics,¹⁶¹ unfavourable parental behaviour, and socioeconomic hardship.¹⁶² Longitudinal studies from Europe show that being unwanted during pregnancy can have long-term negative consequences on the children's lives. In Goteborg, Sweden, researchers followed 120 children born

in 1939-1943 until they turned 21 whose mothers had been refused an abortion. These 120 were compared with a control group of the same size. The children who were born to women who were denied abortions were at greater risk for psychosocial problems. They received more psychiatric attention, were more often engaged in criminal activity, and did more poorly in school. A larger number of them received public assistance and themselves became parents earlier.¹⁶³

Similar results were found in a study of over 12,000 women in Northern Finland who gave birth in 1966. Twelve percent of

these women had reported at six or seven months of gestation that the pregnancy was unwanted. The children born as result of unwanted pregnancy were compared several times in their lives with the children of mothers who had wanted the pregnancy. A greater proportion of the infants who were unwanted were born prematurely, and they were smaller in weight and length at 28 days after birth. They also had a significantly higher infant mortality rate, and higher incidences of all types of disabilities including cerebral palsy and cognitive delays. When the children started school, the children who

160 Jennifer Barber, William Axinn, and Arland Thornton, "Unwanted Childbearing, Health, and Mother-Child Relationships," *Journal of Health and Social Behavior* 40, no. 3 (September 1999): 231-257, <https://doi.org/10.2307/2676350>; Kathryn Kost and Laura Lindberg, "Pregnancy Intentions, Maternal Behaviors, and Infant Health: Investigating Relationships with New Measures and Propensity Score Analysis," *Demography* 52, no. 1 (February 2015): 83-111, <https://doi.org/10.1007/s13524-014-0359-9>; Theodore Joyce, Robert Kaestner, and Sanders Kornman, "The Effect of Pregnancy Intention on Child Development," *Demography* 31, no. 1 (February 2000): 83-94, <https://doi.org/10.2307/2648098>.

161 Kost and Lindberg, "Pregnancy Intentions"; Elizabeth Eggleston, "Unintended Pregnancy and Women's Use of Prenatal Care in Ecuador," *Social Science and Medicine* 51, no. 7 (October 2000): 1011-8, [https://doi.org/10.1016/S0277-9536\(00\)00010-1](https://doi.org/10.1016/S0277-9536(00)00010-1); Satvika Chalasani, John B. Casterline, and Michael Koenig, "Consequences of Unwanted Childbearing: A Study of Child Outcomes in Bangladesh," *Paper presented at the annual meeting of Population Association of America, New York, 29-31 March, 2007*, <https://paa2007.princeton.edu/papers/71482>; Muhammad Bustan and Ann Coker, "Maternal Attitude Toward Pregnancy and the Risk of Neonatal Death," *American Journal of Public Health* 84, no. 3 (March 1994): 411-4, <https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.84.3.411>; Eric Jensen and Dennis Ahlburg, "Family Size, Unwantedness, And Child Health And Health Care Utilisation In Indonesia," *Bulletin of Indonesian Economic Studies* 38, no. 1 (February 2002): 43-59, <https://doi.org/10.1080/000749102753620275>;

Carrie Saphiro-Mendoza, Beatrice J. Selwyn, David P. Smith, and Maureen Sanderson, "Parental Pregnancy Intention and Early Childhood Stunting: Findings from Bolivia," *International Journal of Epidemiology* 34, no. 2 (May 2005): 387-96, <https://doi.org/10.1093/ije/dyh354>; Cicely Marston and John Cleland, "Do Unintended Pregnancies Carried to Term Lead to Adverse Outcomes for Mother and Child? An Assessment in Five Developing Countries?" *Population Studies* 51, no. 1 (February 2003): 77-93, <https://doi.org/10.1080/0032472032000061749>.

162 Barber et al, "Unwanted Childbearing, Health"; Diana Greene Foster et al, "Socioeconomic Outcomes of Women Who Receive and Women Who Are Denied Wanted Abortions in the United States," *American Journal of Public Health* 108, no. 3 (March 2018): 407-413, <https://doi.org/10.2105/AJPH.2017.304247>.

163 Hans Forssman and Inga Thuwe, "One Hundred and Twenty Children Born After Application for Therapeutic Abortion Refused: Their Mental Health, Social Adjustment and Educational Level up to the Age of 21," *Acta Psychiatrica Scandinavica* 42, no. 1 (March 1966): 71-88, <https://doi.org/10.1111/j.1600-0447.1966.tb01915.x>.

Births after an unwanted pregnancy are associated with poorer health characteristics, unfavourable parental behaviour, and socioeconomic hardship. Being unwanted during pregnancy can have long-term negative consequences on the children's lives.

were unwanted needed more help from teachers, and were rated poorer in verbal performance. At the age of 14 more than twice as many in the unwanted group had low IQ scores (under 86) than their matched pairs. Their physical growth was also poorer and school performance significantly lower.¹⁶⁴ By the time the children reached the final level of compulsory school (age 16), the children who were unwanted were more reluctant to go to school and wanted to leave at the earliest possible age, finding little purpose in continuing their education. Their relationships with teachers and fellow classmates were described as more troubled compared to their matched pairs. By the age of 24 one in every four young men born as result of an unwanted pregnancy had failed to attain any more education than nine years of compulsory schooling compared to less than one in seven of the children whose mothers had wanted the pregnancy.¹⁶⁵

A third study from Prague, in the former Czechoslovakia, took 220 children born during the period from 1961 to 1963 and followed them for 35 years. They were all born to women twice denied an abortion for the same pregnancy. They were compared with children born to mothers who had not applied for an abortion. In contrast to the Finnish study the Prague study found no difference in birth weight or length, nor in the incidences of congenital malformation or brain dysfunction. Both groups started their lives in similar conditions. The first

follow-up was done when the children were nine. Although both groups obtained similar mean scores in intelligence, the children who were unwanted received lower school scores in Czech language, and were rated less favourably on school performance, diligence, and behaviour by their teachers and mothers. They were also more likely to be rejected by their peers, and less likely to have a secure family life. By the time the children reached age 14-16 the difference in school performance had widened. The children who were unwanted were substantially underrepresented among students graded above average or higher, and they rarely appeared on any roster of excellence. As in the Finnish study, significantly larger numbers of unwanted children did not

Children who were unwanted received lower school scores in language, and were rated less favourably on school performance, diligence, and behaviour by their teachers and mothers.

continue their education to secondary school. When the children reached age 21-23, twice as many unwanted children had been sentenced to prison terms than in the control group. By the time children reached their thirties, being unwanted was linked to higher likelihood of having an unstable marriage, and receiving psychiatric services.¹⁶⁶

The long-term negative outcomes captured in the studies can be a result of the unwantedness itself or due to more difficult socioeconomic conditions for the unwanted children. The Prague study included siblings as one of the control groups. The results showed that while both the unwanted children and their siblings included a higher percentage of poorly socialized individuals than the control group, the children who were unwanted were psychiatric patients more often than their siblings.¹⁶⁷

There are several mechanisms that could explain why being unwanted itself can cause adverse outcomes in children. Women's behaviour while pregnant has a strong impact on the infant's health. When the pregnancy is not wanted women might be less motivated to take care of themselves and the foetus while pregnant. Studies have found a positive association between unintended pregnancy and maternal risky behaviours, including alcohol and illicit drug use, and smoking.¹⁶⁸ Women with unwanted pregnancies are also more likely to receive less or delayed antenatal care than women with intended pregnancies.¹⁶⁹

164 Antero Myrman, "The Northern Finland Cohort, 1966-82: A Follow-up Study of Children Unwanted at Birth," In: Henry P. David, Zdenek Dytrych, Zdenek Matejcek, Vratislav Schuller (editors) *Born Unwanted: Developmental Effect of Denied Abortion*, (New York: Springer; 1988).

165 Antero Myrman, Päivi Olsén, Paula Rantakallio, and Esa Läärä, "Does the Wantedness of a Pregnancy Predict a Child's Educational Attainment?" *Family Planning Perspectives* 27, no. 3 (May-June 1995): 116-9, <https://doi.org/10.2307/2136109>.

166 Henry P. David, Zdenek Dytrych, and Zdenek Matejcek, "Born Unwanted. Observations from the Prague Study," *American Psychologist* 58, no. 3 (March 2003): 224-9, <https://doi.org/10.1037/0003-066x.58.3.224>; Henry P. David "Born Unwanted, 35 Years Later: The Prague Study," *Reproductive Health Matters* 14, no. 27 (May 2006): 181-190, [https://doi.org/10.1016/S0968-8080\(06\)27219-7](https://doi.org/10.1016/S0968-8080(06)27219-7).

167 David, *Born Unwanted*. Observations."

168 Robert Weller, Isaac W. Eberstein, and Mohamed Bailey, "Pregnancy Wantedness and Maternal Behavior During Pregnancy," *Demography* 24, no. 3 (August 1987): 407-412, <https://doi.org/10.2307/2061306>; Susan Altfeld, Arden Handler, Dee Burton, and Leatrice Berman, "Wantedness of Pregnancy and Prenatal Health Behaviors" *Women & Health* 26, no. 4 (1998): 29-43, https://doi.org/10.1300/j013v26n04_03; Lara Than et al, "Intent to Become Pregnant as a Predictor of Exposures During Pregnancy: Is There a Relation?" *The Journal of reproductive medicine* 50, no. 6 (July 2005): 389-96, <https://pubmed.ncbi.nlm.nih.gov/16050563/>.

169 Kost and Lindberg, "Pregnancy intentions"; Weller et al, "Pregnancy Wantedness"; Theodore Joyce and Michael Grossman, "Pregnancy Wantedness and the Early Initiation of Prenatal Care," *Demography* 27 (February 1990): 1-17, <https://doi.org/10.2307/2061549>; Eggleston, "Unintended Pregnancy and Women's"



By the age of 24

1 in every 4

young men born as the result of an unwanted pregnancy

had failed to attain any more education than

9 years

of compulsory schooling compared to less than

1 in 7

of the children whose mothers had wanted the pregnancy.

Several studies have also found that mothers with unintended pregnancies suffer from higher levels of depression, parental stress, and lower levels of happiness.¹⁷⁰ The negative effect of unwanted pregnancy may persist even after the children have left home.¹⁷¹ Maternal depression, during the pregnancy and after the child's birth, can adversely affect infants' cognitive and emotional development.¹⁷² Brain development is shaped by an interactive influence of genes and experience. An important element of the developmental trajectory is described as the "serve and return" nature of children's engagement in relationships with their parents

and other caregivers. When a child's signals are reacted to appropriately with attention, the connections in the child's brain are built and strengthened. These mutually rewarding interactions are essential for development of a healthy brain and increasingly complex skills.¹⁷³ Depressed mothers are typically less responsive to their infant's signals, being either withdrawn with flatness of affect, or else hostile or disconnected, which in turn denies the infants the maternal contact they need.¹⁷⁴ A U.K. study found that children born after an unplanned pregnancy were associated with cognitive delay at three years of age.¹⁷⁵

Two separate studies from Sweden and

Finland suggest that unwanted pregnancy is associated with an increased risk of the child developing schizophrenia.¹⁷⁶ Other studies have previously found that psychological stress during pregnancy increases the risk of a child's developing schizophrenia. Thus, one explanation for the association could be that unwanted pregnancy causes psychological stress to the expectant mother, which can affect the brain development of the infant. It is also possible that the continuing stress after childbirth may infuse the family atmosphere during childhood, which in turn may affect the brain development and increase the risk of schizophrenia. A third possibility explaining the link could

170 Barber, Axinn, and Thornton, "Unwanted Childbearing, Health"; Jinwook Bahk, Sung-Cheol Yun, Yu-mi Kim, Young-Ho Khan, "Impact of Unintended Pregnancy on Maternal Mental Health: a Causal Analysis Using Follow up data of the Panel Study on Korean Children (PSKC)," *BMC Pregnancy Childbirth* 15, 85 (April 2015), <https://doi.org/10.1186/s12884-015-0505-4>; Pamela Herd, Jenny Higgins, Kamil Sicsinski, and Irina Merkurieva, "The Implications of Unintended Pregnancies for Mental Health in Later Life," *American Journal of Public Health* 106, no. 3 (March 2016): 421-429, <https://doi.org/10.2105/AJPH.2015.302973>; Yohannes Dibaba, Mesganaw Fantahun, and Michelle J. Hindin, "The Association of Unwanted Pregnancy and Social Support with Depressive Symptoms in Pregnancy: Evidence from Rural Southwestern Ethiopia," *BMC Pregnancy Childbirth* 13, 135 (2013), <https://doi.org/10.1186/1471-2393-13-135>.

171 Herd et al., "The Implications of Unintended Pregnancies."

172 Lynne Murray, Peter Cooper, and Alan Stein, "Postnatal Depression and Infants Development," *British Medical Journal* 302 (April 1991): 978-979, www.ncbi.nlm.nih.gov/pmc/articles/PMC1669306/pdf/bmj00123-0008.pdf.

173 Center on the Developing Child at Harvard University, "Maternal Depression Can Undermine the Development of Young Children," Working Paper No. 8 (2009), <http://www.developingchild.harvard.edu>.

174 Murray et al., "Postnatal Depression and Infants Development."

175 Elise De La Rochebrochard and Heather Joshi, "Children Born After Unplanned Pregnancies and Cognitive Development at 3 years: Social Differentials in the United Kingdom Millennium Cohort," *American Journal of Epidemiology* 178, no. 6. (September 2013):910-20, <https://doi.org/10.1093/aje/kwt063>.

176 Women had reported the pregnancy as unwanted during pregnancy. Antero Myhrman et al, "Unwantedness of a Pregnancy and Schizophrenia in the Child," *The British Journal of Psychiatry* 169, no. 5 (November 1996): 637-640, <https://doi.org/10.1192/bjp.169.5.637>; Thomas F. McNeil et al, "Unwanted Pregnancy as a Risk Factor for Offspring Schizophrenia-spectrum and Affective Disorders in Adulthood: a Prospective High-risk Study," *Psychological Medicine* 39, no. 6 (June 2009):957-965, <https://doi.org/10.1017/s0033291708004479>.

be that the “wantedness” of the child itself supports healthy brain development which is a protective factor for the child against developing schizophrenia.¹⁷⁷

Unwanted pregnancy and maternal depression may also cause a poor mother-child relationship.¹⁷⁸ Research has shown that poor quality parent-child relationships can have long-term negative effects on children’s mental

and physical health. It is associated with various mental health problems such as depression, psychological distress, and anxiety disorders in children.¹⁷⁹ A study found that mothers whose pregnancy was unwanted, in addition to having higher levels of depression, also spank or slapped their young children more, and spent less leisure time with them. They also gave their children less social and financial support. The withdrawn or

aggressive interaction with the children was not limited to the child born as a result of unwanted pregnancy; all the children in the family suffered. This low-quality mother-child relationship persisted through adulthood.¹⁸⁰ When the pregnancy is unwanted the likelihood for good father-child relations is lower, the father being either absent from the child’s life, or otherwise disengaged. Studies have shown that a poor father-

¹⁷⁷ Myhrman et al, “Unwantedness of a Pregnancy and Schizophrenia in the Child.”


¹⁷⁸ A study found that children born to women who had been denied an abortion experienced poorer maternal bonding than the control group of children whose mothers had received an abortion and had subsequent child within five years. Diana Greene Foster et al, “Comparison of Health, Development, Maternal Bonding, and Poverty Among Children Born After Denial of Abortion vs After Pregnancies Subsequent to an Abortion,” *JAMA Pediatrics* 72, no. 11 (November 2018): 1053–1060, <https://doi.org/10.1001/jamapediatrics.2018.1785>.

¹⁷⁹ Judith A. Crowell et al, Mothers’ Conceptualizations of Parent-Child Relationships: Relation to Mother-Child Interaction and Child Behavior Problems.”

Development and psychopathology 3, no. 4 (October 1991): 431–444, <https://doi.org/10.1017/S0954579400007616>; Scott Weich, Jacoby Patterson, Richard Shaw, and Sarah Stewart-Brown, “Family Relationships in Childhood and Common Psychiatric Disorders in Later Life: Systematic Review of Prospective Studies,” *British Journal of*

Psychiatry 194, no. 5 (May 2009): 392–98, <https://doi.org/10.1192/bjp.bp.107.042515>.

¹⁸⁰ Barber et al, “Unwanted Childbearing, Health.”



Unwanted pregnancy and maternal depression may also cause a poor mother-child relationship. Poor quality parent-child relationships can have long-term negative effects on children’s mental and physical health.

child relationship can have negative effects on children's well-being and mental health, and it is associated with withdrawn behaviour in daughters, and aggressive behaviour in sons.¹⁸¹

The disadvantaged position of children who were unwanted during pregnancy may also reflect the socioeconomic conditions where these children grow up. Several studies have found that unwanted childbearing is associated with socioeconomic hardship.¹⁸² Unintended pregnancies are, in general, more common among women of lower socioeconomic status. When these women are denied access to an abortion, their situation often deteriorates. A landmark project from the U.S., the Turnaway Study, followed nearly one thousand women recruited from abortion clinics from over 20 states. Some of the women received their abortions, while the others were turned away, because they had missed the pregnancy gestational limit set by the clinic. The researchers interviewed each woman every six months for five years to learn how receiving versus being denied an abortion affects a woman's mental or physical health, her life aspirations, and the well-being of her family. For every outcome the women who had an abortion were better off than women who were denied an abortion. Their physical health, and financial and employment situation were better. The women who got the

Parents' low socioeconomic status can have long-term effects on children. It can affect all aspects of the child's life, from having poorer mental and physical health, to academic achievements and social inclusion.

abortion were less likely to be on public assistance, or report they had no money for food, housing, or transport.¹⁸³ They had less debt and negative public records, such as bankruptcies and evictions.¹⁸⁴ The children they already had were less likely to be living in poverty and did better in achieving key developmental milestones than the children of women who were denied an abortion.¹⁸⁵ While there was usually more than one reason for women to seek abortion, the most commonly cited reason for abortion was financial: women did not think they could afford a child, or, another child. The study showed that the women's fears were proved right.¹⁸⁶

The majority of women who seek an abortion are poor and often also young,

as was shown in the Turnaway Study and many other studies,¹⁸⁷ and adding a child to their already disadvantaged position exacerbates the financial burden, which can in turn negatively affect women's mental health and the child's development. Parents' low socioeconomic status can have long-term effects on children. It can affect all aspects of the child's life, from having poorer mental and physical health, to academic achievements and social inclusion.¹⁸⁸ Girls who grow up in poverty or in a single-parent household are nearly twice as likely to have a teen birth as girls without these disadvantaged background factors.¹⁸⁹ Children of teen mothers are at higher risk of poorer health outcomes as well as a wide range of social and economic problems.¹⁹⁰ Their foster care placements

181 Patricia L. East, "The Parent-child Relationships of Withdrawn, Aggressive, and Sociable children: Child and Parent Perspectives," *Merrill-Palmer Quarterly*, 37, no. 3 (July 1991): 425-443, <https://www.jstor.org/stable/23087398?seq=1>.

182 Foster et al, "Socioeconomic Outcomes of Women"; De La Rochebrochard and Joshi, "Children Born After Unplanned Pregnancies"; Foster et al, "Comparison of Health."

183 Foster et al, "Socioeconomic Outcomes of Women."

184 Sarah Miller, Laura R. Wherry, and Diana Greene Foster, "The Economic Consequences of Being Denied an Abortion" National Bureau of Economic Research, Working Paper 26662 (January 2020), www.nber.org/papers/w26662.

185 Diana Greene Foster et al, "Effects of Carrying an Unwanted Pregnancy to Term on Women's Existing Children," *The Journal of Pediatrics* 205 (February 2019): 183-189.e1, <https://doi.org/10.1016/j.jpeds.2018.09.026>.

186 Diana Greene Foster, "Op-Ed: Restricting Access to Abortion Makes Poor Women Poorer," *Los Angeles Times*, January 22, 2018, www.latimes.com/opinion/op-ed/la-oe-foster-abortion-socioeconomic-impact-20180122-story.html.

187 Rachel Jones and Jenna Jerman, "Population Group Abortion Rates and Life time Incidence of Abortion: United States, 2008-2014," *American Journal of Public Health* 107, no 12 (2017 December): 1904-1909, <https://doi.org/10.2105/AJPH.2017.304042>; Laya Font-Ribera, Gloria Pérez, Joaquin Salvador, Carme Borrell,

"Socioeconomic Inequalities in Unintended Pregnancy and Abortion Decision," *Journal of urban health: bulletin of the New York Academy of Medicine* 85, no. 1 (January 2008): 125-35, <https://doi.org/10.1007/s11524-007-9233-z>.

188 Mladenka Vukojević et al, "Parental Socioeconomic Status as a Predictor of Physical and Mental Health Outcomes in Children - Literature Review," *Acta Clinica Croatia* 56, no. 4 (December 2017): 742-748, <https://doi.org/10.20471/acc.2017.56.04.23>.

189 Melissa Kearney and Phillip B. Levine, "Socioeconomic Disadvantage and Early Childbearing," in *The Problems of Disadvantaged Youth: An Economic Perspective*, edited by Jonathan Gruber, (University of Chicago Press, 2009).

190 Judith Levine, Harold Pollack, and Maureen Comfort, "Academic and Behavioral Outcomes Among the Children of Young Mothers," *Journal of Marriage and*

and incarceration rates are also higher. The average total prison time of children of teenage mothers is estimated to be twice as high as the average time spent in prison for children of older mothers.¹⁹¹ Further, the daughters of teen mothers are significantly more likely to become teen mothers themselves,¹⁹² leading to intergenerational cycles of teenage motherhood and, usually, poverty.

Prior to the legalization of abortion in the U.S. it was estimated that one of the most important contributing and perpetuating causes of poverty was the high incidence of unwanted children born into poor families.¹⁹³ Since the legalization, women have been able to choose whether to carry a pregnancy to term. This has had an important impact on birth cohort outcomes born after the legalization. A study looking at living conditions of children born after legalization of abortion in the U.S. found that the children who were not born due to abortion legalization would have systematically been born in worse circumstances had the pregnancies not been terminated: they would have been 70 percent more likely to live in a single parent household, 40 percent more likely to live in poverty, 35 percent more likely to die during to first year of their life, and 50 percent more likely to live

in a household collecting welfare. It was further estimated that the last of these findings saved the U.S. government over \$14 billion in welfare payments in 1994.¹⁹⁴ In fact, it is estimated that for every public dollar spent to pay for abortions in the U.S., about four dollars are saved on future public medical and welfare expenditures.¹⁹⁵ Similar results were found in another U.S. study indicating that legalizing and lowering the cost of abortion led to improved cohort outcomes, particularly in the form of higher rates of college graduation, lower rates of single motherhood, and lower rates of welfare use.¹⁹⁶

Access to Abortion and Crime Reduction

Children born after abortion has been legalized, it has been posited, are less likely to engage in criminal behaviour than would have been the case in the absence of legalized abortion.¹⁹⁷ The idea behind this hypothesis is simple: the children who were not born as a result of legalization of abortion would have been disproportionately more likely to grow up in poverty with a young and poorly educated single-mother who did not want the pregnancy. These factors increase a child's risk of engaging in criminal

activity when they are age 15 to 25.¹⁹⁸ Thus, access to legal abortion would have reduced the number of unwanted pregnancies among adolescents and economically disadvantaged women, and so fewer children were born in circumstances that would have put them at a higher risk of engaging in criminal activity. Crime was thereby averted.

This hypothesis was tested in a 2001 study that indicated a positive association between abortion legalization and decreased crime rates in the U.S.¹⁹⁹ The crime rate in the U.S. has declined by half since the early 1990s. This decline was first seen two decades after the legalization of abortion in the 1970s, or how the researchers of the seminal study put it, exactly when the cohorts exposed to legalized abortion would reach their peak crime years. The five states that had legalized abortion before *Roe v. Wade* experienced declines earlier than the rest of the nation. Further, the states that had higher abortion rates after legalization experienced greater crime reduction. Closer analysis of the arrest data also showed that in high abortion states only the arrest of cohorts born after legalization fell relative to low abortion states. The study estimated that the crime rates were 15 to 25 percent lower in 1997 than they would have been in the absence

Family 63, no. 2 (May 2001): 355–369, <https://doi.org/10.1111/j.1741-3737.2001.00355.x>; Saul Hoffman and Rebecca Maynard, "Kids Having Kids: Economic Costs and Social Consequences of Teen Pregnancy," (Washington, DC.: Urban Institute Press, 2008); Marco Francesconi, "Adult Outcomes for Children of Teenage Mothers," *The Scandinavian Journal of Economics* 110, no. 1 (March 2008): 93–117, <https://doi.org/10.1111/j.1467-9442.2008.00526.x>.

191 Hoffman and Maynard Kids Having Kids."

192 Francesconi, "Adult Outcomes for Children of Teenage Mothers"; Christina Meade, Trace Kershaw, and Jeanette Ickovics, "The Intergenerational Cycle of Teenage Motherhood: an Ecological Approach," *Health Psychology* 27, no. 4 (July 2008):419–29, <https://doi.org/10.1037/0278-6133.27.4.419>.

193 Richard A. Schwartz, "The Social Effects of Legal Abortion," *American journal of public health* 62, no.10 (October 1972): 1331–5, <https://doi.org/10.2105/ajph.62.10.1331>.

194 Jonathan Gruber, Phillip Levine, and Douglas Staiger, "Abortion Legalization and Child Living Circumstances: Who is the "Marginal Child?," *The Quarterly Journal of Economics* 114, no. 1 (February 1999): 263–291, <https://doi.org/10.1162/003355399556007>.

195 Aida Torres, Patricia Donovan, Nancy Dittes, and Jacqueline Darroch Forrest, "Public Benefits and Costs of Government Funding for Abortion," *Family Planning Perspectives* 18, no. 3 (May–June 1986): 111–8, <https://doi.org/10.2307/2135343>.

196 Elizabeth Oltmans Ananat, Jonathan Gruber, Phillip B. Levine, and Douglas Staiger, "Abortion and Selection," National Bureau of Economic Research, Inc, NBER Working Papers 12150 (April 2006), www.nber.org/papers/w12150.

197 John Donohue and Steven Levitt, "The Impact of Legalized Abortion on Crime," *Quarterly Journal of Economics* 116, no. 2 (February 2001): 379–420, www.researchgate.net/publication/24091736_The_Impact_Of_Legalized_Abortion_On_Crime.

198 Rolf Loeber and Magda Stouthamer-Loeber, "Family Factors as Correlates and Predictors of Juvenile Conduct Problems and Delinquency," *Crime and Justice* 7 (1986): 29–149, www.jstor.org/stable/1147516; Adrian Raine, Patricia Brennan, and Sarnoff A. Mednick, "Birth Complications Combined With Early Maternal Rejection at Age 1 Year Predispose to Violent Crime at Age 18 Years," *Archives of General Psychiatry* 51, no. 12 (December 1994): 984–988, <https://doi.org/10.1001/archpsyc.1994.03950120056009>; Pirkko Räsänen et al, "Maternal Smoking During Pregnancy and Risk of Criminal Behavior Among Adult Male Offspring in the Northern Finland 1966 Birth Cohort," *American Journal of Psychiatry* 156, no. 6 (June 1999): 857–62, <https://doi.org/10.1176/ajp.156.6.857>; Maynard and Hoffman, "Kids Having Kids."

199 Donohue and Levitt, "The Impact of Legalized Abortion on Crime."



Shutterstock.com

of legalized abortion. The researchers also predicted that, all else being equal, legalized abortion would account for persistent declines of 1 percent a year for the subsequent two decades.²⁰⁰ In a follow-up study in 2019 they confirmed that prediction and estimated that crime fell 20 percent between 1997 and 2014 due to legalized abortion. They further estimated the cumulative impact of legalized abortion on crime to be 45 percent, accounting for a major share of the roughly 50-55 percent overall decline in crime since the early 1990s.²⁰¹

The original study sparked wide debate among academics on the impact of

abortion legalization on crime. Although some economists have challenged the findings,²⁰² later studies from Canada and Europe have confirmed a positive association between legalized abortion and decreased crime rates.²⁰³ That notwithstanding, some have suggested that the effect is driven by cohort size (reduced fertility results in smaller cohorts and thus fewer criminals) rather than by the selection effect (access to abortion reduces unwanted births among those incapable to raise a child). A recent study indicates that in Romania the reduction of crime after abortion legalization was in fact due to fertility reduction and smaller

cohorts.²⁰⁴ However, a cross-country study based on a sample of 16 Western European countries found evidence pointing in the opposite direction. It indicates that legalization of abortion had significant negative impact on crime rates in Western Europe, and that reduction was driven by selection criteria rather than cohort size. Meaning, crime in Europe reduced because children born after abortion legalization were more likely to be wanted and well-raised, not because there are fewer young people to commit crimes.²⁰⁵

Others have argued that rather than the cohort size or general selection effect, the

200 Donohue and Levitt, *The Impact of Legalized Abortion on Crime*.

201 John Donohue, and Steven Levitt, *The Impact of Legalized Abortion on Crime Over the Last Two Decades*, University of Chicago, Becker Friedman Institute for Economics Working Paper No. 2019-75 (May 2019), <http://dx.doi.org/10.2139/ssrn.3391510>;

202 Theodore Joyce, *Did Legalized Abortion Lower Crime?* *Journal of Human Resources* 39, no. 1 (Winter 2004): 1-28, <https://doi.org/10.2307/3559003>; Theodore Joyce, "A Simple Test of Abortion and Crime," *The Review of Economics and Statistics*, MIT Press, 91, no. 1 (February 2009): 112-123, <https://doi.org/10.1162/rest.91.1.112>; Christopher Foote, and Christopher F. Goetz, *The Impact of Legalized Abortion on Crime: Comment*, *The Quarterly Journal of Economics* 123, no. 1 (February 2008): 407-423, www.researchgate.net/publication/24092010_The_Impact_of_Legalized_Abortion_on_Crime_Comment. The researchers of the original study replied to the critic: John Donohue and Steven Levitt, "Further Evidence that Legalized Abortion Lowered Crime: A Reply to Joyce," *Journal of Human Resources*, 39, no.1 (January 2004): 29-49, <https://ideas.repec.org/a/uwp/jhriss/v39y2004i1p29-49.html>; and John Donohue and Steven Levitt, "Measurement Error, Legalized Abortion, and the Decline in Crime: A Response to Foote and Goetz," *Quarterly Journal of Economics* 123, no. 1 (February 2008): 425-440, <https://doi.org/10.1162/qjec.2008.123.1.425>.

203 Anindya Sen, *Does Increased Abortion Lead to Lower Crime? Evaluating the Relationship between Crime, Abortion, and Fertility*, *The B.E. Journal of Economic Analysis & Policy* 7, no. 1 (September 2007): 1-38, <https://doi.org/10.2202/1935-1682.1537>; Randi Hjalmarsson, Andreea Mitrut, and Cristian Pop-Eleches, *The Impact of Abortion on Crime and Crime-related Behaviour*, NBER Working Paper No. 26024, June 2019, www.nber.org/papers/w26024; François Abel, Raul Magni Berton and Laurent Weill, "Abortion and Crime: Cross-country Evidence from Europe," *International Review of Law and Economics* 40 (October 2014): 24-35, <https://doi.org/10.1016/j.irl.2014.08.001>.

204 Hjalmarsson et al, "The Impact of abortion on Crime."

205 The researchers did not attempt to compute the actual impact, but they estimate that the magnitude is smaller in Europe than what was suggested in the U.S study. Abel et al, "Abortion and Crime."

43%

of U.S. prisoners reported growing up in a family with only one parent.

14%

reported growing up in household with neither parent present.

17%

grew up in a foster home, agency, or other institution.

decrease in crime is a result of a reduction in teenage fertility after abortion legalization.²⁰⁶ The results of the U.S. study may have been driven entirely by a high concentration of teenage abortions in a handful of states.²⁰⁷ A study from Canada attributed more than a quarter of the drop in violent crime to the increase in teenage abortions that occurred after legalization of abortion. However, an even greater drop in violent crime was due to earlier reduction in teenage fertility in the 1960s and 1970s, before Canada had legalized abortion.²⁰⁸ In other words, it is not abortion per se that matters, but the number of unwanted children born to women who are not ready nor equipped to raise them – be it due to a young age or other factors.

Teenage motherhood is strongly linked to a child's future likelihood to engage in criminal activity.²⁰⁹ Adolescent mothers have limited parenting skills due to their inexperience, and they are also more often

raising the child without the father's help, as young fathers are usually less present and supportive than older fathers.²¹⁰ Regardless of the age of the mother, it is the difficult home environment that most puts the child at risk of engaging in criminal activity. Evidence from prison inmate surveys indicates a clear link between an adverse family environment and later criminality. In 1991, 43 percent of U.S. prisoners reported growing up in a family with only one parent, 14 percent reported growing up in household with neither parent present, and 17 percent grew up in a foster home, agency, or other institution. Over one quarter of them had a parent who abused alcohol or drugs, and 31 percent also had a brother with jail or prison record.²¹¹

Unwanted Childbearing and the Situation of Jamaican Children

In Jamaica an estimated 5,000 children are born each year from unwanted pregnancies,²¹² most to single women from socioeconomically disadvantaged backgrounds. In 2019, 25 percent of children born in Jamaica did not have a registered father.²¹³ Even if the father is present, among the poorest quintile their interaction with their children is generally low: a 2011 study found that only 15 percent of poor fathers engaged with their young children.²¹⁴ Nearly half of Jamaican households are female-headed, the majority with children.²¹⁵ Children of single mothers are particularly vulnerable to poverty as female-headed households tend to be economically more disadvantaged. This is partially due to gender discrimination in the labour market in female employment and wages,

206 Gary Shoemith, "Crime, Teenage Abortion, and Unwantedness," *Crime & Delinquency* 63, no. 11 (October 2017): 1458-1490, <https://doi.org/10.1177/0011128715615882>.

207 Shoemith, "Crime, Teenage Abortion, and Unwantedness."

208 Sen, "Does Increased Abortion Lead to Lower Crime?"

209 Räsänen et al, "Maternal smoking."

210 World Bank, "Caribbean Youth Development."

211 Allen Beck et al, "Survey of State Prison Inmates, 1991," Bureau of Justice Statistics Bulletin, NCJ 136949, March 1993, <https://www.bjs.gov/content/pub/pdf/SOSP191.PDF>.

212 In the 2008 RHS 16 percent of pregnancies were reported as unwanted. If the rate is applicable in 2018, it would mean that 5295 children were unwanted in 2018. Serbanescu et al, "Reproductive Health."

213 Registrar General Department, Vital Statistics 2019.

214 STATIN (Statistical Institute of Jamaica) and UNICEF (United Nations Children's Fund), "Jamaica Multiple Indicator Cluster Survey (MICS) 2011," Kingston, Jamaica: STATIN and UNICEF, 2013, https://mics-surveys-prod.s3.amazonaws.com/MICS4/Latin%20America%20and%20Caribbean/Jamaica/2011/Final/Jamaica%202011%20MICS_English.pdf. More recent research in similar demographics suggests that this pattern of low father involvement among poor men may be shifting, and fathers are becoming more involved with their children. Camille Graham, "Jamaican Fathers' Involvement In Their Children's Development," Early Childhood Commission website, January 12, 2017, <https://ecc.gov.jm/jamaican-fathers-involvement-in-their-childrens-development/>.

215 CAPRI, "Situational Analysis of Jamaican Children – 2018," UNICEF 2018, www.unicef.org/jamaica/reports/situation-analysis-jamaican-children-2018.

but is also a result of larger household sizes in female-headed households and lack of support for low-income mothers. Poverty is also strongly associated with a larger number of children in the household.²¹⁶ Poverty is considerably higher among Jamaican children than it is among the adult population. Prior to COVID-19 it was estimated that at least one in every four Jamaican children lived in poverty.²¹⁷ The pandemic has further worsened the situation of Jamaican children. The socioeconomic hardship exposes these children to a variety of social ills including hunger, malnutrition, ill-health, lack or limited education, child labour, violence and delinquency, risky sexual behaviour, abuse, and exploitation.²¹⁸

High levels of teenage pregnancies are common among Jamaica's poor, rural, and inner-city communities. Many of the children living in poverty are themselves products of teenage pregnancies. The extant financial distress makes young girls vulnerable to sexual exploitation, and in order to take care of their basic needs, they are, sometimes even by their mothers, encouraged to engage in transactional sexual relationships with older men in exchange for goods such as food, money, or school books.²¹⁹ These kinds of relationships may carry some benefit to the family, but they put the girls at risk of mental health problems, sexually transmitted diseases, and unwanted

pregnancies. Young mothers with limited education have little knowledge to pass on their children, and the weak parenting skills may transfer through the generations.²²⁰ Inter-generational transmission of poverty is among Jamaica's most persistent developmental challenges, and high levels of unintended births occurring to vulnerable women who are not seeking parenthood further exacerbates the issue.

When children are born to women who do not feel ready to be a parent – for financial, emotional, or other reasons – the children, the family, and the whole society may suffer. Abandonment, neglect, and abuse are among the most severe consequences of unwanted childbearing. In 2018, the Child Protection and Family Service Agency (CPFSA) received reports relating to 10,722 Jamaican children, ranging from physical abuse, to neglect, to child labour and trafficking. Many of these children were victims of multiple assaults. After reports relating behaviour problems (25 percent), neglect was the most common form of abuse (22 percent), followed by children in need of care and protection (18 percent), and physical, sexual, and emotional abuse (14, 13, and 7 percent, respectively).²²¹ Some of the children in need of care and protection can be placed with a relative, but others have no one to provide them with a safe home, and are

placed in state-owned or private child care facilities.

In state care a child is likely to have difficult experiences that may undermine their capacity to establish stable foundations for emotional, social, and economic development, and may lead to greater difficulty to adjust to society in their adulthood. An estimated 4,875 Jamaican children are currently in the care of the state, meaning that approximately six out of every 1,000 Jamaican children are removed from their homes and living in either a residential facility or a foster home.²²² The residential facilities are often characterized by reports of abuse and sub-standard living conditions.²²³ A profile of Jamaican children in state care indicated that up to 76 percent exhibited several maladjusted behaviours, such as social withdrawal, aggression, and suicidal tendencies, and 71 percent had learning disabilities.²²⁴ In general, Jamaican children in state care are more vulnerable to poverty because of poorer educational outcomes, challenges in independent living, disabilities, stigma, and unemployment or low wage jobs in adulthood.²²⁵ In addition to these individual costs, placing children in the care of the state also comes with a public cost. For the financial year 2019–2020 an estimated expenditure for child protection in children homes, places of safety, and in foster care is J\$1.6 billion,

216 Ministry of Economic Growth and Job creation, "National Policy on Poverty," National Poverty Reduction Programme, Green Paper, December 2016, <https://opm.gov.jm/wp-content/uploads/2017/01/NATIONAL-POVERTY-POLICY-Green-Paper-December-2016-Public.pdf>.

217 CAPRI, "SitAn of Jamaican Children."

218 UNICEF and Caribbean Policy Research Institute, "The effect of the COVID-19 pandemic on Jamaican children," 2020, www.unicef.org/jamaica/press-releases/unicef-study-reveals-impact-covid-19-challenges-children-and-families-jamaica.

219 Katherine Hutchinson et al, "Jamaican Mothers' Influences of Adolescent Girls' Sexual Beliefs and Behaviors," *Journal of nursing scholarship: an official publication of Sigma Theta Tau International Honor Society of Nursing* 44, no. 1 (March 2012): 27-35, <https://doi.org/10.1111/j.1547-5069.2011.01431.x>.

220 Jason Cross, "Child Abuse Alarm - 11-year-old Manchester Girl Latest Victim of Sex Assault,"

Gleaner, June 21, 2019, <http://jamaica-gleaner.com/article/lead-stories/20190621/child-abuse-alarm-11-year-old-manchester-girl-latest-victim-sex>.

221 A small proportion of the reports, 2 percent, concerned child labour and trafficking. Child Protection and Family Services Agency, accessed September 3, 2020, <http://childprotection.gov.jm/ncr/>.

222 Among child care facilities in Jamaica, several are private and some are run directly by the state. All homes comes under the purview of the CPFSA however. Six Out of Every 100 Children are in State Care – Green," Jamaica Observer, February 15, 2017, www.jamaicaobserver.com/news/six-out-of-every-1-000-children-are-in-state-care---green.

223 Jamaicans for Justice, "Report on the Situation of Children in the Care of the Jamaican State," November 2009, www.upr-info.org/sites/default/files/document/jamaica/session_9_-_november_2010/jfjamicansforjusticeannex12.pdf; Jamaicans For Justice, "The Children in Inside: Incidents in State Care (Part 1)," July 18, 2018, www.youtube.com/watch?v=gKmuIodIOGQ.

224 Delores Smith and Godwin Ashiabi, Poverty and Child Outcomes: Focus on Jamaican Youth," *Adolescence* 42, no. 168 (Winter 2007): 837 – 58, <https://pubmed.ncbi.nlm.nih.gov/18229515/>.

225 Ministry of Economic Growth and Job creation, "National Policy on Poverty"

Over 70%

of Jamaican children have experienced violent discipline, either in a form of psychological aggression or physical punishment.

and the sum is estimated to rise in the years to come.²²⁶ Children often leave state care at the age of 18 with no place to go. They may end up living and working on the streets.

Unwanted and neglected children may also end up on the street. Although the exact number of street children is not known, it is estimated that between 2,000 to 6,000 children are living on the streets. On average a street child is around 13 years old, has a large number of siblings, and comes from a lowly-educated, female-headed household.²²⁷ Inadequate parenting skills, material deprivation, neglect and abuse, as well as parental disapproval of pregnancy or sexual orientation/identity, are among the most common underlying factors that lead children to the streets.²²⁸ In addition to children living on the street there are nearly 40,000 children engaged in some form of child-labour or begging.²²⁹ About half of these children are between five

and 12 years of age. A large percentage of these children are engaged in forced-begging, where children are directed by parents to beg on the streets.²³⁰

Unwanted children may be victims of violence in the guise of discipline. Stressed or depressed mothers are more likely to violently discipline their children, a practice that is widespread in Jamaica. Over 70 percent of Jamaican children have experienced violent discipline, either in a form of psychological aggression or physical punishment. Violent discipline is particularly common among poor households; in the poorest population quintile, eight of ten children have been the subject of violent discipline, and nearly one in ten children have experienced severe violent punishment.²³¹ One study found that the caregivers in poor Jamaican families are almost three times more likely to experience high levels of parental stress than the caregivers in families living above the poverty line.

The high levels of stress often caused the mothers to withdraw from positive interactions with their children and rely on violent punishment when disciplining their children. More than one fifth of Jamaican parents experiencing high levels of stress and having low interaction level with children rely on beating with an implement to discipline their young children.²³²

Violence has roots in childhood. Jamaica is a violent society and children and youth are particularly vulnerable to crime and violence. It is estimated that 68 of every 100,000 Jamaican children are victims of violent crime,²³³ and violence is among the leading causes of mortality and morbidity of children age 5 to 14 years.²³⁴ Corporal punishment in the home is still legal in Jamaica, despite decades of research that has shown that it is associated with increases in children's aggressive behaviours, poor quality parent-child relationships,

226 Ministry of Finance, "Estimates of Expenditure 2019 – 2020," mof.gov.jm/downloads/budgets/eoe/Estimates_of_Expenditure_2019-2020_1.pdf.

227 Ministry of Economic Growth and Job creation, "National Policy on Poverty."

228 Chris Patterson, "Children's Advocate Recommends Strategies to Keep Children off the Streets," Jamaica Information Services, November 7, 2013, <https://jis.gov.jm/childrens-advocate-recommends-strategies-keep-children-streets/>.

229 Ministry of Economic Growth and Job creation, "National Policy on Poverty."

230 Head of Child Labour Unit Sasha Deer-Gordon quoted in Corey Robinson, "'Culture of Begging' – Educators Accuse Parents Grooming Children to Work the Streets," *Gleaner*, January 19, 2020, <http://jamaica-gleaner.com/article/lead-stories/20200119/culture-begging-educators-accuse-parents-grooming-children-work>.

231 STATIN and UNICEF, Jamaica Multiple Indicator Cluster Survey (MICS)."

232 Heather Ricketts and Patricia Andersson, "The Impact of Poverty on the Interaction of Jamaican Caregivers with Young Children," *International Journal of Early Years Education* 16, no. 1 (March 2008): 61-74, <https://doi.org.10.1080/09669760801892276>.

233 CAPRI, "SitAn of Jamaican Children."

234 Smith and Ashiabi, "Poverty and Child Outcomes."

poor mental-health outcomes, juvenile delinquency, spousal abuse, and criminal activity in later life.²³⁵ The 2008 Jamaican Reproductive Health Survey found that among the total Jamaican population 42 percent of men and 36 percent of women reported hitting a child with a belt, stick, or other object as punishment.²³⁶

Young males from poor inner-city communities between 15 to 29 years of age are both the main victims and perpetrators of violent crime,²³⁷ and it is thought that many of them experienced violence in their childhoods. A 2019 study indicated that 46 percent of Jamaican inner-city youths involved in gangs were tortured by their caregiver when growing up. One of the main reasons for torture was the struggle to keep the boys from joining gangs. The study further revealed that nearly 70 percent of those who had killed someone reported being tortured, and all who had killed more than three persons were tortured by their mothers when growing up.²³⁸ According to the study's author, extreme disciplinary methods by some mothers is one of the main factors that push boys into a life a crime in Jamaica. He said: "Fifty-three percent of murders in Jamaica are done by someone who is a repeat killer, and repeat killers are [often] traumatised boys who come from traumatised mothers."²³⁹ Further, over 80 percent of repeat killers did not have a father present. These boys also did not get along well with their mothers.²⁴⁰

In Jamaica, as elsewhere, poverty is strongly associated with low educational attainment

These findings are supported by other studies that have shown that unfavourable parenting behaviours, such as maternal rejection, unstable or harsh behaviour, lack of parental supervision, and exposure to violence in childhood are among the best predictors of juvenile delinquency and violent youth behaviour.²⁴¹ In Jamaica, the main perpetrators of violence, the at-risk unattached males, are generally unemployed (in the formal sector), have low levels of educational attainment, and come from poor, crime-ridden communities.

In Jamaica, as elsewhere, poverty is strongly associated with low educational attainment. Educational attainment, in turn, is a protective factor against youth criminal engagement.²⁴² Children growing up in a household with a single mother and multiple siblings are likely to have limited resources to invest in each

child's education. The IMF has calculated the extra cost of sending a child to school (such as books, extra lessons, transportation, lunch, and uniforms) can be equivalent to as much as 40 percent of the per capita consumption of a female-headed household in Jamaica. Consequently, among the poorest population quintiles, only 73 percent of the children attend at least 19 days of school per month on average, compared to 94 percent at the top quintile.²⁴³

Being unwanted during pregnancy can thus adversely affect a child's life, and this negative effect may persist throughout to adulthood. Children born from unwanted pregnancies are more likely to have poorer health, suffer from disengaged or violent parental behaviour, and experience socioeconomic hardship. These adverse childhood experiences can lead to lower educational attainment, social exclusion, and delinquency. In Jamaica, as elsewhere, unwanted pregnancies are more common among young women from lower socio-economic backgrounds. Unwanted children born to young mothers not ready for parenthood exacerbates the cycle of intergenerational transmission of poverty and hampers the country's developmental prospects. Further, the unfavourable conditions in which these children grow up puts them at higher risk for criminal engagement, and consequently affects the country's crime rate.

235 Elisabeth Thompson Gershoff, "Corporal Punishment by Parents and Associated Child Behaviors and Experiences: a Meta-analytic and Theoretical Review," *Psychological Bulletin* 128, no. 4 (July 2002): 539-79, <https://doi.org/10.1037/0033-2909.128.4.539>.

236 Serbanescu et al, Reproductive Health."

237 Caribbean Policy Research Institute, Scamming, Gangs and Violence in Montego Bay," 2019, www.capricaribbean.org/documents/scamming-gangs-and-violence-in-montego-bay.

238 Herbert Gayle, The Ugly Truth: Most Repeat Killers Were Tortured by Their Caregivers," Viewpoints, October 30, 2019, <https://viewpointsja.com/the-ugly-truth-most-repeat-killers-were-tortured-by-their-caregivers/>.

239 "Growing Murderers," *Observer*, March, 7, 2019, www.jamaicaobserver.com/front-page/growing-murderers-scientist-points-to-abuse-of-boys-by-mothers-says-absence-of-fathers-not-a-factor_15882.

240 Hendricks, Sharlene, "Gayle: Hunger, Social Neglect Drives Violence," *Observer*, April, 7, 2019, http://301-joweb.newscyclecloud.com/news/gayle-hunger-social-neglect-drives-violence_161583?profile=1036.

241 Machteld Hoeve et al, "The Relationship Between Parenting and Delinquency: a Meta-analysis," *Journal of abnormal child psychology* 37, no. 6 (August 2009): 749-775, <https://doi.org/10.1007/s10802-009-9310-8>; Chelsea Weaver, John Borkowski, and Thomas Whitman, "Violence Breeds Violence: Childhood Exposure and Adolescent Conduct Problems," *Journal of community psychology*, 36, no. 1 (January 2008): 96-112, <https://doi.org/10.1002/jcop.20219>.

242 Observer, "Growing Murderers"; International Monetary Fund, "Jamaica: 2018 Article IV Consultation, Third Review Under the Stand-By Arrangement and Request for Modification of Performance Criteria-Press Release and Staff Report," IMF Country Report No. 18/103 - Jamaica, April 2018, www.imf.org/en/Publications/CR/Issues/2018/04/16/Jamaica-2018-Article-IV-Consultation-Third-Review-Under-the-Stand-By-Arrangement-and-Request-45801.

243 IMF, "Jamaica: 2018 Article IV Consultation."



8

The Economic Cost of Unwanted Childbearing in Jamaica



It is estimated that the public, social, and private cost of crime in Jamaica is

4%

OF ANNUAL GDP

The effects of the lack of access to safe and legal termination of pregnancy services can be measured in terms of their economic costs.

Economic Impact of a Reduction in Crime

Exposure to violence in childhood, poverty, and low educational attainment increase youths' vulnerability to violence and gang membership. These factors, combined with reduced economic opportunities for young people, create a vicious cycle of violence, crime, and low growth. Crime, violence, and the lack of human capital negatively affect economic growth by discouraging investment due to lower productivity, higher security costs, and reduced competitiveness.²⁴⁴ Private costs associated with crime in Jamaica are high. Jamaican firms reportedly lose nearly 8 percent of their annual sales due

to crime and security issues. The IMF has estimated that a 10 percent reduction in crime in tourism-dependent countries would be associated with an 8 percent growth in sales for firms, and a 2 percent growth in tourist arrivals.²⁴⁵

The financial cost of crime for the government and taxpayers is even higher. It is estimated that the public, social, and private cost of crime in Jamaica is 4 percent of annual GDP, which translates into a US\$630 million annual cost. Government spending is thus diverted from other investments that could spur economic growth, such as health, education, and productive infrastructure, and as such poverty is further aggravated. The IMF estimated in 2017 that if Jamaica reduced its homicide rates to the world average, GDP growth would be almost half a percentage point higher each year.²⁴⁶ However, even higher estimates have been given: one World Bank report posited that if Jamaica reduced its crime



Jamaican firms
lose nearly
8%
of their
annual sales
due to crime
and security issues

levels to those of Costa Rica, the annual increase in GDP growth could be up by 5 percentage points.²⁴⁷

If removing the legal restrictions on abortion had a similar effect on crime in Jamaica as it has been estimated to have in the U.S., in 15 to 20 years

²⁴⁴ IMF, "Jamaica: 2018 Article IV Consultation."

²⁴⁵ Heather Sutton, Laura Jaitman, and Jeetenda Khadan, "Violence in the Caribbean: Cost and Impact," In *Unleashing Growth and Strengthening Resilience in the Caribbean*, edited by Trevor Alleyne, Inci Ötoker, Uma Ramakrishnan and Krishna Srinivasan, Washington D.C: International Monetary Fund, 2017, www.elibrary.imf.org/doc/IMF071/24291-9781484315194/24291-9781484315194/Other_formats/Source_PDF/24291-9781484319253.pdf?redirect=true.

²⁴⁶ IMF, "Jamaica: 2018 Article IV Consultation."

²⁴⁷ World Bank, "World Development Report 2011: Conflict, Security and Development," Washington D.C: The World Bank, 2011, <http://documents1.worldbank.org/curated/en/966731468161352341/pdf/589880PUB0WDR0000public00BOX358355B.pdf>

Crime, violence, and the lack of human capital negatively affect economic growth by discouraging investment due to lower productivity, higher security costs, and reduced competitiveness.

Additionally, the 20% reduction in crime could be expected to increase firms' sales by **16%** and tourist arrivals by **4%**



Jamaica could start seeing a reduction in crime of 15 to 25 percent. Even with that reduction, Jamaica's crime rates would be considerably higher than the world average; in fact, to reach that, crime rates would have to decline by 85 percent. Even to reach Costa Rica's crime rate, crime would have to decline by over 70 percent.²⁴⁸ That notwithstanding, a 20 percent reduction in crime would still bring an annual saving of US\$126 million. Additionally, the 20 percent reduction in crime could be expected to increase firms' sales by 16 percent, and tourist arrivals by 4 percent. Since the new cohorts are born in to more favourable conditions, the crime rates would continue to decline, and consequently the annual cost of crime would continue to decrease and GDP growth to increase.

The Cost of Adolescent Childbearing

Adolescent childbearing comes with an economic cost for the mother, the child, and their family, for the father of the child and his family, for taxpayers, and for the society at large. In 2003, the World Bank estimated that the cost of adolescent pregnancies in Jamaica over the lifetime of one cohort is US\$60 million.²⁴⁹ The costs were estimated for mothers 15 to 19 years of age as compared to new mothers in their early twenties, and therefore it does not account for the total cost of young mothers raising children, but instead are additional costs that accrue when young women give birth in adolescence. The estimate includes both financial and economic costs. Financial costs are the sum of the additional health costs of adolescent mothers and their children, the value of government transfers, the expected financial costs of

crime committed by the children, and the cost of child support. Economic costs, in turn, are forgone tax revenues, and the forgone benefit of alternative uses of resources spent on health care, transfers, and criminality of adolescent mothers and/or their children.

The estimate also does not account for the private costs borne by the women themselves, their children, or families, and is thus an underestimation of the true economic burden of adolescent childbearing. Nor does it account for the forgone earning of the child of the teenage mother when the child reaches adulthood and enters the labour force with more limited educational attainment as compared to the child of an older mother.²⁵⁰ If the cost estimate was applicable today, after taking into account the reduction in adolescent fertility rate and inflation, the lifetime cost of the 2020 cohort of adolescent mothers would be US\$53 million.²⁵¹ The economic cost

248 In 2018 Jamaica's homicide rate was 43.9 / 100,000, the world average was 5.8 / 100,000, and Costa Rica's 11.3 / 100,000. United Nations Office on Drugs and Crime (UNODC), "Victims of International homicide, 1990-2018," <https://data.unodc.un.org/content/data/homicide/homicide-rate>.

249 Social financial cost USD 22.2 million and social economic cost USD 38 million.

250 World Bank, "Caribbean Youth Development: Issues and Policy Directions," World Bank Country Study, Washington, DC: World Bank, 2003, <https://openknowledge.worldbank.org/handle/10986/15165>.

251 In 2003 the adolescent fertility rate in Jamaica was 82/1000 and in 2018 51.3/1000. World Bank, "Adolescent fertility rate - Jamaica," accessed January 18, 2021, <https://data.worldbank.org/indicator/SP.ADO.TFRT?locations=JM>; US Inflation calculator. www.usinflationcalculator.com/



Ozphotoguy / Shutterstock.com

would account for US\$34 million, and the financial cost for US\$19 million.

While the number of teenage pregnancies can be reduced with adequate sex education, and by removing social, cultural, and policy barriers on access to and use of contraceptives, not all adolescent pregnancies can be prevented. Legal and affordable access to safe termination of pregnancy services, should unintended conception occur, can substantially reduce the number of unwanted births among young women. It is estimated that the legalization of abortion in the U.S. reduced teenage pregnancies by 8-12 percent. However, these estimates do not take into account whether abortion was legal for minors without parental involvement. Only some U.S. states allow abortion for a minor without either parental consent or notification, and teenage abortion rates are higher in those states.²⁵² One study estimated that in states where abortion was legalized and young women could

obtain an abortion without involving a parent, the likelihood of becoming a mother before age 19 declined by 34 percent.²⁵³

If removing the legal restrictions on abortion had a similar effect on the teenage pregnancy rates in Jamaica as it has had in the U.S., legalization of abortion would reduce the Jamaican adolescent fertility rate by 10 percent, and the lifetime cost per cohort of adolescent mothers would drop to US\$47 million. However, if Jamaica allowed abortion to minors without parental involvement, and the reduction was in line with the reduction in the U.S. (34 percent), then the lifetime cost per cohort of adolescent mothers would be reduced from US\$53 million to US\$35 million. That translates to an annual cost of US\$18 million for not allowing minors legal access to abortion. Even with the 34 percent reduction in teenage pregnancies, the adolescent fertility rate in Jamaica would be over three and half times larger than

the average rate in the European Union, where in most countries abortion services are readily available and affordable.²⁵⁴ If the Jamaican adolescent fertility rate mirrored that of Europe, the lifetime cost per cohort of adolescent mothers would be US\$8 million. In other words, failing to prevent teenage births costs Jamaica US\$45 million annually.

Women's inability to safely terminate an unwanted pregnancy can have real and long-lasting effects on the country's economic development. Particularly when young women (adolescents and teenagers) are unable to access safe abortions, they are more likely to become mothers before they are emotionally or financially ready; their education is often cut short which presents a disadvantage to their further advancement, and to their child's prospects; and the society bears the cost of their forgone economic output.

252 Melanie Guldi, "Fertility Effects of Abortion and Birth Control Pill Access for Minors," *Demography* 45, no.4 (November 2008): 817-827, <https://doi.org/10.1353/dem.0.0026>.

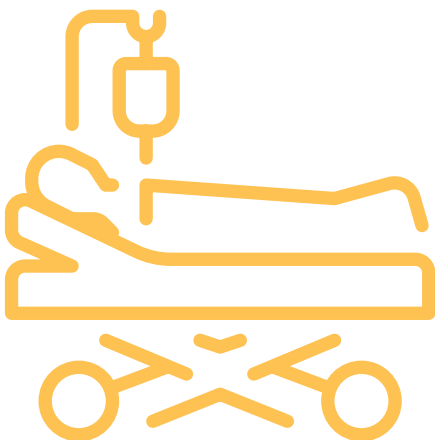
253 Caitlin Knowles Myers, "The Power of Abortion Policy: Reexamining the Effects of Young Women's Access to Reproductive Control," *Journal of Political Economy* 125, no. 6 (December 2017): 2178-2224, <https://doi.org/10.1086/694293>.

254 The average adolescent fertility rate in the European Union in 2018 was 9 / 1000. World Bank, "Adolescent fertility rate," accessed January 18, 2021, <https://data.worldbank.org/indicator/SP.ADO.TFRT?locations=EU>.



9

Conclusion and Recommendations



Given that up to

43%

of the complications in **early pregnancy**

may be due to attempted termination of pregnancy, the cost to Jamaican public health system is large.

When, in December 2020, Argentina legalized abortion up to 14 weeks gestation, it was the culmination of decades of feminist activism. Even though just two years before the Argentine senate narrowly voted against legalizing abortion, President Alberto Fernandez had promised in his 2019 election campaign to reintroduce it: “I am Catholic but I have to legislate for everyone,” he proclaimed. While Fernandez cited the provision of free and legal abortion as a matter of public health, some senators voted for women’s autonomy and freedom to make such a decision for themselves, according to their own conscience.²⁵⁵

The abortion debate and the move towards legalization of termination of pregnancy in Jamaica has been in train since the 1970s, and since then it has been opposed by religious groups and their spokespersons. Despite the consistent position of the state health authority, the Ministry of Health, that access to safe and legal abortion is a matter of public health and of women’s health, successive governments have allowed

vigorous opposition by religious groups to continue to forestall legislative change. Women’s (and other) groups that have publicly taken “pro-choice” positions largely advocate on abortion legalization as regards women’s health, and women’s human rights.

This report examines other consequences of the illegality of abortion in Jamaica, namely the costs incurred by women who do not have access to safe, legal termination of pregnancy services; by their families, including their existing children; by the children born to women who did not want them; and to the country as a whole in terms of the human capital losses that are incurred in several different ways. The study also brings more detailed evidence to the public health costs, beyond the generalizations that tend to accompany existing arguments in favour of legalization, in an attempt to bring a truer accounting of the economic costs of illegal abortion.

The study finds that the unlawfulness of safe termination of pregnancy in Jamaica has detrimental societal and individual

level outcomes, and those outcomes come with a considerable economic cost. Despite termination of pregnancy being illegal, it is estimated that up to 22,000 abortions are performed on the island each year. Since safe abortion services are not, in most cases, legally accessible, many of these abortions are unsafe, leading to complications or even death. The treatment of the complications burdens the public health system and consumes scarce medical resources that could be used for alternative health services. Given that up to 43 percent of the complications in early pregnancy may be due to attempted termination of pregnancy, the cost to Jamaican public health system is large. However, since unsafe abortions and the complications resulting from them are underreported, this cost, and the out-of-pocket expenses borne by the women and their households, cannot be estimated, but are certainly high. In addition to the costs related to the treatment of the complications, disability or death due to abortion-related complications incur indirect costs to households and to society, and these costs

²⁵⁵ “Argentina Abortion: Senate Approves Legislation in Historic Decision,” BBC World News, 30 December 2020, www.bbc.com/news/world-latin-america-55475036.

The abortion debate and the move towards legalization of termination of pregnancy in Jamaica has been in train since the 1970s, and since then it has been opposed by religious groups.



may transfer through the generations. These costs are largely borne by Jamaica's poorest and most vulnerable women, and their families, as women from the higher socio-economic quintiles are able to readily access safe abortions despite the illegality of the procedure. We estimate that only in terms of lost economic output, the complications resulting from unsafe abortions cost Jamaica US\$1.4 million annually. This estimate does not account for any long-term consequences to the children whose mother suffers from chronic illness, or who have lost a mother due to a complication from unsafe abortion.

While many women with unwanted an pregnancy seek to terminate the pregnancy by their own means, others are forced to carry the pregnancy to term either because they were not able to access an abortion, or their attempts to abort failed. Unwanted childbearing comes with immense costs for the mother, her other children, and for the unwanted child. It also exacts a cost that goes beyond the individual and her family: it can have a significant impact on a country's economic development. It reduces the potential human capital and the size and quality of the labour force. It increases public health spending and

welfare costs. It can affect crime rates, in response to which there is an increase in a country's spending on crime and security. It feeds the cycle of intergenerational poverty and low growth.

The lack of reliable data precludes a precise calculation of the magnitude of many of these negative outcomes, but based on our analyses we estimate that an additional US\$248 million could be added to Jamaica's annual economic output due only to an increase in innovation, and in the size of labour force, if women were legally able to choose whether or not to carry an unintended pregnancy to term. Additionally, we estimate that access to legal abortion might reduce Jamaica's crime rates by a fifth in a generation. Such a reduction in crime would bring an annual saving of US\$126 million. It would further increase firms' sales by 16 percent, and tourist arrivals by 4 percent. The crime rates would continue to decline since the children born after abortion legalization would be living in more favourable conditions, and consequently the annual cost of crime would continue to decrease and GDP growth to increase. We further estimate that abortion legalization would reduce teenage pregnancies by up to a third, depending on whether minors were allowed

to access abortion without parental consent or notification. That reduction would translate to an annual saving of US\$18 million. However, even with that reduction, the adolescent fertility rate in Jamaica would remain comparatively high. We estimate that the failure to prevent teenage births costs Jamaica US\$45 million annually. Although there is some overlap with these estimates, even a conservative estimate indicates that Jamaica could be losing over 2 percent of its annual GDP as a result of not allowing women to safely and legally terminate their unwanted pregnancies.

These conclusions are drawn from empirical evidence, and inform arguments that support legal abortion based on economics and societal good. Beyond that, we have shown that being denied an abortion makes families poorer and puts excessive strain on both women and children, poor women in particular. There is strong evidence that safe, legal abortion leads to improvements in women's economic wellbeing and health, strengthening their ability to care for existing children and allowing them to determine the timing and circumstances of future children.

Recommendations

While effective, affordable, and accessible family planning services and adequate sex education are crucial to improving women's sexual and reproductive health, not all unintended pregnancies can be prevented. Access to safe and affordable termination of pregnancy services would considerably reduce unsafe abortions and unwanted births, particularly among vulnerable women who now lack the access to safe abortion. Nevertheless, these recommendations are made acknowledging the raft of pre-existing, sustained, and repeated calls for improving women's access to contraception, and empowering women to exercise their autonomy to use contraception, and to not have sex against their will. Adolescents' access to scientifically accurate information about sexual and reproductive health and rights should be incorporated in comprehensive sex education in the Jamaican school curriculum is especially important. Finally, the relevant legislation should be amended to ensure that adolescents have access to affordable, modern contraceptive methods, including emergency contraception, without parental involvement. Having established this premise, the recommendations are:

1. **A secret conscience vote should be held in the Jamaican parliament to repeal sections 72 and 73 of the Offences Against Person Act, which criminalize attempts to procure abortion.** The legislation should be replaced with a law permitting medical termination of pregnancy upon request.

Abortion on request means that doctors are not required to attest to, or certify, the existence of a

particular reason or justification for the abortion. Women's requirement to explain why they are seeking to terminate a pregnancy undermines their autonomous decision-making, and adds unnecessary bureaucracy and discretion. There should be no mandatory waiting periods or required counselling. Mandatory waiting periods or counselling have no medical justification and make abortions less accessible by adding unnecessary delays in obtaining abortion care. Moreover, legal restrictions may deny some women access to safe termination of pregnancy services, and put their health and well-being at risk.

The abortion legislation should include mandatory quality post-abortion counselling and care, including family planning services.

The specifics of the new legislation should be informed by an evidence-informed debate as to whether there should be a cut-off gestational period. In general, termination of pregnancy should be performed at the earliest possible time of the gestation, preferably during the first 12 weeks. Abortions performed at early stage of the gestation are easier, safer and cost less, although even a second trimester abortion is generally a safe procedure when done in appropriate medical facilities. While termination of pregnancies over 24 weeks of gestation is generally not

recommended, there are situations that terminations are medically or otherwise advised.

The abortion legislation should include mandatory quality post-abortion counselling and care, including family planning services.

The vote should be secret to protect elected parliamentarians from fear of retribution by religious groups, some of whom have expressly stated their intention to mobilize against any elected official who votes to legalize abortion.

2. **Minors should be able to access reproductive health services, including abortion, without parental involvement.** The requirement of parental consent or notification may delay young women's abortion care leading to more risky and costlier late-term abortion procedures, or even cause the young women to resort to illegal or self-induced abortions in a fear of parental reactions. While studies have shown that the majority of the pregnant teens seeking to terminate the pregnancy tell their parents about the pregnancy, those who wish not to involve their parents may do it out of fear of abuse, fear of force to leave home, fear of disappointment, or a feeling of disconnectedness from their parents.²⁵⁶
3. **Termination of pregnancy services should be publicly funded to ensure that the women who are most economically vulnerable have access to them, and bearing in mind that the public costs of complications of abortion and/or of unwanted children is exponentially greater.**

256 Stanley Henshaw and Kathryn Kost. "Parental Involvement in Minors' Abortion Decisions," *Family Planning Perspectives* 24, no. 5 (September /October 1992): 196-213. <https://doi.org/10.2307/2135870>.



References

- Ananat, Elizabeth Oltmans, Jonathan Gruber, Phillip B. Levine, and Douglas Staiger. 2006. "Abortion and Selection," National Bureau of Economic Research. NBER Working Papers 12150. www.nber.org/papers/w12150.
- Angrist, Joshua D. and William N. Evans. 1996. "Schooling and Labour Market Consequences of the 1970 State Abortion Reforms." National Bureau of Economic Research. Working Paper 5406. www.nber.org/papers/w5406.pdf.
- Angrist, Joshua D. and Williams N. Evans. 1998. "Children and their parents' labor supply: Evidence from exogenous variation in family size." *The American Economic Review*, 88, no. 3 (February): 450–477. <https://doi.org/10.3386/w5778>.
- Altfeld, Susan, Arden Handler, Dee Burton, and Leatrice Berman. 1998. "Wantedness of pregnancy and prenatal health behaviors." *Women & Health* 26, no 4: 29-43. https://doi.org/10.1300/j013v26n04_03.
- Arceo-Gómez, Eva Olimpia and Raymundo M. Campos-Vázquez. 2011. "Teenage Pregnancy in Mexico: Evolution and Consequences." MPRA 44532, University Library of Munich, Germany, November. https://mpra.ub.uni-muenchen.de/44532/1/MPRA_paper_44532.pdf.
- Aworinde, Olufemi, Olumuyiwa Ogunlaja, Kehinde Olufemi-Aworinde, Victor Joel-Medewase, Kola Owonikoko, and Adeyemi Adewale. 2018. "Tackling Unsafe Abortion: A Public Health Perspective." *European Journal of Biomedical and Pharmaceutical Studies* 5, no. 4 (April): 95-99. www.ejbps.com/ejbps/abstract_id/4153.
- Azarnert, Leonid V. 2009. "Abortion and Human Capital Accumulation: A Contribution to The Understanding of the Gender Gap in Education." *Scottish Journal of Political Economy*, 56, no. 5 (October): 559-579. <https://doi.org/10.1111/j.1467-9485.2009.00498.x>
- Bahk Jinwook, Sung-Cheol Yun, Yu-mi Kim, Young-Ho Khan. 2015. "Impact of unintended pregnancy on maternal mental health: a causal analysis using follow up data of the Panel Study on Korean Children (PSKC)." *BMC Pregnancy Childbirth* 15, no. 85 (April). <https://doi.org/10.1186/s12884-015-0505-4>.
- Bailey, Martha J. 2006. "More Power to the Pill: The Impact of Contraceptive Freedom on Women's Life Cycle Labor Supply." *The Quarterly Journal of Economics*, 121, no. 1 (February): 289–320. <https://doi.org/10.1093/qje/121.1.289>.
- Bankole, Akinrinola, Susheela Singh and Taylor Haas. 1998. "Reasons Why Women Have Induced Abortions: Evidence from 27 Countries." *International Family Planning Perspectives* 24, no. 3 (September): 117-127, 152. www.guttmacher.org/sites/default/files/article_files/2411798.pdf.
- Barber, Jennifer, William Axinn, and Arland Thornton. 1999. "Unwanted Childbearing, Health, and Mother-Child Relationships." *Journal of Health and Social Behavior* 40, no. 3 (September): 231-257. <https://doi.org/10.2307/2676350>.
- Barmao-Kiptanui, Catherine, Jonah Nyaga Kindiki and Joseph Lelan. 2015. "Impact of Teenage Motherhood on the Academic Performance in Public Primary Schools in Bungoma County, Kenya." *International Journal of Educational Administration and Policy Studies*, 7, no 2 (March): 61–71. <https://doi.org/10.5897/IJEAPS2014.0383>.
- Barro, Robert. 2001. "Human Capital and Growth." *American Economic review* 91, no. 2 (May): 12-17. <https://doi.org/10.1257/aer.91.2.12>.
- Baumgartner, Joy Noel, Cynthia Waszak Geary, Heidi Tucker and Maxine Wedderburn. 2009. "The influence of early sexual debut and sexual violence on adolescent pregnancy: a matched case-control study in Jamaica." *International Perspectives on Sexual and Reproductive Health* 35, no. 1 (March): 21–28. <https://doi.org/10.1363/ifpp.35.021.09>.
- Beck, Allen, Darrel Gilliard, Lawrence Greenfeld, Caroline Harlow, Thomas Hester, Louis Jankowski, Tracy Snell, James Stephan, and

- Danielle Morton. 1993. "Survey of State Prison Inmates, 1991." Bureau of Justice Statistics Bulletin, NCJ 136949, March. www.bjs.gov/content/pub/pdf/SOSPI91.PDF.
- Bernstain, Anna, and Kelly Jones. 2019. "The Economic Effects of Abortion Access: A Review of the Evidence." Institute for Women's Policy Research. https://iwpr.org/wp-content/uploads/2020/07/B379_Abortion-Access_rfinal.pdf.
- Bhona, Fernanda Monteiro de Castro, Carla Ferreira de Paula Gebara, Ana Regina Noto, Marcel de Toledo Vieira and Lélío Moura Lourenço. 2019. "Socioeconomic Factors and Intimate Partner Violence: A Household Survey." *Trends in Psychology*, 27, no. 1 (November): 205-218. <https://doi.org/10.9788/tp2019.1-15>.
- Bishwajit, Ghose, Yaya Sanni. 2018. "Domestic Violence: A Hidden Barrier to Contraceptive Use Among Women in Nigeria." *Open Access Journal Contraception* 9 (January): 21-28. <https://doi.org/10.2147/OAJC.S154733>.
- Bloom, David and Davis Canning. 2003. "Contraception and the Celtic Tiger." *The Economic and Social Review* 34, no. 3 (Winter): 229-247. www.tara.tcd.ie/handle/2262/60947/.
- Bloom, David, David Canning, Günther Fink, and Jocelyn Finlay. 2009. "Fertility, Female Labor Force Participation, and the Demographic Dividend." *Journal of Economic Growth* 14 (May): 79-101. <https://doi.org/10.1007/s10887-009-9039-9>.
- Bourne, Paul, Denise Eldemire-Shearer, Tomlin Paul, Janet LaGrenade, and Christopher Charles. 2010. "Public and Private Health Care Utilization Differences Between Socioeconomic Strata in Jamaica." *Patient Relation Outcome Measures* 1 (September): 81-91. <https://doi.org/10.2147/PROM.S11868>.
- Bott, Sarah, Allesandra Guedes, Mary Goodwin and Jennifer Adams Mendoza. 2012. "Violence Against Women in Latin America and the Caribbean: A Comparative Analysis of Population-based Data from 12 Countries." Washington, DC: Pan American Health Organization. www.paho.org/hq/dmdocuments/2014/Violence1.24-WEB-25-febrero-2014.pdf.
- Bustan, Muhammad and Ann Coker. 1994. "Maternal Attitude Toward Pregnancy and the Risk of Neonatal Death." *American Journal of Public Health* 84, no. 3 (March): 411-4. <https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.84.3.411>.
- Caleb-Drayton, Vonna, Susanne Montgomery, Naomi Modeste, B. A. Frye-Anderson, and P. MvNeil. 2001. "The Impact of the Women's Centre of Jamaica Foundation Programme for Adolescent Mothers on Repeat Pregnancies." *The West Indian Medical Journal* 49, no. 4 (January): 316-26. www.researchgate.net/publication/12118900_The_impact_of_the_Women's_Centre_of_Jamaica_Foundation_Programme_for_adolescent_mothers_on_repeat_pregnancies.
- Caribbean Policy Research Institute. 2018. "UNICEF Situational Analysis of Jamaican Children – 2018." Kingston, Jamaica: CAPRI. www.unicef.org/jamaica/reports/situation-analysis-jamaican-children-2018.
- . 2019. "Scamming, Gangs and Violence in Montego Bay." Kingston, Jamaica: CAPRI. www.capricaribbean.org/documents/scamming-gangs-and-violence-in-montego-bay.
- Chalasani, Satvika, John Casterline, and Michael Koenig. 2007. "Consequences of Unwanted Childbearing: A Study of Child Outcomes in Bangladesh." *Paper presented at the annual meeting of Population Association of America, New York, 29-31 March, 2007*. <https://paa2007.princeton.edu/papers/71482>.
- Chao, Shiyun. 2013. "Jamaica's Effort in Improving Universal Access within Fiscal Constraints." UNICO Studies Series 6. World Bank. <http://documents1.worldbank.org/curated/en/408381468044133381/pdf/750050NWP0Box30n0Fiscal0Constraints.pdf>.
- Chiquero, Ana Nuevo. 2014. "The Labor Force Effects of Unplanned Childbearing." *Labour Economics* 29 (August): 91-101. <https://doi.org/10.1016/j.labeco.2014.07.006>.
- Christofides, Nicola, Rachel K. Jewkes, Kristin L. Dunkle, Frances McCarty, Nwabisa Jama Shai, Mzikazi Nduna, and Claire Sterk. 2014. "Risk Factors for Unplanned and Unwanted Teenage Pregnancies Occurring Over Two Years of Follow-up Among a Cohort of

- Young South African Women.” *Global Health Action* 7, article no. 23719 (August). <http://dx.doi.org/10.3402/gha.v7.23719>.
- Clark, Shelley, Jennifer Blum, Kelly Blanchard, Loren Galvao, Horace Fletcher, and Beverly Winikoff. 2002. “Misoprostol Use in Obstetrics and Gynecology in Brazil, Jamaica, and the United States.” *International Journal of Gynecology & Obstetric* 76, no. 1 (January): 65-74. [https://doi.org/10.1016/S0020-7292\(01\)00567-7](https://doi.org/10.1016/S0020-7292(01)00567-7).
- Crawford, Tazhmoye, Donovan McGrowder and Alexay Crawford. 2009. “Access to Contraception by Minors in Jamaica: A Public Health Concern.” *North American Journal of Medical Science* 1, no.5 (October): 247–255. <https://doi.org/10.4297/najms.2009.5247>.
- Crowell, Judith, Elizabeth O’Connor, Gretchen Wollmers, Joyce Sprafkin, and Uma Rao. 1991. “Mothers’ Conceptualizations of Parent-Child Relationships: Relation to Mother-Child Interaction and Child Behavior Problems.” *Development and Psychopathology* 3, no. 4 (October): 431–444. <https://doi.org/10.1017/S0954579400007616>.
- Cunningham, Wendy and Maria Correia. 2003. *Caribbean Youth Development: Issues and Policy Directions*. Washington, DC: World Bank. <https://doi.org/10.1596/0-8213-5518-X>
- Darlington, Kay-Anne, Tania Basta and Rafael Obregon. 2012. “Cross-generational Relationships in Rural Jamaica.” *Vulnerable Children and Youth Studies: An International Interdisciplinary Journal for Research, Policy and Care* 7, no. 2 (June): 1-11. <https://doi.org/10.1080/17450128.2011.647729>
- David, Henry, Zdenek Dytrych and Zdenek Matejcek. 2003. “Born Unwanted. Observations from the Prague Study.” *American Psychologist* 58, no. 3 (March): 224-9. <https://doi.org/10.1037/0003-066x.58.3.224>.
- David, Henry. 2006. “Born Unwanted, 35 Years Later: The Prague Study.” *Reproductive Health Matters* 14, no. 27 (May): 181-190. [https://doi.org/10.1016/S0968-8080\(06\)27219-7](https://doi.org/10.1016/S0968-8080(06)27219-7)
- De La Rochebrochard, Elise and Heather Joshi. “Children Born after Unplanned Pregnancies and Cognitive Development at 3 years: Social Differentials in the United Kingdom Millennium Cohort.” *American Journal of Epidemiology* 178, no 6. (September):910-20. <https://doi.org/10.1093/aje/kwt063>.
- Dibaba, Yohannes, Mesganaw Fantahun, and Michelle Hindin. 2013. “The Association of Unwanted Pregnancy and Social Support with Depressive Symptoms in Pregnancy: Evidence from Rural Southwestern Ethiopia.” *BMC Pregnancy Childbirth* 13, 135. <https://doi.org/10.1186/1471-2393-13-135>.
- Dodd, Jodie and Caroline Crowther. 2010. “Misoprostol for induction of labour to terminate pregnancy in the second or third trimester for women with a fetal anomaly or after intrauterine fetal death.” *Cochrane Database of Systematic Reviews* 4, art. no. CD004901 (April). <https://doi.org/10.1002/14651858.CD004901.pub2>.
- Dollar, David and Gatti Roberta. 1991. *Gender Inequality, Income, and Growth: Are Good Times Good for Women?* Washington, D.C.: The World Bank. Development Research Group/Poverty Reduction and Economic Management Network. <http://darp.lse.ac.uk/frankweb/courses/EC501/DG.pdf>.
- Donohue, John, and Steven Levitt. 2001. “The Impact of Legalized Abortion on Crime.” *Quarterly Journal of Economics* 116, no. 2 (February):379-420. www.researchgate.net/publication/24091736_The_Impact_Of_Legalized_Abortion_On_Crime.
- . 2004. “Further Evidence that Legalized Abortion Lowered Crime: A Reply to Joyce.” *Journal of Human Resources* 39, no. 1 (January):29-49. <https://ideas.repec.org/a/uwp/jhriss/v39y2004i1p29-49.html>.
- . 2008. “Measurement Error, Legalized Abortion, and the Decline in Crime: A Response to Foote and Goetz.” *Quarterly Journal of Economics* 123, no. 1 (February): 425-440. <https://doi.org/10.1162/qjec.2008.123.1.425>.
- . 2019. “The Impact of Legalized Abortion on Crime Over the Last Two Decades.” University of Chicago, Becker Friedman Institute for Economics Working Paper No. 2019-75 (May). <http://dx.doi.org/10.2139/ssrn.3391510>.
- East, Patricia. 1991. *The Parent-child Relationships of Withdrawn, Aggressive, and Sociable Children: Child and Parent Perspectives*.

Merrill-Palmer Quarterly, 37, no. 3 (July): 425–443.

Eggleston Elizabeth. 2000. "Unintended Pregnancy and Women's Use of Prenatal Care in Ecuador." *Social Science and Medicine* 51, no. 7 (October):1011-8. [https://doi.org/10.1016/s0277-9536\(00\)00010-1](https://doi.org/10.1016/s0277-9536(00)00010-1).

Florida, Richard. 2012. *The Rise of the Creative Class, Revisited*. New York: Basic Books.

Francesconi, Marco. 2008. "Adult Outcomes for Children of Teenage Mothers." *The Scandinavian Journal of Economics* 110, no. 1 (March): 93-117. <https://doi.org/10.1111/j.1467-9442.2008.00526.x>.

François Abel, Raul Magni Berton and Laurent Weill. 2014. "[Abortion and Crime: Cross-country Evidence from Europe](#)." *International Review of Law and Economics* 40 (October): 24-35. <https://doi.org/10.1016/j.irl.2014.08.001>.

Font-Ribera, Laya, Gloria Pérez, Joaquin Salvador, Carme Borrell. 2008. "Socioeconomic Inequalities in Unintended Pregnancy and Abortion Decision." *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 85, no. 1 (February): 125–135. <https://doi.org/10.1007/s11524-007-9233-z>.

Forssman, Hans and Inga Thuwe. 1966. "One Hundred and Twenty Children Born after Application for Therapeutic Abortion Refused: Their Mental Health, Social Adjustment and Educational Level up to the Age of 21." *Acta Psychiatrica Scandinavica* 42, no. 1 (March): 71-88. <https://doi.org/10.1111/j.1600-0447.1966.tb01915.x>.

Foster, Diana Greene, M. Antonia Biggs, Lauren Ralph, Caitlin Gerdts, Sarah Roberts, and M. Maria Glymour. 2018. "Socioeconomic Outcomes of Women Who Receive and Women Who Are Denied Wanted Abortions in the United States." *American Journal of Public Health* 108, no. 3 (March): 407-413. <https://doi.org/10.2105/AJPH.2017.304247>.

Diana Greene Foster, M. Antonia Biggs, Sarah Raifman, Jessica Gipson, Katrina Kimport, and Corinne Rocca. 2018. "Comparison of Health, Development, Maternal Bonding, and Poverty Among Children Born After Denial of Abortion vs After Pregnancies Subsequent to an Abortion." *JAMA Pediatrics* 72, no. 11 (November):1053–1060. <https://doi.org/10.1001/jamapediatrics.2018.1785>,

Foster, Diana Greene, Sarah Raifman, Jessica Gipson, Corinne Rocca and M. Antonia Biggs. 2019. "Effects of Carrying an Unwanted Pregnancy to Term on Women's Existing Children." *The Journal of Pediatrics*, 205 (February): 183-189.e1. <https://doi.org/10.1016/j.jpeds.2018.09.026>.

Gershoff, Elisabeth Thompson. 2002. "Corporal Punishment by Parents and Associated Child Behaviors and Experiences: A Meta-analytic and Theoretical Review." *Psychological Bulletin* 128, no. 4 (July):539-79. <https://doi.org/10.1037/0033-2909.128.4.539>.

González, Libertad, Sergi Jiménez-Martín, Natalia Nollenberger and Judit Vall Castello. 2018. "The Effect of Abortion Legalization on Fertility, Marriage, and Long-term Outcomes for Women." Working Papers 1035, Barcelona Graduate School of Economics. www.barcelonagse.eu/sites/default/files/working_paper_pdfs/1035.pdf.

Greenstone, Michael and Adam Looney. 2011. "Where is the Best Place to Invest \$102,000 — In Stocks, Bonds, or a College Degree?" June 25, 2011, The Brookings Institution. www.brookings.edu/research/where-is-the-best-place-to-invest-102000-in-stocks-bonds-or-a-college-degree/.

Grimes, David, Janie Benson, Susheela Singh, Mariana Romero, Bela Ganatra, Friday Okonofua, Iqbal Shah. 2006. "Unsafe abortion: the preventable pandemic." *The Lancet Sexual and Reproductive Health Series* 368, no. 9550 (November):1908-1919. [https://doi.org/10.1016/S0140-6736\(06\)69481-6](https://doi.org/10.1016/S0140-6736(06)69481-6).

Grogger, Jeffrey. 1997. "Incarceration-related Costs of Early Childbearing." In Saul D. Hoffman, and Rebacca A. Maynard (editors), *Kids Having Kids: Economic Costs and Social Consequences of Teen Pregnancy*, Urban Institute Press, Washington, DC.

Gruber, Jonathan, Phillip Levine and Douglas Staiger, 1999. "Abortion Legalization and Child Living Circumstances: Who is the 'Marginal Child?'" *The Quarterly Journal of Economics* 114, no. 1 (February): 263–291. <https://doi.org/10.1162/003355399556007>.

- Guldi, Melanie. 2008. "Fertility Effects of Abortion and Birth Control Pill Access for Minors." *Demography*, 45, no. 4 (November): 817–827. <https://doi.org/10.1353/dem.0.0026>.
- Haberland, Nicole. 2015. "The Case for Addressing Gender and Power in Sexuality and HIV Education: A Comprehensive Review of Evaluation Studies." *International Perspectives on Sexual and Reproductive Health* 41, no. 1 (March): 31–42. <https://doi.org/10.1363/4103115>.
- Hasstedt, Kinsey and Andrea Rowan. 2016. "Understanding Intimate Partner Violence as a Sexual and Reproductive Health and Rights Issue in the United States." *Guttmacher Policy Review* 19 (July): 37-45. www.guttmacher.org/gpr/2016/07/understanding-intimate-partner-violence-sexual-and-reproductive-health-and-rights-issue.
- Henshaw, Stanley, and Kathryn Kost. 1992. "Parental Involvement in Minors' Abortion Decisions." *Family Planning Perspectives* 24, no. 5 (September /October): 196-213. <https://doi.org/10.2307/2135870>.
- Herd, Pamela, Jenny Higgins, Kamil Sicinski, and Irina Merkurieva. 2016. "The Implications of Unintended Pregnancies for Mental Health in Later Life." *American Journal of Public Health* 106, no. 3 (March):421-429. <https://doi.org/10.2105/AJPH.2015.302973>.
- Herr, Jane Leber. 2007. "Does it Pay to Delay? Understanding the Effect of First Birth Timing on Women's Wage Growth." University of California, Berkeley, Job Market Paper (November). https://eml.berkeley.edu/~webfac/cbrown/e251_f07/Herr.pdf?origin=publication_detail?origin=publication_detail.
- Hjalmarsson, Randi, Andreea Mitrut and Cristian Pop-Eleches. 2019. "The Impact of Abortion on Crime and Crime-related Behaviour." NBER Working Paper No. 26024 (June.) www.nber.org/papers/w26024.
- Hofferth, Sandra. and Kristian Moore. 1979. "Early Childbearing and Later Economic Well-Being." *American Sociological Review* 44, no. 5 (October): 784-81. <https://pubmed.ncbi.nlm.nih.gov/533035/>
- Hoffman, Saul and Rebacca Maynard. 2008. "Kids Having Kids: Economic Costs and Social Consequences of Teen Pregnancy," Washington, DC.: Urban Institute Press.
- Hoeve, Machteld, Judith Semon Dubas, Veroni Eichelsheim, Peter van der Laan, Wilma Smeenk, and Jan Gerris. 2009. "The Relationship Between Parenting and Delinquency: A Meta-analysis." *Journal of Abnormal Child Psychology*, 37, no. 6 (August), 749–775. <https://doi.org/10.1007/s10802-009-9310-8>
- Hope Entreprises Ltd. 2008. 2008 HIV/AIDS Knowledge Attitudes and Behavior Survey, Jamaica. <https://caribbean.unfpa.org/en/publications/2008-hiv-aids-knowledge-attitudes-and-behavior-survey-jamaica-0>
- Hutchinson, Katherine., Eulalia Kahwa, Norman Waldron, Cerese Hepburn Brown, Pansy Hamilton, Hermi Hewitt, Joyette Aiken, Julie Cederbaum, Emily Alter, and Loretta Sweet Jemmott. 2012. "Jamaican Mothers' Influences of Adolescent Girls' Sexual Beliefs and Behaviors." *Journal of Nursing Scholarship* 44, no.1 (March): 27–35. <https://doi.org/10.1111/j.1547-5069.2011.01431.x>
- Inter-American Commission on Human Rights (IACHR). 2012. "Report on the Situation of Human Rights in Jamaica." August 10, 2012. www.oas.org/en/iachr/docs/pdf/Jamaica2012eng.pdf
- Iseyemi, Abigail, Qiuhong Zhao, Colleen McNicholas and Jeffrey Peipert. 2017. "Socioeconomic Status As a Risk Factor for Unintended Pregnancy in the Contraceptive CHOICE Project." *Obstetrics and Gynecology*, 130, no. 3 (September), 609–615. <https://doi.org/10.1097/AOG.0000000000002189>
- Jensen, Eric and Dennis Ahlburg. 2002. "Family Size, Unwantedness, and Child Health and Health Care Utilisation in Indonesia." *Bulletin of Indonesian Economic Studies* 38, no. 1 (February): 43-59. <https://doi.org/10.1080/000749102753620275>
- Johnson, Brooke, Mihai Horga and Peter Fajans. 2004. "A Strategic Assessment of Abortion and Contraception in Romania." *Reproductive Health Matters* 12 (sup24): 184-194. [https://doi.org/10.1016/S0968-8080\(04\)24023-X](https://doi.org/10.1016/S0968-8080(04)24023-X)
- Jones, Rachel and Jenna Jerman. 2017. "Population Group Abortion Rates and Lifetime Incidence of Abortion: United States, 2008–

- 2014.” *American Journal of Public Health* 107, no. 12 (December):1904-1909. <https://doi.org/10.2105/AJPH.2017.304042>.
- Joyce, Theodore and Michael Grossman. 1990. “Pregnancy Wantedness and the Early Initiation of Prenatal Care.” *Demography* 27, no. 1 (February): 1–17. <https://doi.org/10.2307/2061549>
- Joyce, Theodore, Robert Kaestner and Sanders Korenman. 2000. “The Effect of Pregnancy Intention on Child Development.” *Demography* 37, no. 1 (February): 83-94. <https://doi.org/10.2307/2648098>
- Kalist, David. 2004. “Abortion and Female Labor Force Participation: Evidence Prior to Roe v. Wade.” *Journal of Labor Research* 25, no. 3 (September): 503–14. <https://link.springer.com/article/10.1007/s12122-004-1028-3>
- Kearney Melissa, and Phillip Levine. 2009. “Socioeconomic Disadvantage and Early Childbearing.” In *The Problems of Disadvantaged Youth: An Economic Perspective*, edited by Jonathan Gruber. University of Chicago Press.
- Kennedy, Dasmine. 2017. “Jamaica’s Policy for the School Reintegration of School-Age Mothers: How Are We Doing and Where Do We Need to Go?” Center for Universal Education at Brookings. Echidna Global Scholars Program, Policy Brief (November). www.brookings.edu/wp-content/uploads/2017/11/dasmine-kennedy_final_20171101_web.pdf
- Kost Kathryn and Laura Lindberg. 2015. “Pregnancy Intentions, Maternal Behaviors, and Infant Health: Investigating Relationships with New Measures and Propensity Score Analysis.” *Demography* 52, no. 1 (February): 83-111. <https://doi.org/10.1007/s13524-014-0359-9>
- Levin, Carol, Daniel Grossman, Karla Berdichevsky, Claudia Diaz, Belkis Aracena, Sandra Garcia and Lorelei Goodyear. 2009. “Exploring the Costs and Economic Consequences of Unsafe Abortion in Mexico City Before Legalisation.” *Reproductive Health Matters* 17, no. 33 (June): 120-132. [https://doi.org/10.1016/S0968-8080\(09\)33432-1](https://doi.org/10.1016/S0968-8080(09)33432-1).
- Levine, David and Gary Painter. 2003. “The Schooling Costs of Teenage Out-of-Wedlock Childbearing: Analysis with a Within-School Propensity-Score-Matching Estimator.” *Review of Economics and Statistics* 85, no. 4 (February): 884-900. <https://doi.org/10.1162/003465303772815790>.
- Levine, Judith, Harold Pollack and Maureen Comfort. 2001. “Academic and Behavioral Outcomes Among the Children of Young Mothers.” *Journal of Marriage and Family* 63, no. 2 (May): 355–369. <https://doi.org/10.1111/j.1741-3737.2001.00355.x>.
- Lipman, Ellen Katholiki Georgiades and Michael Boyle. 2011. “Young Adult Outcomes of Children Born to Teen Mothers: Effects of Being Born During their Teen or Later Years.” *Journal of the American Academy of Child and Adolescent Psychiatry* 50, no. 3 (March): 232-241.e4. <https://doi.org/10.1016/j.jaac.2010.12.007>.
- Loeber Rolf, and Magda Stouthamer-Loeber. 1986. “Family Factors as Correlates and Predictors of Juvenile Conduct Problems and Delinquency.” *Crime and Justice* 7: 29-149. www.jstor.org/stable/1147516.
- Marseille, Elliot, Bruce Larson, Dhruv Kazi, James Kahn, Sydney Rosen. 2015. “Thresholds for the Cost-effectiveness of Interventions: Alternative Approaches.” *Bulletin World Health Organization* 93, no. 2 (February):118–124. <http://dx.doi.org/10.2471/BLT.14.138206>.
- Marston Cicely and John Cleland. 2003. “Do Unintended Pregnancies Carried to Term Lead to Adverse Outcomes for Mother and Child? An Assessment in five Developing Countries.” *Population Studies* 51, no. 1 (February): 77-93. <https://doi.org/10.1080/0032472032000061749>.
- Maxwell, Shakira. 2012. “Fighting a Losing Battle? Defending Women’s Reproductive Rights in Twenty-First Century Jamaica,” *Social and Economic Studies* 61, no. 3 (September): 95-115. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=223387.
- McCaw-Binns, Affette and Jashnet Mullings. 2012. “Epidemiological Surveillance of Maternal Mortality (1981-2012) Country: Jamaica.” www.msh.org/sites/default/files/gtr_casestudy_jamaica_eng.pdf.
- McCaw-Binns, Affette, Jashnet Mullings and Yvette Holder. 2015. “Vital Registration and Under-reporting of Maternal Mortality in

- Jamaica" *International Journal of Gynecology and Obstetrics* 128, no. 1 (January): 62-67. <https://doi.org/10.1016/j.ijgo.2014.07.023>.
- McCaw-Binns, Affette, LV Campbell, SS Spence. 2018. "The Evolving Contribution of Non-communicable Diseases to Maternal Mortality in Jamaica, 1998–2015: A Population-based Study." *International Journal of Gynecology and Obstetrics* 125, no. 10 (September):1254-126. <https://doi.org/10.1111/1471-0528.15154>.
- McNeil, Thomas, Erland Schubert, Elisabeth Cantor-Graae, M. Brossner, P. Schubert, and K. Henriksson. 2009. "Unwanted Pregnancy as a Risk Factor for Offspring Schizophrenia-spectrum and Affective Disorders in Adulthood: A Prospective High-risk Study." *Psychological Medicine* 39, no. 6 (June):957-965. <https://doi.org/10.1017/s0033291708004479>.
- Meade, Christina, Trace Kershaw, Jeanette Ickovics. 2008. "The Intergenerational Cycle of Teenage Motherhood: An Ecological Approach." *Health Psychology* 27, no. 4 (July):419-29. <https://doi.org/10.1037/0278-6133.27.4.419>.
- Metcalfe, Amy, Rachel Talavlikar, Beatrice du Prey and Suzanne Tough. 2016. "Exploring the Relationship Between Socioeconomic Factors, Method of Contraception and Unintended Pregnancy." *Reproductive Health* 13, article no. 28 (March). <https://doi.org/10.1186/s12978-016-0151-y>.
- Miller, Amalia. 2011. "The Effects of Motherhood Timing on Career Path." *Journal Population Economics* 24, no. 3 (July): 1071–1100. <https://doi.org/10.1007/s00148-009-0296-x>.
- Miller Sarah, Laura Wherry and Diana Greene Foster. 2020. "The Economic Consequences Of Being Denied An Abortion." National Bureau Of Economic Research, Working Paper 26662. www.nber.org/papers/w26662.
- Ministry of Economic Growth and Job Creation (Jamaica.) 2016. "National Policy on Poverty." National Poverty Reduction Programme, Green Paper (December). <https://opm.gov.jm/wp-content/uploads/2017/01/NATIONAL-POVERTY-POLICY-Green-Paper-December-2016-Public.pdf>.
- Mohr, Rebekah, Jose Carbajal and Bonita Sharma. 2019. "The Influence of Educational Attainment on Teenage Pregnancy in Low-Income Countries: A Systematic Literature Review." *Journal of Social Work in the Global Community* 4, no. 1 (December): 19–31. <https://doi.org/10.5590/JSWGC.2019.04.1.02>.
- Mølland, Eirin. 2016. "Benefits from Delay? The Effect of Abortion Availability on Young Women and Their Children." *Labour Economics* 43 (December): 6–28. <https://doi.org/10.1016/j.labeco.2016.06.011>.
- Montenegro, Claudio and Harry Anthony Patrions. 2014. "Comparable Estimates of Returns to Schooling Around the World." Policy Research Working Paper no. 7020, Washington DC: The World Bank. <https://openknowledge.worldbank.org/handle/10986/20340>.
- Murray Lynne, Peter Cooper and Alan Stein. 1991. "Postnatal Depression and Infant Development." *British Medical Journal* 302 (April): 978-979. www.ncbi.nlm.nih.gov/pmc/articles/PMC1669306/pdf/bmj00123-0008.pdf.
- Myers, Caitlin Knowles. 2017. "The Power of Abortion Policy: Reexamining the Effects of Young Women's Access to Reproductive Control." *Journal of Political Economy* 125, no. 6 (December): 2178-2224. <https://doi.org/10.1086/694293>.
- Myhrman, Antero. 1988. "The Northern Finland Cohort, 1966–82: A Follow-up Study of Children Unwanted at Birth," in: Henry P. David, Zdenek Dytrych, Zdenek Matejcek ,Vratislav Schuller (editors) *Born Unwanted: Developmental Effect of Denied Abortion*. New York: Springer.
- Myhrman, Antero, Päivi Olsén, Paula Rantakallio, Esa Läärä. 1995. "Does the Wantedness of a Pregnancy Predict a Child's Educational Attainment?" *Family Planning Perspectives* 27, no. 3 (May-Jun):116-9. <https://doi.org/10.2307/2136109>.
- Myhrman, Antero, Paula Rantakallio, Matti Isohanni, Peter Jones, and Ursula Partanen. 1996. "Unwantedness of a Pregnancy and Schizophrenia in the Child." *The British Journal of Psychiatry* 169, no. 5 (November): 637-640. <https://doi.org/10.1192/bjp.169.5.637>.
- Neufville, Zadie. 2009. "Jamaica: For an Abortion Law That Reaches the Poor." Inter Press Service, June, 14, 2009. www.ipsnews.com.

net/2009/06/jamaica-for-an-abortion-law-that-reaches-the-poor/.

Nihlwing, Linda. 2019. "The Impact of Abortion Reforms on Female Labour Force Participation and Education in Mexico." Lund University, School of Economics and Management. Student papers. <https://lup.lub.lu.se/student-papers/search/publication/8979948>.

OECD. 2012. "How does education affect the economy?" in *Education at a Glance 2012: Highlights*, OECD Publishing, Paris. https://doi.org/10.1787/eag_highlights-2012-15-en.

Omani-Samani, Reza, Mostafa Amini Rarani, Mahdi Sepidarkish, Esmaeil Khedmati Morasae, Saman Maroufizadeh and Amir Almasi-Hashiani. 2018. "Socioeconomic Inequality of Unintended Pregnancy in the Iranian Population: A Decomposition Approach." *BMC Public Health* 18, article no 607 (May). <https://doi.org/10.1186/s12889-018-5515-5>.

Ostry, Johnathan, Jorge Alvarez, Raphael Espinoza, and Chris Papageorgiou. 2018. "Economic Gains from Gender Inclusion: New Mechanisms, New Evidence." IMF Staff Discussion Note (October). www.weforum.org/agenda/2018/12/economic-gains-from-gender-inclusion-even-greater-than-you-thought/.

Prada, Elena, Isaac Maddow-Zimet and Fatima Juarez. 2013. "The Cost of Postabortion Care and Legal Abortion In Colombia." *International Perspectives on Sexual and Reproductive Health* 39, no. 3 (September):114–123. <https://doi.org/10.1363/3911413>.

Raine Adrian, Patricia Brennan and Sarnoff Mednick. 1994. "Birth Complications Combined With Early Maternal Rejection at Age 1 Year Predispose to Violent Crime at Age 18 Years," *Archives of General Psychiatry* 51, no. 12 (December): 984–988. <https://doi.org/10.1001/archpsyc.1994.03950120056009>.

Ralph, Lauren J., Jane Mauldon, M. Antonia Biggs, and Diana Greene Foster. 2019. "A Prospective Cohort Study of the Effect of Receiving versus Being Denied an Abortion on Educational Attainment." *Women's Health Issues* 29, no. (November): 455-464. <https://doi.org/10.1016/j.whi.2019.09.004>.

Rowan, Andrea. 2015. "Prosecuting Women for Self-Inducing Abortion: Counterproductive and Lacking Compassion." *Guttmacher Policy Review* 18, no. 3 (September): 70-76. www.guttmacher.org/gpr/2015/09/prosecuting-women-self-inducing-abortion-counterproductive-and-lacking-compassion#.

Räsänen Pirkko, Helinä Hakko, Matti Isohanni, Sheilag Hodgins, Marjo-Riitta Järvelin, Jari Tiihonen. 1999. "Maternal Smoking During Pregnancy and Risk of Criminal Behavior Among Adult Male Offspring in the Northern Finland 1966 Birth Cohort." *American Journal of Psychiatry* 156, no. 6 (June): 857-62. <https://doi.org/10.1176/ajp.156.6.857>.

Saphiro-Mendoza, Carrie, Beatrice J. Selwyn, David Smith and Maureen Sanderson. 2005. "Parental Pregnancy Intention and Early Childhood Stunting: Findings from Bolivia." *International Journal of Epidemiology* 34, no. 2 (May): 387-96. <https://doi.org/10.1093/ije/dyh354>.

Sarkar Narendra Nath. 2008. "The Impact of Intimate Partner Violence on Women's Reproductive Health and Pregnancy Outcome." *Journal of Obstetrics Gynaecology* 28, no. 3 (April): 266-271. <https://doi.org/10.1080/01443610802042415>.

Schwartz, Richard A. 1972. "The Social Effects of Legal Abortion." *American Journal of Public Health* 62, no. 10 (October): 1331-5. <https://doi.org/10.2105/ajph.62.10.1331>.

Sedgh Gilda and Rubina Hussain. 2014. "Reasons for Contraceptive Nonuse among Women Having Unmet Need for Contraception in Developing Countries." *Studies in Family Planning* 45, no. 2 (June): 151–169. <https://doi.org/10.1111/j.1728-4465.2014.00382.x>

Sen, Anindya. 2007. "Does Increased Abortion Lead to Lower Crime? Evaluating the Relationship between Crime, Abortion, and Fertility." *The B.E. Journal of Economic Analysis & Policy* 7, no. 1 (September): 1-38. <https://doi.org/10.2202/1935-1682.1537>.

Serbanescu F, Ruiz A, Suchdev DB. 2010. Reproductive Health Survey Jamaica 2008: Final Report. Atlanta, GA (USA) and Kingston,

- Jamaica. <https://evaw-global-database.unwomen.org/fr/countries/americas/jamaica/2008/reproductive-health-survey-jamaica-2008>.
- Shoesmith, Gary. 2017. "Crime, Teenage Abortion, and Unwantedness." *Crime & Delinquency* 63, no. 11 (October): 1458-1490. <https://doi.org/10.1177/0011128715615882>.
- Shuger, Lisa. 2012. "Teen Pregnancy and High School Dropout: What Communities are Doing to Address These Issues." Washington, DC: The National Campaign to Prevent Teen and Unplanned Pregnancy and America's Promise Alliance. www.colorincolorado.org/research/teen-pregnancy-high-school-dropout-what-communities-can-do-address-these-issues.
- Singh, Susheela, Jacqueline Darroch and Lori Ashford. 2014. "Adding It Up: The Costs and Benefits of Investing in Sexual and Reproductive Health 2014." New York: Guttmacher Institute. www.guttmacher.org/sites/default/files/report_pdf/addingitup2014.pdf.
- Singh, Susheela. 2010. "Global Consequences of Unsafe Abortion." *Women's Health* 6, no. 6 (November): 849-860. <https://doi.org/10.2217/WHE.10.70>.
- Smith, Delores and Godwin Ashiabi. 2007. "Poverty and Child Outcomes: Focus on Jamaican Youth." *Adolescence* 42, no. 168 (Winter): 837 - 58. <https://pubmed.ncbi.nlm.nih.gov/18229515/>.
- Smith, Delores. 2016. "Prevalence Of Intimate Partner Violence In Jamaica: Implications For Prevention And Intervention." *International Journal of Child, Youth and Family Studies* 7, no. 3-4 (August): 343-363. <https://doi.org/10.18357/ijcyfs73-4201616089>.
- Sonia Alexander. 2009. "Community Dental and Maternal Health Study, Jamaica: Does Oral Health Care in Pregnancy Make a Difference?" PhD dissertation, Mona: UWI.
- STATIN (Statistical Institute of Jamaica) and UNICEF (United Nations Childrens Fund). 2013. "Jamaica Multiple Indicator Cluster Survey (MICS)." Kingston, Jamaica: STATIN and UNICEF. https://mics-surveys-prod.s3.amazonaws.com/MICS4/Latin%20America%20and%20Caribbean/Jamaica/2011/Final/Jamaica%202011%20MICS_English.pdf.
- Stephenson, Rob, Michael Koenig, Rajib Acharya, and Tarun Roy. 2008. "Domestic Violence, Contraceptive Use, and Unwanted Pregnancy in Rural India." *Studies in Family Planning*, 39, no. 3 (August): 177-186. <https://doi.org/10.1111/j.1728-4465.2008.165.x>.
- Strakey, Marian. 2015. "Barriers to Effective Contraceptive Use." *Population Connection*, January 28, 2015 www.populationconnection.org/barriers-to-effective-contraceptive-use/.
- Sutton, Heather, Laura Jaitman and Jeetenda Khadan. 2017. "Violence in the Caribbean: Cost and Impact," In *Unleashing Growth and Strengthening Resilience in the Caribbean*, edited by Trevor Alleyne, Inci Ötker, Uma Ramakrishnan and Krishna Srinivasan. Washington DC: International Monetary Fund. www.elibrary.imf.org/doc/IMF071/24291-9781484315194/24291-9781484315194/Other_formats/Source_PDF/24291-9781484319253.pdf?redirect=true.
- Tang, Jennifer, Nathalie Kapp, Monica Dragoman, Joao Paulo de Souza. 2013. "WHO Recommendations for Misoprostol Use for Obstetric and Gynaecologic Indications." *International Journal of Gynecology & Obstetrics* 121, no. 2 (May): 186-189. <https://doi.org/10.1016/j.ijgo.2012.12.009>.
- Teixeira, Eliana, Maria De Lurdes Pinho, Ricardo Sarmento, Isabel Marques, Ana Paula Lopes. 2019. "Uterine Rupture Following Misoprostol Improper Use." *European Journal of Obstetrics and Gynecology and Reproductive Biology* 234 (March): E63-E64. <https://doi.org/10.1016/j.ejogrb.2018.08.295>.
- Than, Lara, Margaret Honein, Margaret Watkins, Paula Yoon, Katherine Lyon Daniel and Adolfo Correa. 2005. "Intent to Become Pregnant as a Predictor of Exposures During Pregnancy: Is There a Relation?" *The Journal of Reproductive Medicine* 50, no. 6 (July): 389-96. <https://pubmed.ncbi.nlm.nih.gov/16050563/>.
- Torres, Aida, Patricia Donovan, Nancy Dittes and Jacqueline Darroch Forrest. 1986. "Public Benefits and Costs of Government Funding for Abortion." *Family Planning Perspectives* 18, no. 3 (May-June): 111-8. <https://doi.org/10.2307/2135343>.

United Nations Population Fund. 2014. "UNFPA Operational Guidance for Sexuality Education: A Focus on Human Rights and Gender." New York: UNFPA. www.unfpa.org/publications/unfpa-operational-guidance-comprehensive-sexuality-education.

Upadhyay, Ushma D., M. Antonia Biggs, and Diana Greene Foster. 2015. "The effect of abortion on having and achieving aspirational one-year plans." *BMC Women's health* 15, article no. 102 (November). <https://doi.org/10.1016/10.1186/s12905-015-0259-1>.

Vauzelle, Catherine, Delphine Beghin, Marie-Pierre Cournot, Elisabeth Elefant. 2013. "Birth Defects after Exposure to Misoprostol in the First Trimester of Pregnancy: Prospective Follow-up Study," *Reproductive Toxicology* 36 (April): 98-103. <https://doi.org/10.1016/j.reprotox.2012.11.009>.

Vlassoff, Michael, Jessica Shearer, Damian Walker and Henry Lucas. 2008. "Economic Impact of Unsafe Abortion-Related Morbidity and Mortality: Evidence and Estimation Challenges." IDS Research Report 59, Institute of Development Studies (December). www.abortionresearchconsortium.org/reports/Rr59.pdf.

Vlassoff Michael, Damian Walker Jessica Shearer, David Newlands and Susheela Singh. 2009. "Estimates of Health Care System Costs of Unsafe Abortion In Africa and Latin America." *International Perspectives on Sexual and Reproductive Health* 35, no. 3 (September):114–121. <https://doi.org/10.1363/ipsrh.35.114.09>.

Vukojević, Mladenka, Ana Zovko, Ivana Talić, Merima Tanović, Biserka Rešić, Ivana Vrdoljak, and Bruno Splavski. 2017. "Parental Socioeconomic Status as a Predictor of Physical and Mental Health Outcomes in Children - Literature Review." *Acta Clinica Croatia* 56, no. 4 (December):742-748. <https://doi.org/10.20471/acc.2017.56.04.23>.

Watson Williams, Carol. 2018. "Women's Health Survey 2016 Jamaica: Final Report." Co-publication of the Statistical Institute of Jamaica, Inter-American Development Bank and the United Nations Entity for Gender Equality and the Empowerment of Women. <http://dx.doi.org/10.18235/0001170>.

Weaver, Chelsea, John Borkowski, and Thomas Whitman. 2008. "Violence Breeds Violence: Childhood Exposure and Adolescent Conduct Problems." *Journal of Community Psychology* 36, no. 1 (January): 96–112. <https://doi.org/10.1002/jcop.20219>.

Weller, Robert, Isaac Eberstein and Mohamed Bailey. 1987. "Pregnancy Wantedness and Maternal Behavior During Pregnancy." *Demography*, 24, no. 3 (Spring): 407-412. <https://doi.org/10.2307/2061306>.

Wodon, Quentin, Claudio Montenegro, Hoa Nguyen, Adenike Onagoruwa. 2018. "Missed Opportunities: The High Cost of Not Educating Girls." The Cost of Not Educating Girls Notes Series. World Bank, Washington, DC. www.worldbank.org/en/topic/education/publication/missed-opportunities-the-high-cost-of-not-educating-girls.

Woetzel, Jonathan, Anu Madgavkar, Kweilin Ellingrud, Eric Labaye, Sandrine Devillard, Eic Kutcher, James Mayika, Richard Dobbs, and Mekala Krishnan. 2015. "The Power of Parity: How Advancing Women's equality can add \$12 trillion to Global Growth." McKinsey Global Institute (September). www.mckinsey.com/featured-insights/employment-and-growth/how-advancing-womens-equality-can-add-12-trillion-to-global-growth.

World Bank. 2003. "Caribbean Youth Development: Issues and Policy Directions." World Bank Country Study, Washington, DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/15165>.

———. 2011. "World Development Report 2011: Conflict, Security and Development." The World Bank, Washington D.C. <http://documents1.worldbank.org/curated/en/966731468161352341/pdf/589880PUB0WDR0000public00BOX358355B.pdf>.

———. 2011. "Jamaica – Country Economic Memorandum: Unlocking Growth." World Bank Other Operational Studies 2756, The World Bank. <https://ideas.org/p/wbk/wbopr/2756.html>.

World Economic Forum. 2015. "Human Capital Report 2015." Employment, Skills and Human Capital Global Challenge Insight Report. <http://reports.weforum.org/human-capital-report-2015/the-human-capital-index>.

World Health Organization/London School of Hygiene and Tropical Medicine. 2010. "Preventing Intimate Partner and Sexual Violence

Against Women: Taking Action and Generating Evidence.” World Health Organization. www.who.int/violence_injury_prevention/publications/violence/9789241564007_eng.pdf?ua=1.

World Health Organization. 2005. “Report of a WHO Technical Consultation on Birth Spacing.” Geneva, Switzerland 13-15 June 2005. World Health Organization. www.who.int/maternal_child_adolescent/documents/birth_spacing05/en/.

———. 2011. “Unsafe Abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2008.” 6th Edition. World Health Organization. <https://apps.who.int/iris/handle/10665/44529>.

———. 2012. “Safe Abortion. Technical and Policy Guidance for Health Systems.” 2nd Edition. World Health Organization. www.who.int/reproductivehealth/publications/unsafe_abortion/9789241548434/en/.

———. 2014. “Ensuring Human Rights in the Provision of Contraceptive Information and Services. Guidance and Recommendations.” World Health Organization. www.who.int/reproductivehealth/publications/family_planning/human-rights-contraception/en/.

———. 2019. “High Rates of Unintended Pregnancies Linked to Gaps Family Planning Services: New WHO Study.” www.who.int/news-room/detail/25-10-2019-high-rates-of-unintended-pregnancies-linked-to-gaps-in-family-planning-services-new-who-study.

Appendix I

Benchmark rate

OECD

1. Iceland 0.24
2. Norway 0.26
3. Japan 0.27
4. New Zealand 0.28
5. Finland 0.29
6. Austria 0.36
7. Switzerland 0.38
8. Australia 0.38
9. Sweden 0.41
10. Italy 0.41
11. Slovenia 0.43
12. Estonia 0.47
13. Luxemburg 0.52
14. Czech Republic 0.55
15. Spain 0.55
16. U.K 0.56
17. France 0.57
18. Netherlands 0.57
19. Denmark 0.60
20. Germany 0.62
21. Canada 0.69
22. Slovakia 0.76
23. Portugal 0.76
24. Belgium 0.8
25. Lithuania 1.15
26. Hungary 1.12
27. Greece 1.45
28. Israel 1.5
29. United States 1.62
30. Latvia 1.71

OECD countries where abortion is illegal: Poland, Turkey, South Korea, Mexico, Chile, and Ireland (until 2018)

Coming to Terms The Social Costs of Unequal Access to Safe Abortions

To read any of our published reports in full,
please visit

www.capricaribbean.org/reports

Contact us at:

info@capricaribbean.org

or by telephone at

(876) 970-3447 or (876) 970-2910



**CARIBBEAN
POLICY
RESEARCH
INSTITUTE**