

## Adolescent Pregnancy: A Health Challenge

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### Dear Editor-in-Chief,

Every year, some 3.9 million girls aged 15 to 19 years undergo unsafe abortions (1). Approximately 16 million girls aged 15 to 19 years and 2.5 million girls under 16 years give birth each year in developing regions (2, 3). Complications during pregnancy and childbirth are the leading cause of death for 15 to 19 year-old girls globally (4). Adolescent mothers (ages 10 to 19 years) face higher risks of eclampsia, puerperal endometritis, and systemic infections than women aged 20 to 24 years (5, 6).

The term "adolescent" is often used synonymously with "teenager". In this sense "adolescent pregnancy" means pregnancy in a woman aged 10–19 years (2, 7). Pregnant teenagers face many of the same pregnancy related issues as other women. There are additional concerns for those under the age of 15 as they are less likely to be physically developed to sustain a healthy pregnancy or to give birth (8). For girls aged 15–19, risks are associated more with socioeconomic factors than with the biological effects of age (9). Risks of low birth weight, premature labor, anemia, and pre-eclampsia are connected to biological age, being observed in teen births even after controlling for other risk factors (such as accessing prenatal care etc.) (5, 6).

**Key Words:** Adolescent, Death, Girls, Pregnancy, World.

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**Health Challenges**

Adolescent pregnancy remains a major contributor to maternal and child mortality, and to intergenerational cycles of ill-health and poverty. Pregnancy and childbirth complications are the leading cause of death among 15 to 19 year-old girls globally, with low and middle-income countries accounting for 99% of global maternal deaths of women ages 15 to 49 years (4, 10). Adolescent mothers (ages 10 to 19 years) face higher risks of eclampsia, puerperal endometritis, and systemic infections than women aged 20 to 24 years (5, 6, 10). Additionally, some 3.9 million unsafe abortions among girls aged 15 to 19 years occur each year, contributing to maternal mortality and lasting health problems (1).

Furthermore, the emotional, psychological and social needs of pregnant adolescent girls can be greater than those of other women. Early childbearing can increase risks for newborns, as well as young mothers. In low- and middle-income countries, babies born to mothers under 20 years of age face higher risks of low birth weight, preterm delivery, and severe neonatal conditions (10). Newborns born to adolescent mothers are also at greater risk of having low birth weight, with long-term potential effects (10). In some settings, rapid repeat pregnancy is a concern for young mothers, which presents further risks for both the mother and child (11).

According to the United Nations Population Fund (UNFPA), "Pregnancies among girls less than 18 years of age have irreparable consequences. It violates the rights of girls, with life-threatening consequences in terms of sexual and reproductive health, and poses high development costs for communities, particularly in perpetuating the cycle of poverty"(12). Health consequences include not yet being physically ready for pregnancy and childbirth leading to

complications and malnutrition as the majority of adolescents tend to come from lower-income households. The risk of maternal death for girls under age 15 in low and middle income countries is higher than for women in their twenties. Teenage pregnancy also affects girls' education and income potential as many are forced to drop out of school which ultimately threatens future opportunities and economic prospects (12). Early motherhood can affect the psychosocial development of the infant. The children of teen mothers are more likely to be born prematurely with a low birth weight, predisposing them to many other lifelong conditions (13). Children of teen mothers are at higher risk of intellectual, language, and socio-emotional delays (14). Developmental disabilities and behavioral issues are increased in children born to teen mothers (15, 16).

Poor academic performance in the children of teenage mothers has also been noted, with many of the children being held back a grade level, scoring lower on standardized tests, and/or failing to graduate from secondary school (17). Daughters born to adolescent parents are more likely to become teen mothers themselves (17, 18).

Maternal and prenatal health is of particular concern among teens who are pregnant or parenting. The worldwide incidence of premature birth and low birth weight is higher among adolescent mothers (9, 17, 19).

Inadequate nutrition during pregnancy is an even more marked problem among teenagers in developing countries (20, 21). Complications of pregnancy result in the deaths of an estimated 70,000 teen girls in developing countries each year. Young mothers and their babies are also at greater risk of contracting HIV (8). The World Health Organization estimates that the risk of death following pregnancy is twice as high for girls aged 15–19 than for women

aged 20–24. The maternal mortality rate can be up to five times higher for girls aged 10–14 than for women aged 20–24. Illegal abortion also holds many risks for teenage girls in areas such as sub-Saharan Africa (22, 23). Risks for medical complications are greater for girls aged under 15, as an underdeveloped pelvis can lead to difficulties in childbirth. Obstructed labour is normally dealt with by caesarean section in industrialized nations; however, in developing regions where medical services might be unavailable, it can lead to eclampsia, obstetric fistula, infant mortality, or maternal death (5, 6, 8, 12).

## CONCLUSION

A holistic approach is required in order to address teenage pregnancy. This means not focusing on changing the behaviour of girls but addressing the underlying reasons of adolescent pregnancy such as poverty, gender inequality, social pressures and coercion. This approach should include "providing age-appropriate comprehensive sexuality education for all young people, investing in girls' education, preventing child marriage, sexual violence and coercion, building gender-equitable societies by empowering girls and engaging men and boys and ensuring adolescents' access to sexual and reproductive health information as well as services that welcome them and facilitate their choices" (24-26).

**CONFLICT OF INTEREST:** None.

## REFERENCES

1. Darroch J, Woog V, Bankole A, Ashford LS. Adding it up: Costs and benefits of meeting the contraceptive needs of adolescents. New York: Guttmacher Institute; 2016.
2. UNFPA. Girlhood, not motherhood: Preventing adolescent pregnancy. New York: UNFPA; 2015.
3. Neal S, Matthews Z, Frost M, Fogstad H, Camacho AV, Laski L. Childbearing in adolescents aged 12–15 years in low resource countries: a neglected issue. New estimates from demographic and household surveys in 42 countries. *Acta Obstet Gynecol Scand.* 2012; 91: 1114–18.
4. World Health Organization. Global health estimates 2015: deaths by cause, age, sex, by country and by region, 2000–2015. Geneva: WHO; 2016.
5. Loto OM, Ezechi OC, Kalu BK, Loto A, Ezechi L, Ogunniyi SO. "Poor obstetric performance of teenagers: Is it age- or quality of care-related?" *Journal of Obstetrics and Gynaecology.* 2004; 24 (4): 395-98.
6. Abalkhail BA. Adolescent pregnancy: Are there biological barriers for pregnancy outcomes?" *The Journal of the Egyptian Public Health Association.* 1995; 70 (5–6): 609–25. PMID 17214178.
7. Adolescent Pregnancy. World Health Organization. 2004. p. 5. ISBN 978-9241591454. Retrieved 28 July 2017.
8. Mayor S. Pregnancy and childbirth are leading causes of death in teenage girls in developing countries". *BMJ.* 2004; 328 (7449): 1152.
9. Makinson C. "The health consequences of teenage fertility". *Family Planning Perspectives.* 1985; 17(3): 132–39. doi:10.2307/2135024. JSTOR 2135024.
10. Ganchimeg T, Ota E, Morisaki N, Laopaiboon M, Lumbiganon P, Zhang J, et al. Pregnancy and childbirth outcomes among adolescent mothers: a World Health Organization multicountry study. *BJOG.* 2014; 121(S Suppl 1):40-8.
11. WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Trends in maternal mortality: 1990 to 2015: Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Geneva: WHO; 2015.
12. "Adolescent pregnancy - UNFPA - United Nations Population Fund", 2013.
13. Gibbs, CM. Wendt, A.; Peters, S.; Hogue, CJ. The impact of early age at first childbirth on maternal and infant health". *Paediatr Perinat Epidemiol.* 2012; 26 Suppl 1: 259–84.

14. Cornelius MD, Goldschmidt L, Willford JA, Leech SL, Larkby C, Day NL. Body Size and Intelligence in 6-year-olds: Are Offspring of Teenage Mothers at Risk? *Maternal and Child Health Journal*. 2008; 13 (6): 847-56.
15. American Academy of Pediatrics. Committee on Adolescence Committee on Early Childhood Adoption, Dependent Care. American Academy of Pediatrics: Care of adolescent parents and their children". *Pediatrics*. 2001; 107 (2): 429-34.
16. Hofferth SL, Reid L. "Early Childbearing and Children's Achievement and Behavior over Time". *Perspectives on Sexual and Reproductive Health*. 2002; 34 (1): 41-9.
17. The National Campaign to Prevent Teen Pregnancy. "Not Just another Single Issue: Teen Pregnancy Prevention's Link to Other Critical Social Issues" (PDF). Archived from the original (PDF) on 2007-09-28. (147 KB). Retrieved May 27, 2006.
18. Furstenberg FF, Levine JA, Brooks-Gunn J. The children of teenage mothers: patterns of early childbearing in two generations. *Fam Plann Perspect*. 1990; 22 (2): 54-61.
19. Furstenberg FF, Levine JA, Brooks-Gunn J. The children of teenage mothers: patterns of early childbearing in two generations. *Fam Plann Perspect*. 1990; 22 (2): 54-61.
20. Scholl TO, Hediger ML, Belsky DH. "Prenatal care and maternal health during adolescent pregnancy: A review and meta-analysis". *The Journal of Adolescent Health*. 1994; 15(6): 444-56.
21. Sanchez PA, Idrisa A, Bobzom DN, Airede A, Hollis BW, Liston DE, Jones DD, Dasgupta A, Glew RH (1997). "Calcium and vitamin D status of pregnant teenagers in Maiduguri, Nigeria". *Journal of the National Medical Association*. 89 (12): 805-11.
22. Peña E, Sánchez A, Solano L. Profile of nutritional risk in pregnant adolescents. *Archivos Latinoamericanos de Nutricion*. 2003; 53 (2): 141-49. PMID 14528603.
23. Locoh, Therese. Early Marriage and Motherhood in Sub-Saharan Africa. *African Environment*. 1999; 3-4 (39-40): 31-42.
24. Kost K, Maddow-Zimet I, Arpaia A. Pregnancies, births, and abortions among adolescents and young women in the United States, 2013: National and state trends by age, race and ethnicity. Washington, DC: Guttmacher Institute 2017. Lay summary at [ChildTrends.org](http://ChildTrends.org)
25. Taghizadeh Moghaddam H, Bahreini A, Ajilian Abbasi M, Fazli F, Saeidi M. Adolescence Health: the Needs, Problems and Attention. *Int J Pediatr*. 2016; 4(2):1423-38.
26. Ghazanfarpour M, Khadivzadeh T, Rajab Dizavandi F, Kargarfard L, Shariati Kh, Saeidi M. The Relationship between Abuse during Pregnancy and Pregnancy Outcomes: An Overview of Meta -Analysis. *Int J Pediatr*. 2018; 6(10):8399-8405.