

Chapter 2: Structural Inequality and the Social Determinants of Unintended Pregnancy

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The following discussion considers unintended pregnancies, some of the circumstances that give rise to them, and some of the ways to prevent them. It purposely departs from the moral arguments and debates about procreation, contraception, and abortion that have so dominated the field of moral theology. There will be no theological or ethical scholarship brought to bear on the subject matter. The research presented is drawn in large part from the fields of health science and human development, much of it scientific, statistical, data-heavy. No Church teachings are quoted. Instead, global and country-level prevalence rates for unintended pregnancy and abortion are cited. Yet, the questions raised, and evidence presented about unintended pregnancy, are moral to the core.¹ Analysis of the social drivers of unintended pregnancy reveals that deep-seated structural inequalities create the context for women's experiences and decision-making concerning pregnancy and childbearing. The paper discusses the nature of these inequalities and their consequences for women's health and wellbeing.

The first part of the paper draws on the World Health Organization's conceptual framing of the social determinants of health to consider the nature of the structural inequalities implicated in unintended pregnancies. This theoretical section asks: What, precisely, is structural about structural inequality and how does structural inequality affect health outcomes?

¹ Essays within this collection that make Catholic theological arguments regarding this and similar data include Suzanne Mulligan, "Thinking about Reproductive Justice in Contexts of Violence," 148–174; Mary Lilian Akhere Ehidihamhen, "Reclaiming Women's Agency for Reproductive Justice in Nigeria Today," 310–333; and Virginia Saldanha, "Religio-Cultural Underpinnings of Gender and Reproductive Justice and Their Impact on Women's Agency in India," 391–410.

Subsequent sections consider the role of income level, access to contraception, gender inequality, and educational access and attainment on the incidence of unintended pregnancy. Since female empowerment can reduce the high number of unintended pregnancies, evidence is provided of what female empowerment means in practical terms for women and girls at risk of unintended pregnancies.

The Social Determinants of Health

Health and wellbeing—including reproductive health and wellbeing—are affected by where people live and the various economic, social, cultural, and politico-legal conditions that form the context for their lives. In medical parlance, these conditions are referred to as social determinants of health. The term determinant can be misleading. Determinants are not destiny; they are usually one of several factors that play a role in health.² Determinants of health increase or decrease the risk associated with health conditions. The role played by social factors is significant, often complex or subtle, and not always fully understood. Behavioural determinants play a more evident role in health. Behaviours (e.g., alcohol consumption) are greatly influenced by social context (social determinants) such as social attitudes, availability and access, legal and policy frameworks, religious rules, and so forth. Genetic inheritance, implicated in most diseases, is a major determinant of health risk and explains many population differences in susceptibility to disease. For example, genetic (not social) determinants explain why Africans are more likely than Europeans to develop sickle cell disease. Less obviously, the natural environment is also a health determinant; for instance, where soils lack iodine, inhabitants may become iodine deficient.

Social determinants of health refer to how life context has health consequences. The World Health Organization (WHO) frames this

² See also Kate Ward, “Never Just a Choice: Three Theoretical Approaches to Economic Constraints on Family Formation,” 55–89.

capacious concept as “the full set of social conditions in which people live and work.”³ Multiple aspects of existence come in for scrutiny under this framing. Male circumcision, a cultural practice prevalent in some countries and among certain religious groups, affords some health benefits, including improved genital hygiene and reduced risk of sexually transmitted infections for the circumcised and their sexual partners. Robert Hahn discusses the manufacture of iodised salt to show how society can improve health by deliberately addressing an environmental cause of iodine deficiency.⁴

More often, however, social determinants of health are invoked to draw attention to the harmful effects on health of aspects of social existence. Living in a fragile state, a conflict zone, or a heavily polluted area greatly imperils health and wellbeing. Those in sedentary occupations tend to be less fit and more vulnerable to certain health conditions than people with jobs requiring physical exercise. Child marriage, common in various regions and cultures, which disproportionately affects girls rather than boys, tends to early childbearing, creating various health risks for affected females and their pregnancies.⁵ Sub-Saharan Africa’s sky-high number of preventable maternal deaths compared to the rest of the globe is socially (rather than behaviourally, genetically, or environmentally) determined.⁶

WHO is invested in better understanding social determinants of health and their role in the causes, prevention, and treatment of health conditions. WHO adopts an intentionally broad description of the social determinants of health: “the non-medical factors that influence health

³ World Health Organization, “A Conceptual Framework for Action on the Social Determinants of Health,” 2010, 9, iris.who.int/handle/10665/44489.

⁴ Robert A. Hahn, “What is a Social Determinant of Health? Back to Basics,” *Journal of Public Health Research* 10, no. 4 (2021): 2, doi.org/10.4081/jphr.2021.2324.

⁵ World Health Organization, “Adolescent Pregnancy,” June 2, 2023, www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy; UNICEF, “Child Marriage,” July 2023, www.unicef.org/protection/child-marriage.

⁶ World Health Organization, “Trends in Maternal Mortality 2000 to 2020: Estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division,” 2023 www.who.int/publications/i/item/9789240068759.

outcomes. They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems.”⁷ Typically included in lists of social determinants of health are income level, employment status, occupation, educational attainment, gender, ethnicity/race, and class. Also significant are the social values, governance structures, and institutional arrangements that give shape, meaning and order to societies, such as global trade, national healthcare and welfare systems, and laws and policies such as gun, drug, and abortion laws, national speed limits, alcohol taxes, and smoking bans.

Health Inequity

The social determinants of health provide a framework for analysing local, national, and international differences in the health of individuals and groups along with their causes and remedies. When differential health outcomes are the consequence of social injustice or unfairness, these differences are termed health inequities. Health inequity is an inherently moral and evaluative term. In population health, the term health inequality is purely descriptive rather than moral. The distinction between health inequity and health inequality is clarified in the following definitions: “*Health inequality*: A generic term designating differences, variations, and disparities in the health of individuals and groups”; and “*Health inequity*: Those inequalities in health deemed to be unfair or to stem from some form of injustice.”⁸ According to WHO, “Health inequities are *avoidable* inequalities in health between groups of people within countries and between countries. These inequities arise from

⁷ World Health Organization, “Social Determinants of Health,” www.who.int/health-topics/social-determinants-of-health#tab=tab_1.

⁸ David A. Kindig, “Understanding Population Health Terminology” *The Milbank Quarterly* 85, no. 1 (2007): 149, doi.org/10.1111/j.1468-0009.2007.00479.x.

inequalities within and between societies.”⁹ WHO’s description of health inequities as avoidable reminds us that these human-induced, immoral inequalities can and should be remedied. Clearly, health inequities can only be overcome by tackling the social injustices and unfairness that generate them. There is always, therefore, a moral imperative attached to any attempt to understand the social drivers of health inequity.

WHO’s Commission on Social Determinants of Health (CSDH) was established to analyse and address the complex ways that multiple intersecting social factors—structural inequalities—give rise to health inequity. Its conceptual framing of the social determinants of health inequity is highly relevant for any discussion of the underlying causes of unintended pregnancy; it also offers valuable insights concerning the structural character of structural inequality.¹⁰ The Commission explicitly positions health inequities within the moral arena: “Identifying a health difference as inequitable . . . necessarily implies an appeal to ethical norms.”¹¹ It declares that “the guiding ethical principle for the CSDH is health equity, defined as the absence of unfair and avoidable or remediable differences in health among social groups.”¹² The CSDH’s stated objective, therefore, is “to advance health equity, driving action to reduce health differences among social groups, within and between countries.”¹³

WHO’s analysis of the social determinants of health inequity takes as its starting point a familiar pattern repeated the world over: the worst-off in society have the worst health and those who are well-off have the best health. WHO describes the stratifying effect of health inequities within

⁹ World Health Organization, “Social Determinants of Health: Key Concepts,” May 7, 2013, www.who.int/news-room/questions-and-answers/item/social-determinants-of-health-key-concepts.

¹⁰ On structural inequality in global health, see also *Prophet to the Peoples: Paul Farmer’s Witness and Theological Ethics*, ed. Jennie Weiss Block, M. Therese Lysaught, and Alexandre A. Martins (Eugene, OR: Pickwick Press, 2023).

¹¹ World Health Organization, “A Conceptual Framework,” 12.

¹² World Health Organization, “A Conceptual Framework,” 14.

¹³ World Health Organization, “A Conceptual Framework,” 9.

society as follows: “The poorest of the poor, around the world, have the worst health. Within countries, the evidence shows that in general the lower an individual’s socioeconomic position the worse their health. There is a social gradient in health that runs from top to bottom of the socioeconomic spectrum. This is a global phenomenon, seen in low, middle and high income countries.”¹⁴ The social gradient in health tracks the socioeconomic gradient that stratifies all societies. Social stratification is a consequence of the way society is organized, which, ultimately, is a reflection of what and who society values.

Social status and value are usually sedimented in social class divisions which, over time, are reinscribed, reorganized, or replaced as a consequence of what society as a whole (or what the most powerful in society) prizes and privileges, such as income level, occupation, educational attainment, gender, ethnicity/race, tribe, religion and so on. These class divisions and differing social identities lead to an ineluctable and often unacknowledged sorting and stratification process that ranks individuals and groups on the spectrum of haves and have-nots, those who are one-of-us and those who are not-of-us, creating social hierarchies of structural inequality. Part and parcel of social stratification is the relative amount of social, economic, and political leverage (i.e., social power) possessed by individuals and groups as compared to others situated on the socioeconomic gradient. The CSDH describes the consequences of social stratification as “the systematically unequal distribution of power, prestige and resources among groups in society.”¹⁵ The privileged have more collateral, greater leverage, greater social mobility, and better health than those who are disadvantaged, who generally lack the power, wherewithal, and mobility to change their circumstances. Groups that experience multiple intersecting forms of disadvantage are the most socially marginalized and disempowered; they lack collateral and have the worst health. “In essence,” states the CSDH, “health inequities are health

¹⁴ World Health Organization, “Social Determinants of Health.”

¹⁵ World Health Organization, “A Conceptual Framework,” 20.

differences that are socially produced, systematic in their distribution across the population, and unfair.”¹⁶ With this statement, it would appear that a signal characteristic of health inequities is identified, namely their predictable, socially stratified arrangement that is reproduced within and across all societies. The CSDH summarizes social stratification and its effects on health as follows: “Social contexts create social stratification and assign individuals to different social positions. Social stratification in turn engenders differential exposure to health-damaging conditions and differential vulnerability, in terms of health conditions and material resource availability. Social stratification likewise determines differential consequences of ill health for more and less advantaged groups (including economic and social consequences, as well differential health outcomes per se).”¹⁷ The health of any society and the health of different population groups within society reveal much about how that society is structured, its value system, who and what is privileged, where power is located, and where resources are directed. The mechanism of social stratification that patterns power and privilege within countries also operates at the international level, producing similar pecking orders of power and privilege and stratified health hierarchies between countries. Social inequity and health inequity go hand-in-hand everywhere, consistently and predictably, within countries and between them.

What Is an Unintended Pregnancy?

We now consider unintended pregnancy, focusing on four social determinants of unintended pregnancy to better understand their role as risk factors for unintended pregnancy and as potential pathways to its prevention. Pregnancy preferences and outcomes are generally described in binary terms: planned or unplanned; intended or unintended; wanted or unwanted. Such either/or categories cannot capture the spectrum of

¹⁶ World Health Organization, “A Conceptual Framework,” 12.

¹⁷ World Health Organization, “A Conceptual Framework,” 24.

possible (sometimes changing) dispositions (such as ambivalence, equanimity, and fatalism) towards future children that some may experience. However, yes/no categories are useful for generating internationally comparable measures of pregnancy intention, which can be further interpreted via a range of economic and human development indicators.

A planned pregnancy is one that is intended and wanted, where attention has likely been paid to the timing and spacing of children. An intended pregnancy is one that was wanted at the time and was almost certainly planned or at least anticipated. The terms planned pregnancy and intended pregnancy are often used synonymously, as are the terms unplanned pregnancy and unintended pregnancy. However, some couples who are open to procreation and/or trying for children resist the connotations associated with family planning. In surveys about future childbearing wishes, this openness to children whenever they arrive is often expressed in the response that a pregnancy is up to God.¹⁸

Not all pregnancies are wanted. They may be unwanted from day one, or circumstances may lead to a pregnancy becoming unwanted at a later stage. A pregnancy that was unwanted at the time of conception is described as unintended. Many but not all unwanted pregnancies end in abortion. Women may choose to go through with an unwanted pregnancy and keep the child or give it to others (such as via adoption). Infanticide is relatively rare. Wanted and unwanted pregnancies can occur unexpectedly. A wanted pregnancy that occurs unexpectedly is described as mistimed or earlier-than-intended. Mistimed pregnancies count as unintended. Unintended pregnancies, therefore, may be wanted or unwanted. The term unintended pregnancy is used to describe a pregnancy that was unwanted at the time the pregnancy occurred or one that was wanted but mistimed (earlier than planned). The standard

¹⁸ See Elizabeth Thomson, "Family Size Preferences," in *International Encyclopedia of the Social & Behavioral Sciences*, ed. James D. Wright, 2nd ed., vol. 8 (New York: Elsevier, 2015), 805–808, 806, dx.doi.org/10.1016/B978-0-08-097086-8.31064-9.

definition of an unintended pregnancy is: “A pregnancy that occurs to a woman who was not planning to have any (more) children, or that was mistimed, in that it occurred earlier than desired”; the definition of an unwanted pregnancy is: “A pregnancy that occurred when a woman did not want to have any children at all, or any more children.”¹⁹

What is the Global Prevalence of Unintended Pregnancy and Abortion?

Jonathan Bearak and colleagues investigated prevalence rates for unintended pregnancy and abortion for the period 1990–94 and 2015–19, producing the first-ever country-level estimates. The prevalence rate is a measure of the number of individuals experiencing a condition within a particular population at a specific point, or within a specific period of time. Unintended pregnancy and abortion rates are expressed in terms of the number of women having an unintended pregnancy or abortion per 1,000 women of reproductive age (age 15 to 49). Bearak and others’ findings show that unintended pregnancy and abortion are global phenomena and prevalence rates vary according to national context. In 2015–19, there were 121 million unintended pregnancies annually, equating to 48 percent of all pregnancies. This translates into an unintended pregnancy rate of 64 per 1,000 women of reproductive age (15–49 years) out of a total annual pregnancy rate of 133 per 1,000 women of reproductive age.²⁰ The country

¹⁹ United Nations Population Fund, “State of World Population 2022: Seeing the Unseen: The Case for Action in the Neglected Crisis of Unintended Pregnancy,” 2022, 6, www.unfpa.org/swp2022.

²⁰ Jonathan Bearak, Anna Popinchalk, Bela Ganatra, Ann-Beth Moller, Özge Tunçalp, Cynthia Beavin, Lorraine Kwok, Leontine Alkema, “Unintended Pregnancy and Abortion by Income, Region, and the Legal Status of Abortion: Estimates from a Comprehensive Model for 1990–2019,” *The Lancet Global Health* 8, no. 9 (2020): e1152–e1161, e1155; Supplementary Appendix, 9, [doi.org/10.1016/S2214-109X\(20\)30315-6](https://doi.org/10.1016/S2214-109X(20)30315-6).

estimates for unintended pregnancy rates vary enormously, ranging from 11 in Montenegro to 145 in Uganda.²¹

How many unintended pregnancies end in abortion? Bearak and team estimate that annually, in 1990–94, 25 percent of all pregnancies (51% of unintended pregnancies) ended in abortion, corresponding to an annual rate of 40 abortions per 1,000 women (15–49). In 2015–19, the proportion increased to 29 percent of all pregnancies (61% of unintended pregnancies), an annual total of 73.3 million abortions. Due to population growth, the annual abortion rate remained stable at 39 per 1,000 women (15–49).²² At country level, abortion rates also varied widely. Singapore had the lowest abortion rate (5), and Georgia the highest (80).²³ Bearak’s team did not investigate how marital status relates to the number of abortions. However, Gilda Sedgh and others’ earlier study of abortion incidence found that in the period 2010–14, 73 percent of all abortions were obtained by married women (27% by unmarried women).²⁴ Both studies found that, since 1990, abortion incidence has declined in Europe and Northern America, but not elsewhere.²⁵ Neither research team found

²¹ Jonathan Marc Bearak, Anna Popinchalk, Cynthia Beavin, Bela Ganatra, Ann-Beth Moller, Özge Tunçalp, Leontine Alkema, “Country-Specific Estimates of Unintended Pregnancy and Abortion Incidence: A Global Comparative Analysis of Levels in 2015–2019,” *BMJ Global Health* 7, no. 3 (2022): 1, dx.doi.org/10.1136/bmjgh-2021-007151.

²² Bearak, Popinchalk, Ganatra, Moller, Tunçalp, Beavin, Kwok, Alkema, “Unintended Pregnancy and Abortion by Income, Region, and the Legal Status of Abortion,” e1156–e1157; Supplementary Appendix, 9.

²³ Bearak, Popinchalk, Beavin, Ganatra, Moller, Tunçalp, Alkema, “Country-Specific Estimates of Unintended Pregnancy and Abortion Incidence,” 1.

²⁴ Gilda Sedgh, Jonathan Bearak, Susheela Singh, Akinrinola Bankole, Anna Popinchalk, Bela Ganatra, Clémentine Rossier, Caitlin Gerds, Özge Tunçalp, Brooke Ronald Johnson, Heidi Bart Johnston, Leontine Alkema, “Abortion Incidence Between 1990 and 2014: Global, Regional, and Subregional Levels and Trends,” *The Lancet* 388, no. 10041 (2016): 258–267, 258, doi.org/10.1016/S0140-6736(16)30380-4.

²⁵ Sedgh, Bearak, Singh, Bankole, Popinchalk, Ganatra, Rossier, Gerds, Tunçalp, Johnson, Johnston, Alkema, “Abortion Incidence between 1990 and 2014,” 258; Bearak, Popinchalk, Ganatra, Moller, Tunçalp, Beavin, Kwok, Alkema, “Unintended Pregnancy and Abortion by Income, Region, and the Legal Status of Abortion,” e1159.

that legal restrictions on abortion suppressed abortion rates. In countries where access to abortion is relatively unhindered, abortion rates were often lower than in countries where the legal status of abortion makes access more difficult.²⁶

Over the 30-year timespan of Bearak's study, unintended pregnancy rates declined from 79 to 64 per 1,000 women (age 15–49).²⁷ Yet, alarmingly, despite this downward trend, almost half of all pregnancies are unintended and mostly they end in abortion. Equally concerning is the wide variation in unintended pregnancy rates between countries. What factors are driving these disparities? Unintended pregnancies occur for a variety of reasons; their causes are multifactorial. Behavioral determinants clearly play a role. However, the large differences in country-level rates of unintended pregnancy indicate that social context exerts a major influence on the incidence of unintended pregnancy. In the words of Bearak and colleagues, country-level differences in rates of unintended pregnancy suggest “inequality in the ability to determine whether and when to have children.”²⁸ The underlying causes of these inequalities will be investigated by examining four social determinants of health: income level; access to contraception; gender inequality; and education.

²⁶ Sedgh, Bearak, Singh, Bankole, Popinchalk, Ganatra, Rossier, Gerdt, Tunçalp, Johnson, Johnston, Alkema, “Abortion Incidence between 1990 and 2014,” 258; Bearak, Popinchalk, Ganatra, Moller, Tunçalp, Beavin, Kwok, Alkema, “Unintended Pregnancy and Abortion by Income, Region, and the Legal Status of Abortion,” e1158–e1159.

²⁷ Bearak, Popinchalk, Ganatra, Moller, Tunçalp, Beavin, Kwok, Alkema, “Unintended Pregnancy and Abortion by Income, Region, and the Legal Status of Abortion,” e1152–e1161, e1155; Supplementary Appendix, 9.

²⁸ Bearak, Popinchalk, Beavin, Ganatra, Moller, Tunçalp, Alkema, “Country-Specific Estimates of Unintended Pregnancy and Abortion Incidence,” 9.

Identifying Twenty-Five Sample Countries for Discussion Purposes

It is not possible to discuss these four social determinants in the abstract. It is necessary to draw on country-level data that relates to income level, contraceptive access, gender inequality and educational access. For illustrative purposes, twenty-five countries have been selected for discussion, offering a snapshot of how social determinants of health play out across a wide geographical range: Africa (Cabo Verde, Democratic Republic of the Congo, Equatorial Guinea, Lesotho, Nigeria); Asia (India, the Philippines, Timor-Leste); Oceania (Papua New Guinea); South America (Argentina, Brazil, Chile, Colombia, Peru, Bolivarian Republic of Venezuela); Central America and Antilles (Dominican Republic, Mexico); North America (United States); Europe (Croatia, France, Germany, Italy, Poland, Portugal, Spain). The countries range in size and relative wealth and, in terms of magnitude and/or proportion are home to large Catholic communities. Most are majority Catholic nations. Together, the selected countries account for 986 million (71 percent) of the global population of 1.4 billion baptised Catholics.²⁹ Table 1 ranks the twenty-five countries in terms of Catholic population size, indicating, for each nation, the proportion of the population that is Catholic.

²⁹ Vatican Secretariat of State, *Statistical Yearbook of the Church 2022* (Vatican City: Libreria Editrice Vaticana, 2024). Baptism data correct as of 31 December 2022.

Table 1: Number of baptised Catholics (thousands) and proportion of the population that is Catholic (%) for 25 countries, ranked by size of Catholic population³⁰

Country	Number of baptised Catholics (thousands) 2022	Proportion of population that is Catholic (%) 2022
Brazil	180,965	84.2
Mexico	118,974	91.4
Philippines	92,851	83.2
United States	75,112	22.5
Italy	57,361	97.2
Democratic Republic of Congo	53,677	49.3
France	49,202	74.9
Colombia	48,374	93.6
Spain	44,229	93.3
Argentina	42,406	91.7
Poland	36,751	97.6
Nigeria	34,241	15.8
Peru	30,489	91.3
Venezuela	29,293	87.8
Germany	24,078	28.9
India	23,174	1.7
Chile	14,680	74.0
Dominican Republic	10,038	94.5
Portugal	9,098	87.9
Croatia	3,394	86.7
Papua New Guinea	2,522	30.6
Lesotho	1,486	63.2
Timor-Leste	1,439	96.0
Equatorial Guinea	1,165	74.8
Cabo Verde	627	94.2
WORLD	1,389,573	17.7

³⁰ Vatican Secretariat of State, *Statistical Yearbook of the Church 2022*.

Social Determinants of Unintended Pregnancy: Income Level

Income level—wealth or the lack thereof—is a major social determinant of health.³¹ Prior to discussing the effects of national income levels on unintended pregnancy rates, it is necessary to consider the relative income levels of the twenty-five sample countries and how income is distributed among the members of each nation. The World Bank uses four income groupings to classify countries according to the size of their economies: high-income; upper-middle-income; lower-middle-income and low-income. The classification is based on a comparative measure of a country's Gross National Income (GNI) per capita, which corresponds to the total income received from home or abroad by residents and businesses divided by the number of residents.³² Nine of the 25 countries are classed as high-income, seven are upper-middle-income, seven are lower-middle-income, one is low-income; Venezuela is unclassified.³³ The global average GNI per capita (2022) is estimated to be \$17,254; Liechtenstein has the highest GNI per capita (\$146,673), South Sudan the lowest (\$691). Of the 25 sample nations, the US is richest (\$65,565) and Democratic Republic (DR) of the Congo poorest (\$1,080). The disparity in income levels reflects the acute economic inequality that exists between countries.³⁴

To gain insights into inequalities that exist in the internal distribution of a nation's wealth, measures of income share are used. Increasing the

³¹ See World Health Organization, "A Conceptual Framework," 30–31.

³² Nada Hamadeh, Catherine van Rompaey and Eric Metreau, "World Bank Group Country Classifications by Income Level for FY24 (July 1, 2023–June 30, 2024)," *World Bank Data Blog*, June 30, 2023, blogs.worldbank.org/opendata/new-world-bank-group-country-classifications-income-level-fy24.

³³ World Bank, "World Bank Country and Lending Groups," 2023, datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.

³⁴ United Nations Development Programme, "Human Development Report 2023–24: Breaking the Gridlock: Reimagining Cooperation in a Polarized World," 2024, 274–277, hdr.undp.org/content/human-development-report-2023-24.

income share of the poorest 40 percent of the population is a Sustainable Development Goal target (SDG 10.1) relating to SDG 10: “Reduce inequality within and among countries,” while lifting people out of poverty corresponds to SDG 1: “End poverty in all its forms everywhere.”³⁵ In 11 of the 25 sample countries, the richest one percent of the population has a greater income share than the poorest 40 percent. In the Dominican Republic, Mexico, and Peru the richest one percent owns more than a quarter of the nation’s wealth.³⁶ In sub-Saharan Africa, many suffer from extreme poverty. Almost one-in-three people in Lesotho and Nigeria and two-thirds of the population of DR Congo live below the international poverty line of \$2.15 a day.³⁷ One-in-ten of the world’s female population lives on less than \$2.15 a day.³⁸ SDG target 8.5 aims, by 2030, to achieve equal pay for work of equal value for all women and men. In every country, women’s average earnings are less than those of men, highlighting the gendered (i.e., stratified) character of economic inequality. The estimated average annual GNI per capita value is \$12,516 for females and \$22,035 for males.³⁹ These economic indicators draw attention to the income inequalities that exist at international and national level and the scale of global poverty. The unjust distribution of wealth within and between countries has a major impact on the relative health of population groups.

How does national income level affect unintended pregnancies? Bearak’s team found “substantial differences” in unintended pregnancy

³⁵ See United Nations Department of Economic and Social Affairs, Statistics Division, “SDG Indicators Metadata Repository,” unstats.un.org/sdgs/metadata/.

³⁶ United Nations Development Programme, “Human Development Report 2023–24,” 283–287.

³⁷ United Nations Development Programme, “Human Development Report 2023–24,” 298–300.

³⁸ UN Women and United Nations Department of Economic and Social Affairs, “Progress on the Sustainable Development Goals: The Gender Snapshot 2023,” 2023, 8, www.unwomen.org/en/digital-library/publications/2023/09/progress-on-the-sustainable-development-goals-the-gender-snapshot-2023.

³⁹ United Nations Development Programme, “Human Development Report 2023–24,” 288–292.

rates between high-income and low-income countries.⁴⁰ Low-income countries had the highest average annual rates of unintended pregnancy (93 per 1,000 women aged 15–49), compared to middle-income and high-income averages of 66 and 34 respectively, showing that economic factors play a significant role in unintended pregnancy rates and that the distribution of unintended pregnancies is stratified across income groups.⁴¹ In general, women in low-income countries are the least able to avoid unwanted pregnancy and women in high-income countries the most able.⁴² In the case of abortion, no simple relationship exists between national income levels and abortion rates. Abortion rates are generally highest in middle-income countries, with some of the highest incidences in Asia.⁴³

Table 2 gives the World Bank income groupings and 2015–19 estimates for the average annual unintended pregnancy rate and the proportion of unintended pregnancies that end in abortion for women aged 15–49 in the twenty-five sample countries ranked by decreasing size of GNI per capita.⁴⁴ Spain has the lowest unintended pregnancy rate (20) and DR Congo the highest (117). The high-income economies of Europe and the US have appreciably lower rates of unintended pregnancy than the low-income and middle-income countries (LMICs) in the sample nations. For the proportion of unintended pregnancies that end in abortion, the picture is

⁴⁰ Bearak, Popinchalk, Ganatra, Moller, Tunçalp, Beavin, Kwok, Alkema, “Unintended Pregnancy and Abortion by Income, Region, and the Legal Status of Abortion,” e1159.

⁴¹ Bearak, Popinchalk, Ganatra, Moller, Tunçalp, Beavin, Kwok, Alkema, “Unintended Pregnancy and Abortion by Income, Region, and the Legal Status of Abortion,” e1155–e1156.

⁴² Bearak, Popinchalk, Ganatra, Moller, Tunçalp, Beavin, Kwok, Alkema, “Unintended Pregnancy and Abortion by Income, Region, and the Legal Status of Abortion,” e1160.

⁴³ Bearak, Popinchalk, Ganatra, Moller, Tunçalp, Beavin, Kwok, Alkema, “Unintended Pregnancy and Abortion by Income, Region, and the Legal Status of Abortion,” e1157; Bearak, Popinchalk, Beavin, Ganatra, Moller, Tunçalp, Alkema, “Country-specific Estimates of Unintended Pregnancy and Abortion Incidence,” 7.

⁴⁴ Data in columns 1 to 3 are more recent than in columns 4 and 5. Caution is therefore required interpreting data. Columns 2 and 3 are illustrative of general trends in how income group and gender inequality relate to unintended pregnancy rates.

more complex and interpretation of the data more difficult. Values range from 24 percent in Lesotho to 77 percent in India (one of the highest in the world). Europe and the US record some of the lowest annual percentages, though Italy's proportion is much higher (67%), exceeding the global average (61%). There is no apparent association between rates of unintended pregnancy and the proportion of unintended pregnancies that end in abortion. Nor is there an obvious correspondence between income levels and the percentage of unintended pregnancies that end in abortion. Also noteworthy, there is no association between the proportion of unintended pregnancies that end in abortion and the proportion of baptized Catholics in the population.

Social Determinant of Unintended Pregnancy: Access to Contraception

Access to healthcare, including reproductive healthcare, is socially determined.⁴⁵ Access to contraception and family planning services depends upon many social factors that vary from country to country, such as laws and policy frameworks, costs, availability and supply, the nature of the provider (state, donor, private sector), prevailing moral and social attitudes (e.g., husband or family pressure, social stigma), ease of travel to sources of supply, and so forth.⁴⁶ Family planning services typically include provision of information, advice, and the wherewithal to correctly use what, in medical parlance, are described as modern or traditional methods of family planning. Modern methods include female and male sterilization, intra-uterine devices, implants, injectables, oral contraceptive

⁴⁵ See World Health Organization, "A conceptual framework for action on the social determinants of health," 39–40; Robert A. Hahn, "What is a social determinant of health?," 3.

⁴⁶ See Stephanie Ann Puen, "Considerations for a Comprehensive Sex Education Grounded in Catholic Social Thought for Reproductive Justice in the Philippines," 237–256, in this volume.

Table 2: World Bank income grouping (2024), Gender Inequality Index ranking (2022), estimated annual unintended pregnancy rate (2015–19), and percentage of unintended pregnancies ending in abortion (2015–19) for 25 countries ranked by Gross National Income per capita (2022)

Country (ranked by Gross National Income per capita (2017 PPP \$, 2022) ⁴⁷	World Bank country classification by income level (financial year 2023–2024) ⁴⁸	Gender Inequality Index rank 2022 ⁴⁹	Average annual number of unintended pregnancies per 1,000 women (aged 15–49), 2015–2019 ⁵⁰	Average annual proportion (%) of unintended pregnancies ending in abortion, 2015–2019 ⁵¹
United States	High	44	35	34
Germany	High	19	21	27
France	High	24	29	50
Italy	High	14	28	67
Spain	High	15	20	43
Portugal	High	21	21	32
Poland	High	31	29	37
Croatia	High	25	33	50
Chile	High	49	70	52
Argentina	Upper-middle	71	69	48
Mexico	Upper-middle	84	60	51
Dominican Republic	Upper-middle	107	84	44
Colombia	Upper-middle	95	63	43

⁴⁷ United Nations Development Programme, *Human Development Report 2023-24: Breaking the Gridlock: Reimagining Cooperation in a Polarized World* (New York: United Nations Publications, 2024), 274–277, hdr.undp.org/content/human-development-report-2023-24.

⁴⁸ World Bank, ‘World Bank Country and Lending Groups’, 2024, datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.

⁴⁹ United Nations Development Programme, *Human Development Report 2023–24*, 293–297

⁵⁰ Data extracted from Guttmacher Institute Data Center, “Pregnancies”, data.guttmacher.org/countries.

⁵¹ Data extracted from Guttmacher Institute Data Center, “Pregnancies.”

Brazil	Upper-middle	94	67	48
Peru	Upper-middle	85	90	48
Equatorial Guinea	Upper-middle	..	..	..
Philippines	Lower-middle	92	71	51
Cabo Verde	Lower-middle	75	102	49
India	Lower-middle	108	62	77
Venezuela	Unclassified	134	..	..
Nigeria	Lower-middle	165	68	48
Papua New Guinea	Lower-middle	151	80	46
Lesotho	Lower-middle	141	99	24
Timor-Leste	Lower-middle	103	50	68
Democratic Republic of Congo	Low	152	117	28
World	n/a	n/a	64	61

pills, male and female condoms, vaginal barrier methods (including the diaphragm, cervical cap and spermicidal foam, jelly, cream and sponge), the lactational amenorrhea method, and emergency contraception. Traditional methods refer, chiefly, to withdrawal and rhythm (fertility awareness-based methods, periodic abstinence).⁵²

There are 1.9 billion women of reproductive age, of whom 966 million use family planning to postpone or prevent pregnancy. The vast majority (874 million) use modern methods. A small minority (92 million) use

⁵² United Nations Department of Economic and Social Affairs, Population Division, “World Family Planning 2022: Meeting the changing needs for family planning: Contraceptive use by age and method,” 4 UN DESA/POP/2022/TR/NO. 4, 2022, desapublications.un.org/publications/world-family-planning-2022-meeting-changing-needs-family-planning-contraceptive-use. Terminology (“modern”, “traditional”, “contraceptive”) can be misleading and/or divisive. Health scientists categorise rhythm as contraceptive. Barrier methods (classed as modern) have been used for millennia. Supposedly traditional fertility awareness-based methods were developed in the mid-twentieth century and often require use of modern equipment and/or technology.

traditional methods.⁵³ Female sterilization accounts for 219 million (22.9%) of the 966 million contraceptive users, making it the most commonly used form of contraception. Almost half of all sterilized women live in India.⁵⁴ Female sterilization is also prevalent in (Catholic majority) Puerto Rico, Mexico, El Salvador, Colombia, Dominican Republic, and Nicaragua.⁵⁵ The once-and-done permanency of sterilization and its minimal side-effects make it a popular choice among older women who have completed childbearing.⁵⁶ The low cost of sterilization also makes it an attractive option for poorer populations who might otherwise have to pay for a regular supply of contraceptives.⁵⁷ Once the mainstay of large-scale state-sponsored family planning programs, the preference now is for long-acting reversible methods.⁵⁸ The traditional methods of withdrawal and rhythm, that rely for their effectiveness on the willing cooperation of the male partner, are generally less popular and less reliable than most modern methods.⁵⁹ Take-up is low across all regions, accounting

⁵³ United Nations Department of Economic and Social Affairs, Population Division, "World Family Planning 2022," i, 34, 2022, desapublications.un.org/publications/world-family-planning-2022-meeting-changing-needs-family-planning-contraceptive-use.

⁵⁴ United Nations Department of Economic and Social Affairs, Population Division, "World Family Planning 2022," 18. See also Virginia Saldanha, "Religio-Cultural Underpinnings of Gender and Reproductive Injustice and Their Impact on Women's Agency in India," in this volume.

⁵⁵ United Nations Department of Economic and Social Affairs, Population Division, "World Contraceptive Use 2022," www.un.org/development/desa/pd/data/world-contraceptive-use.

⁵⁶ United Nations Department of Economic and Social Affairs, Population Division, "World Family Planning 2022," 18.

⁵⁷ Mieke C. W. Eeckhaut and Megan M. Sweeney, "The Perplexing Links Between Contraceptive Sterilization and (Dis)advantage in Ten Low-Fertility Countries," *Population Studies* 70, no. 1 (2016): 39–58, doi.org/10.1080/00324728.2015.1122209.

⁵⁸ The history of the practice of female (and male) sterilization is replete with examples of disregard for human rights and ethical norms, including compulsory sterilization of vulnerable populations on racist and eugenicist grounds. Coercion, lack of consent and non-disclosure of the permanency of the procedure remain widespread: United Nations Population Fund, "State of World Population 2022: Seeing the Unseen," 102–103.

⁵⁹ United Nations Population Fund, "State of World Population 2022: Seeing the Unseen," 58–59; Mohamed M. Ali, John G Cleland, Iqbal H Shah, World Health Organization,

for less than 10 percent of contraceptive use. Withdrawal is used by 53 million couples worldwide (5.5% of users); 33 million use rhythm (3.5%).⁶⁰ Of our 25 countries, Peru (14%), Poland (12%), DR Congo (7.9%) and the Philippines (3.6%) register above average use of rhythm. Italy's prevalence rate for all traditional methods is 13.3 percent.⁶¹ Globally, use of traditional methods is declining.⁶²

The availability (and therefore use) of contraceptive methods varies from country to country. In some countries, modern methods are not widely available. In others, there are many available methods, providing greater choice and alternatives that women can switch to for reasons of health, convenience, etc. National family planning programmes or foreign donors sometimes promote one method over others, limiting women's choice of methods. Country-wide prevalence rates for each contraceptive method are tracked annually. Out of the 21 sample countries for which data is available, the pill is the most commonly used form of contraception in Argentina, Brazil, Cabo Verde, Chile, Equatorial Guinea, the Philippines, and Portugal. Female sterilization is preferred in Colombia, Dominican Republic, India, Mexico, and the US. Injectables are the most popular method in Lesotho, Papua New Guinea, Peru, and Timor-Leste. The male condom is the most prevalent method in Italy, Poland, and Spain. Implants are the most used method in Nigeria. In DR Congo, rhythm is the most widely used form of family planning.⁶³

"Causes and consequences of contraceptive discontinuation: evidence from 60 demographic and health surveys," 2012, iris.who.int/handle/10665/75429.

⁶⁰ United Nations Department of Economic and Social Affairs, Population Division, "World Family Planning 2022," 17–18.

⁶¹ United Nations Department of Economic and Social Affairs, Population Division, "World Contraceptive Use 2022."

⁶² United Nations Department of Economic and Social Affairs, Population Division, "World Family Planning 2022," 21.

⁶³ United Nations Department of Economic and Social Affairs, Population Division, "World Contraceptive Use 2022." Recent data unavailable for Croatia, France, Germany, Venezuela.

Universal access to sexual and reproductive healthcare by 2030 is a specific SDG target (3.7).⁶⁴ Currently, however, 164 million (8%) of the 1.9 billion women of reproductive age have an unmet need for family planning.⁶⁵ Unmet need is defined as the percentage of married or in-union women of reproductive age (15–49 years) “who are fecund and sexually active, who wish to stop or delay childbearing, but who are not using any form of contraception.”⁶⁶ Regionally, Oceania (excluding Australia and New Zealand) and sub-Saharan Africa have the highest unmet need and the lowest use of modern methods of family planning.⁶⁷ 12 of our sample countries record an unmet need for contraception: Peru (6%); Colombia (7%); US (7%); Mexico (11%); Argentina (13%); Dominican Republic (15%); Lesotho (16%); Philippines (17%); Nigeria (19%); Timor-Leste (25%); Papua New Guinea (26%); DR Congo (29%).⁶⁸ The six poorest nations have the highest unmet need and some of the highest unintended pregnancy rates out of the 12 countries.

Demand for family planning varies by country. In high fertility countries, where there is a preference for large families or where couples are open to children whenever they arrive (e.g., Chad, Niger, Burkina Faso), the unintended pregnancy risk and demand for family planning is low. In low-fertility countries, where there is a preference for smaller families, couples must avoid pregnancy for extended periods if they are to achieve their desired family size. In these countries, demand for family

⁶⁴ United Nations Department of Economic and Social Affairs, Statistics Division, “SDG Indicators Metadata Repository.”

⁶⁵ United Nations Department of Economic and Social Affairs, Population Division, “World Family Planning 2022,” 4.

⁶⁶ United Nations Department of Economic and Social Affairs, Population Division, “World Family Planning 2022,” 4.

⁶⁷ United Nations Department of Economic and Social Affairs, Population Division, “World Family Planning 2022,” 6.

⁶⁸ United Nations Department of Economic and Social Affairs, Population Division, “World Contraceptive Use 2022.”

planning is high because the risk of an unintended pregnancy is high.⁶⁹ In recent decades, across all continents, the desire for smaller families has grown, as reflected in falling birthrates.⁷⁰ Additionally, increasing numbers of women are delaying childbearing to pursue education and careers.⁷¹ As a consequence, increasing numbers of women are at risk of unintended pregnancy, leading to an increased demand for family planning. Despite the push-factors expected to increase rates of unintended pregnancy, Bearak's team found that over the last three decades rates declined, showing that the increased demand for contraception was in large part satisfied: "More people than ever, as a proportion of the population who are at reproductive age, were able to limit or space their childbearing."⁷² That is to say, unintended pregnancy rates declined because access to contraception increased.⁷³

Bearak's study also found an inverse relationship between national income levels and rates of unintended pregnancy. This income-dependent gradient in unintended pregnancy rates suggests that unmet need is not distributed equally across those population groups with a demand for contraception: the burden is disproportionately located in low-income, and to a lesser degree in middle-income, countries. The wider availability of contraceptives in high-income countries (greater met need) contributes

⁶⁹ See John Bongaarts and John B. Casterline, "From Fertility Preferences to Reproductive Outcomes in the Developing World," *Population and Development Review* 44, no. 4 (2018): 793–809, doi.org/10.1111/padr.12197.

⁷⁰ See GBD 2021 Fertility and Forecasting Collaborators, "Global Fertility in 204 Countries and Territories, 1950–2021, with Forecasts to 2100: A Comprehensive Demographic Analysis for the Global Burden of Disease Study 2021," *The Lancet*, March 20, 2024, doi.org/10.1016/S0140-6736(24)00550-6.

⁷¹ Global Burden of Disease 2017 Population and Fertility Collaborators, "Population and Fertility by Age and Sex for 195 Countries and Territories, 1950–2017: A Systematic Analysis for the Global Burden of Disease Study 2017," *The Lancet* 392 (2018), 1995–2051, 2007, doi.org/10.1016/S0140-6736(18)32278-5.

⁷² Bearak, Popinchalk, Ganatra, Moller, Tunçalp, Beavin, Kwok, Alkema, "Unintended Pregnancy and Abortion by Income, Region, and the Legal Status of Abortion," e1159.

⁷³ Bearak, Popinchalk, Ganatra, Moller, Tunçalp, Beavin, Kwok, Alkema, "Unintended Pregnancy and Abortion by Income, Region, and the Legal Status of Abortion," e1152.

to the lower rates of unintended pregnancy compared to LMICs, where greater barriers exist to accessing contraceptive services. Economic inequality between countries creates inequality in access to contraception, leading to the national income-related gulf in unintended pregnancy rates. On the link between economic and health inequity, Bearak and others comment: “Our findings suggest that people in high-income countries have better access to sexual and reproductive health care than those in low-income countries These findings emphasise the importance of ensuring access to the full spectrum of sexual and reproductive health services, including contraception and abortion care, and for additional investment towards equity in health-care services.”⁷⁴ Universal access to sexual and reproductive health services would reduce the high rates of unintended pregnancy and help address income-related health inequity.

Social Determinant of Unintended Pregnancy: Gender Inequality

Gender inequality is one of the most ubiquitous and enduring of all social injustices, present from womb to tomb, in every nation, throughout every stratum of human existence. It is baked into the structure of all societies; part of the social stratification process that positions people on account of their relative power and assumed value and worth. The interstitial social nature of gender inequality and its systematic expression in forms of gender discrimination is taken up by the CSDH in its discussion of the linkages between gender inequity and health inequity. “Gender,” it states, “constitutes a fundamental basis for discrimination.” The CSDH refers to the existence of “gender-based social hierarchies” as a consequence of which, “girls and women suffer systematic discrimination in access to power, prestige and resources.”⁷⁵

⁷⁴ Bearak, Popinchalk, Ganatra, Moller, Tunçalp, Beavin, Kwok, Alkema, “Unintended Pregnancy and Abortion by Income, Region, and the Legal Status of Abortion,” e1152.

⁷⁵ World Health Organization, “A Conceptual Framework,” 33.

According to UNESCO, “Gender inequality is strongly correlated with early and unintended pregnancy.”⁷⁶ Research undertaken for the United Nations Population Fund (UNFPA) using Bearak and colleagues’ dataset confirms the positive association between country-level gender inequality and unintended pregnancy: irrespective of income level, countries with higher levels of gender inequality have higher rates of unintended pregnancy.⁷⁷ The Gender Inequality Index (GII) is used to investigate the relationship between country-level gender inequality and rates of unintended pregnancy. The GII is a composite indicator used to assign a numerical value to each nation based on its performance against key health and development indicators that, taken together, reflect the degree of gender inequality in society. The GII takes into account a country’s achievement in the areas of reproductive health (maternal mortality ratio, adolescent birth rate), female empowerment (percentage of parliamentary seats held by women, percentage of population with at least some secondary education by gender), and the labour market (participation in the labour force by gender).⁷⁸ A high GII value corresponds to a high level of gender inequality. The relative performance of each country is reflected in its GII rank. Denmark tops the country rankings as most gender equitable nation; Yemen (ranked 166) is the most gender unequal country. Table 2 displays the 2022 GII rank for the 25 sample countries, showing that LMICs tend to have greater gender inequality than high-income countries. Given the different dates of data collection, the GII rankings cannot be compared directly with unintended pregnancy rates for 2015–19. However, the general trend is clear: more gender equitable nations tend to have lower unintended pregnancy rates.

⁷⁶ United Nations Educational, Scientific and Cultural Organization, “Early and Unintended Pregnancy and the Education Sector: Evidence Review and Recommendations,” 14, 2017, unesdoc.unesco.org/ark:/48223/pf0000251509.

⁷⁷ United Nations Population Fund, “State of World Population 2022: Seeing the Unseen,” 23.

⁷⁸ United Nations Development Programme, “Human Development Report 2023–24,” 272.

Recognizing that gender equality is a *sine qua non* for human health and development, SDG 5 (“achieve gender equality and empower all women and girls”) has targets and indicators that address a range of social contexts where inequality thrives and that measure progress towards gender equity.⁷⁹ Many of these are important for tackling the high incidence of unintended pregnancy. SDG 5.6, for instance, concerns female agency with respect to decision-making about sex and reproduction. Women and girls often lack decision-making power over matters of sex and pregnancy, which can lead to unwanted pregnancies. This can be the case when, for instance, male partners disagree about the frequency of intercourse or the number and spacing of children, and females are expected to accede to the wishes of the male. In sexual matters, girls often have less agency than older females. According to Sarah Bott, “Numerous studies have found an association between forced sexual debut, lack of contraception/condom use, and unintended pregnancy.”⁸⁰ Diminished agency and duress can arise in any situation of dependency, such as when male gatekeepers control access to vital resources. As a consequence, forced sex and coercion are commonplace. Partners and families may pressure women to abort for social reasons,⁸¹ or to conceive, for instance, to prove fertility prior to marriage,⁸² or to obtain a male-child, or to gain the status that a large family confers.⁸³ Globally, the proportion of women aged 15 to 49 years who make their own informed decisions regarding sexual relations, contraceptive use, and reproductive health care (SDG 5.6.1) is

⁷⁹ See United Nations Department of Economic and Social Affairs, Statistics Division, “SDG Indicators Metadata Repository.”

⁸⁰ Sarah Bott, “Sexual Violence and Coercion: Implications for Sexual and Reproductive Health,” in *Social Determinants of Sexual and Reproductive Health: Informing Future Research and Programme Implementation*, ed. Shawn Malarcher (Geneva, Switzerland: World Health Organization, 2010), 133–157, 141, www.who.int/publications/i/item/9789241599528.

⁸¹ United Nations Population Fund, “State of World Population 2022: Seeing the Unseen,” 46–47, 113.

⁸² Sarah Castle and Ian Askew, *Contraceptive Discontinuation: Reasons, Challenges, and Solutions* (New York: Population Council and FP2020, 2015), 10.

⁸³ United Nations Population Fund, “State of World Population 2022: Seeing the Unseen,” 84.

56 percent. It is estimated that one-in-four women of reproductive age are unable to say no to sex.⁸⁴ When women and girls experience diminished sexual and reproductive health decision-making capacity, the risk of unintended pregnancy increases.⁸⁵

Psychological, physical, and sexual violence against women and girls is a scourge affecting every nation (SDG 5.2). Usually inflicted by a current or former husband or male intimate partner, it often goes unchallenged, facilitated by a long-standing culture of social acceptance and inadequate legal protections. The link between intimate-partner violence and unintended pregnancy is drawn out by Sarah Bott: “Evidence suggests that women who live in situations of intimate-partner violence often experience forced sex and are generally less able to negotiate protected sex, leading to higher rates of unintended pregnancies.”⁸⁶ Globally, the lifetime prevalence of intimate-partner violence (IPV) for ever-married or partnered females age 15–49 is 27 percent, affecting 641 million women and girls. Least developed countries have the highest prevalence, where as many as one-in-two females are victims of IPV. The global prevalence of non-partner sexual violence, perpetrated by friends, relatives, and others, is 6 percent.⁸⁷

Child marriage is almost always a product of gender inequality. Although the practice of child marriage is declining, in many countries it

⁸⁴ United Nations Department of Economic and Social Affairs, Statistics Division, “Global SDG Indicators Database,” 2023, unstats.un.org/sdgs/dataportal/analytics/GlobalRegionalTrends.

⁸⁵ See Bright Opoku Ahinkorah, Abdul-Aziz Seidu, Francis Appiah, Linus Baatiema, Francis Sambah, Eugene Budu, Edward Kwabena Ameyaw, “What has reproductive health decision-making capacity got to do with unintended pregnancy? Evidence from the 2014 Ghana Demographic and Health Survey,” *PLoS ONE* 14, no. 10 (2019): 1–16 doi.org/10.1371/journal.pone.0223389.

⁸⁶ Sarah Bott, “Sexual Violence and Coercion,” 141.

⁸⁷ World Health Organization, “Violence Against Women Prevalence Estimates, 2018: Global, Regional and National Prevalence Estimates for Intimate Partner Violence Against Women and Global and Regional Prevalence Estimates for Non-partner Sexual Violence Against Women,” 2021, viii–xv, www.who.int/publications/i/item/9789240022256.

remains legal or is tolerated.⁸⁸ Globally, 19 percent of females are married or in a cohabiting union before age 18 (SDG indicator 5.3.1).⁸⁹ Child marriage is a problem in the LMIC sample countries, despite laws that prohibit it. In Nigeria, 43 percent of married women are child brides. One-in-three (217 million) of all child marriages occur in India.⁹⁰ UNFPA reports that married girls often experience numerous disadvantages that compound their vulnerability: “Women and girls married as adolescents tend to have less education, less household and economic power and less mobility than unmarried adolescents and older women. They tend to be isolated and lack the knowledge and skills to negotiate situations that are detrimental to their health and well-being—including how many children to have and when.”⁹¹ Where child marriage is prevalent, so too is adolescent childbearing (SDG 3.7.2), which carries a greater risk of pregnancy and childbirth complications than in older women.⁹² Most adolescent mothers are married or in a union and they tend to have larger families than women who commence childbearing at older ages.⁹³ Globally, 14 percent of

⁸⁸ For the legal status of child marriage across the globe, see Megan Arthur, Alison Earle, Amy Raub, Ilona Vincent, Efe Atabay, Isabel Latz, Gabriella Kranz, Arijit Nandi, Jody Heymann, “Child Marriage Laws around the World: Minimum Marriage Age, Legal Exceptions, and Gender Disparities,” *Journal of Women, Politics & Policy* 39, no. 1 (2018): 51–74, doi.org/10.1080/1554477X.2017.1375786; Girls Not Brides, “Child Marriage Atlas,” www.girlsnotbrides.org/learning-resources/child-marriage-atlas/.

⁸⁹ United Nations Children’s Fund, *The State of the World’s Children 2023: For every child, vaccination* (Florence, Italy: UNICEF Innocenti – Global Office of Research and Foresight, 2023), 182, www.unicef.org/media/108161/file/SOWC-2023-full-report-English.pdf.

⁹⁰ United Nations Children’s Fund, “Is an End to Child Marriage within Reach?: Latest Trends and Future Prospects,” May 5, 2023, data.unicef.org/resources/is-an-end-to-child-marriage-within-reach/?_gl=1*12d8k09*_ga*MTM2NjMONTY2LjE3MDIYNzk2Njk*_ga_ZEPV2PX419*MTc wNTI0MzI0Mi4xLjAuMTcwNTI0MzI0Mi42MC4wLjA.

⁹¹ United Nations Population Fund, “State of World Population 2022: Seeing the Unseen,” 32.

⁹² World Health Organization, “Adolescent Pregnancy,” 2 June 2023, www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy; UNICEF, “Child Marriage,” July 2023, www.unicef.org/protection/child-marriage.

⁹³ United Nations Population Fund, “State of World Population 2022: Seeing the Unseen,” 30–31.

mothers give birth before age 18,⁹⁴ with sub-Saharan Africa recording the highest rates of adolescent fertility.⁹⁵ In four of the 25 sample countries one-in-four girls become mothers before their 18th birthday (DR Congo, Equatorial Guinea, Nigeria, Venezuela). Equatorial Guinea has one of the highest prevalence rates in the world for early childbearing (42%).⁹⁶ These depressing statistics speak to the second-class status, limited autonomy, and compromised negotiating power of women and girls, compared to males. Too often, females are subject to discriminatory cultural norms that privilege males and circumscribe female choice in matters of sex and reproduction. Intersecting sources and structures of inequality and injustice frequently combine to undermine human dignity, increase vulnerability and disempower large sectors of the female population.

The Demographic and Health Surveys (DHS) program gathers data from LMICs on key development indicators, including those relating to female empowerment. In the familial and interpersonal realm, these include female age at first marriage and sex, the ability to refuse or negotiate about sex and condom use, female attitudes towards wife beating, the extent to which women can choose their spouse, participate in household decisions, control household resources, and manage their own affairs. Sociocultural indicators include male and female rates of educational attainment and mobile phone ownership. Economic indicators include income disparity, property and land ownership, and access to paid work and credit.⁹⁷ Esso-Hanam Atake and Pitaloumani Gnakou Ali's research in Francophone Sub-Saharan Africa found that in each of these realms—familial/interpersonal, sociocultural, and economic—female empowerment is associated with lower fertility and lower incidence of unintended

⁹⁴ United Nations Children's Fund, *The State of the World's Children 2023*, 152.

⁹⁵ United Nations Population Fund, "State of World Population 2022: Seeing the Unseen," 142.

⁹⁶ United Nations Children's Fund, *The State of the World's Children 2023*, 148–152.

⁹⁷ Trevor N. Croft, Courtney K. Allen, Blake W. Zachary, *Guide to DHS Statistics* (Rockville, Maryland: ICF, 2023), 15.1–15.29, www.dhsprogram.com/publications/publication-dhsg1-dhs-questionnaires-and-manuals.cfm.

pregnancy. Of these, economic empowerment is the most important. Independent income improves women's social status. It frees them from their financial dependency on men and equalizes power relations with males. Greater purchasing power allows finances to be directed to control of fertility. Gainful employment also incentivises the avoidance of unintended pregnancy.⁹⁸ Economic empowerment buys power (autonomy, influence, control), prestige (mutual respect, social status), and resources (including access to healthcare).

Social Determinants of Unintended Pregnancy: Education (Access and Attainment)

As social determinants, educational access and attainment play beneficial roles in health.⁹⁹ Various studies point to the reproductive health benefits conferred on females through educational access and attainment, including greater knowledge and control over fertility and lower unintended pregnancy rates.¹⁰⁰ Educational access is beneficial even when school functions as no more than a safer social environment than out-of-school alternatives. Chung and others' study of adolescent pregnancy in LMICs reports that "a higher level of educational attainment or more

⁹⁸ Esso-Hanam Atake and Pitaloumani Gnakou Ali, "Women's Empowerment and Fertility Preferences in High Fertility Countries in Sub-Saharan Africa," *BMC Women's Health* 19, no. 54 (2019): 1–14. doi.org/10.1186/s12905-019-0747-9. See Edward Kwabena Ameyaw, Eugene Budu, Francis Sambah, Linus Baatiema, Francis Appiah, Abdul-Aziz Seidu, Bright Opoku Ahinkorah, "Prevalence and Determinants of Unintended Pregnancy in Sub-Saharan Africa: A Multi-Country Analysis of Demographic and Health Surveys," *PLoS ONE* 14, no. 8 (2019): doi.org/10.1371/journal.pone.0220970; Andrew Amos Channon, Jane Falkingham, Zoë Matthews, "Sexual and Reproductive Health and Poverty," in *Social Determinants of Sexual and Reproductive Health: Informing Future Research and Programme Implementation*, ed. Shawn Malarcher (Geneva, Switzerland: World Health Organization, 2010), 73–91, 81, www.who.int/publications/i/item/9789241599528.

⁹⁹ See World Health Organization, "A Conceptual Framework," 31–32.

¹⁰⁰ See United Nations Population Fund, "State of World Population 2022: Seeing the Unseen," 43.

schooling is a protective factor against [adolescent] pregnancy. Adolescents who have no formal education or lower level of education, or who are not enrolled in school have a higher likelihood of being pregnant. Long-term school absences, temporary dropout of school, and school failure are also risk factors for pregnancy.”¹⁰¹ Cynthia Lloyd’s research on schooling in developing countries also shows the protective effect of education for schoolgirls compared to out-of-school girls who are more exposed to premarital sex, early pregnancy, and child marriage.¹⁰² Lloyd refers to a Kenyan study which found that “the most effective intervention in reducing teen marriage and childbearing was a programme to subsidize the cost of schools through the provision of school uniforms for girls in grades 6–8, thus encouraging school attendance during the teen years and reducing incentives for early dropout and childbearing.”¹⁰³ Lloyd concludes, “Improved academic performance is associated with delayed sexual initiation and a reduced likelihood of pregnancy.”¹⁰⁴ Many factors including poverty, conflict, child marriage, child labour, and gender norms keep girls out of school.¹⁰⁵ Data on out-of-school rates is tracked as part of SDG 4 (universal access to education). Globally, at upper secondary school

¹⁰¹ Hye Won Chung, Eun Mee Kim and Ji-Eun Lee, “Comprehensive Understanding of Risk and Protective Factors Related to Adolescent Pregnancy in Low- and Middle-Income Countries: A Systematic Review,” *Journal of Adolescence* 69, no. 1 (2018): 180–188, 184, doi.org/10.1016/j.adolescence.2018.10.007.

¹⁰² Cynthia B. Lloyd, “The Role of Schools in Promoting Sexual and Reproductive Health Among Adolescents in Developing Countries,” in *Social Determinants of Sexual and Reproductive Health: Informing Future Research and Programme Implementation*, ed. Shawn Malarcher (Geneva, Switzerland: World Health Organization, 2010), 113–131, www.who.int/publications/i/item/9789241599528.

¹⁰³ Cynthia B. Lloyd, “The Role of Schools in Promoting Sexual and Reproductive Health,” 128.

¹⁰⁴ Cynthia B. Lloyd, “The Role of Schools in Promoting Sexual and Reproductive Health,” 128.

¹⁰⁵ See Andrew Amos Channon, Jane Falkingham, Zoë Matthews, “Sexual and Reproductive Health and Poverty,” 84–85.

level, one-in-three girls are out of school; huge disparities exist between nations, ranging from 0% (Singapore; Netherlands) to 89% (Niger).¹⁰⁶

How does the education of males influence unintended pregnancy rates? Fantu Mamo Aragaw and others' study of the determinants of unintended pregnancy in 61 LMICs found that women whose husbands had no education or education to primary level were more likely to have an unintended pregnancy than women whose husbands had secondary or higher education. In fact, the husband's educational attainment was a better predictor of unintended pregnancy than that of the wife.¹⁰⁷ This finding points to male dominance in sexual and reproductive decision-making: "Partners who have no formal education or a lower level of education are less likely to encourage their wives to use modern contraceptives and a woman's pregnancy intentions and parenting decisions are influenced by her partner's attitude . . . [T]he male partner has a strong influence on most household decisions, including the timing of pregnancy and the number of children desired."¹⁰⁸ UNFPA's study of the relative contribution of female and male educational attainment on unintended pregnancy rates found that the rates were correlated with the overall country-wide level of educational attainment for both sexes, rather than with female educational attainment alone.¹⁰⁹

Comparing national data on mean years of schooling (SDG 4.4) shows how educational opportunity varies worldwide and how females in LMICs suffer educational disadvantage compared to females in high-income nations. The value for mean years of schooling for girls ranges from 1.3 (Niger) to 14.3 (Germany); the global average is 8.7 completed years of

¹⁰⁶ United Nations Children's Fund, *The State of the World's Children 2023*, 174–178.

¹⁰⁷ Fantu Mamo Aragaw, Tsegaw Amare, Rediet Eristu Teklu, Biresaw Ayen Tegegne, Adugnaw Zeleke Alem, "Magnitude of Unintended Pregnancy and Its Determinants Among Childbearing Age Women in Low and Middle-income Countries: Evidence from 61 Low and Middle Income Countries," *Frontiers in Reproductive Health* 5 (2023): 1–10, doi.org/10.3389/frph.2023.1113926.

¹⁰⁸ Fantu Mamo Aragaw, Tsegaw Amare, Rediet Eristu Teklu, Biresaw Ayen Tegegne, Adugnaw Zeleke Alem, "Magnitude of Unintended Pregnancy," 5–6.

¹⁰⁹ United Nations Population Fund, "State of World Population 2022: Seeing the Unseen," 23.

education.¹¹⁰ Educational inequity intersects with income inequity and gender inequity, creating a perfect storm of disadvantage for women and girls in poorer parts of the world, with negative consequences for health, including higher incidences of unintended pregnancy (health inequity). At the same time, access to quality education is not only educationally beneficial; its benefits extend to the intersecting areas of life that might otherwise hold back females, lifting them out of income-related, gender-related, and health-related disadvantage. The large international research team that comprises the Global Burden of Disease (GBD) 2021 Fertility and Forecasting Collaborators detail some of these extensive benefits: “Quality education increases the knowledge, skills, and self-confidence needed to challenge traditional gender roles, and equips women to make more informed decisions about their health, careers, and lives as a whole. It also improves women’s decision-making power in the household and lowers their risk of exposure to abuse in the home. Furthermore, higher female educational attainment is associated with higher paid labour-force participation and higher wages.”¹¹¹ In short, education is empowering.

Conclusion

Females in low-income and middle-income countries have more unintended pregnancies and abortions than do females in high-income countries. These disparities are caused by interlocking and compounding structural inequalities, which cement injustice into the *status quo*. Gender equity and redistribution of social power and resources would contribute greatly to reducing the inexcusably high rates of unintended pregnancy among some of the world’s most disadvantaged and vulnerable women

¹¹⁰ United Nations Development Programme, “Human Development Report 2023–24,” 274–278.

¹¹¹ GBD 2021 Fertility and Forecasting Collaborators, “Global Fertility in 204 Countries and Territories, 1950–2021,” 33. Cf. Kien Le and My Nguyen, “How Education Empowers Women in Developing Countries,” *The B.E. Journal of Economic Analysis & Policy* 21, no. 2 (2021): 511–536, doi.org/10.1515/bejeap-2020-0046.

and girls. This requires a change process in which female empowerment is an essential component. Female empowerment not only challenges the power inequity and socioeconomic stratification that positions females at a disadvantage to males but it also reduces a range of inequity-generated vulnerabilities, including vulnerability to unintended pregnancy. In the words of WHO: “Health equity depends vitally on the empowerment of individuals to challenge and change the unfair and steeply graded distribution of social resources to which everyone has equal claims and rights.”¹¹²



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¹¹² WHO, “Social Determinants of Health: Key Concepts.”