Women's health in their reproductive years

Key points

- In 2016, at the global level, maternal conditions were the leading cause of death among young women (aged 15—29); for young men in the same age bracket road injuries were the leading cause of death.

- The leading causes of death among women aged 15-49, both at the global level and in sub-Saharan Africa, are HIV/AIDS and maternal conditions. Within the same age group, men's causes of death are globally dominated by road injuries and ischaemic heart disease.

- In 2017, the life-time risk of dying from maternal causes in sub-Saharan Africa was 1 in 37; in Central and Southern Asia it was 1 in 260; and in Latin America and the Caribbean it was 1 in 630.

- During the period 2000—2017, the greatest overall reduction in maternal mortality was achieved in countries in Southern Asia, with a reduction of 59% in the number of deaths (from 384 to 157 maternal deaths per 100,000 live births).

- The risk of maternal death can be reduced through better access to modern methods of contraception, and by ensuring that women have access to high-quality care before, during and after childbirth, with an approach that is sensitive to cultural diversity. There has been significant improvement in reducing maternal mortality worldwide, with increased access to skilled care at delivery, the increase in contraceptive prevalence and the decline in fertility.

- There are marked regional disparities in access to modern contraceptive methods, as well as births attended by skilled personnel, with the lowest access to both being in Oceania (excluding Australia and New Zealand) and sub-Saharan Africa, which is also the region with the highest maternal mortality rate.

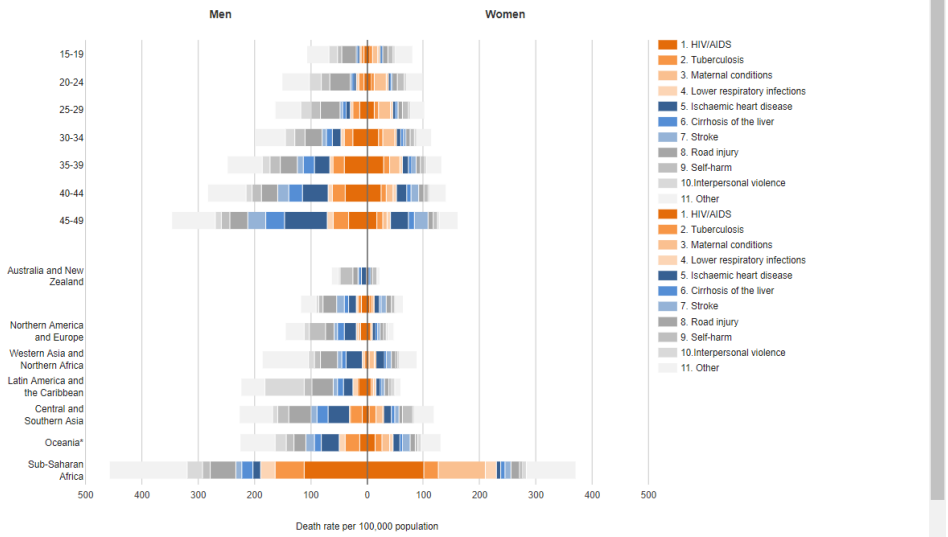
- Emerging research suggests that Coronavirus-19 (COVID-19)–pandemic-related worries may influence how women feel about having children. Women may be changing their plans–about when and/or how many children to have.

Background

Women's reproductive years begin at puberty and the onset of menstruation and end with menopause, spanning, on average, ages 15—49. Women's health status during this period is dominated by issues related to their sexual and reproductive health. During this period, women and men are likely to form families and enter the labour force, and are considered, on average, too young to die.–Nevertheless, all types of diseases affect the health of people in this age group.

As reported by the World Health Organization (WHO):[1] (a) maternal conditions (group 1) represent a leading cause of death for women aged 15—49, both at the global level and in developing regions; (b) the risk of death from communicable diseases (also in group 1) is highest among women and men at ages 35—39, when the global death rates from HIV/AIDS peak for both women and men; (c) mortality from non-communicable diseases (group 2) increases with age, and is higher among men; and (d) deaths due to injuries (group 3) are prominent among men aged 15—49, particularly road accidents, as are deaths from suicide and interpersonal violence.–

Figure I: Deaths due to leading causes of death among people aged 15-49 per 100,000 population by sex, age group and region: 2016



Source: World Health Organization (WHO), Health Topics, Global Health Estimates 2016 (https://www.who.int/healthinfo/global_burden_disease/en/).

Current situation

Central and Southern Asia are the only regions showing a gender difference in the top leading cause of death among people aged 15-49: self-harm for women and road injury for men

In 2016, among women aged 15-49, the leading causes of death at the global level and in sub-Saharan Africa were HIV/AIDS and maternal conditions. Within the same age group, at the global level men's causes of death were dominated by road injuries and ischaemic heart disease.–

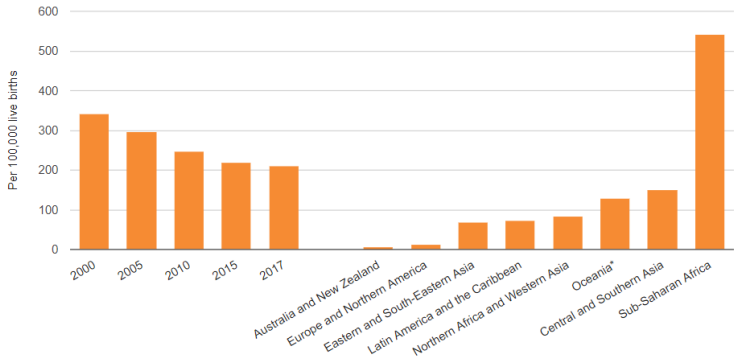
At the regional level, the top leading causes of death among people aged 15-49 were: self-harm (in Australia and New Zealand, and Northern America and Europe, for both women and men), road injury (in Eastern and South-Eastern Asia, for both women and men), and interpersonal violence (in Latin America and the Caribbean, for both women and men). Central and Southern Asia showed a gender difference in the top leading cause of death among people aged 15-49: self-harm for women and road injury for men.

Globally, in 2017, an estimated 295,000 women died during pregnancy and childbirth

Worldwide, maternal conditions were the top cause of death among women aged 20—24 in 2016. The risk of dying from maternal causes is related to the risk of getting pregnant and to the obstetric risk of developing a complication and dying while pregnant, during childbirth or within 42 days postpartum. In resource-poor settings, fertility rates are higher and the risks of dying in labour are greater,[2] and thus the risk of dying from maternal causes is greatly amplified. In 2017, the lifetime risk of dying from maternal causes in sub-Saharan Africa was one in 37, in Central and Southern Asia it was one in 260, and in Latin America and the Caribbean it was one in 630 (see figure II).

Significant progress has been made in in reducing maternal mortality since 2000. During the period 2000—2017, the global maternal mortality rate declined by 38% (from an estimated 342 to 210 maternal deaths per 100,000 live births). Over the same period, the greatest overall reduction in the rate was achieved–in Southern Asia, with a reduction of 59% in the number of maternal deaths (from 384 to 157 maternal deaths per 100,000 live births). Four other regions roughly halved their maternal mortality rates during this same period: Central Asia (by 52%), Eastern Asia (by 50%), Europe (by 53%) and Northern Africa (by 54%). All four regions, with the exception of Northern Africa, already had relatively low maternal mortality rates in 2000 (less than 100 per 100,000 live births).[3] In 2017, sub-Saharan Africa and Southern Asia accounted for approximately 86% (254,000) of the estimated global maternal deaths, with sub-Saharan Africa alone accounting for roughly two-thirds (196,000) of maternal deaths, while Southern Asia accounted for nearly one-fifth (58,000).[4] Despite its high maternal mortality rate in 2017, sub-Saharan Africa achieved a 40% reduction in maternal mortality in the years since 2000.

Figure II: Maternal mortality ratio by region: 2000-2017



Source: WHO, Trends in maternal mortality: 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division, Geneva, 2019 (https://www.unfpa.org/sites/default/files/pub-pdf/Maternal_mortality_report.pdf).
Note: Oceania* means Oceania (excluding Australia and New Zealand). Regional values are for 2017: regions are organized in ascending order by the maternal mortality ratio.

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Wide variations in the maternal mortality ratio and lifetime risk suggest that most maternal deaths are preventable

Women die as a result of complications during and following pregnancy and childbirth. Most of these complications develop during pregnancy and are preventable or treatable. Other complications may exist before pregnancy but worsen during pregnancy, especially if not managed as part of a woman's health care.[5] The major complications, which account for nearly 75% of all maternal deaths, are severe bleeding, infections, high blood pressure during pregnancy, complications from delivery and unsafe abortions.[6]

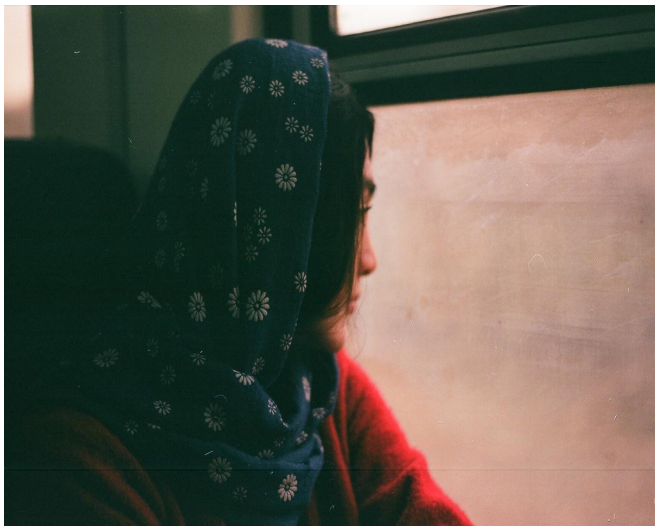
In addition to the tragic loss of life, maternal deaths have negative effects on families, including on the physical and mental health of family members.[7,8] Studies have shown greatly increased mortality among children whose mothers have died.[9,10,11] Other documented effects are of an economic nature, including catastrophic expenditures (for example, health care and funeral expenses), reduced household income and crippling debt;[12,13,14] thus, not only are the risks of maternal death elevated by poverty, such deaths may act to reinforce the cycle of poverty in poor communities from one generation to the next.

Maternal deaths are also influenced by other factors associated with poverty, such as poor nutrition, lack of freedom over–reproductive health choices and lack of access to resources. Programmes to address upstream risk factors for maternal death, including by promoting women's economic empowerment and educational attainment, are also important for the well-being of women and their families.

The risk of maternal death can be reduced through better access to modern methods of contraception and by ensuring that women have access to high-quality care before, during and after childbirth

Family planning is one of the most important aspects of reproductive health, since the use of modern contraceptive methods allows women to avoid unintended pregnancies. An unintended or unwanted pregnancy may be a pregnancy too early in life, too soon after a previous pregnancy or after a family has been established at a desired size. Like any pregnancy, unwanted pregnancies carry the risk of disability or even death, but they also have added health risks due to the possibility that a woman may choose to have an abortion, and that it might be unsafe. Unlike abortions carried out by skilled personnel in a medically safe environment, unsafe abortions carry a very high risk of complications.

Between 2010—2014, on average, 56 million induced (safe and unsafe) abortions occurred worldwide each year,[15] of which around 25 million were unsafe.[16] Between 4.7% to 13.2% of maternal deaths can be attributed to unsafe abortion.[17] Over half of all estimated unsafe abortions globally were in Asia. In Africa and Latin America, 3 out of 4 abortions were unsafe.[18] In almost every case, death and disability could be prevented through sexuality education, use of effective contraception, provision of safe, legal, induced abortion and timely care for complications.[19] A study estimated that if all women wanting to avoid pregnancy used a modern contraceptive method, the number of unintended pregnancies would drop by 70% and unsafe abortions by 74%.[20]

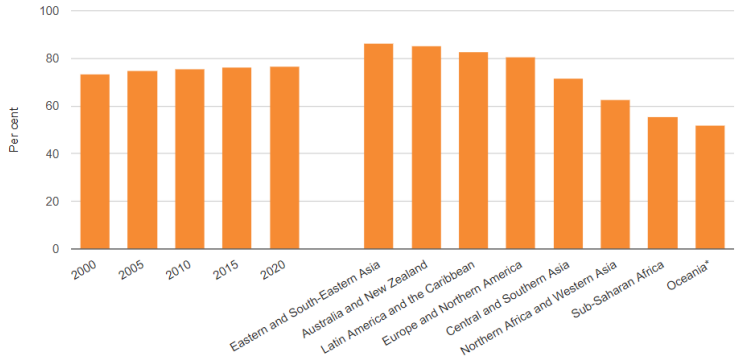


At the global level, it is estimated that 76.8% of women of reproductive age had their family planning needs met with a modern contraceptive method in 2020 (see figure III). This proportion ranged from 86% in Eastern and South-Eastern Asia to about 52% in Oceania (excluding Australia and New Zealand) and 56%–in sub-Saharan Africa, showing marked inequalities in women's access to modern contraception across regions. However, it is important to recognize that these figures are an improvement over historic percentages: in sub-Saharan Africa, 23.5% of women of reproductive age had their family planning needs met with a modern contraceptive method in 1990, and in 2010 that figure was 45.70%.[21] In general, regions with lower levels of fertility have higher proportions of women using contraception.

Family planning and reproductive health services need to account for inequality and barriers that may limit access, such as cultural factors and ethnicity.[22] Use and access to modern contraceptive methods depend, inter alia, on women's–autonomy.– Globally, only around 50% of women can make their–own decisions on health care and contraceptive use, and can say no to sexual intercourse.

The COVID-19 pandemic could leave significant numbers of women and couples without access to essential sexual and reproductive health care. The proportion of women of reproductive age (ages 15—49) that have their need for family planning satisfied–with modern contraceptive methods could fall from 76.8% to 71%, resulting in around 60 million fewer users of modern contraception worldwide in 2020. It is estimated that the most impacted regions would be Latin America and the Caribbean and sub-Saharan Africa owing to their relatively greater reliance on short-term methods, such as injectables and pills, which require frequent contact with health-care providers.[23]

Figure III: Proportion of women aged 15-49 who have their need for family planning satisfied with modern methods by region: 2000-2020 (Percentage)



Source: UNDESA, Population Division, Estimates and Projections of Family Planning Indicators 2020, New York, 2020 (https://www.un.org/en/development/desa/population/theme/family-planning/cp_model.asp).
Note: Oceania* means Oceania (excluding Australia and New Zealand): regional values are for 2020: regions are organized in descending order of the need for family planning satisfied.

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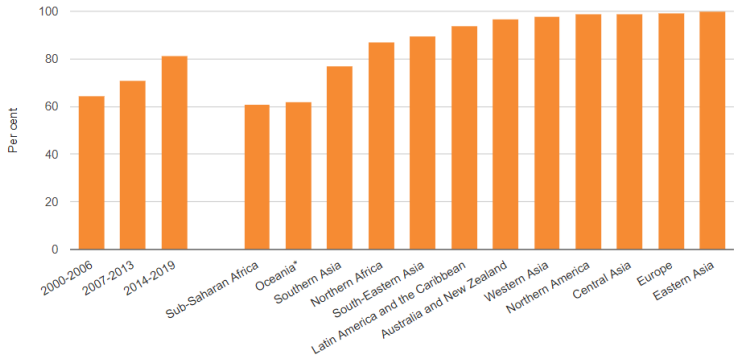
Globally, during the period 2014—2019, 81% of births took place with the assistance of a skilled birth attendant,–up from 64% in the period 2000—2005; however, there are wide disparities across regions

Coverage of deliveries by skilled birth attendants ranges from 60% in sub-Saharan Africa to almost universal coverage in Europe and Northern America,–Central Asia, Eastern Asia and Western Asia (see figure IV). In sub-Saharan Africa significant gains have been made since the turn of the century, with coverage ranging from 43% in the period 2000—2005 to 51% in the period 2007—2013. In-focus insight on the subject can be found in the story on skilled birth attendants in Ghana.

Figure IV: Proportion of births attended by skilled personnel, by region: 2000-2019 (Percentage)



Source: Joint UNICEF/WHO global database on skilled attendants at birth, 2020 (https://data.unicef.org/topic/maternal-health/delivery-care/).
Note: Oceania* means Oceania (excluding Australia and New Zealand). Figures are based on the latest country-level data available for the periods 2000-2006, 2007-2013 and 2014-2019. Regional values are for 2014-2019: regions are organized in ascending order of births attended by skilled personnel.

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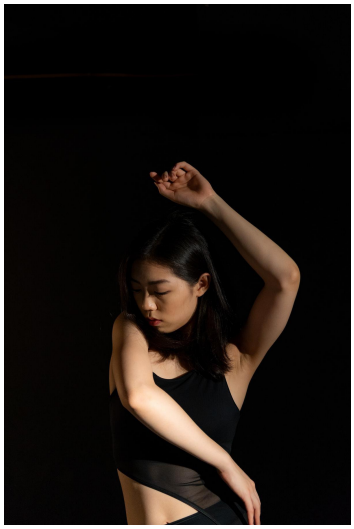
Adolescent girls face higher risks of eclampsia, systemic infections and complications during childbirth than adult women

In 2018, there were an estimated 12.8 million births among–adolescent girls aged 15—19, some 11% of all births worldwide.[24] The estimated global adolescent birth rate has declined from 56 births per 1,000 adolescent girls in 2000 to 41 births per 1,000 in 2020, representing a reduction of 27% in a 20-year span. At the regional level, adolescent birth rates are the lowest in developed regions (12 births per 1,000 adolescent girls in Australia and New Zealand, and 13 in Europe and Northern America) and the highest in sub-Saharan Africa (101 births per 1,000), followed by Latin America and the Caribbean (61 births per 1,000).

Early childbearing not only has a negative effect on the health of adolescents and their newborn children, evidence shows that adolescent mothers are at higher risks of eclampsia, systemic infections and complications during childbirth.[25] In addition, the stigma and stress adolescents experience may also make them less likely to complete schooling – reducing lifetime opportunities to achieve their full potential and weakening their control over resources and their future lives.[26] [27] A cause of unintended pregnancy is sexual violence, which is widespread with more than a third of girls in some countries reporting that their first sexual encounter was coerced.[28] Further insights about trends and levels of adolescent fertility are set out in the section on population and families.

COVID-19 may have an influence on how women feel about having children

Early evidence from a study in the United States of America[29] shows that pandemic-related worries about finances and job stability, as well as general unease about the future, may be having an effect on how women feel about having children. It is reported that more than 40% of women have declared having changed their plans about when to have children, or how many children to have, due to–the COVID-19 pandemic. Furthermore, black women (44%) and Hispanic women (48%) were more likely than white women (28%) to state that they wanted to have children later or wanted fewer children because of the pandemic.



About the data

Definitions

- **Death rate by leading causes of death among people aged 15—49**: Number of deaths due to a specific cause of death per 100,000 population aged 15—49.

- **Maternal mortality ratio** (MMR,–Sustainable Development Goal (SDG) 3,–indicator 3.1.1):–Number of maternal deaths per 100,000 live births: the ratio captures the risk of death in a single live birth, including up to six weeks after pregnancy.–

- **Proportion of births attended by skilled health personnel**–(Sustainable Development Goal (SDG) 3,–indicator 3.1.2): Number of births attended by skilled health personnel (doctors, nurses or midwives), divided by the total number of live births in a given time period.–Having a skilled attendant at the time of childbirth is an important lifesaving intervention for both women and babies.

- **Proportion of women of reproductive age (ages 15—49) who have their need for family planning satisfied with modern methods** (Sustainable Development Goal (SDG) 3,–indicator 3.1.2): Reported as a percentage of women of reproductive age who use any method of contraception or who have an unmet need for family planning. The numerator is the number of women–(ages 15—49) who are currently using, or whose sexual partner is currently using, at least one modern method of contraception. The denominator is the total demand for family planning (the sum of the number of women who are using any method of contraception and those who are having an unmet need for family planning). Access to and use of an effective means to prevent pregnancy helps women and their partners to decide on the number and spacing of their children.–

- **Adolescent birth rate per 1,000 women**–(Sustainable Development Goal (SDG) 3, indicator 3.7.2):–Adolescent birth rate is the annual number of births to women aged 15—19 per 1,000 women. Preventing births very early in a woman's life is an important measure to improve maternal health and reduce infant mortality and enhances a woman's opportunities for socioeconomic improvement.

Availability

- **Death rate by leading causes of death among people aged 15—49**:–WHO calculates estimates for all its member States with a population of more than 90,000 (184 countries). Data on causes of death are sourced from WHO, Global Health Estimates 2016–and are classified by regional grouping under the Sustainable Development Goals (SDGs) indicators framework.

- **Maternal mortality ratio (MMR)**: About one third of all countries/territories have reliable data on maternal mortality;

and about half of countries have data that are adjusted for the purposes of comparability; for the remainder a statistical model has been employed. Countries are organized according to regional groupings under the Sustainable Development Goals (SDGs) indicators framework.

- **Proportion of births attended by skilled health personnel**: Data are available for over 170 countries. The main source of data is household surveys, which are conducted every 3 to 5 years; data from administrative sources may be annual. Countries are organized according to regional groupings under the Sustainable Development Goals (SDGs) indicators framework.

- **Proportion of women of reproductive age (ages 15—49) who have their need for family planning satisfied with modern methods**: Data are available for 130 countries or territories for the period 2000—2019. For 103 countries or territories, there are at least two available data points. Countries are organized according to the regional groupings under the Sustainable Development Goals (SDGs) indicators framework.

- **Adolescent birth rate per 1,000 women**: Data are available for 221 countries or territories for the period 2000—2017: there are at least two data points for 217 countries or areas. Countries are organized according to regional groupings under the Sustainable Development Goals (SDGs) indicators framework.–

Footnotes

1. World Health Organization (WHO), Health Topics, Fact sheets, The top 10 causes of death, May 2018.

2. Zimicki, S., "The Relationship between Fertility and Maternal Mortality", in Parnell, A. (ed.), Contraceptive Use and Controlled Fertility: Health Issues for Women and Children Background Papers, Washington, D.C., National Research Council, National Academies Press, 1989.

3. World Health Organization (WHO), Trends in Maternal Mortality: 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division.

4. WHO, Fact sheets, Maternal mortality, September 2019.

5. Ibid.

6. Say, L., Chou, D., Gemmill, A., Tun€alp, €., Moller, A.B., Daniels, J.D., et al., "Global Causes of Maternal Death: A WHO Systematic Analysis", The Lancet, vol.2, Issue 6, June 2014.

7. Bergman, A.S., Axberg, U., Hanson, E., "When a parent dies – a systematic review of the effects of support programs for parentally bereaved children and their caregivers", BMC Palliative Care, vol. 16 (1), August 2017.

8. Zhou, H., Zhang, L., Ye, F., Wang, H.J., Huntington, D., Huang, Y. et al., "The effect of maternal death on the health of the husband and children in a rural area of China: a prospective cohort study", PLOS ONE, 9 June 2016 (accessed on 17 March 2019).

9. Finlay, J.E., Moucheraud, C., Goshev, S., Levira, F., Mrema, S., Canning, D. et al., "The effects of maternal mortality on infant and child survival in rural Tanzania: a cohort study", Maternal Child Health Journal, vol.19, Issue 11, November 2015.

10. Moucheraud, C., Worku, A, Molla, M., Finlay, J.E., Leaning and J., Yamin, A.E., "Consequences of maternal mortality on infant and child survival: a 25-year longitudinal analysis in Butajira Ethiopia (1987–2011)", Reproductive Health, vol. 2015.

11. Ronsmans, C., Chowdhury, M.E., Dasgupta, S.K., Ahmed, A. and Koblinsky, M., "Effect of parent's death on child survival in rural Bangladesh: a cohort study", The Lancet, vol. 375, Issue 9730, June 2010 (accessed on 17 March 2019).

12. Kes, A., Ogwang, S., Pande, R.P., Douglas, Z., Karuga, R., Odhiambo, F.O. et al., "The economic burden of maternal mortality on households: evidence from three sub-counties in rural western Kenya", Reproductive Health ,vol. 12, Supplement 1, May 2015.

13. Wang, H, Ye, F., Wang, Y. and Huntington, D., "Economic impact of maternal death on households in rural China: a prospective cohort study", PLOS ONE, 24 October 2013.

14. Ye, F., Wang, H., Huntington, D., Zhou, H., Li, Y., You, F. et al., "The immediate economic impact of maternal deaths on rural Chinese households", PLOS ONE, 6 June 2012.

15. WHO, Health Topics, Fact sheets, Preventing unsafe abortion fact sheet.

16. Ganatra, B., Gerdts, C., Rossier, C., Johnson Jr, B. R., Tuncalp, €., Assifi, A., Sedgh, G., Singh, S., Bankole, A., Popinchalk, A., Bearak, J., Kang, Z., Alkema, L., "Global, regional, and subregional classification of abortions by safety, 2010–14: estimates from a Bayesian hierarchical model", The Lancet, vol. 390, Issue 10110, 25 November 2017.

17. Say, L., Chou, D., Gemmill, A., Tun€alp, €., Moller, A.B., Daniels, J., G€lmezoglu, A.M., Temmerman, M. and Alkema, L., "Global causes of maternal death: a WHO systematic analysis", The Lancet, vol. 2, Issue 6, 1 June 2014.

18. WHO, Health Topics, Fact sheets, Preventing unsafe abortion, 2019.

19. Haddad, L., "Unsafe Abortion: Unnecessary Maternal Mortality", Reviews in Obstetrics and Gynecology, vol. 2 (2), Spring 2009.

20. Singh, S. et al., "The incidence of abortion and unintended pregnancy in India, 2015", The Lancet, vol.6, Issue 1, January 2018.

21. See United Nations Department of Economic and Social Development (UNDESA), Statistics Division, The World's Women 2015: Trends and Statistics, New York, 2015.

22. UNFPA, UN OHCHR and The Danish Institute for Human Rights, Reproductive Rights are Human Rights, 2014.

23. UNDESA, Population Division, World Fertility and Family Planning 2020: Highlights, New York, 2020.

24. WHO, Health Topics, Fact sheets, Adolescents: health risks and solutions.

25. Ganchimeg, T. et al., "Pregnancy and childbirth outcomes among adolescent mothers: a World Health Organization multicountry study", BJOG: An International Journal of Obstetrics and Gynaecology, Supplement 1, March 2014.

26. United Nations Educational, Scientific and Cultural Organization (UNESCO), Early and unintended pregnancy and the education sector: evidence review and recommendations, Paris, 2007.

27. United Nations Population Fund (UNFPA), Motherhood in childhood: Facing the challenge of adolescent pregnancy, New York, 2013.

28. Raj A, Boehmer U. Girl child marriage and its association with national rates of HIV, maternal health, and infant mortality across 97 countries. Violence Against Women 2013.

29. Lindberg, L.D., Van de Vusse, A., Mueller, J. and Kirstein, M., "Early Impacts of the Covid-19 Pandemic: Findings from the 2020 Guttmacher Survey of Reproductive Health Experiences", Guttmacher Institute, June 2020.