Adolescent Pregnancy

Situation in South-East Asia Region

World Health Organization
Regional Office for South-East Asia

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Preface

Adolescents are the future of every nation. This period of life is full of opportunities, challenges and threats. Adolescents are generally perceived to be healthy. However, it is well-recognized that they face several public health challenges, particularly related to sexual and reproductive health. The United Nations General Assembly, recognizing the importance of adolescent health, included a specific indicator – adolescent birth rate – under MDG 5b targets for global monitoring and reporting in October 2007. WHO has recently released the"Global report on the health of adolescents" which clearly highlights the burden of adolescent sexual and reproductive health issues including adolescent pregnancy.

Adolescent pregnancy is a major threat to adolescent health globally. It is estimated that six million adolescents are giving birth each year in Member States of the South-East Asia Region. Much of adolescent pregnancy in the Region occurs within marriage, especially in Bangladesh, India and Nepal, where early marriage of girls is still common. In some countries, a substantial proportion of adolescent pregnancies occurs in unmarried girls, the exact burden of which remains hidden and unknown because of social stigma. Adolescent pregnancy is associated with higher maternal mortality, especially below 15 years of age, maternal morbidity and adverse child outcomes including a higher prevalence of low birth weight and higher perinatal, neonatal and infant mortality as compared to older women. Access and use of condoms and modern contraceptives among sexually active adolescents is low and unmet need for family planning is high. This contributes to higher risk for STI/HIV, unintended pregnancy and induced abortion with associated complications.

To promote adolescent health and development, the WHO Regional Office has supported and collaborated with Member States to develop national adolescent health programmes. It has been noted that strategic information on adolescent health, including adolescent pregnancy is not adequately available in many countries. Such information about the prevalence of adolescent pregnancy and the underlying behaviours and their determinants is extremely important for designing meaningful programmes and strategies for prevention and management. The Regional Office has compiled country-level data and information on adolescent pregnancy from various existing sources and presented as country factsheets and a regional summary in this document.

I am sure this information will be useful for various stakeholders in the Member States of the Region in prioritizing and planning their national health actions for prevention and management of adolescent pregnancy. It will also help to advocate for enhanced and sustained commitment for addressing adolescent sexual and reproductive health that will contribute to accelerating progress in the countries towards achieving Millennium Development Goals 4, 5 and 6 as well as progress beyond 2015.

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SOUTH-EAST ASIA REGION

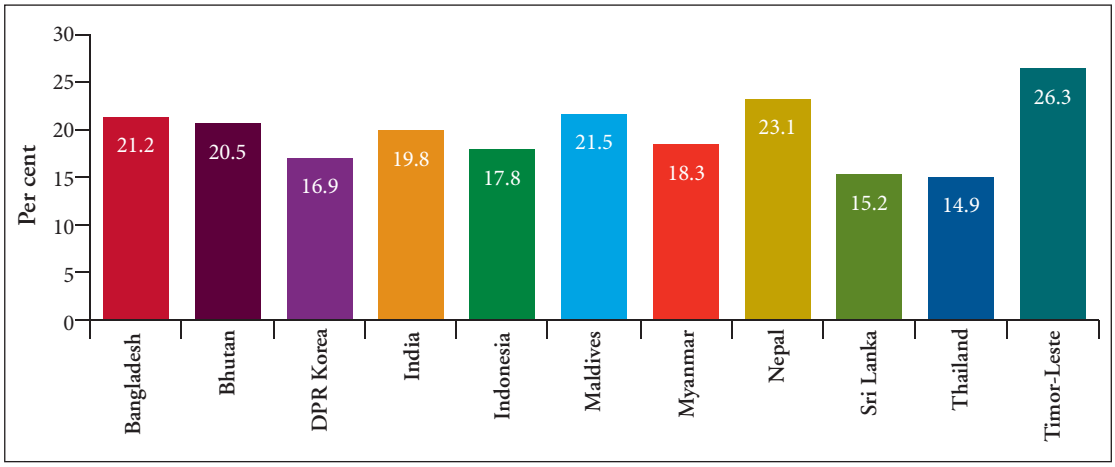
Adolescent Pregnancy in SEAR

- The adverse effects of teenage sexual behaviour, pregnancy, and childbearing are generally well documented.
- Young women are more likely to suffer pregnancy-related complications that endanger their lives or lead to infertility than older women. The real problems stem from the physiological immaturity of the young mother.
- Available data suggest that maternal mortality rates for young adolescents may be higher than women in their twenties and early thirties.
- Adolescent pregnancies are more likely to be associated with low birth weight, prematurity, birth injuries, stillbirth, and infant mortality.
- Younger and/or unmarried women are more likely than older and/or married women to consider late, unsafe abortions as an alternative to carrying a pregnancy to term.
- Apart from the health risks, adolescent childbearing and the conditions associated with it are fundamental factors determining the quality of life and role of women in a society.
- Untimely pregnancy can force young women to discontinue their education, reducing their employment options later in life.
- Health problems, lack of education, and the responsibilities of parenthood combine to further restrict women's future economic opportunities and career choices.
- The implications for society include the immediate costs of addressing the health problems. But the longer term costs may be even greater.
- Finally, national efforts to limit population growth will suffer, not just because of the early childbearing by these women, but because childbearing at early ages tends to be associated with higher fertility over women's reproductive lives. Rapid population growth represents a challenge to nations in terms of providing education, health services, and employment for its people now and in the future.

1. Number of adolescents in South-East Asia region

We are living in a very young world, indeed, with almost half of the current global population under the age of 25. There are 1.2 billion adolescents in the world today, and about 350 millions live in SEAR countries. Adolescents constitute about 15-26% of the total population in the countries of the region[1] (Figure-1). In some of the countries of the region where youth bulge started late, these numbers are projected to increase, but in others the adolescent population will decline by the next quarter of the century. However, their large number is a major concern in regard to adolescent pregnancy and future population growth[2].

Figure 1: Proportion of adolescent population in SEAR countries (Estimates for 2015)



Source: *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision. New York: UN, 2011 - http://esa.un.org/unpd/wpp/index.htm*

Number of adolescents giving birth

About 16 million women under age 20 give birth each year worldwide. The vast majority of births to adolescents occur in developing countries[1]. In South-East Asia region alone 6 million adolescents are giving birth each year which is on an average 16% of all births, though it varies markedly by countries in the region (Table-1). It ranges from as low as 4-5% in Maldives, Myanmar and Sri Lanka to 21% in Nepal[1].

Birth rates are another way to look at the scope of adolescent pregnancy which is highly variable among the countries of the region. Bangladesh has adolescent fertility levels of above 100 per 1 000 women. It is interesting to note (Table-2) that the country with highest TFR (Timor-Leste with TFR of 5.7) is not necessarily the one with the highest adolescent fertility rate. Bhutan, Indonesia and Nepal all with the TFR of 2.6 have widely varying levels of adolescent fertility. Timor-Leste adolescent fertility rate of 51 is much lower than that of Bangladesh (highest adolescent fertility rate) having TFR of 2.3.

[1] *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision. New York: UN, 2011 http://esa.un.org/unpd/wpp/index.htm*

[2] *World Health Organization. Position paper on mainstreaming adolescent pregnancy in WHO's making pregnancy safer strategic approach. Geneva: Making Pregnancy Safer Department, WHO, 2009. Document No. WHO/MPS/10.03 - http://www.gfmer.ch/SRHcourse_2010/adolescent_sexual_repoductive_health/pdf/WHO-mainstreaming-adolescent-pregnancy-efforts-MPS-2010.pdf -*

Table 1: Birth to adolescents as percentage of all births in SEA Region

Country	Total number of births		Birth to adolescents as percentage of all births (%)
	All ages (000) 2005-2010	15-19 years old (000) 2005-2010	
Bangladesh	15 136	2 569	16.9
Bhutan	75	10	13.3
India	136 354	24 388	17.9
Indonesia	22 319	2 419	10.8
Maldives	25	1	4
Myanmar	4 229	184	4.4
Nepal	3 660	785	21.4
Sri Lanka	1 929	96	4.9
Thailand	4 364	560	12.8
Timor-Leste	210	19	9
Total	**188 301**	**31 031**	**16.4**

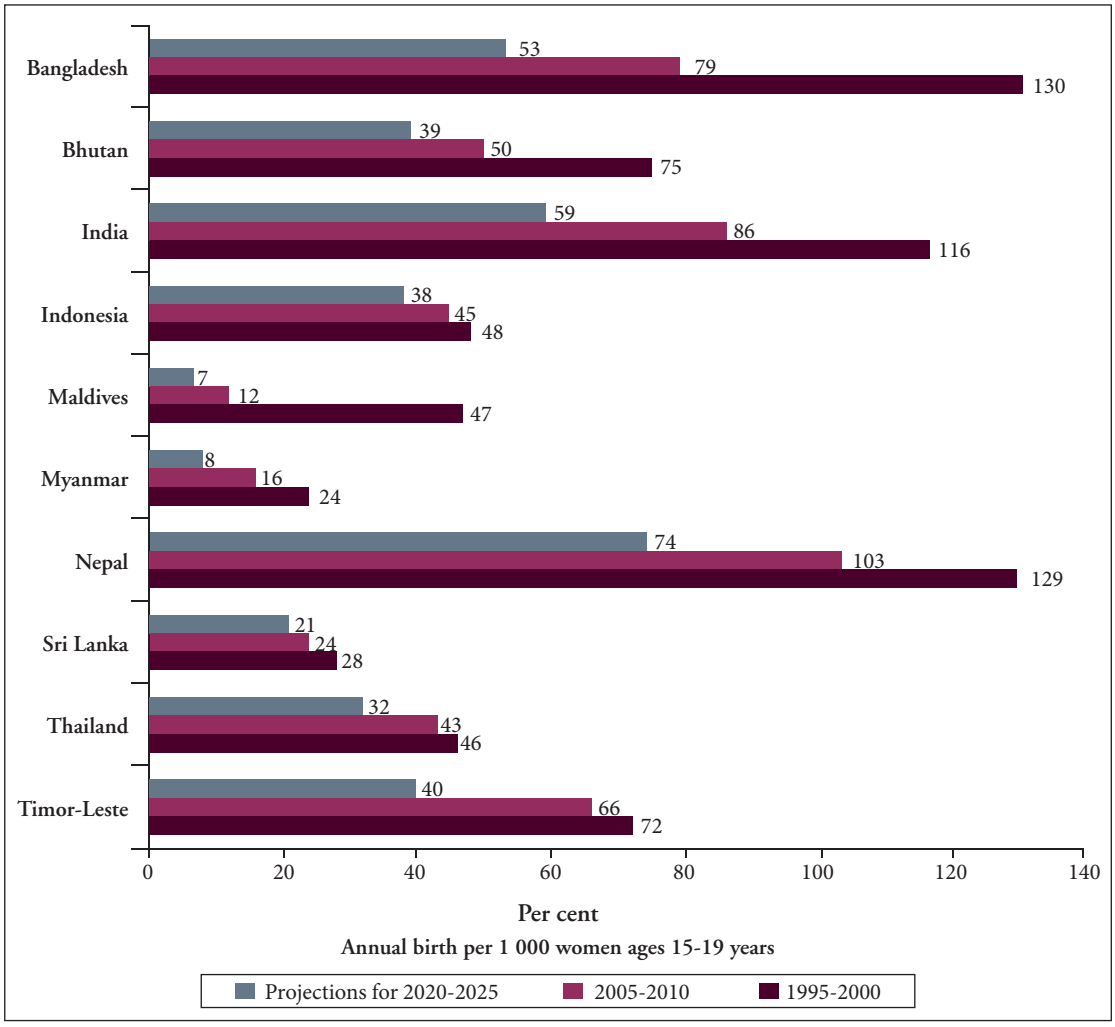
Source: *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision. New York, 2010 - http://esa.un.org/unpd/wpp/index.htm*

2. Adolescent pregnancy

The data from World Population Prospects, 2010 Revision indicates that rates of childbearing among adolescents has declined in nearly all the countries except Sri Lanka where the incidence was already low (Figure-2). The largest declines over the past 15 years are observed in Bangladesh, India, Maldives, Myanmar and Timor-Leste (Figure-3). Reasons for the decline in adolescent birth rates vary from country to country, and reflect a combination of factors like rising age at marriage, increases in girls' educational attainments, greater job opportunities for women, urbanization, and rising rates of contraceptive use.

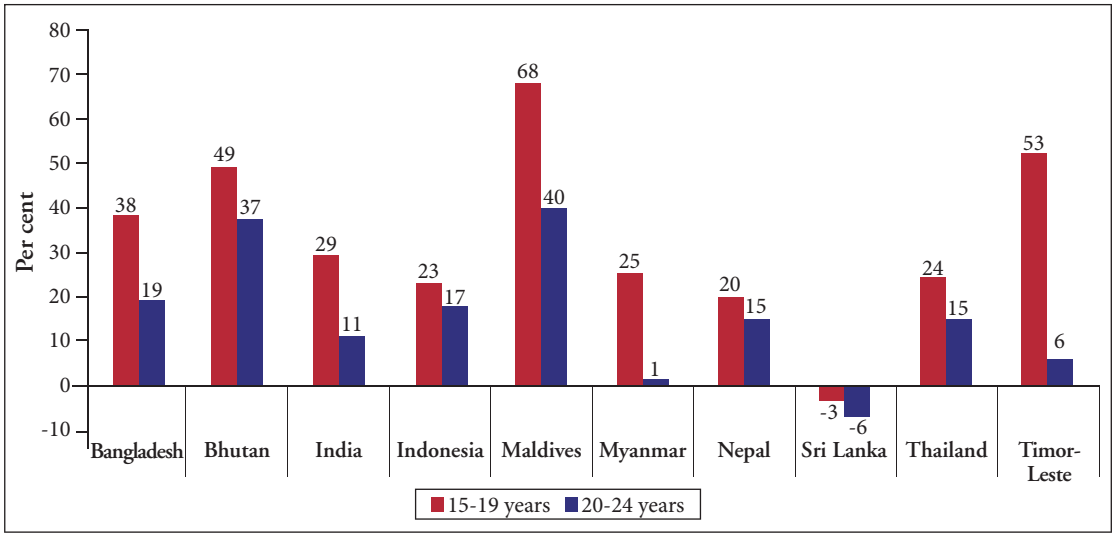
Adolescent fertility

Figure 2: Trends in adolescent fertility in SEAR countries from 1995 to 2025



Source: *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision. New York: UN, 2011 - http://esa.un.org/unpd/wpp/index.htm*

Figure 3: Percentage decline in fertility, 1995-2010



Source: *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision. New York: UN, 2011 - http://esa.un.org/unpd/wpp/index.htm*

Table 2: Total fertility rate and age specific fertility rate among SEAR countries

Country	Total Fertility Rate (TFR) (per Woman)	Age Specific Fertility Rate (ASFR), ages 15-19 years (per 1,000 women)
Bangladesh	2.3	118
Bhutan	2.6	59
India	2.68	90
Indonesia	2.6	51
Maldives	2.5	10
Myanmar	2.03	17
Nepal	2.6	81
Sri Lanka	2.3	28
Thailand*	1.6	43
Timor-Leste	5.7	51
DPR Korea*	2	1

Source: *Bangladesh DHS 2011; Bhutan MIS 2010; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Myanmar FRHS 2007; Nepal DHS 2011; Sri Lanka DHS 2006-07; and Timor-Leste DHS 2009-10;*

**Data for DPR Korea and Thailand has been taken from World Health Statistics 2012, World Health Organization, 2012, Geneva.*

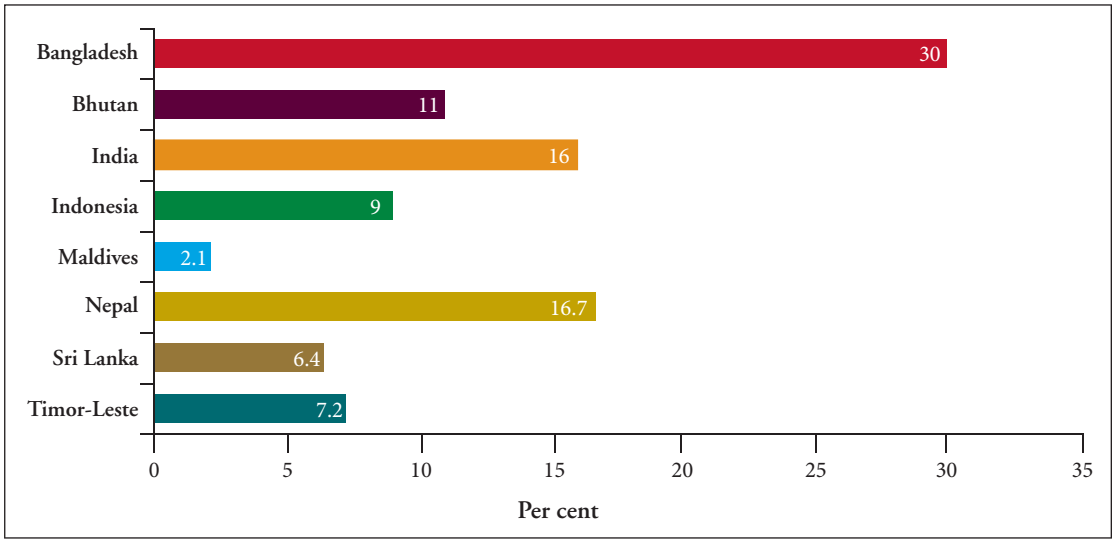
The recent decline in adolescent fertility reflects a broader decline in fertility that has occurred in many countries during the past 10-15 years, but the fall in adolescent fertility is likely to exceed the changes in older age groups (Figure-3). This can be explained with the increase in age of marriage in some countries which would affect the younger group more than the older group.

Age at first birth

Although pregnancy during adolescence is on the decline in all the countries of the region, one third of adolescents in Bangladesh and one sixth in Nepal have either given birth or are pregnant (Figure-4). This percentage is less than 10% in Indonesia, Sri Lanka and Timor-Leste and just 2% in Maldives.

It is important to understand the age patterns of births within the adolescent age group because risks associated with adolescent pregnancy apparently increase as age decreases. A closer look at the data from recent Demographic and Health Surveys (DHSs) on births in the 15-19 years age category shows that adolescent pregnancy in most countries is concentrated among older adolescents (Figure-5), though this proportion varies considerably across the countries, from 58% in Bangladesh to 17% in Sri Lanka and 7% in Maldives by the age of 19 years. On the other hand about 16% of adolescents in Bangladesh, 6% in India and 5% in Nepal are bearing children by the age of 16 years. Some studies have also shown birth in even the under 15 age group, though DHSs do not cover adolescents below 15 in the surveys.

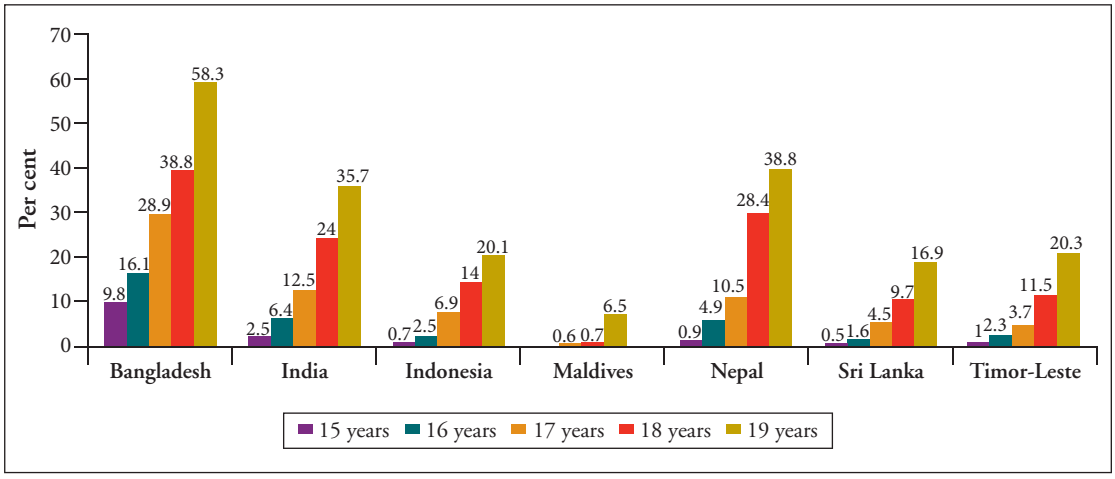
Figure 4: Proportion of adolescents who have begun childbearing among SEAR countries



Source: *Bangladesh DHS 2011; Bhutan MIS 2010; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Nepal DHS 2011; Sri Lanka DHS 2006-07; Timor-Leste DHS 2009-10.*

Note: Data from Myanmar has not been taken into account as number of respondents was very small.

Figure 5: Proportion of married adolescents (ages 15-19 years) who have begun childbearing by specific age

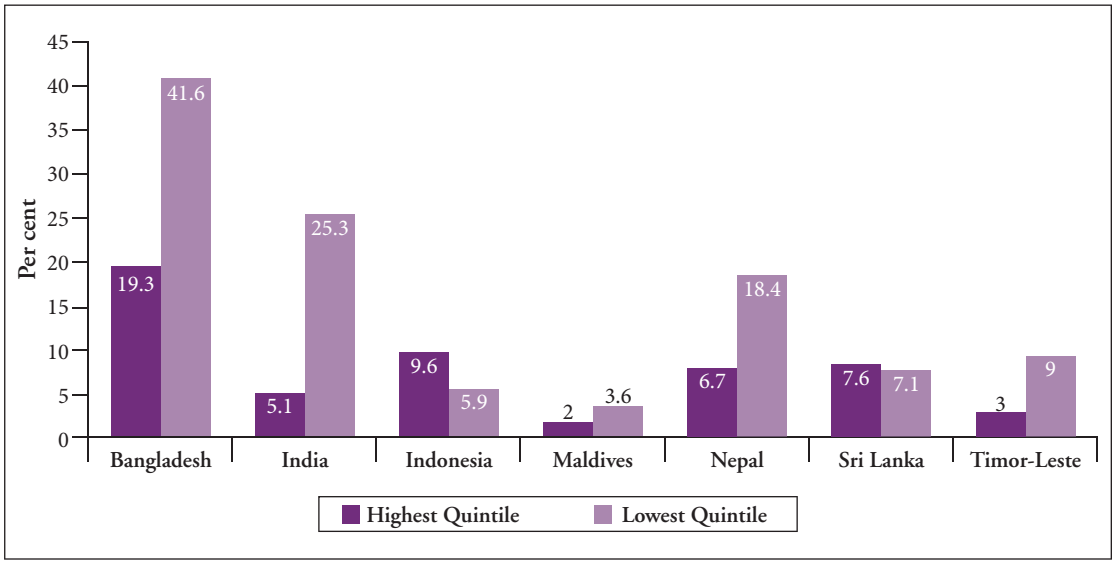


Source: *Bangladesh DHS 2011; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Nepal DHS 2011; Sri Lanka DHS 2006-07; Timor-Leste DHS 2009-10.*

Note: Data from Myanmar has not been taken into account as number of respondents was very small.

In most Countries in SEAR region adolescent childbearing has been high among women from low economic background. But Indonesia and Sri Lanka showed a reversed association with economic status of women.

Figure 6: Proportion of women aged 15-19 years who have begun child bearing by economic status among SEAR countries.



Source: *Bangladesh DHS 2011; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Nepal DHS 2011; Sri Lanka DHS 2006-07; Timor-Leste DHS 2009-10.*

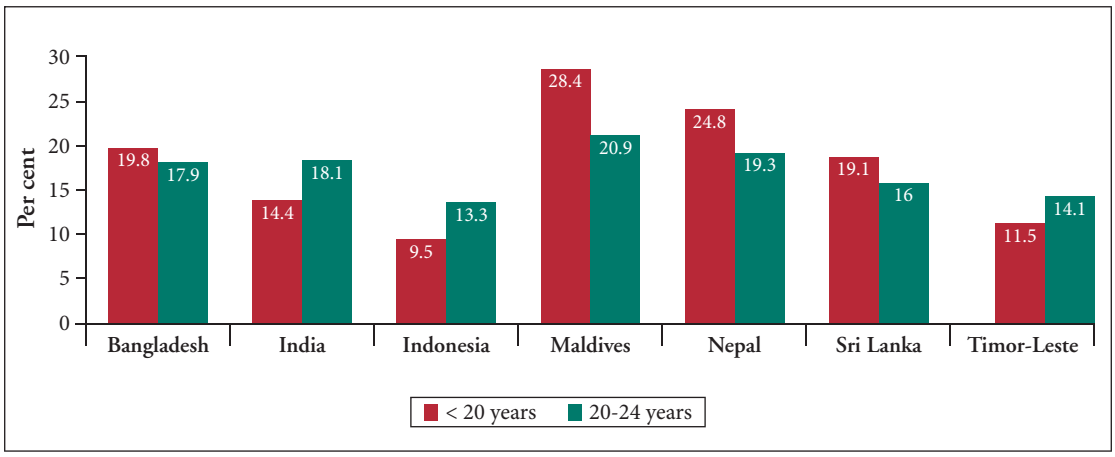
Planning status of adolescent pregnancies

Given the high value placed in most of the societies on children and motherhood, and given that a high proportion of adolescent childbearing occurs within a union or marriage, most early marital births would be expected to be wanted or planned at the time they occurred. Unplanned pregnancies include both those that are mistimed (i.e.,the woman wanted to become pregnant at some point in the future, but not yet) and those that were unwanted (the woman did not want to become pregnant now or in the future). Data from recent surveys shows that a wide variation in planning status exists across the countries of the region. Results from seven recent DHSs show a mean of about 75% of pregnancies to married adolescents are planned. However, the percentage of pregnancies to adolescents that are unwanted varies widely, from a low of 10% in Indonesia to a high of 28% in Maldives (Figure-7).

No data is available for unmarried adolescents.

No clear pattern emerges when comparing planning status of pregnancy in adolescents versus older women. In four out of seven countries for which recent DHS data is available, adolescents under 20 years have higher rates of unwanted pregnancies compared with women 20-24 years old (Figure-7).

Figure 7: Proportion of births that are unwanted among adolescents and older women



Source: *Bangladesh DHS 2011; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Nepal DHS 2011; Sri Lanka DHS 2006-07; Timor-Leste DHS 2009-10.*

3. Proximate determinants of adolescent pregnancy

The principal factors that affect an adolescent girls's risk of becoming pregnant are age at marriage, sexual intercourse and contraception.

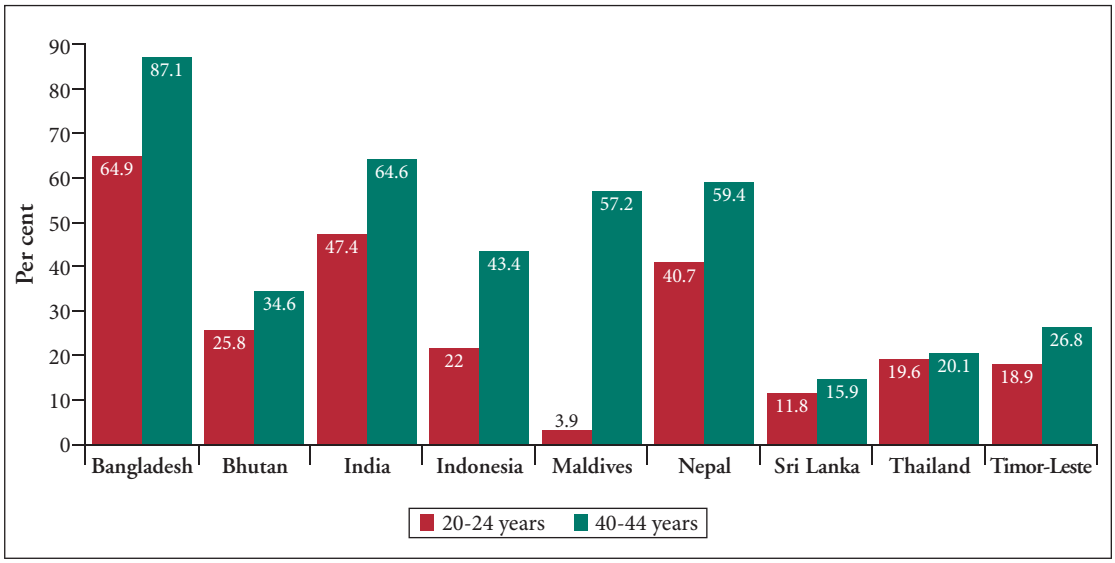
Age at marriage

Globally the highest adolescent birth rates are found in countries where the age of marriage is low. The mechanisms linking age at marriage to fertility are well known, even though complex, and involve other determinants of fertility, such as education. In addition, populations with higher mean ages at first marriage also tend to be more urbanized, to have higher levels of educational attainment, and, more often, to use family planning within marriage.

Age at first marriage has gradually increased in most countries (Figure-8). Nonetheless, significant proportions of adolescents are already married and parents.

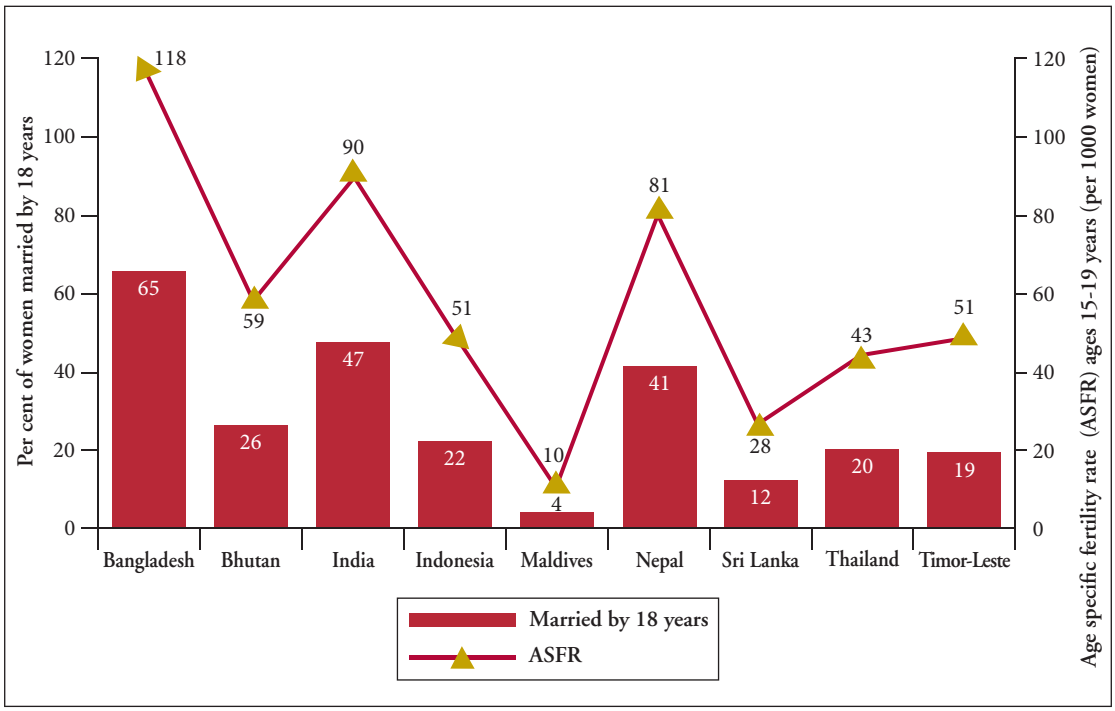
The inverse relationship between age at marriage and fertility can be easily interpreted from the Figure-9. Adolescent childbearing is higher in Bangladesh, India and Nepal as the age of marriage is low compared to Sri Lanka where the age of marriage is higher. The principal exceptions to the rule is Timor-Leste where proportions of women reported as married by age 18 are low and has comparatively higher levels of adolescent fertility.

Figure 8: Proportion married by age 18 among females ages 20-24 and 40-44 years



Source: *Bangladesh DHS 2011;Bhutan MIS2010; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Nepal DHS 2011; Sri Lanka DHS 2006-07; Thailand MICS3, 2005-06; Timor-Leste DHS 2009-10.*

Figure 9: Early marriage and age specific fertility rate for ages 15-19 in selected countries



Source: *Bangladesh DHS 2011;Bhutan MIS2010; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Nepal DHS 2011; Sri Lanka DHS 2006-07; Thailand MICS3, 2005-06; Timor-Leste DHS 2009-10.*

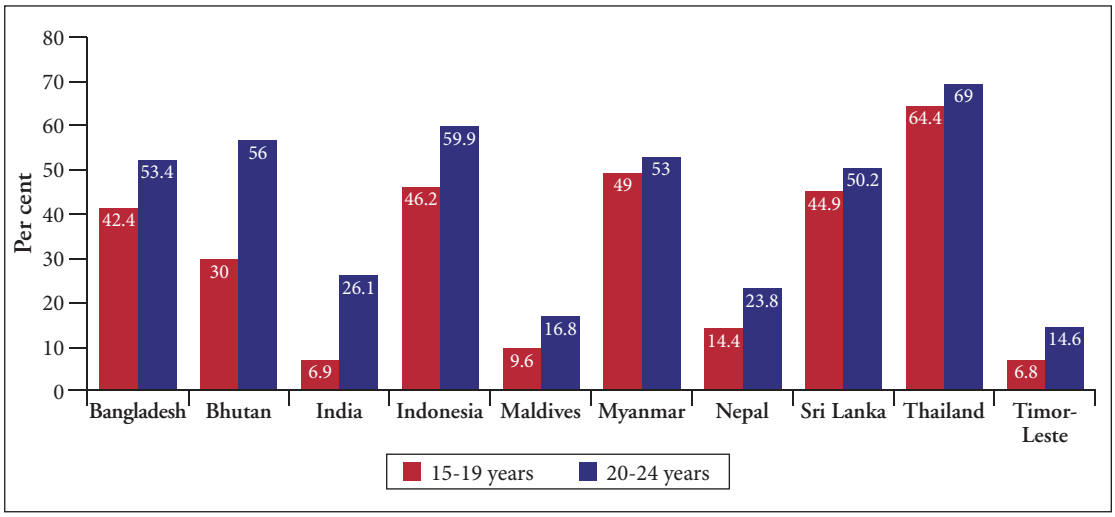
Contraception

Contraceptive use is a second key proximate determinant of adolescent fertility, though accumulated evidence indicates that the use of family planning by women in this age group is less important a determinant of their fertility than age at marriage.

Proportions of married adolescent women using any method of family planning are generally low, but with sizeable inter-country variation (Figure-10). The major reason for low contraceptive prevalence among adolescents is because adolescent women are young, at the beginning of their reproductive lives and, once married, often are under social pressures to have children.

Contraceptive prevalence is also low among adolescents in comparison to older women aged 20-24 years in almost all the countries. The difference varies from 4 percentage points in Myanmar to 26 percentage points in Bhutan.

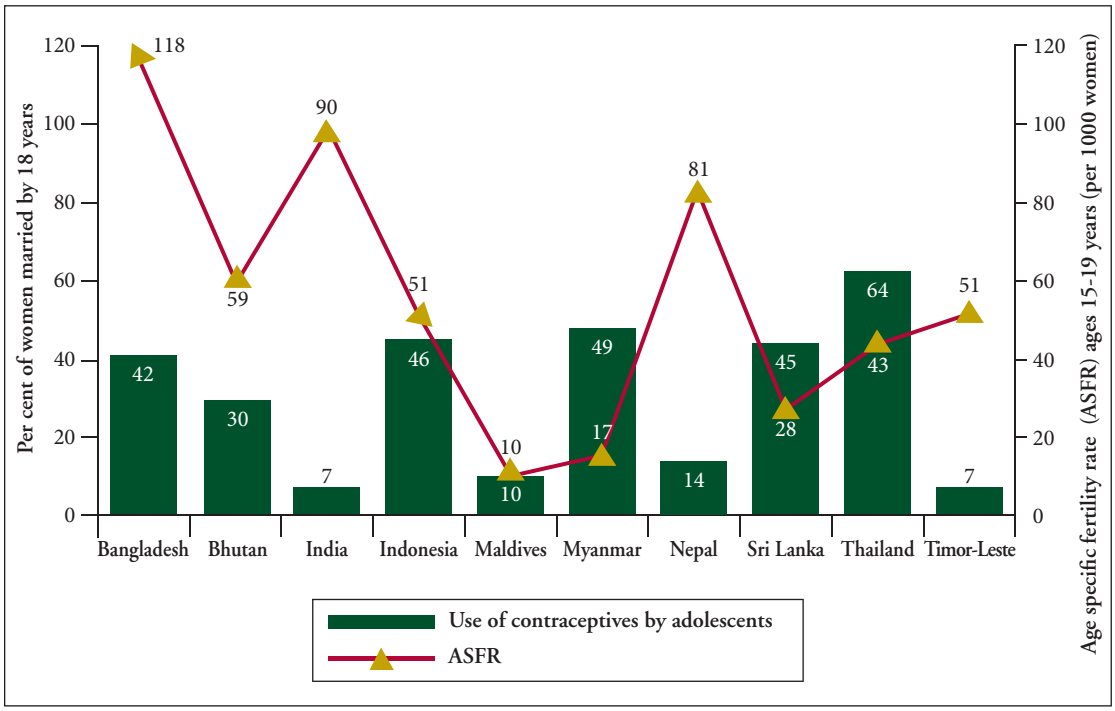
Figure 10: Proportion of contraceptive use among married 15-19 years and 20-24 years old women



Source: *Bangladesh DHS 2011; Bhutan Living Standards Survey 2007; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Myanmar FRHS 2007; Nepal DHS 2011; Sri Lanka DHS 2006-07; Thailand MICS3 2005-06; Timor-Leste DHS 2009-10.*

A cross-national comparison of percentages of currently married women ages 15-19 years using contraception and age-specific fertility data (Figure 11) fails to show the clear relationship. Contraceptive use has not been the dominant proximate determinant of fertility for women in the age range 15 to 19 years. Age at marriage is the significant factor in determining exposure to pregnancy and childbearing for adolescent women.

Figure 11: Contraceptive use and age specific fertility rate for ages 15-19 years in selected countries



Source: *Bangladesh DHS 2011; Bhutan Living Standards Survey 2007; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Myanmar FRHS 2007; Nepal DHS 2011; Sri Lanka DHS 2006-07; Thailand MICS3 2005-06; Timor-Leste DHS 2009-10.*

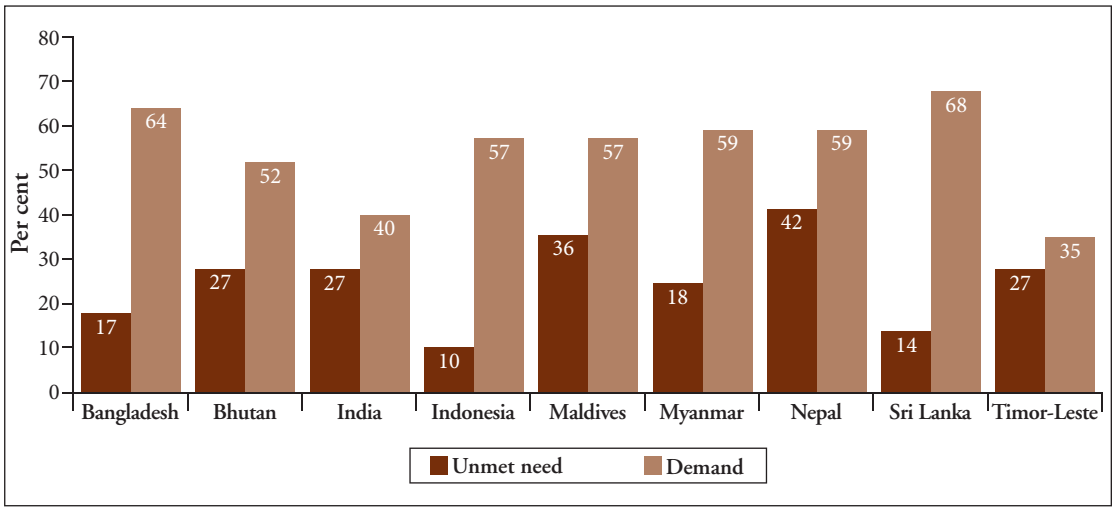
Unmet need for family planning is an important indicator for assessing the potential demand for family planning services. Currently married women who are not using any method of contraception but who do not want any more children are defined as having an unmet need for family planning. Generally in SEAR region unmet need decreases with age, it is comparatively high for women age 15-19 years in Bhutan, India, Maldives, Nepal and Timor-Leste (Figure-12).

Most of the unmet need reported is for spacing or postponement rather than fertility limitation, since very few couples in the age range 15-19 years intend to stop family formation at this age.

In the countries where demand for contraception is high (more than 50%) among adolescents, e.g., in Bangladesh, Bhutan, Indonesia, Myanmar and Sri Lanka; the unmet need is low. However this is not observed Maldives and Nepal where both demand for contraception and the unmet needs (Figure-12) are high.

The pregnancies associated with adolescent unmet need are high risk pregnancies (in terms of both maternal and infant health) as well as being unplanned. This group of women should be considered in need of special attention.

Figure 12: Demand and unmet need for contraception among adolescents aged 15-19 years



Source: *Bangladesh DHS 2011; Bhutan MIS 2010; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Myanmar FRHS 2007; Nepal DHS 2011; Sri Lanka DHS 2006-07; Timor-Leste DHS 2009-10.*

4. Essential care interventions during pregnancy

For women of all ages, use of health care services is a key proximate determinant of maternal and infant outcomes, including maternal and infant mortality. For a safe pregnancy, childbirth and postnatal experience, mothers and babies need a continuum of care that starts in the household and community and extends into health care system, including emergency treatment if a birth is prolonged or obstructed. According to the Making Pregnancy Safer (MPS) Strategic Approach, an essential package of interventions for maternal and newborn health care covers pregnancy, labour, birth, postnatal and early newborn care, family planning, unplanned pregnancy (and its consequences) and post-abortion care[3].

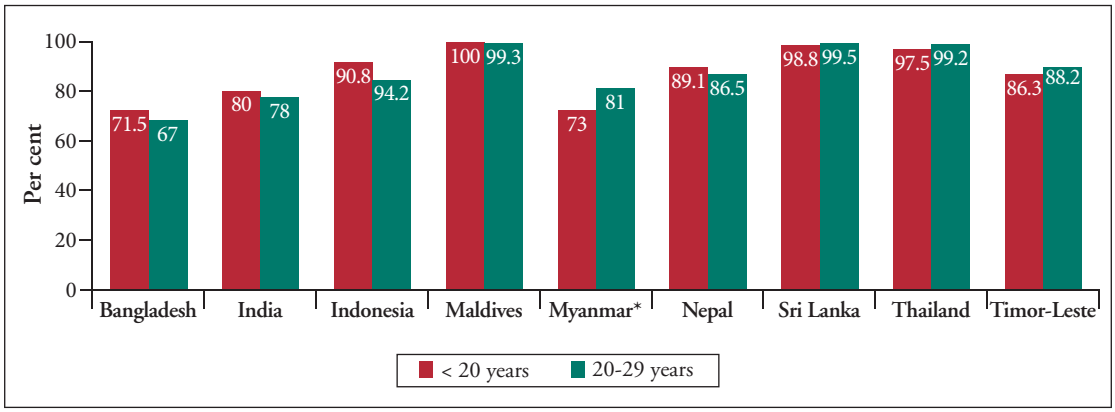
Antenatal care

Essential components of antenatal care include a minimum of four visits that include monitoring for and detection of problems such as anaemia, hypertensive disorder, bleeding, malpresentations, multiple pregnancy; tetanus immunization, anaemia prevention and control; information and counselling on self care at home, nutrition, safer sex, breastfeeding, family planning, and healthy lifestyle; birth and emergency planning; advice on danger signs and emergency preparedness, and syphilis testing[2].

Information from large national surveys shows that use of antenatal services is highly variable across countries and according to various social and demographic categories. At the national level, use of antenatal care by adolescents ranges from about 72% in Bangladesh to 100% in Maldives (Figure-13).

[2]*World Health Organization. Position paper on mainstreaming adolescent pregnancy in WHO's making pregnancy safer strategic approach. Geneva: Making Pregnancy Safer Department. Document No. WHO/MPS/10.03-http://gfmer.ch/SRH_course_2010/adolescent_sexual_reproductive_health/pdf/WHO_mainstreaming_adolescent_pregnancy_efforts_MPS_2010.pdf*

Figure 13: Use of antenatal care among, adolescents and older women age 20-29 years

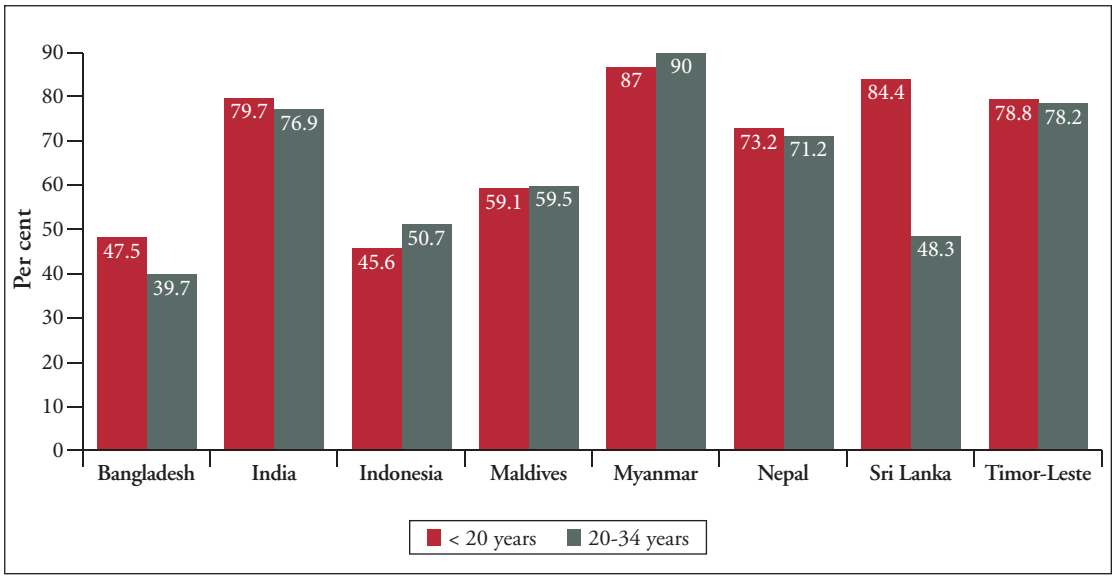


** Age group 20-24 years.*

Source: *Bangladesh DHS 2011; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Myanmar MICS 2009; Nepal DHS 2011; Sri Lanka DHS 2006-07; Thailand MICS3, 2005-06; Timor-Leste DHS 2009-10.*

In terms of tetanus toxoid vaccination, adolescents appear to have better access than do older pregnant women. DHS data shows that in five of nine countries, adolescents have higher rates of tetanus toxoid vaccinations than do older women (Figure-14).

Figure 14: Use of TT vaccination (with at least two doses), adolescents vs. older women age 20-34 years



Source: *Bangladesh DHS 2011; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Myanmar MICS 2009; Nepal DHS 2011; Sri Lanka DHS 2006-07; Timor-Leste DHS 2009-10.*

Care at birth

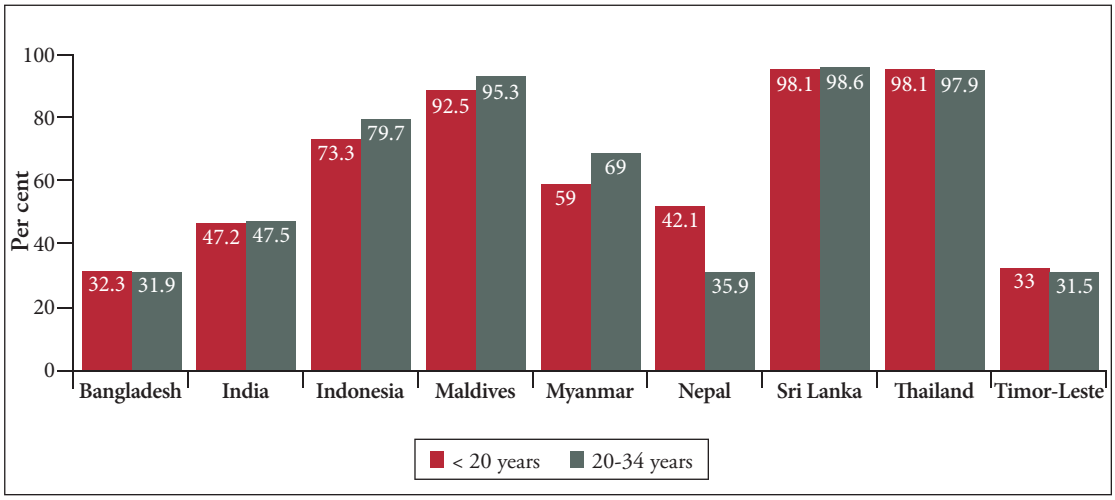
Another key element of the essential package of safe motherhood interventions is childbirth care. WHO Recommendation Interventions for Improving Maternal and Newborn Health encompass

care during labour and delivery and immediate postpartum care of mother. Important indicators of quality childbirth care are whether skilled personnel attended the birth, and whether the mother gave birth in a well-equipped health care facility.

Information from DHSs show mixed findings. Like antenatal services, use of skilled delivery care by adolescents is highly variable across countries. At the national level, use of skilled delivery care by adolescents ranges from about 32% in Bangladesh to 98% in Sri Lanka and Thailand (Figure-15). In three of nine countries with a recent DHSs, adolescents were less likely than women ages 20-34 years to have skilled attendance at birth. However, these differences were relatively small, generally a couple of percentage points. In Nepal and Timor-Leste adolescents were more likely to use delivery care (Figure-15).

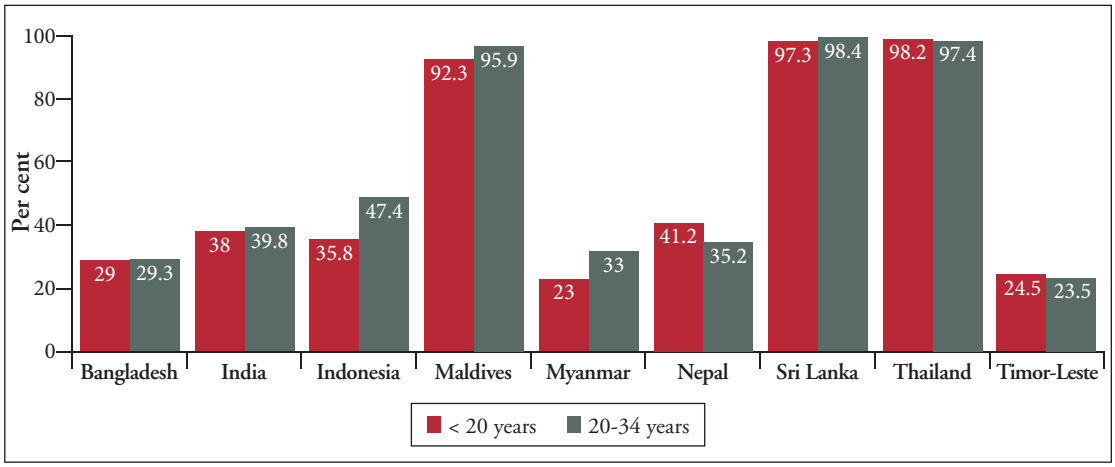
Findings comparing place of delivery are similar, with adolescents in six of nine countries less likely to give birth in a health facility (Figure-16).

Figure 15: Use of skilled delivery care, adolescents and older women



Source: *Bangladesh DHS 2011; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Myanmar MICS 2009; Nepal DHS 2011; Sri Lanka DHS 2006-07; Thailand MICS3, 2005-06; Timor-Leste DHS 2009-10.*

Figure 16: Birth in health facility, adolescents and older women



Source: *Bangladesh DHS 2011; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Myanmar MICS 2009; Nepal DHS 2011; Sri Lanka DHS 2006-07; Thailand MICS3, 2005-06; Timor-Leste DHS 2009-10.*

5. Impact of adolescent pregnancy on health outcomes for mothers, newborns and children

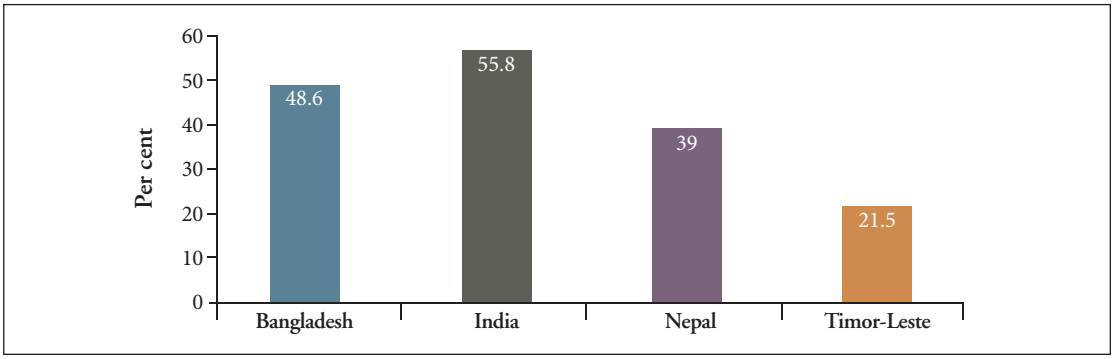
This review provides a clear-cut answer to the question of whether early childbearing puts mothers at higher risk of health problems compared with childbearing in women in their twenties.

Adolescent pregnancy is a complex issue influenced by many factors including individual, family and community characteristics. Its consequences affect the health, social and economic well-being of the adolescents, their children and society at large.

Anaemia

Data from the latest DHSs found that the prevalence of anaemia in adolescents girl age 15-19 years in four countries. Studies show that anaemia, a condition caused in large part by underlying nutritional deficiencies, is a significant problem in pregnant adolescents (Figure-17).

Figure 17: Prevalence of anaemia in adolescent girls age 15-19 years among selected SEAR countries



Source: *Bangladesh DHS 2011; India NFHS-3 2005-06; Nepal DHS 2011; Timor-Leste DHS 2009-10.*

Abortion

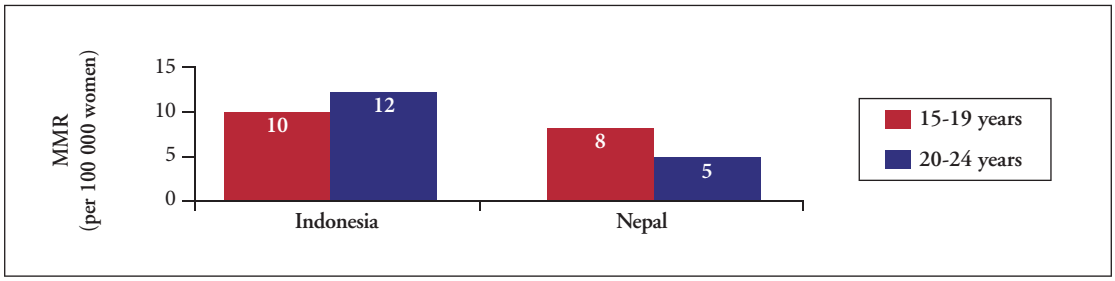
No information is available in national surveys on the numbers of abortions in adolescents or rates of adolescent abortions. Information is generally available only from some studies which have been included in country factsheets, wherever available.

Abortion prevalence is higher where the unmet need for family planning is high, contraceptive prevalence is low, and less-effective contraceptive methods prevail. Where abortion laws are the least restrictive there is no or very little evidence of unsafe abortion, while legal restrictions increase the percentage of unlawful and unsafe procedures. Unsafe abortion, in turn, puts all women, including young women, at risk of maternal death and morbidity.

Maternal mortality

Data from Nepal DHS showed that maternal mortality among 15-19 years old women is one and half times higher than women in their twenties while in Indonesia, maternal mortality is slightly lower in women age 15-19 years old than women in their twenties (Figure-18).

Figure 18: Maternal mortality rate among women, age 15-19 and 20-24 years

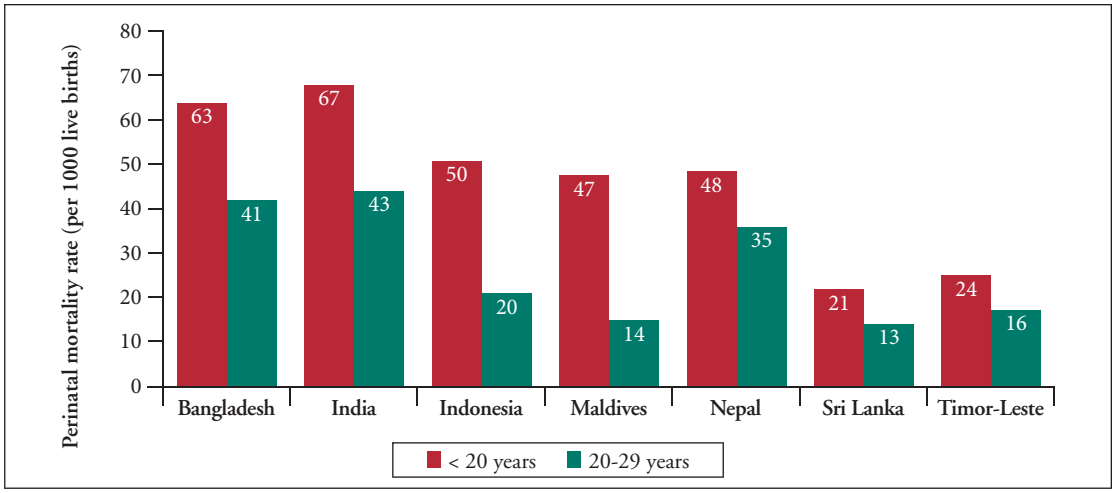


Source: *Indonesia DHS 2007; Nepal DHS 2006*

Newborn and child survival

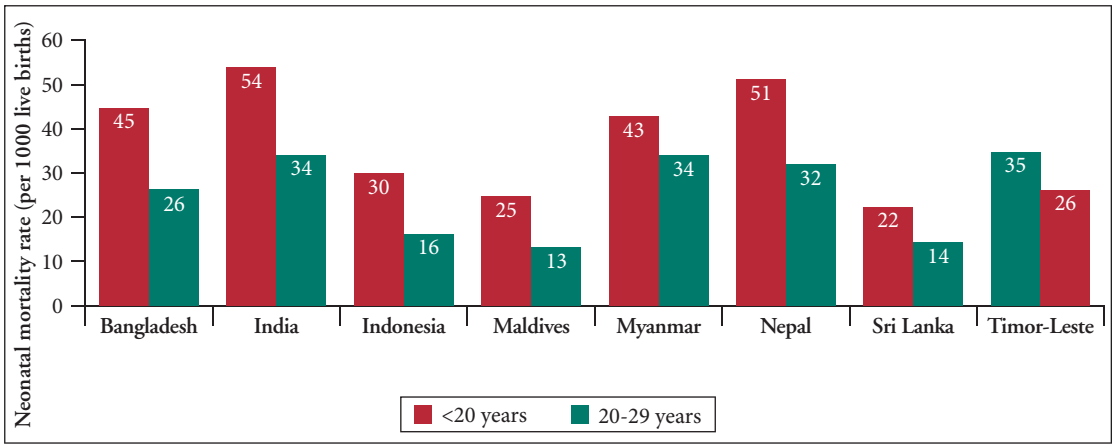
Previous WHO reviews have found substantial evidence of the adverse effects of early pregnancy on perinatal and newborn health. In fact, previous reviewers judged the association as more definitive than that of the effect of early maternal age on maternal health. Births to teenage mothers are subject to higher risks of low birth weight and complications associated with delivery resulting in higher mortality. In all countries, rates of perinatal mortality are higher to mothers under 20 versus mothers in the 20-29 years age range, typically by more than 50% (Figure-19). Similarly, rates of neonatal mortality and infant mortality are higher to adolescent mothers versus mothers in their 20s in all the countries (Figure- 20&21).

Figure 19: Perinatal mortality rate by mother's age in selected countries



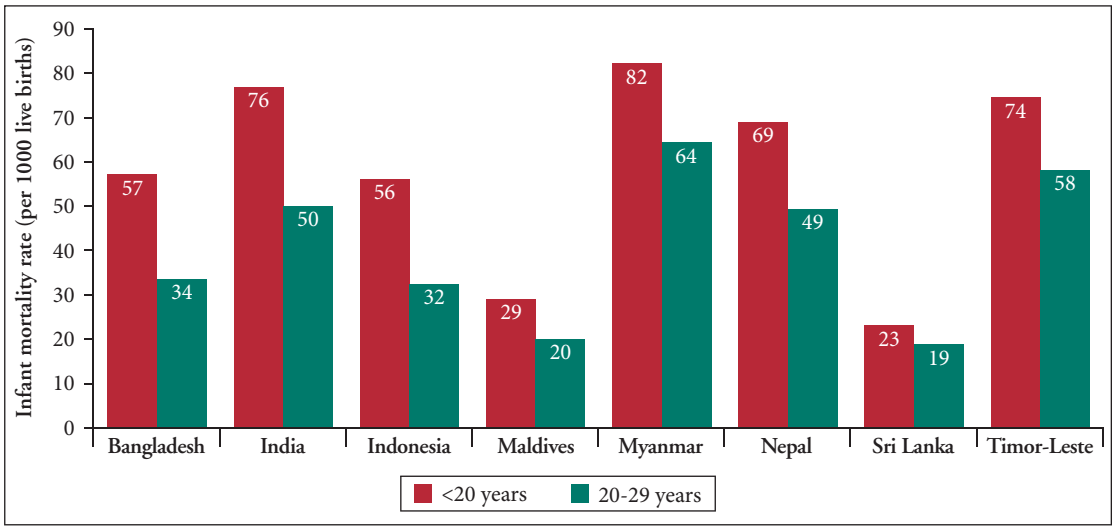
Source: *Bangladesh DHS 2011; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Nepal DHS 2011; Sri Lanka DHS 2006-07; Timor-Leste DHS 2009-10.*

Figure 20: Neonatal mortality rates by mother's age in selected countries.



Source: *Bangladesh DHS 2011; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Myanmar FRHS 2007; Nepal DHS 2011; Sri Lanka DHS 2006-07; Timor-Leste DHS 2009-10.*

Figure 21: Infant mortality rates by mother's age in selected countries



Source: *Bangladesh DHS 2011; India NFHS-3 2005-06; Indonesia DHS 2007; Maldives DHS 2009; Myanmar FRHS 2007; Nepal DHS 2011; Sri Lanka DHS 2006-07; Timor-Leste DHS 2009-10.*

Infant mortality rates (IMRs) are also significantly higher for babies born to adolescent mothers than for infants born to women in their twenties or thirties. Data from DHSs indicate that IMRs for younger women are higher than those for women in the age group 20-29 years by as much as 75% in Indonesia (Figure-21).

The differences are also larger in a relative sense where the absolute IMR levels are now lower, as in Maldives, Indonesia and Sri Lanka. This suggests that infant mortality among babies born to adolescent mothers continues to be a problem even in those countries that have enjoyed some success in bringing down their IMRs overall. These data also reflect the fact that, because of the differences in mix of causes involved (the higher incidence of low birth weight births and birth complications associated with teenage pregnancies), it is easier to reduce infant mortality for older women than for teenage mothers.

BANGLADESH

1. Number of adolescents in Bangladesh

About 32 million adolescents aged 10-19 years constitute 21% of total population of Bangladesh. It is projected that their population will marginally increase until 2015 and thereafter it is expected to decrease[1]. However, their large number is a major concern in regard to adolescent pregnancy and future population growth.

Table 1: Number and proportion of young people by age and sex in Bangladesh, 2010

Age group (in years)	Male		Female		Total	
	Number	(%)	Number	(%)	Number	(%)
10-14	8 224 000	5.5	7 784 000	5.2	16 008 000	10.7
15-19	7 953 000	5.3	7 554 000	5.1	15 507 000	10.4
20-24	7 398 000	5.0	7 261 000	4.9	14 659 000	9.9
Total	**23 575 000**	**15.8**	**2 259 000**	**15.2**	**46 174 000**	**31.0**

Source: *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: the 2010 Revision. New York: UN, 2011- http://esa.un.org/unpd/wpp/index.htm*

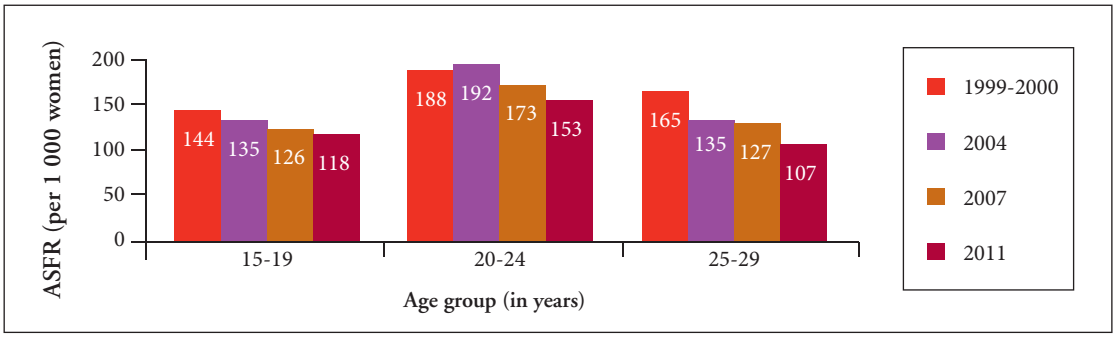
2. Adolescent pregnancy

Adolescent fertility

Early pregnancy is common in Bangladesh. Pregnancy and motherhood often occur before adolescents are fully developed physically, which exposes them to particularly acute health risks during pregnancy and childbirth. An estimated 2.5 million births (17% of total births) were attributed to adolescents between the age 15 and 19 years between 2005 and 2010[1]. The adolescent fertility rate in Bangladesh is 118 births per 1 000 women younger than 20 (Figure-1). Although the adolescent pregnancy rate is declining, the reduction is only 18% during a period of 12 years. There is marked difference in age specific fertility rate between urban areas (91 per 1 000 women) and rural areas (128 births per 1 000 women) (Figure-2). Women in urban areas might get chance to avoid social pressure as a large number of them may be economically independent.

[1] *United Nations, Department of Economic and socail Affairs, Population Divison World Population Prospects: The 2010 Revision and World Urbanization Prospects: The 2010 Revision. New York : UN, 2012 - http://esa.un.org/unpd*

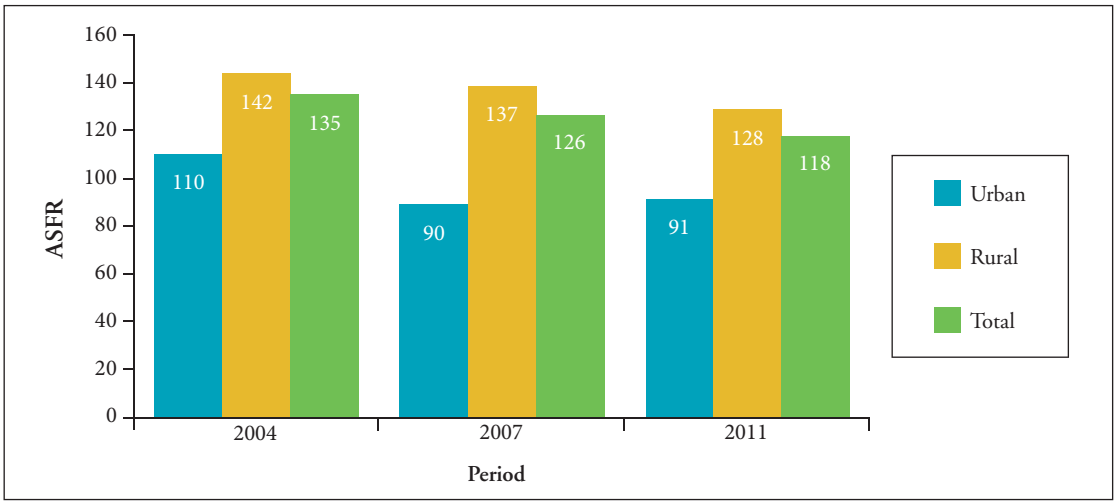
Figure 1: Trend in age specific fertility rate among women at different age groups



Source:

1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*
3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*
4. *National Institute of Population Research and Training. Bangladesh demographic and health survey 1999-2000. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2001 – http://www.measuredhs.com/pubs/pdf/FR119/00FrontMatter.pdf*

Figure 2: Urban-rural differentials in ASFR for adolescents aged 15-19 years



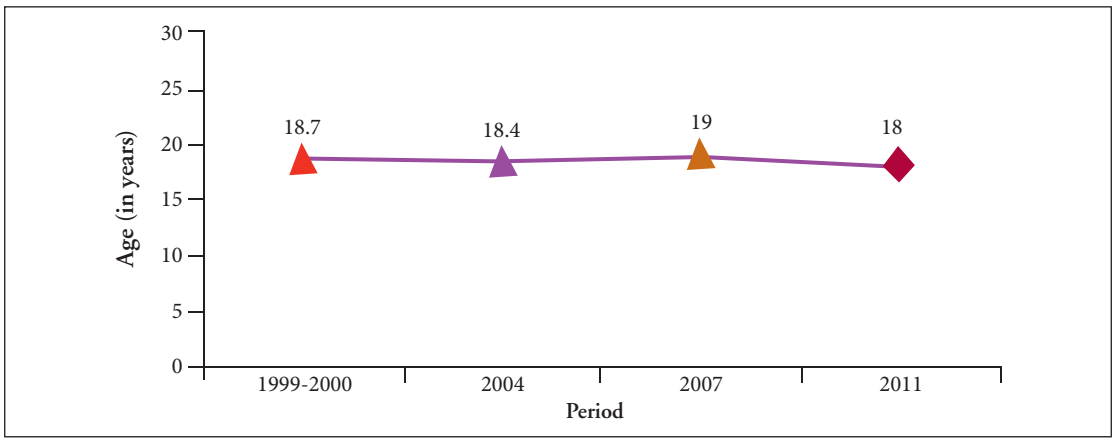
Source:

1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*
3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*

Age at first birth

Data from the Bangladesh Demographic and Health Survey, BDHS 2011 indicate that women are gradually having children at an older age. The median age at first birth shows an unusual trend. It dipped from 18.7 in 2000 to 18.4 in 2004, increased to 19 in 2007 and then declined to 18 in 2011 (Figure-3). However, the age at first birth shows an increasing trend in last 25 years: Eleven per cent of women in age group 40-44 years had their first child by age 15 year compared to 4% of women age 15-19 years (Figure-4).

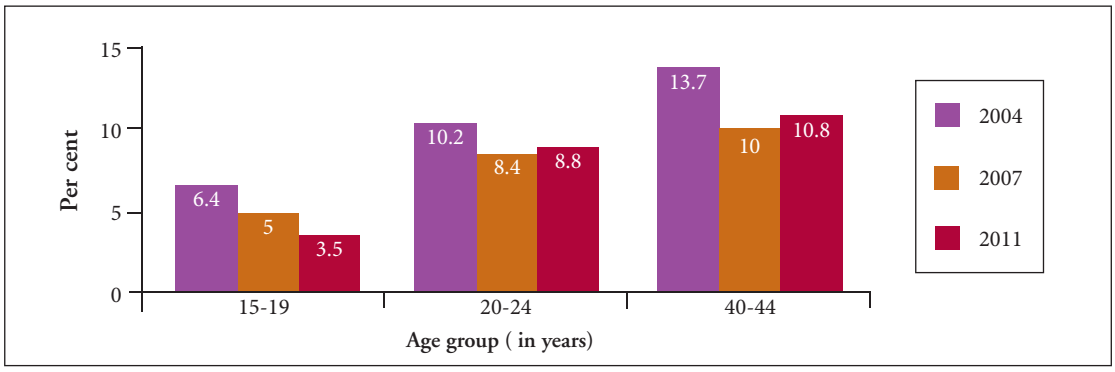
Figure 3: Trends in median age at first birth



Source:

1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*
3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*
4. *National Institute of Population Research and Training. Bangladesh demographic and health survey 1999-2000. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2001 – http://www.measuredhs.com/pubs/pdf/FR119/00FrontMatter.pdf*

Figure 4: Trends in proportion of women who gave first birth by age in Bangladesh



Source:

1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
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4. *National Institute of Population Research and Training. Bangladesh demographic and health survey 1999-2000. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2001 – http://www.measuredhs.com/pubs/pdf/FR119/00 FrontMatter.pdf*

Thirty per cent of adolescents aged 15-19 years have had children, according to the BDHS 2011; of these 24% have given birth and another 6% are pregnant with their first child. The proportion of adolescents aged 15-19 years, who have begun childbearing is mainly concentrated among older adolescents (Figure-5). Nonetheless, 10% of adolescents at the age of 15 and 16% at the age of 16 were either pregnant with their first child or were mothers at the time of survey in 2011. The decline in adolescent pregnancy over the period of 10 years (2000 to 2011) is more noticeable among young adolescents at about 38% for both 15 and 16 years old women in 2011 (Figure-5).

Figure 5: Adolescent childbearing in Bangladesh by age

Source:
1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*
3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04 [FR165].pdf*
4. *National Institute of Population Research and Training. Bangladesh demographic and health survey 1999-2000. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2001 – http://www.measuredhs.com/pubs/pdf/FR119/00 FrontMatter.pdf*

The data from the last four DHSs shows a declined in adolescent childbearing between 1999–2000 and 2004 (Table-2). However, the percentage increased in Dhaka and Sylhet divisions and marginally in Chittagong from 2004 to 2007 and in Barisal from 2007 to 2011. DHS 2011 data shows that Khulna Division has highest adolescent childbearing while Sylhet Division has lowest adolescent childbearing, mainly because of the later age at marriage in Sylhet.

Table 2: Adolescent childbearing by residence in different divisions of Bangladesh

All figures in percentage

Division	1999–2000	2004	2007	2011
Barisal	30.8	29.5	29.4	30.2
Dhaka	35	31.5	33.4	28.8
Khulna	41.6	37.7	33.9	32.9
Rajshahi	42.9	42.3	39.8	32.8
Sylhet	22.2	19	23.2	19.5
Chittagong	26.4	27.7	28.1	27.4

Source:

1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*
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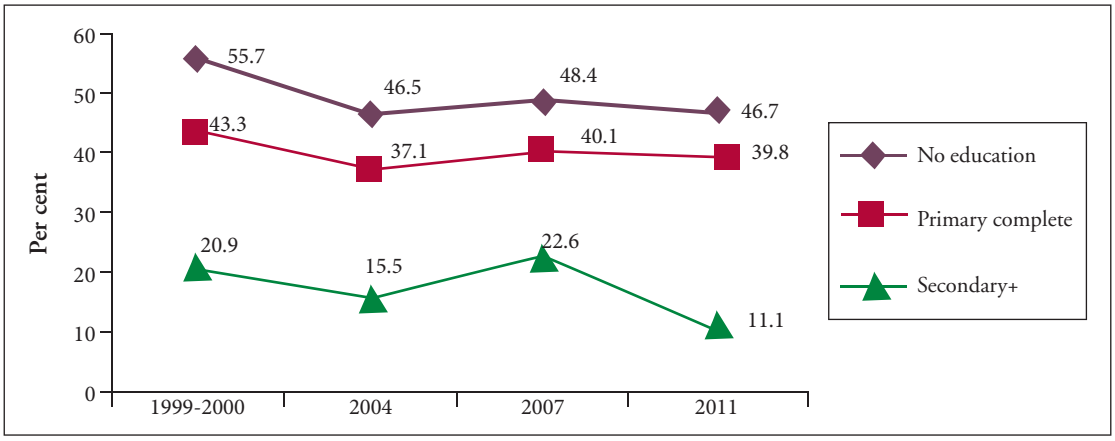
4. *National Institute of Population Research and Training. Bangladesh demographic and health survey 1999-2000. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2001 – http://www.measuredhs.com/pubs/pdf/FR119/00FrontMatter.pdf*

Education and adolescent childbearing

Women's education has strong negative association with adolescent pregnancy. Staying in school and getting education helps in delaying early marriage and pregnancy. The data from BDHS corroborates this premise. Only 11% of the teenagers who completed secondary or higher education had begun bearing children (DHS 2011 data), compared with almost half of those with no education (Figure-6).

Figure 6: Trends in adolescent childbearing by level of education from 1999 to 2011



Source:

1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
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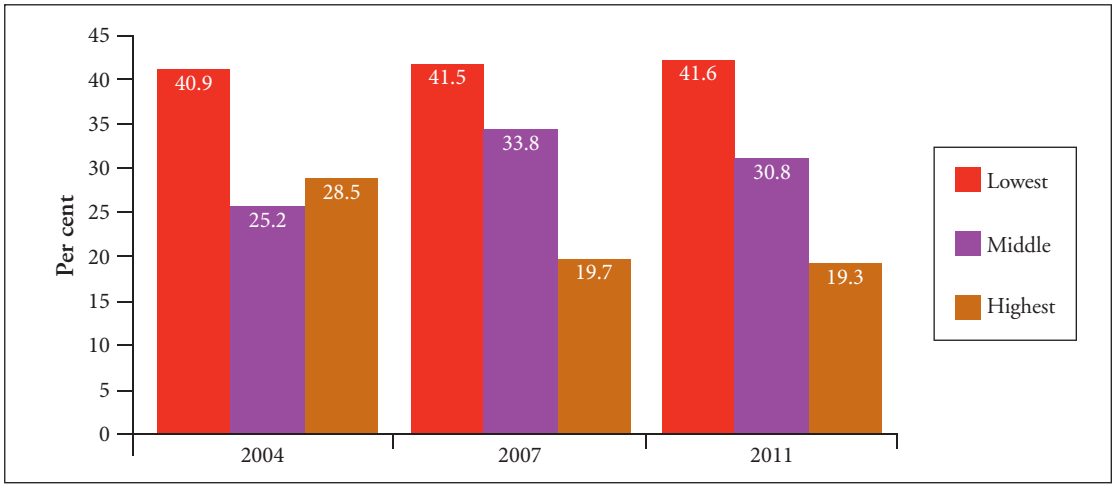
Wealth and adolescent childbearing

A girl who lives in poverty is more likely to be pregnant early than those who belong to higher income families for many reasons such as early marriage (as parents consider them as economic burden), lack of access to education and families' inability to resist social pressure. BDHS also report that childbearing begins earlier in the lowest wealth quintile: 42% of adolescents in this group have begun childbearing, compared with only 19% of adolescents in the highest wealth quintile (Figure-7). There is a significant drop in adolescent childbearing only in highest wealth quintile, 29% to 19%, from 2004 to 2011.

Figure 7: Trends in adolescent childbearing by wealth quintiles



Source:
1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
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Birth interval

Early marital pregnancy may lead to a longer reproductive life among these women and they have more number of children early. While 21% of all women and 46% of currently married women (15-19 years age) have given birth to one child, 7% of currently married women reported to have two children and almost 1% have three children before they attained the age of 19 (Table-3). This suggests that these women also gave births at very short intervals. Studies have shown that birth interval of less than 24 months increases the risk to the health of mother and baby. Short birth

intervals also threaten maternal health. The data shown in table 4 corroborates this finding— birth interval is less than 24 months in 42.4% among mothers aged 15-19 years as compared to only 12.6% among the older age group (20-29 years). The median birth interval is also substantially shorter for teenage mothers (26 months) as compared to older mothers (45 months). Short birth intervals are associated with an increased risk of poorer health and death for both mother and child.

Table 3: Proportion distribution of all women and currently married women age 15-19 years by number of children ever born

Number of children ever born	Percentage of women (age 15-19 years)					
	All women			Currently married women		
	2011	2007	2004	2011	2007	2004
0	75.6	73.4	72.1	45.9	43.1	40.8
1	20.8	21.7	21.5	46.1	46.3	45.3
2	3.3	4.4	5.9	7.3	9.6	12.9
3	0.3	0.4	0.5	0.7	1.0	1.0

Source:
1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
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Table 4: Birth intervals/spacing among mothers in Bangladesh

Age group (in years)	Birth interval (in months)			Median number of months since preceding birth
	7-17(%)	18-23(%)	48+(%)	
15-19	21.6	20.8	3.9	26.4
20-29	4.9	7.7	44.2	44.5

Source: *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*

Planning status of adolescent pregnancy

The degree to which couples are able to successfully control childbearing can be gauged from the data on the percentage of pregnancies that are unwanted. (Table-5).

Table 5: Trends in fertility planning status by mothers' age at birth in Bangladesh

All figures in percentage

Age group at birth (in years)	Planning status of birth		
	Wanted then	Wanted later	Wanted no more
<20	79.2	19.8	0.9
20-24	75.0	17.9	7.1
25-29	68.6	9.7	21.6

Source: *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*

According to BDHS 2011 data, more than three fourths of births (79%) among adolescents were planned, 20% were mistimed, and 1% were unwanted. Although the proportion of planned births is high among adolescents, they are more likely to have mistimed births than the older women. (Table-5)

3. Proximate determinants of adolescent pregnancy

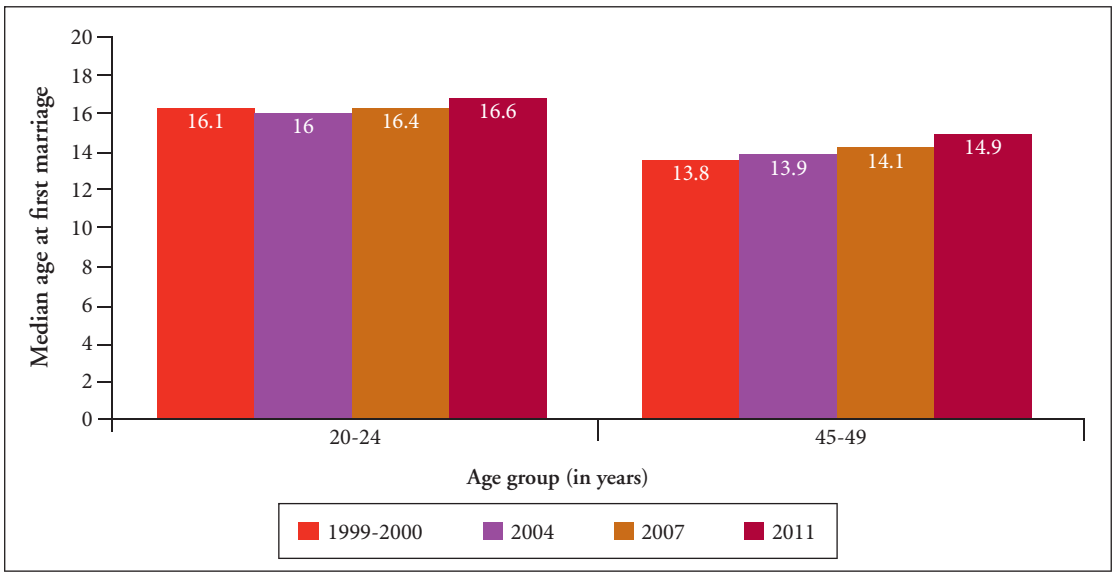
The principal factors that affect an adolescent woman's risk of becoming pregnant are age at marriage, sexual intercourse and contraception.

Age at marriage

Marriage in Bangladesh marks the point in a woman's life when childbearing becomes socially acceptable. Age at first marriage has a major effect on childbearing because women who marry early have, on average, a longer period of exposure to the risk of becoming pregnant and a greater number of lifetime births. There has been a slow but steady increase over the past 25 years in the age at which Bangladeshi women first marry, from a median age of 14.9 years for women who are now in their late forties to 16.6 years for those currently in their early twenties (Figure-8). Nevertheless, this median age at marriage is still one and a half years below the legal minimum age, indicating that laws or policies alone do not necessarily guarantee social change. Sixty-five percent of girls were married by age 18 and 17% by age 15 in 2011[2] (Figure-9 and 10).

[2]*National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.Unicef.org/bangladesh/BDHS2007_Final.pdf–accessed 14 June 2013.*

Figure 8: Trends in median age at first marriage in Bangladesh



Source:

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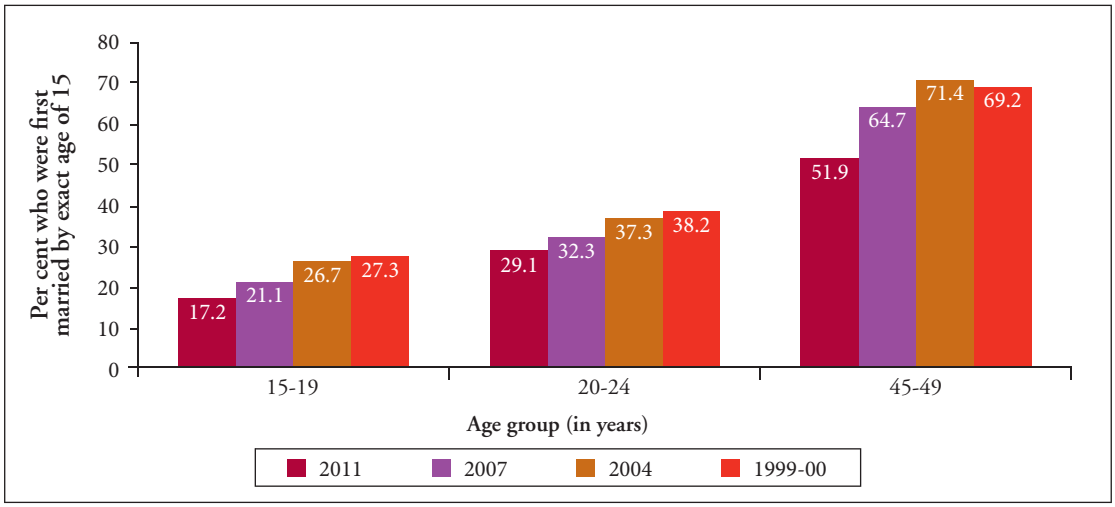
3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*

However, a dramatic decline in the proportion of women marrying in their early teens (by age 15 year) has been observed. The proportion of women marrying by age 15 year has declined by two thirds over time; from 52% among women in the oldest cohort to 17% among women in the youngest cohort (Figure-9).

Figure 9: Trends in proportion of women who were first married by the age 15 years in Bangladesh



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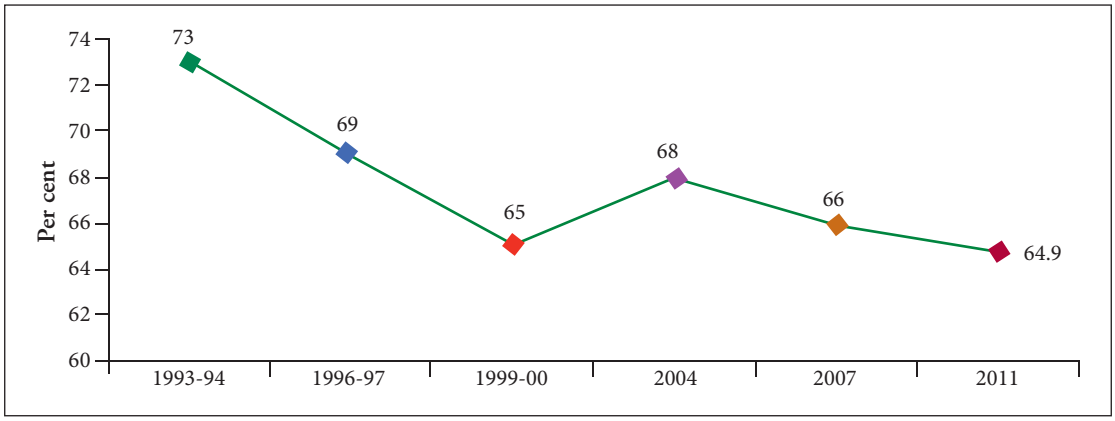
2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*
3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*
4. *National Institute of Population Research and Training. Bangladesh demographic and health survey 1999-2000. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2001 – http://www.measuredhs.com/pubs/pdf/FR119/00FrontMatter.pdf*

Figure 10: Trend in proportion of women aged 20-24 years married by age 18 year in Bangladesh



Source: *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*

The median age at first marriage varies across various administrative divisions of Bangladesh. While it is highest for women in Sylhet, it is lowest for those in Rajshahi and Khulna. Women in Chittagong and Sylhet enter into marriage about one and a half years later than the women in Rajshahi and Khulna. As expected, the incidence of adolescent childbearing is lowest in Sylhet division and highest in Rajshahi and Khulna(Table-6).

Table 6: Median age at first marriage for women in age group 20-49 years by residence

Division	Median age at first marriage
Barisal	15.7
Dhaka	15.8
Khulna	15.3
Rajshahi	15.2
Sylhet	17.5
Chittagong	16.6

Source: *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*

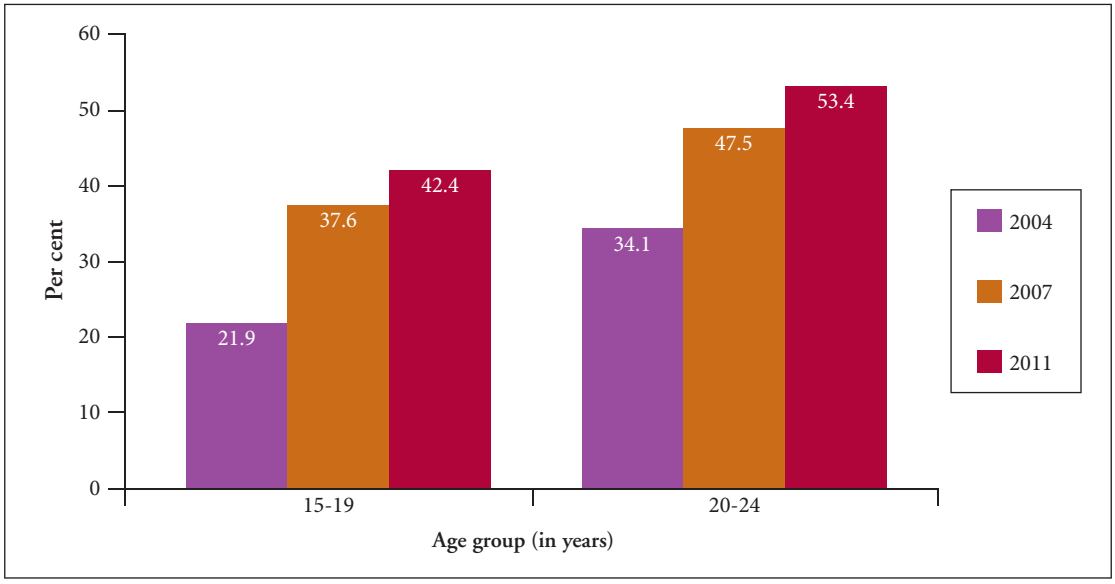
Sexual activity

Age at first marriage is often used as a proxy for first exposure to intercourse and risk of pregnancy. However, the two events may not occur at the same time because some people may engage in sexual activity before marriage. Data from the BDHS 2011 confirm that sex outside of marriage is negligible among women and that the median age at first marriage is identical to the median age at first sex.

Contraception

Contraception, if used consistently and correctly, will prevent pregnancy and, depending upon an individual's circumstances, prevent sexually transmitted diseases. The family planning programme in Bangladesh has made remarkable progress over the last few decades. While knowledge of family planning methods is high among Bangladeshi couples irrespective of their age (99%), the use of modern methods of contraceptives by adolescents aged 15-19 years is much lower (42.4%) than the national average among married women (52.1%). Nevertheless, modern contraceptive use among women aged 15-19 years has increased from 22% in 2004 to 42.4% in 2011 (Figure-11).

Figure 11: Trends in married women who are currently using modern contraceptive methods



Source:

1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*
3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*

Unmet need for family planning

Sexually active and fecund women who prefer to space or limit births, but who are not using family planning services, are considered to have an unmet need for family planning. Unmet need does not necessarily mean that family planning services are not available. It may also mean that women lack information, or that the quality of the services available does not inspire the necessary confidence, or that women themselves have little say in the matter. The DHS data show that adolescent women have a higher unmet need in comparison to older women(Table-7), even though, the demand for family planning among married adolescents is less when compared with that of older women.

Table 7: Proportion of currently married women with demand and unmet need for family planning, 2004 - 2011

Age group (in years)	Unmet need for family planning			Total demand for family planning			Percentage of demand satisfied		
	2004	2007	2011	2004	2007	2011	2004	2007	2011
15-19	15.1	19.4	17.0	60.0	61.2	64.1	74.7	68.3	73.5
20-24	12.5	17.2	15.3	68.7	69.6	73.2	81.9	75.3	79.1

Source:

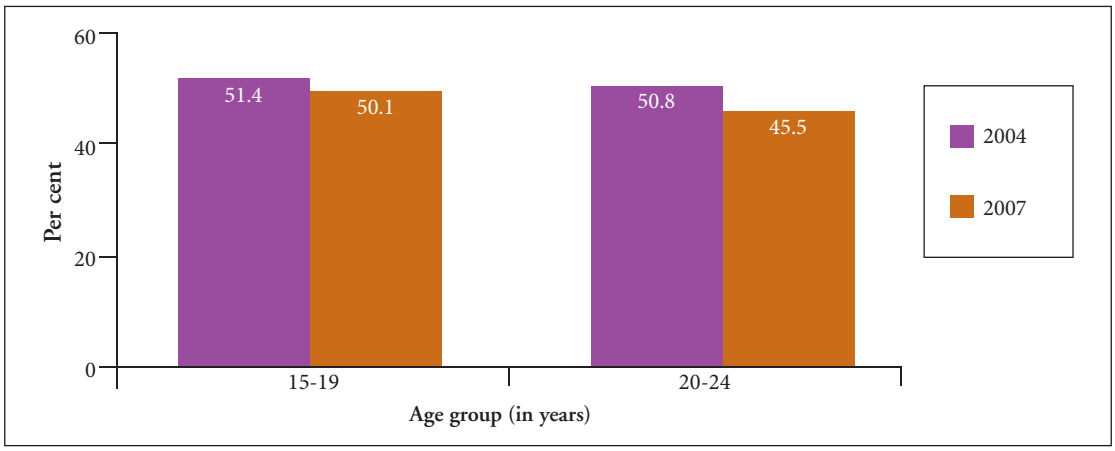
1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*
3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*

Unmet need has increased in all age groups from 2004 to 2007, and then decreased in 2011. The apparent increase in unmet need may reflect problems with the supply of family planning services and/or an increase in demand for family planning. Concurrently, there is a decrease in the percentage of women whose demand for family planning was satisfied during the same period(Table-7).

While no data is available for unmarried adolescents in Bangladesh, reports from other countries show that unmarried young people face great barriers to services and may have higher levels of unmet need than married women.

Use of family planning methods is facilitated when husbands and wives discuss the issue and share their views. Slightly more than half (50.1%) of married adolescents do not talk with their husband about family planning (Figure-12). Husband and wife discussion of family planning was generally more common among older women.

Figure 12: Trends in proportion of young women who never discuss family planning with their husband



Source:

1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*
2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*

4. Essential care interventions during pregnancy

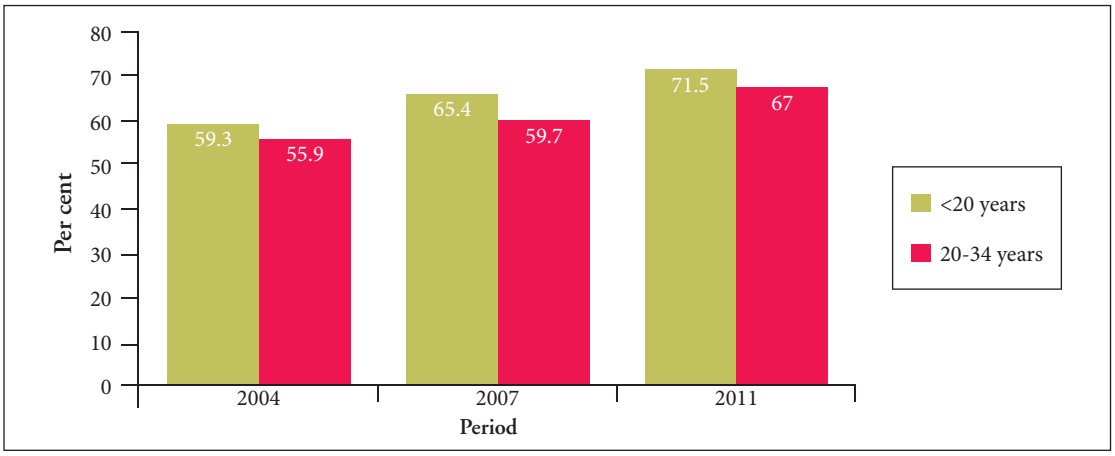
WHO recommends a focused package of four antenatal visits, which help in detection, and treatment of any complications during pregnancy. The visits also provide for early contact with the health-care system, which can improve the timely and appropriate use of delivery care services. Information on the use of antenatal care (ANC), delivery assistance and postnatal, can be used to identify subgroups of women who are at risk due to non-use of reproductive health care services.

Antenatal care

The BDHS 2011 reported that 72% of married adolescents received antenatal care at least once from some provider (Figure-13), while 57% received care from a medically trained provider. The likelihood of getting antenatal care dropped with age. Antenatal care in all age groups has improved over the years. However, the extent of improvement is greater in the case of women under 20.

The quality of antenatal care depends on what it includes, and this is crucial for the health of the mother and the unborn child. Important elements of antenatal care are: providing iron supplements, educating women on the signs of pregnancy complications, performing screening tests and measuring weight gain and blood pressure. Adolescents are less likely to receive each of these services than older women (Table-8).

Figure 13: Trends in proportion of married women who received any antenatal care during pregnancy



Source:
1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*
3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*

Table 8: Among women receiving antenatal care, the percentage receiving specific antenatal services by age

Age group (in years)	Among women who received ANC for their most recent birth, the percentage who received selected services					
	Weighed	Blood pressure measured	Urine sample taken	Blood sample taken	Informed of signs of pregnancy complications	Took iron tablets
<20	80.4	84.5	50.8	33.1	34.5	56.0
20-34	80.7	87.3	55.7	38.9	39.6	55.6

Source:
1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*

BDHS 2011 also reported that the latest birth of 94% of women age 15-19 years was found to be protected against tetanus in comparison to 90% of older women (Table-9). In addition, younger mothers are more likely to have received two or more tetanus injections during their last pregnancy than older women which could be credited to better awareness among young women or any focussed reproductive health programmes for them.

Table 9: The number of tetanus toxoid injections received during the most recent pregnancy and proportion whose most recent birth was protected against neonatal tetanus by the age

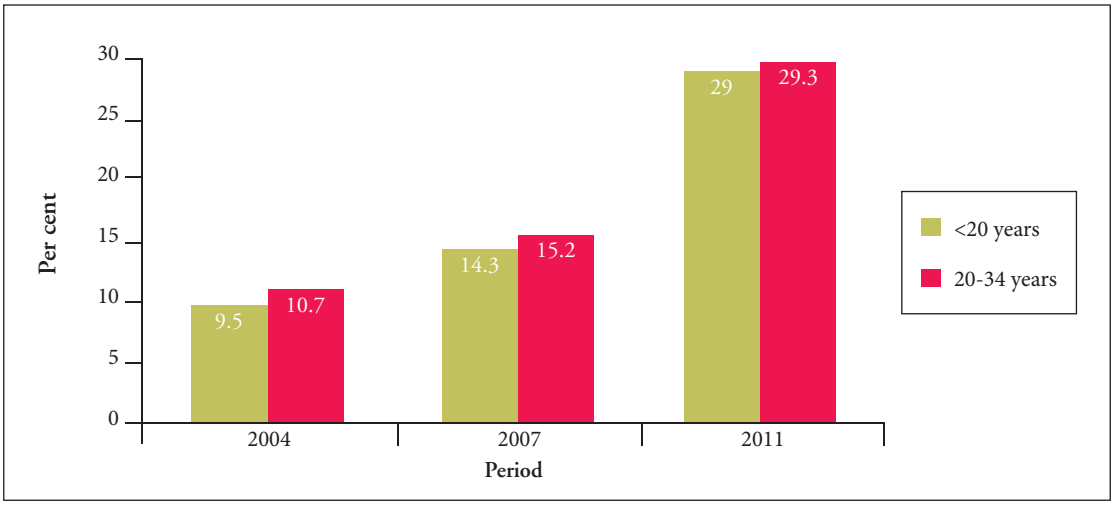
Age group (in years)	Two or more tetanus toxoid injections during the last pregnancy	Percentage whose most recent birth was protected against neonatal tetanus
<20	47.5	93.6
20-34	39.7	89.5

Source: 1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*

Care at birth

Another key element of the essential package of safe motherhood interventions is childbirth care. According to BDHS 2007, adolescents are more likely to deliver at home than older women (Figure-14). The proportion of children delivered at a health facility continues to be low in Bangladesh.

Figure 14: Trend in institutional deliveries by age of women at birth



Source: 1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*

2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*

3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*

Adolescents are also less likely than women ages 20-34 years to have skilled attendance at birth, although these differences were relatively small (Figure-15). But in 2011 this trend in reversed.

Figure 15: Trend in deliveries by skilled birth attendant by age of women at birth

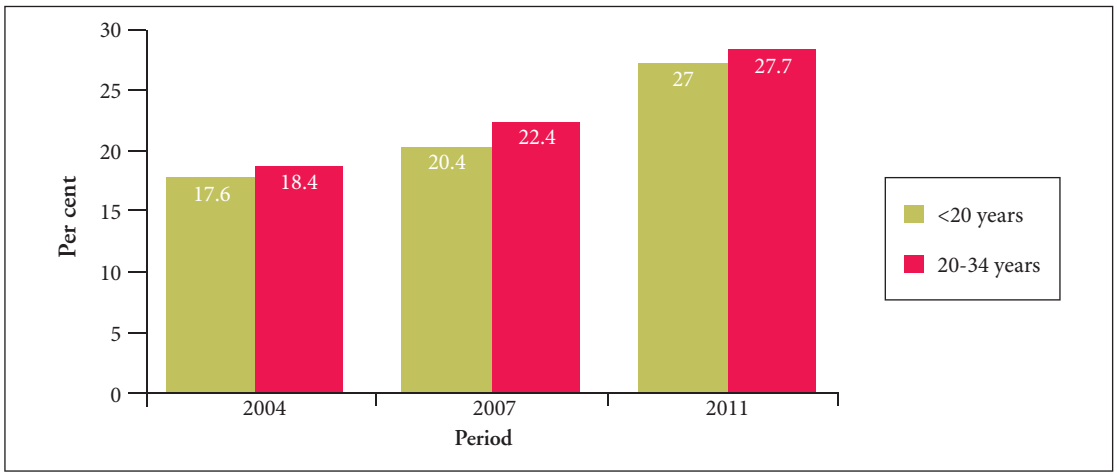
Source:

1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*
3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*

Postnatal care

Postnatal care is another crucial part of safe motherhood. As in the case of delivery care, adolescent mothers are slightly at disadvantage for postnatal care compared to the older mothers (Figure-16). There is a dramatic increase of care from 2004 to 2011.

Figure 16: Trend in post natal care by age of women at birth



Source:

1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*

2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*

3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*

5. Determinants of health care-seeking behaviour of adolescents

A wide range of determinants influence access to and use of pregnancy care, including autonomy of women, their freedom of movement, decision making power, educational status and violence against women.

Autonomy

Personal autonomy is known to be a key determinant of a woman's ability to seek reproductive health services. DHS data have shown that adolescent women in Bangladesh have relatively less autonomy than older women when making health care decisions, including decisions related to pregnancy care (Table-10).

Table 10: Determinants of health care seeking during pregnancy among adolescents

Age group (in years)	Women who can take decision about own healthcare	Women who cannot go to health centre or hospital alone or with children	Women who agree with at least one reason towards wife beating
15-19	48.1	41.5	32.7
20-24	55.9	24.5	32.2

Source: 1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*

Freedom of movement

The ability to leave one's home to seek care has an important influence on access to health care. BDHS 2007 found that adolescents have less mobility than older women, especially after marriage (Table-10).

Violence against women

Domestic violence may limit pregnant women's ability to seek care. In addition, when a woman believes that a husband is justified in hitting or beating his wife, she may consider herself to be of low status, both absolutely and relative to men. Such a perception could act as a barrier to accessing health care for herself and her children. The BDHS 2007 reported that acceptance of wife beating for at least one reason is higher among women age 15-19 (Table-10).

6. Impact of adolescent pregnancy on health outcomes for mothers, newborns and children

Nutritional status

Recent DHS do not provide any information about the nutritional status of pregnant adolescents. However, the data on nutritional status of ever married women suggest that women age 15-19 years are more likely to be thin or undernourished and short in height than women in other age cohorts (Table-11). Women who are short and malnourished have higher risk of complications during pregnancy and delivery.

Table 11: Nutritional status of ever married women

All figures in percentage

Age group (in years)	BMI < 18.5 (thinness)	Height less than 145cms
15-19	25.4	13.0
20-29	23.4	13.7

Source: 1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*

Abortion

Induced abortion is permitted only to save a woman's life under the menstrual regulation (MR) programme. It is available for up to the 12 weeks of gestational age in the form of menstrual regulation (MR). About 2.6% of currently married adolescents reported undergoing menstrual regulation (Table-12). As abortion services are available only up to the 12th week of the pregnancy, adolescents may not recognize their pregnancy or find adequate resources in time. Furthermore, it is important to note that MR is not legally permitted for unmarried women, irrespective of their age[3]. Small-scale studies have shown that while adolescents constitute 9% of women who received services from menstrual regulation clinics, they also form 15% of those rejected by the clinics presumably because the advance stage of pregnancy. In a study conducted by Ahmed et al, there is evidence to suggest that unmarried adolescents are more likely to have an abortion than those who are married; 73% of unmarried adolescents under study had abortions as opposed to 66% of adults in a comparison group[4] In Bangladesh there is a high level of stigmatization associated with out of wedlock pregnancies and this accounts for the most common reasons of terminating a pregnancy. Other reasons include failure of contraceptives, inadequate spacing between pregnancies and poor maternal health[5]. Pregnancy out of marriage in Bangladesh is considered a condition that often

[3] *The Center for Reproductive Rights. Women of the World: Laws and Policies Affecting their Reproductive Rights. New York: South Asia, 2004. p.45.*

[4] *Ahmed MK, van Ginneken J, Razzaque A. Factors associated with adolescent abortion in a rural area of Bangladesh. Tropical Medicine and International Health 2005; 10 (2): 200*

[5] *Ibid, pg 202.*

warrants suicide, the killing of the child immediately after birth or marriages made in haste[6]. As a result of these consequences, girls and especially those who are unmarried, seek abortions in clandestine and unsafe conditions fearing being turned away for menstrual regulation. In particular, there are type of abortion services providers, outside of formal and legal methods, that many girls have access to. These include: *kobiraj* or women trained in using herbal medicines and the insertion of a root or vine into the cervix and uterus to abort a pregnancy. Secondly, there are village doctors who provide women with injections or drugs, and finally there are homeopaths[7]. Data from a study focused on deaths from injuries and induced abortions in rural Bangladesh, suggest that the complication of an unsafe abortion was the primary cause of death due to injury[8]. Furthermore the proportion of the risk of death was 2.6 times higher for unmarried women than it was for those who were married. In addition, married women had a higher chance of being seen by a qualified physician due to complications of an abortion, than unmarried women[9]. As a result, many adolescent girls are hospitalized for complications of undergoing an abortion by traditional birth attendants or after attempting to induce[10]. Cause-specific Mortality rate showed that deaths from abortion among 15-19 years-olds were twice more common than those in women aged 20-34[11].

Table 12: Per cent of currently married women who know or have ever used Menstrual Regulation (MR) in Bangladesh

Age group (in years)	Women know MR (%)			Women used MR services (%)		
	2004	2007	2011	2004	2007	2011
10-14	52.6	-	-	0.0	-	-
15-19	75.3	73.2	58.5	1.4	1.3	2.6
20-24	81.8	80.0	69.4	3.6	3.6	5.5

Source:

1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*
3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*

[6] *Fauveau V, Blanchet T. Deaths from injuries and induced abortions among rural Bangladeshi Women. Social Science and Medicine 1989; 29 (9): 1125.*

[7] *Ahmed MK, van Ginneken J, Razzaque A. Factors associated with adolescent abortion in a rural area of Bangladesh. Tropical Medicine and International Health 2005; 10 (2): 202.*

[8] *Fauveau V, Blanchet T. Deaths from injuries and induced abortions among rural Bangladeshi Women. Social Science and Medicine 1989; 29 (9): 1122.*

[9] *Ibid pg 1123.*

[10] *Akhtar HH. Menstrual regulation among adolescents in Bangladesh: risks and experiences; In Towards adulthood: Exploring the sexual and reproductive health of adolescents in south Asia. Geneva, World Heath Organization, 2003.*

[11] *United Nations. Adolescent Reproductive Behaviour: Evidence from developing countries Vol. II New York: UN, 1989.pp.83-96.*

Newborn and child survival

Many studies have found strong evidence linking early childbearing with higher perinatal and neonatal death rates. The Bangladesh DHS 2011 also reported that the risk of dying in the first month of life is almost double among births occurring to adolescent women as compared with women aged 20-29. Perinatal and under-five mortality is also higher among teenage mothers than women aged 20 or more (Table-13).

Table 13: Perinatal, neonatal and under-five mortality rates by women's age at birth

Years	PMR		NMR		U5MR	
	<20	20-29	<20	20-29	<20	20-29
2004	80	54	58	37	106	84
2007	79	41	55	30	90	63
2011	63	41	45	26	66	43

Source:

1. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2011. Dhaka: NIPORT, Mitra & Associates, and ICF International, 2013 – http://www.measuredhs.com/pubs/pdf/FR265/FR265.pdf*
2. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2007. Dhaka: NIPORT, Mitra & Associates, and Macro International, 2009 – http://www.unicef.org/bangladesh/BDHS2007_Final.pdf*
3. *National Institute of Population Research and Training. Bangladesh demographic and health survey 2004. Dhaka: NIPORT, Mitra & Associates, and ORC Macro, 2005 – http://www.measuredhs.com/pubs/pdf/FR165/FRBD04[FR165].pdf*

The increased risk of infant death to adolescent mothers is also associated with early childbearing and inexperience in child-rearing. Most importantly, adolescent women face increased risks during pregnancy and childbirth because they have less information and access to prenatal, delivery and postpartum care as compared with older women.

BHUTAN

1. Number of adolescents in Bhutan

Bhutan is a country of young population with about 31% of its people between 10 to 24 years of age. The total population of adolescents (ages 10-19 years) is 149 000 in Bhutan and the population is almost equally divided between males and females (Table 1). Adolescents constitute 20.6% of Bhutan's population[1].

Table 1: Number and proportion of young people by age and sex in Bhutan, 2010

Age group (in years)	Male		Female		Total	
	Number	(%)	Number	(%)	Number	(%)
10-14	36 000	5.0	35 000	4.8	71 000	9.8
15-19	39 000	5.4	39 000	5.4	78 000	10.8
20-24	40 000	5.5	38 000	5.2	78 000	10.7
Total	**115 000**	**15.9**	**112 000**	**15.4**	**227 000**	**31.3**

Source: *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision. New York: UN, 2011- http://esa.un.org/unpd/wpp/index.htm-.*

However, it is estimated that the adolescent population will decline gradually in the future and more significantly from 2020 onwards. Between 2005 and 2030, because of the declining fertility, the proportion of the population less than 15 years of age is projected to decline from 33.1% to 22.8%. Estimates project that adolescent population will be 78 776 by 2030, which is a drastic decrease from the total number of 149 000 in 2010[2].

2. Adolescent pregnancy

The adolescent pregnancy rate of 59 births per 1 000 women aged 15-19 years in Bhutan[2] is comparatively lower than some countries in the SEA region. According to the Population and Housing Census of Bhutan, adolescents were responsible for 11% of all births in 2005 (Table-2) indicating early initiation of sexual activity leading to early pregnancy.

Table 2: Pregnancy among young people

Age group (in years)	Number of births	Per cent of all births (N=12,538)
15-19	1 376	11.0
20-24	4 211	33.6
Total	**5 587**	**44.6**

Source: *Royal Government of Bhutan,Population and housing census of Bhutan. Thimpu: office of the Census commissioner,2005 - http://www.bhutanswitzerland.org/pdf/fact-sheet.pdf -.*

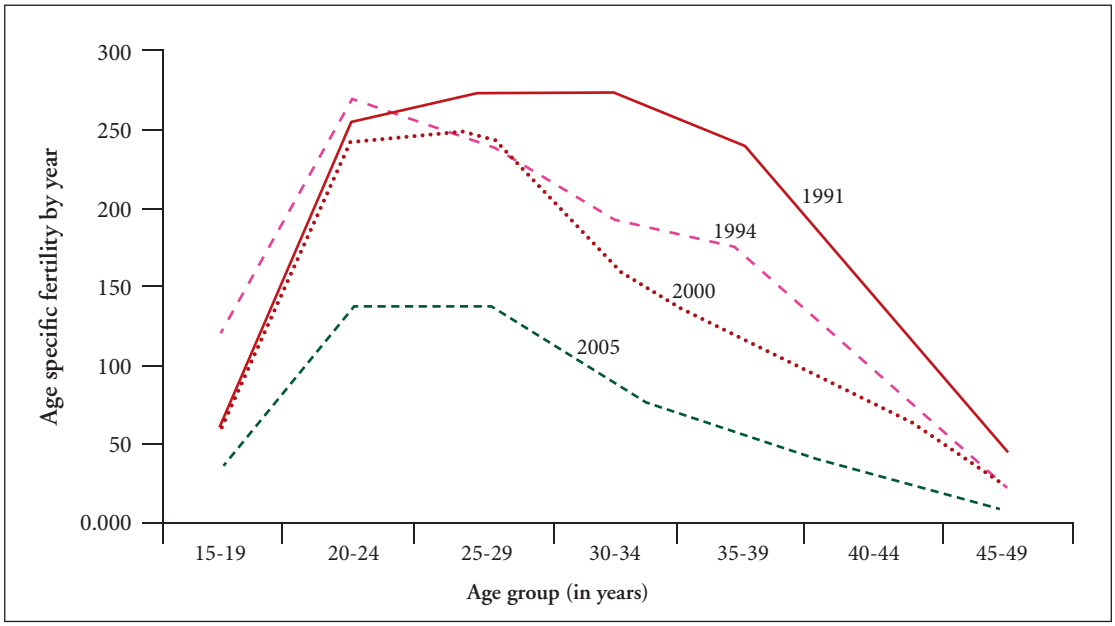
[1] *National Statistical Bureau Population Projection or Bhutan. Thimpu: NSB, 2008.- http//www.nsb.gov.bt/publication/files/pubofi1037nm.pdf-.*

[2] *Royal Government of Bhutan. Bhutan Multiple Indicator Survey, 2010, Thimphu:NSB, May 2011.*

Adolescent fertility

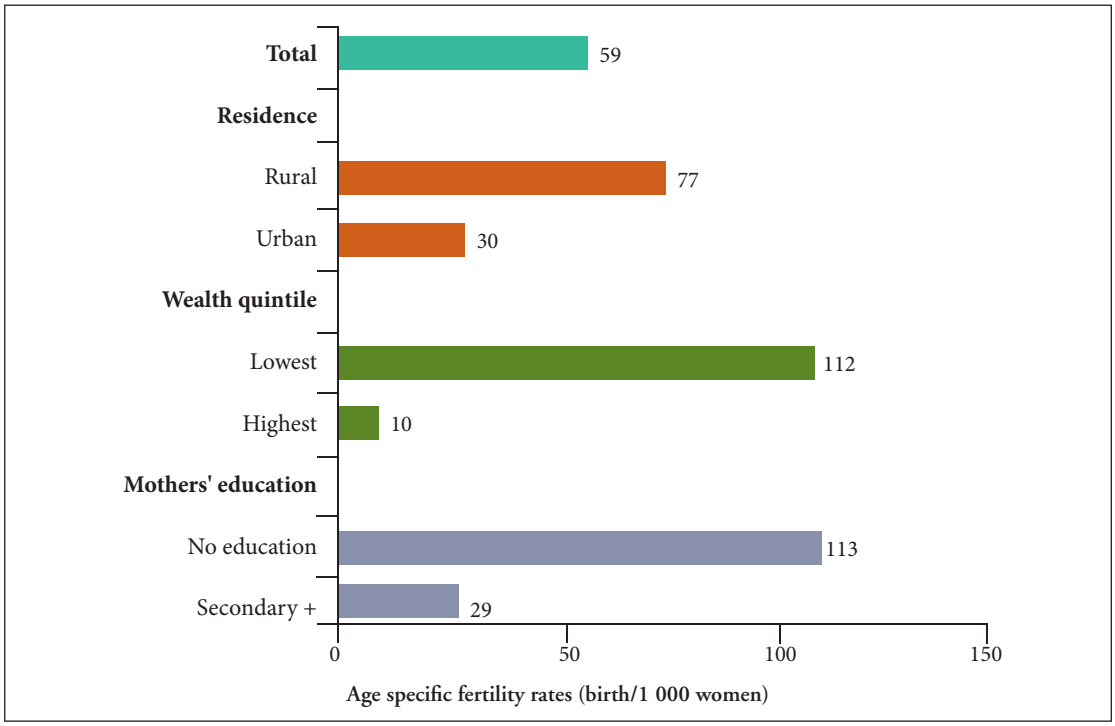
Age specific fertility rates show descending trend during 1991 to 2008 amongst all age groups (Figure-1). Teenage pregnancy is two and half times as common in rural areas compared with urban areas (Figure-2). There is a stark difference in childbearing status of adolescents among rich and poor and

Figure 1: Trends in age specific fertility rates (births per 1000 women)



Source: *Royal Government of Bhutan. Population and Housing Census of Bhutan. Thimpu: Office of the Census Commissioner, 2005- http//www.nsb.gov.bt-.*

Figure 2: Differentials in adolescent age specific fertility rates by basic characteristics



Source: *Royal Government of Bhutan. Bhutan Multiple Indicator Survey,2010. Thimpu: National Statistics Bureau, May 2011.*

women with no education and with higher education. There is a pronounced inter region variation with ASFR 332 in Gasa in comparison to 20 in Samdrup Jongkhar (Table-3). Other regions which have ASFR more than 100 are Dagana, Mongar, Pemagatshel and Zhemgang.

Table 3: Region wise age specific fertility rates for adolescents aged 15-19 years

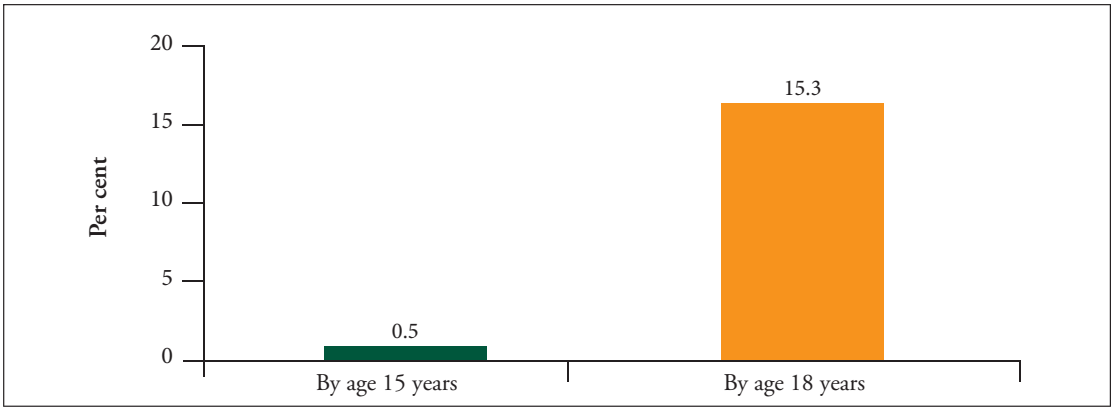
Region	ASFR (births per 1,000 women)
Butmthabg	41
Chukha	29
Dagana	124
Gasa	332
Haa	53
Lhuentse	67
Mongar	138
Paro	42
Pemagatshel	163
Punkha	35
Samdrup Jongkhar	20
Samtse	63
Sarpang	37
Thimphu	34
Trashigang	86
Trashiyangtse	54
Tronga	95
Tsirang	60
Wangdue	51
Zhemgange	150

Source: *Royal Government of Bhutan Multiple Indicator Survey 2010. Thimpu: National Statistics Bureau, May 2011.*

Age at first birth

Sexual activity and childbearing early in life carry significant risks for young people all around the world. In Bhutan, 11% of adolescent girls aged 15-19 years have begun childbearing[3] . About 0.5% has had a live birth before the age of 15 and 15.3% have had a live birth before 18 years of age (Figure-3).

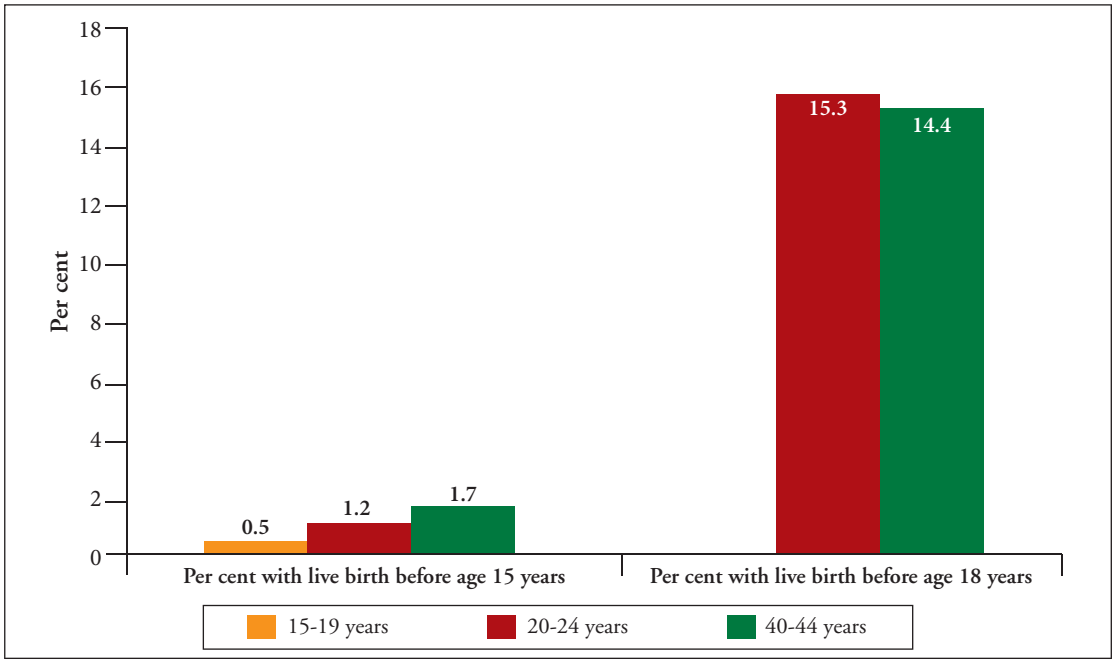
Figure 3: Proportion of girls who have had live birth by age



Source: *Royal Government of Bhutan. Bhutan Multiple Indicator Survey 2010. Thimpu. National Statistics Bureau, May 2011.*

Child bearing decreases with wealth and education, thus it is almost 10 times more common among women with no education (24%), compared with women with secondary plus (2.7%). Early child bearing is more common in rural areas (18%) and in the Eastern and Central regions (18.7% and 18.1%) respectively. Proportion of women with live birth before the age of 18 has remained relatively unchanged over the last 25 years. When comparing the age group of 15-19 years to the older age groups, it is worth mentioning the declining trend in giving birth before the age 15 (Figure-4).

Figure 4: Trends in early childbearing before 15 years and 18 years of age by age group



Source: *Royal Government of Bhutan. Bhutan Multiple Indicator Survey 2010. Thimpu: National Statistics Bureau, May 2011.*

[3]*Royal Government of Bhutan. Butan Multiple Indicator Survey, 2010. Thimpu: National Statistics Bureau, May 2011.*

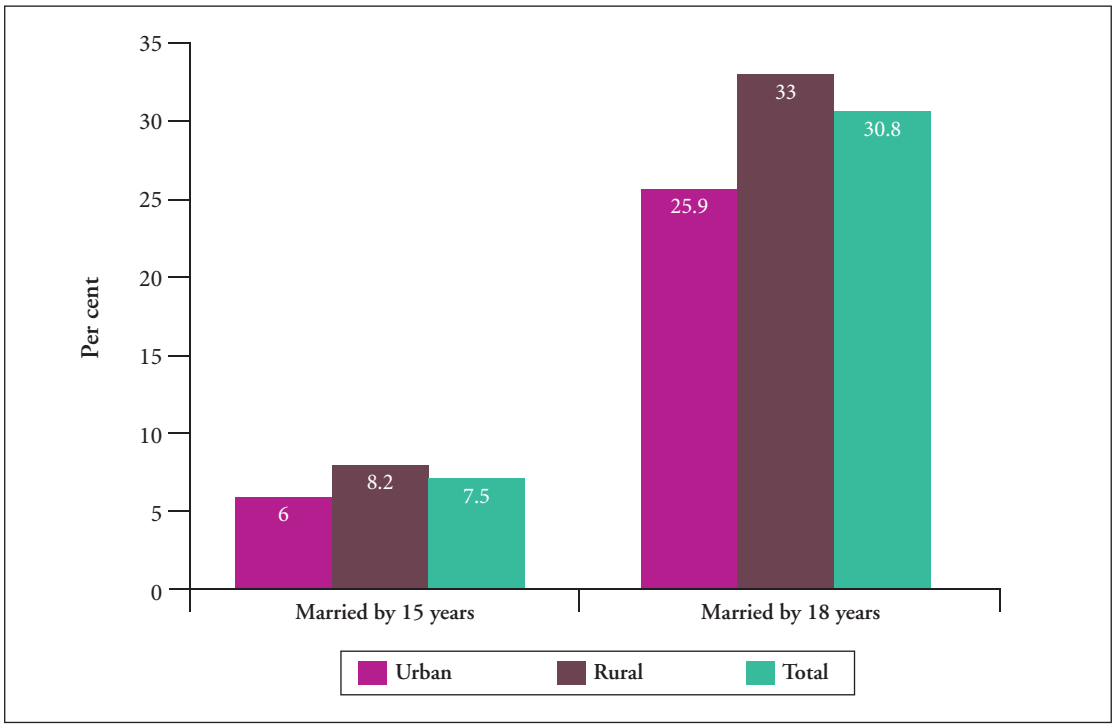
3. Proximate determinants of adolescent pregnancy

Age at marriage

The principal factors that affect an adolescent woman's risk of becoming pregnant are marriage, sexual intercourse and contraception. Early marriage is a principal indicator of women's exposure to the risk of pregnancy and higher fertility levels. The legal minimum age of marriage for both men and women is 18 years. Although the practice of child marriage has largely declined with modernization, underage marriages, some as early as 15 years of age, are still known to occur especially in the rural communities. Research suggests that many factors interact to place a girl at risk of marriage. Poverty, protection of girls, family honour and the provision of stability during unstable social periods are considered as significant factors in determining a girl's risk of getting married while still a child.

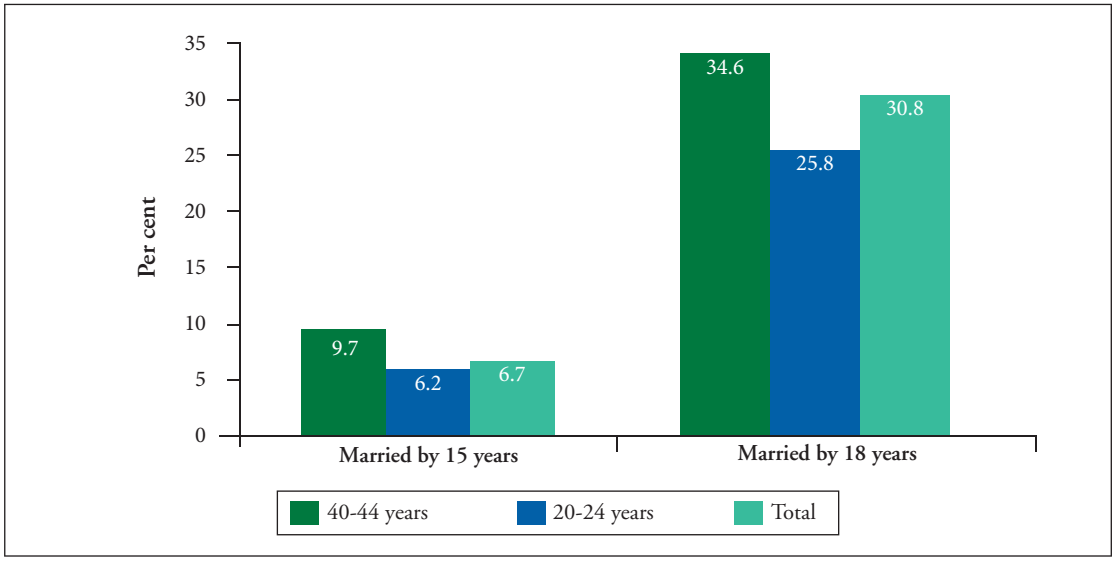
Figure 5 presents the proportion of 20-24 years old women who were first married or entered into a marital union before age 15 and 18. Examining the proportion of married before the age of 15 and 18 by different age groups, allows us to see the trends in early marriage over time. Overall 8% of women married before the age of 15 and 31% married before the age of 18. Over the last 20 years there is a decreasing trend of early marriages. Marriage before the 15th and 18th birthdays is higher among rural women when compared to urban women (Table-4).

Figure 5: Proportion of 20-24 years old women who were first married or entered into a marital union before age 15 and 18 years by place of residence



Source: *Royal Government of Bhutan. Bhutan Multiple Indicator Survey 2010. Thimpu: National Statistics Bureau, May 2011.*

Figure 6: Trends in early marriage



Source: *National Statistics Bureau Royal Government of Bhutan. Bhutan Multiple Indicator Survey 2010. Thimpu, Bhutan: National Statistics Bureau, May 2011.*

Less than one in five young women age 15-19 years is currently married (15%). This proportion varies between urban and rural areas, and is strongly related to the level of education and to household wealth (Table-4). Eastern region has the highest percentage of early marriages and women in union which has resulted in the highest proportion of early pregnancy (25%) among all regions.

Table 4: Early marriage differentials

	Place of residence		Region			Education		Wealth	
	Urban	Rural	Western	Central	Eastern	No Education	Secondary+	Poorest	Richest
Married before age 15 years	5.1	7.5	6.2	7.0	7.5	8.9	1.2	10.4	3.5
Married before age 18 years	25.9	33.0	26.1	24.3	35.9	37.0	8.1	37.9	20.8
Currently married 15-19 years old women or in union	5.5	20.8	9.8	19.1	24.9	35.3	5.2	25.6	2.7

Source: *Royal Government of Bhutan. Bhutan Multiple Indicator Survey 2010. Thimpu: National Statistics Bureau, May 2011.*

Sexual activity

Bhutanese society does not have stringent norms on sexual activity, and has fairly tolerant attitudes towards the issues regarding sex and sexuality. Premarital sex is also acceptable in the society (Adolescent Health and Development, 2008).

MIS 2010 reported sexual activity of women before the age of 15 (Table-5). While 96% of never married young women (age 15-24 years) never had sex, 4% had sex before the age of 15 increasing the risk unwanted and unsafe pregnancy. Sexual activity is more among the poorest, those who are not educated and residing in the rural areas. Women living in eastern region were most sexually active among all regions.

Table 5: Sexual activity of women before the age of 15 by basic characteristics

Age group (in years)		Marital status		Education		Wealth		Residence		Region		
15-19	20-24	Ever married/ in union	Never married/ in union	None	Sec+	Poorest	Richest	Urban	Rural	Western	Central	Eastern
2.2	4.9	7.9	0.4	7.9	0.3	8.4	0.3	1.3	5.0	2.9	3.0	6.1

Source: *Royal Government of Bhutan Multiple Indicator Survey 2010. Thimpu: National Statistics Bureau, May 2011.*

Studies on the sexual behaviour of young people in Bhutan indicate that they become sexually active in their teens. According to reports, a few had sexual initiation as early as when 13 years old while almost 10% had their first sexual experience by the age of 14. Girls often become sexually active in the context of marriage. Studies show that early sexual activity results in unprotected sex, multiple partner relationships and sex with partners who have been at risk of HIV exposure[4]. In another study, 58% of adolescents who were sexually active, viewed sexual activity as a natural process[5].

Contraception

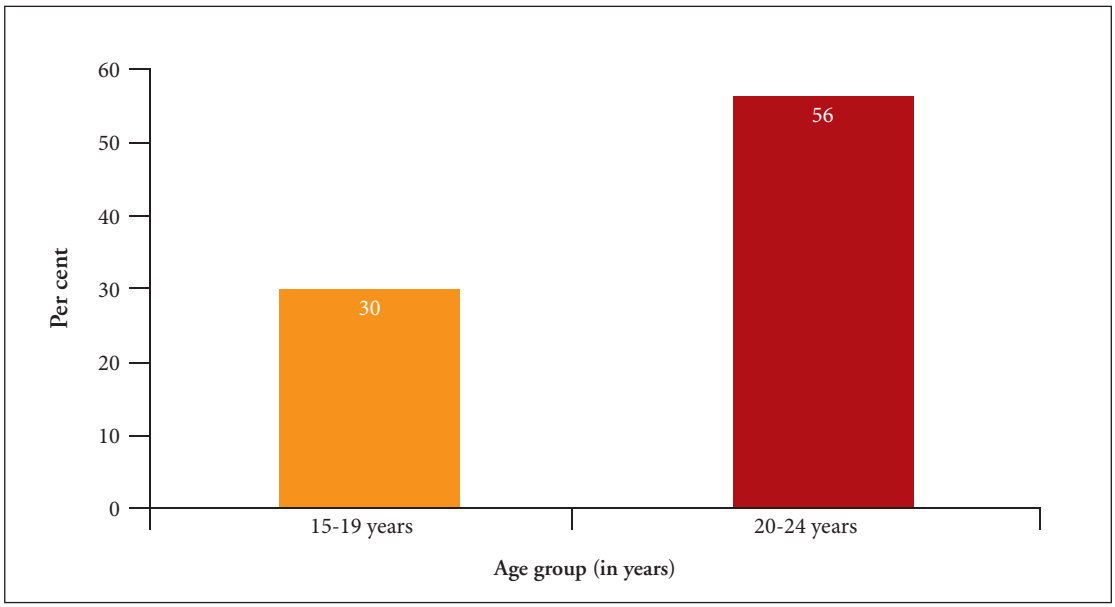
The contraceptive prevalence rate (CPR) in Bhutan increased from 30.7% in 2000 to 35% in 2007[6]. This indicated that large numbers of eligible women were not using contraceptives, which may have eventual consequences such as pregnancy, sexually transmitted diseases, and maternal and newborn deaths and disabilities. Although, MIS 2010 reported CPR as 65.4% for all age groups, it is only 30% among adolescents which may lead to teenage pregnancy (Figure-7).

[4]*Royal Government of Bhutan Ministry of Health. National AIDS Programme Report for 2005. Thimpu:MOH, 2005.*

[5]*Department of Youth, Culture and Sports, Ministry of Education, RGoB. Teenage pregnancy and early marriage: result of youth awareness survey. Thimpu:MoE, 2000.*

[6]*Royal Government of Bhutan Ministry of Health. reproductive health programme report. Thimpu:MOH, 2008.*

Figure 7: Contraceptive prevalence among women age 15-19 years & 20-24 years



Source: *Royal Government of Bhutan. Bhutan Multiple Indicator Survey 2010. Thimpu: National Statistics Bureau, May 2011.*

Table 6: Reasons for not using contraceptives by adolescents

No.	Reasons for not using contraceptives by adolescents (15-19) years	Per cent
1.	Not concerned	85.1
2.	Service not available	0.3
3.	Religious/moral objection	-
4.	Husband/family objection	2.3
5.	Because of side effects	0.1
6.	Does not want to respond	12.3

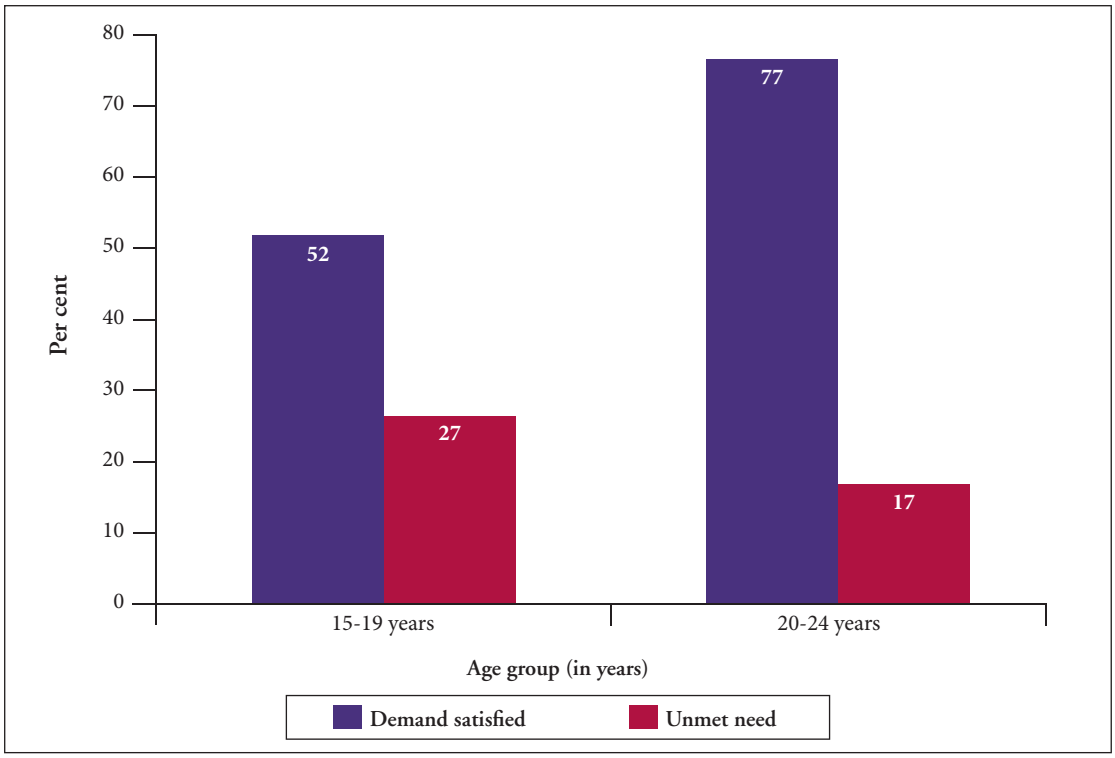
Source: *Royal Government of Bhutan, Ministry of Health. Adolescent health and development. Thimpu: MOH,2008.*

It was observed that 85% of adolescents (15-19 years) were not concerned about using contraceptives while few had objections from their husband or family members (Table-6). Embarrassment and shyness, lack of confidentiality or privacy and judgemental attitude of health-care providers may be other reasons for not using the contraceptives.

Unmet need for family planning

MIS 2010 indicates that, in comparison to women aged 20-24 years, the proportion of demand satisfaction is much less among adolescents (Figure-8). This leads to fairly high unmet need among married adolescents. Unmet need for family planning is highest among women aged 15-19 years, which is 27% in comparison to the national average of 11.7%.

Figure 8: Unmet need for contraception among young people



Source: *Royal Government of Bhutan. Bhutan Multiple Indicator Survey 2010. Thimpu: National Statistics Bureau, May 2011.*

4. Essential care interventions during pregnancy

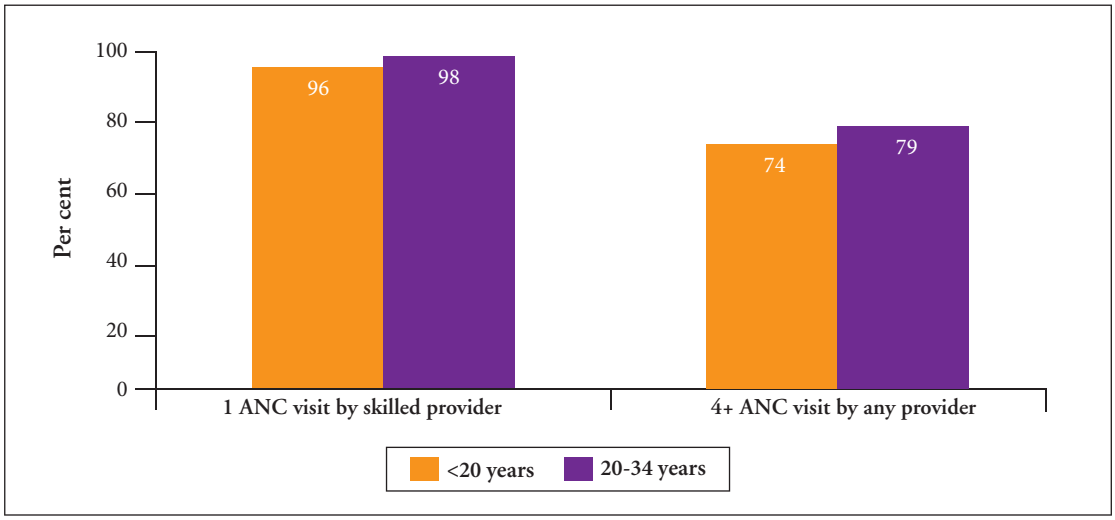
For women of all ages, use of health-care services is a key proximate determinant of maternal and infant outcomes, including maternal and infant mortality. For a safe pregnancy, childbirth and postnatal experience, mothers and babies need a continuum of care.

Antenatal care

The antenatal period presents important opportunities for reaching pregnant women with a number of interventions that may be vital to their health and well-being and that of their infants. WHO recommends a minimum of four antenatal visits based on a review of the effectiveness of different models of antenatal care. Coverage of antenatal care by skilled personnel is relatively high in Bhutan with 97% of women receiving antenatal care at least once during the pregnancy.

Likewise 96% women below 20 years of age are also getting antenatal care at least once. However, they are less likely to receive four or more antenatal care visits compared to women 20-34 years old (Figure-9). The age group of women less than 20 years also had the least reported percentage of women who had their blood pressure measured, urine sample taken and blood sample taken as part of antenatal care.

Figure 9: Proportion of adolescents receiving antenatal care



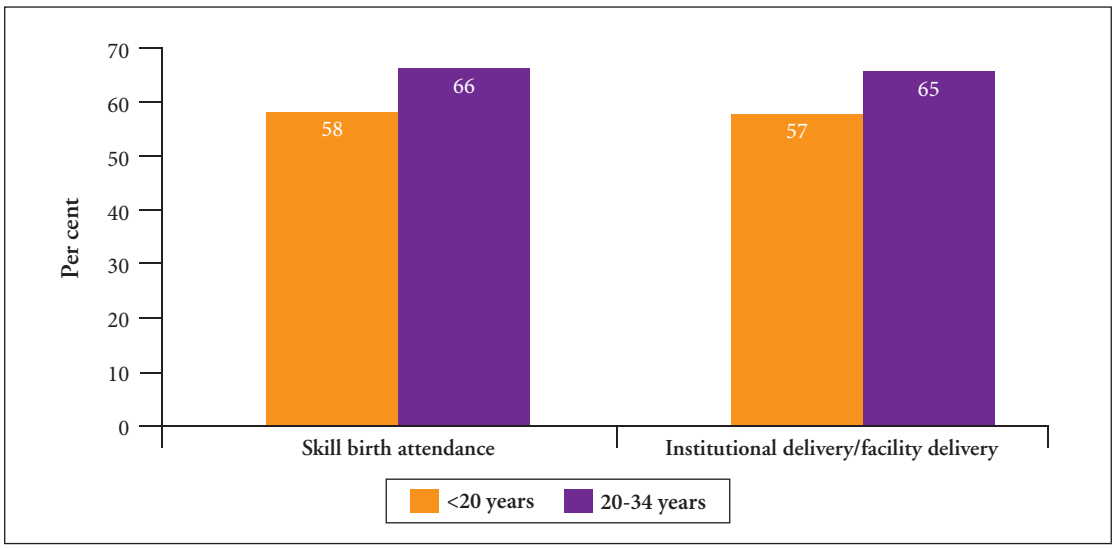
Source: *Royal Government of Bhutan. Bhutan Multiple Indicator Survey 2010. Thimpu: National Statistics Bureau, May 2011.*

Care at birth

The single most critical intervention for safe motherhood is to ensure a competent health worker with midwifery skills is present at every birth. The indicators are the proportion of births with a skilled attendant and proportion of institutional deliveries. As is the case of antenatal care, women below 20 are less likely to deliver in a health facility and get care from a skilled attendant as compared to older women (Figure-10).

Although Government provides free and equal access to health-care services, pregnant adolescents may not use the health services for prenatal care and childbirth due to physical, personal and other social barriers.

Figure 10: Place of delivery and births by skilled birth attendant



Source: *Royal Government of Bhutan. Bhutan Multiple Indicator Survey 2010. Thimpu: National Statistics Bureau, May 2011.*

5. Impact of adolescent pregnancy on health outcomes of mothers, newborns and children

Maternal mortality

Table 7: Maternal mortality trend among adolescents and older women

Year	Maternal deaths for 10-19 years	Maternal deaths for 20-29 years	Per cent of deaths among adolescents	% of deaths for 20-29 years
2001	2	10	14	71
2002	2	11	10	52
2003	2	7	10	33
2004–2005	3	18	10	62
2006–2007	2	14	7	48

Source: *Royal Government of Bhutan, Ministry of Health. Maternal Death Reports 2001-2007. Reproductive Health programme. Thimpu: MOH, 2008.*

Maternal mortality of Bhutan is 255 per 100 000 live births. More than 50% of its cause is postpartum haemorrhage. Maternal deaths among adolescents contribute only 10-12% to the total maternal deaths in Bhutan. However, it is still a concern for the Government[7].

[7] *Royal Government of Bhutan, Ministry of Health. Maternal Death Reports 2001-2007. Thimpu: Reproductive Health Programme, MOH, 2008.*

Abortion

Abortion as a method of contraception is socially unacceptable and illegal in Bhutan. In 1999, the Government legalized the "medical termination of pregnancy" only if the mother's life is at risk or threatened, or if the unborn child may suffer severe physical and mental abnormalities as a result of the pregnancy. The law also permits termination of pregnancy caused by rape. Although no official figures for abortion among young women are available, studies have revealed a growing number of women particularly young people seeking abortion in the border towns of India. The National Referral Hospital (JDWNRH) receives many cases of post-abortion complications resulting from unsafe abortions. From a 1991-1992 Maternal Mortality Surveillance report, there is evidence to suggest that complications from abortions were associated with more than 50% of maternal deaths. Unfortunately, there is no data available on the number of adolescent abortions[8].

[8] *Department of Public Health. Adolescent Health and Development. Country Profile: Bhutan. Revised edition Thimpu 2007, pg 23.*

INDIA

1. Number of adolescents in India

There are more than 242 million adolescents in India, about one fifth of the total population (Table-1). By 2025 adolescent population is projected to peak and increase by another 1.4 million[1] creating an historic milestone of the largest generation of young people in India. The tendency for a youth-heavy population would keep growing because of the sheer number of people entering their reproductive years. Adolescents, compared to other age groups, are more exposed to increased reproductive health risks.

Table 1: Number and proportion of young people by age and sex in India, 2010

Age group (in years)	Male		Female		Total	
	Number	(%)	Number	(%)	Number	(%)
10-14	64 018 000	5.2	58 604 000	4.8	122 622 000	10.0
15-19	62 907 000	5.1	57 462 000	4.7	120 369 000	9.8
20-24	59 549 000	4.9	54 724 000	4.5	114 273 000	9.4
Total	**186 474 000**	**15.2**	**170 790 000**	**14.0**	**357 264 000**	**29.2**

Source: *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision. New York: UN, 2011 - http://esa.un.org/unpd/wpp/index.htm -.*

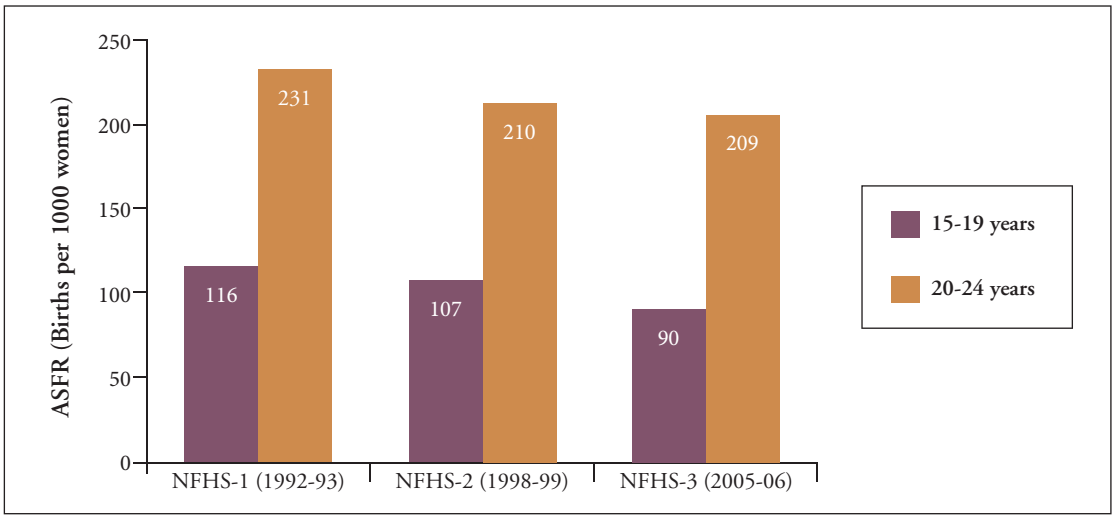
2. Adolescent pregnancy

Adolescent fertility

Although a large number of births are attributed to adolescents between the age 15 and 19 years in India, there is a steady but moderate fall (22%) in the adolescent fertility rates in last 15 years (Figure-1). Age specific fertility rates are lower at all ages in urban areas than in rural areas (Figure-2). Despite decreasing trend in adolescent fertility, child births to <20 years remain high.

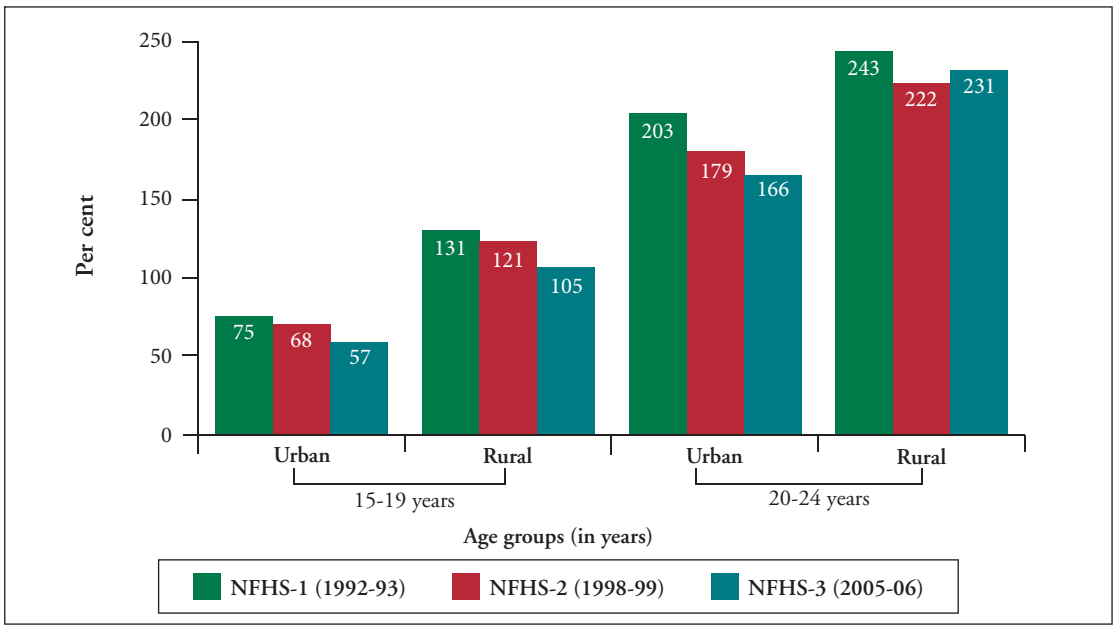
[1] *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision. New York: Un, 2011 - http://esa.un.org/unpd/wpp/index.htm*

Figure 1: Trends in age specific fertility rate



Source:
1. *International Institute for Population Sciences (IIPS). National Family Survey (MCH and Family Planning), India 1992-93. Bombay:IIPS,1995 - http://www.measuredhs.com/pubs/pdf/FRIND1/FRIND1.pdf*
2. *International Institute for Population Sciences (IIPS) and ORC Macro. National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS,2000.*
3. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai:IIPS, 2007.*

Figure 2: Age specific fertility rates by area of residence

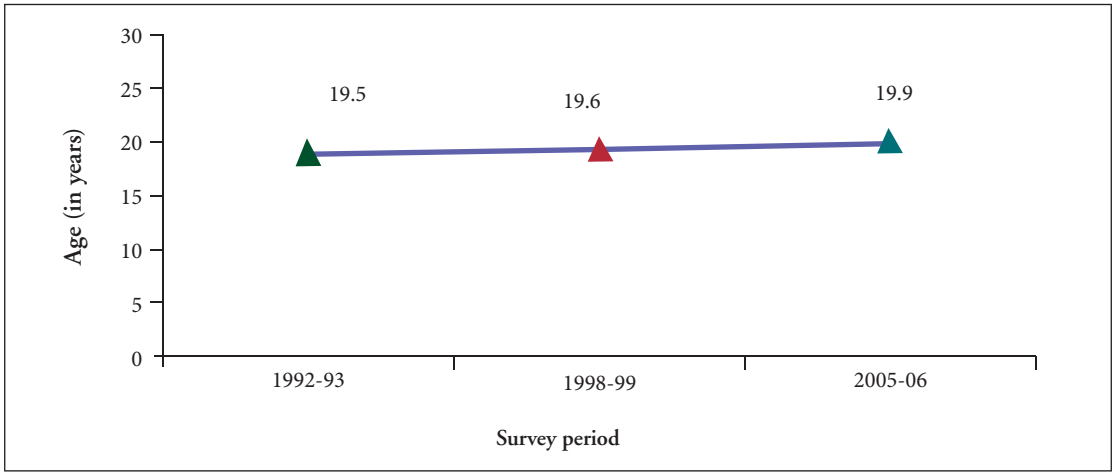


Source:
1. *International Institute for Population Sciences (IIPS). National Family Survey (MCH and Family Planning), India 1992-93. Bombay:IIPS,1995 - http://www.measuredhs.com/pubs/pdf/FRIND1/FRIND1.pdf*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS,2000.*
3. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Age at first birth

The recent NFHS-3 shows that half of women aged 25-29 years had given birth to their first child by the time they were 20 years old suggesting that a large proportion of women start childbearing when they are very young. The NFHS-3 data also indicate that women are gradually having children at an older age, though the median age at first birth is increasing at a very slow rate (Figure-3).

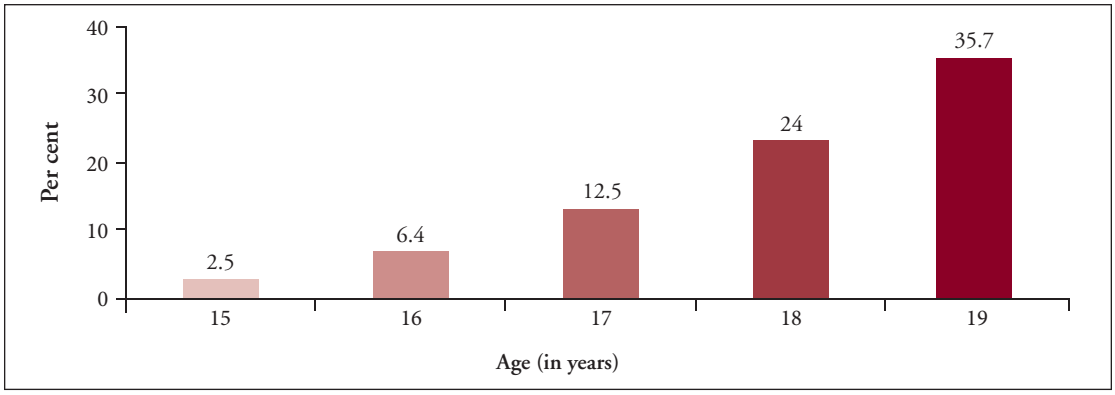
Figure 3: Trends in median age at first birth in India



Source:
1. *International Institute for Population Sciences (IIPS). National Family Survey (MCH and Family Planning), India 1992-93. Bombay:IIPS,1995 - http://www.measuredhs.com/pubs/pdf/FRIND1/FRIND1.pdf*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS,2000.*
3. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

The NFHS-3 shows that 16% of adolescents age 15-19 years have begun childbearing. In 2005-06 in India, 12% of adolescents had already given birth, and another 4% were pregnant with their first child. The proportion of women age 15-19 years that have begun childbearing is mainly concentrated among older adolescents (Figure-4). However, 2.5% of women at the age of 15 and 6.4% at 16 were either pregnant with their first child or were mothers at the time of the survey in 2005-2006.

Figure 4: Proportion of adolescents aged 15-19 years who have begun childbearing, 2005-2006

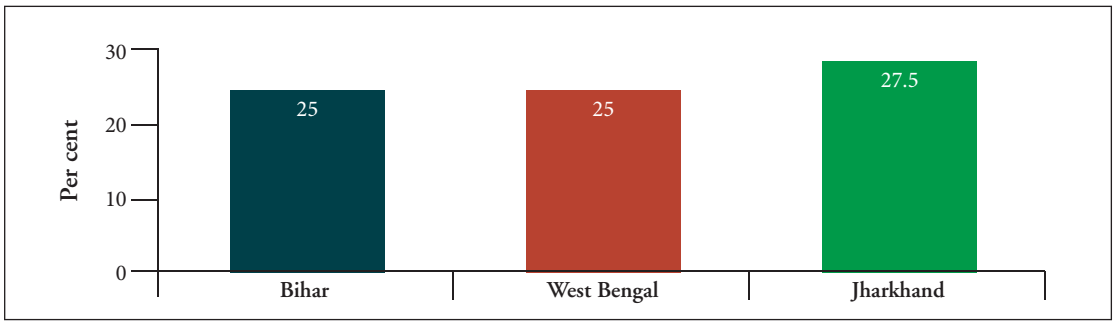


Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Residence and adolescent childbearing

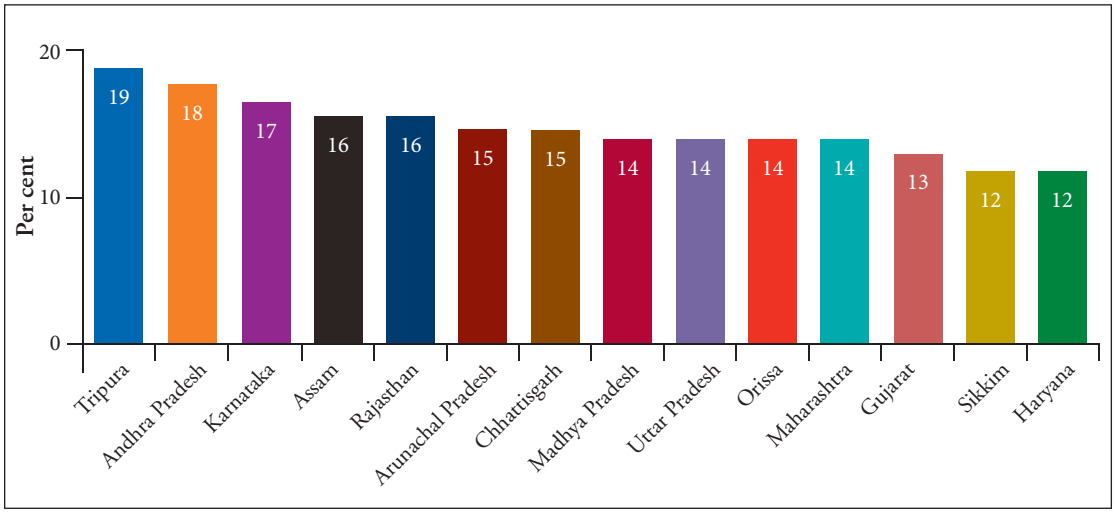
India is a large country with a great variability in adolescent childbearing rates in its different state (NFHS-3). The proportion of adolescent women who have begun childbearing early is highest in Jharkhand (28%), West Bengal (25%) and Bihar (25%), all in the Eastern Region [Figure-5 (a)].

Figure 5 (a): States where 20-30% of 15-19 years old women have begun childbearing



Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

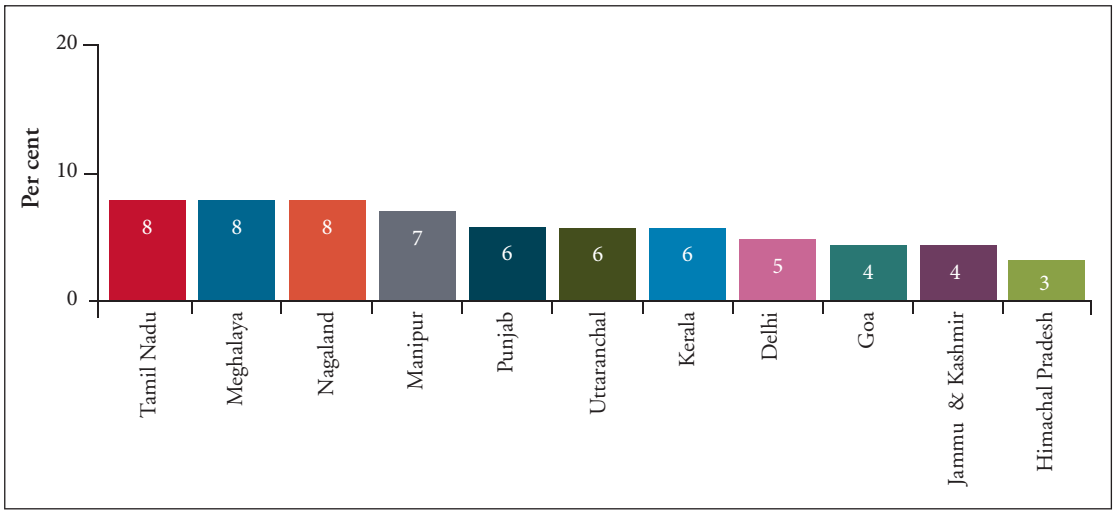
Figure 5 (b): States where 10-20% of 15-19 years old women have begun childbearing



Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

The level of adolescent childbearing is lowest (less than 5%) in the states of Himachal Pradesh, Goa and Jammu and Kashmir [Figure-5 (c)].

Figure 5 (c): States where less than 10% of 15-19 years old women have begun childbearing

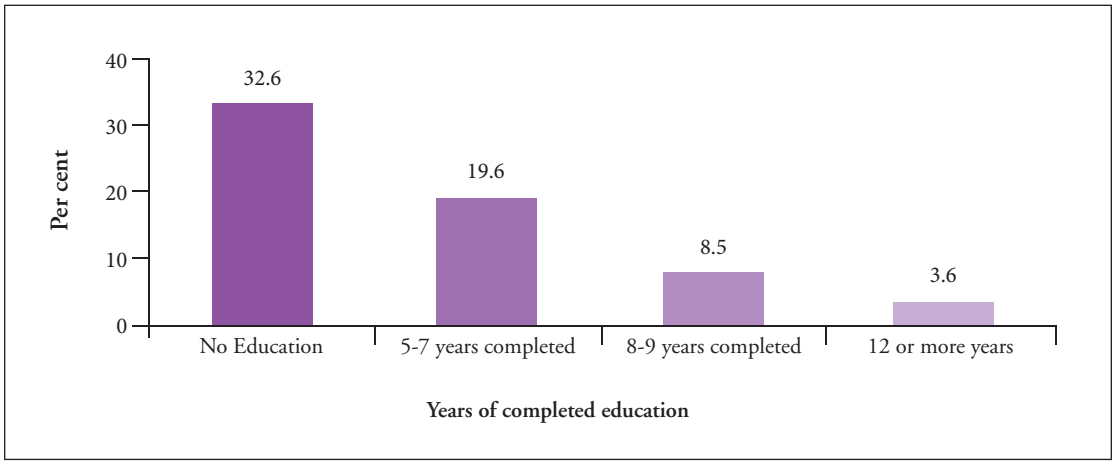


Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Education and adolescent childbearing

Adolescent childbearing is strongly related to education among women age 15-19 years. Only 4% of the teenagers who completed secondary or higher education had begun childbearing compared with almost one third of those with no education (Figure-6).

Figure 6: Level of education and adolescent childbearing in India, 2005-2006

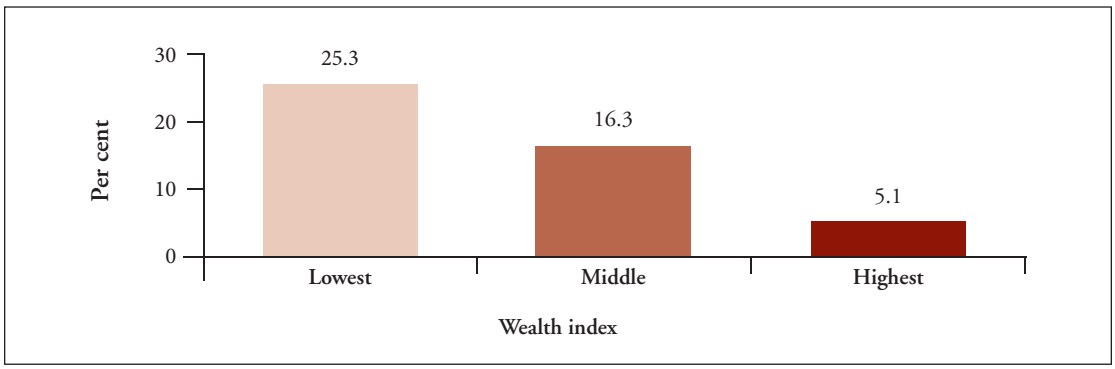


Source: *International Institute for Population Sciences (IIPS). Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Wealth and childbearing

The economic status of the family also has a remarkable impact on early childbearing. Adolescents from poorest families are five times more likely to start bearing children at an early age in India than those belonging to richest families (Figure-7).

Figure 7: Economic status and adolescent childbearing



Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Birth internal

Table 2: Proportion distribution of all women and currently married women age 15-19 years by number of children born

Number of children ever born	Proportion of currently married women (age-15-19 years)	
	1998-1999	2005-2006
0	52.2	56.1
1	34.8	33.4
2	11.1	9.1
3	1.7	1.3

Source:
1. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS, 2000.*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

While 33% of currently married women have given birth to one child, 9% reported to have two children and 1% three children before they attain the age of 19 (Table-2). This shows that these women started childbearing at a very early age and gave birth at very short intervals. Short birth intervals may adversely affect a mother's health and her children's chances of survival. Past studies have shown that children born too close to a previous birth are at increased risk of dying. Recent research has shown that the optimal birth interval is from three to five years to reduce neonatal and infant mortality and achieve optimal nutrition outcomes[2]. The data in table 3 support the above observation showing that births to a greater number of adolescents are at shorter intervals as compared to older women. A little less than half of the births to mothers age 15-19 years follow an interval of less than 24 months.

[2]*International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005–06: India: Volume I. Mumbai: IIPS, 2007.*

Table 3: Birth intervals/spacing among mothers in India

Age group (in years)	Birth interval (in months)				Median number of months since preceding birth
	7-17 (%)	18-23 (%)	24-35 (%)	36-47 (%)	
15-19	22.5	23.0	41.6	10.6	24.9
20-29	12.9	18.4	36.4	18.9	29

Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Planning of pregnancy among adolescents

The degree to which couples are able to successfully control (plan) childbearing can be gauged from the data on the percentage of pregnancies that are unwanted, mistimed or wanted no more (Table-4). NFHS-3 reported that 85% births among adolescents were wanted, 12% were mistimed, and 3% were unwanted. The percentage of births, which were, wanted later decline with age.

Table 4: Trends in fertility planning status by mothers' age at birth in India

All figures are in percentage

Age at birth (in years)	Planning status of birth		
	Wanted then	Wanted later (mistimed)	Wanted no more
<20	85.2	11.9	2.5
20-24	81.6	11.5	6.6
25-29	76.4	8.6	14.7

Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

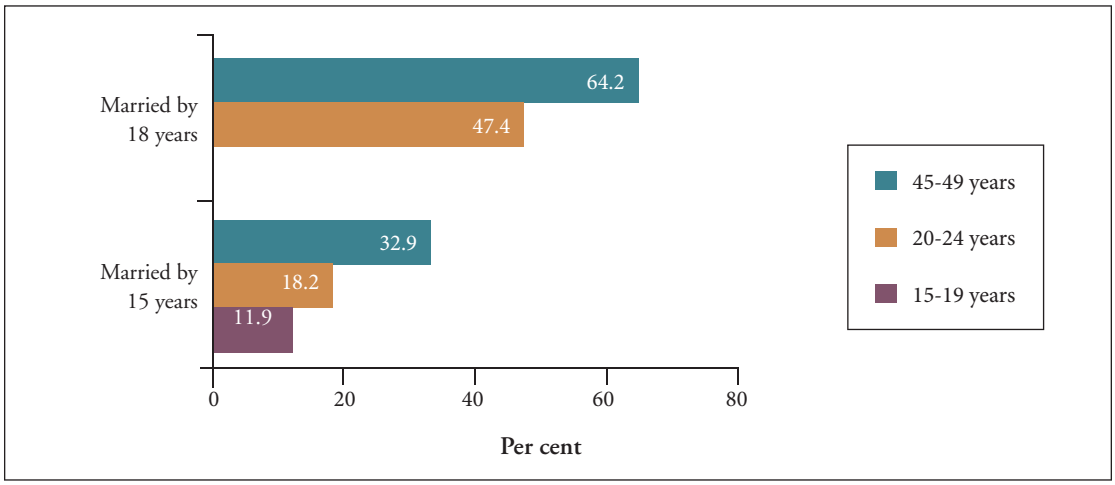
3. Proximate determinants of adolescent pregnancy

The principal factors that affect an adolescent woman's risk of becoming pregnant are age at marriage, sexual intercourse and contraception. Early marriage is a principal indicator of women's exposure to the risk of pregnancy and higher fertility levels, especially in the countries where most of the childbearing happens within marriage.

Age at marriage

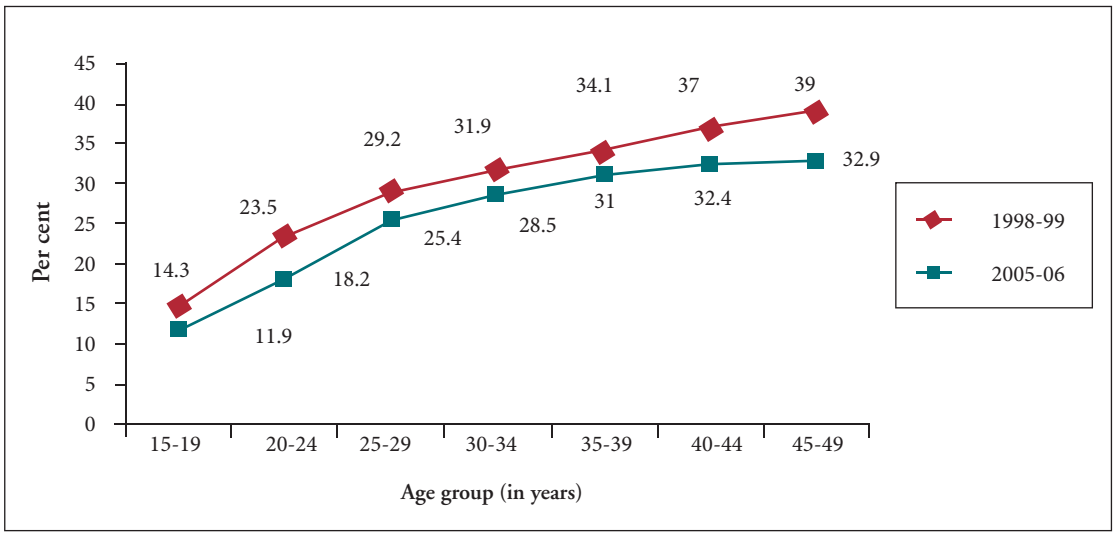
In India, though the minimum legal age for marriage is 18 years for girls, adolescent marriage rates are high. About 18% of women age 20-24 years are married before the age of 15 and 47% before 18 (Figure-8). Nevertheless, NFHS 2 and 3 data show a steady and perceptible rise in the age of first marriage in India[3]. The proportion married by the exact age of 15 falls steadily across all age groups from 1998 to 2006 (Figure-9); the decline is more prominent from ages 20-24 to 15-19 years (Figure-8). Half of 20-49 years old women are married by age 17.2 years in India, and it is 0.8 years earlier for women in rural India (Figure-10).

Figure 8: Percentage of women married by specific ages



Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

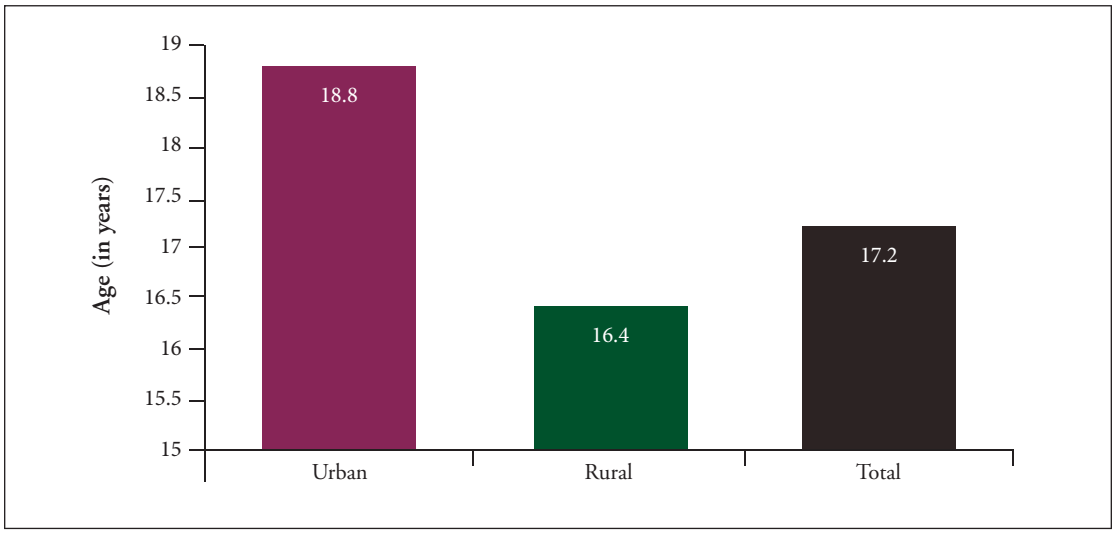
Figure 9: Proportion of women married by the age of 15 years: trends



Source:
1. *International Institute for Population Studies (IIPS. National Family Health Survey CMCH and Family Planning), India 1992-93. Bombay: IIPS, 1995 - http://www.measuredhs.com/pubs/pdf/FRIND1/FRIND1.pdf*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS, 2000.*
3. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

[3] *World Health Organization. Adolescent Pregnancy: Unmet needs and Undone deeds. Geneva: WHO, 2007.*

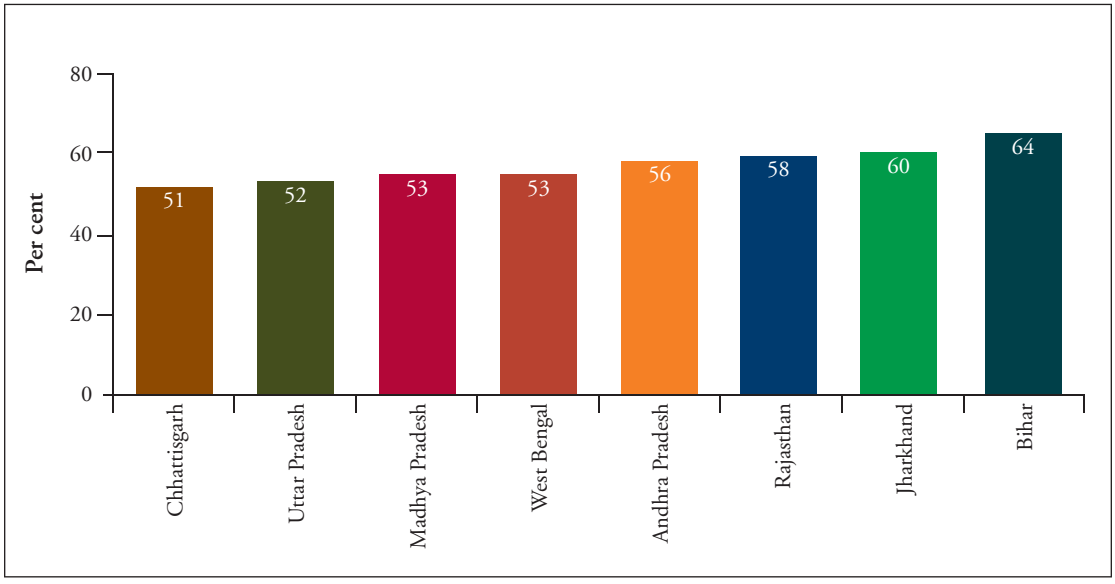
Figure 10: Median age at first marriage among women aged 20-49 years by residence



Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

As is in the case of adolescent pregnancy, there are considerable differences across states in the proportion of women who marry before reaching the legal minimum age of marriage [Figure-11 (a), (b), (c)]. While 64% of women in Bihar are married before the age of 18 and only 11% in Goa get married before reaching 18. Proportion of women who marry early is considerably lower among urban residents than among rural residents in all states, with the exception of Goa. Rural-urban differential is largest in Jharkhand, Rajasthan, Chhattisgarh, Bihar, West Bengal, Uttar Pradesh, and Madhya Pradesh[2].

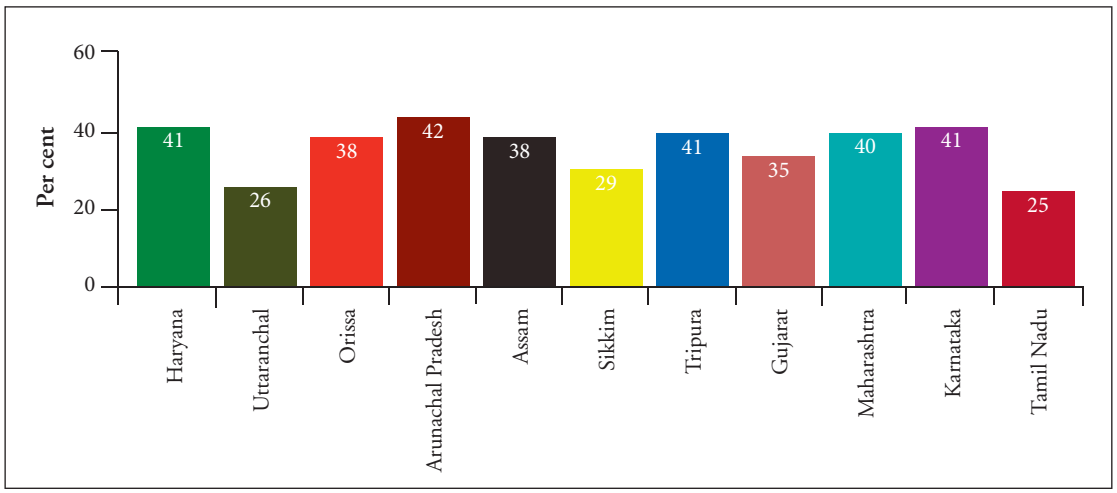
Figure 11 (a): States with more than 50% of girls married by 18 years of age



Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

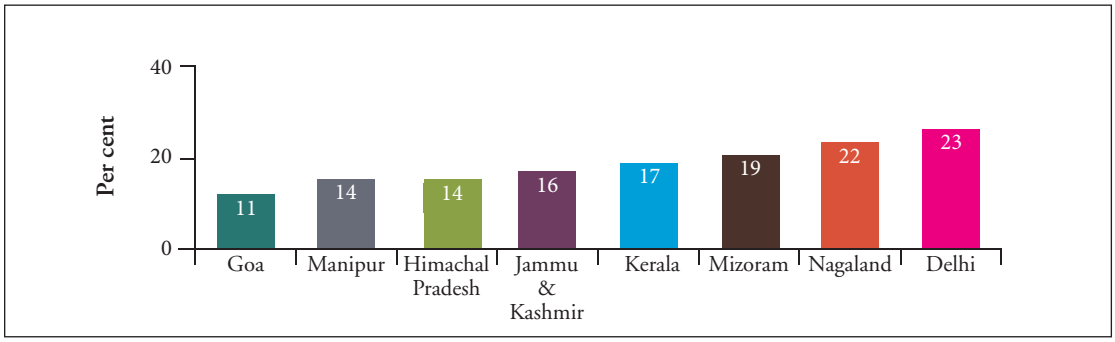
[2]*International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005–06: India: Volume I. Mumbai: IIPS, 2007.*

Figure 11 (b): States where 25- 50% of girls married by 18 years of age



Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Figure 11 (c): States where less than 25% of girls are married by 18 years of age



Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Sexual activity

Age at first marriage is often used as a proxy for first exposure to intercourse and risk of pregnancy. But the two events may not occur at the same time because some people may engage in sexual activity before marriage.

The median age at first sexual intercourse for women age 25-49 years was 17.6 years, which is almost identical to the median age at cohabitation. This clearly reveals that Indian women generally begin sexual intercourse at the time of their first marriage. The median age at first sexual intercourse among women has increased over the past two decades, from 17.3 among respondent women age 40-45 years to 18.7 years among respondent women age 20-24[2].

Contraception

Contraception, if used consistently and correctly, will prevent pregnancy. The provision of contraceptive information is fundamental to the ability of women and men to make informed

[2]*International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005–06: India: Volume I. Mumbai: IIPS, 2007.*

choices about their reproductive health needs. NFHS-3 reported that knowledge of modern contraceptive methods is almost universal among adolescents (Table-5). However, only 84% of female adolescents reported knowledge of any spacing method. Women and men aged 20-24 years are slightly more knowledgeable about contraceptive methods than those aged 15-19 years. Adolescent women and men from urban areas and those who are currently married are more likely to know about contraceptive methods than other women and men. The proportion of adolescents knowing any method, any modern method, and any modern temporary method increases with education and the wealth index[2].

Table 5: Knowledge of contraceptive methods among youth

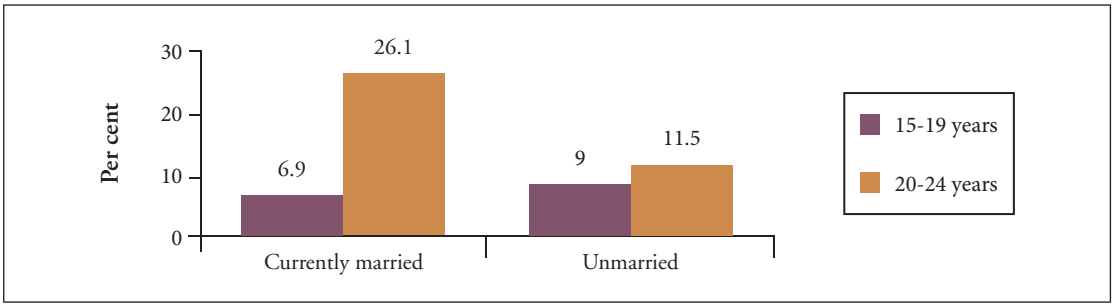
All values are in percentage

Age group (in years)	Women (%)		Men (%)	
	Know any modern method	Know any temporary modern method	Know any modern method	Know any temporary modern method
15-19	93.9	83.8	96	92.6
20-24	98.2	91.6	98.6	96.8

Source: *:International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

There is a large gap between knowledge and use of contraception among 15-19 years-old married adolescents; while use of contraceptives among currently married adolescents has marginally increased in the last 13 years (1% between 1992-1993 and 1998-1999; 2% between 1998-1999 and 2005-2006), only 7% report using a modern contraceptive method. This is 19 percentage points lower than the value for their 20-24 years old counterparts (Figure-12). Contraceptive prevalence rate of unmarried adolescents is higher in comparison to married adolescents. Unmarried women are mainly using condoms, which is good for protection against pregnancy and sexually transmitted infections (STIs).

Figure 12: Current use of modern contraceptives by married and unmarried youth



Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2006-06: India: Volume I. Mumbai: IIPS, 2007.*

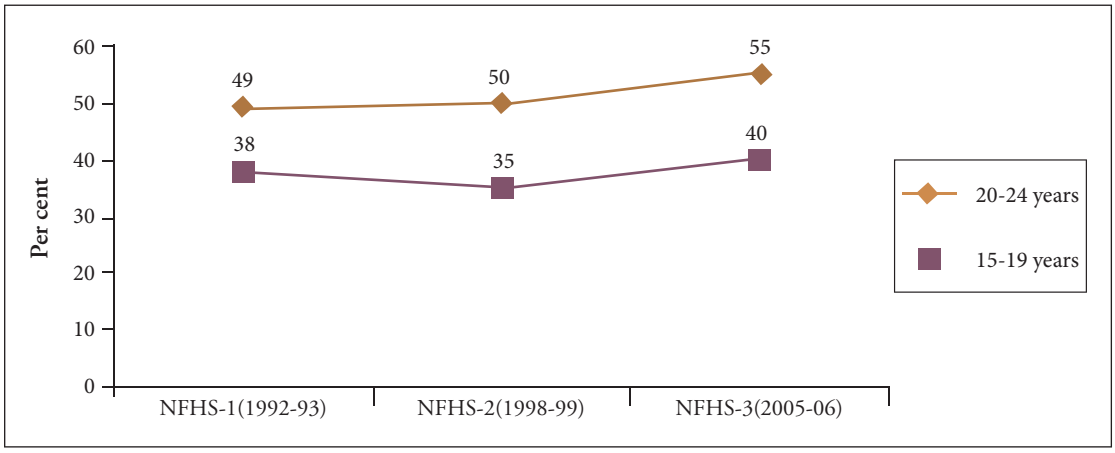
[2]*International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005–06: India: Volume I. Mumbai: IIPS, 2007.*

Unmet need for family planning

NFHS-3 indicates that the total demand for family planning services is not very high among adolescents, though it has been increasing steadily over the years (Figure-13). In comparison to women age 20-24 years, the proportion of demand satisfaction is poor among adolescents (61% versus 32%). This leads to fairly high unmet need among married adolescents (Figure-14). Unmet need for family planning is highest among women aged 15-19 years, which is 27% in comparison to the national average of 13%.

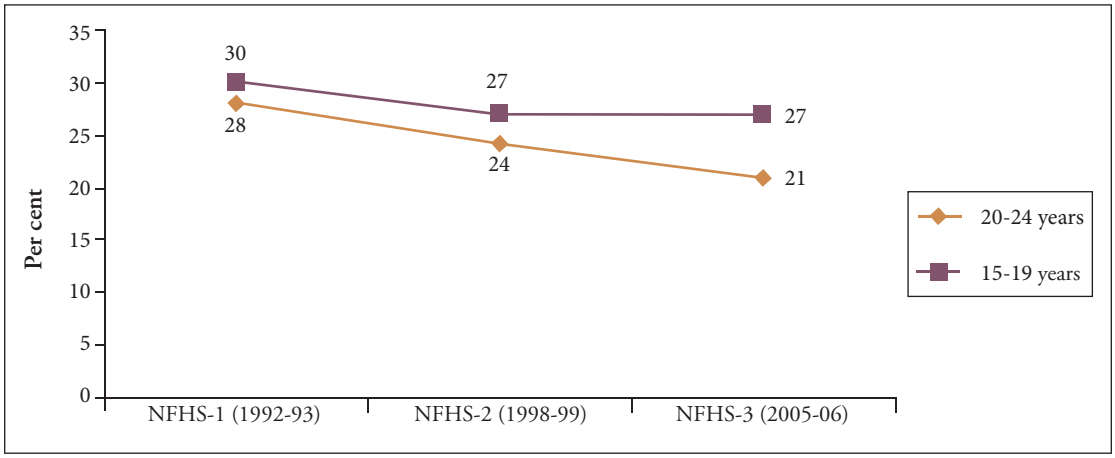
Trends show that there has been a very slight decrease in the unmet needs of adolescent married women between NFHS-1 and NFHS-2 (from 30% to 27% for 15-19 years olds and from 28 to 24% for 20-24 years old). Between NFHS-2 and 3 the decrease in unmet needs for younger married women has been nil and very small for 20-24 years old married women (Figure-14).

Figure 13: Trend in total demand for family planning among currently married women according to age group



Source:
1. *International Institute for Population Sciences (IIPS). National Family Survey (MCH and Family Planning), India 1992-93. Bombay:IIPS,1995 - http://www.measuredhs.com/pubs/pdf/FRIND1/FRIND1.pdf*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS,2000.*
3. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Figure 14: Trend in total unmet need for family planning among currently married women according to age group



Source:
1. *International Institute for Population Sciences (IIPS). National Family Survey (MCH and Family Planning), India 1992-93. Bombay:IIPS,1995 - http://www.measuredhs.com/pubs/pdf/FRIND1/FRIND1.pdf*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS, 2000.*
3. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai:IIPS, 2007.*

4. Essential care interventions during pregnancy

For women of all ages, use of health-care services is a key proximate determinant of maternal and infant outcomes, including maternal and infant mortality. For a safe pregnancy, childbirth and postnatal experience, mothers and babies need a continuum of care. According to the 'Making Pregnancy Safe' Strategic Approach, an essential package of interventions for maternal and newborn health care covers pregnancy, labour, birth, postnatal and early newborn care, family planning, unplanned pregnancy (and its consequences) and post-abortion care.

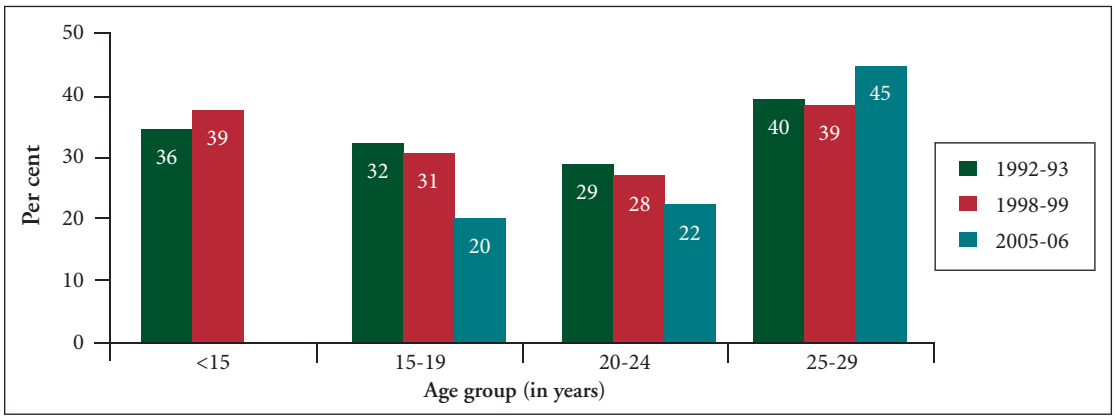
Antenatal care

Evidence indicates that insufficient antenatal care (ANC) is related to complications among adolescents[3]. In India, the Reproductive and Child Health Programme aims to provide at least three antenatal check-ups, which should include a weight and blood pressure check, abdominal examination, immunization against tetanus, iron and folic acid prophylaxis, as well as anaemia management[4].

[3] *World Health Organization. Adolescent Pregnancy: Unmet needs and Undone deeds. Geneva: WHO, 2007.*

[4] *India, Ministry of Health and Family Welfare (MOHFW). 2005. Annual report 2004-2005. New Delhi: MOHFW, 2005.*

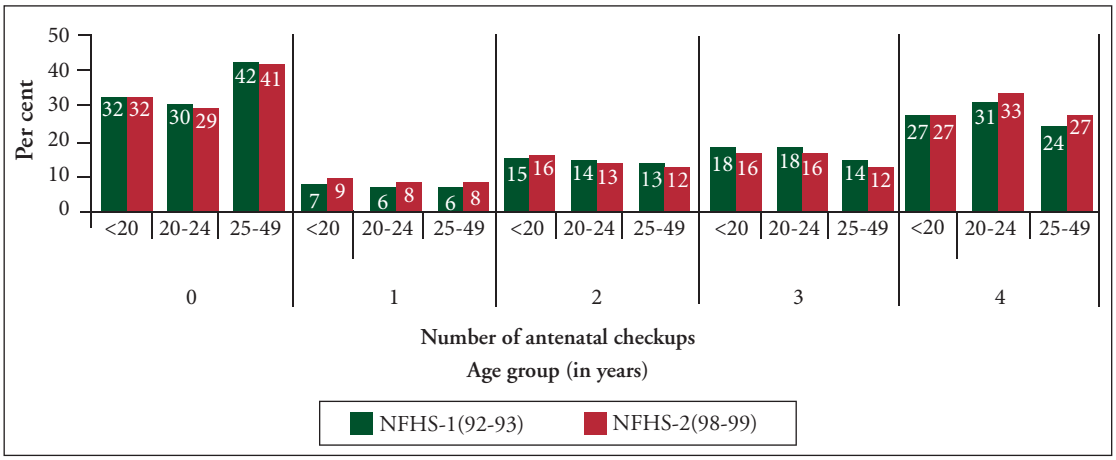
Figure 15: Trend in proportion of mothers who received no ANC according to the age group



Source:
1. *International Institute for Population Sciences (IIPS). National Family Survey (MCH and Family Planning), India 1992-93. Bombay:IIPS,1995 - http://www.measuredhs.com/pubs/pdf/FRIND1/FRIND1.pdf*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS,2000.*
3. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Note: NFHS-3 age groups are <20, 20-34 and 35-49 years and record from five years preceding the survey. For NFHS-1 &2 it is three years preceding the survey)

Figure 16: Number of antenatal check-up received by women according to age group



Source:
1. *International Institute for Population Sciences (IIPS). National Family Survey (MCH and Family Planning), India 1992-93. Bombay:IIPS,1995 - http://www.measuredhs.com/pubs/pdf/FRIND1/FRIND1.pdf*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS, 2000.*

Although the use of antenatal services has improved from the time of NFHS-1 to NFHS-3 in India, the NFHS-3 data show that one in five married adolescents still do not receive antenatal services (Figure-15). NFHS-3 has not provided age disaggregated information on number of antenatal check-up. The data made available after the subset analysis of NFHS-1 and 2 data show that approximately 40% of women less than 20 years old and about half of women aged 20-24 years received ANC three to four times during their pregnancy (Figure-16).

NFHS-3 data also shows that all the antenatal services are somewhat better received by women aged 20-24 years than those who are less than 20 years old (Table-6). As an exception, somewhat larger proportion of younger mothers received two or more tetanus injections during their last pregnancy (NFHS-3) than older women (Figure 17).

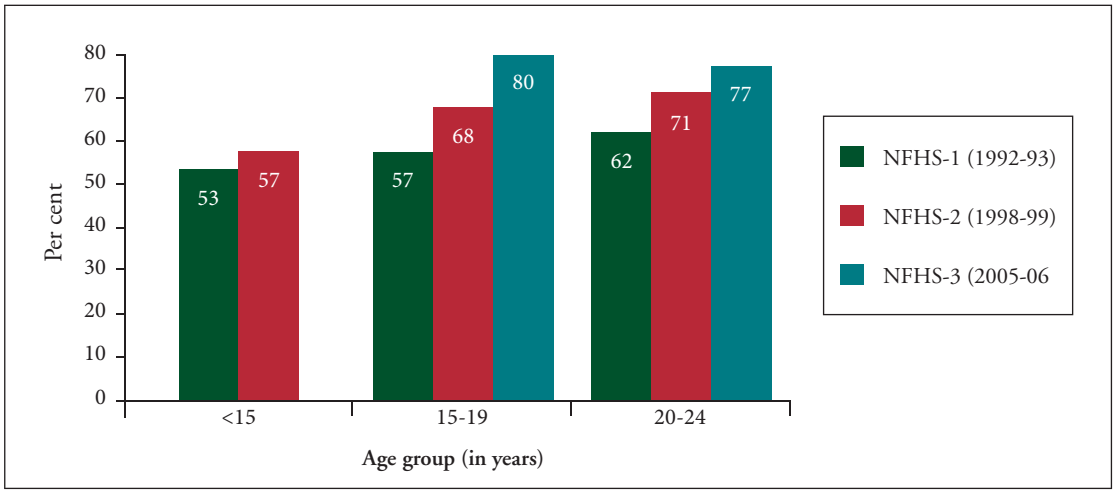
Table 6: Proportion of women receiving specific antenatal services (among women receiving ANC) for most recent births during last five years

All values are in percentage

Age group (in years)	Among women who received ANC for their most recent birth, the proportion who received selected services						
	Weighed	Blood pressure measured	Urine measured taken	Blood sample taken	Informed signs of pregnancy complications		Took iron tablets
					Vaginal bleeding	Convulsions	
<20	62.7	62.2	57.1	57.9	13.8	13.9	19.5
20-34	64.2	65	59.3	60.7	17.4	15.9	24.6

Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Figure 17: Proportion of pregnant women who received two or more TT injections during their last pregnancy



(**Note:** NFHS-3 age groups- <20, 20-34)

Source:
1. *International Institute for Population Sciences (IIPS). National Family Health Survey (MCH and Family Planning), India 1992-93. Bombay:IIPS,1995 - http://www.measuredhs.com/pubs/pdf/FRIND/FRIND1.pdf*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS, 2000.*
3. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Male involvement in antenatal care

The Reproductive and Child Health Programme in India envisages the involvement of men in women's reproductive health. Health workers are supposed to provide expectant fathers with information on several aspects of maternal and child care during their contacts with expectant fathers. NFHS-3 reported that men under age 20 were less likely to be present for antenatal check-ups of the mother than older men (Table-7).

Table 7: Male involvement in antenatal care by age of father

All values are in percentage

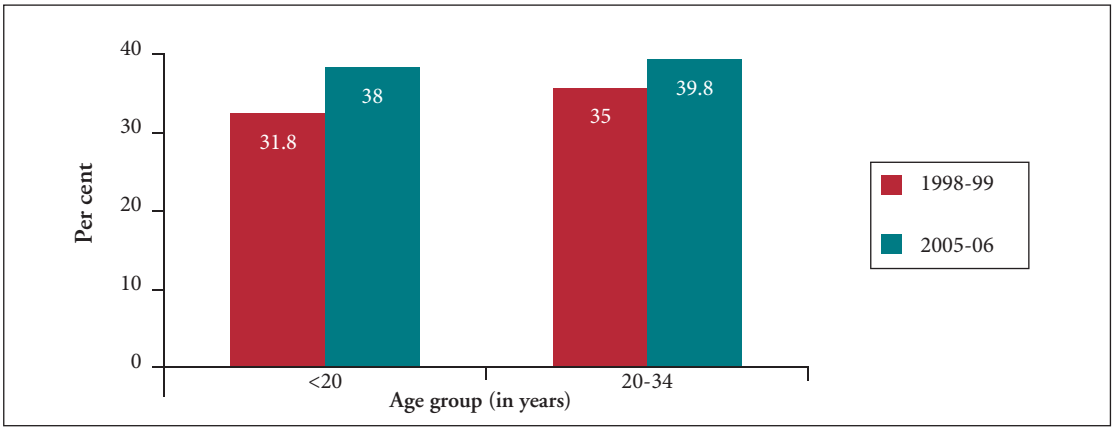
Age of father (in years)	Percentage for whom the child's mother received ANC and the father was present for ANC	Percentage ever told what to do if mother had any pregnancy complication
<20	30.3	25.3
20-34	50.4	38.2

Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Care at birth

Another key element of the essential package of safe motherhood interventions is childbirth care. This includes care during labour and delivery and immediate postpartum care for the mother. Important indicators of quality childbirth care are whether skilled personnel attended the birth, and whether the mother gave birth in a well-equipped health-care facility. According to NFHS-3 little more than one third of adolescent mothers deliver in an institution. Although the proportion of children delivered at a health facility continues to be low, there has been a marginal increase in institutional deliveries of adolescent mothers in India (Figure-18).

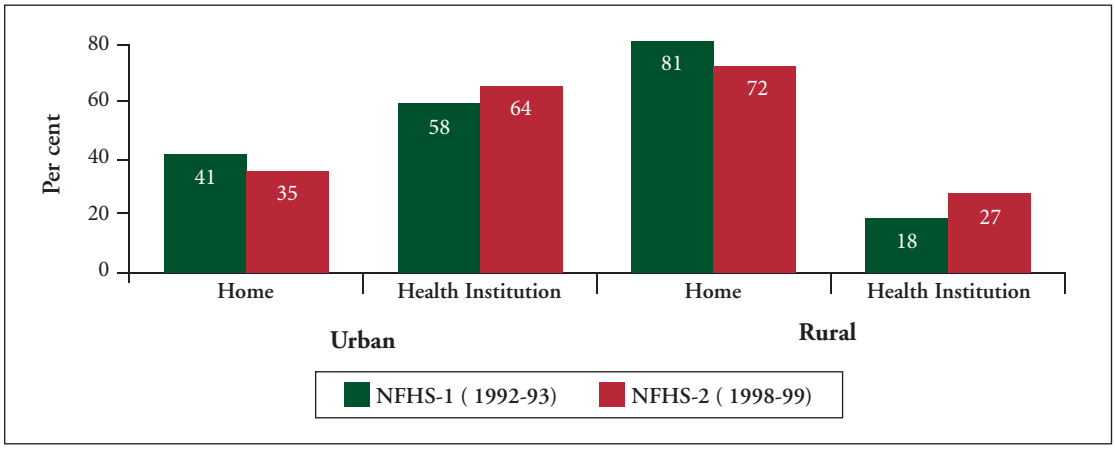
Figure 18: Trend in institutional deliveries by age of women



Source:
1. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS, 2000.*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Home births are more common among women (15-24 years) living in rural areas as compared to those living in urban areas (Figure-19). NFHS-3 data shows that the women who received no antenatal checkups, had no education or were in the lowest wealth quintile were also more likely to give birth at home. The main reason for not delivering at a health facility was indicated as not being convinced of the necessity. The other common reasons cited were the high cost, distant location of the health facility and lack of transport. Age disaggregated data for this information is not available.

Figure 19: Trends in places of delivery for women aged 15-24 years according to the area of residence



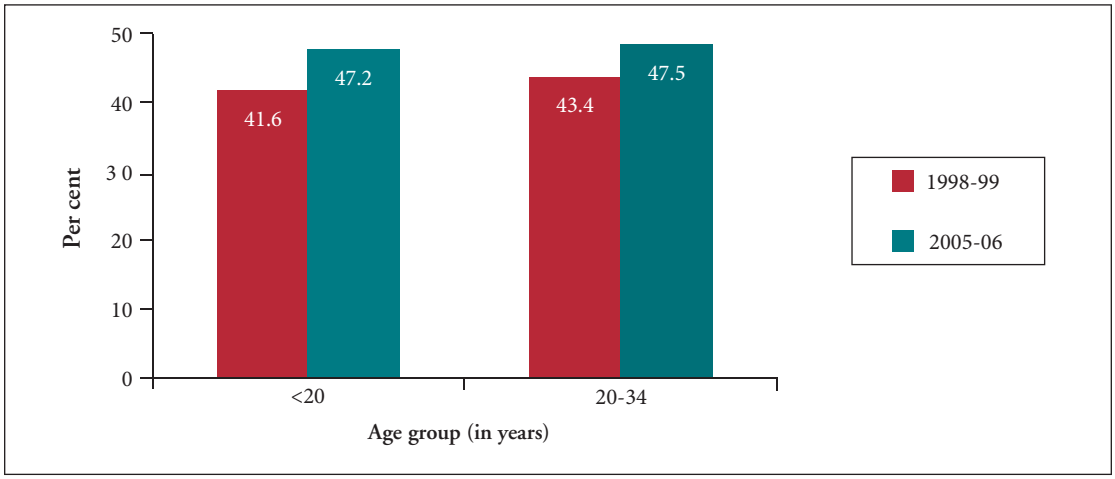
Source: 1. *International Institute for Population Sciences (IIPS). National Family Survey (MCH and Family Planning), India 1992-93. Bombay:IIPS,1995 - http://www.measuredhs.com/pubs/pdf/FRIND/FRIND1.pdf*

2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS, 2000.*

Note: *NFHS-3 data is available only for 15-49 according to residence & not included in figure 19.*

Similar to place of delivery, adolescents are less likely than women ages 20-34 years to have skilled attendants at birth. However, these differences were very small (Figure-20).

Figure 20: Trend in deliveries by skilled birth attendant by age of women



Source: 1. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS, 2000.*

2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

NFHS-3 also explored the participation of husbands in pregnancy/delivery care. It was reported that men less than 20 years of age were considerably less likely to be given the important information related to delivery or newborn care than older men (Table-8).

Table 8: Delivery and other related information given to men: Men's reports

Values in percentage

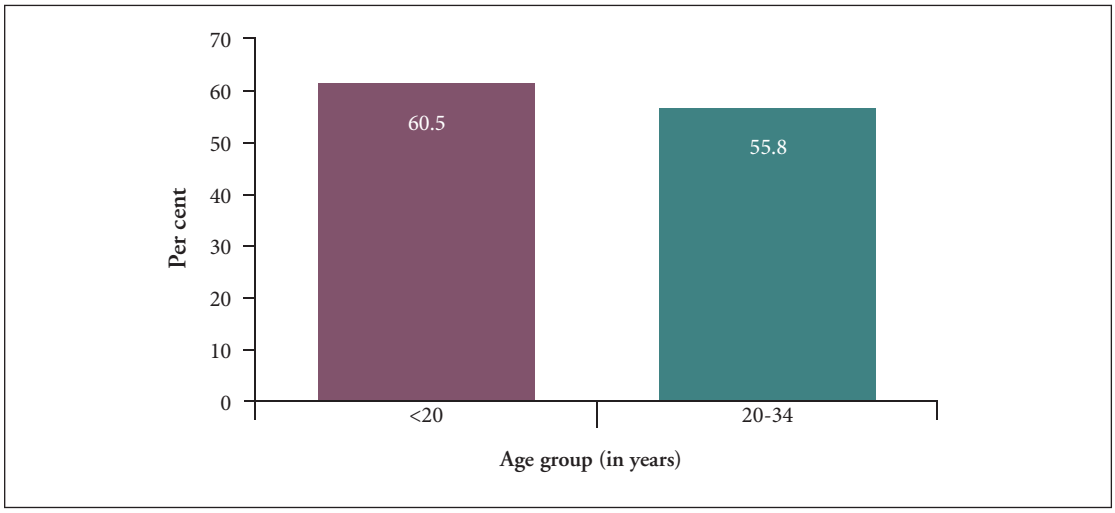
Age at birth (in years)	Fathers who said some time during pregnancy a health provider/worker talked to them			Fathers who said during pregnancy someone explained to them the importance of:			
	Importance of delivering in health facility	Importance of proper nutrition of mother during pregnancy	Family planning or delaying his next child	Breastfeeding the baby immediately after birth	Keeping the baby warm immediately after birth	Cleanliness at the time of delivery	Using a new or unused blade to cut the cord
<20	27.3	27.8	21.2	17.3	15.6	28.9	33.7
20-34	44.2	51.1	41.6	36.6	33.3	44.8	48.8

Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Postnatal care

Postnatal care is another crucial component of safe motherhood. Postnatal check-up provide an opportunity to assess and treat delivery complications and to counsel mothers on how to care for themselves and their children. A large proportion of maternal and neonatal deaths occur during the 24 hours following delivery. As in the case of delivery care, adolescent mothers are more disadvantaged for postnatal care than older mothers (Figure 21).

Figure 21: Proportion of women who did not receive postnatal care by age group



Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

5. Determinants of health care-seeking behaviour of adolescents

Many factors play a role in determining the health-seeking behaviour of pregnant adolescents and meeting their reproductive health needs. These range from autonomy of women, their freedom of movement, decision-making power, educational status and violence against women.

Autonomy

Personal autonomy is known to be a key determinant of a woman's ability to seek reproductive health services. Women often lack the authority to make health-care decisions for themselves. Studies have shown that women in general have very little say in the decision making processes within family. Where women's decision-making is restricted and women's health and illness rank low on the family's priority list, decisions regarding health care for pregnancy and pregnancy-related complications may be delayed, often with significant health consequences. NFHS-3 data has shown that adolescent women in India have relatively less autonomy than older women in making health care decisions, including decisions related to pregnancy care (Table-9).

Table 9: Pregnancy care-seeking behaviour of adolescents and attitudes towards violence against women

Values in percentage

Age group (in years)	Women who can make decisions about own health care	Women who are allowed to go alone to the health facility	Women who agree with at least one reason towards wife beating
15-19	40.4	23.1	52.9
20-24	52.5	36.3	52.5

Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Freedom of movement

The ability to leave one's home to seek care has an important influence on access to health-care services, especially during pregnancy. Evidence from NFHS-3 suggests that adolescents are less likely than older women to be able to visit health facility without permission (Table-9).

Violence against women

A fundamental element of empowerment is the rejection of normatively prescribed power of men over women. One such ascribed 'right' of husbands is to regulate and control their wives' behaviour through the use of violence. In addition, when a woman believes that a husband is justified in hitting or beating his wife, she may consider herself to be of low status to men. Such perception could act as a barrier in accessing health care for herself and her children. NFHS-3 reported that acceptance of wife beating for at least one reason is high among women of all ages (Table-9).

Educational attainments and exposure to mass media

Table 10: Adolescents' level of education

Values in percentage

Surveys →	NFHS-1		NFHS-2		NFHS-3			
Age group → (in years)	**15-19 (F)**	**20-24 (F)**	**15-19 (F)**	**20-24 (F)**	**15-19 (F)**	**20-24 (F)**	**15-19 (M)**	**20-24 (M)**
No education	67.1	59.8	59	52.1	21.7	31.4	7.4	12.3
<5 years complete	5.6	5.8	6.1	5.3	7.7	6.6	6.9	8.4
5-7 years complete	13	12.8	16.8	14	19.4	15.8	18.3	17.1
8-9 years complete	8.6	9.5	11.1	11.6	23.6	16.4	32	21.8
10-11 years complete	5.6	9.5	5.2	9.3	18.1	10.6	24.7	13.4
12 or more years complete	0.2	2.6	1.8	7.7	9.4	19.2	10.6	27.0

Source:
1. *International Institute for Population Sciences (IIPS). National Family Survey (MCH and Family Planning), India 1992-93. Bombay:IIPS,1995 - http://www.measuredhs.com/pubs/pdf/FRIND/FRIND1.pdf*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS, 2000.*
3. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

In the context of social background and determinants of adolescent pregnancies, another aspect of improved education is that the overall level of childbearing is usually lower in better-educated women compared to the less-educated. Educated adolescents are less dependent upon parents and family and have postponed the age at marriage and thereby the age of socially sanctioned sexual relations. Although, there is an improvement in the educational levels attained by adolescents, still more than one fifth of adolescent girls are not educated, making them more vulnerable to early marriage and early childbearing (Table-10).

6. Impact of adolescent pregnancy on health outcomes for mothers, newborns and children

Adolescent pregnancy is a complex issue influenced by many factors. Its consequences affect the health, the social and economic well-being of the adolescents, their children and society at large.

Nutritional status

NFHS-3 does not provide any information about the nutritional status of pregnant adolescents. However, the data on nutritional status of women shows that women age 15-19 years are more likely to be thin or undernourished and shorter in height than women in other age cohorts (Table-11). More than half of women suffer from anaemia. Women who are short and malnourished have higher risks of complications during pregnancy and delivery.

Table 11: Nutritional status of women

Values in percentage

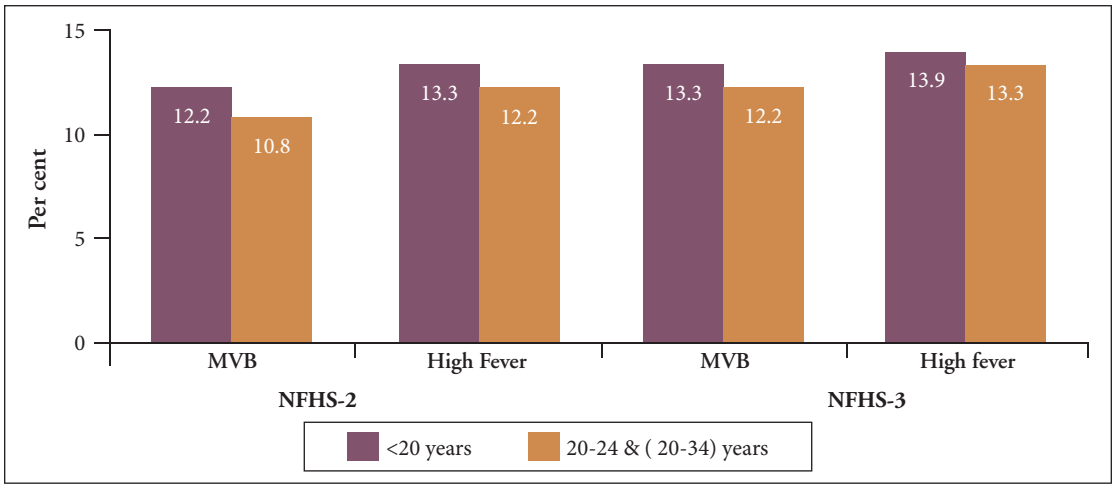
Age group (in years)	BMI < 18.5 (thinness)	Height less than 145cms	Prevalence of any anaemia
15-19	46.8	11.7	55.8
20-24	38.1	10.9	56.1

Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Pregnancy complications

According to NFHS-3, 13% of postpartum women aged less than 20 years reported massive vaginal bleeding and 14% reported a very high fever. Younger women (less than 20 years) reported more symptoms of postpartum complications compared to those aged 20-24 years (Figure-22).

Figure 22: Trend in postpartum complications - massive vaginal bleeding (MVB) and very high fever among women in the age group <20 and 20-24 (20-34 for NFHS-3)



Source:
1. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS, 2000.*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Table 12: Outcome of pregnancy according to age group

Age group (in years)	15-19 years				20-24 years			
Pregnancy outcome	Spontaneous abortion	Induced abortion	Still birth	Live birth	Spontaneous abortion	Induced abortion	Still birth	Live birth
NFHS-1	7.3	1.7	2.4	88.7	5.5	1.2	2.5	90.9
NFHS-2	4.5	0.6	1.4	93.4	5.1	1.4	2.1	91.4
NFHS-3	NA	NA	NA	NA	NA	NA	NA	NA

Source:
1. *International Institute for Population Sciences (IIPS). National Family Survey (MCH and Family Planning), India 1992-93. Bombay: IIPS,1995 - http://www.measuredhs.com/pubs/pdf/FRIND/FRIND1.pdf*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS, 2000.*
3. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

Pregnancy outcomes from NFHS-1 reveal that younger mothers (15-19 years) experience a higher percentage of negative pregnancy outcomes in terms of spontaneous abortions, induced abortion and still births compared to women aged 20-24 years. Trends from NFHS-1 to NFHS-2 show a decline in the negative outcomes of pregnancy and an increase in live births especially in the 15-19 years age group (Table-12).

Abortion

In India, abortion is permitted for a pregnancy of up to 12 weeks when there is risk to the woman's life; serious injury to the woman's physical or mental health; and if there is substantial fetal impairment. Abortion is also considered if the pregnancy has resulted from rape or contraceptive failure by either the man or the woman. For pregnancies between 12 and 20 weeks, the opinions of two medical practitioners are required. For pregnancies beyond 20 weeks, abortion is prohibited unless it is "immediately necessary to save the life of the pregnant woman"[5]. Where minors are concerned, consent of a legal guardian is required for a legal abortion. For a married woman to obtain a legal abortion, she does not require consent of her husband.

While there is no precise number of abortions recorded in India, government estimates suggest that there are between 4 and 6 million illegal abortions conducted annually and that 9% of maternal deaths are caused by unsafe abortions. Furthermore, it is estimated that 1.7% of all pregnancies end in induced abortion. Non-governmental data, however, suggest that the number of abortions is in fact higher: 6.7 million abortions every year. These sources also indicate that unsafe abortions are accountable for 4.5% to 16.9% of all maternal deaths. With regards to adolescents, estimates suggest that 6.1% of adolescents under the age of 20 have had abortions. Furthermore, unsafe abortions account for half of all maternal deaths for girls between the ages of 15-19[5] years.

[5] *The Center for Reproductive Rights. Women of the World: Laws and Policies Affecting their Reproductive Rights. South Asia. New York 2004, pg 86.*

In a particularly pertinent study on induced abortion among adolescent in rural Maharashtra, revealed that although unmarried women had the same access to safe abortion services as married women, 11 out of the 28 unmarried women in the study chose to have a termination using the methods of a traditional provider near their villages. These women explained that secrecy was very important in having an abortion; a private practitioner provided higher levels of confidentiality. Furthermore, many said they would not be able to explain repeated visits away from their home[6]. This study also highlighted that although abortion is legal for unmarried women, many of the single women in this study were unaware of the law. Nearly 43% of the adolescents believed that legality depended on marital status.

In another study focused on the abortion experiences of young and unmarried women in India, there was a strong demographic correlation between age and a longer period of gestation before having an abortion. Women who had an abortion in the second trimester tended to be younger (18 versus 20 years of age), less educated (seven years of schooling versus 10) and more likely to live in rural areas than urban (53% versus 87%)[7]. These studies highlight that unmarried women in India, although legally considered in requesting an abortion (provided they have consent if they are minors), are severely restricted by social, demographic, and cultural barriers that do not safeguard their legal rights.

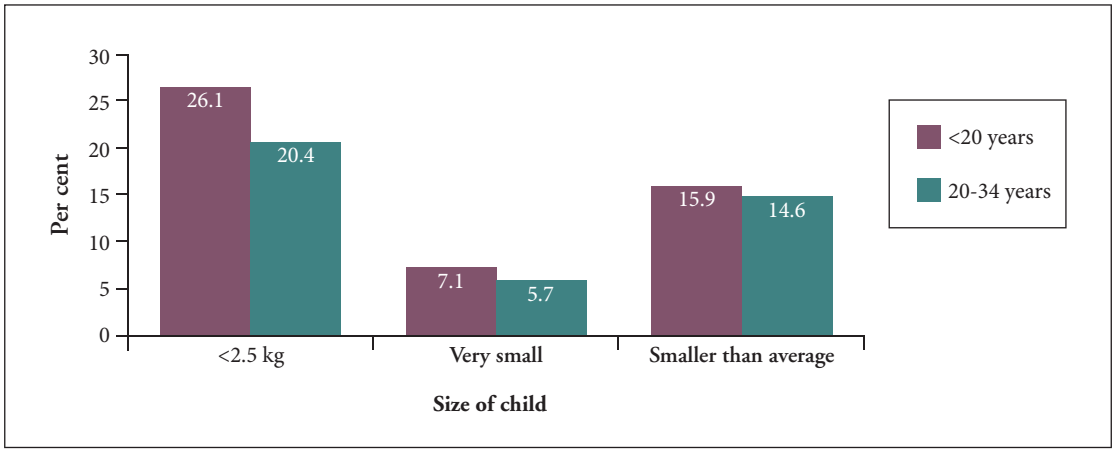
Newborn and child survival

The consequences of early marriage and early childbearing extend to the lives of the next generation. Infants born to adolescent mothers are more likely to be of low birth weight (LBW) (defined as birth weight <2500 g) or smaller than average in size (Figure-23). This key outcome of unsafe pregnancy conditions is higher among adolescent mothers than among older women aged 20-34. Infants and children of mothers who give birth to them before the age of 20 face higher mortality rates even up to the age of five. The neonatal and under-five mortality rates among children of mothers under the age of 20 are much higher than those in the immediate next cohort aged 20-29 years (Table-13). NFHS-3 data also shows that perinatal mortality rates are highest among women aged less than 20. However, mortality at all ages has reduced in the period between the recent two family health surveys.

[6]*Ganatra B, Hirve S. Induced abortions among adolescent women in rural Maharashtra, India. Reproductive Health Matters 2002; 10 (9): 82*

[7]*Kalyanwala S, Zavier AJ Francis, Jejeebhoy S, Kumar R. Abortion experiences of unmarried young women in India: Evidence from a facility-based study in Bihar and Jharkhand 2010; 36 (2): 66-71 - http://www.guttmachre.org/pubs/journals/3606210.html - accessed 13 June 2013.*

Figure 23: Size of the child at birth by age of the mother



Source: *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India: Volume I. Mumbai: IIPS, 2007*

Note: *Very small & smaller than average is based on mother's perception*

Table-13: Perinatal, neonatal and under-five mortality rates by the age when they gave birth

Period of survey	PMR		NMR		U5MR	
	<20	20-29	<20	20-29	<20	20-29
NFHS-3 (2005-2006)	66.8	43.4	54.2	34.2	95.0	65.0
NFHS-2 (1998-1999)	NA	NA	63.1	40.7	120.8	90.2

Source:
1. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-2), 1998-99. Mumbai: IIPS, 2000.*
2. *International Institute for Population Sciences (IIPS). National Family Health Survey (NFHS-3), 2005-06: India. Volume I. Mumbai: IIPS, 2007.*

INDONESIA

1. Number of adolescents in Indonesia

It is estimated that the total number of adolescents in Indonesia is about 43 million (Table-1). They constitute 17.8% of the total population. Girls constitute a little less than half of the adolescent population. The number of adolescents has already peaked in Indonesia and is now on the decline. Data from World Population Prospects 2010 project a decline of about 5.3% by the year 2030[1]. However, their large number remains a major cause of concern on account of adolescent pregnancy and future population growth.

Table 1: Number and proportion of young people by age and sex in Indonesia, 2010

Age group (in years)	Male		Female		Total	
	Number	(%)	Number	(%)	Number	(%)
10-14	10 787 000	4.5	10 411 000	4.3	21 198 000	8.8
15-19	10 966 000	4.6	10 633 000	4.4	21 599 000	9.0
20-24	10 869 000	4.5	10 683 000	4.4	21 552 000	8.9
Total	**32 622 000**	**13.6**	**31 727 000**	**13.1**	**64 349 000**	**26.7**

Source: *United Nations, Department of Economic and Social Affairs, Population Division. World population prospects: The 2010 Revision and World Urbanization prospects: 2010 Revision. New York: UN, 2011 - http://esa.un.org/undp/wpp/index.htm*

2. Adolescent pregnancy

Adolescent fertility

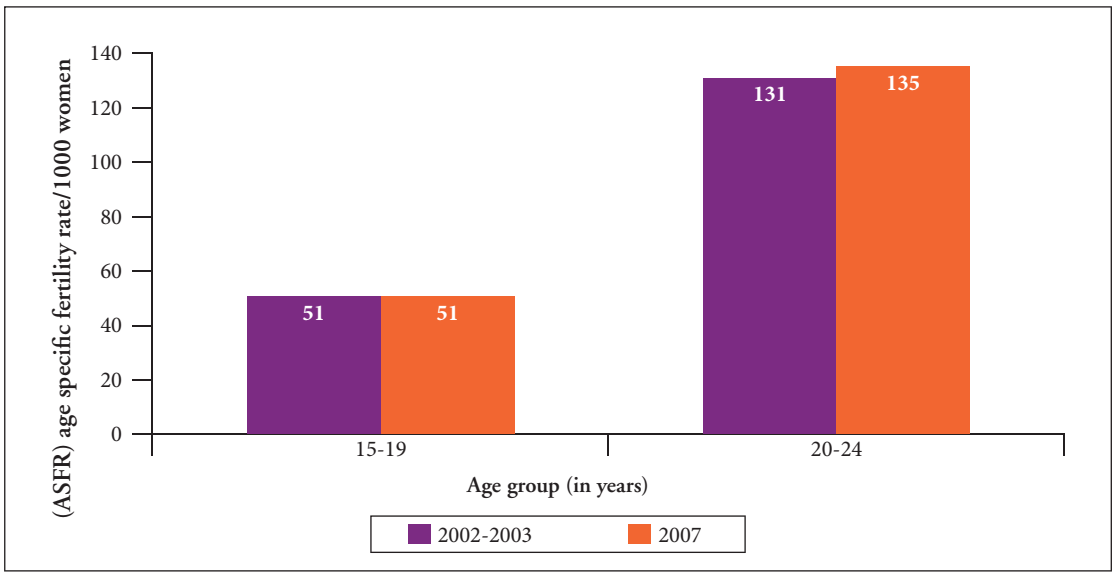
In Indonesia more than 2 million adolescent girls aged 15-19 years are estimated to have given birth between 2005 and 2010[1], which is about 10% of the total births. The rate of births per 1000 females aged 15–19 years is 51[2]. The total adolescent fertility rates remained unchanged between 2002 and 2007 (Figure-1). However, the fertility rate among adolescents living in urban areas has declined considerably, whereas it increased in rural areas (Figure-2 a). At the national level, the decrease in the urban fertility rate is offset by the increase in the rural fertility rate. The urban rural differential is much higher in adolescence aged 15-19 years (2.8 times) compared to the women in 20-24 years age group (1.3 times) (Figure-2b). Data from the IDHS 2007 indicate that women are gradually having children at an older age. The median age at first birth increased from 20.8 in 1996 to 21 in 2002-2003 and has further increased to 21.5 in 2007. The increase in age at first birth can also be seen from the decrease overtime in the proportion of women who have

[1] *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision and World Urbanization Prospects: The 2010 Revision. New York: UN, 2011 - http://esa.un.org/unpd/wpp/index.htm*

[2] *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

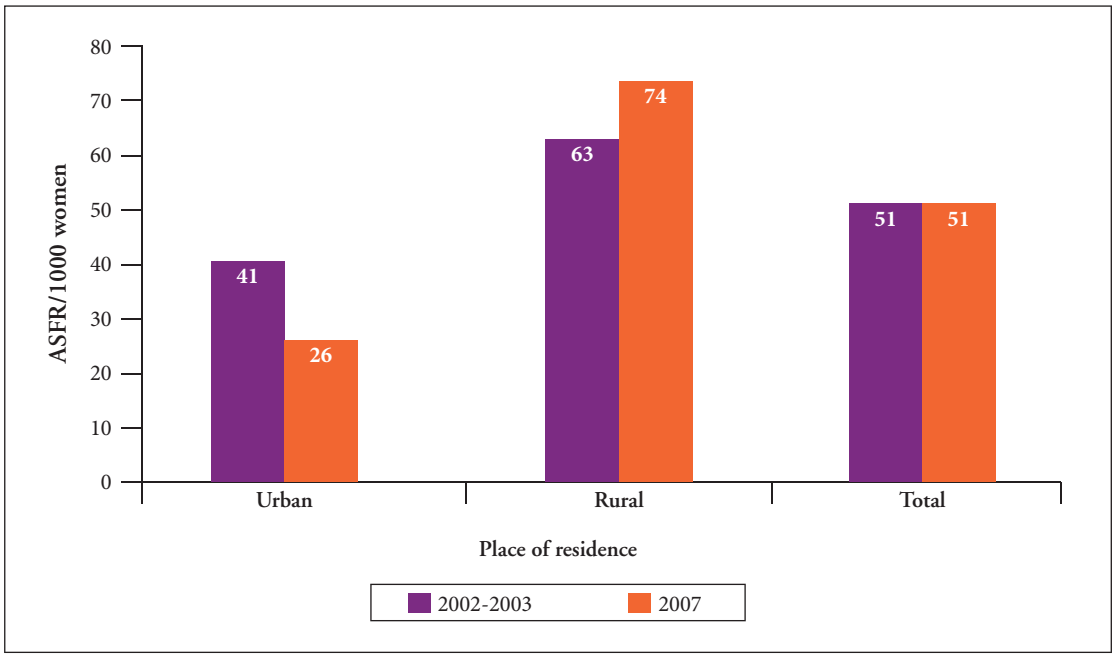
given birth at age 15. Of women age 40-44, 5.7% had their first child by age 15 compared with less than 0.4% of women age 15-19 years. Data in figures 3 and 4 show that pregnancy during adolescence has declined in the last 25 years. However, the decline is not appreciable between the last two IDHSs.

Figure 1: Trend in age specific fertility rate in Indonesia



Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

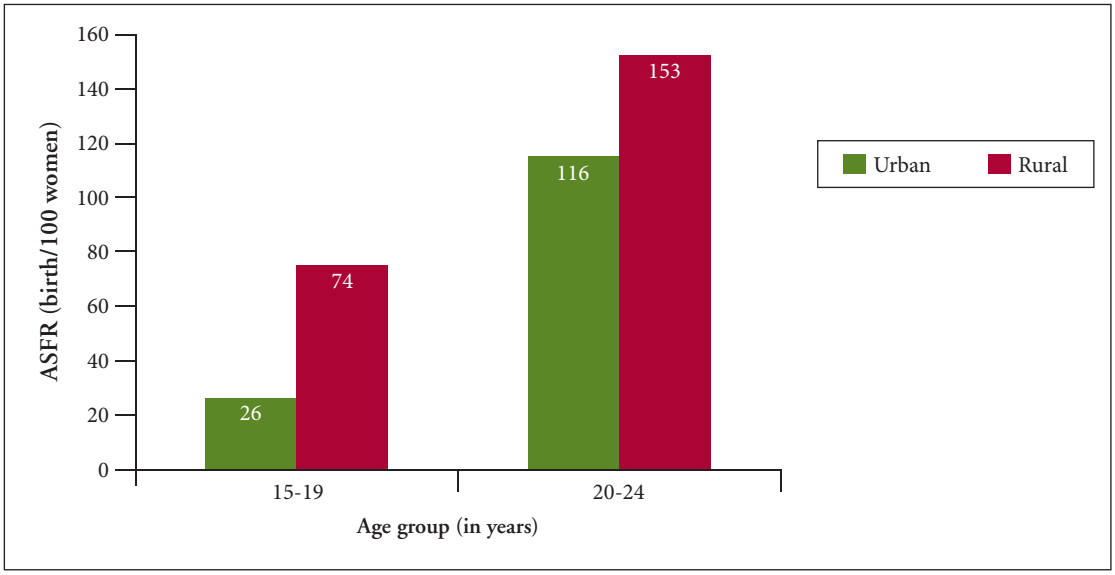
Figure 2 (a): Trends in urban-rural differentials in ASFR (births/1000 women) among women aged 15-19 years



Source: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

2 *Statistics Indonesia. Indonesia Demographic and Health Survey 2002- 2003. Jakarta: BPS and ORC Macro, 2003.*

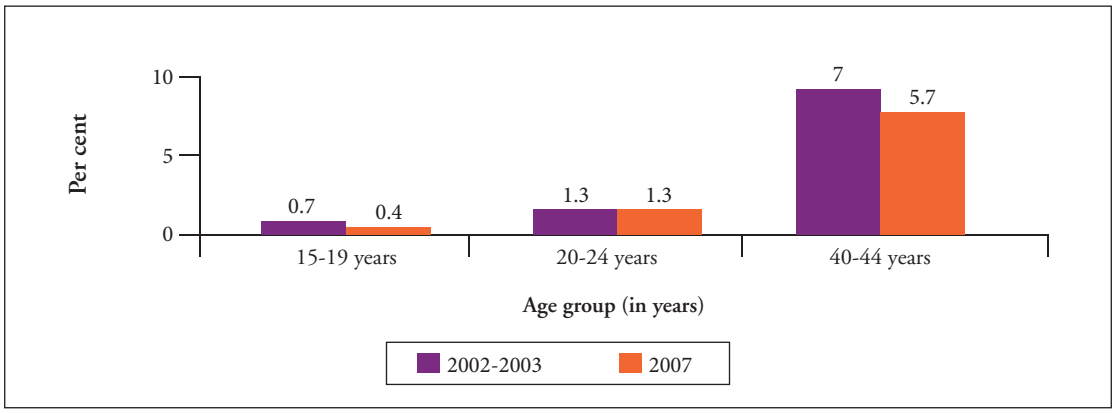
Figure 2 (b): Urban - Rural differentials in ASFR



Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

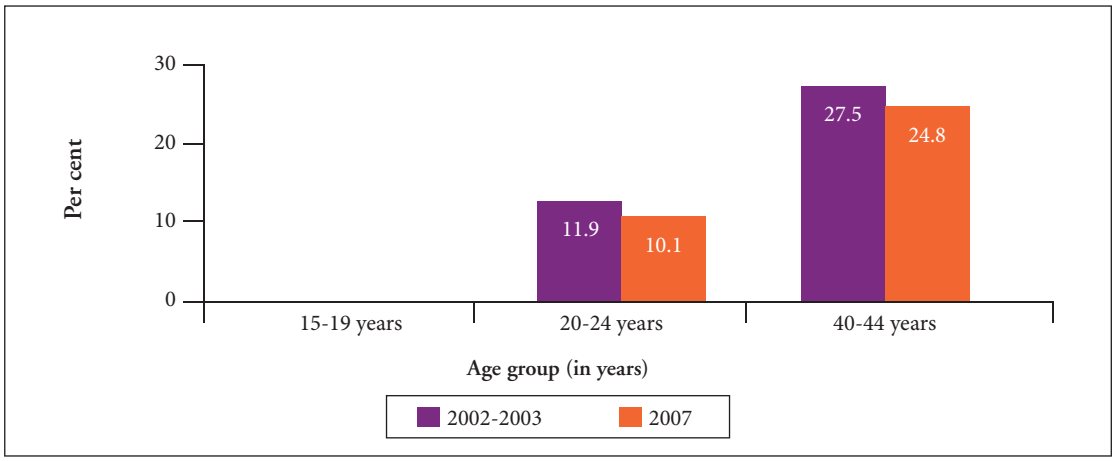
Age at first birth

Figure 3: Proportion of women who gave first birth by age 15 in Indonesia by age groups



Source:
1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*
2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002- 2003. Jakarta: BPS and ORC Macro, 2003.*

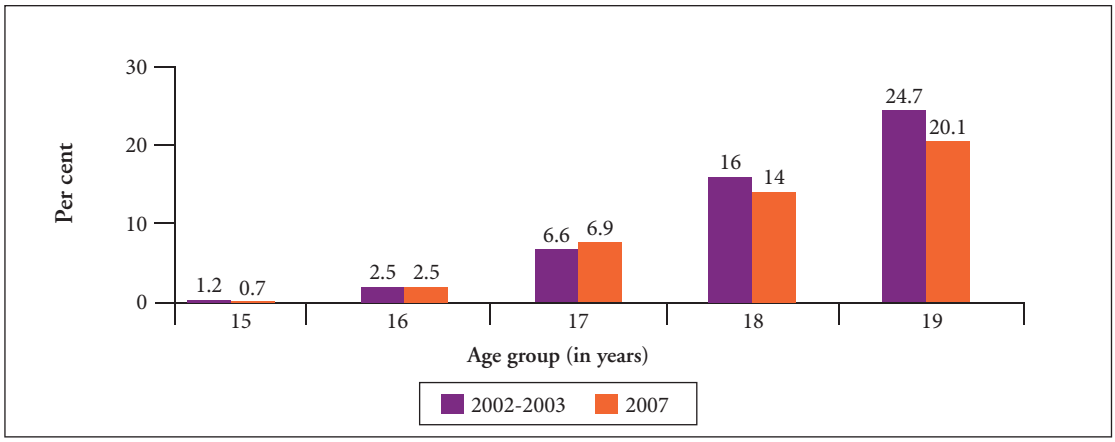
Figure 4: Proportion of women who gave first birth by age 18 in Indonesia by a groups



Sources: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*
2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002- 2003. Jakarta: BPS and ORC Macro, 2003.*

The 2007 IDHS findings also show that 9% of adolescents have started childbearing: 7% have had a live birth and 2% are currently pregnant with their first child. The proportion of teenagers who have started having children increases rapidly with age. While less than 1% of women aged 15 have started childbearing, one in five women aged 19 years is either a mother or is pregnant with her first child (Figure-5). Rural teenagers and those with less education, are more likely than urban teenagers and those who are educated up to secondary levels and beyond to have started childbearing early (Table-2).

Figure 5: Proportion of adolescents (aged 15-19 years) who have begun childbearing by age



Source: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*
2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002-2003. Jakarta: BPS and ORC Macro, 2003.*

By wealth status, the proportion of teenagers who have begun childbearing is less likely among those living in the lowest quintile (6%) than among those in the highest quintile (10%) (Table-2).

Table 2: Differentials in proportion of adolescents (15-19 years) who have begun child bearing

All figures are in percentages

		2002-2003	2007
Residence	**Urban**	7.3	13.7
	Rural	3.9	12.7
Education	**No education**	13.6	18.7
	Less than completed primary	16.2	21.2
	Completed primary	22.7	21.4
	Some secondary	6.7	5.5
	Secondary and above	5.7	3.8
Wealth Quintile	Lowest	-	5.9
	Highest	-	9.6

Sources:
1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*
2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002 2003. Jakarta: BPS and ORC Macro, 2003.*

Recidence and adolescent childbearing

Variations in adolescent pregnancy also exist in different provinces of Indonesia [Table-3 (a), (b) and (c)]. IDHS 2007 data at province level shows that the proportion of adolescent women who have begun childbearing is the highest in Central Kalimantan (25.7%) and Jambi (19.8%) and is the lowest (less than 5%) in the Bali, DKI Jakarta and North Sumatera.

Table 3 (a): Provinces where less than 10% of women aged 15-19 years have begun childbearing

Province	Proportion of adolescents who have begun child bearing
Bali	1.0
DKI Jakarta	2.2
North Sumatera	3.9
DI Yogyakarta	5.1
Banten	5.8
East Nusa Tenggara	6.3
Nanggroe Aceh Darussalam	6.7
North Maluku	7.2
Riau Islands	7.2
Central Sulawesi	7.5
Maluku	7.6
Lampung	7.8
North Sulawesi	8.0
East Java	8.3
Bengkulu	8.6
West Java	8.9
Central Java	9.3
Riau	9.5

Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

Table 3 (b): Provinces where 10-15% of women aged 15-19 years have begun childbearing

Province	Proportion of adolescents who have begun child bearing
West Nusa Tenggara	11.1
West Sumatera	11.2
East Kalimantan	11.4
Bangka Belitung	11.6
West Kalimantan	11.6
South Sulawesi	11.7
Southeast Sulawesi	12.9
West Papua	13.2
South Sumatera	14.1
South Kalimantan	14.1

Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

Table 3 (c): Provinces where more than 15% of aged 15-19 years have begun childbearing

Province	Proportion of adolescents who have begun child bearing
Gorontalo	15.6
Papua	16.0
West Sulawesi	16.8
Jambi	19.8
Central Kalimantan	25.7

Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

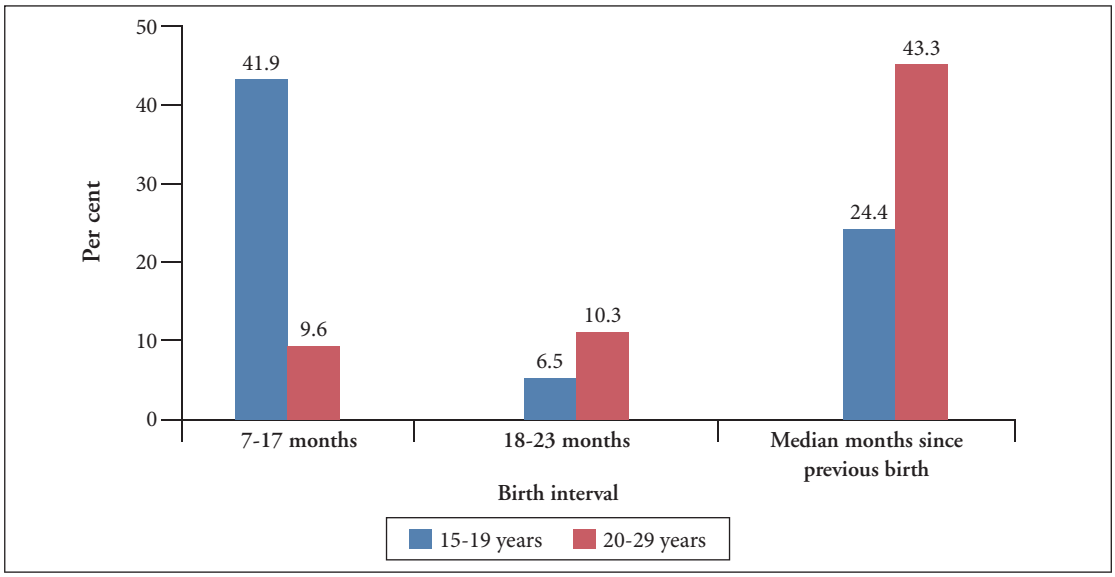
Birth interval

Research shows that children born too soon after a previous birth are at an increased risk of dying, particularly when the interval between the two consecutive births is less than 24 months[2]. Maternal health is also put at risk when births are closely spaced. IDHS 2007 shows that 42% of births to adolescents are at an interval of less than 18 months as compared to only 10% births of women aged 20-29 (Figure-6). The median number of months since the preceding birth for adolescent mothers (24) is much less than the national average of 55 months or even for women aged 20-29 years (43)[2]

[2]*Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

This Birth interval for adolescent mothers has dropped since the 2002-03 IDHS, when it was 31.8 months. This can be attributed to the increase in unmet need for contraception for adolescent mothers since 2002-2003 (see Figure-15).

Figure 6: Birth intervals/spacing between two consecutive births in Indonesia, 2007



Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

Planning status of adolescent pregnancy

The degree to which couples are able to successfully control childbearing can be gauged from data on the percentage of pregnancies that are unwanted. The IDHS 2007 reported that the planning status of births is associated with the age of the mother. Older mothers tend to have a smaller percentage of children who were wanted at conception. Greater proportion of births was mistimed rather than unwanted. The percentage of unwanted births increase with mother's age; it is about 10% among women under age 20 years, compared with 18% among women aged 25-29 years and 47% among aged 40-44 years (not shown in the table). However, the unwanted pregnancies have increased in all the age groups, which can be attributed to number of factors, including unmet need for contraception and the women's status (Table-4).

Table 4: Trends in fertility planning status by mothers' age at birth Indonesia 2007

All figures are in percentages

Age at birth (in years)	Planning status of birth					
	Wanted then		Wanted later		Wanted no more	
	2007	2002-2003	2007	2002-2003	2007	2002-2003
<20	89.3	91.8	8.6	6.9	0.9	0.3
20-24	85.9	88.1	11.5	9.5	1.8	1.5
25-29	81.8	84.9	14.2	10.0	3.7	4.0

Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

3. Proximate determinants of adolescent pregnancy

The principal factors that affect an adolescent woman's risk of becoming pregnant are marriage, sexual intercourse and contraception.

Sexual activity

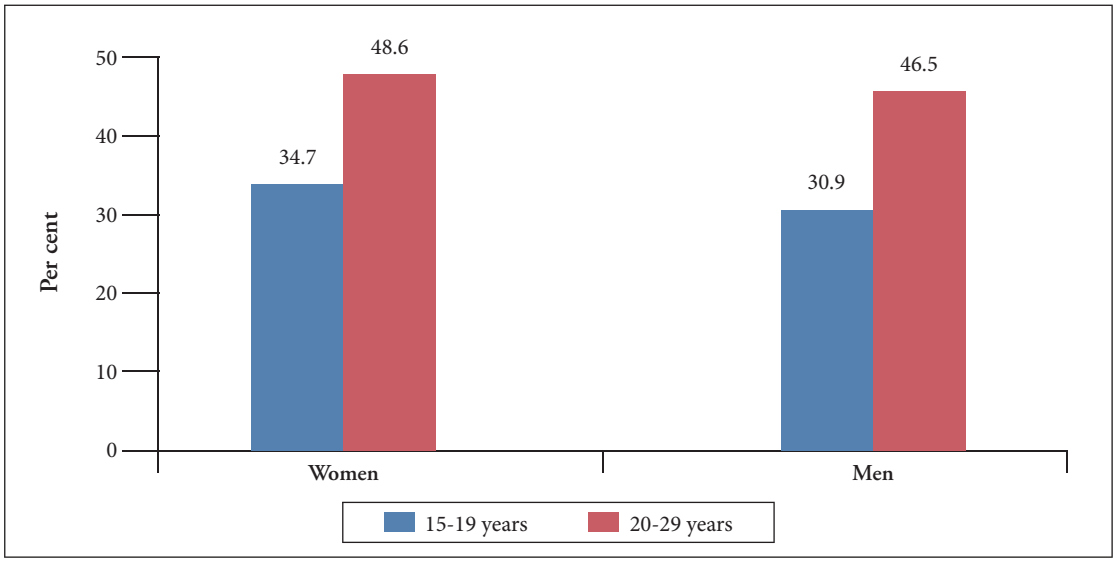
Although age at marriage is often used as a proxy measure for the beginning of exposure to the risk of pregnancy, some women and men in Indonesia engage in sexual activity before marriage. While about 6% of male adolescents and 3% of female adolescents (ages 15-19 years) among those responding to the Indonesia Young Adult Reproductive Health Survey 2002-03 (IYARHS 2002-2003) accepted premarital sex for men, only 3% of males and 2% of females accepted premarital sex for women. Adolescents aged 15-19 years are more likely than young men aged 20-24 years to approve premarital sex. Very few respondents admitted to being sexually active, though about one-third of the youth aged 15-19 years and about half aged 20-24 years, claimed to know of others who have been engaged in premarital sex (Figure-7). Those who admitted in the survey to having sexual intercourses were very few, (less than 1% of women and 5% of men).

Data from IDHS 2007 show that more than 14% of women aged 15-19 years who were ever married, had their first sexual intercourse at the age of 15, while it was 7% in the case of those who were 20-24 years old (Table-5) but, very few men reported having sex by age 15. It may be noted here that only 2% (Figure-8) of women age 15-19 years had their first marriage by 15 which shows that sexual activity may start even before they get married.

IYARHS 2002-03 reported that young people living in urban areas with a higher level of education were likely to be more sexually active. The reasons for first sexual intercourse cited were: love, curiosity and influence of peers. The majority (60%) of adolescents who have had sex did it without using condoms[3].

[3]*Statistics Indonesia. Indonesia Young AdultReproductive Health Survey 2002-2003. Jakarta: Statistics Indonesia and ORC Macro, 2004.*

Figure 7: Proportion of unmarried young women and men who have at least one friend who has had a sexual experience



Source: *Statistics Indonesia. Indonesia Young Adult Reproductive Health Survey 2002-2003. Jakarta: Statistics Indonesia and ORC Macro, 2004.*

Table 5: Age at first sexual intercourse among married women and men, 2007

Marital status	Present age	Proportion of first sexual activity at the age of		
		15	18	20
Women who ever married	15-19	13.5	NA	NA
	20-24	6.7	34.6	65.1
Currently married men	15-19	0.0	NA	NA
	20-24	0.2	10.2	30.8

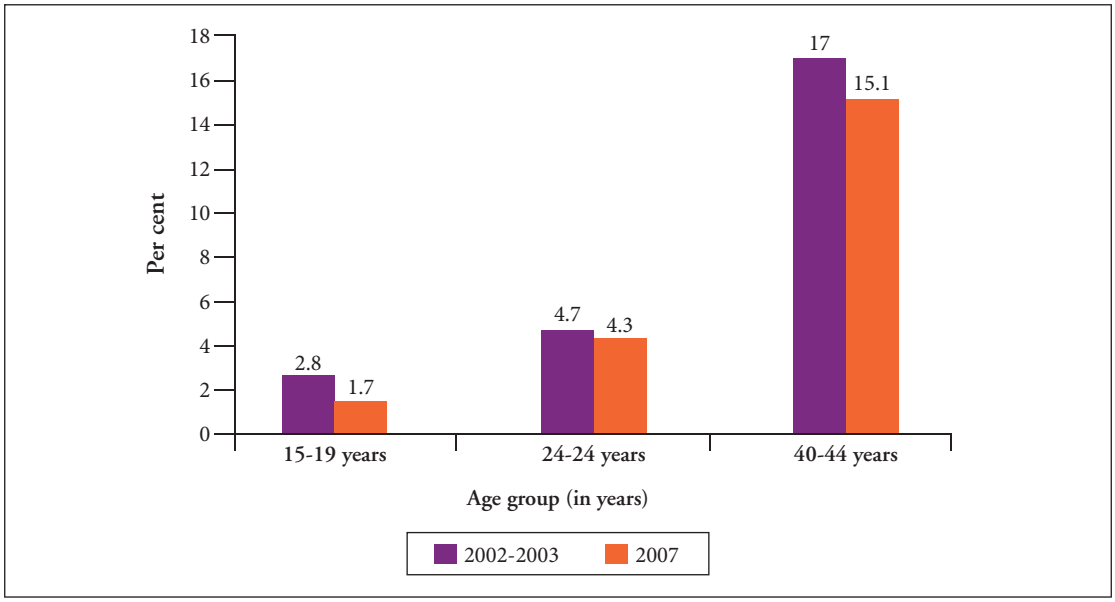
Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

Age at marriage

In Indonesia, marriage is closely associated with fertility because most births occur within marriage[2]. Thus, an understanding of trends in age at first marriage can be important in interpreting changes in fertility patterns in Indonesia. The recent IDHS 2007 of Indonesia showed that about 13% of women aged 15-19 years were married. There has been a substantial change in the age at which women first marry (Figures-8 & 9). For example, 15% of women age 40-44 years were married by age 15 years, compared with less than 5% of women age 20-24 years and less than 2% of women aged 15-19 years (Figure-8). The median age at first marriage has increased from 18.3 years among women in the oldest age group to 20.8 years among women age 25-29 years (Figure-10). Postponement of first births as a result of an increase in the age at marriage has contributed to the overall fertility decline.

[2]*Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

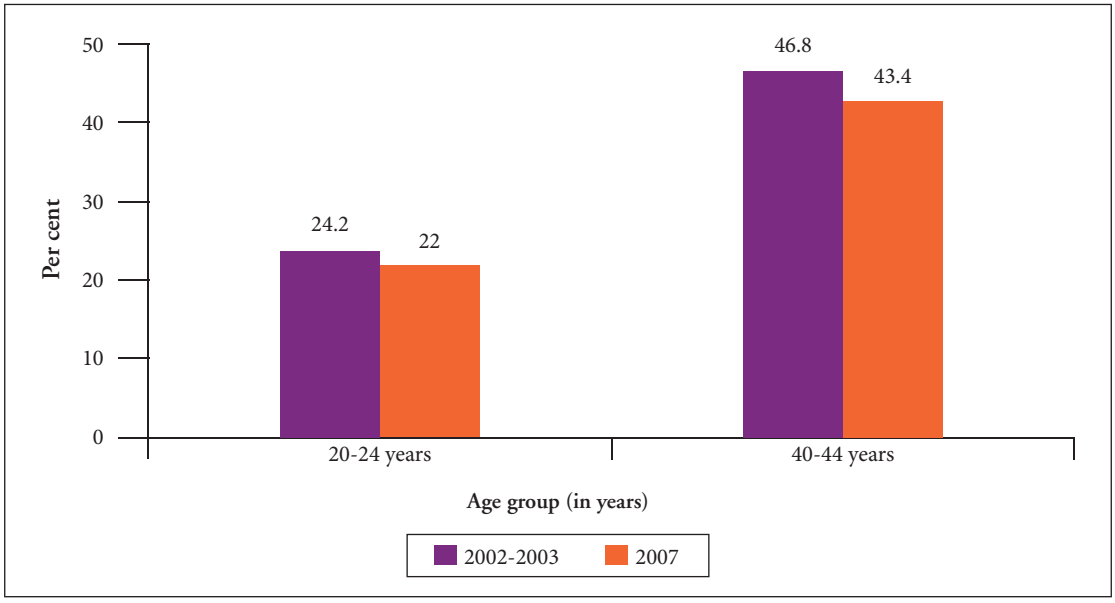
Figure 8: Trends in proportion of women who were first married by the age 15 years



Source: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002-2003. Jakarta: BPS and ORC Macro, 2003.*

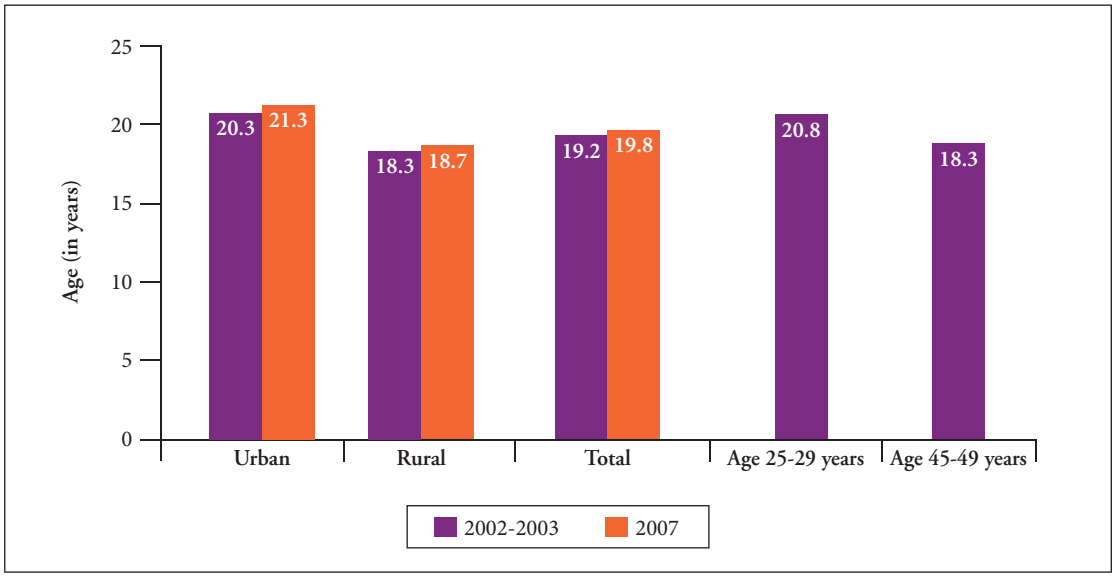
Figure 9: Trends in proportion of women married by the age 18 years in Indonesia



Source: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002-2003. Jakarta: BPS and ORC Macro, 2003.*

Figure 10: Median age at first marriage for women by sector and age groups

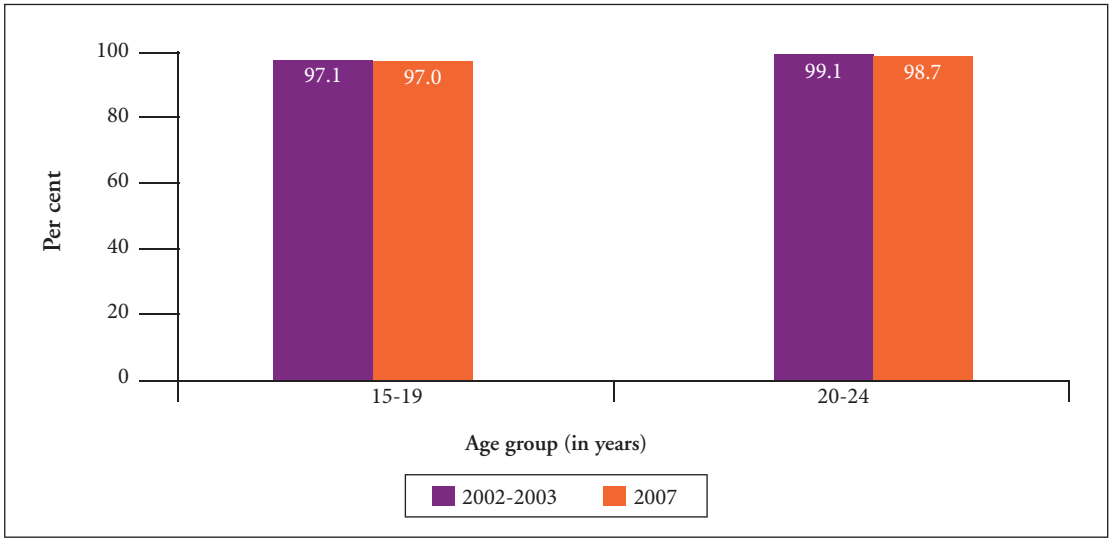


Source: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*
2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002-2003. Jakarta: BPS and ORC Macro, 2003.*

Contraception

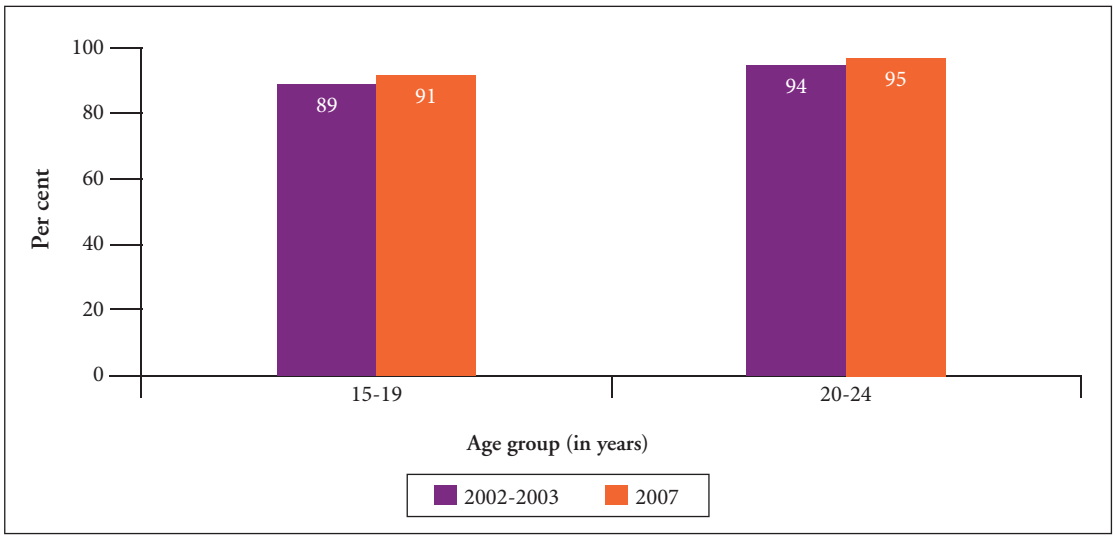
Acquiring knowledge about fertility control is an important step toward gaining access to contraceptive methods and using a suitable method in a timely and effective manner. Almost all currently married young men and women have knowledge about at least one modern method of family planning. Knowledge of any contraceptive methods is slightly lower among younger men and women than among women in their 20s and 30s (Figure-11 and 12). Unmarried women and men are only a little less knowledgeable about family planning compared with currently married women aged 15-49 years and currently married men between 15 and 54 years old who were interviewed during the 2002-2003 DHS (Figure-13).

Figure 11: Knowledge of any modern contraceptive method among currently married women



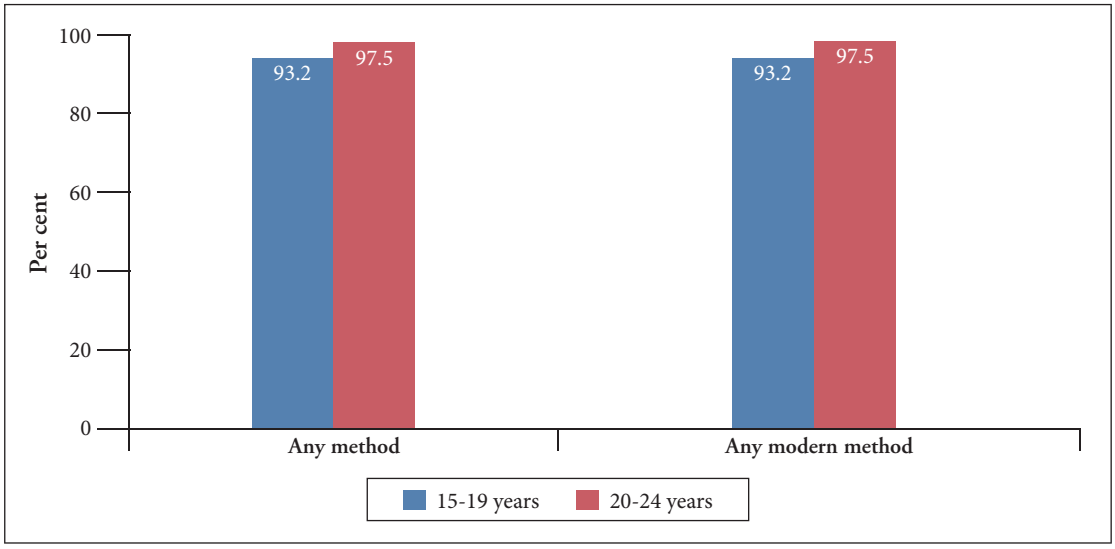
Source: 1. *Statistics Indonesia . Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*
2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002-2003. Jakarta: BPS and ORC Macro, 2003.*

Figure 12: Knowledge of any modern contraceptive methods among men



Source: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*
2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002-2003. Jakarta: BPS and ORC Macro, 2003.*

Figure 13: Proportion of unmarried women having knowledge of contraceptive methods in Indonesia, 2002-2003

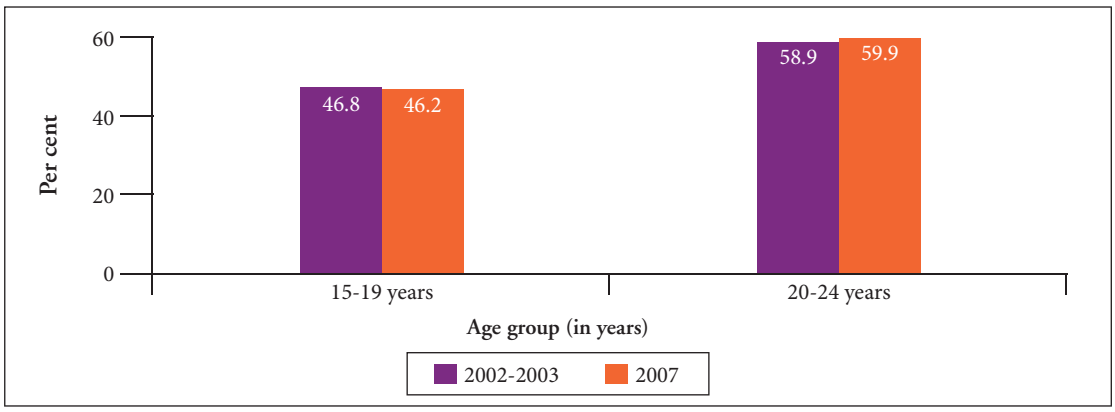


Source: *Statistics Indonesia. Indonesia Young Adult Reproductive Health Survey 2002-2003. Jakarta: BPS-Statistics Indonesia and ORC Macro, 2004. http://www.measuredhs.com/pubs/pdf/FR157/00Front Matter.pdf-accessed 13 June 2013.*

There is a large gap between knowledge of and use of contraceptives. Only 46% of married adolescents aged 15-19 years are currently using any method of contraception, which is almost14 percentage points lower than that of their 20-24-years-old counterparts (Figure-14). There is not much change in contraceptive prevalence during the period between IDHS 2002-03 and IDHS 2007. Almost all young women are using reversible methods. Among modern methods, injectable contraceptives are most commonly used followed by the pills.

Currently, family planning services available to adolescents in Indonesia offer a wide range of information, education and counselling services. However, the provision of contraceptives to unmarried persons is not part of the national family planning programme[3].

Figure 14: Currently married women currently using the modern methods of contraceptives

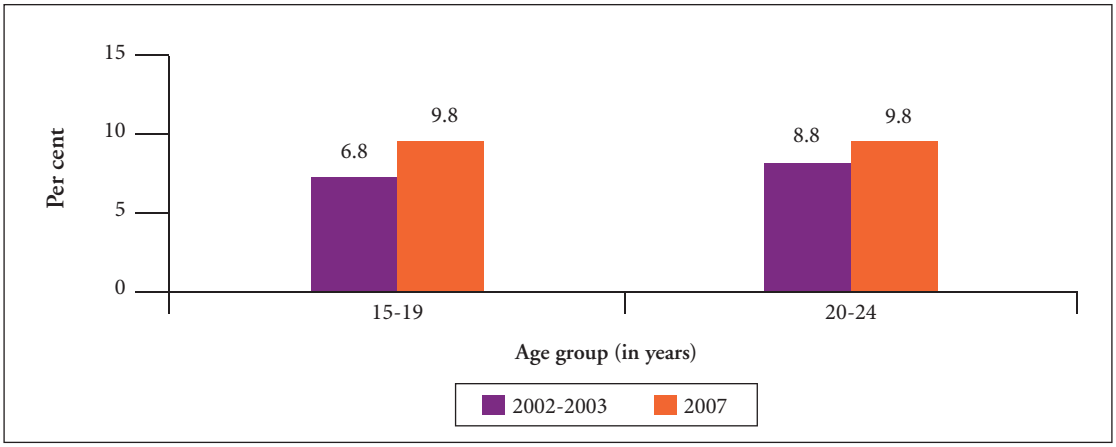


Source: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*
2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002-2003. Jakarta: BPS and ORC Macro, 2003.*

Unmet need for family planning

Unmet need for family planning is defined as the percentage of currently married women who either do not want any more children, or want to wait before having their next birth, but who are not using any method of family planning. Unmet need for family planning for women aged 15-19 years and 20-24 years is 10% (Figure-15). The total demand for family planning by adolescents is much less when compared with older age groups, suggesting that for married adolescents there may be barriers to contraceptive use (Table-6). Besides other familial and societal barriers, the inability to negotiate the use of contraception is a major stumbling block for adolescent women who are less likely to discuss family planning with their partners.

Figure 15: Trends in unmet need for family planning among youth in Indonesia



Source: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*
2. *Statistics Indonesia. Indonesia Demographic and ealth Survey 2002-2003. Jakarta: BPS and ORC Macro, 2003.*

[3]*Statistics Indonesia. Indonesia Young AdultReproductive Health Survey 2002-2003. Jakarta: Statistics Indonesia and ORC Macro, 2004.*

Table 6: Proportion of currently married women with demand and unmet need for family planning, 2007

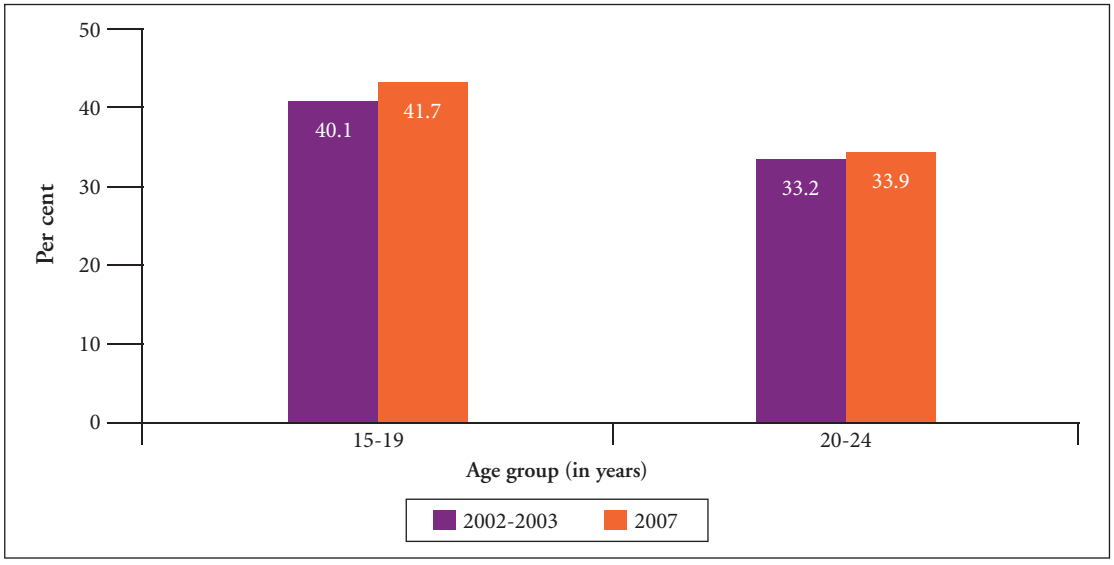
All figures are in percentages

Age group (in years)	Total demand for family planning for			Unmet need for family planning for			Percentage of demand satisfied
	Spacing	Limiting	Total	Spacing	Limiting	Total	
15-19	49.1	7.6	56.6	7.3	2.5	9.8	82.7
20-24	59.4	12.1	71.5	7.9	1.9	9.8	86.3

Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

Although discussions between husband and wife about contraceptive use are not a precondition for adoption of contraception, its absence may be an impediment to use. The IDHS 2002-2003 and IDHS 2007 show that adolescents are less likely to discuss family planning frequently with their husbands as compared with older women (Figure-16).

Figure 16: Young women who never discuss family planning with their husbands



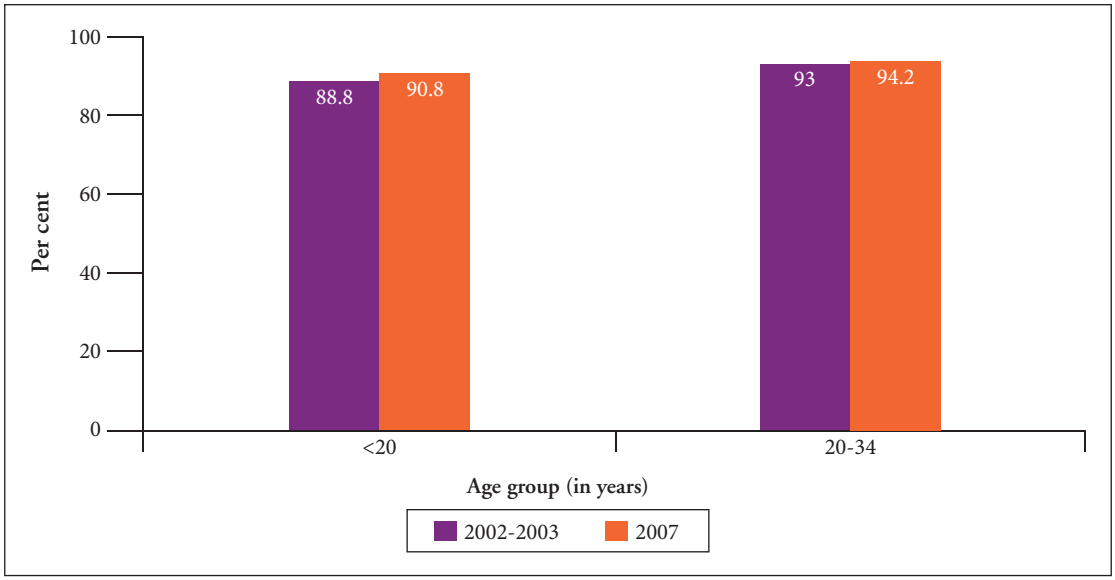
Source: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*
2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002-2003. Jakarta: BPS and ORC Macro, 2003.*

4. Essential care interventions during pregnancy

Antenatal care

There is a high utilization of antenatal services by women in Indonesia; however, the use is slightly less among adolescents (Figure-17). Compared with the IDHS 2002-2003, antenatal care (ANC) coverage has remained at about the same level in all age groups in the IDHS 2007.

Figure 17: Antenatal care received during pregnancy by age of married women



Source: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002-2003. Jakarta: BPS and ORC Macro, 2003.*

The data from IDHS 2007 show that the percentage of women who received antenatal services was highest for women age 20-34 years (Figure-17 and Table-7). Adolescents remained at a little disadvantage for all the antenatal services. The data also show that a very low proportion of women are informed about the signs of pregnancy complication.

Table 7: Components of antenatal services received by women for their most recent live birth in Indonesia

All figures are in percentages

Age at birth (in years)	Percentage of women receiving various antenatal services							
	Informed of signs of pregnancy complications	Weight measured	Height measured	Blood pressure measured	Urine sample taken	Blood sample taken	Abdominal examination	Received iron tablets
< 20	31.7	84.2	28.4	89.2	32.0	20.5	94.3	74.6
20-34	40.1	91.8	34.4	92.5	42.4	30.3	96.6	78.9

Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

Table 8: The number of tetanus toxoid injections received during the most recent pregnancy by the age of women

All figures are in percentages

Mothers' age at birth (in years)	Number of tetanus toxoid injections		
	None	One	Two or more
< 20	32.5	19.3	45.6
20-34	24.3	22.4	50.7

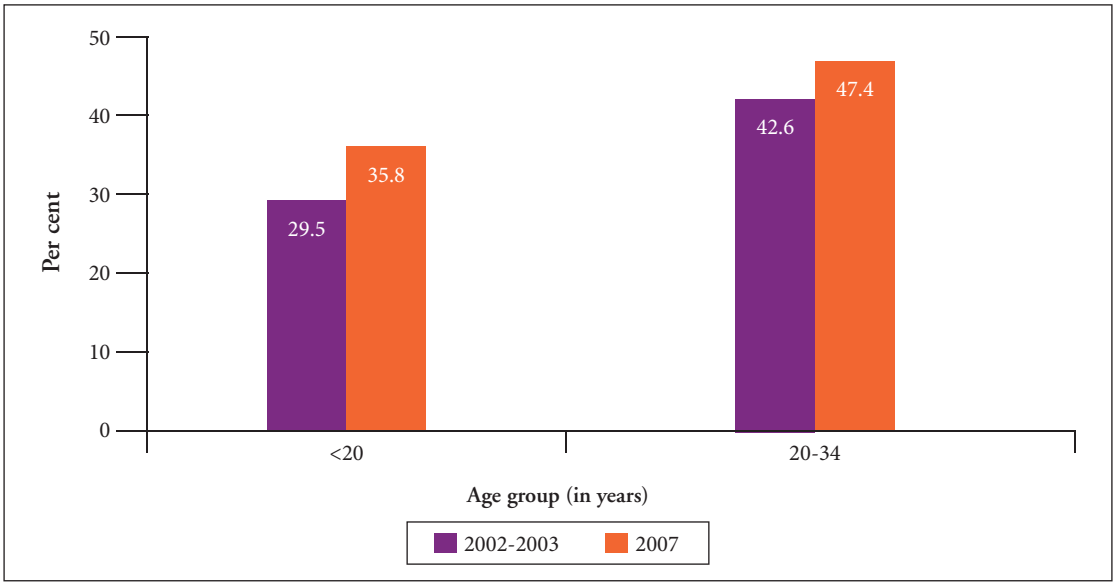
Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

The immunization program of Indonesia recommends that women receive two tetanus toxoid (TT) injections during the first pregnancy. Booster injections are given once during each subsequent pregnancy to maintain full protection. It has been shown in the recent IDHS 2007 report that adolescents are less likely to receive TT immunization as compared to older women (Table-8).

Care at birth

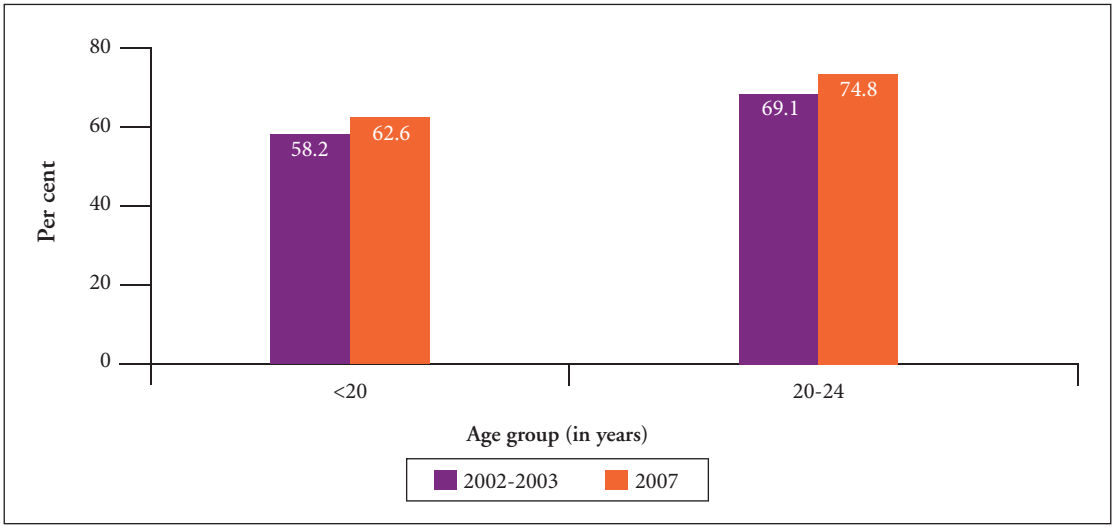
The two IDHSs (2002-03 and 2007) have shown that births to women in high-risk age groups (younger than 20) are more likely to take place at a home than births to women age 20-34 years. However, there is an increase in institutional deliveries in all age groups including adolescents (Figure-18).

Figure 18: Trend in institutional deliveries by age of women at time of birth



Source: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*
2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002-2003. Jakarta: BPS and ORC Macro,2003.*

Figure 19: Trend in deliveries by skilled birth attendant by age of women at time of birth



Source: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*
2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002-2003 Jakarta: BPS and ORC Macro, 2003.*

Similarly, comparison with data from past IDHS studies indicate that there has been a substantial increase in the proportion of births assisted at delivery by skilled birth attendants, from 58% in the 2002-2003 IDHS to 63% in the 2007 IDHS for women aged less than 20. While there has been a shift away from traditional birth attendants (TBAs), these persons still have a role to play in delivery assistance, especially in case of younger women (about 4%)[2].

5. Determinants of health care-seeking behaviour of adolescents

A wide range of determinants influence access to and use of pregnancy care.

Autonomy

Personal autonomy is known to be a key determinant of a woman's ability to seek reproductive health services. The DHS 2007 reported that though a majority of women participate in all decisions, married adolescents are less likely to make decisions in the family (Table-9). The degree of independence in making household decisions increases with age.

[2]*Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

Table 9: Women's participation in decision making

All figures are in percentages

Age group (in years)	Percentage of women who say that alone or jointly have final say in the following decisions:					Percentage who participate in all decisions
	Own health care	Major household purchases	Purchases for daily household needs	Visits t o her family or relatives	What food to cook each day	
15-19	74.8	65.5	83.9	79.9	81.8	49.3
20-24	81.2	73.7	87.0	83.4	86.8	57.4

Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

There are many other factors that can prevent women, especially adolescents, from getting medical advice or treatment for themselves when they need it (Table-10). Some of these factors can be attributed to women's autonomy. It was reported in the IDHS 2007 that adolescents are more likely to report problems in accessing health care than older women. The most often cited problems were getting money for treatment, not wanting to go alone and the distance to health facilities.

Table 10: Problems faced by women in accessing health care

All figures are in percentages

Age group (in years)	Problems in accessing health care							At least one problem accessing health care
	Knowing where to go for treatment	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Having to take transport	Not wanting to go alone	Concern no female provider available	
15-19	8.1	6.6	31.8	21.1	18.5	25.1	17.3	55.2
20-29	5.7	4.3	24.8	16.6	14.2	14.6	13.6	43.9

Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

Exposure to mass media

Information access is essential to increase people's knowledge and awareness of issues and programmes that may eventually affect their perceptions and behaviour. IDHS 2007 reported that exposure to any kind of media is much less among married adolescents when compared with older women (Table-11).

Table 11: Exposure to media

All figures are in percentages

Age group (in years)	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media at least once a week	None of the specified media at least once a week
15-19	6.0	72.0	32.3	2.3	21.3
20-24	8.7	79.2	32.2	4.8	15.9

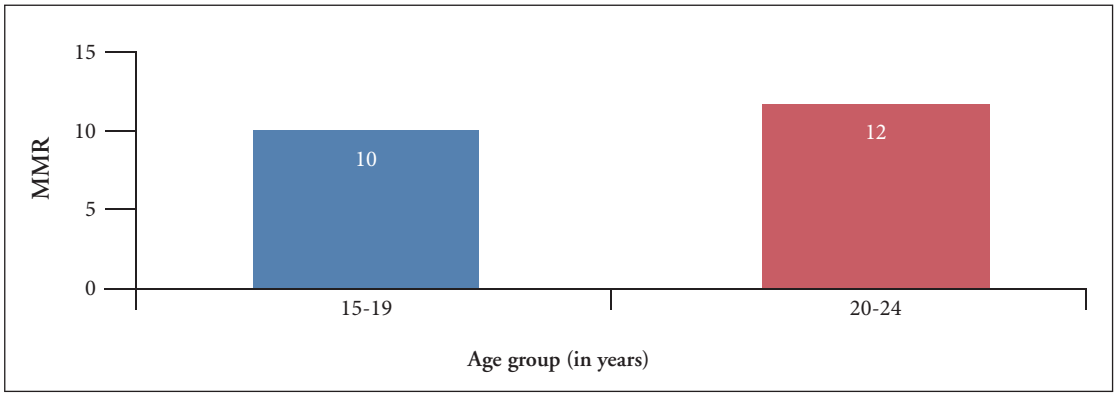
Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

6. Impact of adolescent pregnancy on health outcomes for mothers, newborns and children

Maternal mortality

Young mothers are more likely to suffer from severe complications during delivery, which results in higher morbidity and mortality for both themselves and their children. Adolescents tend to have a higher mortality rate than older women. However, in Indonesia maternal mortality in 15-19 years age group is reported to be lower than that in 20-24 years age group (Figure-20).

Figure 20: Maternal mortality rate (per 100,000) women according to age group



Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

Newborns and child survival

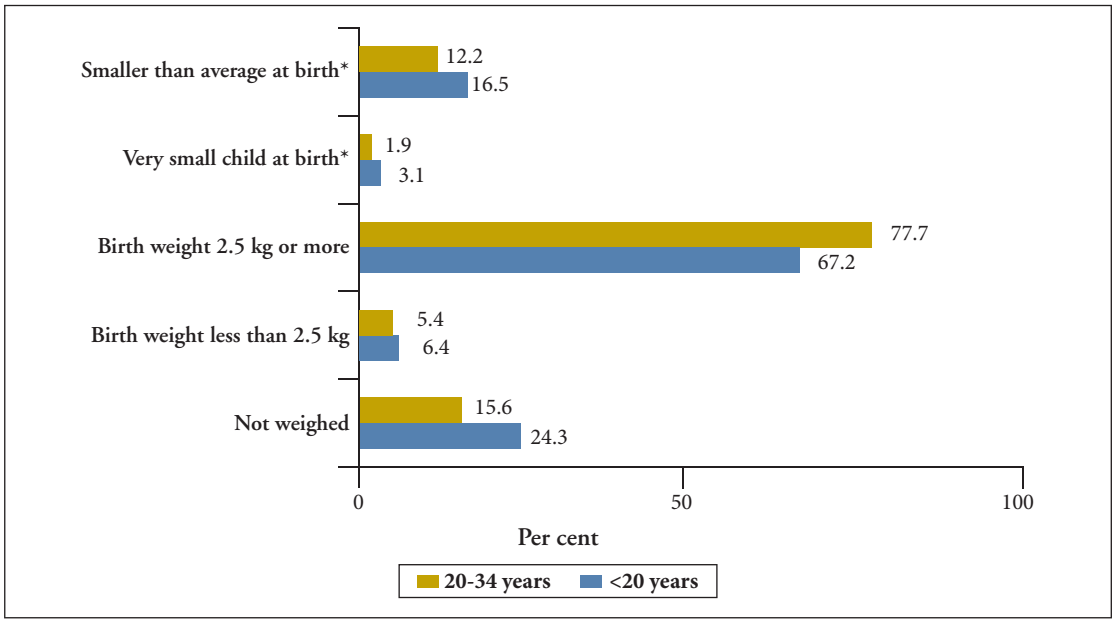
The age of the mother at birth can affect a child's chances of survival. Table 12 shows high neonatal, perinatal and under five mortality rates for births to mothers aged less than 20 as compared with births to older women. It declines among women who gave birth at age 20-29 years. Another important observation reported by IDHS 2007 is that perinatal, infant and under-five mortality rates have increased in the children born to adolescent mothers over a 5-year period, while these rates have declined among older mothers.

Table 12: Perinatal, neonatal and under-five mortality rates by women's age at birth

IDHS years	PMR		NMR		IMR		U5MR	
	<20	20-29	<20	20-29	<20	20-29	<20	20-29
2002-2003	30	21	32	19	53	39	62	52
2007	50	20	30	16	56	32	72	42

Source: 1. *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*
2. *Statistics Indonesia. Indonesia Demographic and Health Survey 2002-2003. Jakarta: BPS and ORC Macro, 2003.*

Figure 21: Delivery characteristics by the age of mother at birth



** Based on mother's perception*

Source: *Statistics Indonesia. Indonesia Demographic and Health Survey 2007. Jakarta: BPS and Macro International, 2008.*

Because a large proportion of deliveries to adolescent mothers take place at home, 24% of their babies born to adolescent mothers were not weighed at birth (Figure-21). The IDHS 2007 data showed that babies born to adolescent mothers are more likely to weigh less than 2.5 kg and are small for gestational age at the time of birth compared with babies born to older women.

Abortions

Abortion is prohibited in Indonesia, except when it is necessary to save a woman's life. It is permissible to carry out certain medical procedures in an emergency with the purpose of saving the life of a pregnant woman or her foetus. Qualitative studies among various groups revealed that premarital abortions are becoming more common among young adults. According to a consultancy report for the Sustaining Technical Achievements in Reproductive Health (STARH) Program, there

are roughly two million abortions conducted in Indonesia every year, of which 30% are associated with adolescents[4]. The report also suggests that up to half of all pregnancy-related deaths are due to complications resulting from unsafe abortions.

In Indonesia, like other countries in South-East Asia, pre-marital sexual relations and abortion are looked down on socially. Using a particularly pertinent case study of a 19 year old, Bennett explains how abortions for unmarried women are met with harsh criticism by abortion providers who reprimand women for engaging in pre-marital sex and provide very little counselling on appropriate contraceptive methods[5]. The case study also revealed that many young and unmarried women face difficult choices during pregnancy - if they do not have the option of marrying their child's father, they have little choice but to have a clandestine abortion. The problem of adolescent pregnancy is severely compounded by the fact that access to family planning and safe contraceptive methods under The Indonesian Family Welfare Law, UU No. 10/1992 are severely restricted to unmarried individuals[6]. Furthermore, any information relayed through IEC programs do not focus on safe sex and contraception but rather on moral and religious values thus, overlooking the needs of single and adolescent Indonesians.

Single pregnant adolescent women are often ostracized from their family and society at large and may seek abortions in unsafe conditions. A study by Utomo and McDonald reveals that women overdose on Cytotectablets used for stomach ulcers, go to traditional healers who provide stomach massages, or ingest a mixture of traditional herbal medicines[7] to terminate their pregnancies. While these practices put the girl's life at considerable risk, the father of the child is not usually stigmatized for his actions. However, those studies cannot be extrapolated for adolescents in Indonesia.

[4]*Situmorang A. Adolescent reproductive health in Indonesia: Consultancy Report. Jakarta: Johns Hopkins University/ Center for Communication Program, 2003; pg 5.-http://pdf.usaid.gov/pdf_docs/PNACW743.pdf-.*

[5]*Bennett LR. Single women's experiences of premarital pregnancy and induced abortion in Lombok, Eastern Indonesia. Reproductive Health Matters 2001; 9 (17): 42*

[6]*Situmorang A. Adolescent reproductive health in Indonesia: Consultancy Report. Jakarta: Johns Hopkins University/ Center for Communication Program, 2003; pg 8*

[7]*Utomo ID, McDonald P. Adolescent reproductive health in Indonesia: Contested values and policy inaction. Studies in Family Planning 2009; 40 (2): 140*

MALDIVES

1. Number of adolescents in Maldives

Adolescents constitute 21.5% of the total population in Maldives (Table-1). Females represented approximately 48% (33 000) of the total adolescent population.

Table 1: Number and proportion of young people by age and sex in Maldives, 2010

Age group (in years)	Male		Female		Total	
	Number	(%)	Number	(%)	Number	(%)
10-14	16 000	5.06	15 000	4.75	31 000	9.81
15-19	19 000	6.01	18 000	5.70	37 000	11.71
20-24	20 000	6.33	20 000	6.33	40 000	12.68
Total	**55 000**	**17.40**	**53 000**	**16.78**	**108 000**	**34.18**

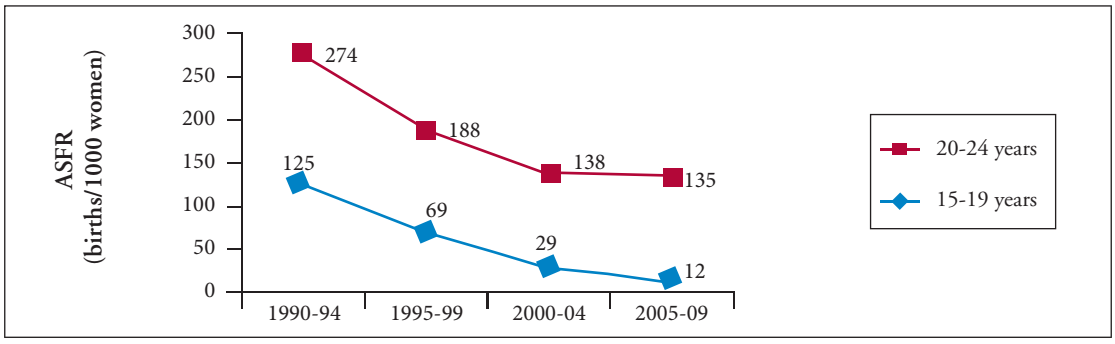
Source: *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision. New York: UN, 2011-http://esa.un.org/unpd/wpp/index.htm-*

2. Adolescent pregnancy

Adolescent fertility

The adolescent pregnancy rate is low in Maldives. According to Maldives Demographic and Health Survey 2009 (MDHS 2009), the age of first pregnancy has increased and there are fewer teenage pregnancies now than in the past (Figure-1 and 2). The current age specific fertility rate for adolescents age 15-19 years is 12. Median age at first birth is now 21.2 years for the age group 25-29 years (for whom data is available). Teenage women accounted for approximately 5% of live births in the year 2006 in comparison with approximately 6% in 2004. The vital registration survey of Maldives also reported a decline in total adolescent pregnancies by 56% during 1996 to 2004 (Table-2).

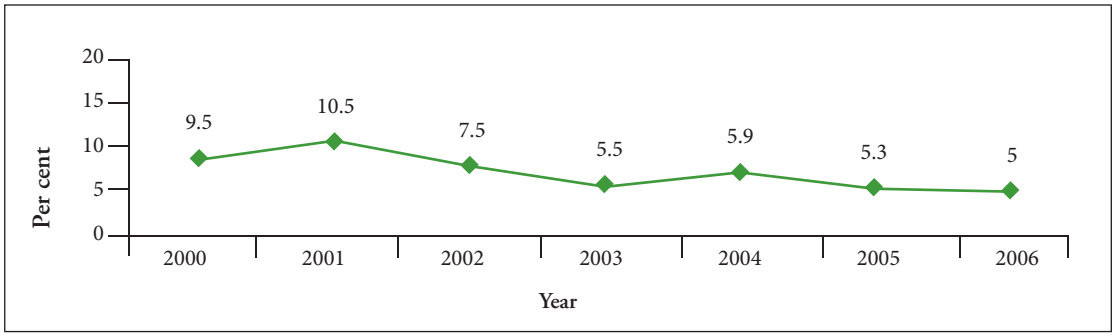
Figure 1: Trends in age specific fertility rate (ASFR) among women age 15-19 years and 20-24 years during 1990-2009



Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

ASFRs declined from 125 to 12 for 15-19 year olds and from 274 to 135 for 20-24 year olds during the last 15 years (Figure-1). Decline is more steep in the fertility of adolescents (90%) compared to those in the 20-24 year age group (about 50%) during the five years from 2004 to 2009.

Figure 2: Proportion of births by teenage mothers (10-19 years)



Source: *Republic of Maldives, Ministry of Health. Maldives Health Statistics 2007. Male: MOH, 2007.*

Table 2: Number of live births classified by age of mother in Maldives, 1996, 2004

Age group (in years)	Year 1996	Year 2004
15-19	676	299
20-24	2 008	1 777

Source: 1. *Republic of Maldives, Ministry of Health Vital registration system, (VRS), 1994 and 2004. Male: MOH, 2004.*
2. *Republic of Maldives, Ministry of Health and Family. Vital registration system. Male: MOH, 2009.*

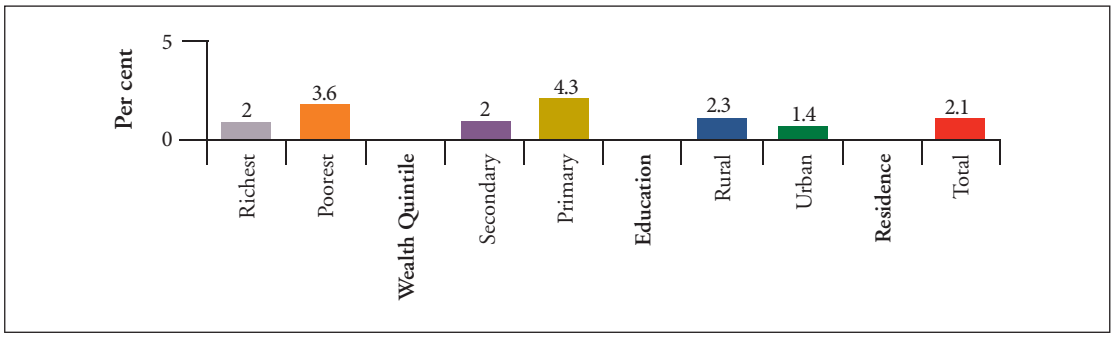
Table 3: Teenage pregnancy and motherhood by age in Maldives, 2009

Age group (in years)	Proportion of adolescents age 15-19 years who had a live birth or are pregnant with their first child or have begun childbearing		
	Had a live birth (%)	Pregnant with the first child (%)	Begun childbearing (%)
17	0.0	0.6	0.6
18	0.5	0.2	0.7
19	3.8	2.8	6.5
Total	**1.3**	**0.9**	**2.1**

Source: *Republic of Maldives Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

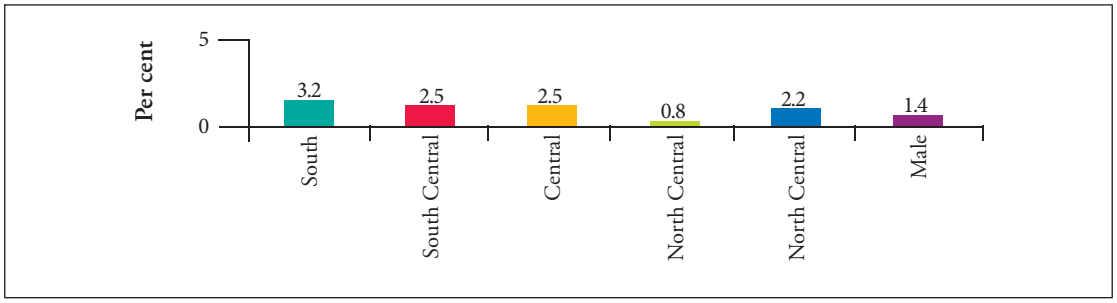
Data from MDHS 2009 also shows that teenage pregnancies are uncommon in Maldives. Only 2% of teenagers have started childbearing – 1.3% are mothers and less than 1% are pregnant with their first child (Table-3). Very few adolescents have begun childbearing at 18, while only 6.5% have started childbearing by 19 (3.8% have had a live birth and 2.8% are pregnant with their first child).

Figure 3: Differentials in proportion of adolescents who have begun childbearing by basic characteristics



Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

Figure 4: Proportion of adolescent who have begun child bearing by region



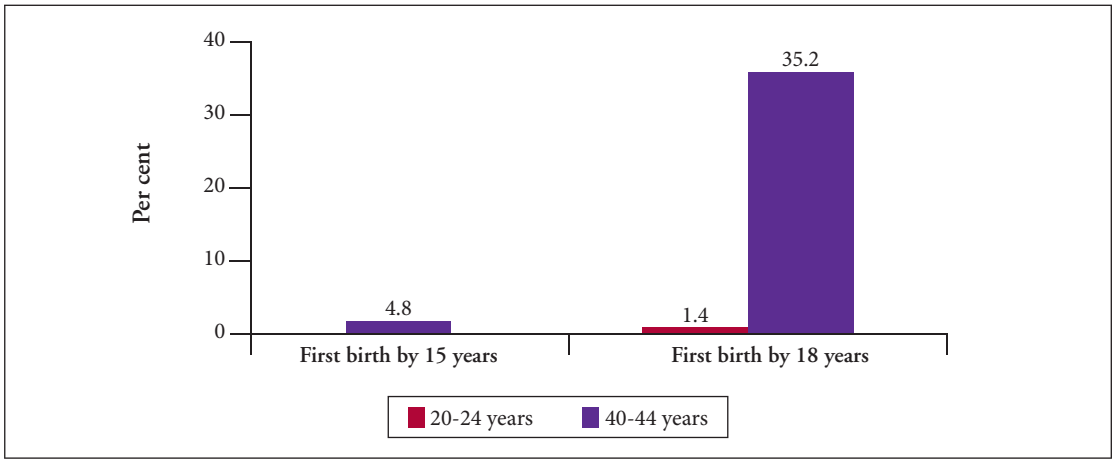
Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

Although adolescent pregnancy is very low in Maldives, but it varies little across the subgroups of women. It is higher in rural areas, among women who are less educated and those belonging to poorest households (Figure-3). Women in South begin childbearing earlier than those in other regions (Figure-4).

Age at first birth

Age at which childbearing commences is an important determinant of the overall level of fertility. Median age at first birth has increased from 19.1 years (for women age 40-44) to 23.9 years (for women age 25-29 years). Increase in age at first birth can also be observed from decrease in proportion of women who have given birth at age 15 across all age groups. While 5% of women in the age group 40-44 had their first child by age 15, none reported childbearing by age 15 in the age group of 20-24 and about 1% of women in the age group 20-24 had their first child by age 18 (Figure-5).

Figure 5: Age at first birth, Maldives 2009



Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

Birth intervals

Age disaggregated data for the age group 15-19 years is not available.

Planning status of adolescent pregnancy

MDHS 2009 data indicates that more births among adolescent were unplanned compared to older age group. About 29% of births to the adolescents were unplanned (18% were not wanted at all while another 11% were mistimed) compared to 21% for the age group of 20-24 years (Table-4).

Table 4: Fertility planning status by age at birth, 2009

All figures in percentage

Mother's age at birth (in years)	Wanted then	Wanted later	Wanted no more
< 20	69.5	10.6	17.8
20-24	78.5	12.2	8.7

Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

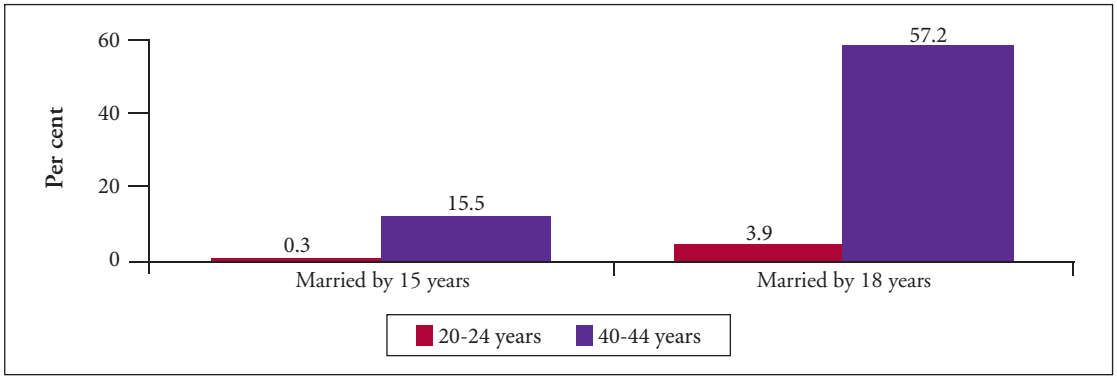
3. Proximate determinants of adolescent pregnancy

Age at marriage

Age at marriage is an important indicator of the likelihood of pregnancy as this is the age which usually coincides with the age at first intercourse. The legal age of marriage is 18 in Maldives. The census data for 10 years shows that the age of first marriage among males is increasing and

there is no change in the age of first marriage among women (Table-5). A very small proportion of women (3-4%) marry during adolescence[1]. DHS 2009 also shows that age at first marriage has increased significantly across all age groups. Among the women age 40-44 years, 16% were married by the age of 15 years old and 57% were married by the age 18 years old. In comparison, less than 1% and only 4% of women age 20-24 years were married by the age of 15 and 18 years respectively (Figure-6). Median age at first marriage has increased rapidly from 16.9 years for the age group 45-49 to 21.6 years for the age group 25-29 years.

Figure 6: Trends in age at first marriage in Maldives, 2009



Source: *Republic of Maldives Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

Table 5: Singulate mean ages at marriage (15 years and above) by sex, 1995, 2000 and 2006

(All figures in years)

Year	Singulate mean age at marriage (years)	
	Females	Males
1995	18.05	19.07
2000	16.85	20.28
2006	18.03	21.44

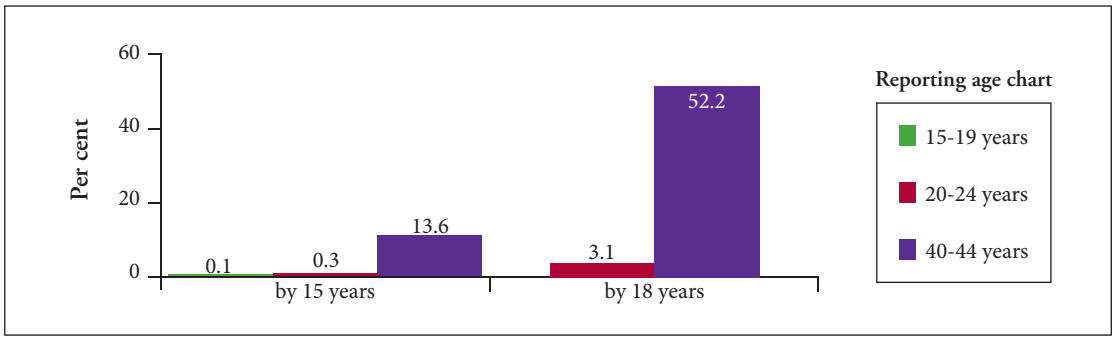
Source: *Republic of Maldives Ministry of Planning and National Development. Population and housing census 1995, 2000 and 2006. Male, 2007.*

Sexual activity

The median age at first sexual intercourse has increased from 17 years among women aged 45-49 to 21.8 years for women aged 25-29. Only 0.3% had first sexual intercourse by the age of 15 among 20-24 years age group (Figure-7). About 95% of women age 15-19 are not sexually active. This data shows that sexual activity is mainly confined to age at marriage. (please refer to the data on marriage).

[1] *Republic of Maldives, Ministry of Planning and National Development. Population and housing census 2006. Male: 2007-http://www.planning.gov.mv/publications/Population%20and%20Housing%20Census%202006/ -.*

Figure 7: Trends in age of first sexual intercourse by the age of 15 and 18 years



Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

However, data from other sources suggests that not all the adolescent pregnancies in Maldives occur within marriage. Although consensual sex between unmarried persons is punishable by law[2], it is estimated that by the age of 21 a high proportion of youth has had sexual intercourse at least once[3]. However, due to its illegal status, the extent of premarital, or extramarital sex, is not known.

The Reproductive Health Survey 2004 also reported that one in 5 young people had admitted to having sexual intercourse—14% of men and 5% of women. Almost two-thirds of those who have had sex said their first sexual intercourse was before the age of 18. However, this data should be interpreted with caution due to small size of the sample[4].

About 4% of respondents in the Reproductive Health Survey 2004 reported that they had been forced into unwanted sexual activity by people of their own age as well as by older people. Young females were more likely to be involved in unwanted sexual activity with someone older than were young males. However, this data should be interpreted with caution due to small size of the sample[4].

Contraception

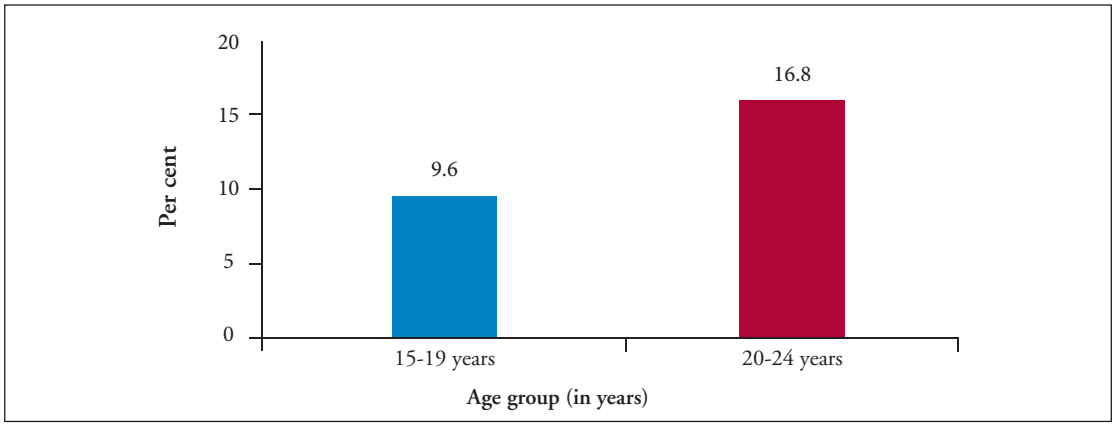
Contraception, if used consistently and correctly, will prevent pregnancy and will also prevent sexually transmitted infections. A small proportion of adolescents are using modern methods of contraception in Maldives (Figure-8).

[2]*Republic of Maldives, Narcotics Control Board. Rapid Situation Assessment of drug abuse in Maldives. Male: NCB UNESCAP and UNDP, 2003 -http:/www.dhiveobserver.com/reports/UNDP%20drug%20report%202003.pdf -.*

[3]*Jenkins, C., ed. (2000). A Situational Assessment of HIV/AIDS in the Maldives for the Year 2000. Male: UN Theme Group on HIV/AIDS, 2000.*

[4]*Reproductive health survey 2004, Ministry of Health, Republic of Maldives.*

Figure 8: Current use of any modern method of contraceptives by married women age 15-19 years & 20-24 years



Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

The Reproductive Health Survey 2004 found that only 56% of unmarried youth were aware that condoms can protect against unwanted pregnancies. The survey also reported that of those youth who were sexually active, 4% did not know what a condom was and 45% had never used one. The most common reason for not using condom was dislike of using condoms (47%). Of those who used condoms, nearly half said they used condoms to avoid pregnancy.

Knowledge about the modern contraceptive methods is high among both unmarried young women and men across the age groups 15-19 and 20-24 as reported by DHS 2009 (Table-6). Women had slightly better knowledge in this area compared to men. This has resulted in decrease in the number of births among adolescents and young people in Maldives.

Table 6: Knowledge about modern contraceptive methods among unmarried men and women in Maldives, 2009

All figures in percentage

Contraceptive method	Women (age in years)		Men (age in years)	
	15-19	20-24	15-19	20-24
Any modern method	92.6	96.0	92.0	95.4
Female sterilization	82.6	90.6	69.2	84.5
Male sterilization	50.3	64.8	53.7	70.2
Pill	75.3	85.7	69.7	83.4
IUD	42.4	60.5	35.6	55.0
Injectables	64.2	75.4	56.5	71.9
Implants	31.4	51.6	22.8	36.0
Male condoms	83.2	92.6	88.7	94.8
Emergency contraception	25.0	32.8	25.9	37.0

Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

Unmet need for family planning

The unmet need for family planning is highest among adolescents (36.3%) (Table-7), compared to all other age groups (even the national average which is pegged at 28%). Although, the total demand for family planning services is a little more than 50% for adolescents and older age group (57% and 56% respectively), the demand satisfied is slightly less in the case of adolescents as compared to 20-24 year olds.

Table 7: Need and demand for family planning services by currently married adolescents and young women, Maldives 2009

All figures in percentage

Current age group (in years)	Unmet need for family planning			Met need for family planning			Total demand for family planning services			Demand satisfied
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total	
15-19	36.3	0	36.3	15.0	0	15.0	57.3	0	57.3	36.6
20-24	26.3	5.2	31.5	20.2	3.0	23.2	47.6	8.4	56.0	43.7

Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009, Male: MOHF and ICF Macro, 2010.*

4. Essential care interventions during pregnancy

Antenatal care and care at birth

Proper care during pregnancy and delivery are important for the health of both the mother and the infant. In Maldives, while all women less than 20 years of age reported seeing a health professional at least once for antenatal care for the most recent birth, only 59% of births among adolescents who received two or more tetanus toxoid injections (Table-8).

MDHS 2009 also shows that a high proportion of births in Maldives are delivered by health professionals. However, the proportion is slightly lower in adolescents (Table-8).

Table 8: Maternal care indicators

Age at birth (in years)	Antenatal care from health professional	Receiving two or more tetanus toxoid injections during last pregnancy	Delivered By a health professional	Delivered in a health facility
< 20	100	59.1	92.5	92.3
20-34	99.3	59.3	95.3	95.9

Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

Postnatal care

Postnatal check-up and care are important interventions in ensuring that both mother and child remain healthy after delivery and there are no post-delivery complications for both of them. It also helps mother and other caregivers in the family to understand the further process of infant care and the immunization schedule. Timing of postnatal check-up is also critical for the mother and infant as most maternal and neonatal deaths occur during the early postnatal period following the delivery. MDHS 2009 reported that adolescent mothers (<20 years) were more likely to get an early postnatal check-up (within 4 hours of delivery) compared to women in the older age group (Table-9). However, 20% of adolescent mothers and 25% of mothers in the age group 20-34 years reported that they did not know the timings for postnatal check-up or the information was missing. This shows that almost one fifth of adolescent mothers and one fourth of mothers in the age group 20-34 did not get any postnatal check-up.

Table 9: Timings of first postnatal check-up

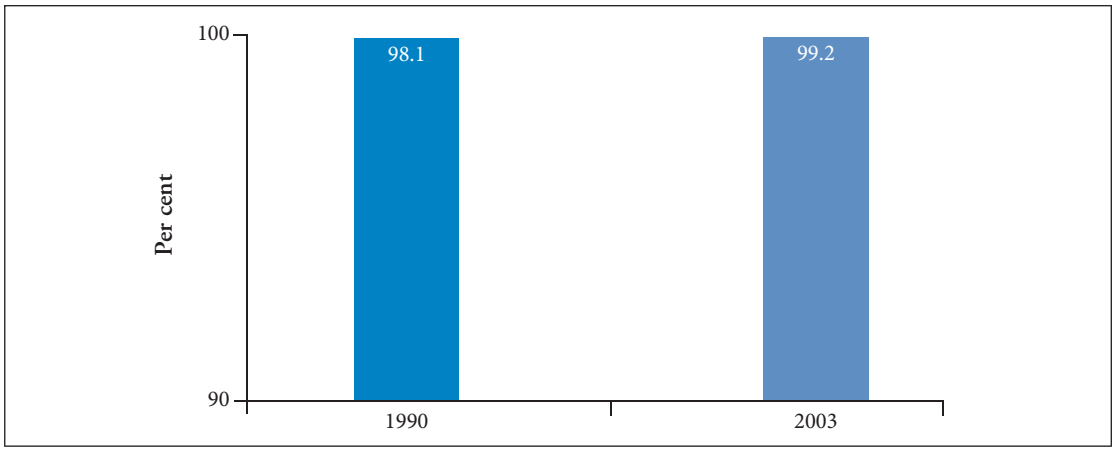
Mother's age (in years)	<4 hours	4-23 hours	2 days	No postnatal check-up
< 20	52.1	16.2	6.0	3.9
20-34	46.3	12.1	9.2	5.2

Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

5. Determinants of health care-seeking behaviour of adolescents

Reviews elsewhere in the region found evidence that higher levels of education improve health-seeking behaviour for women of all ages. Maldives has a high literacy rate with very few (0.8%) illiterate young people (Figure-9).

Figure 9: Trends in youth (15-24) literacy rate in Maldives, 1990–2003



Source: *United Nations Development Programme. Human Development Report 2005. New York : UNDP, 2005.*

Problems in accessing health care

Many factors prevent women, especially adolescent women from accessing medical care for themselves when sick, and particularly meeting their reproductive health needs (before and after pregnancy). Some of the important factors include autonomy of women, freedom of movement, decision making powers, educational attainments and violence against women. All these can have profound impact on their ability and willingness to access medical care during antenatal period or should any problem occur during the pregnancy. Table 10 shows that almost 81% of adolescents have at least one major problem in accessing medical care. As is also evident from the table, the main obstacle cited by the women (both adolescents and women between 20-34 years) is the concern that no drugs would be available for treatment when they visit the health facility. Non-availability of the female provider at the health facility was considered to be another major hindrance (57% of the adolescents cited this reason). Not wanting to go alone and difficulty in taking a transport were some of the other concerns expressed by the adolescents.

Table 10: Proportion of women having a problem in accessing health care facilities in Maldives, 2009

Age group (in years)	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Problem of transport	Not wanting to go alone	Concern no female provider available	Concern provider no	Concern no drugs available problems	At least one of the in accessing health care
15-19	1.6	10.5	18.5	20.2	30.7	57.1	64.2	71.7	80.7
20-34	1.6	7.4	22.9	24.0	22.9	54.5	64.6	70.1	82.1

Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

Women's empowerment and violence against women

Women's empowerment is known to be a key determinant of a woman's ability to seek reproductive health services during pregnancy. Lack of authority to take decisions and the prevalence of domestic violence in case the woman takes independent decisions prevents women from timely access to reproductive health care facilities, often with serious health consequences both for the adolescent as well as the unborn child. Interestingly, adolescents though slightly less empowered to take independent decision to seek health care compared to the older women in the age group 20-24 (Table-11), were less likely to face problems in accessing health care. The older a woman, the more likely that she will take independent decisions.

Table 11: Women's empowerment and violence against women in Maldives, 2009

All figures in percentage

Women's age (in years)	Percentage of women who can make decision about their own health care	Percentage of women who agree with at least one reason towards wife beating
15-19	68.9	40.7
20-24	75.6	31.1

Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

6. Impact of adolescent pregnancy on health outcome for mothers, newborn and children

Nutritional status

There is no data about the nutritional status of pregnant adolescents. However, data on nutritional status of women indicates that adolescents (15-19 years) are more likely to be thin or undernourished and short in height compared to the women in the older age groups (Table-12). There is no data on the prevalence of anaemia among pregnant adolescents.

Table 12: Nutritional Status of women

All figures in percentage

Age group (in years)	BMI <18.5 (thinness)	Height < 145 cm
15-19	23.7	8.4
20-29	13.4	8.0

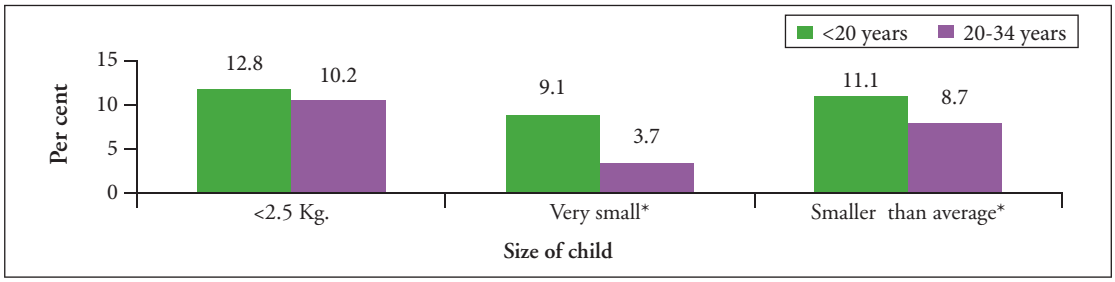
Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

Newborn and child survival

Pregnancy outcomes can be measured in terms of positive or negative results of the pregnancy. Negative outcomes would include abortions - both spontaneous and induced, stillbirths and low birth weight and size. In Maldives, for the women in the age group less than 20 years, no stillbirths are recorded in the 2009 MDHS. However, mortality rates (perinatal, neonatal, infant and under-five) (Table-13) are higher across board among these women compared to those in the age group 20-29 years. This indicates that children born to adolescent women are at greater risk of dying before they reach the age of five years.

Positive outcome of the pregnancy is the healthy child born at the end of full term who is of appropriate weight and size. Children born to adolescents are similarly disadvantaged as they are more likely to be smaller than average in size and weigh less than 2.5 kg compared to women in the higher age groups (Figure-10).

Figure 10: Size of child at birth by mother's age



**Mother's Perception*

Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

Table 13: Perinatal, neonatal, infant and under five mortality rates by mother's age, Maldives 2009

Mother's age (in years)	Number of stillbirths	Perinatal mortality rate	Neonatal mortality rate	Infant mortality rate	Under five mortality rate
< 20	0	47	25	29	36
20-29	18	14	13	20	22

Source: *Republic of Maldives, Ministry of Health and Family. Maldives Demographic and Health Survey 2009. Male: MOHF and ICF Macro, 2010.*

MYANMAR

1. Number of adolescents in Myanmar

Adolescents (10-19 years) and young people (10-24 years) comprise 18% and 28% respectively of the Myanmar population (Table-1). Proportion of adolescents was 19% in the year 2005 but now it has declined because of a significant drop in fertility rates[1]. However, their large number is still a major concern regarding adolescent pregnancy and future population growth.

Table 1: Number and proportion of young people by age and sex in Myanmar, 2010

Age group (in years)	Male		Female		Total	
	Number	(%)	Number	(%)	Number	(%)
10-14	2 190 000	4.5	2 148 000	4.5	4 338 000	9
15-19	2 227 000	4.6	2 198 000	4.5	4 425 000	9.2
20-24	2 260 000	4.7	2 268 000	4.7	4 528 000	9.4
Total	**6 677 000**	**13.9**	**6 614 000**	**13.8**	**13 291 000**	**27.7**

Source: *United Nations, Department of Economic and Social Affairs, Population Divisions. World Population Prospects: The 2010 Revision. New York: UN, 2011 - http://esa.un.org/unpd/wpp/index.htm*

2. Adolescent pregnancy

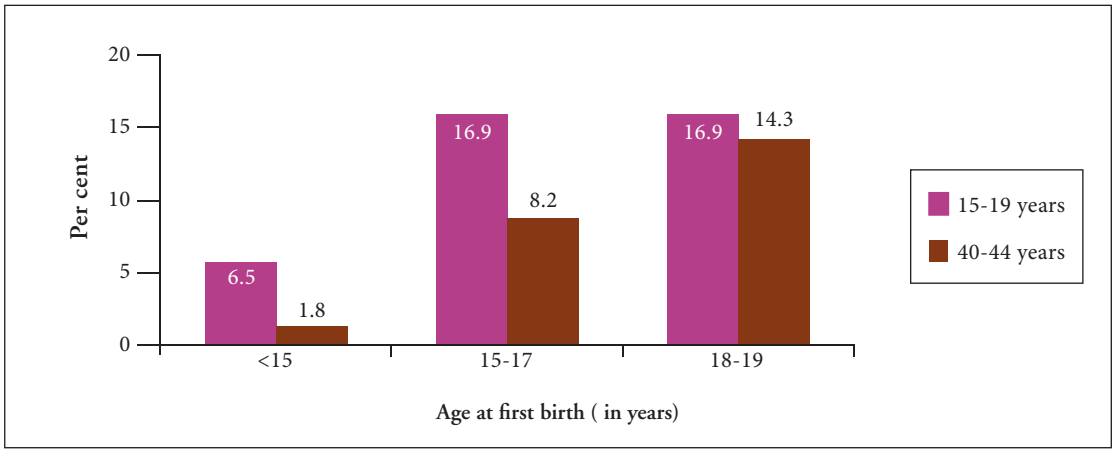
Early pregnancy is not common in Myanmar. Only 4% of total births are contributed by women aged 15-19[2] years. The age specific fertility rates (ASFR) for the 15-19 years age group is about 17 births per thousand women, somewhat higher in urban areas than in rural areas (20 versus 16). The Country Report on Fertility and Reproductive Health (FRHS 2007) showed that only 8% of women aged 44-49 years had given birth before they reached 18 years of age. However, the proportion is higher among women aged 15-19 years (Figure-1). The report shows that more adolescents are bearing children now, though the trends for age-specific fertility from 1983 to 2007 reveal a gradual decline in the fertility rate (Figure-2) and the future projections of births to adolescents in Myanmar also show a steady decline in adolescent fertility (Figure-3).

The median age at first birth for Myanmar women is 22 years[2]. Low adolescent fertility can be attributed to the high age of marriage and high literacy rates.

[1] *United Nations, Department of Economic and Social Affairs, Population Divisions. World Population Prospects: The 2010 Revision. New York: UN, 2011 - http://esa.un.org/unpd/wpp/index.htm*

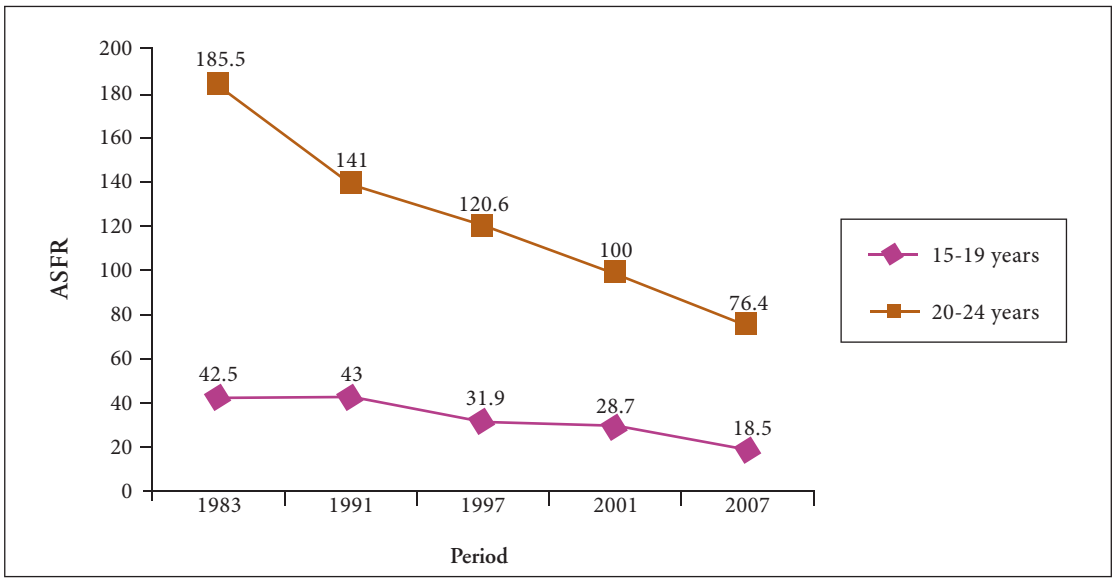
[2] *Union of Myanmar, Ministry of Immigration and Population, Department of Population and UNFPA. Country Report on 2007 and reproductive health survey. Yangon, 2008.*

Figure 1: Age at first birth



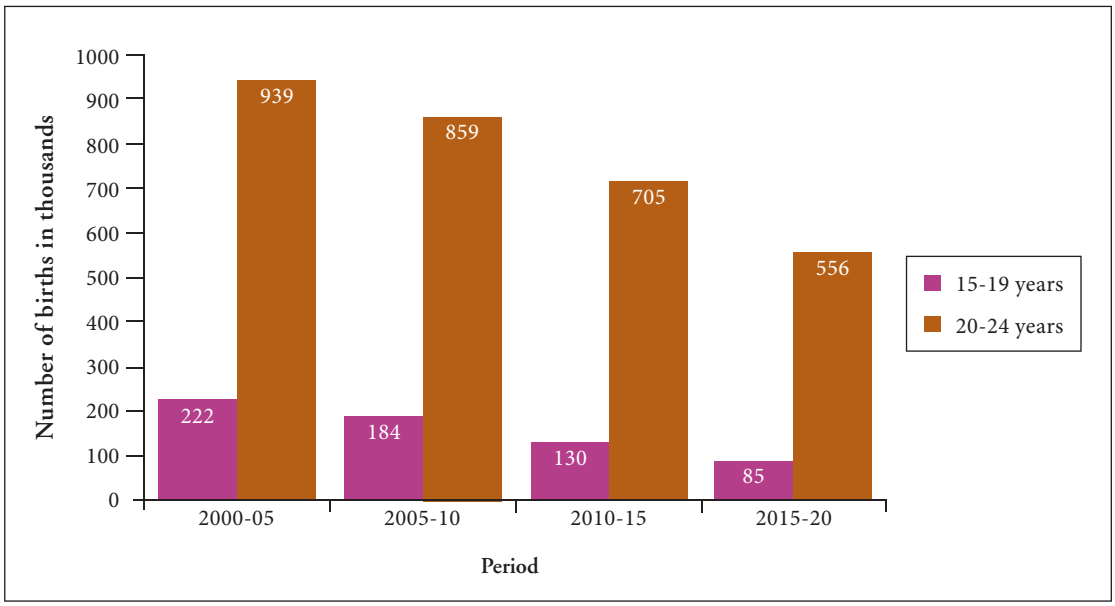
Source: *Union of Myanmar, Ministry of Immigration and Population, Department of Population and UNFPA. Country Report on 2007 Fertility and Reproductive Health Survey. Nay Pyi Taw, Yangon, 2009.*

Figure 2: Trend in age specific fertility rate among young women



Source: *Union of Myanmar, Ministry of Immigration and Population, Department of Population and UNFPA. Country Report on 2007 Fertility and Reproductive Health Survey. Nay Pyi Taw, Yangon, 2009.*

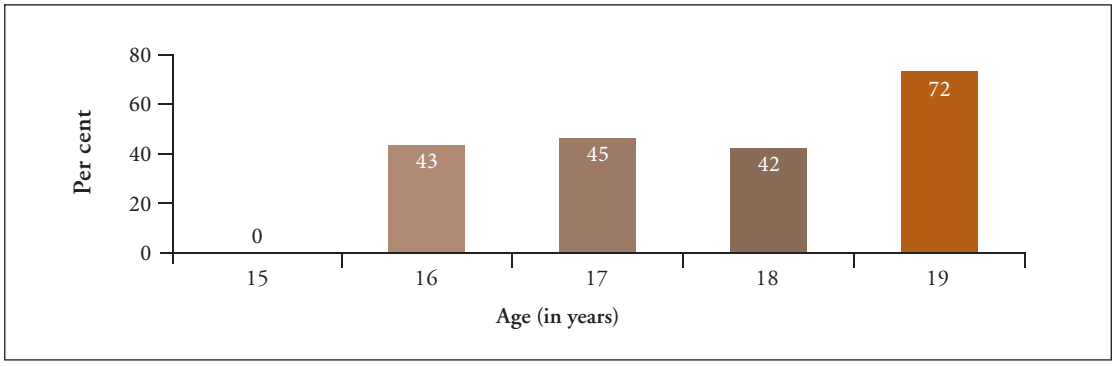
Figure 3: Number of births among women 15-19 years and 20-24 years during 2000-2010 and future projections in Myanmar



Source: *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision. New York: UN, 2011 - http://esa.org/unpd/wpp/index.htm-.*

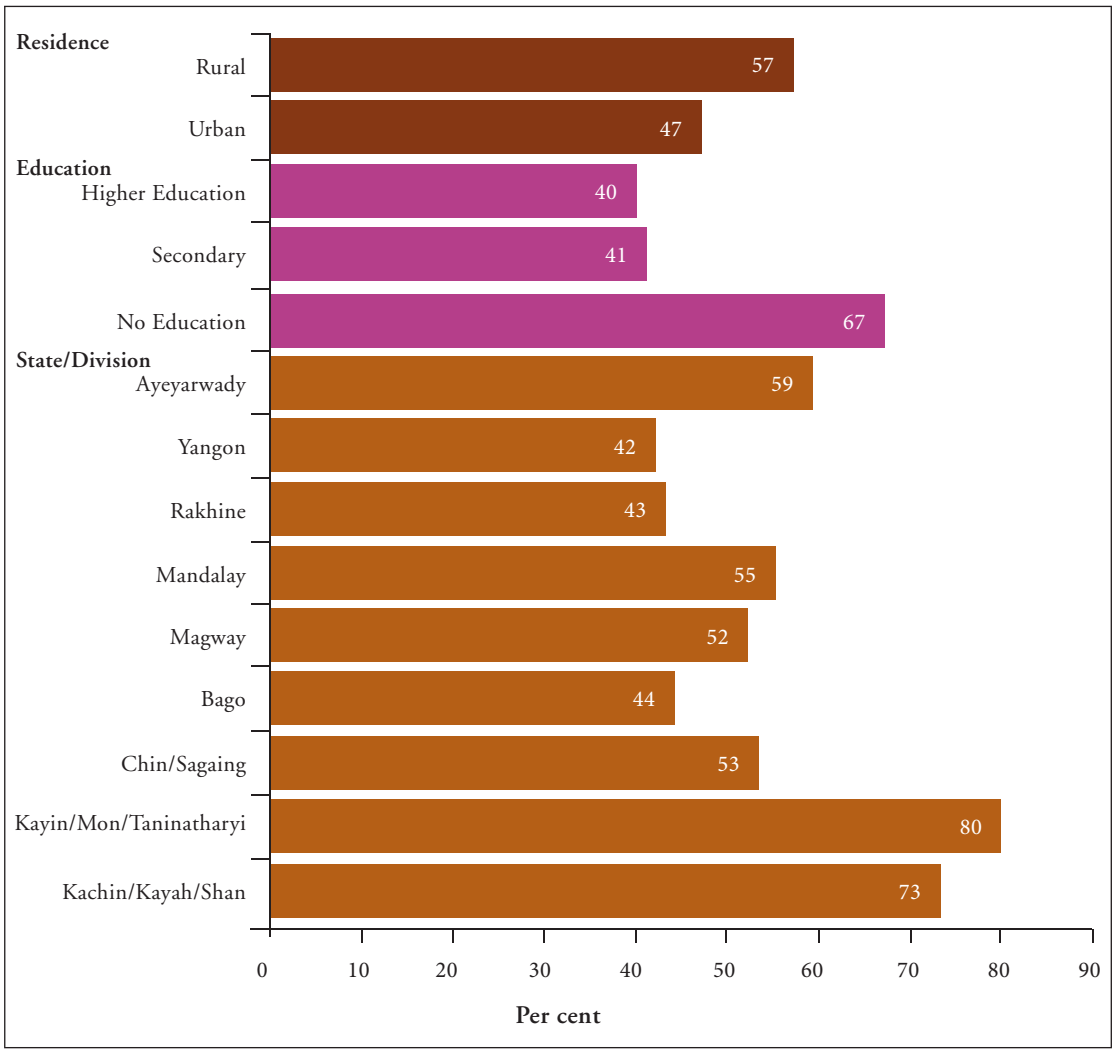
The FRHS 2007 data on childbearing among ever married adolescent women shows that nearly 55% had already begun childbearing, of which 40% are mothers and another 14% are pregnant with their first child. However this data should be interpreted with caution as the number of married women in this age group is very low. The report also shows that 43% of adolescents at age 16 and 45% at 17 have begun child bearing (Figure-4). The proportion is higher in rural areas (57%) than in urban settings (47%). There is a large regional variation in adolescent childbearing, highest in Kayin/Mon/Tanintharyi (80%) and lowest in Yangon Division (42%) (Figure-5). The level of adolescent pregnancy is strongly associated with education. The proportion of teenagers who had begun childbearing declined with increasing levels of education.

Figure 4: Number of women aged 15-19 years who had begun childbearing by their age, 2007



Source: *Union of Myanmar, Ministry of Immigration and Population, Department of Population and UNFPA. Country Report on 2007 Fertility and Reproductive Health Survey. Nay Pyi Taw, Yangon, 2009.*

Figure 5: Differentials in adolescent pregnancy by basic characteristics/socio demographic, childbearing, 2007



Source: *Union of Myanmar, Ministry of Immigration and Population, Department of Population and UNFPA. Country Report on 2007 Fertility and Reproductive Health Survey. Nay Pyi Taw, Yangon, 2009.*

3. Proximate determinants of adolescent pregnancy

Age at marriage

On an average, 7.4% of adolescents age 15-19 years are married in Myanmar[3]. There is wide variation in adolescent marriage in different states/divisions ranging from 22.3 in Shan (east) to 4.7 in Sagaing. Level of education of women also has significant impact on early marriage as is economic condition of the family (Table-2).

[3] *Union of Myanmar, Ministry of National Planning and Economic Development and Ministry of Health. Myanmar Multiple Indicator Cluster Survey 2009 - 2010 Final Report. Nay Pyi Taw, Yangon, 2011.*

Table 2: Differentials in currently married women in 15-19 years age group by socio demographic characteristics

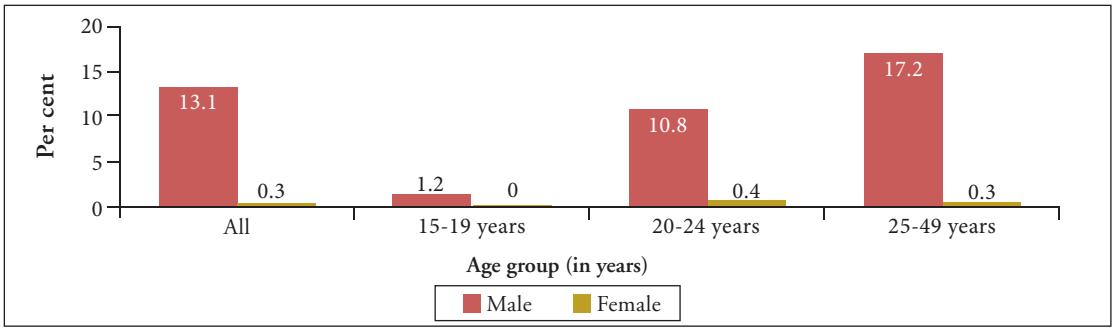
Differentials area	Percentage of married women age 15-19 years
Residence	
Urban	5.1
Rural	8.4
State/division	
Shan (east)	22.3
Shan (north)	13.7
Shan (south)	11.2
Ayeyarwaddy	10.9
Kachin	10.8
Magwe	8.9
Bago (west)	8.0
Kayah	7.8
Chin	7.3
Rakhine	6.5
Kayin	6.3
Yangon	6.3
Mandalay	6.2
Bago (east)	5.1
Mon	5.0
Tanintharyi	5.0
Sagaing	4.7
Education	
None	20.3
Secondary+	5.2
Wealth quintile	
Poorest	9.0
Richest	4.2

Source: *Union of Myanmar, Ministry of National Planning and Economic Development and Ministry of Health. Myanmar Multiple Indicator Cluster Survey 2009 - 2010 Final Report. Nay Pyi Taw, Yangon, 2011.*

Sexual activity

Although there are strong cultural values rooted against sex before marriage, the rising average age of marriage for both girls and boys provide a longer period of chance to indulge in premarital sex. Behavioural Surveillance Survey of 2007-08 in Myanmar revealed that more than 1% male adolescents and almost 11% of youth aged 20-24 years reported engaging in high risk sex (Figure 6).

Figure 6: High-risk sex according to age group



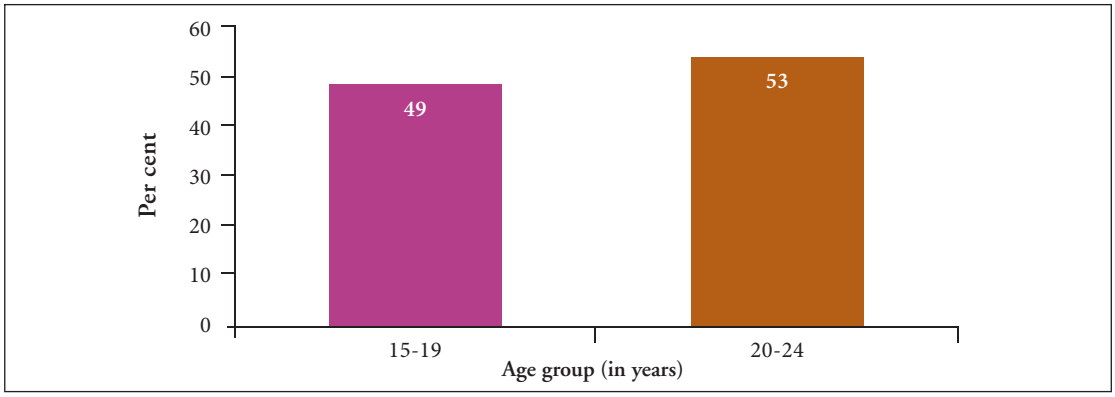
Source: *National AIDS Programme. UNGASS Country Progress Report; Myanmar: Reporting period: January 2008-December 2009. Yangon, 2010 - http://data.unaids.org/pub/Report/2010/myanmar_2010_country_progress_report_en.pdf*

Behavioural Surveillance Survey (BSS) of 2003 showed that 16% of the youth population was sexually active[4]. The median age at first sex reported by the youth was 22 years and 19 years for men and women, respectively.

Contraception

Contraception, if used consistently and correctly, will prevent pregnancy and, depending upon an individual's circumstances, prevent sexually transmitted diseases. Among currently married women, knowledge of at least one modern contraceptive method is same among young women (98%). However, the contraceptive prevalence rate among adolescents is lower than the next cohort (Figure-7).The FRHS data also shows that approval for use of contraceptives by spouses is likely to be less among adolescents in comparison to husbands and wives in the age group 20-24 (Figure-8).

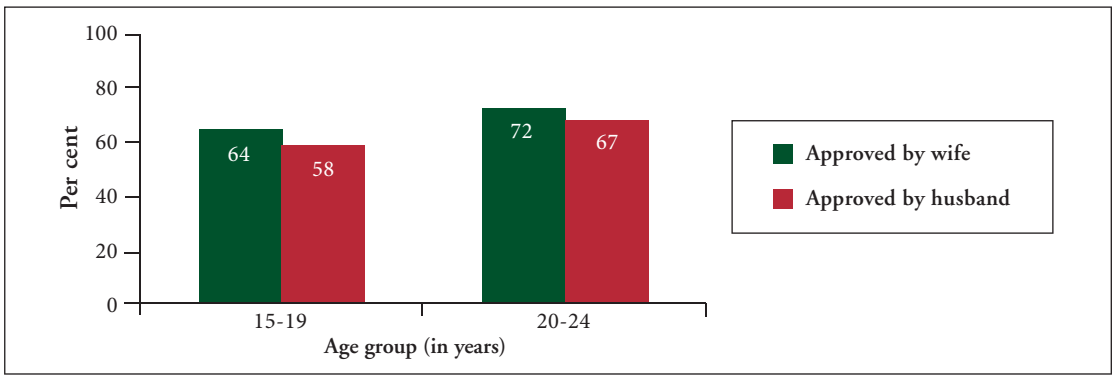
Figure 7: Proportion of currently married women using any modern contraceptive method, 2009-10



Source: *Union of Myanmar, Ministry of National Planning and Economic Development and Ministry of Health. Myanmar Multiple Indicator Cluster Survey 2009 - 2010 Final Report. Nay Pyi Taw, Yangon, 2011.*

[4]*Min Thwe, Aye MyatSoe, Tin Aung. Behavioural surveillance survey 2003: general population and youth. Yangon: Ministry of Health, 2005.*

Figure 8: Approval for use of contraception by spouses, 2007



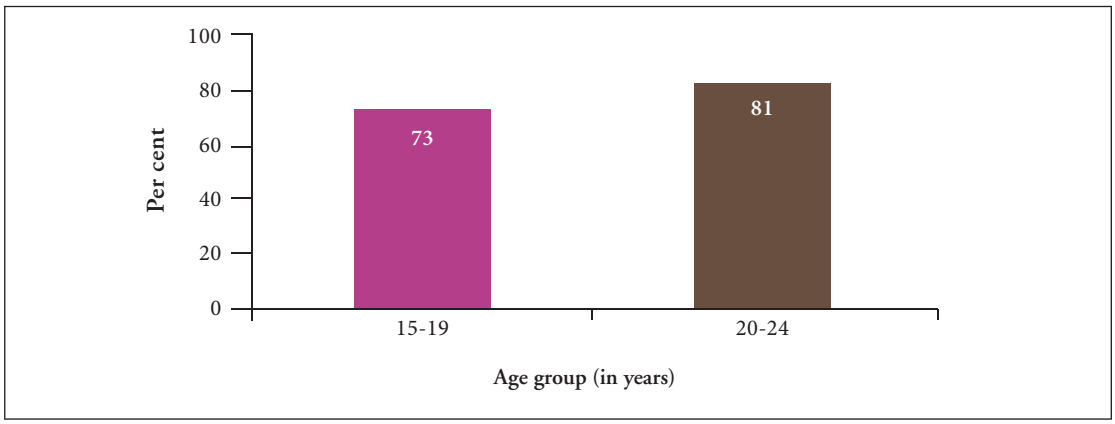
Source: *Union of Myanmar, Ministry of Immigration and Population, Department of Population and UNFPA. Country Report on 2007 Fertility and Reproductive Health Survey. Nay Pyi Taw, Yangon, 2009.*

4. Essential care interventions during pregnancy

The information on the use of antenatal care (ANC), delivery assistance and postnatal care can be used to identify subgroups of women who are at risk because of non-use of reproductive healthcare services. In Myanmar, 73% of ever-married women age 15-19 years received ANC service from skilled provider as compared with 81% of women aged 20-24 (Figure-9). Similarly FRHS 2007 reported that the average number of ANC visits made by adolescents is considerably less than those made by the older pregnant females (Table-3).

MICS 2009-10 reported that antenatal care services are used by most of pregnant women, though it is slightly less used by adolescents (Table-4). Adolescents are also disadvantaged in getting protected against neonatal tetanus compared to older women, though marginally (Figure-10).

Figure 9: Proportion of ever-married women who received antenatal care from any skilled provider, 2009-10



Source: *Union of Myanmar, Ministry of National Planning and Economic Development and Ministry of Health. Myanmar Multiple Indicator Cluster Survey 2009 - 2010 Final Report. Nay Pyi Taw, Yangon, 2011.*

Table 3: Proportion of women making up to five ANC visits during the last completed pregnancy, 2007

Age group (in years)	No visits	1 to 2 visits	3 to 5 visits	Mean number of visits
15-19	17	26	41	3.3
20-24	15	14	42	5.2

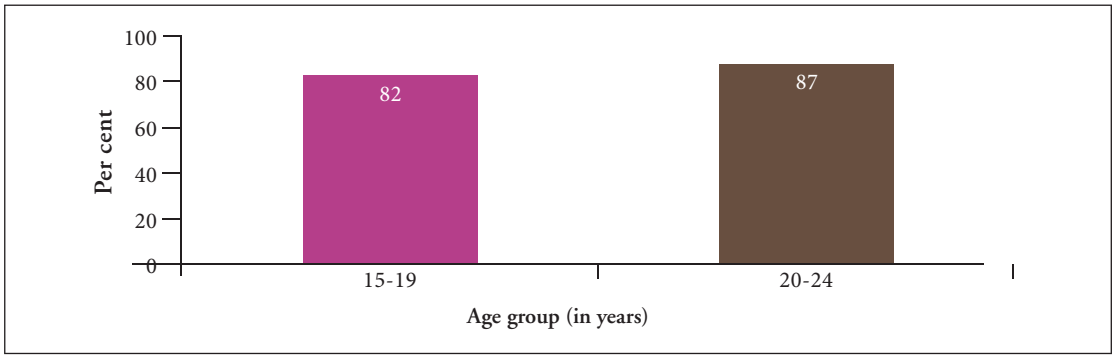
Source: *Union of Myanmar, Ministry of Immigration and Population, Department of Population and UNFPA. Country Report on 2007 Fertility and Reproductive Health Survey. Nay Pyi Taw, Yangon, 2009.*

Table 4: Antenatal services used by ever-married women in Myanmar among women receiving antenatal care

Age group (in years)	Proportion of women utilized antenatal services once or more times	Among women who received ANC for their most recent birth, proportion of who received selected services			
		Weighed	Blood pressure measured	Urine sample taken	Received iron tablets
15-19	90	52	72	45	76
20-24	93	61	77	54	81

Source: *Union of Myanmar, Ministry of National Planning and Economic Development and Ministry of Health. Myanmar Multiple Indicator Cluster Survey 2009 - 2010 Final Report. Nay Pyi Taw, Yangon, 2011.*

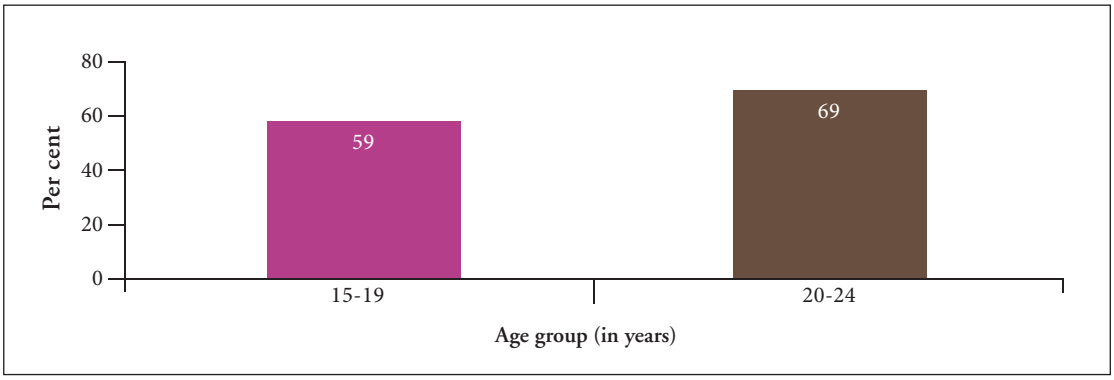
Figure 10: Proportion of women who received two or more doses of tetanus toxoid during the last pregnancy



Source: *Union of Myanmar, Ministry of National Planning and Economic Development and Ministry of Health. Myanmar Multiple Indicator Cluster Survey 2009 - 2010 Final Report. Nay Pyi Taw, Yangon, 2011.*

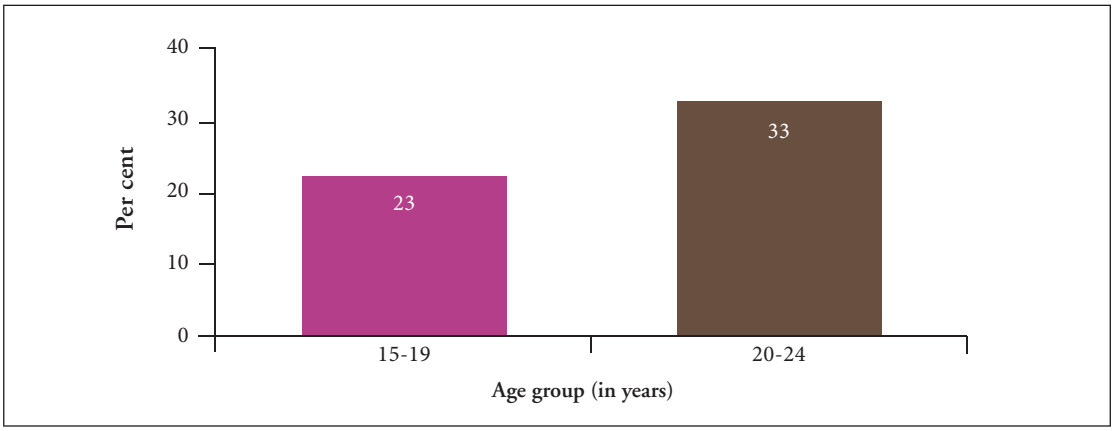
Another key element of the essential package of safe motherhood interventions is childbirth care. Even though a large number of deliveries take place at home in Myanmar, more than 50% of women are able to get skilled attendance at birth. Adolescents are disadvantaged even for this intervention (Figure-11 and 12).

Figure 11: Proportion of women getting skilled assistance at delivery, 2009-10



Source: *Union of Myanmar, Ministry of National Planning and Economic Development and Ministry of Health, Myanmar. Myanmar Multiple Indicator Cluster Survey 2009 - 2010 Final Report. Nay Pyi Taw, Yangon, 2011.*

Figure 12: Proportion of young women whose last delivery was Institutional deliveries, 2007

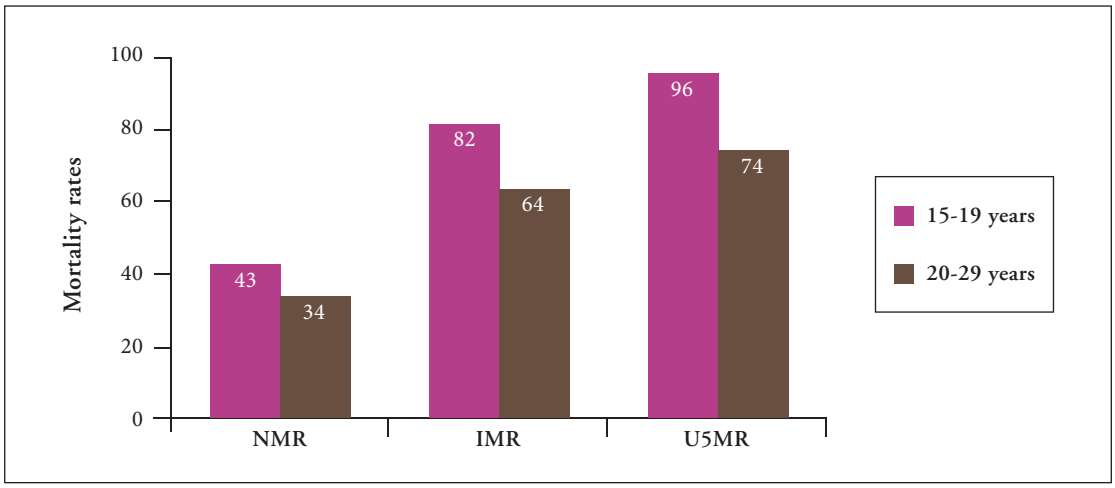


Source: *Union of Myanmar, Ministry of National Planning and Economic Development and Ministry of Health, Myanmar. Myanmar Multiple Indicator Cluster Survey 2009 - 2010 Final Report. Nay Pyi Taw, Yangon, 2011.*

5. Impact of adolescent pregnancy on health outcomes for mothers, newborns and children

Many studies have found strong evidence linking early childbearing with higher young child mortality. The FRHS 2007 report also shows that the risk of dying in first month of life is high among births occurring to adolescent women when compared with women aged 20-29 years (Figure-13). Similarly infant and under-five mortality rates are also high among children born to adolescent mothers.

Figure 13: Neonatal, infant and under five mortality rates by age of women at birth, 2007

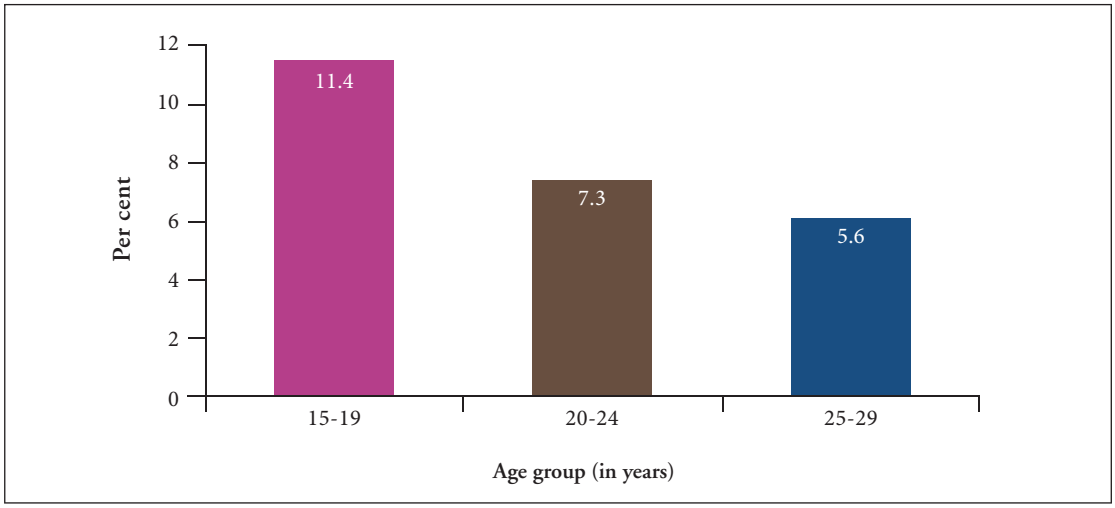


Source: *Union of Myanmar, Ministry of Immigration and Population, Department of Population and UNFPA. Country Report on 2007 Fertility and Reproductive Health Survey. Nay Pyi Taw, Yangon, 2009.*

Abortion

The 2007 FRHS also showed that abortion is highest among women aged 15-19 years and that these are the highest in the Yangon region (Figure-14).

Figure 14: Proportion of ever married women who had abortion by age



Source: *Union of Myanmar, Ministry of Immigration and Population, Department of Population and UNFPA. Country Report on 2007 Fertility and Reproductive Health Survey. Nay Pyi Taw, Yangon, 2009.*

In Myanmar, abortion is only available to women if their life is at risk[5]. While there is no data on the exact number of adolescents who have had abortions, there are several small studies that address the issues surrounding sexual and reproductive health. In a study focused on the reproductive health of young Burmese refugees in Thailand, the author makes note of the social stigmatization of pre-marital sexual relations which severely restrict adolescents' access to antenatal and other health care services[6]. Compounding this problem was parents' lack of knowledge on sexual and reproductive information and that youngsters had neither formal nor personal access to care services. This lack of information meant most youngsters in the study did not know that first sex could result in pregnancy. The results of the study showed that the adolescents in the study would have preferred to be counselled on sexual and reproductive health by trained health workers.

Although this study showed a willingness of youth to learn about sex and health, another small study revealed that any reproductive health services widely available are targeted at married couples, therefore, disregarding the needs of sexually active single adolescents[7]. While abortions and pregnancy were rarely mentioned in this study, marriage was the response to unwanted pregnancies.

[5] *Ganatra B. Young and vulnerable: the reality of unsafe abortion among adolescent and young women, ARROWS for change. 2006;12(3):1-2.*

[6] *Benner MT, Townsend J, Kaloi W, Htwe K, Naranichakul N, Hunnangkul S et al. Reproductive health and quality of life of young Burmese refuges in Thailand. Conflict and Health 2010; 4(5): 8*

[7] *Hla-Soe-Tint, Phyo-Maung-Thaw, Yin-Thet-Nu-Oo, Ko-Ko-Zaw, Than-Tun-Sein, Thein-Tun, Sexual and reproductive health needs of vulnerable youth in Myanmar 2008; 39 (6): 1126-38 - http://www.researchgate.net/publication/23638131-sexual-and-reproductive-health-needs-of-vvinerable-youth-in-myanmar*

NEPAL

1. Number of adolescents in Nepal

About one in five persons in Nepal is an adolescent. The current population of adolescents in Nepal is 6 934 000 (Table-1). Adolescent girls in the age group 10-19 years will be more than 10% of the total population in 2030[1]. The sheer number of adolescents alive today and their expected growth in numbers is the major reason for concern on account of adolescent pregnancy.

Table 1: Number and proportion of young people by age and sex in Nepal, 2010

Age group (in years)	Male		Female		Total	
	Number	(%)	Number	(%)	Number	(%)
10-14	1 858 000	6.2	1 762 000	5.9	3 624 000	12.1
15-19	1 700 000	5.7	1 610 000	5.4	3 310 000	11.1
20-24	1 482 000	4.9	1 418 000	4.7	2 900 000	9.6
Total	**5 044 000**	**16.8**	**4 790 000**	**16.0**	**9 834 000**	**32.8**

Source: *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision. New York: UN, 2011- http://esa.un.org/unpd/wpp/index.htm*

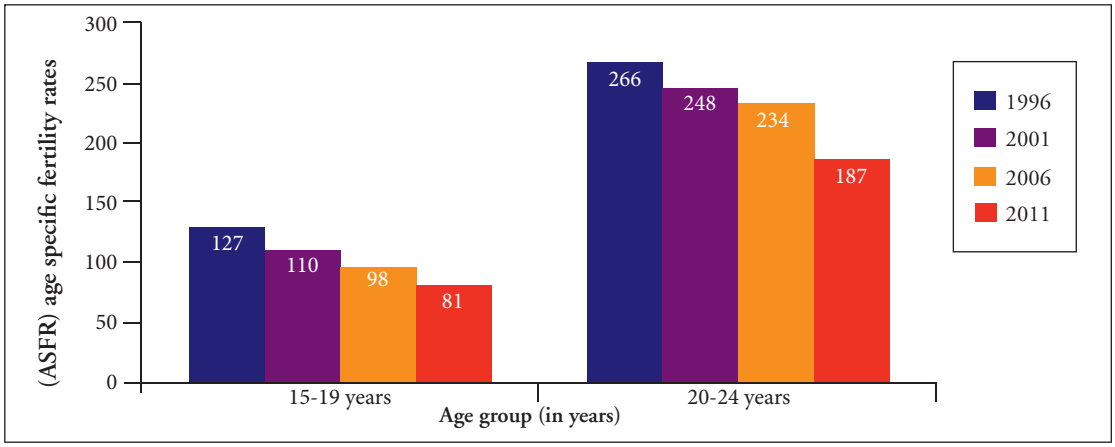
2. Adolescent pregnancy

Adolescents fertility

The fertility rate for adolescents aged 15–19 years is about 81 births per 1000 women. However, Nepal has achieved success in lowering its levels of adolescent childbearing (Figure-1). The magnitude of decline is notable at 36% in the 15 years since 1996 which has further reduced by 17% in the last five years for the age group 15-19 years.

[1] *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision. New York:UN, 2011 -http://esa.un.org/unpd/wpp/index.htm*

Figure 1: Trends in age specific fertility rates (ASFR) over the period 1996-2011

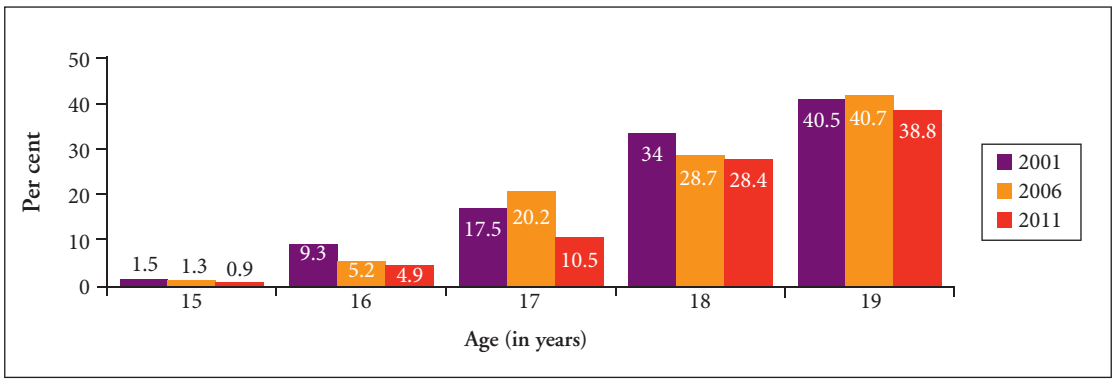


Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*
2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*
3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoPH, New ERA and ORC Macro, 2002.*
4. *Pradhan, Ajit, Ram Hari Aryal, Gokarna Regmi, Bharat Ban and Pavalavalli Govindasamy. Nepal Family Health Survey 1996. Kathmandu: Ministry of Health, New ERA and Macro International Inc., 1997.*

Age at first birth

In Nepal, 17% of women age 15-19 years had begun childbearing. There is, however, evidence that the birth rate among 18-19 years-old adolescents is much higher than among younger adolescents (aged 15-17 years), partly because the older adolescents were more likely to be married and cohabiting. Proportion of adolescent women who have begun childbearing increases rapidly with age, from 1% among women aged 15 years, to 39% among women at age 19 years (Figure-2). However, DHSs do not give any information about births and birth rates for adolescents under 15 years. Small studies available from the country do report births to these women, which are small as a proportion of all births to adolescents[2].

Figure 2: Trends in proportion of adolescent girls who have begun childbearing by the specific age



Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*

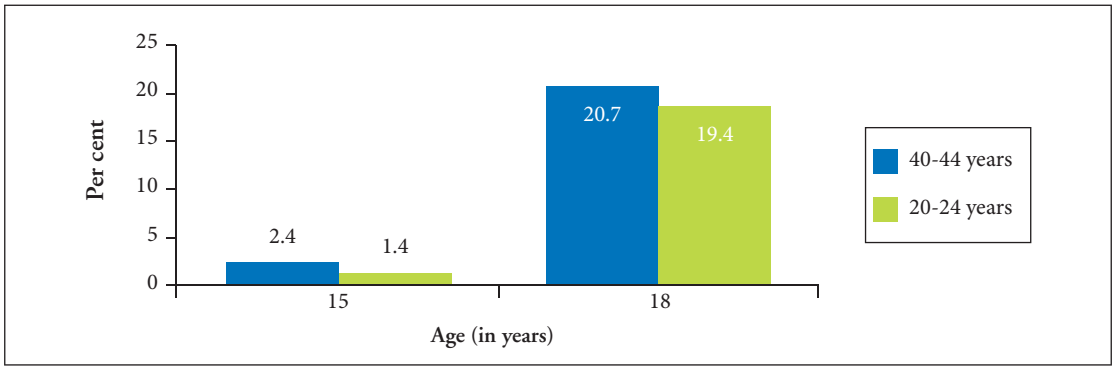
[2] *Katz J, Khatry S.K., LeClerq S.C., Shrestha S.R., West K.P. Christian P. Miscarriage but not stillbirth rates are higher among younger nulliparas in rural Southern Nepal, J Adolesc Health. 2008 June, 42(6):587-95. doi:10.1016/j. jadohealth.2007.11.137 -http://www.ncbi.nim.gov/pmc/articles/pmc2377393/pdf/nihms-49765.pdf -.*

2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*

3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoH, New ERA and ORC Macro, 2002.*

Data from various DHSs indicate that adolescent childbearing has decreased over all age groups during the last 10 years. Decrease of the proportion is the steepest for the 15 year age group (40%) and the least for 19 year age group (about 4%). Similarly, decrease of the proportion in births by the 15 year age group is more than the births by 18 years age group during the period of 20 years (Figure-3).

Figure 3: Trends in women having their first birth by age 15 and 18 (women aged 20-24 years vs. women aged 40-44 years)



Source: *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*

Residence and adolescent childbearing

A remarkable difference has been observed in adolescent childbearing in various sub-regions in Nepal. While only 10.7% adolescents had started childbearing in the Central Mountain Region, the incidence is two and a half times higher in Western Mountain Region (26%) and a little less than two times higher in the Mid-western Terai Region (19.9%) (Table-2).

Table 2: Differentials in adolescent childbearing by sub region of residence (in ascending order)

Sub region	Proportion of adolescents who have begun childbearing
Central Mountain	10.7
Central Hill	13.0
Far-western Terai	13.1
Eastern Mountain	14.0
Western Terai	14.1
Eastern Hill	15.0
Far-western Hill	15.2
Mid-western Hill	16.3
Eastern Terai	16.6
Western Hill	17.8
Central Terai	19.9
Mid-western Terai	21.3
Western Mountain	26.0

Source: *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*

Education and adolescent childbearing

Not surprisingly, early childbearing is inversely related to the educational level of the mother. Lack of education is a key factor predisposing adolescents to pregnancy. Women with no education are almost four times as likely to have begun childbearing as those with School leaving Certificate (SLC) and higher education levels (Table-3). There is a marked difference between the proportion of teens that have started childbearing with secondary or higher level of education and teens at all other levels of education.

Table 3: Trends in proportion of adolescents (15 – 19 years) who have begun childbearing by basic characteristics

		2001	2006	2011
Residence	Urban	12.6	16.4	9.3
	Rural	22.5	18.8	17.8
Education	No Education	31.5	32.7	31.6
	SLC and above	8.3	3.9	8.0
Wealth Quintile	Lowest		18.2	18.4
	Middle	NA	21.5	22.1
	Highest		14.4	6.7

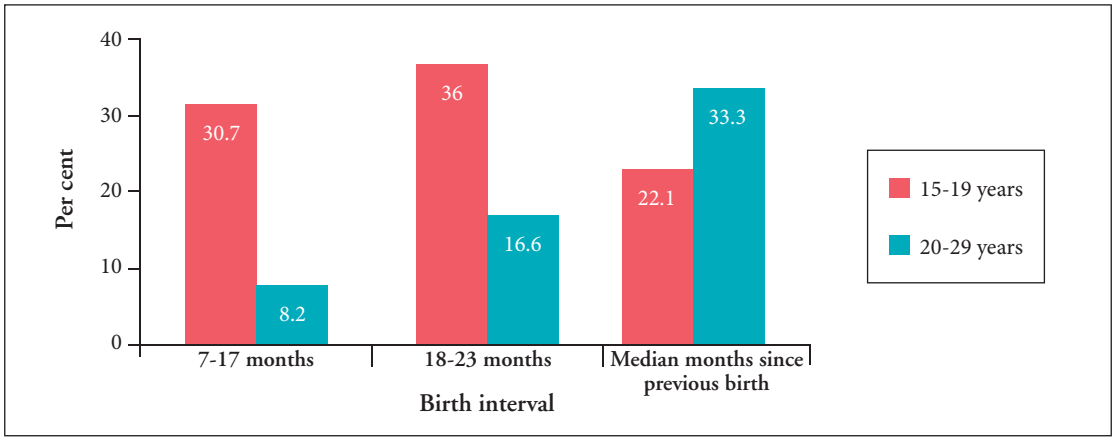
Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*
2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*
3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoH, New ERA and ORC Macro, 2002.*

Similarly urbanization and wealth status also have influential effects on the rates of adolescent pregnancy and childbearing (Table-3). Contrary to the common perception that early pregnancy is more common in lowest wealth quintile, in Nepal, a larger proportion of childbearing in 15-19 years age group occurs in women of middle wealth quintile.

Birth interval

Research shows that children born too soon after a previous birth are at an increased risk of dying, particularly when the interval between the two consecutive births is less than 24 months. Maternal health is also put at risk when births are closely spaced. NDHS 2011 shows that 31% of births to adolescents are at an interval of less than 18 months as compared to only 8% births of women aged 20-29 (Figure-4). The median number of months since the preceding birth for adolescent mothers (22.1) is much less than the national average of 36.2 months or even for women aged 20-29 (33.3). This data for adolescent mothers has improved since the 2006 DHS (19.0 months). This can be attributed to the increased need for contraception.

Figure 4: Birth intervals/spacing between two consecutive births in Nepal, 2011



Source: *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, Calverton, Maryland, 2012.*

Planning status of adolescent pregnancy

Both married and unmarried adolescents experience unplanned and unwanted pregnancies and births, even in countries where early marriage and childbearing are the norm. Table 4 shows the proportion of wanted, unwanted or unplanned births among married adolescents during the last three Demographic and Health Surveys in Nepal. More than 75% of adolescent pregnancies were intended. The data also show that adolescents had higher rates of intended, as well as mistimed pregnancies when compared with older women till 2006, but this trend reversed in the 2011 DHS where planned pregnancy was 81% for 20-24 years age group compared with 75% for adolescents in the age group <20 years.

Table 4: Trends in fertility planning status

Mother's age at birth (in years)	Planned (wanted then) births (%)			Mistimed (wanted later) births (%)			Unwanted births (wanted no more) (%)		
	2011	2006	2001	2011	2006	2001	2011	2006	2001
<20	75.2	76.5	76.5	23.1	21.9	22.0	1.7	1.6	0.9
20-24	80.7	74.7	74.0	13.4	17.7	17.9	5.9	7.6	7.7

Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, Caverton, Maryland, 2012.*
2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc. , 2007*
3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001.Kathmandu: MoH, New ERA and ORC Macro, 2002.*

3. Proximate determinants of adolescent pregnancy

Sexual activity

Sexual activity begins early among young people in Nepal. The average age at first sexual intercourse for females is identical to that of the median age of marriage, suggesting that women have their first sexual intercourse within marriage (Table-5). The opposite is the case for males who initiate their first intercourse a year earlier than their first marriage, indicating that their first sexual intercourse begins outside of marriage. The DHS 2011 also reports that 4.6% of women age 15-19 years had sexual intercourse by age 15 and about 59% of women age 20-24 years had their first intercourse by age 18. Proportion of never-married men and women aged 15–19 years is steadily increasing. This leads to more unmarried adolescents, particularly young men becoming sexually active outside marriage.

Table 5: Trends in median age at marriage and median age at first sexual intercourse in Nepal

Age group (in years)	Female		Male	
	Median age at marriage	Median age at first sexual intercourse	Median age at marriage	Median age at first sexual intercourse
20-24	18.9	19	a	b
25-29	17.9	18.1	22.1	20.6
30-34	17.6	17.7	21.9	20.1
35-39	17.4	17.5	21.6	20.7
40-44	17.2	17.4	21.0	20.6

a – omitted because less than 50% of the women and men began living with her/his first spouse or partner

b – Omitted because less than 50% of the respondents had sexual intercourse for the first time before reaching the beginning of the age group

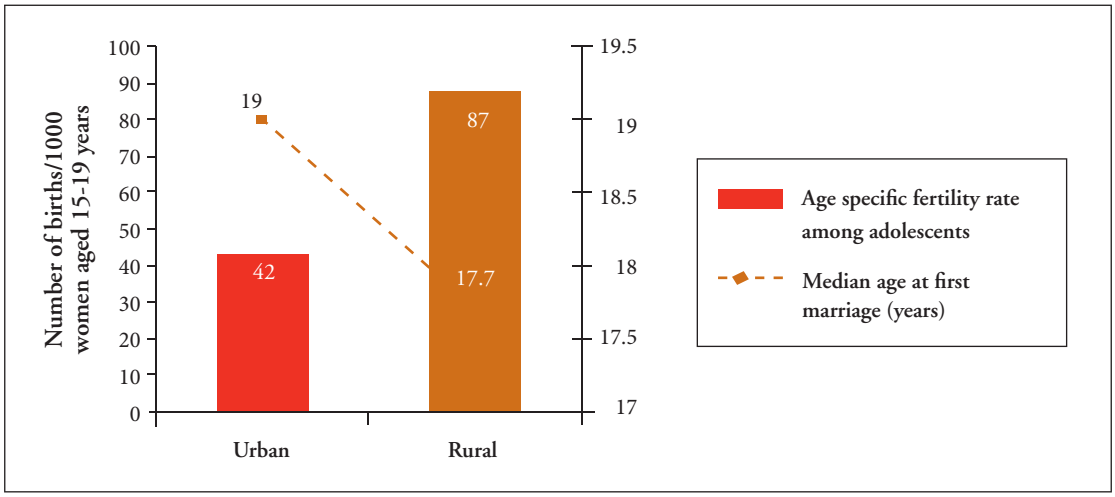
Source: *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*

Age at marriage

Globally the highest adolescent birth rates are found in countries where the age of marriage is low. This inverse relationship can be easily interpreted from the Figure-5. Adolescent childbearing is higher in rural Nepal where the age of marriage is low compared to urban areas where the age of marriage is higher. Child marriages are still prevalent in some communities in Nepal, particularly in rural areas. Marriages occur very early among rural females, 11% of child marriages (marriage before age 15 year) have been recorded[3] in these areas.

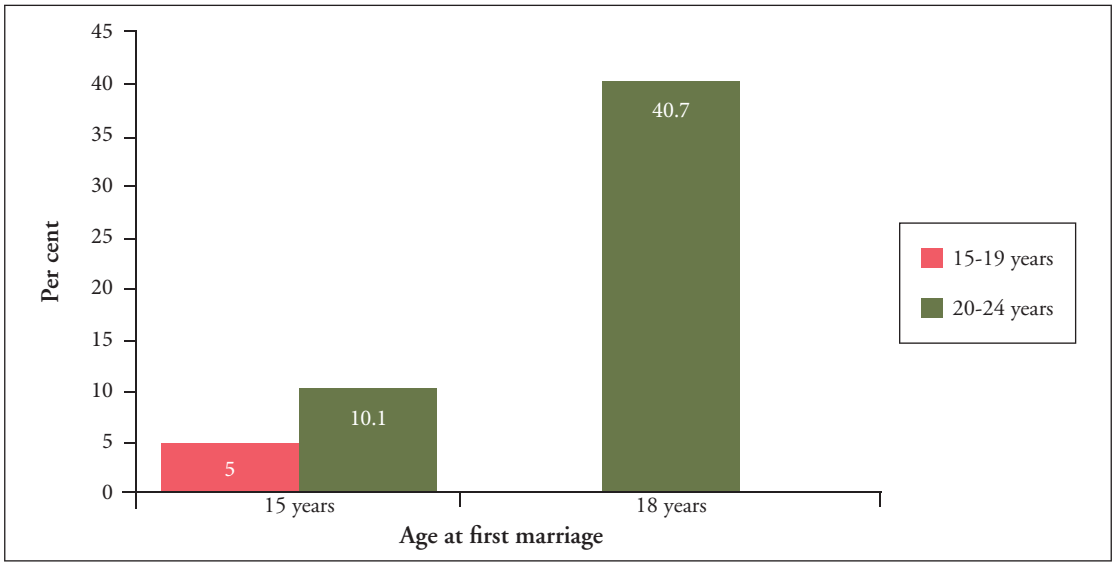
[3]*Choe MK, Thapa S, Mishra V. Early marriage and early motherhood in Nepal. J. biosoc. Sci. (first published online 2004) 00, 1–20.*

Figure 5: Median age at first marriage versus ASFR by urban & rural sectors



Source: *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*

Figure 6: Trends in proportion of women aged 15-19 years and 20-24 years having age at first marriage at 15 years & 18 years

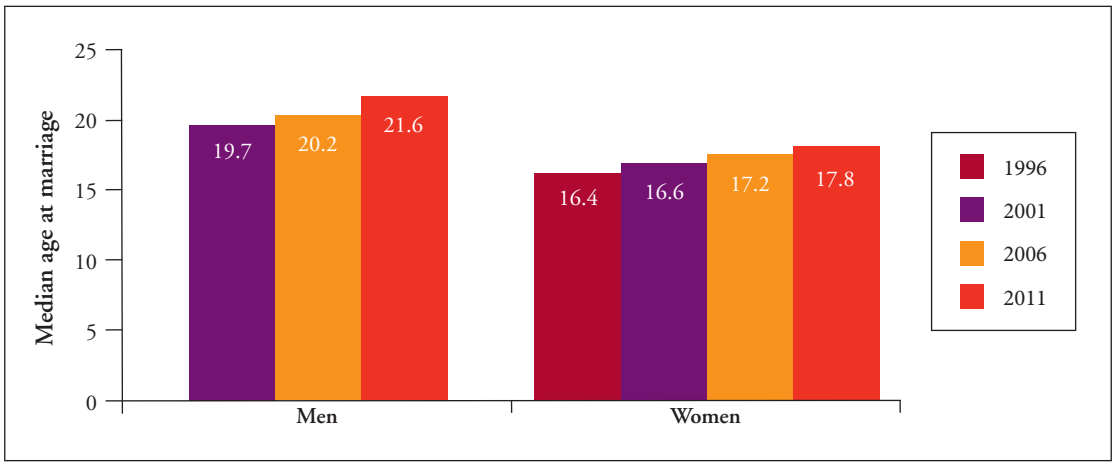


Source: *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*

In Nepal, the legal age of marriage with parental consent is 18 for both sexes and 20 years without parental consent. Despite the law governing marriage, over 40% of the women aged 20-24 years are married by the time they are 18 years old and 10% by the time they are 15 (Figure-6). However the median age at first marriage for women is rising among younger cohorts, the DHS-2011 reports that it is 17.8 for women age 20-49 years and has risen by 16 months in last 15 years (Figure-7). In the case of men age 25-49 years, the median age at marriage increased from 19.7 years in 2001 to 21.6 years in 2011. This is another clear indication of a continuing shift to later marriage in Nepal for both men and women.

A wide variation in median age of first marriage was reported by DHS-2011 in different sub-regions of Nepal (Table-6). While half of the girls are married by the age 17 in Western Mountain, Far Western Hill, Mid-Western Hill and Central Terai sub regions; median age at first marriage is above 19 in Eastern Mountain, Eastern Hill and Central hill sub regions. A higher rate of early pregnancy was reported from the sub regions where girls get married at an early age.

Figure 7: Trend in median age at marriage by sex over last 15 years



Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*
2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*
3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoH, New ERA and ORC Macro, 2002.*
4. *Pradhan, Ajit, Ram Hari Aryal, Gokarna Regmi, Bharat Ban and Pavalavalli Govindasamy. Nepal Family Health Survey 1996. Kathmandu: Ministry of Health, New ERA and Macro International Inc., 1997.*

A high proportion of these married adolescents are believed to commence childbearing, but a substantial number of pregnancies go unreported due to the high rate of home deliveries.

Delayed consummation of marriage plays an intermediary role in reducing the impact of early marriage on early motherhood. In many parts of Nepal, delayed consummation of marriage is common, especially for the couples who marry early. It is much more common for brides under age 15 (three fifths in urban vs. two thirds in rural areas) and less common among brides aged 15–17 years (one fifth in urban vs. one third in rural areas)[3].

[3]*Choe MK, Thapa S, Mishra V. Early marriage and early motherhood in Nepal. J. biosoc. Sci. (first published online 2004) 00, 1–20.*

Table 6: Differentials in median age at first marriage by sub region of residence

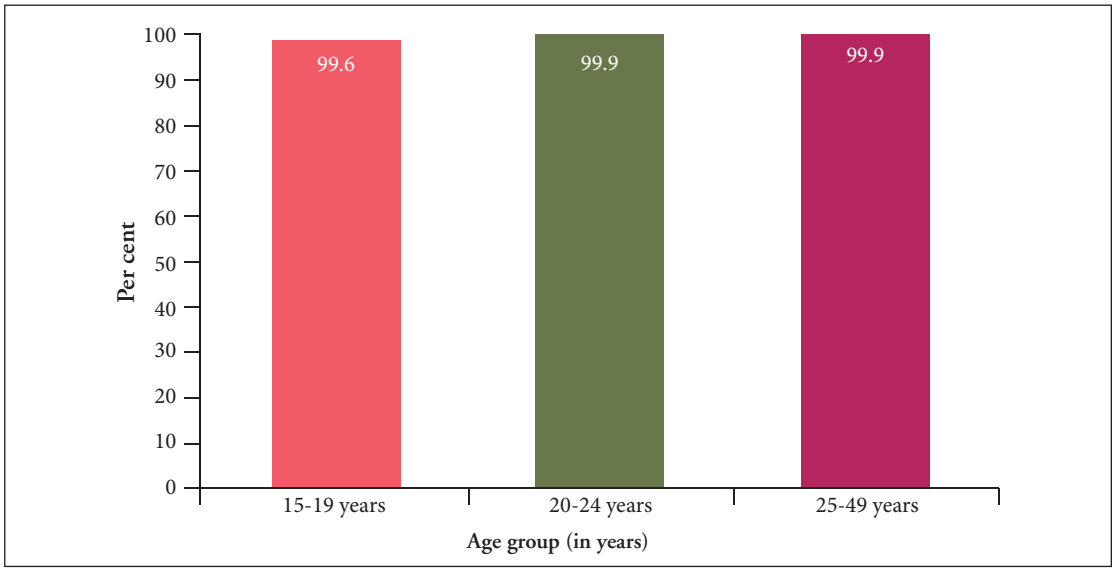
Sub region	Median age for age 20-49 years
Eastern Hill	19.5
Central Hill	19.4
Eastern Mountain	19.1
Eastern Terai	18.6
Western Hill	18.0
Western Terai	17.9
Central Mountain	17.7
Mid-western Terai	17.5
Far-western Terai	17.4
Mid-western Hill	17.0
Far-western Hill	16.7
Central Terai	16.5
Western Mountain	16.4

Source: *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*

Contraception

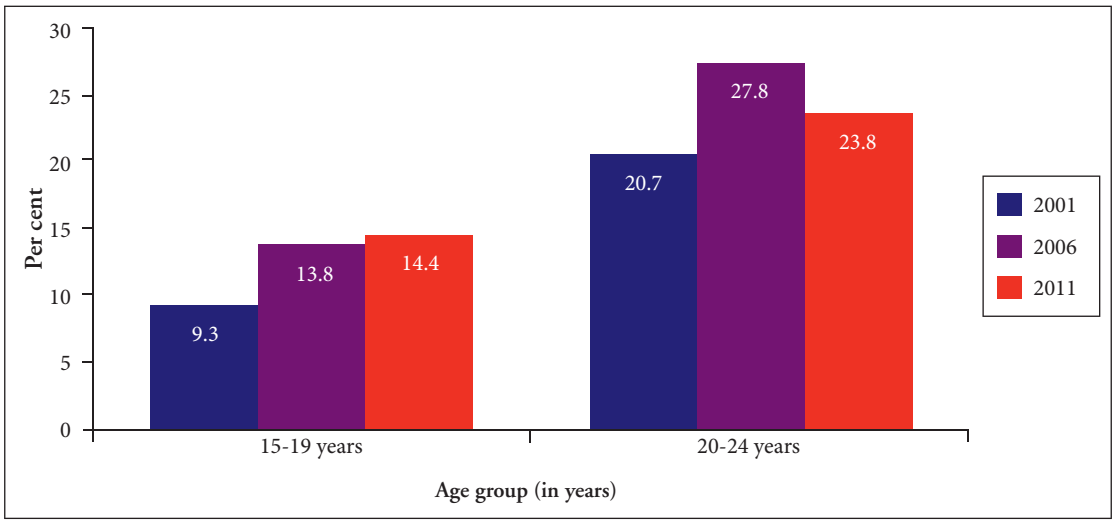
Knowledge about family planning and contraceptives is nearly universal among adolescents and young people. However the higher level of knowledge found in this group has not translated into a higher level of contraceptive use (Figure-8 and 9). Current use of contraceptives among young married women ages 15-19 years is only about 14% and is 24% among 20-24 years age group. The use of contraceptives, especially modern methods among women age 15-19 years, had increased by one and a half times between 2001 and 2006 but thereafter increased only marginally from 2006 to 2011.

Figure 8: Knowledge of women about contraceptive methods



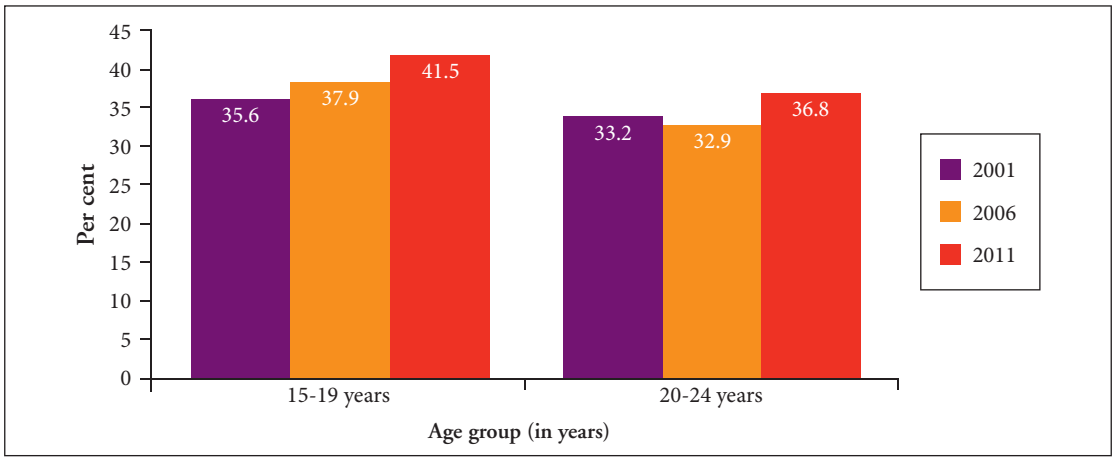
Source: *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and International Inc., 2007.*

Figure 9: Trends in proportion of currently married women currently using modern methods of contraceptives



Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*
2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*
3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoH, New ERA and ORC Macro, 2002.*

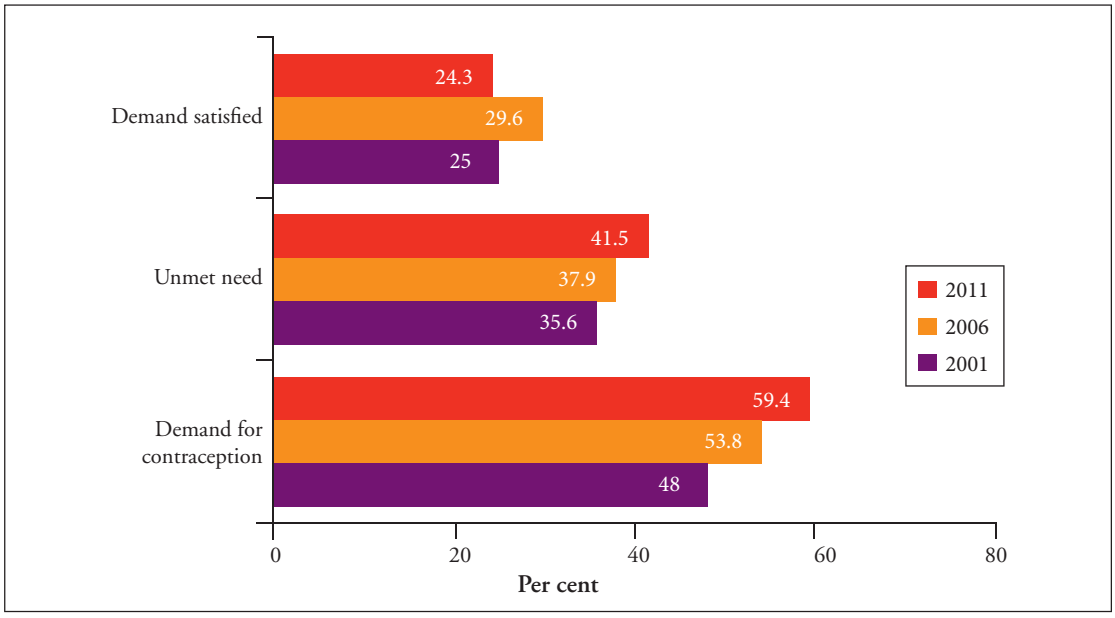
Figure 10: Trends in unmet need for family planning



Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*
2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*
3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoH, New ERA and ORC Macro, 2002.*

Adolescents have a greater unmet need for contraception than older women in Nepal. The data from the three DHSs 2001, 2006 and 2011 show that this gap is increasing (Figure-10). Only 24% of demand for modern contraceptive methods by women aged 15-19 years was satisfied as compared to 35% for women in the 20-24 years age group. There is an increase in unmet need for family planning as also the demand for contraception among adolescent women over the ten-year period of the study (Figure-11). The high unmet need among adolescents coupled with their high level of knowledge about contraception indicates that young married people face significant barriers to contraception.

Figure 11: Trend in unmet need for contraception demand satisfied of married adolescents girls age 15-19 years



Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*

2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*

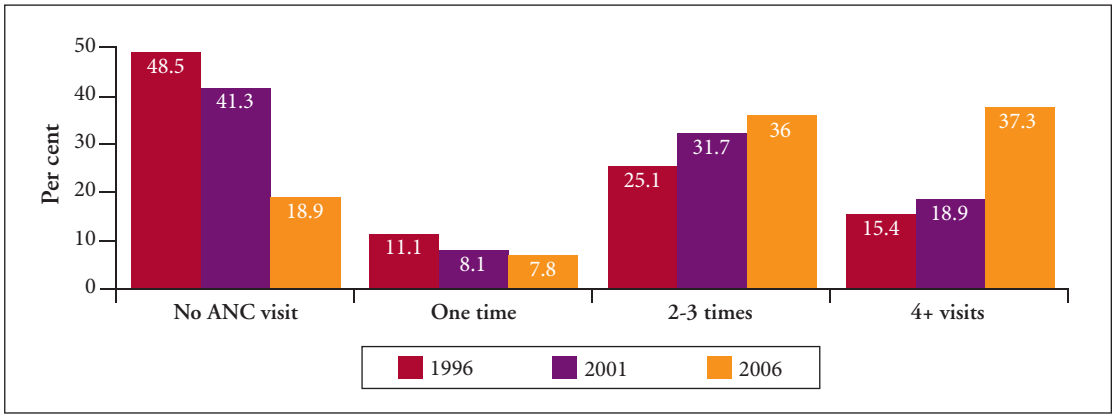
3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoH, New ERA and ORC Macro, 2002.*

4. Essential care interventions during pregnancy

Antenatal care

Antenatal care is an important part of obstetric and perinatal care. In the past, too much emphasis was put on the number of antenatal care visits, but more recently attention has been directed towards the content of antenatal care and the importance of early initiation. For routine antenatal care, WHO recommends four visits during the pregnancy (at 16 weeks, between 24 and 28 weeks, at 32 weeks and 36 weeks) with specific activities during each visit[4]. Evidence indicates that insufficient antenatal care is related to complications among adolescents[5]. Many of the health problems associated with adolescent pregnancy and childbearing can be prevented and controlled with timely and appropriate care during and after pregnancy.

Figure 12: Trends in antenatal care status among young women aged 15-24 years



Source:

1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoHP, New ERA and Macro International Inc., 2007.*
2. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoH, New ERA and ORC Macro, 2002.*
3. *Pradhan Ajit, Ram Hari Aryal, Gokarna Regmi, Bharat Ban, and Pavalavalli Govindasamy. Nepal family health survey 1996. Kathmandu: Ministry of Health, New ERA, Macro International Inc., 1997.*

In Nepal a steep rise in visit to the health facility (four plus visits) by women age 15-24 years for antenatal check-up was observed from the year 2001 to 2006 (Figure-12). DHS 2006 reported that antenatal services were used more by younger women, below 20, than by older women and urban women use the services more than women living in rural areas (Table-7). DHS 2011 reported that only 58% Nepalese women (age 15-49 years) are using the antenatal services by a skilled provider (doctor, nurse or midwife).

[4]*World Health Organization. Adolescent pregnancy:Unmet needs and undone deeds. Geneva: WHO, 2007.*

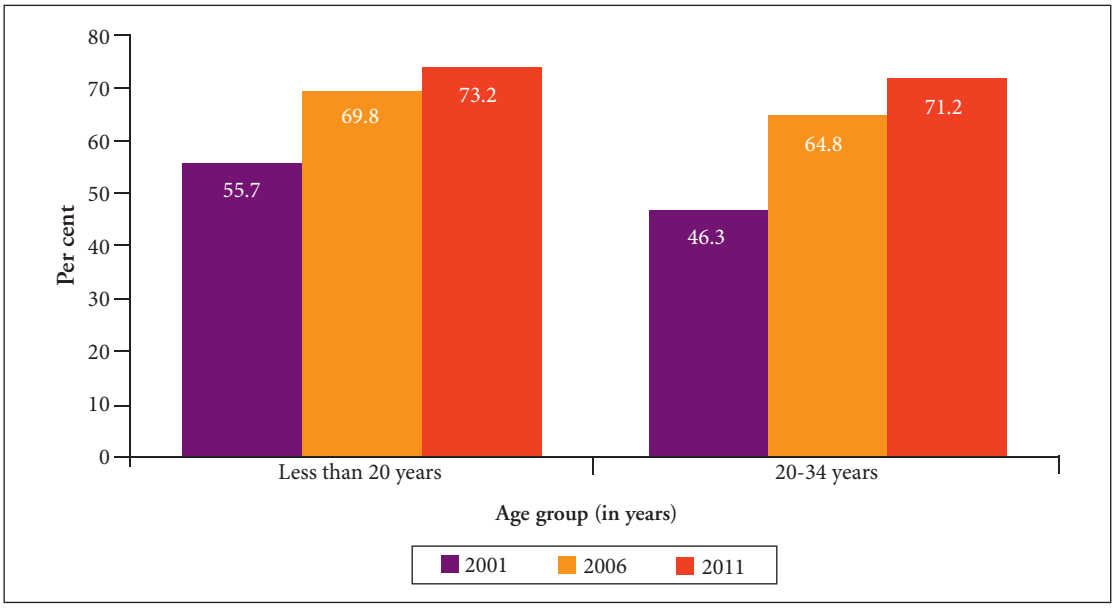
[5]*Scholl T, Hediger ML, Belsky DH. Prenatal care and maternal health during adolescent pregnancy: a review and meta-analysis. Journal of Adolescent Health, 1994, 15:444–456.*

Table 7: Proportion of antenatal check ups attendend by mothers age 15-24 years by number of visits & residency

Percentage distribution of births of adolescent mothers aged 15-24 years during the five years preceding the survey by number of antenatal check-ups, Nepal 2006			
ANC status	**Urban**	**Rural**	**Total**
Number of antenatal check-ups			
No ANC visit	8.9	20.5	18.9
One time	3.3	8.5	7.8
2-3 times	34.6	36.2	36.0
4+	53.2	34.8	37.3

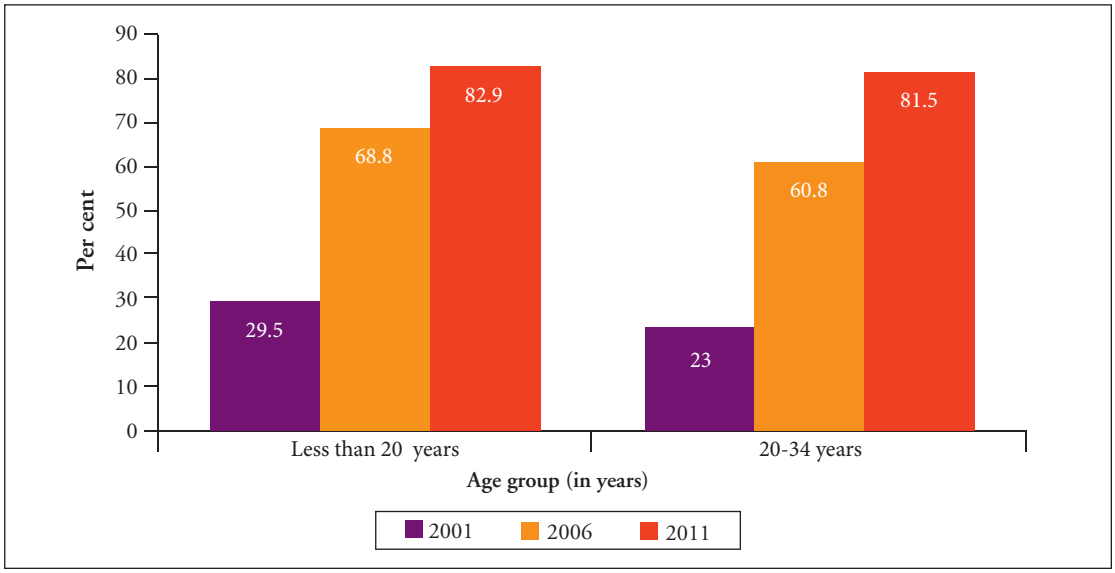
Source: *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*

Figure 13: Trends in proportion of pregnant mothers who received two or more TT injections by age groups



Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*
2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*
3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoH, New ERA and ORC Macro, 2002.*

Figure 14: Trends in proportion of pregnant mothers who were given iron/folic acid during pregnancy by age group



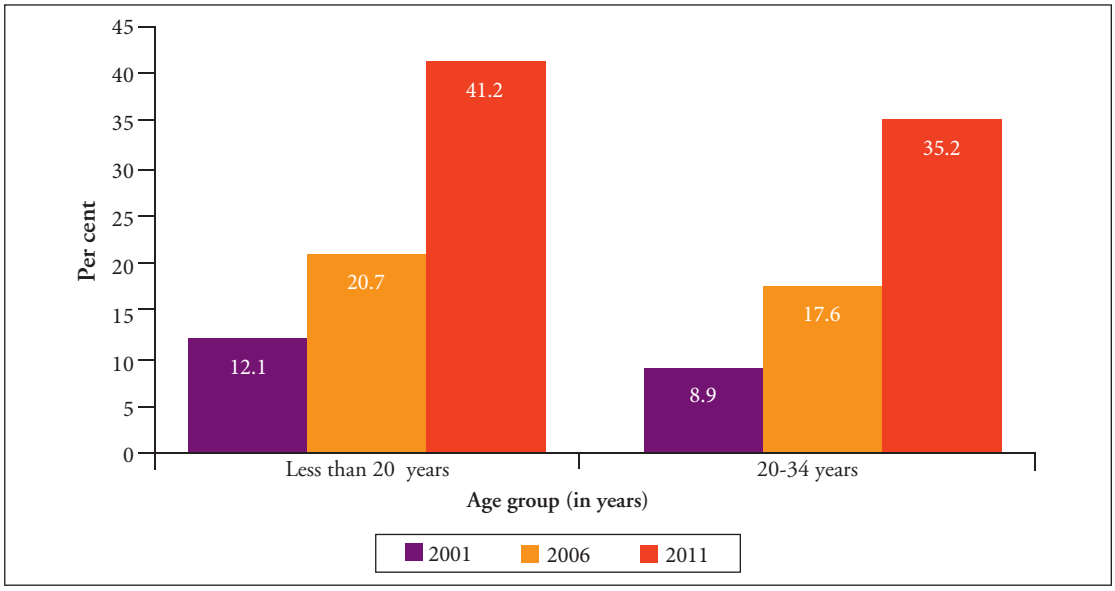
Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*
2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*
3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoH, New ERA and ORC Macro, 2002.*

It is generally believed that adolescents do not often use health services. However, contrary to belief, more adolescents in Nepal are receiving antenatal services than older women (Figure-13 and 14).

Care at birth

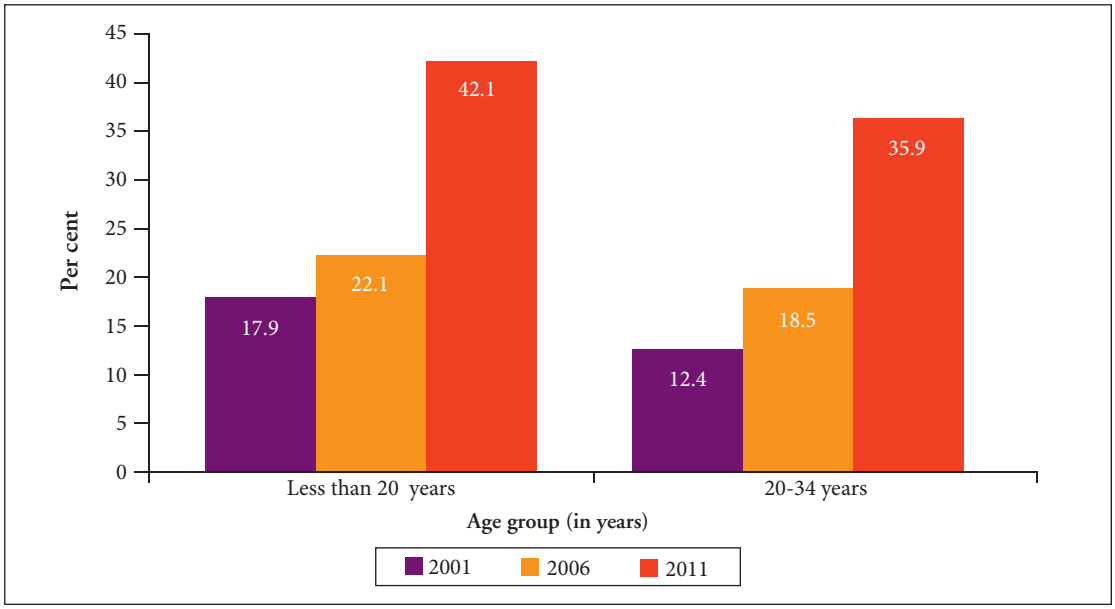
Findings comparing the place of delivery and delivery by skilled birth attendant are similar. Adolescents are more likely to have institutional delivery with assistance of skilled birth attendant (SBA) compared with older women (Figure- 15 and 16).

Figure 15: Trends in proportion of institutional deliveries by age group



Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*
2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*
3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoH, New ERA and ORC Macro, 2002.*

Figure 16: Trends in proportion of adolescents who had their deliveries by skilled birth attendants



Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*
2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*
3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoH, New ERA and ORC Macro, 2002.*

5. Determinants of health care-seeking behaviour of adolescents

Autonomy

Personal autonomy is known to be a key determinant of a woman's ability to seek reproductive health services. DHSs 2006 and 2011 show that adolescent women have relatively less autonomy than older women in making health care decisions, including decisions related to pregnancy care (Table-8). However it has improved over the five years period. Husbands and mothers-in-law play a dominant role in such decision-making, according to the DHS reports.

Table 8: Trends in women's participation in decision making

Age group (in years)	Proportion of who make decisions for own health care		Proportion of who participate in none of the decisions	
	2006	2011	2006	2011
15-19	17.0	35.2	71.1	60.1
20-24	37.1	53.1	47.4	39.4

Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoHP, New ERA and ICF International, 2012.*
2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoHP, New ERA and Macro International Inc., 2007.*

Violence against women

Coercion and domestic violence may limit pregnant women's ability to seek care. Previous reviews found some evidence that such coercion and violence may affect the ability of pregnant adolescents to seek care to a greater degree than older women. DHSs 2006 reported that women age 15-19 years are more likely to accept wife beating than the older women (Table-9) making them more vulnerable to domestic violence.

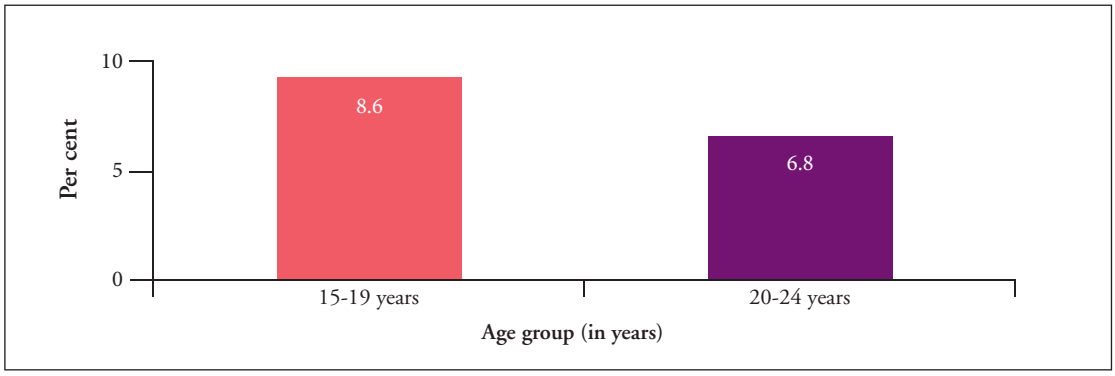
Table 9: Proportion of women who agree wife beating is justified for specific reasons

Age group (in years)	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason
	Burns the food	Argues without him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse	
15-19	3.2	7.7	8.9	20.9	2.5	24.4
20-24	1.9	6.8	7.7	19.7	1.7	22.4

Source: *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 206. Kathmandu: MoPH, New ERA and Macro International Inc., 2012.*

Adolescents are more likely to experience physical violence during pregnancy than older women making them more vulnerable to pregnancy related complications (Figure-17).

Figure 17: Percentage of women who ever experienced violence during pregnancy



Source: *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*

6. Impact of adolescent pregnancy on health outcomes for mothers, newborns and children

Some health risks associated with pregnancy and childbearing are more pronounced among adolescents than among older women due to adolescent physiological and psychological immaturity, lack of adequate antenatal care and safe delivery. Health problems experienced by adolescent mothers are confounded by parity, because first pregnancy and low age often occur simultaneously[6].

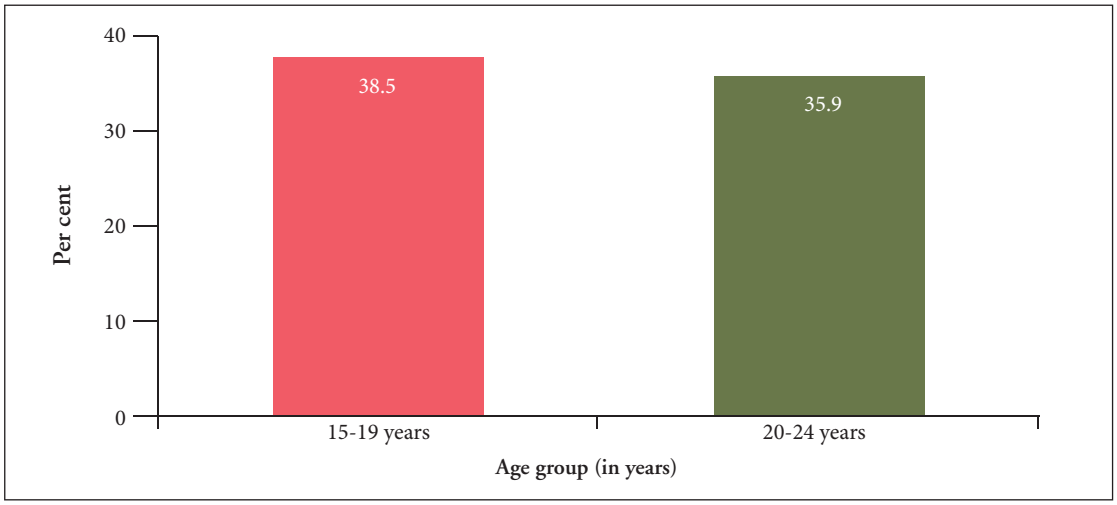
Anaemia

Severe anaemia is one of the important causes of maternal mortality (including adolescents). However there is a scarcity of data on the severity of anaemia and adolescent mortality. The risk

[6]*World Health Organization. Adolescent pregnancy:- Unmet needs and undone deeds. Geneva: WHO, 2007.*

of anaemia is greater for girls during pregnancy because an adolescent's developing body has to compete for nourishment with the foetus, causing rapid depletion in iron and nutrient reserves. The risk of low birth weight (LBW) and pre-term delivery increases among iron-deficient anaemic adolescents. A little less than half the pregnant women in Nepal are anaemic. DHS-2006 reported that 39% of adolescent girls were anaemic. The prevalence of anaemia remained at 38.5% in 2011 (DHS 2011) showing no improvement (Figure-18).

Figure 18: Proportion of anaemia in age groups

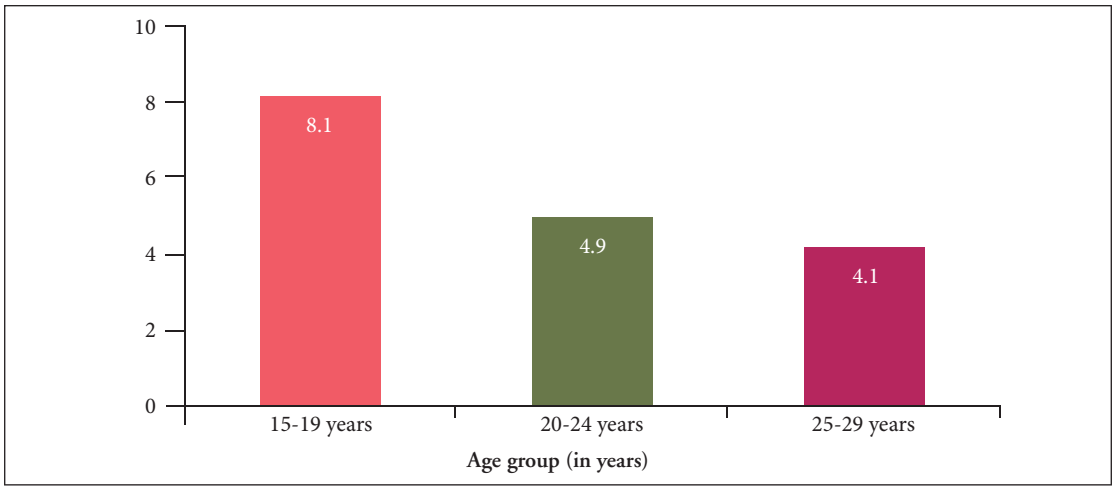


Source: *1. Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*

Maternal mortality

Maternal deaths are defined as any death that occurred during pregnancy, childbirth, or within two months after the birth or termination of a pregnancy. Adolescents tend to have a higher maternal mortality rate than older women. The risk of dying from pregnancy-related causes is almost twice as high for women aged 15–19 years as for women in their early twenties (Figure-19).

Figure 19: Maternal mortality rate per 100 000 women, 2006



Source: *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*

Newborn and child survival

Infants born to adolescent mothers are more likely to be of low birth weight (LBW defined as birth weight <2500 g). According to DHS 2011, 13.4% of women aged less than 20 delivered LBW babies compared with 12.1% of women aged 20-34 years. In adolescents, maternal age is found to be an independent risk factor for pre-term birth and thus for low birth weight. WHO recommends to assure adequate weight gain and nutrient intakes for pregnant adolescents to prevent poor pregnancy outcomes, including low birth weight.

DHSs had shown that adolescent mothers are more likely to deliver small babies at birth in comparison to the older women, though overall proportion has reduced for both the age groups (Table-10).

Table 10: Trends in delivery outcomes according to mothers' age at birth

	Size of child at birth					
	Very small		Smaller than average		Average or larger	
Mother's age at birth →	<20 (%)	20-34 (%)	<20 (%)	20-34 (%)	<20 (%)	20-34 (%)
2001	7.1	5.6	16.9	14.2	75.8	80.1
2006	5.5	5.3	16.1	12.7	78.4	81.9
2011	4.7	3.2	13.4	12.0	81.9	84.7

Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*
2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*
3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoH, New ERA and ORC Macro, 2002.*

Evidence from 2001, 2006 and 2011 DHSs analysis suggest that perinatal, neonatal, infant and under-five mortality rates are much higher when the age of mother is less than 20 as compared to those who are above 20 (Table-11). However, the literature on perinatal mortality shows that stillbirths and early neonatal deaths are multi-causal, having only a weak association with single risk factors such as age, parity and birth interval[7].

[7] *World Health Organization. Adolescent pregnancy: Unmet needs and undone deeds. Geneva: WHO, 2007.*

Table 11: Trends in perinatal, neonatal and under-five mortality rates by women's age at child birth

Years	PMR		NMR		U5MR	
	<20	20-29	<20	20-29	<20	20-29
2001	69.9	39.5	71.2	40.3	133.6	98
2006	51	40	55	32	102	67
2011	48	35	51	32	78	57

Source:
1. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*
2. *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2006. Kathmandu: MoPH, New ERA and Macro International Inc., 2007.*
3. *Nepal, Ministry of Health. Nepal Demographic and Health Survey 2001. Kathmandu: MoH, New ERA and ORC Macro, 2002.*

Abortion

A considerable proportion of pregnancies are either unplanned or unwanted. In Nepal, 7% of abortions occur among adolescents younger than 20 years of age[8]. Abortion was legalized in 2002. In a comprehensive overview of the reproductive health status of women in Nepal, it was estimated that 20% of all women in prison were imprisoned for having an illegal abortion[9]. Some of the conditions of the abortion law made in 2002 include a termination of up to 12 weeks gestation age on request of the woman and termination up to 18 weeks gestation age if the pregnancy resulted from rape. Interestingly, the new law in Nepal does not refuse women an abortion based on their marital status; it does however, require that minors gain third party consent[10].

Kathmandu Maternity Hospital records show that only 4% of adolescents used the services of the hospital for induced abortion. But, about 16% of patients admitted to hospital in Kathmandu in 2003 for post-abortion complications, were adolescents. The proportion of adolescents using Post Abortion Care (PAC) is higher than those using Comprehensive Abortion Care (CAC) (Table-12).

Table 12: Extent of utilization of CAC and PAC services by adolescents

	All ages	Number of adolescent clients (19 years and below)	Adolescents % of all ages
Induced abortion-comprehensive abortion care	1 429	62	4.3
Post abortion care	1 199	186	15.5

Source: *Maternity Hospital, Thapathali. Adolescent Health and Development in Nepal: Status, Issues, Programmes and Challenges: A country Profile 2005. Kathmandu : Department of Health Services, Family Health Division 2004.*

[8] *UNFPA country Support Team for Central and South Asia. The South Asia Conference on Adolescents Kathmandu: UNFPA for CASA, 1999.*

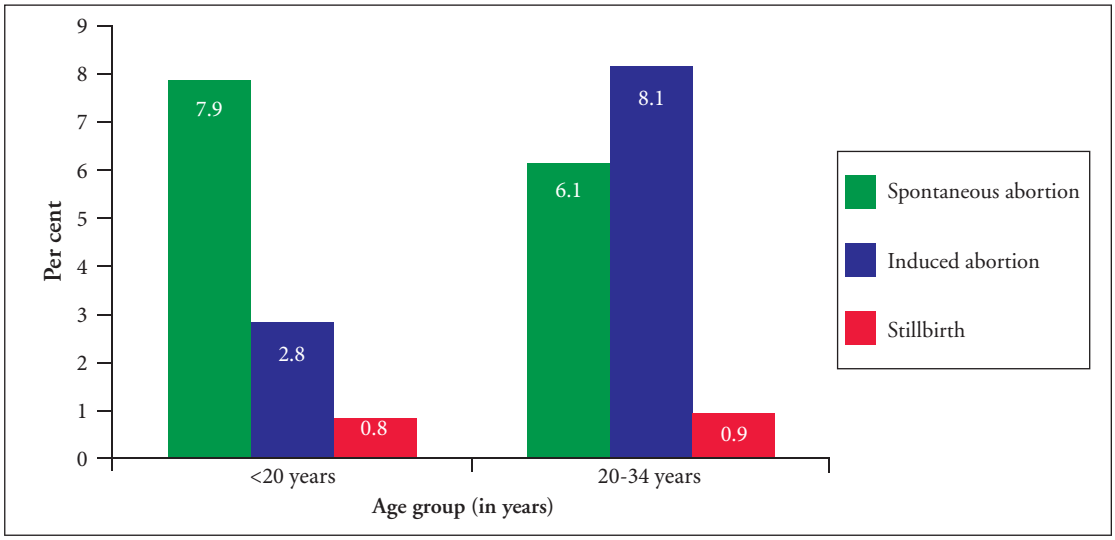
[9] *The Center for Reproductive Rights. Women of the World: Laws and Policies Affecting their Reproductive Rights. South Asia. New York 2004, pg 131.*

[10] *ibid [pg 131].*

It is pertinent that one fifth of all maternal deaths in Nepal are accounted for by adolescents between the ages of 15-19 years and that 5.5% of those ever-married had had an abortion[11]. This shows that even after legalization of abortion, very few adolescents use the available health facilities, but instead resort to induced abortion performed primarily by unskilled persons. Often abortions performed by unskilled practitioners result in complications for which post- abortion care is sought from hospitals. In a study conducted by Puri et al, the methods through which women attempted to induce abortions included taking pills administered by unskilled providers. Others tried to insert roots or sticks covered with cow dung into the uterus[12]. Tamang and Tamang, in their paper, described that women often ingested glass powder to induce abortions[13]. The data from DHS 2011 also show that rate of spontaneous abortion is higher when compared to induced abortion and also induced abortion rates are higher among women below the age of 20 as compared to those aged 20-24 years (Figure-20). However, it has also been reported that women are more likely to report abortions as spontaneous than as induced abortion.

There is no data available on abortions among unmarried adolescents.

Figure 20: Pregnancy outcomes for adolescents versus adult women



Source: *Nepal, Ministry of Health and Population. Nepal Demographic and Health Survey 2011. Kathmandu: MoPH, New ERA and ICF International, 2012.*

[11] *16id pg 142.*
[12] *Puri M, Ingham R, Matthews Z. Factors affecting abortions decisions among young couples in nepal. Journal of Adolescent Health. 2007; 40:539.*
[13] *Tamang A, Tamang J, Availability and acceptability of medical abortion in Nepal: Health care providers' perspectives. Reporductive Health matters. 2005:13 (26):111.*

SRI LANKA

1. Number of adolescents in Sri Lanka

Adolescents (10-19 years) and young people (10-24 years) comprise 15% and 23% respectively of the Sri Lankan population (Table-1). In 2004, the proportion of adolescents was 17% but recently it has declined because of a significant drop in fertility rates.

Table 1: Number and proportion of young people by age and sex in Sri Lanka, 2008

Age group (in years)	Male		Female		Total	
	Number	(%)	Number	(%)	Number	(%)
10-14	790 000	3.8	764 000	3.7	1 554 000	7.4
15-19	823 000	3.9	797 000	3.8	1 620 000	7.8
20-24	838 000	4.0	818 000	3.9	1 656 000	7.9
Total	**2 451 000**	**11.7**	**2 379 000**	**11.4**	**4 830 000**	**23.1**

Source: *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision and World Urbanization Prospects: The 2010 Revision. New York: UN, 2012 - http://esa.un.org/unpd/wpp/index.htm*

2. Adolescent pregnancy

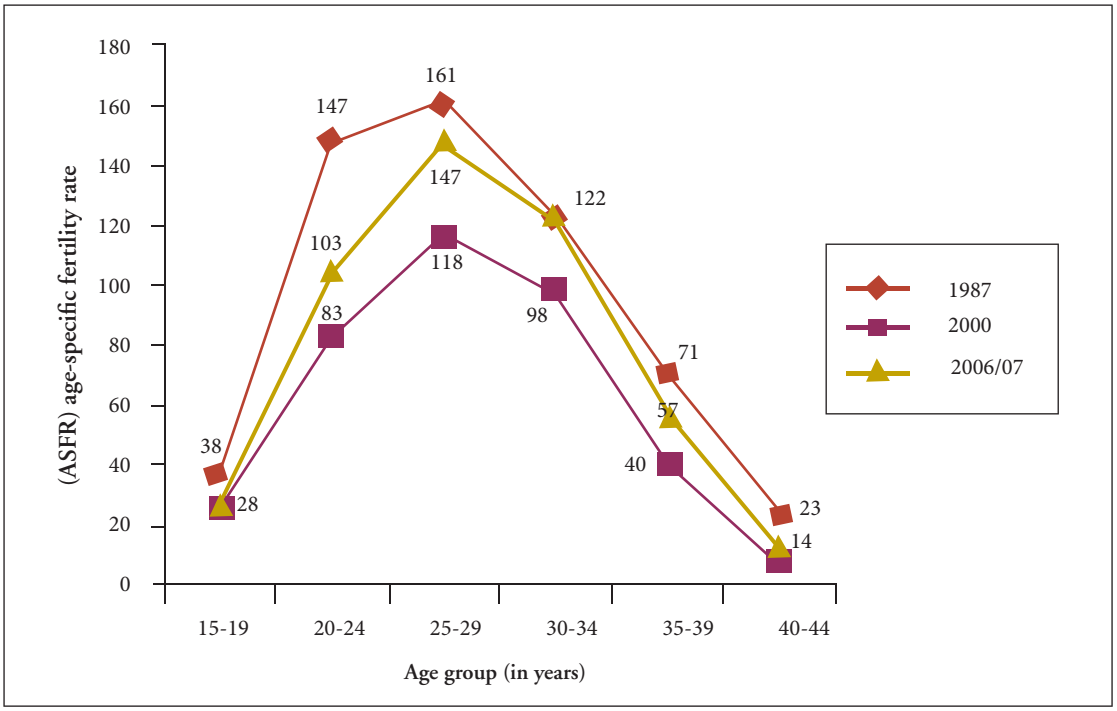
Adolescent fertility

Sri Lanka has experienced a significant decline in fertility. Fifty years ago Sri Lankan women were married at a young age with an average of six births during their life time. But today Sri Lanka has achieved the population replacement level (TFR 2.3). An examination of trends for age-specific fertility from 1987 to 2007 reveals a gradual decline in the fertility rate for all age groups (Figure-1). However, the Sri Lanka Demographic and Health Survey 2006/07 (DHS 2006/07) shows a slight increase in fertility rates for women aged 15-19 years. Future projections of births to adolescents in Sri Lanka nevertheless show a steady decline in fertility though (Figure-2). The DHS 2006-07 also reported (Figure-4) low fertility levels among adolescents in Sri Lanka. The median age at first birth for women aged between 25 and 29 years is 22.6[1]. Low adolescent fertility can be attributed to the higher age at marriage and high literacy rates.

Variations in adolescent pregnancy also exist in different regions of Sri Lanka (Figure-3). Fertility rates are slightly higher in Estate areas (tea growing areas) compared to urban and rural areas.

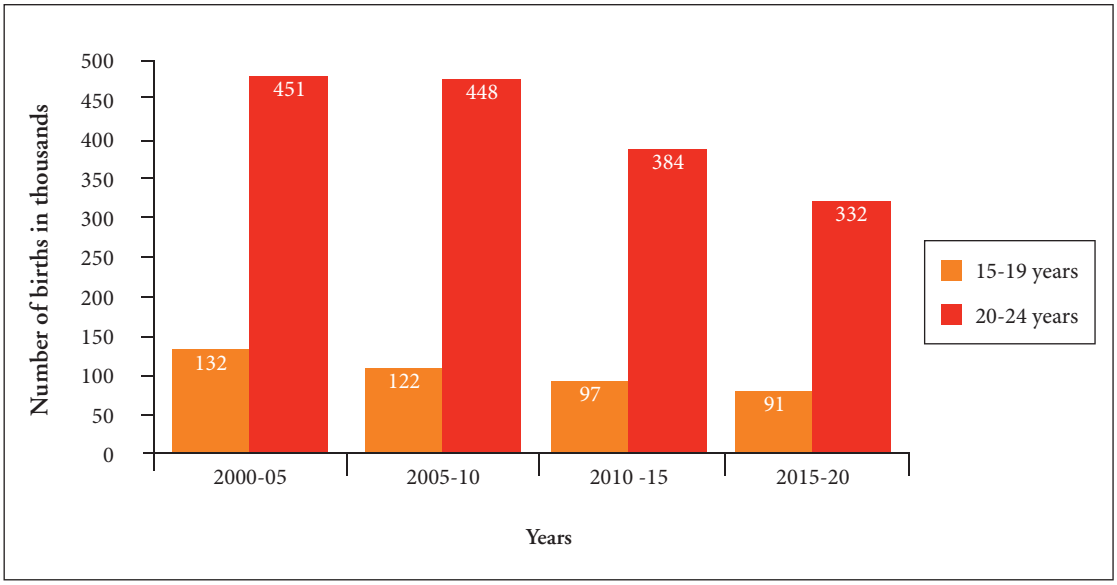
[1]*Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2000. Colombo: Department of Census and Statistic, 2002.*

Figure 1: Trends in age-specific fertility rate (ASFR) in Sri Lanka



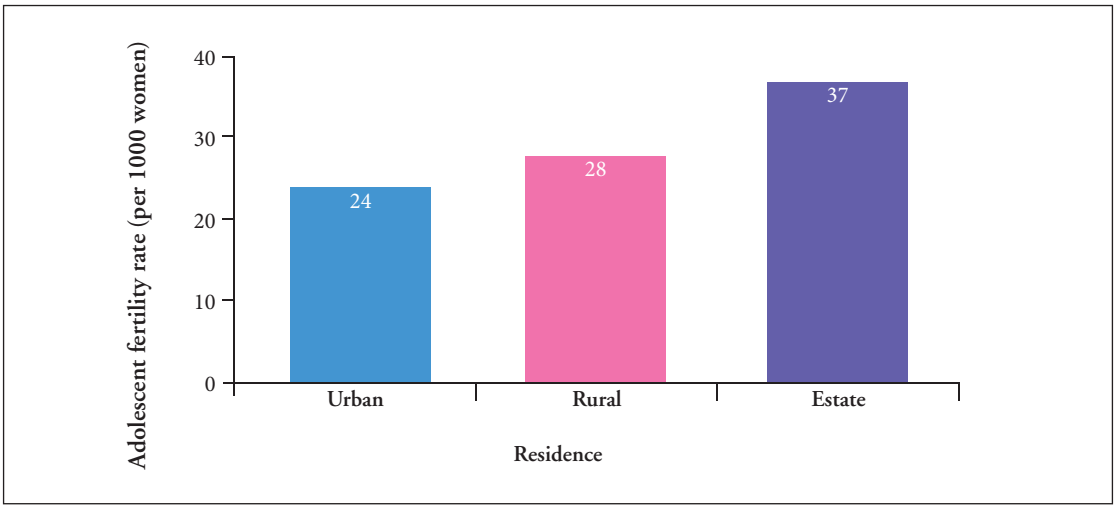
Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*

Figure 2: Births to young people and future projections in Sri Lanka



Source: *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2008 Revision and World Urbanization Prospects: The 2008 Revision. New York: UN, 2009.*

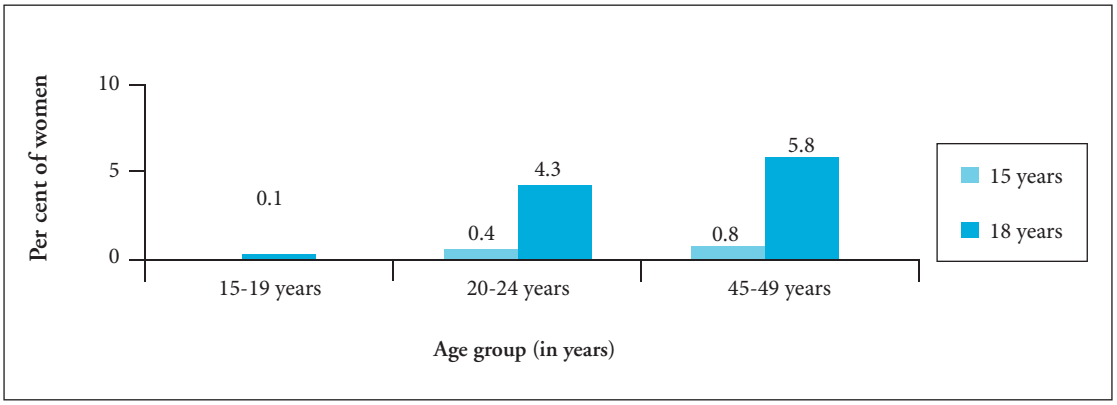
Figure 3: Adolescent fertility rate by residence



Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka Demographic and Health Survey 2006/7. Colombo: Department of Census and Statistics, 2008.*

Age at first birth

Figure 4: Trends in proportion of married women who had their first child by 15 year and 18 year ages



Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*

Overall, only 6% of adolescents age 15-19 years were already mothers or were pregnant with their first child (Table-2). The proportion of women who have started childbearing, increases with age, from less than 1% among 15 year olds to 17% among age 19 year. Women with primary schooling start childbearing earlier than those who have attained higher education.

There is a great variability in adolescent child bearing rates among the districts of Sri Lanka; around 3% of adolescents in Galle had begun childbearing, while in Ampara and Trincomalee the proportion is 16% and 14% respectively (Table-3).

Table 2: Proportion of adolescents age 15-19 years who have begun childbearing

Background		Proportion characteristics who have begun childbearing
Age	15	0.5
	16	1.6
	17	4.5
	18	9.7
	19	16.9
Education		
	No Education	12.9
	Higher	6.3
Wealth quintile		
	Lowest	7.1
	Highest	7.6
Total		**6.4**

Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*

Table 3: Proportion of adolescents age 15-19 years who have begun childbearing in Sri Lankan districts (in descending order)

District	Proportion who have begun childbearing
Ampara	15.8
Trincomalee	14.3
Hambantota	10.8
Moneragala	10.4
Kalutara	10.0
Matara	9.5
Puttalam	9.2
Kurunegala	7.9
Polonnaruwa	7.9
Nuwara Eliya	7.1
Batticaloa	6.8
Matale	5.5
Ratanpura	5.2
Anuradhapura	5.0
Badulla	4.9
Colombo	4.8
Gampaha	4.3
Kandy	4.1
Galle	2.7
Kegalle	-

Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*

Planning of pregnancy among adolescents

DHS 2006-07 data indicates that more births to adolescents were unplanned compared to older age group. About 19% of births to the adolescents were unplanned (4% were not wanted at all while another 15% were mistimed) compared to 16% for the age group of 20-24 years (Table-4).

Table 4: Fertility planning status by women age <20 & 20-24 years

Mother's age at birth (in years)	Wanted then	Wanted later	Wanted no more
< 20	80	15.2	3.9
20-24	83.4	11.9	4.1

Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*

3. Proximate determinants of adolescent pregnancy

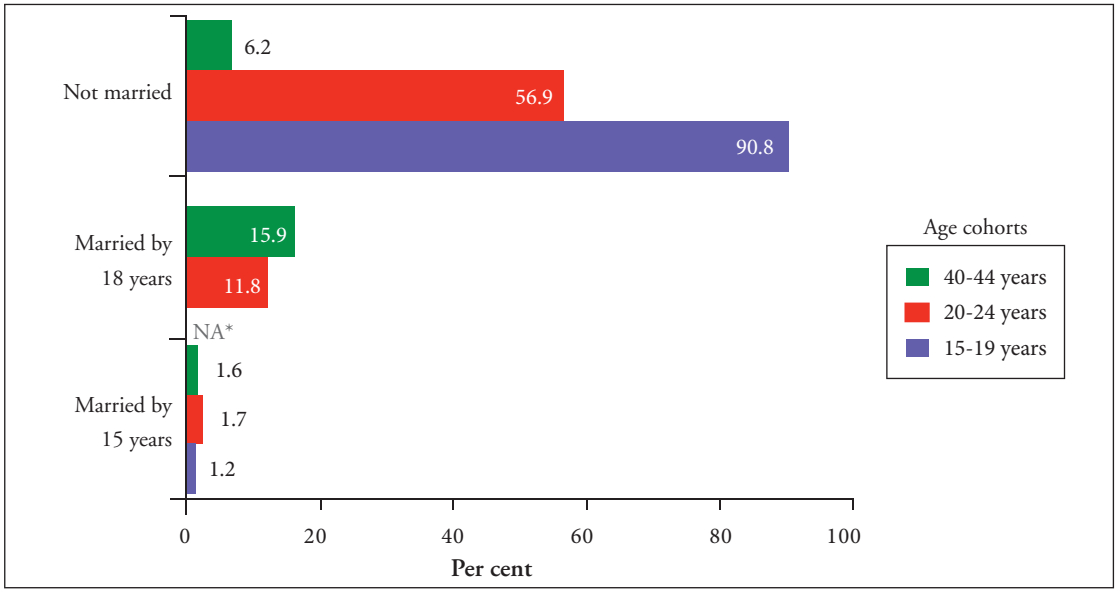
Age at marriage

Age at first marriage is an important indicator that determines the level of fertility, especially in the countries where most of the child births take place within marriage. Although, the median age at first marriage for Sri Lankan women is 23.2 (for 25-29 year olds), 12% of 20-24 year old women marry before the age 18 and less than 2% before 15 (Figure-5). Nevertheless, the proportion of women marrying early has declined. Sri Lanka has been identified as a pioneer among developing countries in Asia for ushering in a change in the marriage pattern – women are marrying not at puberty but a decade after that[2].

The reason for this high age of marriage can be attributed to the high level of education for girls. However the reverse may also be true: as girls get married late, they are also getting an opportunity to further their education.

[2]*De Silva, W.I. The Ireland of Asia: Trends in marriage timing in Sri Lanka,Asia-Pacific Population Journal,1997 12(2):3-24.*

Figure 5: Proportion of women among current age cohorts of women married at the age of 15 year and 18 year



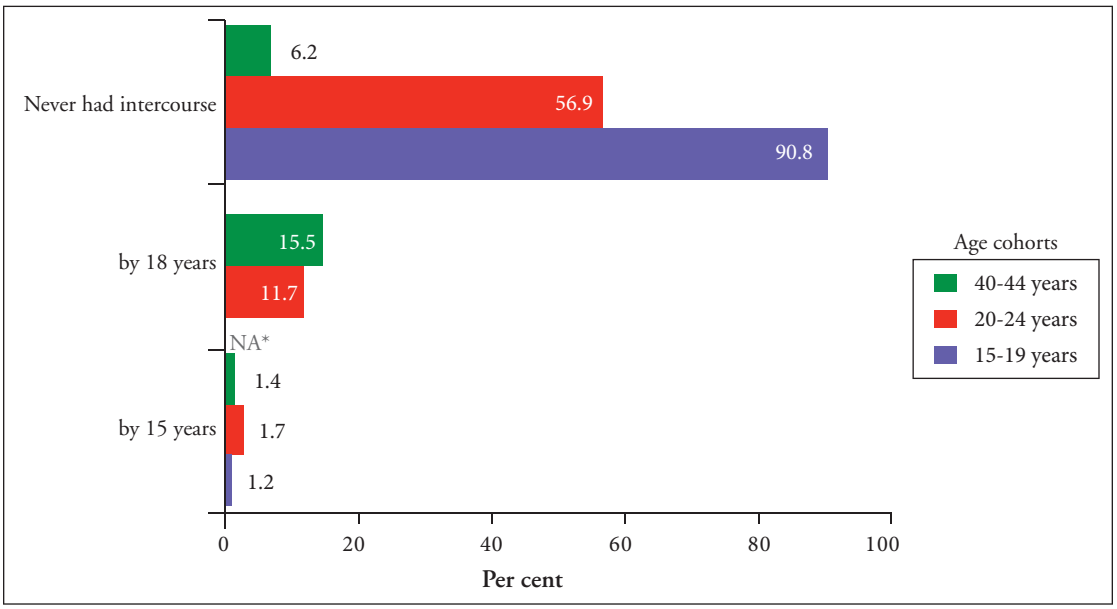
**NA-not applicable due to censoring*

Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*

Sexual activity

Sri Lanka DHS 2006-07 reported that patterns in age at first sexual intercourse are similar to those for age at first marriage (Figure-6), suggesting that women have their first sexual intercourse within marriage.

Figure 6: Proportion of women with first sexual intercourse at the age of 15 years and 18 years amongst current age cohorts



**NA-not applicable due to censoring*

Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*

However, another survey done in 2004 showed that the age of sexual debut for males was around 15.3 years of age and 14.4 years for females[3]. Young people tend to be more likely to indulge in premarital sexual behaviour with the steady increase in the gap between the average age at menarche (onset of menstrual periods) and average age at marriage. The prevalence of heterosexual experience was 14% among adolescent boys and 2% among girls of that age group (Table-5). A higher incidence of sexual experience was reported among out-of-school adolescents. Although the proportion may appear small, they represent a sizable number of the population, exposing adolescents to the risk of unwanted pregnancy and stressing the need to provide information and reproductive health services specific to this group.

Table 5: Prevalence of sexual intercourse among adolescents in Sri Lanka, 2004

	School-going adolescents			Out-of- school adolescents
	Male	Female	All	
% who had friends having heterosexual relationship	40.1	10.7	20.5	NA
% who ever had heterosexual relationship	13.9	2.2	6.1	22.2

Source: *National survey on emerging issues among adolescents in Sri Lanka: UNICEF Sri Lanka (10-19-years age group)-http://www.unicef.org/srilanka/Full_Report.pdf*

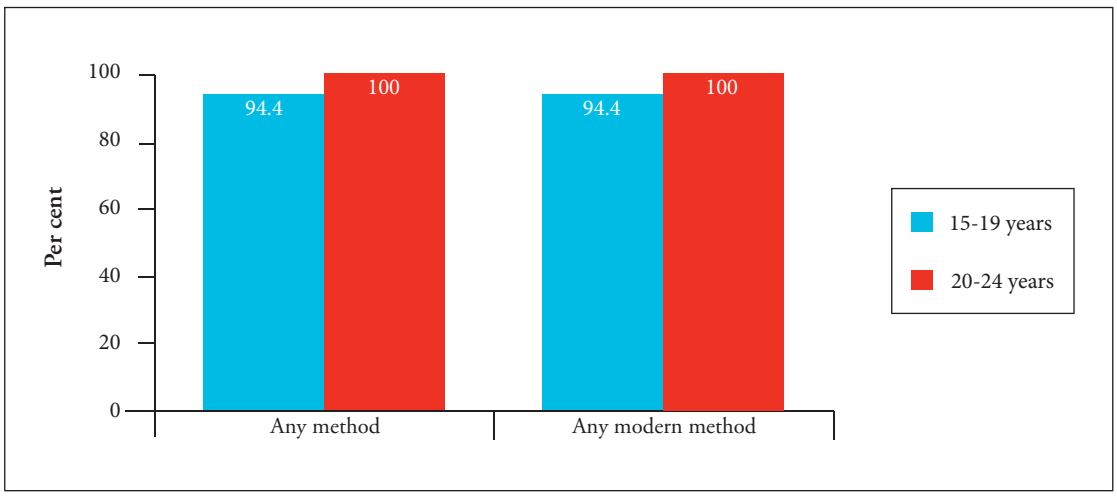
Contraception

Knowledge of contraception, i.e. knowing of at least one modern method of averting pregnancy is universal among women aged 20-24 years who were ever married and is 94% among the 15-19 years age group (Figure-7). However, another national survey of young people aged 10-19 years, conducted by UNICEF in 2004[3] showed that only 28% of 14-16 years olds and 64% of 17-19 years olds had ever heard of modern contraceptive methods. In general, more boys were aware of contraceptive methods than girls. Knowledge of contraception was found to be better among out-of-school adolescents than among those in school.

There is a large gap between knowledge levels and actual use of contraceptives. Less than half of the young population is using modern contraceptives (Figure-8). Adolescents are less likely to use contraceptives than older women. However, the use of contraceptives, especially among currently married adolescents, has been increasing significantly over a period of fourteen years.

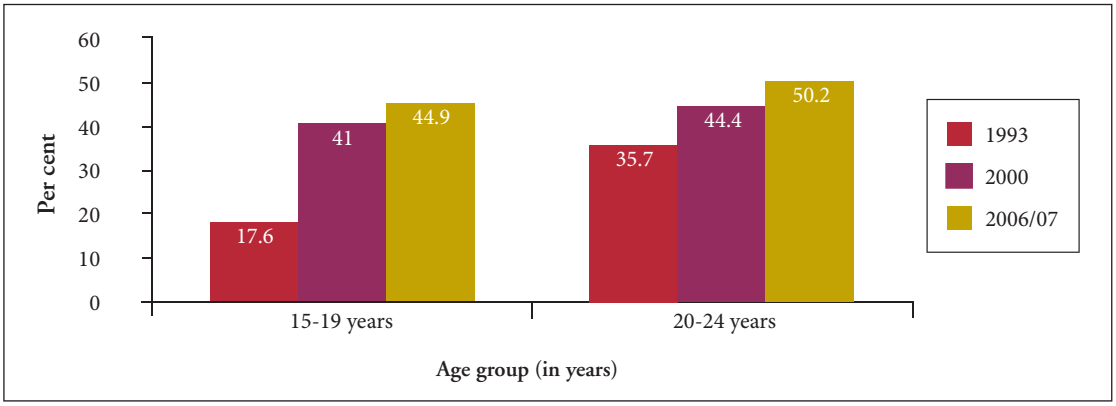
[3]*National survey on emerging issues among adolescents in Sri Lanka: UNICEF Sri Lanka (10-19-years age group). http://www.unicef.org/srilanka/Full-Report.pdf*

Figure 7: Proportion of youth in Sri Lanka having knowledge of contraceptive methods, 2000



Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2000. Colombo: Department of Census and Statistic, 2002*

Figure 8: Trends in use of any modern contraceptives by young people (year 1993 - 2007)



Source:
1. *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*
2. *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2000. Colombo: Department of Census and Statistic, 2002.*
3. *Department of Census and Statistics (DCS), Ministry of Finance and Planning, Sri Lanka. Sri Lanka Demographic and Health Survey 1993. Colombo: Department of Census and Statistics, 1994.*

Unmet need for family planning

Although the total demand satisfied is very high (79.7%) in Sri Lanka, the unmet need for family planning is the highest among adolescents (14%) (Table -6), compared to older women and to the national average (7%).

Table 6: Need and demand for family planning services by currently married adolescents

Current age (in years)	Unmet need for family planning			Met need for family planning			Total demand for family planning services			Demand satisfied
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total	
15-19	12.9	1.0	13.9	48.7	5.0	53.7	62.3	6.0	68.3	79.7
20-24	9.7	1.7	11.4	50.2	8.4	58.6	60.6	10.1	70.6	83.9

Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*

4. Essential care interventions during pregnancy

Antenatal care and care at birth

DHS 2006/07 showed that almost all the mothers, irrespective of their age, had seen a health professional at least once for antenatal care for their most recent birth (Table -7). Similarly nine in 10 women of all ages are protected against tetanus during their pregnancy. Likewise having delivery in a health facility is a common practice. However, women below 20 years received more tetanus toxoid injections than older women.

Table 7: Proportion of antenatal care received by mothers aged <20 year & 20-34 years.

All values are in percentage

Mother's age at birth (in years)	Antenatal care from a skilled provider	Women who received two or more tetanus toxoid injections during last pregnancy	Deliveries by health professionals	Delivered in health facility
<20	98.8	84.4	98.1	97.3
20-34	99.5	48.3	98.6	98.4

Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*

Postnatal care

Timing of postnatal check-up is also critical for the mother and infant as most maternal and neonatal deaths occur during the postnatal period following the delivery. DHS 2006-07 reported that adolescent mothers (<20 years) were more likely to get an early postnatal check-up (within 4 hours of delivery) compared to women in the older age group (Table -8). However, marginally higher proportion of adolescent mothers (<20 years) did not get any postnatal check-up.

Table 8: Timings of first postnatal check-up by mother age <20 year & 20-34 years.

Mother's age (in years)	<4 hours	4-23 hours	2 days	No postnatal check-up
< 20	70.3	12.8	10.1	4.3
20-34	68.1	15.6	6.8	3.4

Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*

5. Determinants of health care-seeking behaviour of adolescents

Problems in accessing health care

Many factors prevent women, especially adolescent women from accessing medical care for themselves when sick, and particularly meeting their reproductive health needs (before and after pregnancy). Some of the important factors include autonomy of women, freedom of movement, decision making powers, educational attainments and violence against women. All these can have profound impact on their ability and willingness to access medical care during antenatal period or should any problems occur during the pregnancy. Table 9 shows that adolescents are more likely to face at least one major problem (almost 58%) in accessing medical care than older women. As it is also evident from the table, the main obstacle cited by the adolescents is that they are reluctant to go alone.

Table 9: Proportion of women having a problem in accessing health care facilities in Sri Lanka

All values are percentage

Age group in years	Getting permission to go for treatment	Getting money for health treatment	Distance to health facility	Problem of transport	Not wanting to go alone	Concern no female provider available	Concern no provider available	Concern no drugs available	At least one of the in accessing health care
15-19	5.8	20.9	23.5	22.7	36.7	14.0	10.4	10.6	57.5
20-34	3.1	18.8	18.5	18.9	23.7	8.1	8.6	9.6	46.8

Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*

Women's empowerment and violence against women

Women's empowerment is known to be a key determinant of a woman's ability to seek reproductive health services during pregnancy. Lack of authority to take decisions and the prevalence of domestic violence, prevents women from timely access to reproductive health care facilities, resulting in serious health consequences both for the adolescent as well as the unborn child. Adolescents though slightly less empowered to take independent decision to seek health care compared to the older women in the age group 20-24 (Table-10), were less likely to approve domestic violence.

Table 10: Women's empowerment and violence against women in Sri Lanka

Women's age (in years)	Women who can make decision about their own health care	Women who agree with at least one reason towards wife beating
15-19	68.6	54.4
20-24	71.2	55.6

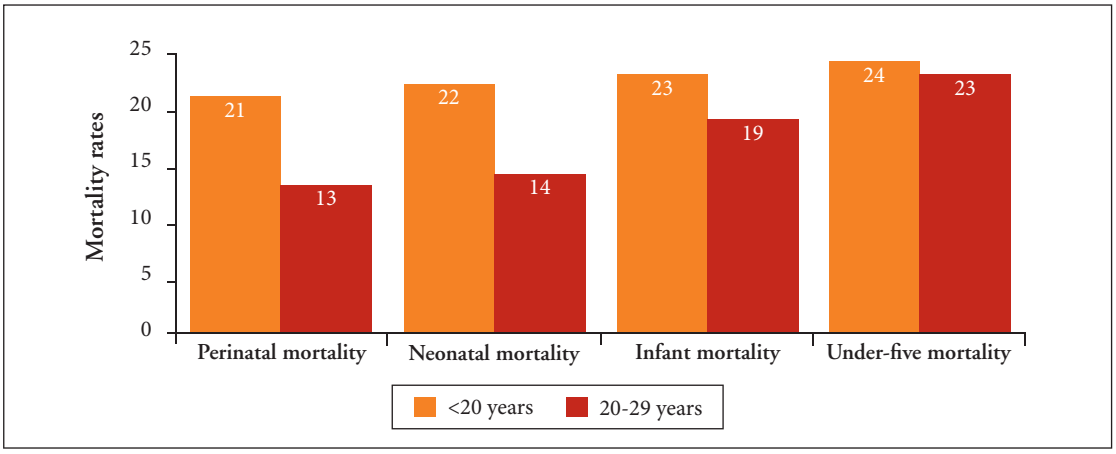
Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*

6. Impact of adolescent pregnancy on health outcomes for mothers, newborns and children

Newborn and child survival

Infant and young child mortality levels are low in Sri Lanka. However, surveys have shown that children born to women below 20 years of age are at higher risk of dying within the first month of birth (Figure-9). Child mortality levels are also the highest in the case of young mothers below 20 years of age.

Figure 9: Perinatal, infant and under-five mortality rates classified by mother's age at birth in Sri Lanka, 2006-07



Source: *Sri Lanka, Ministry of Health Care and Nutrition. Sri Lanka demographic and health survey 2006/7. Colombo: Department of Census and Statistic, 2008.*

Abortion

In Sri Lanka, abortion is only permitted if the woman's life is at risk. A woman may be sentenced up to seven years imprisonment and the payment of a fine if she is found to have conducted an illegal abortion. A woman may also face these punishments if she is 'quick with child'; that is, if she was in an advanced stage of pregnancy where there is a perception of foetal movement. Furthermore, abortions are not permitted on the grounds of incest or rape[4].

[4] *Olsson P, Wijewardena K. Unmarried women's decisions on pregnancy termination: Qualitative interviews in Colombo, Sri Lanka. Sexual and Reproductive Healthcare 2010; pg 136*

There is some evidence to suggest that between 150 000 to 175 000 induced abortions are performed every year and the typical demographic profile of a woman seeking an abortion includes being married, hailing from a rural area and already having children. It is estimated that 5% of all maternal deaths are due to the complications of a pregnancy termination. With regards to national estimates, one small study suggests that young people between the ages of 15 to 25 constitute 19% of all those women who have unsafe abortions in the nation[5].

Unfortunately there is little data indicating the occurrence of abortion among unmarried women on a national scale. One study, however, suggests that 10-13% of abortions in reproductive health centres in Colombo, the Sri Lankan capital, are performed on unmarried women[6].

[5] *Agampodi SB, Agampodi TC, UKD P. Adolescents perception of reproductive health care service in Sri Lanka. BMC Health Services Research 2008;8:98. doi: 10.1186/1472-6963-8-98-http://www.biomedcentral.com/1972-696318/98-accessed 11 June 2013.*

[6] *Olsson P, Wijewardena K. Unmarried women's decisions on pregnancy termination: Qualitative interviews in Colombo, Sri Lanka. Sexual and Reproductive Health care 2010; pg 136.*

THAILAND

1. Number of adolescents in Thailand

There are more than 10 million adolescents making up 15% of the total population in Thailand (Table-1). The dramatic decline in fertility rates in the last three decades has changed the age structure of the Thai population with numbers and proportions in the young age groups, steadily declining. In 2005, there were 10.8 million adolescents in Thailand. It is projected that in 2030 this age group will number 9.4 million[1].

Table 1: Number and proportion of young people by age and sex in Thailand, 2010

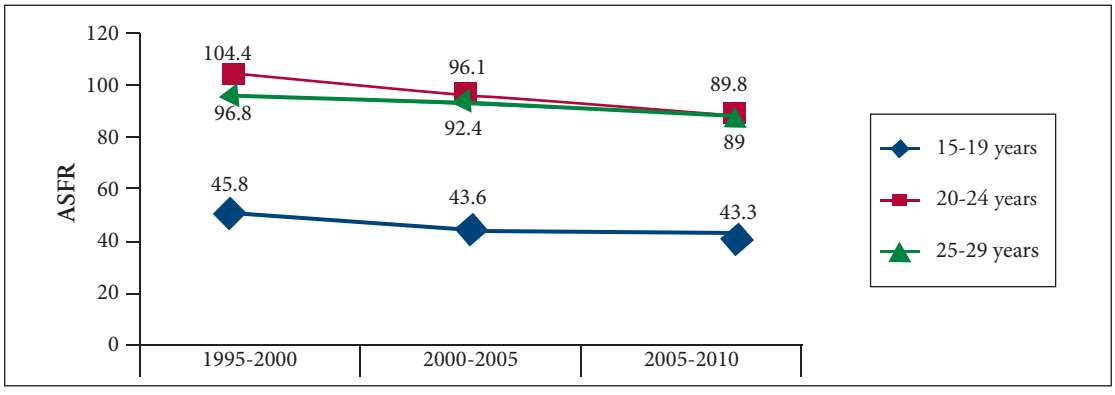
Age group (in years)	Male		Female		Total	
	Number	(%)	Number	(%)	Number	(%)
10-14	2 579 000	3.7	2 456 000	3.6	5 035 000	7.3
15-19	2 674 000	3.9	2 558 000	3.7	5 232 000	7.6
20-24	2 668 000	3.9	2 569 000	3.7	5 237 000	7.6
Total	**7 921 000**	**11.5**	**7 583 000**	**11.0**	**15 504 000**	**22.5**

Source: *United Nations, Department of Economic and Social Affairs, Population Division World Population Prospects: The 2010 Revision. New York:UN, 2011 -http://esa.un.org/unpd/wpp/index.htm*

2. Adolescent pregnancy

Fertility has declined across all age groups, including adolescents (Figure-1). However, adolescent fertility levels remain considerable. It is estimated that about 487 000 adolescent girls aged 15-19 years gave birth in the period of 2005-2010 in Thailand, which is about 11% of total births[1].

Figure 1: Trends in age specific fertility rate (ASFR)

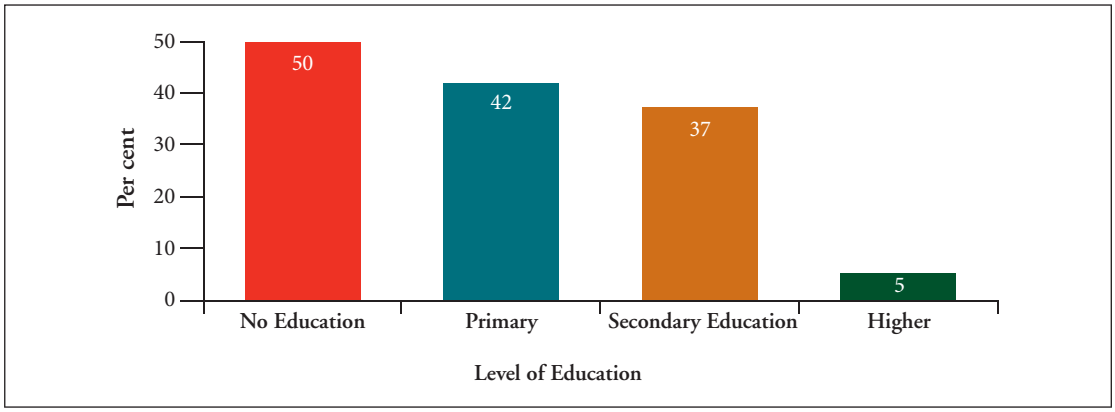


Source: *United Nations, Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2010 Revision. New York: UN, 2011 - http://esa.un.org/unppd/wpp/index.htm*

[1] *United Nations, Department of Economic and Social Affairs, Population Division World Population Prospects: The 2010 Revision. New York: UN, 2011- http://esa.un.org/unppd/wpp/index.htm*

Teenage pregnancy is ten times higher among adolescents with no education compared with adolescent with higher education (Figure-2)

Figure 2: Women who had their first pregnancy when they were less than 20 years old by level of education



Source: *National Statistical office Thailand Multiple Indicator Cluster Survey, 2005 – 06 Final Report. Bangkok, 2006*

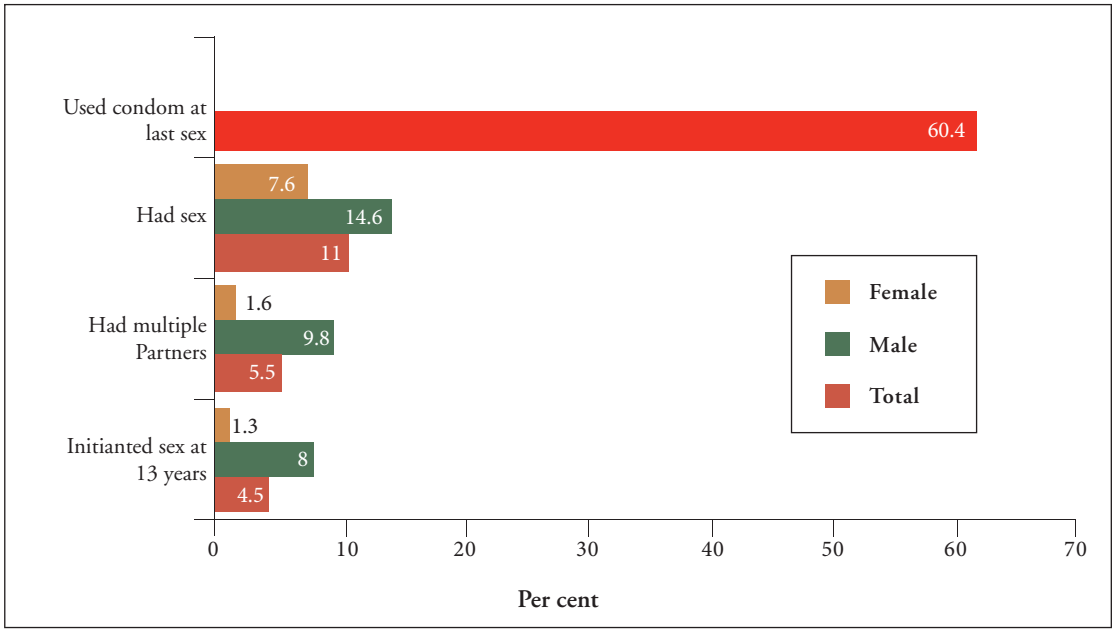
3. Proximate determinants of adolescent pregnancy

The principal factors that affect an adolescent woman of becoming pregnant are marriage, sexual intercourse and contraception.

Sexual activity

Behavioural data from different surveys and studies reveal that youth in Thailand engage in sexual activities in early adolescence. The Global school-based student survey (GSHS) 2008 revealed that overall, 11.0% of students had sexual intercourse during the past 12 months of the survey. Among those who reported having had sex almost 15% were males while 8% were females. Almost 5% of students initiated sexual intercourse when they were 13 years old or younger. Male students (8.0%) were significantly more likely than female students (1.3%) to initiate sexual intercourse when they were 13 years old or younger. Overall, 5.5% of students had sexual intercourse with multiple partners (i.e., two or more) during their life. Almost 10% of male students had sex with multiple partners compared to 2% of females (Figure-3).

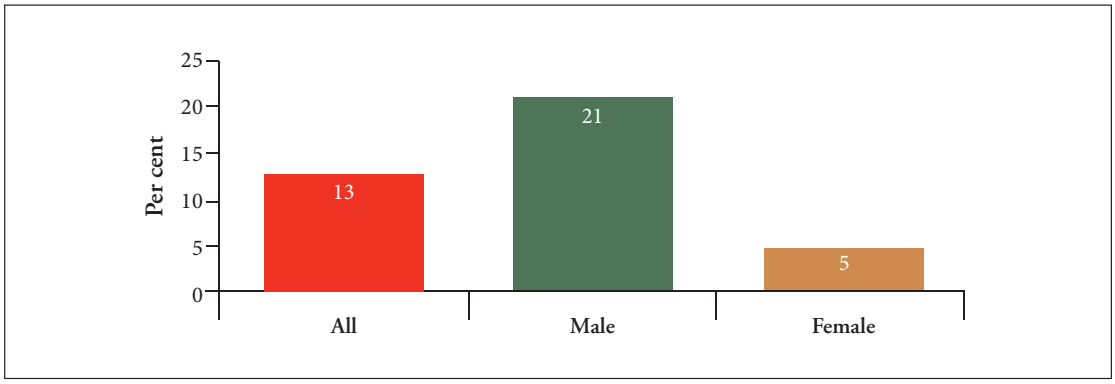
Figure 3: Sexual activity among school students aged 13-15 years (2008)



Source: *Centers for Disease Control and prevntion.The Global School-based Student Health Survey (GSHS) in Thailand, Bangkok, 2008.*

Sexual debut before the age of 15 years is also increasing. Thirteen percent youth reported having sex before the age of 15 years in 2006. Higher proportion of young men reported earlier exposure to sexual activities 21% as compared to young women (5%) (Figure-4).

Figure 4: Youth aged 15-24 years who had sex before the age of 15 years (2006)



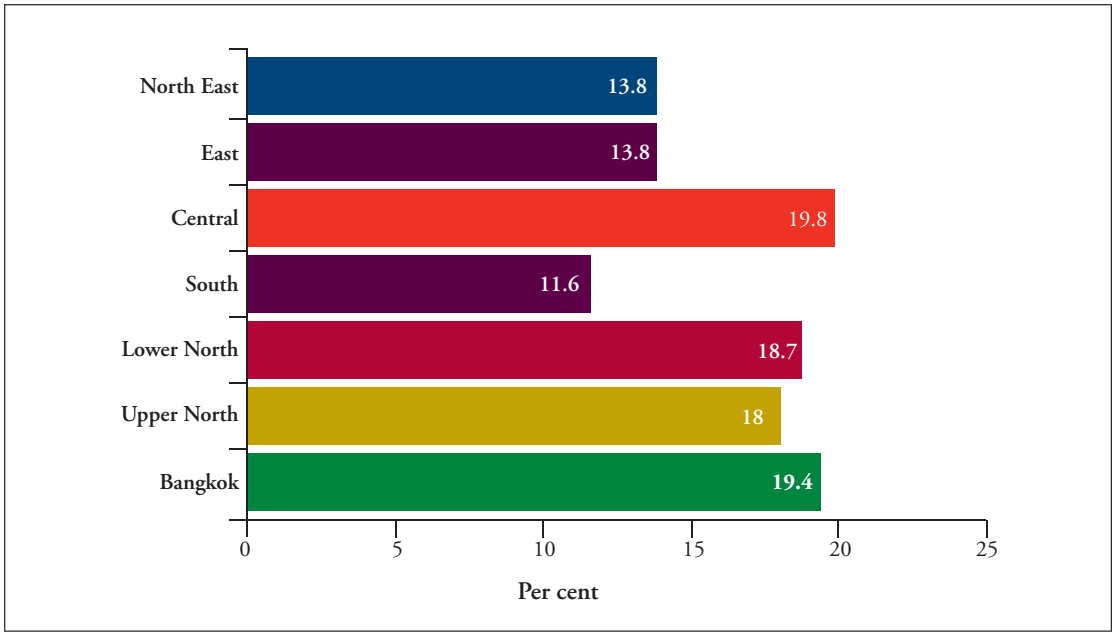
Source: *Chamratrithirong A, kittisuksathit S, Podhisita C,et al.National sexual Behavior Survey of Thailand 2006. Bangkok: Institue For Population and Social Research, Mahidol University, 2007 - http://aidsdatahub.org/dmdocuments/National Sexval-Behavior-survey-of- Thailand-2006.pdf.pdf*

The National Sexual Behaviour survey of Thailand (2006) among youth aged 18-24 years reported about 5% young men and women engaging in sex before the age of 15 years (Figure-4)

The Behavioural Surveillance Survey 2008 among youth in 24 provinces also revealed high proportion of school students reporting a history of sex. Among lower secondary school students (average age 13 years) 3% reported engaging in sexual activities. About 15% to 24% of upper secondary students (average age 16 years) and 37% to 43% of vocational school students (average age 17 years) ever had sex[2].

A behavioural survey conducted among children and youth by the Ramajitti Institute under the Child Watch project in 2008. It revealed varying levels of sexual activity among youth in different provinces (Figure-5). It was the highest in the Central region followed by Bangkok, Lower North and Upper North. South region reported a lower level of sexual activity.

Figure 5: Percentage of youth who had sex by provinces of Thailand (2008)



Source: *Survey of behaviour of in-school children and youth. Child Watch, Ramajitti Institute*

Age at marriage

Marriage is a principal indicator of women's exposure to the risk of pregnancy. Delayed age at marriage directly affects early pregnancy and completed fertility. Very early marriage is not common in Thailand. MICS-3 shows that only 1.7% women aged 15-19 years were married by 15 years of age. However, 20% of women get married by age 18. Smaller proportions of the younger cohorts of women report being married when they were adolescents than do older women, though the difference is very small (Table-2).

[2] *Sirikullsaranurug, Ladda Mo-suwan, Chanpen Choprapawon Differences in Socio-Economic Status, Service Utilization, and Pregnancy Outcomesbetween Teenage and Adult Mothers J Med Assoc Thai, 2006;89(2)*

Table 2: Age at first marriage

All figures are in percentage

Age group (in years)	Age at first marriage	
	By 15 years	By 18 years
15-19	1.7	-
20-24	2.8	19.6
40-44	2.3	20.1

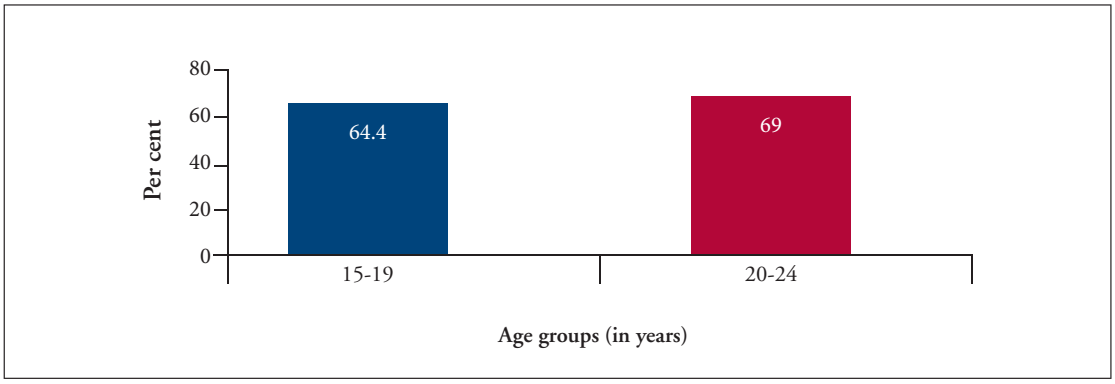
Source: *National Statistical Office Thailand Multiple Indicator Cluster Survey, 2005 – 06 Final Report. Bangkok, 2006.*

Contraception

Contraceptive use is another key proximate determinant of adolescent fertility, though accumulated evidence indicates that the use of family planning by women in this age group is less important as a determinant of their fertility than the age at entry into union.

Contraceptive use among married women in the 15-19 age group is slightly low compared to the levels of use among older women in Thailand (Figure-6). However, contraceptive use in Thailand is the highest in the South-East Asia Region.

Figure 6: Current use of modern contraceptives by married youth



Source: *National Statistical Office Thailand Multiple Indicator Cluster Survey, 2005 – 06 Final Report. Bangkok,2006.*

4. Essential care interventions during pregnancy

For routine antenatal care, WHO recommends four visits during the pregnancy (at 16 weeks, between 24 and 28 weeks, at 32 weeks and at 36 weeks) with specific activities during each visit.

Information on number of antenatal visits is not available. Obstetric and neonatal outcomes can be improved if comprehensive antenatal care emphasizing the specific medical, nutritional, and social

aspects of adolescence is available. MICS-3 reported that antenatal care services are used by almost all pregnant women, though slightly less so by adolescents (Table-3).

In addition to receiving adequate antenatal care, WHO recommends assistance from a skilled birth attendant during delivery. In Thailand, a large majority of women are delivering in health facilities assisted by skilled birth attendants (Table-4).

Table 3: Antenatal services used by women in Thailand among women receiving antenatal care

Age group (in years)	Proportion of women who utilized antenatal services once or more times	Among women who received ANC for their most recent birth, the			
		Weighed	Blood pressure measured	Urine sample taken	Blood sample taken
15-19	97.5	97.5	97.5	97.5	96.5
20-24	99.2	99.2	99.2	98.3	98.7

Source: *National Statistical Office Thailand Multiple Indicator Cluster Survey, 2005 – 2006. Final Report. Bangkok, 2006*

Table 4: Place of delivery and births by skilled birth attendant

Age group (in years)	Institutional delivery	Delivery by skilled personnel
15-19	98.2	98.1
20-24	97.4	97.9

Source: *National Statistical Office Thailand Multiple Indicator Cluster Survey 2005 – 2006: Final Report. Bangkok, 2006.*

5. Impact of adolescent pregnancy on health outcomes for mothers, newborns and children

Consequences of adolescent pregnancy include effects on health and the social and economic well-being of adolescents and their children.

Newborn and child survival

Epidemiological studies in large populations have shown an increased incidence of low birth weight (LBW) in infants born to adolescent mothers, compared to infants of mothers in their twenties. One study showed that the percentage of low-birth weights for teenage and adult mothers were 15% and 9% respectively[2]. A higher percentage of teenage mothers had more abnormal deliveries in comparison with adult mothers.

[2] *Sirikullsaranurug, Ladda Mo-suwan, Chanpen Choprapawon Differences in Socio-Economic Status, Service Utilization, and Pregnancy Outcomesbetween Teenage and Adult Mothers J Med Assoc Thai, 2006;89(2)*

Abortion

In 2010 it was suggested that the leading cause of adolescent admission into hospital was pregnancy-related (34.4%)[3]. Furthermore, a high rate of induced abortion is reported among young people in Thailand. A study carried out in 1999 in government hospitals revealed that out of 13 090 women with induced abortion, 47% occurred in women age less than 25 years old, of which 21% were adolescents having little or no access to contraception (Table-5). From a study conducted by Warakamin et al, it was shown that more than 61% of women less than 25 years of age, of whom 30% were adolescents, had their abortion performed outside the hospital[4]. Only 29% of abortions outside the health facility were done by health personnel such as a physician, obstetrician, nurse or midwife. Significantly, higher complications were caused by unqualified personnel, midwives and providers of unknown status (Table-6).

Table 5: Proportion of abortions by socio-demographic differentials

Age group (in years)			Education (Grade)			Living status		Parental marital status	
13-14	15-19	20-24	0-4	5-10	> 10	With father/ mother/ both	With others/ alone	Having relationship	No relationship
9.4	34.4	56.3	12.5	46.9	40.6	43.8	56.3	46.9	53.1

Source: *Naravage W, Vichit-Vadakan N, Sakulbumrungsil RC, Van der Putten M. Factors affecting decision making of low-income young women with unplanned pregnancies in Bangkok, Thailand. Southeast Asian J Trop 2005 Med Public Health; 36 (3): 776.*

In a recent and highly comprehensive study in which data were collected from three of the country's largest health systems, it was revealed that 11 622 adolescent abortions were conducted, of which 95% were accounted for by women age 15-19 years olds. Out of all the data gathered, adolescent abortions constituted 18% of all abortions in the study population[5]. Shockingly, the data also revealed that five pregnancies occurred in girls under 10 years of age and that only two resulted in abortions. The data presented in this study identified a trend that one in four (for children 10-14 years of age) and one in seven (for children 15-19 years) who fall pregnant have an induced abortion[6].

[3] *Areemit R, Thinkhamrop J, Kosuwon P, Kiatchoosakun P, Sutra S, Thepsuthammarat K. Adolescent pregnancy: Thailand's National Agenda. J Hot Bold Med Assoc Thai 2012; 97 Suppl 7: 134.*

[4] *Warakamin S, Boonthai M. Tangcharoensathien V. 2004. "Induced abortion in Thailand: Current situation in public hospitals and legal perspectives". Reproductive Health Matters 2004:12 (24 Supplement): 147-156.*

[5] *Areemit R, Thinkhamrop J, Kosuwon P, Kiatchoosakun P, Sutra S, Thepsuthammarat K. Adolescent pregnancy: Thailand's National Agenda. J Med Assoc Thai 2012; 97 Suppl 7: 134*

[6] *Ibid pg 139*

Another study conducted by Naravage et al showed that 40.5% of illegal abortions in Thailand are performed on unmarried[7].

More than 87% of girls who had their pregnancy terminated were educated from 5th to 10th grade or beyond 10th grade and over half of them were living with others or alone or whose parents had no relationship (Table-5).

There is evidence to suggest that high rates of adolescent pregnancy and abortions are associated with a lack of knowledge of contraceptive use by unmarried women and society's perception that contraception is not required by unmarried women. Furthermore, those women who are engaged in pre-marital sex rely heavily on condoms and other methods with high failure rates[8].

Table 6: Situation of abortion in Thailand, 2004

Age group (in years)	Spontaneous abortion (%)	Induced abortion (%)	Abortions done by physician in hospital (%)	Abortions done outside hospital (%)
<15	0.3	0.7	1	1
15-19	14	20	7	29
20-24	25	26	18	31
25-29	24	20	28	16

Source: *Warakamin S, Boonthai M. Tangcharoensathien V. 2004. "Induced abortion in Thailand: Current situation in public hospitals and legal perspectives". Reproductive Health Matters 2004:12 (24 Supplement): 147-156.*

[7] *Naravage W, Vichit-Vadakan N, Sakulbumrungsil RC, Van der Putten M. Factors affecting decision making of low-income young women with unplanned pregnancies in Bangkok, Thailand. Southeast Asian J Trop Med Public Health 2005; 36 (3): 776*

[8] *Whittaker A. Reproducing inequlaites: Abortions policy and practice in Thailand. Women & Health 2002;35(4):101-119.*

TIMOR-LESTE

1. Number of adolescents in Timor-Leste

Around 296 000 adolescents (aged 10-19) constitute more than one-fourth (26.3%) of the total population in Timor-Leste (Table-1). In this age group, there are more males than females, 13.4% versus 12.9%. Contrary to the trends in the other countries in the region (except India and Sri Lanka), adolescent population in Timor-Leste is projected to considerably increase (by about 63%) as per the estimates for 2030[1].

Table 1: Number and proportion of young people classified by age and sex in Timor-Leste, 2010

Age group (in years)	Male		Female		Total	
	Number	(%)	Number	(%)	Number	(%)
10-14	83 000	7.4	80 000	7.1	163 000	14.5
15-19	68 000	6.0	65 000	5.8	133 000	11.8
20-24	50 000	4.5	47 000	4.2	97 000	8.7
Total	**201 000**	**17.9**	**192 000**	**17.1**	**393 000**	**35.0**

Source: *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision. New York : UN, 2011 http://esa.un.org/unpd/wpp/index.htm-.*

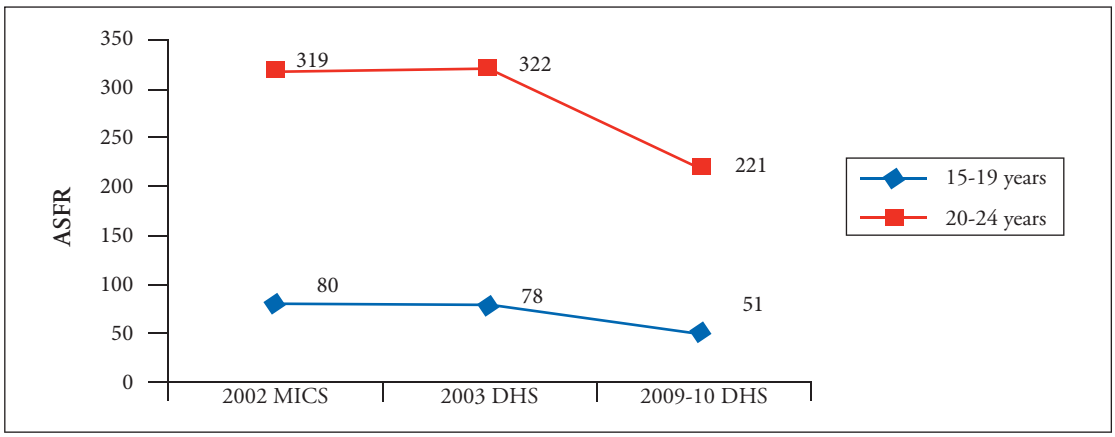
2. Adolescent pregnancy

Adolescent fertility

Although fertility rates are very high in Timor-Leste, adolescent pregnancy rates in the country are comparatively low. An estimated 19 000 births (8.3% of total births) are attributed to adolescents between the age 15 and 19 for the period 2010-2015[1]. Adolescent fertility rates gradually decreased from 80 in 2002 to 51 in 2009-2010 (Figure-1). There is a decline in adolescent fertility over the last 2–3 decades in the South-East Asia.

[1] *United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision, New York: UN, 2011- http://esa.un.org/unpd/wpp/index.htm-.*

Figure 1: Trends in age-specific fertility rates (ASFR) for youth in Timor-Leste, 1996-2009



Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Macro, 2010.*

Age at first birth

Timor-Leste Demographic Health Survey (TLDHS) 2003 reported that the median age at first birth for women aged 20-24 years was 20.7 years and 22.8 years for the oldest women age group (40-44 years olds) (Table-2). The median age at first birth for oldest age group has slightly reduced to 22.5 years as per the 2009-10 TLDHS. Nevertheless, there are very few births during adolescence, especially in early adolescence. In all women, about 14.5% of adolescents had begun childbearing in 2003 which has reduced to 7.2% in 2009-10, except for 18 years old (increasing from 8 to 11.5%) (Table-3). Adolescent childbearing is more common in rural areas and among uneducated adolescents from poor families (Figure-3). Among the districts, adolescent childbearing is the highest in Oecussi (16%) and the lowest in Dili (2%) (Figure-3).

Table 2: Trends in women having first birth by fixed age

Current age group (in years)	Age at first birth				Median age at first birth	
	< 15		<18			
	2003 DHS	2009-10 DHS	2003 DHS	2009-10 DHS	2003 DHS	2009-10 DHS
15-19	0.4	0.4	7.3	NA	NA	NA
20-24	3.5	0.7	16.5	8.8	20.7	NA
40-44	4.0	2.5	10.3	16.0	22.8	22.5

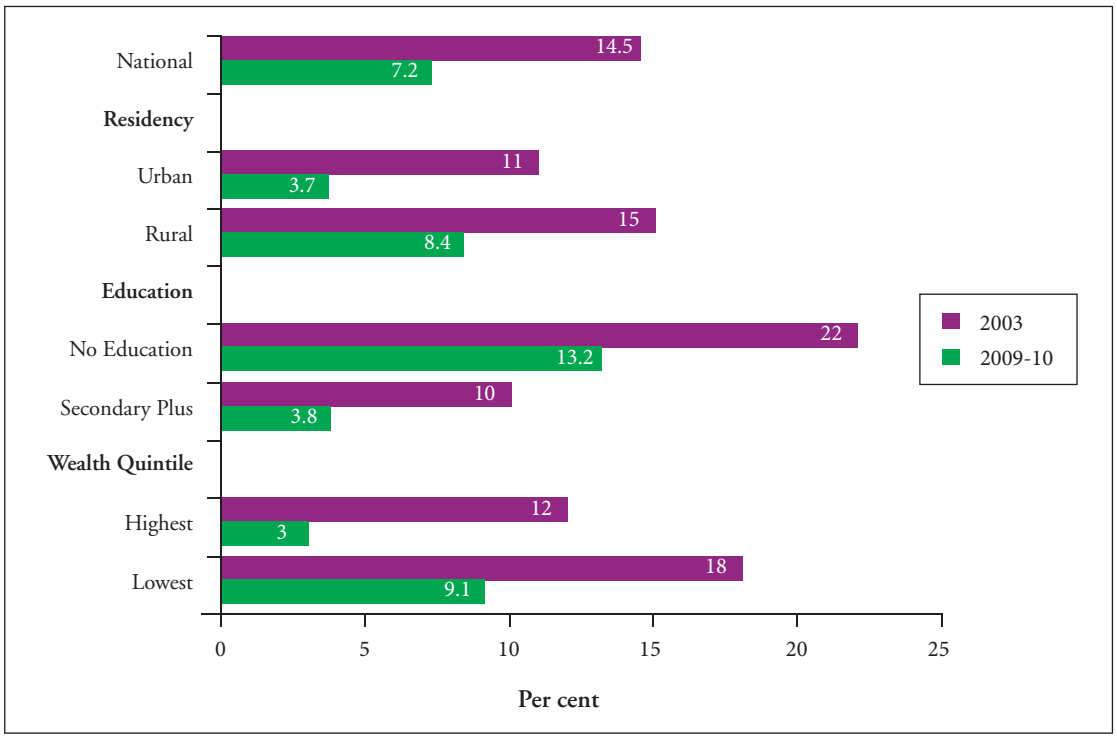
Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*

Table 3: Trends in proportion of married adolescents aged 15-19 years who have begun childbearing

Age (in years)	Proportion a women who have begun childbearing	
	2003 DHS	2009-10 DHS
15	–	1.0
16	4.8	2.3
17	6.3	3.7
18	8.0	11.5
19	37.2	20.3
Total	**14.5**	7.2

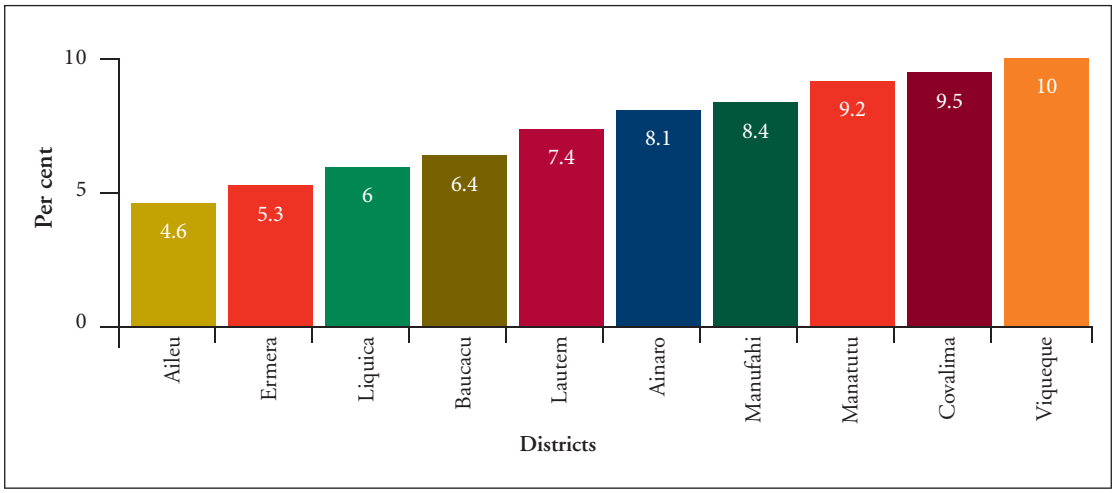
Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Macro, 2010.*

Figure 2: Trends in differentials in proportion of women aged 15-19 years who have begun child bearing by basic characteristics



Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Macro, 2010.*

Figure 3: Proportion of adolescents age 15-19 years who have begun childbearing, district-wise



Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Macro, 2010.*

Birth interval

Table 4: Trends in birth interval according to the age of mothers

All figures in percentage

Age of mother (in years)	Number of months since previous birth				Median number of months since previous birth	
	<18 months		18-23 months			
	2003	2009-10	2003	2009-10	2003	2009-10
15-19	15.9	17.0	42.1	26.8	21.3	25.5
20-24	22.7	12.1*	22.6	25.5*	24.2	26.3*

**These values are for the age group 20-29 years*

Source:
1. *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*
2. *Ministry of Health and National Statistics Timor-Leste, and ACIL Australia Pty Ltd, University of Newcastle, and the Australian National University, Australia. Timor-Leste 2003 demographic and health Survey: key findings. Dili: Ministry of Health 2004.*

Studies have shown that children born less than 24 months after a previous sibling have higher risk of poor health. Short birth intervals also threaten maternal health. TLDHS 2009-10 reported that about half (43.8%) of births to mothers aged 15-19 years follow an interval of less than 24 months (Table-4). The median birth interval was substantially shorter for teenage mothers (21 months) in TLDHS 2003 but it has increased to 25.5 as per TLDHS 2009-10 and it is still less than that of 20-29 years age group (26.3).

Planning status of adolescent pregnancy

According to TLDHS 2009-10 data, 88% births among adolescents were planned, 11% were mistimed, and less than 1% was unwanted (Table-5). Although the proportion of planned births is high among adolescents, they still have substantial mistimed births. This is probably due to low level of knowledge about contraception and availability of contraceptive.

Table 5: Fertility planning status by age at birth in Timor-Leste, 2009-10

Mother's age at birth (in years)	Planning status of birth		
	Wanted then	Wanted later	Wanted no more
<20	88.2	11.1	0.4
20-24	85.7	13.7	0.4
25-29	86.7	12.6	0.7

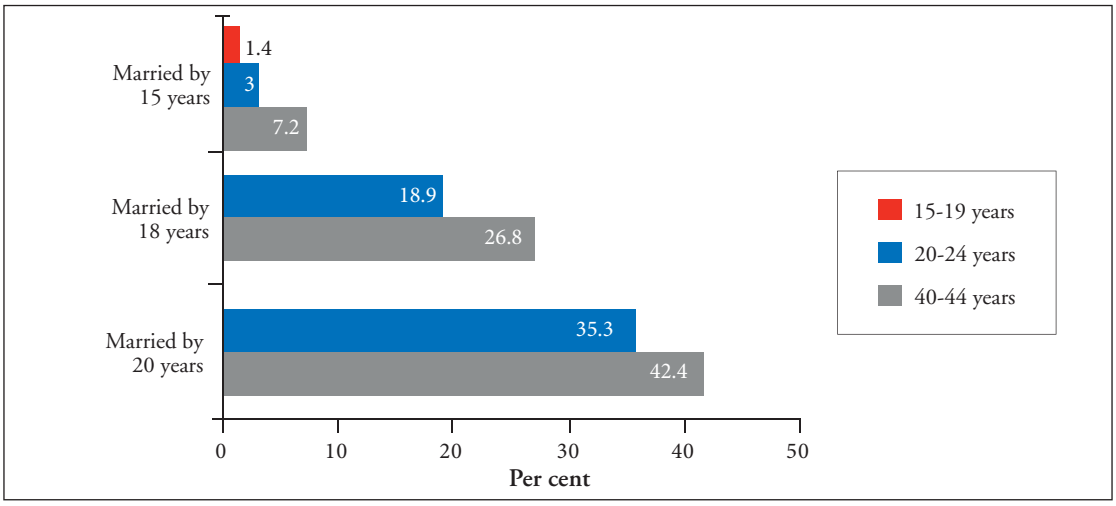
Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*

3. Proximate determinants of adolescent pregnancy

Age at marriage

Marriage patterns in Timor-Leste vary across the country. Recent trend reported by DHS 2009-10 was that younger women were less likely to have a history of being married before the age of 20 than older women. And women from wealthier households were more likely to delay their marriages than those from poor households (Figure-4). Median age at first marriage for all women is 20.9.

Figure 4: Age at first marriage of women



Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*

Sexual activity

Table 6: Age at first sexual Intercourse in Timor-Leste, 2009-10

NA- not available

Current age group (in years)	Per cent who had sex before age of 15 years		Per cent who had sex before age of 18 years	
	Women	Men	Women	Men
15-19	1.1	0.8	NA	NA
20-24	2.7	0.1	16.8	9.2

Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: ICF Marco, National Statistics Directorate and ICF Macro, 2010.*

Median age at first sexual intercourse was 20.7. Very few adolescent women (1.1%) and adolescent men (0.8%) had sex before the age of 15, while data for those who had sex before age 18 years is not available. This may be mainly due to women getting married at an early age compared to the men.

Both median age of first marriage and median age of first sexual intercourse was 20.9. For men the TLDHS 2009-10 data indicates the median age at first marriage was 25.0 for age cohort 25-29 years and age at first sexual intercourse was 22.2. This suggests that while women generally initiate sex within the marriage, men tend to initiate sex much before their marriage age.

Information on pregnancy among unmarried adolescents, no data is available[2].

Contraception

Knowledge of modern contraceptive methods among Timorese youth – both men and women – is gradually increasing. Knowledge levels were higher in the age group of 20-24 years compared to those in the age group of 15-19 years (Table-7). Higher level of knowledge does not necessarily translate into high level of usage of the contraception.

Table 7: Proportion of ever- married youth having knowledge of any modern contraceptive methods

Age group (in years)	Females	Males
15-19	70.4	*
20-24	77.2	66.4

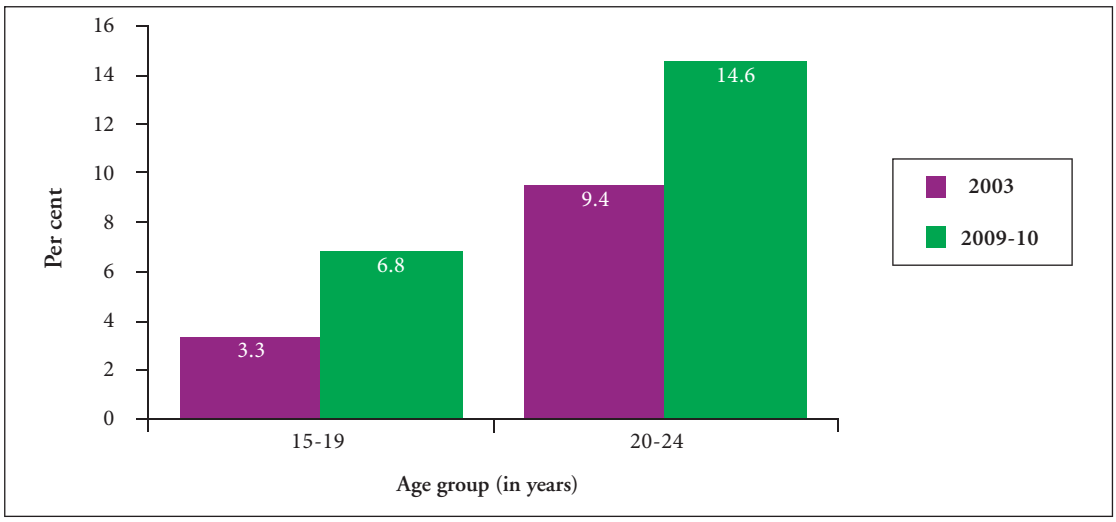
**Figure is based on fewer than 25 unweighted cases and has been suppressed.*

Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: ICF Marco, National Statistics Directorate and ICF Marco, 2010.*

Contraceptive prevalence rate (CPR) is increasing in all age groups including adolescents (Figure-5). However, only 6.8% and 14.6% of currently married females (age 15-19 and 20-24 years respectively) use any modern method of contraception currently.

[2]*Ministry of Health and National Statistics, Timor-Leste, and ACIL Australia Pty Ltd, University of Newcastle, and the Australian National University, Australia. Timor-Leste 2003 Demographic and Health Survey: key findings. Dili: Ministry of Health, 2004.*

Figure 5: Trends in current use of any modern method of contraception among married young women, 2003 to 2009-10



Source: 1. *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*

2. *Ministry of Health and National Statistics Timor-Leste, and ACIL Australia Pty Ltd, University of Newcastle, and the Australian National University. Timor-Leste 2003 demographic and health Survey: key findings. Dili: Ministry of Health 2004.*

Unmet need for family planning

Unmet need for family planning is defined as the proportion of currently married women who either do not want any more children, or want to wait before having their next birth, but who are not using any method of family planning. The total demand for family planning by adolescents and their demand satisfied are much less when compared with older age groups, suggesting that for married adolescents there may be barriers to contraceptive use (Table-8).

Table 8: Need and demand for family planning services by currently married adolescents and young women

Current age groups (in years)	Unmet need for family planning			Met need for family planning			Total demand for family planning services			Demand satisfied
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total	
15-19	26.6	0.2	26.9	7.6	0.2	7.9	34.2	0.5	34.7	22.6
20-24	33.5	1.1	34.6	14.3	1.5	15.7	47.7	2.6	50.3	31.2

Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*

4. Essential care interventions during pregnancy

Antenatal care

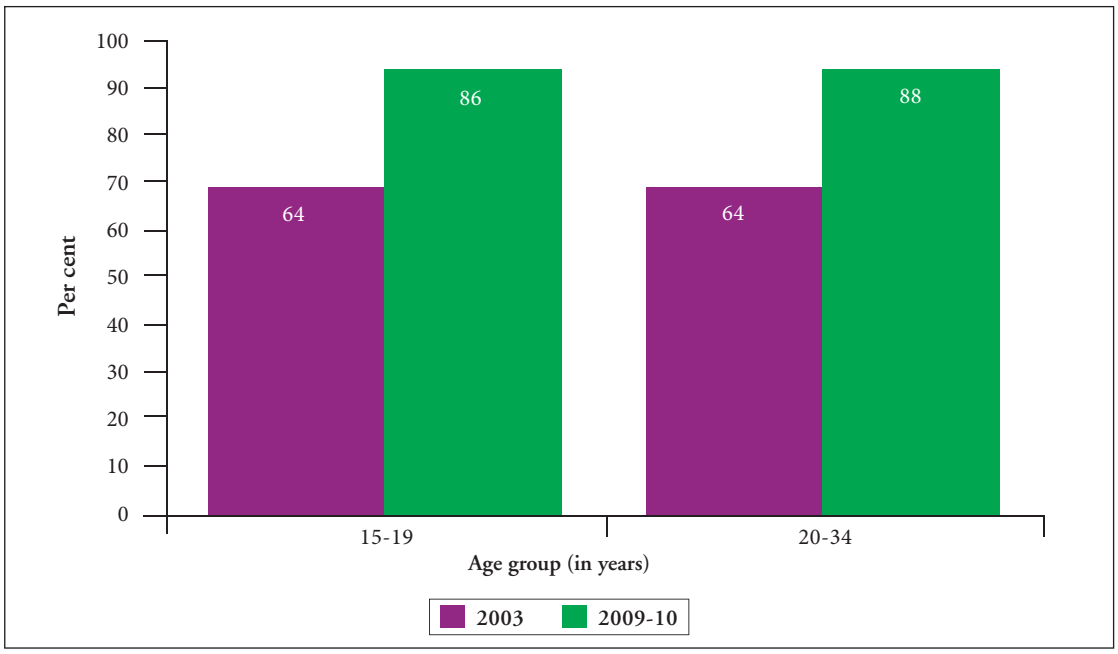
Antenatal care from a trained provider is important in order to monitor the pregnancy and reduce the risks for the mother and child during pregnancy and at delivery. The data from TLDHS 2009-10 shows that the proportion of women who received antenatal services was higher for women age 20-34 years than for adolescent women (Table-9). Adolescents remained at a little disadvantage for all the antenatal services. According to the TLDHS 2009-10, 86% of women aged <20 years received antenatal care for the last live birth, which is slightly less than the next age cohort (Figure-6). Nevertheless, this proportion has improved considerably in the last six years. TLDHS 2009-10 also indicates that almost 80% of adolescents and women aged 20 to 24 years received two or more tetanus toxoid injections during the last pregnancy (Figure-7).

Table 9: Among women receiving antenatal care, proportion receiving specific antenatal services by age, 2009-10

Age groups (in years)	Among women who received antenatal care for their most recent birth who received selected antenatal services				
	Weighed	BP measured	Urine sample taken	Informed signs of pregnancy complications	Took iron tablets/syrup
< 20	94.8	91.9	14.9	50.5	62.2
20-34	97.3	93.9	18.3	55.8	65.5

Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*

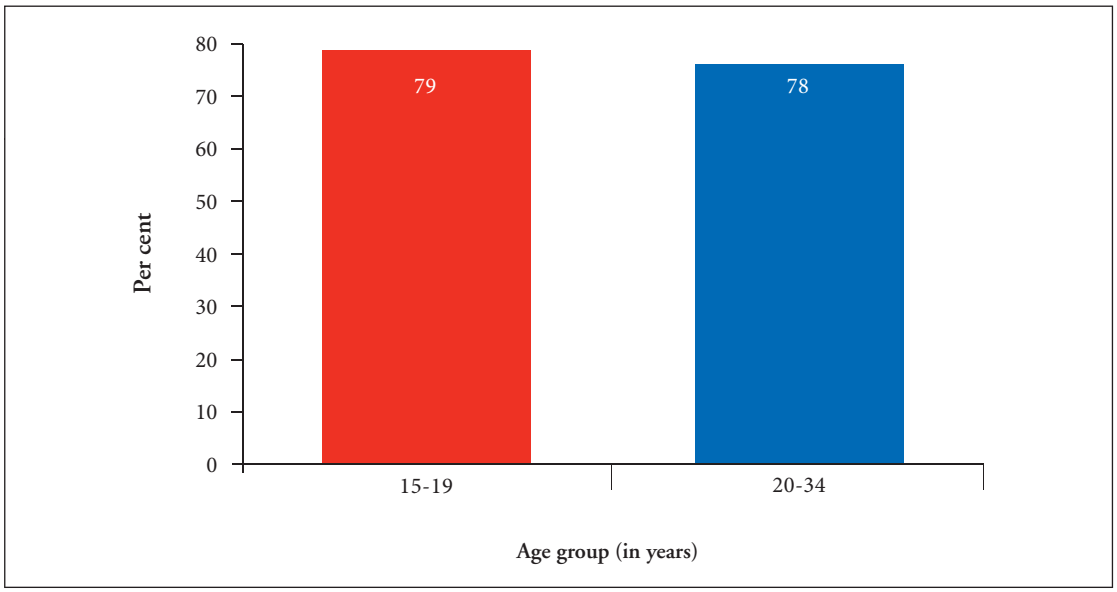
Figure 6: Proportion of women who received antenatal care by age group



Source: 1. *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*

2. *Ministry of Health and National Statistics Timor-Leste, and ACIL Australia Pty Ltd, University of Newcastle, and the Australian National University, Australia. Timor-Leste 2003 demographic and health Survey: key findings. Dili: Ministry of Health 2004.*

Figure 7: Proportion of women who received two or more tetanus toxoid injections during the last pregnancy



Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*

Care at birth

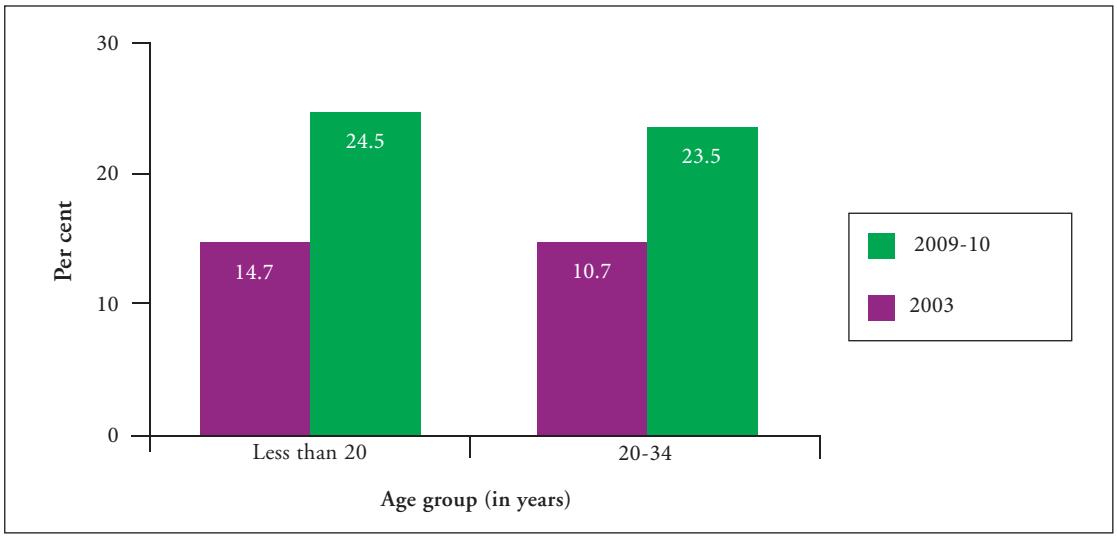
Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause the death or serious illness of the mother and/or the baby. Although 86% of adolescent mothers received antenatal care from a doctor or nurse/midwife for their most recent birth, only 33% of babies are delivered by a doctor or nurse/midwife, and 25% are delivered at a health care facility (Figure-8, Table-10). However, it is encouraging to note that the proportion of babies delivered by a health professional has increased over the last six years. Especially in case of women in the age group of 20-34 years.

Table 10: Trends in proportion of deliveries by a health professional

Mothers' age at birth (in years)	Proportion of deliveries by a health professional	
	2009-10	2003
<20	33.0	25.1
20-34	31.5	18.8

Source:
1. *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*
2. *Ministry of Health and National Statistics Timor-Leste, and ACIL Australia Pty Ltd, University of Newcastle, and the Australian National University Australia. Timor-Leste 2003 demographic and health Survey: key findings. Dili: Ministry of Health 2004.*

Figure 8: Trends in institutional births by women's age



Source: 1. *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*

2. *Ministry of Health and National Statistics Timor-Leste, and ACIL Australia Pty Ltd, University of Newcastle, and the Australian National University Australia. Timor-Leste 2003 demographic and health Survey: key findings. Dili: Ministry of Health 2004.*

5. Determinants of health care-seeking behaviour of adolescents

TLDHS 2009-10 reported that a high proportion of all pregnant women face at least one problem in accessing health care which is marginally high for adolescents. The concern about non availability of health provider and drugs were the major problems they faced (Table-11).

Table-11: Problem in accessing health care

Background characteristics age group (in years)	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Having to take transport	Not wanting to go alone	Concern no female provider available	Concern no provider available	Concern no drugs available	At least one problem accessing health care
15-19	24.9	37.8	53.2	59.6	48.4	64.9	81.9	86.5	96.0
20-24	22.7	33.6	52.5	58.0	42.6	61.7	81.4	85.8	95.7

Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*

Women's empowerment and violence against women

Women's empowerment is known to be a key determinant of a woman's ability to seek reproductive health services during pregnancy. Lack of authority to take decisions and the prevalence of domestic violence in case the woman takes independent decisions prevents women from timely access to reproductive health care facilities, often with serious health consequences both for the adolescent as well as the unborn child. Interestingly, adolescents are more empowered to take independent decision to seek health care and are less tolerant to domestic violence compared to the older women in the age group 20-24 years, but were more likely to experience violence during pregnancy (Table-12).

Studies have shown that higher levels of education improve health-seeking behaviour for women of all ages. However, no age disaggregated data is available to corroborate this finding in adolescents of Timor-Leste.

Table 12: Women's empowerment and violence against women

Women's age (in years)	Percentage of women who can make decision about their own health care	Percentage of women who agree with at least one reason towards wife beating	Percentage who have experienced physical violence during pregnancy
15-19	91.0	81.1	3.2
20-24	86.1	87.3	2.6

6. Impact of adolescent pregnancy on health outcomes for mothers, newborns and children

Nutritional status

Married adolescents and young women had poor nutritional status and a high prevalence of nutritional risk factors for maternal pregnancy, delivery complications and low birth weight. More than one third of the non-pregnant adolescents had low body mass index (BMI) (less than 18.5 kg/m^2) or evidence of chronic energy deficiency (CED) (Table-13). There was a higher prevalence of low BMI among adolescents as compared to older women. Proportion of women whose height was less than 145 cm in 15-19 years age group has gone up by more than 50% over the 2003 data; while the proportion in 20-29 years age group has remained at almost the same level (Table-13).

Table 13: Nutritional Status of women

Age group (in years)	BMI <18.5(thinness)	Height < 145 cm
15-19	33.4	22.0
20-29	27.9	12.8

Source: Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.

Severe anaemia is one of the critical causes of maternal mortality. The risk of anaemia is greater for girls during pregnancy because an adolescent's developing body has to compete for nourishment with the foetus, causing rapid depletion in iron and nutrient reserves. The risk of low birth weight and preterm delivery increases among iron-deficient anaemic adolescents. The prevalence of anaemia among young pregnant women was almost 28% in Timor-Leste in 2003. No data on anaemia in pregnant adolescent in DHS 2009-10 is shown. However, about 22% of adolescents aged 15-19 years recorded as anaemic (Hb level <12.0 g/dl for non-pregnant and <11.0 g/dl for pregnant women) (Table-14). Anaemia level was only slightly lower at 20% for the young women in the age group 20-29 years. The researches have shown that the nutritional status of women, especially with respect to iron status is difficult to improve during the short span of pregnancy. It is therefore important that women should have good nutritional status even before they conceive.

Table 14: Trends in proportion of not pregnant and pregnant young women having anaemia

Age group (in years)	Anaemia (Hb< 12.0 g/dl) prevalence, 2003		Any Anaemia <12.0g/dl for non-pregnant women <11.0 for pregnant women
	Not pregnant	Pregnant	2009-10
15-19	25.6	27.9	21.5
20-24	28.2	36.2	20.2*

Source:
1. *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate ICF Marco, 2010.*
2. *Ministry of Health and National Statistics Timor-Leste, and ACIL Australia Pty Ltd, University of Newcastle, and the Australian National University Australia. Timor-Leste 2003 demographic and health Survey: key findings. Dili: Ministry of Health 2004.*

Positive outcome of the pregnancy is the healthy child born at the end of full term who is of appropriate weight and size. Children born to adolescents are similarly disadvantaged as they are more likely to be smaller than average in size and weigh less than 2.5 kg compared to women in the higher age groups (Table-15).

Table 15: Delivery outcomes by age of the mother

Age of mother (in years)	Birth weight < 2.5 kg	Size of child at birth*	
		Very small	Smaller than average
Less than 20	18.0	6.3	12.0
20-34	9.6	4.9	10.5

**on mother's perception*

Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*

Newborn and child survival

Mortality rates (perinatal, neonatal, infant and under-five) (Table-16) are higher across the board among children born to adolescent mothers compared to those in the age group 20-29 years. This indicates that children born to adolescent women are at greater risk of dying before they reach the age of five years.

Table 16: Perinatal, neonatal, infant and under five mortality rates by mother's age

Mother's age (in years)	Number of stillbirths	Perinatal mortality rate	Neonatal mortality rate	Infant mortality rate	Under five mortality rate
< 20	2	24	35	74	103
20-29	10	16	26	58	83

Source: *Timor-Leste, Ministry of Finance. Timor-Leste demographic and health survey 2009-2010. Dili: National Statistics Directorate and ICF Marco, 2010.*

Abortion

Irrespective of marital status, there is no available data on the number of adolescents who have had an abortion in Timor-Leste. However, there have been several studies that address the legal context of abortion as well as those that include Timor-Leste in larger multi-country studies.

In 2009, Decree Law 19/2009 was passed making 13 amendments to a previous abortion law; these amendments have made the current legal allowances for abortion highly restrictive. The law states that unless there is no other medical procedure to save a woman's life and she is facing imminent death, an abortion is permitted. Furthermore, written consent is required by both the woman and her husband as well as a third person. Three doctors are required to provide official consent, with a fourth performing the procedure[3]. In addition, the law does not permit abortions on the grounds of mental or physical health or for women who have become pregnant as a result of rape or incest.

[3] *Belton S, Whittaker A, Fonseca Z, Wells-Brown T, Pais P. Attitudes towards the legal context of unsafe abortion in Timor-Leste. Reproductive Health Matters 2009; 17 (34): 56-57.*

In an environment where access to safe abortions are so restricted, the study conducted by Belton et al, shows that women who have unplanned and unwanted pregnancies and especially those resulting from rape, are seen as having lost their dignity and are compensated financially or materially as if the woman is a 'spoilt commodity'. The view of the Catholic Church, whose influence is widespread in the country, compounds women's restrictions to safe abortions; anyone seen defying its beliefs may face exclusion. However, the observations from small studies cannot be generalised for the population in Timor-Leste.

Adolescent health programmes in the Member States of the South-East Asia Region of WHO have progressively evolved over the last decade. Adolescent pregnancy has been identified as one of the major public health challenges and has implications for achievement of Millennium Development Goals 4, 5 and 6. It has been experienced that nationally representative strategic information related to adolescent sexual and reproductive health including adolescent pregnancy is difficult to obtain.

This publication presents prevalence and trends on adolescent pregnancy and related health issues in the form of country factsheets and a regional summary. The data and information has been obtained from the most recent existing sources in the countries including national demographic and health surveys (DHS), reproductive health surveys, multiple indicator cluster surveys (MICS), among others.

This information will be useful for various stakeholders in the Member States of the Region in prioritizing and planning their national health actions for prevention and management of adolescent pregnancy and contributing to progress in achievement of MDGs4,5 and 6 as well as progress beyond 2015.

World Health Organization
Regional Office for South-East Asia