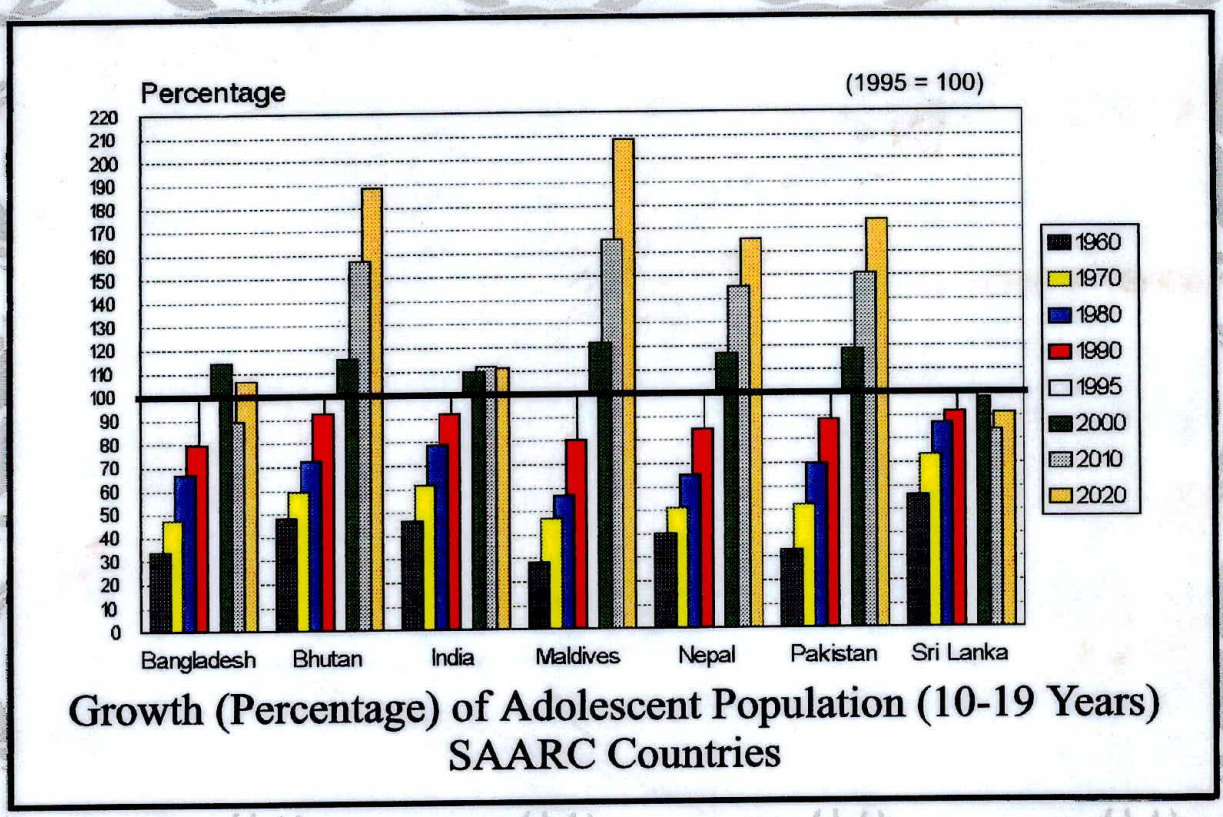
Socioeconomic, Demographic and Reproductive Health Profiles of Adolescents in SAARC Countries



Growth (Percentage) of Adolescent Population (10-19 Years) SAARC Countries

UNFPA

South Asia Conference on the Adolescent
21 - 23 July, 1998
New Delhi - India

Socioeconomic, Demographic and Reproductive Health Profiles of Adolescents in SAARC Countries*

UNFPA

South Asia Conference on the Adolescent
21 - 23 July, 1998
New Delhi - India

---

* The paper is prepared by Rafiqul Huda Chaudhury, Adviser on Population Policies and Development Strategies, in collaboration with his colleagues at CST/CASA, in particular Ms. Malicca Ratne, Ms. Vineeta Rai, Ms. Daphne M. de Rebello, and Ms. Bina Pradhan. Ms. Neera Shrestha, Management Officer, ably assisted the author in compilation of data from various sources. For this she deserves deep appreciation. Thanks are also due to Ms. Toko, Research Assistant, for her occassional help in compilation of the data, Mr. Kumar Shrestha for his painstaking typing of various drafts of the report and Mr. Sujit K. Shrestha for layout. The views expressed in this paper are those of the author alone.

PREFACE

This report has been prepared as a resource material for the South Asia Conference on the Adolescent. The main purpose of this effort is to document and provide a comparative perspective of the socioeconomic, demographic and reproductive health profiles of adolescents in the seven SAARC countries based on the available sources of information. The socioeconomic characteristics and aspects of adolescent health presented in the paper reveal some significant emerging trends and myths about their sexual and reproductive behaviour.

The data presented reveals the gravity, diversity and magnitude of the changes that are taking place in the lives of adolescents. They range from the share of adolescents in the total population to their sexual and reproductive behaviour, social values about sex, marriage and marriage practices, and increasing exposure to grave health risks such as STDs, HIV/AIDS, drug abuse and various forms of sexual exploitations associated with rising industrialisation and urbanisation. These changes are important pointers to the changing gender relations, adolescents' perspectives and expectations as well as the magnitude of the need for quality education, training and career opportunities required for the future.

This document is an important contribution to our knowledge about adolescents in South Asia. It points out not only the diversity and magnitude of the changes in the lives of adolescents in the region, but also brings out the implications of these changes on their lives. It throws lights on evolving gender relations among adolescents, their perspectives and expectations. It also reveals enormous information gaps and the lack of understanding of the socio-cultural context within which adolescents operate and interact in the fast evolving world of today. The entire gamut of changes that are taking place in the lives of adolescents and the magnitude of their needs pose challenges to parents, the nations and all those who are concerned in the advancement of the quality of life of people in general.

We hope that this document will provide a basis for a better understanding and comparative study of adolescents in the region as well as identifying important areas of research that will create a more comprehensive and holistic data-base for informed programme planning and implementation.

SRSheikh

Saad Raheem Sheikh
Director
United Nations Population Fund
Country Support Team

July 1998
Kathmandu

TABLE OF CONTENTS

Page

SUMMARY vii

INTRODUCTION ix

A. DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS OF ADOLESCENTS

A.1 Population Size and Growth 1

B. SOCIOECONOMIC CONDITIONS

B.1 Education

B.1.1 Literacy 5
B.1.2 Primary Education 7
B.1.3 Gross Enrolment Ratio at Secondary Level 9
B.1.4 Gender Disparity in Education 11
B.1.5 Future Scenario 11

B.2 Labour Force Participation/Economic Activity

B.2.1 Labour Force Participation Rate 11
B.2.2 Unemployment Rate 14

C. ADOLESCENT REPRODUCTIVE HEALTH BEHAVIOUR

C.1 Nuptiality Pattern 15
C.2 Median Age at Marriage 18
C.3 Pre-marital Sexual Behaviour 18

C.4 Fertility

C.4.1 Age at First Birth 21
C.4.2 Mean Age at Childbearing 23
C.4.3 Age-specific Fertility 24
C.4.4 Birth Intervals 27
C.4.5 Ideal Number of Children 29

C.5 Family Planning 29

D. HEALTH RISKS OF EARLY MARRIAGE AND CHILDBEARING

D.1 Nutrition 35
D.2 Infant Mortality Among Adolescent Girls 37
D.3 Maternal Mortality 38
D.4 Miscarriage/Still Birth 39
D.5 STDs/HIV/AIDS 39
D.6 Abortion 40

E. REPRODUCTIVE HEALTH CARE

E.1 Antenatal Care 41
E.2 Vaccination Against Tetanus 42
E.3 Attendance at Birth 43

F. KNOWLEDGE ABOUT SEXUAL, CONTRACEPTIVE AND REPRODUCTIVE HEALTH

F.1 Knowledge of Contraceptive Method 45
F.2 Knowledge of Reproductive Biology 46
F.3 Knowledge of HIV/AIDS 46

REFERENCES 49

LIST OF TABLES

Table 1: Percentage of Adolescents (10-19 Years) ion the Estimated Total Population by Countries in the SAARC Region, 1995 1

Table 2: Growth and Decline of Adolescent Population: SAARC Countries (1960-2020) 3

Table 3: Literacy Rate of the Early (10-14 Years) and Late Adolescent (15-19 Years) Population by Sex, SAARC Countries 5

Table 4: Gross and Net Enrolment Ratio of the Adolescent Population at Primary Level by Sex and Proportion First Graders Reaching Final Grade of Primary School SAARC Countries 7

Table 5: Gross Enrolment Rate of the Adolescent Population at Secondary Level by Sex, SAARC Countries 10

Table 6: Labour Force Participation Rate of the Early and Late Adolescent Population by Sex, SAARC Countries 12

Table 7: Unemployment Rate Among the Late Adolescent Population (15-19 Years) by Sex, SAARC Countries 14

Table 8: Percentage of the Late Adolescents (15-19 Years) Ever Married by Sex, SAARC Countries 15

Table 9: Percentage of Women 20-24 who were First Married by Exact Age 12, 15, 18, 20; and Median Age at First Marriage Among Women 20-49 Age, SAARC Countries 17

Table 10: Legal Age of Marriage, SAARC Countries 18

Table 11: Experience of Premarital Sexual Intercourse, by Marital Status, Age, and Rural or Urban Residence 19

Table 12: Profile of Premarital Sexual Activity of Males during Adolescence: Summary of Results from Various Studies 20

Table 13: Percentage Distribution of Women 15-49 by Age at First Birth, according to Current Age, SAARC Countries 22

Table 14: Percentage of Women 15-19 who are Mothers or Pregnant with their First Child According to Current Age, SAARC Countries 23

Table 15: Age-specific Fertility Rates, SAARC Countries 25

Table 16: Trend in Share (Percentage) of All Births Occurring to Adolescent Girls Aged 15-19, SAARC Countries 26

Table 17: Percentage of Adolescent Births that are Unplanned, SAARC Countries 27

Table 18: Percentage Distribution of Births in the Five Years Preceding the Survey by Number of Months Since Previous Birth, According to Age of Mother, SAARC Countries 28

Table 19: Mean Ideal Number of Children for Ever Married Adolescents Girls, SAARC Countries 29

Table 20: Percentage of Currently Married Women (10-24) who are Currently Practising Contraception by Age 30

Table 21: Percentage of Currently Married Adolescent Girls with Unmet Need for Family Planning, and the Total Demand for Family Planning Services, SAARC Countries 31

Table 22: Percent Distribution of Currently Non-users by Whether They Were Visited by a Family Planning Worker or Spoke with a Health Facility Staff Member About Family Planning Methods During the 12 Months Prior to Interview, According to Respondent's Age, SAARC Countries 32

Table 23: Attitudes of Couples Towards Family Planning (FP), SAARC Countries 33

Table 24: Among Mother (15-19 Years) of Children Under Five Years, Mean Height and Percentage of Women Shorter than 145 Centimetres, Mean Body Mass Index (BMI) and the Percentage of Women whose BMI is Less than 18.5 (kg/m2), by Age of Mother: Nepal and Bangladesh 35

Table 25: Energy and Protein Intake by Males and Females of Different Age Groups: India and Pakistan 36

Table 26: Neonatal, Infant and Child Mortality Rates for the Ten-year Period Preceding the Survey, by Age of Mother at Birth, SAARC Countries 37

Table 27: Maternal Mortality Rate (MMR) by Age of Mother, Bangladesh and Sri Lanka 38

Table 28: Percent Distribution of Live Births in the Five Years Preceding the Survey by Source of Antenatal Care during Pregnancy according to Mother's Age at Birth: Selected SAARC Countries 41

Table 29: Percent Distribution of Births in the Five Years Preceding the Survey by Number of Tetanus Toxoid Injections during Pregnancy according to Mother's Age at Birth: Selected SAARC Countries 43

Table 30: Percent Distribution of Live Births in the Five Years Preceding the Survey by Place of Delivery and Type of Assistance during Delivery according to Mother's Age at Birth: Selected SAARC Countries 44

Table 31: Percentage Distribution of Currently Married Women with Knowledge (spontaneous + probing) of Family Planning Methods, SAARC Countries 45

Table 32: Contraceptive Knowledge Among Adolescents (15-19 years) in Selected SAARC Countries 46

Table 33: Percentage Distribution of Ever-married Women who have Ever Heard of AIDS, Percentage who Received Information About AIDS from Specific Sources and Mean Number of Sources of Information about AIDS by Age, SAARC Countries 47

Table 34: Percentage of Ever Married Women who have Heard of AIDS and who know Specific Ways to Avoid HIV/AIDS and Percentage with Misinformation, Nepal 1996 48

LIST OF FIGURES

Figure 1: Percentage of Adolescents (10-19 Years) in the Total Population by Countries in the SAARC Region, 1995 1

Figure 2: Growth (Percentage) of Adolescent Population, SAARC Countries, (10-19 Years) 2

Figure 3: Literacy Rate of the Early (10-14 Years) Adolescent Population by Sex, SAARC Countries 5

Figure 4: Literacy Rate of the Late (15-19 Years) Adolescent Population by Sex, SAARC Countries 6

Figure 5: Gross Enrolment Rate at Primary Level by Sex, SAARC Countries 8

Figure 6: Net Enrolment Rate at Primary Level by Sex, SAARC Countries 9

Figure 7: Gross Enrolment Rate of the Adolescent Population at Secondary Level by Sex, SAARC Countries 10

Figure 8: Labour Force Participation Rate of the Late (15-19 Years) Adolescent Population by Sex, SAARC Countries 12

Figure 9: Labour Force Participation Rate of the Early (10-14 Years) Adolescent Population by Sex, SAARC Countries 13

Figure 10: Percentage of the Late Adolescents (15-19 Years) Ever Married by Sex, SAARC Countries 16

Figure 11: Percentage of Women Aged 20-24 who are First Married by Exact Age 12, 15, 18 and 20, SAARC Countries 17

Figure 12: Percentage Distribution of Women 15-49 by Median Age at Birth, SAARC Countries 21

Figure 13: Percentage of Women aged 20-24 who have begun Child Bearing by Current Age, SAARC Countries 24

Figure 14: Trend in Share (Percentage) of All Births Occurring to Adolescent Girls Aged 15-19, SAARC Countries 25

Figure 15: Percentage Distribution of Median Months Since Previous Birth, SAARC Countries 27

Figure 16: Percentage of Currently Married Women (15-19) who are Currently Practising Contraception by Age, SAARC Countries 30

Figure 17: Infant Mortality Rate for the Ten-year Period Preceding the Survey by Age of Mother at Birth, SAARC Countries 38

Figure 18: Under-five Mortality Rate for the Ten-year Period Preceding the Survey by Age of Mother at Birth, SAARC Countries 39

Figure 19: Proportion of Mothers who do not Seek Antenatal Care in Selected SAARC Countries 42

SUMMARY

The Cairo International Conference on Population and Development held in 1994 reached a consensus to address issues of great importance - among them the health and well being of young people. The Conference recognised that young people 'are the most important resource for the future' and the ICPD Programme of Action urged all countries to firstly, address adolescent sexual and reproductive health issues, including unwanted pregnancy, unsafe abortion, STD/HIV/AIDS, through the promotion of responsible and healthy reproductive and sexual behaviour, including voluntary abstinence and the provision of appropriate services and counselling specifically suitable for that age group and secondly to substantially reduce all adolescent pregnancies.

Four years after ICPD it is important to review the situation of young people and to assess the gains already made to improve their health and well being and what other issues remain unresolved. This profile aims to bring together information on the demographic, socioeconomic and reproductive health issues of adolescents between the ages 10 - 19 in the SAARC countries. It was produced as a background paper for the Regional Conference on Adolescents in the SAARC Countries, held in New Delhi, from 21 - 23 July 1998.

Using information from a number of sources, this profile provides a composite picture of adolescents in the SAARC countries on three major areas: demographic and socieconomic characteristics, marriage and childbirth, sexual and reproductive health status. It also highlights areas where a lack of data had made it difficult to assess a number of critical issues that are potentially important to the health and development of adolescents.

Young people between the ages 10 - 19 constitute over one-fifth of the total population in the SAARC countries. In a region with a total population of over 1.2 billion, there are over 260 million adolescents. In addition to their sheer size, adolescents will continue to grow rapidly, especially in countries that have not reduced fertility rates appreciably.

A majority of the region's adolescents are literate indicating improvements in educational opportunities. However a sizeable number do not complete primary school and the majority do not go on to secondary school. More boys than girls attend primary and secondary schools.

Although the mean age at marriage is rising, South Asian girls still marry early and many become mothers before they are 18 years old. By the time a girl reaches 20 years old, she has had 2 children on average. A progressively larger share of all births is occurring to adolescent girls aged 15-19. Since many South Asian adolescents are malnourished and short statured, the health risks to adolescent mothers and their babies can be serious. The risk of dying at child birth is higher than older mothers and children born to adolescent mothers have higher risk of mortality and morbidity.

Moreover antenatal care among adolescents is unsatisfactory. Those seeking antenatal care is lowest in Pakistan (26 percent) and highest in Nepal (44 percent). However majority of pregnant adolescent girls do receive tetanus toxoid shots.

Only a small proportion of births are delivered by trained birth attendants, ranging from 3 to 11 percent of births in Bangladesh, Nepal and Pakistan, to 24 percent in India.

A large proportion of adolescent pregnancies are unplanned and with shorter spacing between them compared to older women. The use of contraception is very low among currently married adolescent girls 15 - 19 years old. Less than 11 percent are currently using contraceptives, except in Bangladesh and Sri Lanka, although the unmet demand for contraceptives is at least 25 percent. The majority of adolescents and their husbands approve of family planning (with the exception of Pakistan), but health workers in Nepal and Bangladesh do not promote family planning among married adolescent girls. Knowledge on family planning methods is almost universal, except condom.

Over four in ten adolescent girls are estimated to have RTIs and one in five unmarried adolescent boys are reported to have STDs in Bangladesh. In Nepal, 16 percent of HIV/AIDS cases are adolescent girls.

Although sex outside marriage is considered taboo yet studies in Bangladesh and India reveal a high prevalence of pre-marital sex among adolescents. Over 60% of unmarried urban adolescents in Bangladesh under the age of 16 have engaged in pre-marital sex and in India the figure is one in four.

In India and Nepal, a large proportion of adolescent pregnancies are aborted. Unmarried adolescents are more likely to seek abortions during the second trimester when the consequences can be particularly critical.

INTRODUCTION

Adolescents constitute a sizeable proportion of the population accounting for over one-fifth of the total population of countries in the SAARC region. They will continue to grow in most countries of the region for the next 30 years due to population momentum. It is estimated that the adolescent population will increase by 18 percent, from 263 million in 1995 to 311 million in 2020. However, many adolescents in the region are deprived of adequate and quality education and opportunities of acquiring marketable skills; they face unemployment and underemployment, violence and exploitation and are vulnerable to the rising incidence of STDs and HIV/AIDS, abortion and malnutrition, etc. All these will have adverse implications for their physical, psychological and economic well being in adulthood.

Adolescent years are critical to prepare for adult roles in almost all aspects of life, including marriage, motherhood and earners. However, the existing national policies and programmes, outside of the public education system, do not adequately address the needs and concerns of adolescents and assist them in making this transition. In a region where adolescents account for one fifth of the population in each of its constituent countries, the economic, social and health cost of this neglect will be enormous. This underscores the point that adolescents deserve special attention.

ICPD has recognised the special needs of adolescents and recommended for formulating policies and programmes addressing their specific needs. Following the ICPD recommendations, various governments have also acknowledged the need to address adolescents in their policies and programmes. The initiatives taken so far by the governments to address adolescent issues are limited, covering mostly reproductive health aspects. However, adolescent issues are much broader than reproductive health in which education, employment, empowerment, family formation, etc. all play critical roles. Recognising this broader perspective of reproductive health issues and to assist governments of SAARC countries in formulating and implementing comprehensive development interventions for adolescents, the present profile was prepared. It aims to provide a comprehensive regional profile of adolescents covering *interalia* various socioeconomic, demographic, and reproductive health aspects of adolescents such as education, employment, reproductive health, sexuality and family planning.

A. DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS OF ADOLESCENTS

A.1 Population Size and Growth

Adolescents (10-19 years) constitute a sizeable proportion of the total population of countries in the SAARC region. They account for over one-fifth of the total population of the region. However, the share of the adolescent population varies, although modestly, within the region by country. It ranges from highest, 26 percent in Bangladesh to lowest, 21 percent in Sri Lanka and India. For the remaining countries, this proportion ranges between 22 and 24 percent (see Table 1 and Figure 1).

Adolescents constitute over one-fifth of the total population in the SAARC region.

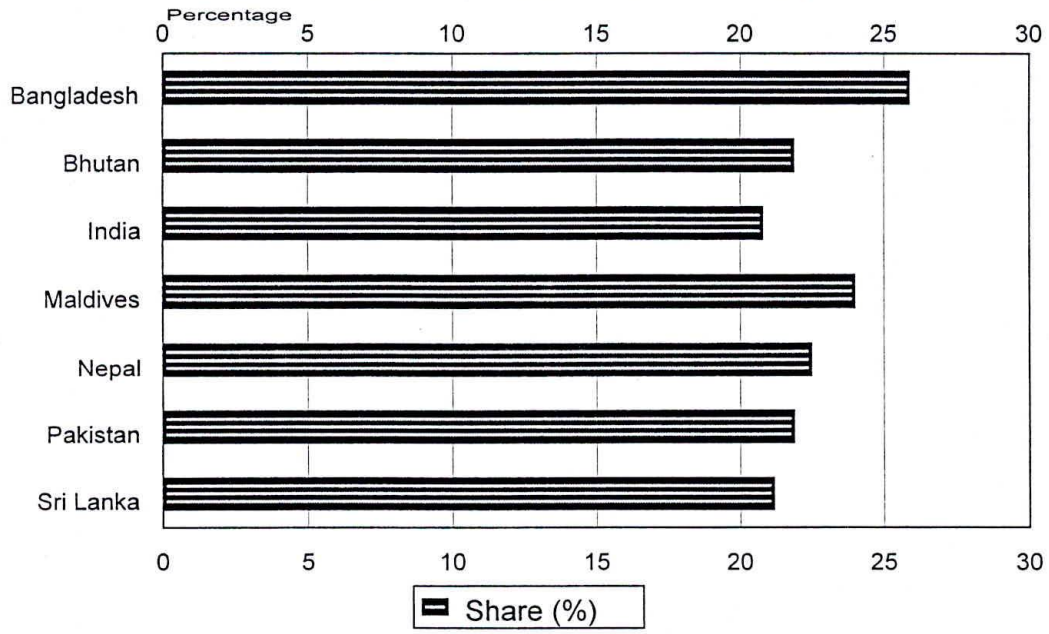
Table 1: Percentage of Adolescents (10-19 Years) in the Estimated Total Population by Countries in the SAARC Region, 1995

(in '000)

Country	Total Population	Adolescent Population	Share (%) of the Adolescent Population in the Total
Bangladesh	118,200	30,644	25.9
Bhutan	1,770	388	21.9
India	929,000	193,221	20.8
Maldives	250	60	24.0
Nepal	21,500	4,841	22.5
Pakistan	136,300	29,786	21.9
Sri Lanka	17,900	3,794	21.2
Total	1,224,920	262,734	21.4

Source: UN Population Division, World Population Prospects: 1996 Revision (October 1996).

Figure 1
Percentage of Adolescents (10-19 Years) in the Total Population by Countries in the SAARC Region, 1995



It is pertinent to mention that adolescents not only constitute a sizeable proportion of the total population, but they will also continue to grow. However, the growth of the adolescent population will vary between countries in the region, depending on the magnitude of changes in fertility. For example, between 1995 and 2020, the number of adolescents is projected to increase by 108 percent in Maldives, 88 percent in Bhutan, 73 percent in Pakistan, 65 percent in Nepal, 11 percent in India and 6 percent in Bangladesh, but to *decline* by 9 percent in Sri Lanka (see Table 2 and Figure 2). The large differences between Maldives, Bhutan, Pakistan and Nepal on the one hand and Sri Lanka, Bangladesh and India on the other, reflects failure on the part of the former countries to reduce fertility rates appreciably over recent decades, contrasted with dramatic fertility decline in Sri Lanka, Bangladesh and India, particularly the former. The decline of the adolescent population in Sri Lanka is attributed to the sharp fall in fertility during recent decades.

Adolescents not only constitute a sizeable proportion of the total population in the SAARC region, but they will also continue to grow rapidly, particularly for the countries which have failed to reduce fertility rates appreciably during recent decades. Conversely, the growth will be slower or even decline for the countries which have experienced substantial fertility decline during recent decades.

Figure 2
Growth (Percentage) of Adolescent Population, SAARC Countries, (10-19 Years)

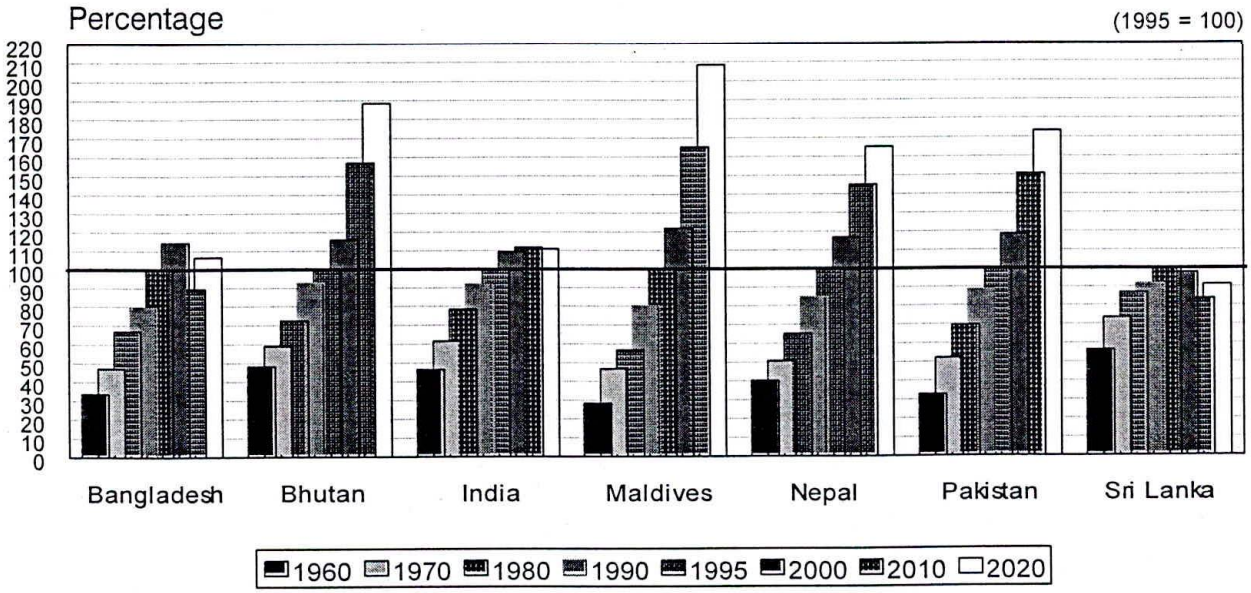


Table 2: Growth and Decline of Adolescent Population: SAARC Countries (1960 - 2020)

Country	1995=100	1960	1970	1980	1990	1995	2000	2005	2010	2015	2020
Bangladesh	10-14	30.7	46.8	63.2	73.3	100.0	98.0	73.0	81.4	90.3	93.5
	15-19	37.7	47.8	72.2	88.3	100.0	136.9	134.5	100.3	112.0	124.4
	20-24	38.3	46.8	69.3	82.6	100.0	113.6	156.1	153.7	114.8	128.5
	Sub-total (10-19)	**33.6**	**47.2**	**66.9**	**79.5**	**100.0**	**114.3**	**98.7**	**89.3**	**99.4**	**106.4**
	Sub-total (10-24)	**34.9**	**47.1**	**67.6**	**80.4**	**100.0**	**114.1**	**113.9**	**106.4**	**103.4**	**112.3**
Bhutan	10-14	47.4	57.9	71.8	92.3	100.0	116.3	135.4	157.9	169.4	181.8
	15-19	49.2	60.3	73.2	92.7	100.0	115.1	134.1	155.9	182.7	196.1
	20-24	50.3	60.8	74.5	93.5	100.0	114.4	132.0	154.2	180.4	211.1
	Sub-total (10-19)	**48.2**	**59.0**	**72.4**	**92.5**	**100.0**	**115.7**	**134.8**	**157.0**	**175.5**	**188.4**
	Sub-total (10-24)	**48.8**	**59.5**	**73.0**	**92.8**	**100.0**	**115.3**	**134.0**	**156.2**	**176.9**	**194.8**
India	10-14	46.3	62.6	77.8	88.4	100.0	105.9	104.5	105.7	105.7	102.8
	15-19	46.7	60.5	79.0	95.6	100.0	113.2	120.1	118.6	120.1	120.2
	20-24	45.0	53.6	73.1	92.1	100.0	104.8	118.8	126.2	124.7	126.4
	Sub-total (10-19)	**46.5**	**61.6**	**78.4**	**91.8**	**100.0**	**109.3**	**111.8**	**111.7**	**112.4**	**110.9**
	Sub-total (10-24)	**46.0**	**59.1**	**76.7**	**91.9**	**100.0**	**107.9**	**113.9**	**116.2**	**116.2**	**115.7**
Maldives	10-14	26.5	44.1	52.9	76.5	100.0	114.7	132.4	158.8	176.5	191.2
	15-19	30.8	50.0	61.5	84.6	100.0	130.8	150.0	173.1	207.7	230.8
	20-24	33.3	42.9	66.7	85.7	100.0	123.8	157.1	185.7	209.5	257.1
	Sub-total (10-19)	**28.3**	**46.7**	**56.7**	**80.0**	**100.0**	**121.7**	**140.0**	**165.0**	**190.0**	**208.3**
	Sub-total (10-24)	**29.6**	**45.7**	**59.3**	**81.5**	**100.0**	**122.2**	**144.4**	**170.4**	**195.1**	**221.0**
Nepal	10-14	37.9	50.1	63.4	83.6	100.0	114.4	128.3	137.4	146.5	155.4
	15-19	42.8	51.5	67.3	85.9	100.0	119.9	137.4	154.5	165.6	176.9
	20-24	46.8	51.1	68.4	86.0	100.0	116.8	140.5	161.3	181.7	195.2
	Sub-total (10-19)	**40.1**	**50.7**	**65.2**	**84.6**	**100.0**	**116.9**	**132.4**	**145.1**	**155.2**	**165.1**
	Sub-total (10-24)	**41.9**	**50.8**	**66.1**	**85.0**	**100.0**	**116.9**	**134.6**	**149.6**	**162.5**	**173.4**
Pakistan	10-14	32.9	52.2	69.7	87.6	100.0	121.3	134.7	145.5	155.7	166.5
	15-19	32.6	51.7	69.4	89.6	100.0	115.5	140.7	156.5	169.1	181.1
	20-24	33.5	41.5	66.4	94.1	100.0	112.9	131.1	159.9	178.0	192.4
	Sub-total (10-19)	**32.7**	**52.0**	**69.6**	**88.5**	**100.0**	**118.6**	**137.5**	**150.6**	**161.9**	**173.2**
	Sub-total (10-24)	**33.0**	**49.0**	**68.7**	**90.1**	**100.0**	**117.0**	**135.7**	**153.3**	**166.5**	**178.7**
Sri Lanka	10-14	58.7	79.1	84.7	91.7	100.0	86.6	79.6	80.2	84.9	89.1
	15-19	53.7	67.2	89.0	91.1	100.0	109.5	95.2	87.6	88.4	93.7
	20-24	51.3	65.7	94.2	100.3	100.0	110.5	122.0	106.4	98.4	99.4
	Sub-total (10-19)	**56.3**	**73.4**	**86.7**	**91.4**	**100.0**	**97.5**	**87.0**	**83.7**	**86.6**	**91.2**
	Sub-total (10-24)	**54.8**	**71.1**	**89.0**	**94.0**	**100.0**	**101.4**	**97.4**	**90.4**	**90.1**	**93.7**

Note: Projected numbers are taken from the medium projection.

Source: United Nations, 1997, The Sex and Age Distribution of the World Populations: The 1996 Revision, New York.

B. SOCIOECONOMIC CONDITIONS

B.1 Education

B.1.1 Literacy

Data in Table 3 and Figures 3 and 4 indicate that in most South Asian countries the majority of both the early (10-14 years) and late (15-19 years) adolescents are literate. The literacy rates of both the early and late adolescents are higher than that of the average literacy rate of the total population, indicating improvement in educational opportunities in recent decades.

Although there has been a significant improvement in educational opportunities in recent decades, a sizeable proportion of the adolescent population, particularly females, are yet to receive formal education.

Table 3: Literacy Rate of the Early (10-14 Years) and Late Adolescent (15-19 Years) Population by Sex, SAARC Countries

Country	Year	Literacy Rate by Age/Sex								Overall Literacy Rate for the Population 6 Years and Above		
		10-14				15-19						
		Male	Female	Total	F/M Ratio	Male	Female	Total	F/M Ratio	Male	Female	Total
Bangladesh	1995	48.5a/	48.6a/	48.5a/	100	61.1a/	59.1a/	60.2a/	97	38.9b/	25.5b/	32.4b/
Bhutan	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
India	92/93	82.1	64.1	73.4	78	80.5	56.2	68.1	70	68.8	43.3	56.3
Maldives	1990	93.3	95.2	94.2	102	97.6	98.0	97.8	100	90.0	91.0	90.5
Nepal	1991	76.0	49.3	63.2	65	71.5	38.6	54.7	54	54.5	25.0	39.6
Pakistan	91/92	69.2	47.3	58.4	68	69.8	44.1	57.5	63	52.8	26.3	39.9
Sri Lanka	1994	94.8	95.7	95.3	101	94.4	95.1	94.8	100	92.5	87.9	90.1

NA = Not Available.

Sources: 1.a/ Bangladesh: Bangladesh Bureau of Statistics. Survey on Household and Population Characteristics 1995.

b/ Bangladesh Bureau of Statistics. Population and Housing Census 1991.

2. India: National Family Health Survey, 1992-93.
3. Maldives: Population and Housing Census 1990.
4. Nepal: Population and Housing Census 1991.
5. Pakistan: Women and Men in Pakistan, 1995.
6. Sri Lanka: Demographic Survey 1994.

Figure 3
Literacy Rate of the Early (10-14 Years) Adolescent Population by Sex, SAARC Countries

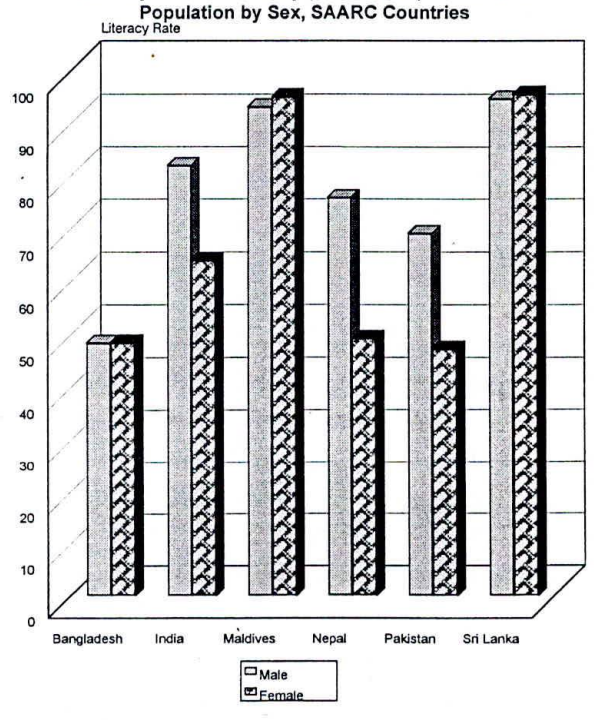
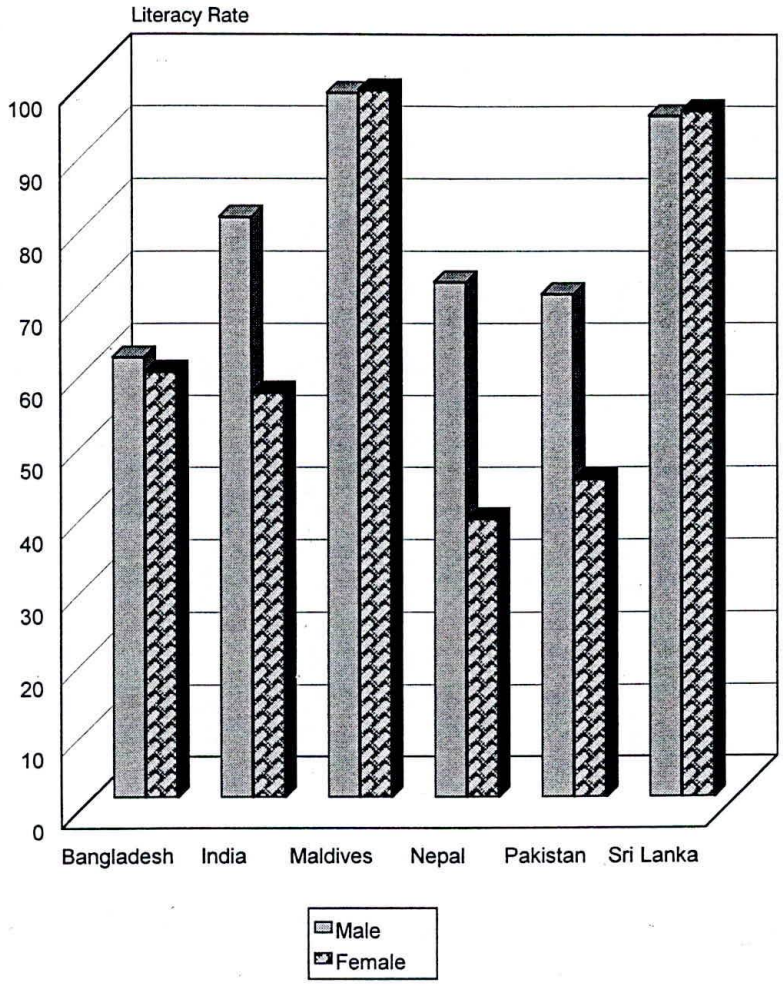


Figure 4
Literacy Rate of the Late (15-19 Years) Adolescent Population by Sex, SAARC Countries



Even though a majority of the younger cohorts have had a greater opportunity to education than the older cohorts, this opportunity was not seized equally by males and females and by all countries in the region. A sizeable proportion of the adolescent population, particularly females are yet to receive formal education in all countries of the region, except for Sri Lanka and Maldives. The illiteracy rate, for the early adolescents (10-14 years), ranges from highest, 52 percent in Bangladesh, to 42 percent in Pakistan, 37 percent in Nepal, 27 percent in India, 6 percent in Maldives and 5 percent in Sri Lanka. The corresponding proportions for the late adolescent (15-19 years) population are 45 percent in Nepal, 43 percent in Pakistan, 40 percent in Bangladesh, 32 percent in India, 5 percent in Sri Lanka and 2 percent in Maldives.

The illiteracy rate is higher for females than males. This overall finding also holds for all countries in the region, except Sri Lanka and Maldives. The illiteracy rate for the early adolescent girls exceeds that of boys by 113 percent in Nepal, 100 percent in India, 71 percent in Pakistan. Conversely, in case of Maldives and Sri Lanka, the illiteracy rate for the early adolescent boys exceeds that of girls by 40 and 21 percent respectively. In Bangladesh, the illiteracy rate is almost the same for the early adolescent boys and girls. The illiteracy rate for the early adolescent girls ranges from 53 percent in Pakistan to 51 percent each in Bangladesh and Nepal, 36 percent in India, 5 percent in Maldives and 4 percent in Sri Lanka. A similar pattern of sex differentials in illiteracy rate by country also emerges for the late adolescent group, although at a slightly attenuated rate. The illiteracy rates for the early and late adolescents, both boys and girls, are

lowest in Sri Lanka and Maldives, accounting for 2 to 7 percent of the adolescent population. The literacy rate for boys is highest in Bangladesh, while for girls it is highest in Pakistan accounting for 39-52 percent of adolescent boys and 50-56 percent of adolescent girls, respectively.

B.1.2 Primary Education

Most countries in South Asia are still far from achieving universal primary education.

Data in Table 4 and Figure 5 show that in most South Asian countries, almost all children, particularly male children attend primary school. However, the picture is misleading as the analysis is based on gross enrolment ratio which also includes students who are under aged, over aged and repeaters. Considering the net enrolment ratio, which allows for over aged and under aged children, it will appear that almost all countries in the region, except Sri Lanka, are still far from enrolling all primary school age children in school. To attain one hundred percent enrolment at primary level, Bangladesh has to increase enrolment for an additional 20 percent of primary school age children, both boys and girls, into school. The corresponding figures for boys and girls range between 20-25 percent and 40 percent respectively for rest of the SAARC countries (see Table 4 and Figure 6).

Table 4: Gross and Net Enrolment Ratio of the Adolescent Population at Primary Level by Sex and Proportion First Graders Reaching Final Grade of Primary School, SAARC Countries

Country	Year	Gross/Net Enrolment Rate at Primary Level by Sex						% of Grade 1 Enrolment Reaching Final Grade of Primary School
		Gross Enrolment			Net Enrolment (1993-97) b/			
		Male	Female	F/M Ratio	Male	Female	F/M Ratio	
Bangladesh a/	1993	128	105	82	82	82	100	47
Bhutan b/	90-95	31	19	61	-	-	-	82
India a/	1993	113	91	81	75	61	81	62
Maldives b/	90-95	136	133	98	-	-	-	93
Nepal a/	1993	129	87	67	80	60	75	52
Pakistan a/	1993	80	49	61	71	62	87	48
Sri Lanka b/	90-95	105	105	100	100	100	100	98

Source: a/ Jones, Gavin. 'Population Dynamics and Their Impact on Adolescents in the ESCAP Region', Asia-Pacific Population Journal, Vol. 12, No. 3, 1997.

b/ UNICEF. The State of World's Children, 1998.

In most countries of South Asia, almost all children, particularly males attend primary school. However, a large proportion of them fail to reach grade 5. For example, in Bangladesh where the gross enrolment rates for both boys and girls are over 100 percent, less than 50 percent of children reach grade 5. In India and Nepal where the rates are nearly 100 percent, only 62 percent and 52 percent of school attending children reach grade 5 respectively. Only in the case of Maldives and Sri Lanka, where the gross enrolment rates for both boys and girls are well over 100, nearly one hundred percent of school going children reach grade 5.

A large proportion of the primary school children fail to complete primary level education.

Figure 5
Gross Enrolment Rate at Primary Level by Sex, SAARC Countries

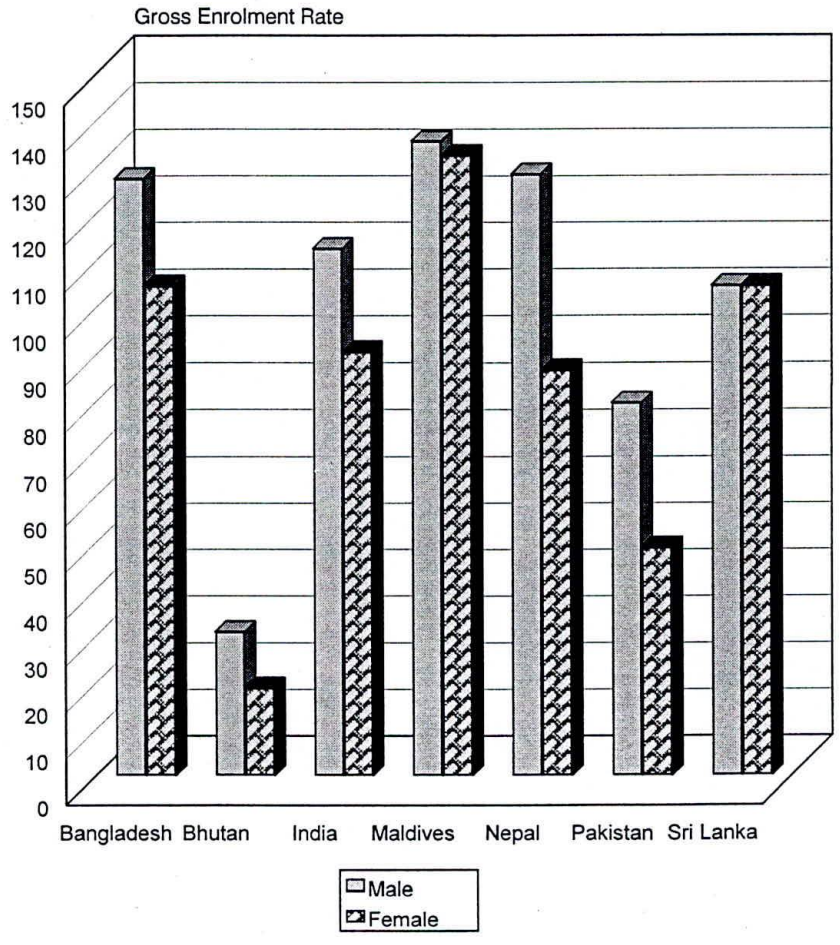
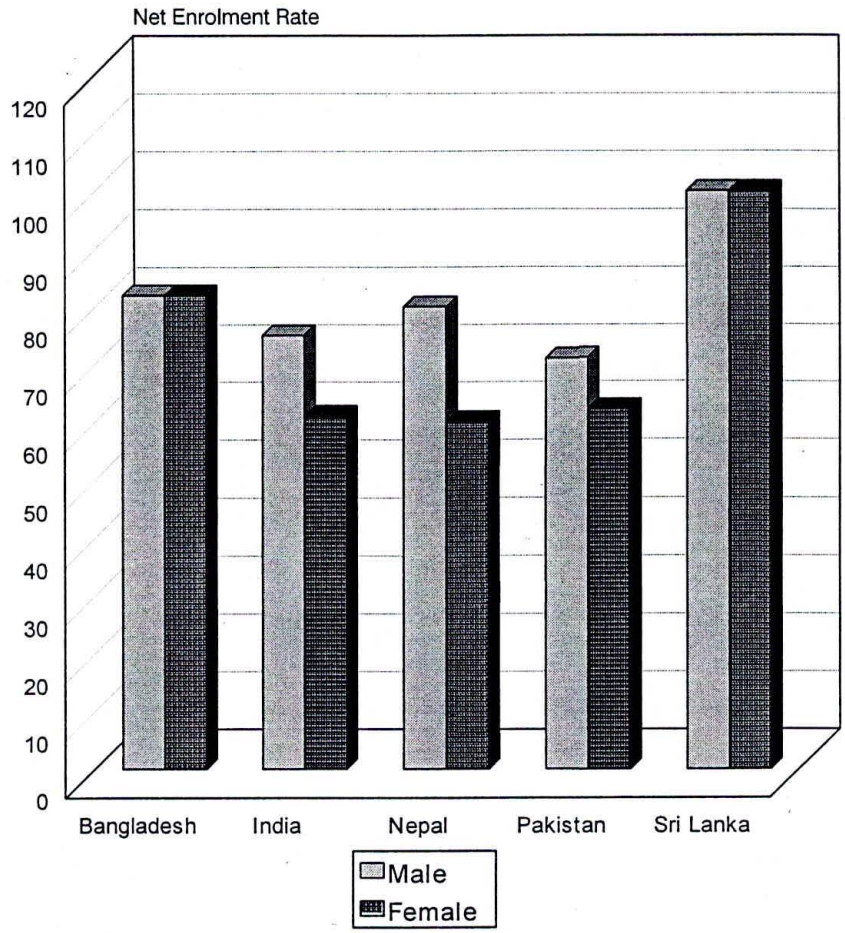


Figure 6
Net Enrolment Rate at Primary Level
by Sex, SAARC Countries



B.1.3 Gross Enrolment Ratio at Secondary Level

The school enrolment rate declines drastically from primary to secondary level, indicating relatively fewer adolescents tend to attend school beyond primary level. Data in Table 5 and Figure 7 show that over 70 percent of adolescent boys in Bangladesh and Pakistan and 90 percent in Bhutan are not attending secondary school. The corresponding proportions are over 50 percent in Maldives and Nepal. Only in Sri Lanka and India, 6 to 7 out of 10 secondary school children are attending secondary schools. In most countries of the region, female enrolment at the secondary level is abysmally low, except for Sri Lanka. About 80 percent of the adolescent girls are enrolled in secondary school in Sri Lanka, as contrasted with 49 percent in Maldives, 37 percent in India, 23 percent in Nepal, 13 percent in Pakistan, 12 percent in Bangladesh and only 2 percent in Bhutan. The gross enrolment rate at the secondary level is highest in Sri Lanka, with 71 percent for boys and 78 percent for girls, and lowest in Bhutan, with 7 percent for boys and 2 percent for girls.

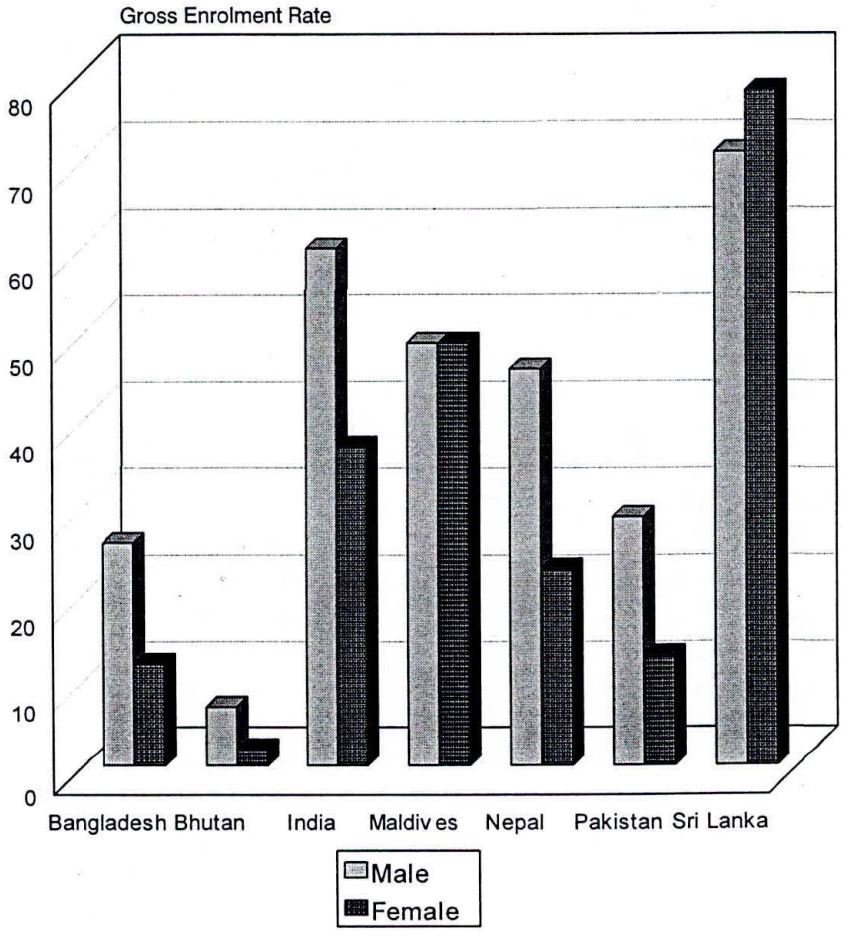
In most countries of South Asia an absolute majority of the secondary school age children are outside the education system. The situation is worse for female than male children.

Table 5: Gross Enrolment Rate of the Adolescent Population at Secondary Level by Sex, SAARC Countries

Country	Year	Gross Enrolment Rate		
		Male	Female	Female/Male Ratio
Bangladesh	1993 a/	26	12	46
Bhutan	1990-95 b/	7	2	29
India	1993 a/	60	37	62
Maldives	1990-95 b/	49	49	100
Nepal	1993 a/	46	23	50
Pakistan	1993 a/	29	13	45
Sri Lanka	1990-95 b/	71	78	110

Source: a/ Same as in 'a' of Table 4.
b/ Same as in 'b' of Table 4.

Figure 7
Gross Enrolment Rate of the Adolescent Population at Secondary Level by Sex, SAARC Countries



B.1.4 Gender Disparity in Education

There exists a wide gender gap in enrolment at both the primary and secondary levels, particularly the latter. The gender disparity in enrolment at the primary level is highest in Bhutan followed by Pakistan and Nepal. Female gross enrolment rate constitutes about 60-67 percent of male enrolment rate at the primary level in Bhutan, Nepal and Pakistan (see Table 4 and Figure 5). The female to male enrolment ratio at the primary level is 80 percent in India and about 100 percent in Sri Lanka, Maldives and Bangladesh, indicating achievement of gender parity in enrolment at the primary level in these three countries. While female enrolment rate accounts for about 45 to 60 percent of male enrolment rate at the secondary level in almost all countries of the region, except Bhutan and Sri Lanka, the two extreme outliers (see Table 5 and Figure 6). The female to male enrolment ratio at the secondary level is only 29 percent in Bhutan and 110 percent in Sri Lanka, indicating the highest gender disparity in enrolment at the secondary level in favour of male and female respectively.

A wide gender gap exists in enrolment at both the primary and secondary levels, particularly the latter.

B.1.5 Future Scenario

From the preceding findings, it appears that few adolescents tend to attend school beyond primary level. To achieve universal primary education and increase enrolment at the secondary level, massive investment will be required. Even with massive investment, countries with high fertility and higher projected growth of the adolescent population will find it difficult to retain the same level of enrolment rate, not to speak of increasing enrolment rate. Conversely, countries which have experienced a considerable decline in fertility and a slower projected growth of the adolescent population such as Sri Lanka, Bangladesh and India, particularly the former will find it relatively easier not only to keep the enrolment rate at the current level, but also to increase it.

Countries with high fertility and higher projected growth of the adolescent population will find it difficult to retain the same level of school enrolment, least of all raising school enrolment.

B.2 Labour Force Participation/Economic Activity

B.2.1 Labour Force Participation Rate

A large proportion of the late adolescent population are engaged in productive activities in most countries of the SAARC region, particularly those which have lower enrolment ratio at the secondary level such as Bangladesh, Pakistan, Nepal and India. Conversely, the participation rate is lower in countries which have higher enrolment ratio at the secondary level such as Sri Lanka and Maldives. The labour force participation rate for the late adolescent population

The labour force participation, in general, is higher in countries which have lower enrolment rate at the secondary level. The higher the school enrolment rate, the lower the labour force participation rate. The labour force participation rate is relatively lower for females than males.

(15-19) is highest in Bangladesh followed by Nepal, India and Pakistan, accounting for 67, 49, 36 and 33 percent of the total population aged 15-19 respectively, while it is lowest in Sri Lanka followed by Maldives, accounting for 18 and 30 percent of the late adolescent population respectively (See Table 6 and Figure 8).

Table 6: Labour Force Participation Rate of the Early and Late Adolescent Population by Sex, SAARC Countries

Country	Year	Labour Force Participation Rate by Age					
		10-14			15-19		
		Male	Female	Total	Male	Female	Total
Bangladesh a/	1990/91	32.3 d/	6.6 d/	20.3 d/	72.8	59.5	66.8
Bhutan	-	-	-	-	-	-	-
India b/	1991	5.66 (5-19)	5.07 (5-19)	5.38 (5-19)	43.8	26.2	35.6
Maldives a/	1990	3.8	1.6	-	46.8	13.6	30.1
Nepal c/	1991	18.4	28.5	23.3	50.0	49.3	49.4
Pakistan a/	1993/94	-	-	-	52.3	33.4	33.4
Sri Lanka a/	1995	-	-	-	28.5	23.5	18.2

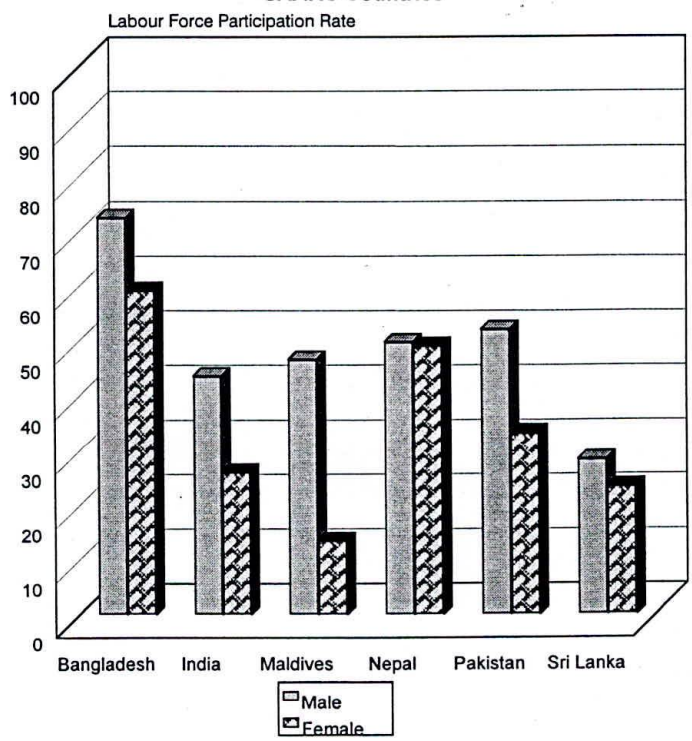
Source: a/ Jones, Gavin 1997. 'Population Dynamics and Their Impact on Adolescents in the ESCAP Region', Asia-pacific Population Journal, Vol. 12, No. 3, 1997.

b/ Computed by Professor Ashish Bose from Table B.1 Economic Table. Population Census of India 1991.

c/ Central Bureau of Statistics. Population and Housing Census of Nepal, 1991.

d/ Bangladesh Bureau of Statistics. Population and Housing Census, 1991.

Figure 8
Labour Force Participation Rate of the Late (15-19 Years) Adolescent Population by Sex, SAARC Countries

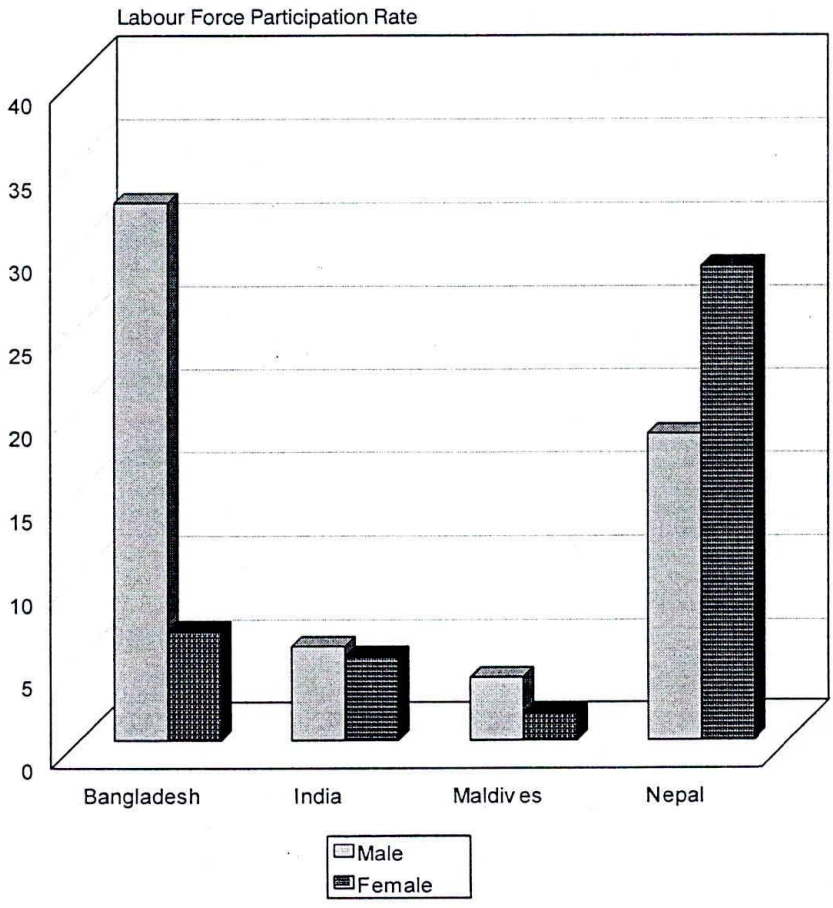


The labour force participation rate is higher for males than females in every SAARC country. However, the gender disparity in labour force participation rate is more glaring in Pakistan and Maldives than any other country in the region. Female participation rate accounts for 99 percent, 82 percent, 82 percent, 64 percent, 60 percent and 29 percent of male participation rate in Nepal, Bangladesh, Sri Lanka, Pakistan, India and Maldives respectively. The participation rate for male adolescent is highest in Bangladesh at 73 percent followed by 52 percent in Pakistan, 50 percent in Nepal, 47 percent in Maldives, 44 percent in India, and 29 percent in Sri Lanka.

A large proportion of the early adolescent population are also engaged in economic activities as may be observed from data in Table 6 and Figure 9. As many as 20 percent of the early adolescents are engaged in productive activities in Bangladesh and Nepal. Among the early adolescents, the participation rate is also higher for males than females in every country for which data are available, except Nepal, where the pattern is reversed in favour of females.

A large proportion of the early adolescents are also economically active.

Figure 9
Labour Force Participation Rate of the Early (10-14 Years) Adolescent Population by Sex, SAARC Countries



B.2.2 Unemployment Rate

Unemployment rate among the late adolescents is also reported to be high in some countries of the region, particularly Sri Lanka, Nepal, Pakistan and India, while this is relatively lower in Maldives and Bangladesh (see Table 7). The rate is higher for females than males in Pakistan, Sri Lanka and Maldives. However, in case of India and Nepal, the unemployment rate is higher for males than females. The unemployment rates for both the adolescent boys and girls are almost the same in Bangladesh. The unemployment rate for male adolescents ranges from highest 41 percent in Sri Lanka to 21.2 percent in Nepal, 13.9 percent in India, 8.4 percent in Pakistan, 3.3 percent in Bangladesh and 1.9 percent in Maldives. The corresponding rates for females are 58.3 percent in Sri Lanka, 11.9 percent in Pakistan, 10.0 percent in Nepal, 5.6 percent in India, 3.6 percent in Maldives and 3.2 percent in Bangladesh. The unemployment rates for both the adolescent boys and girls are highest in Sri Lanka followed by Nepal, while it is lowest for boys and girls in Maldives and Bangladesh respectively.

The incidence of unemployment among the late adolescent population is also reported to be very high in some countries of the region. The rate is usually higher for females than males.

Table 7: Unemployment Rate Among the Late Adolescent Population (15-19 Years) by Sex, SAARC Countries

Country	Unemployment Rates	
	Female	Male
Bangladesh (1989)	3.2 *	3.3 *
Bhutan	-	-
India (1981)	5.6	13.9
Maldives (1990)	3.6 *	1.9 *
Nepal	10.0	21.2
Pakistan (1994)	11.9	8.4
Sri Lanka (1995)	58.3	41.0

Note: * The age group is 10-19 (under 20 years).

Source: India, Pakistan and Sri Lanka: Jones, Gavin. 1997. "Population Dynamics and their Impact on Adolescents in ESCAP Region." Asia-Pacific Population Journal, Vol. 12, No. 3, 1997.

Bangladesh: UN, 1995. Women of Bangladesh, A Country Profile.

Maldives: Ministry of Planning, Human Resources and Environment, Analytical Report on the 1985 & 1990 Population and Housing, 1996.

Nepal: Central Department of Population Studies, Employment Survey 1995, Tribhuvan University, Nepal.

C. ADOLESCENT REPRODUCTIVE HEALTH BEHAVIOUR

C.1 Nuptiality Pattern

Early marriage continues to be the norm, particularly for women in most countries of the region, despite laws prohibiting marriage before age 18 for girls and 21-24 years for boys (see Table 10). At least two in five of the late adolescent girls aged 15-19 were already married in all countries of the region, except Sri Lanka and Pakistan. The proportion of girls married by the age 15-19 years were lowest in Sri Lanka followed by Pakistan, accounting for 7 and 17 percent of all girls aged 15-19, while this proportion is highest in Bangladesh, followed by Nepal, India and Maldives, accounting for 51 percent, 48 percent, 39 percent and 37 percent of all girls aged 15-19 respectively (see Table 8 and Figure 10).

Early marriage has been and continues to be the practice, particularly for women in most countries of South Asia .

Table 8: Percentage of the Late Adolescents (15-19 Years) Ever Married by Sex, SAARC Countries

Country	Reference Year	Percentage of Ever Married	
		Male	Female
Bangladesh	1991	5.0	51.3
Bhutan	NA	NA	NA
India	1992/93	6.7	39.1
Maldives	1990	6.1	36.5
Nepal	1991	20.6	47.8
Pakistan	1996/97	3.8	17.1
Sri Lanka	1994	-	7.1

Source: Bangladesh: Bangladesh Bureau of Statistics Population and Housing Census 1991.

India: National Family Health Survey, India 1992-93.

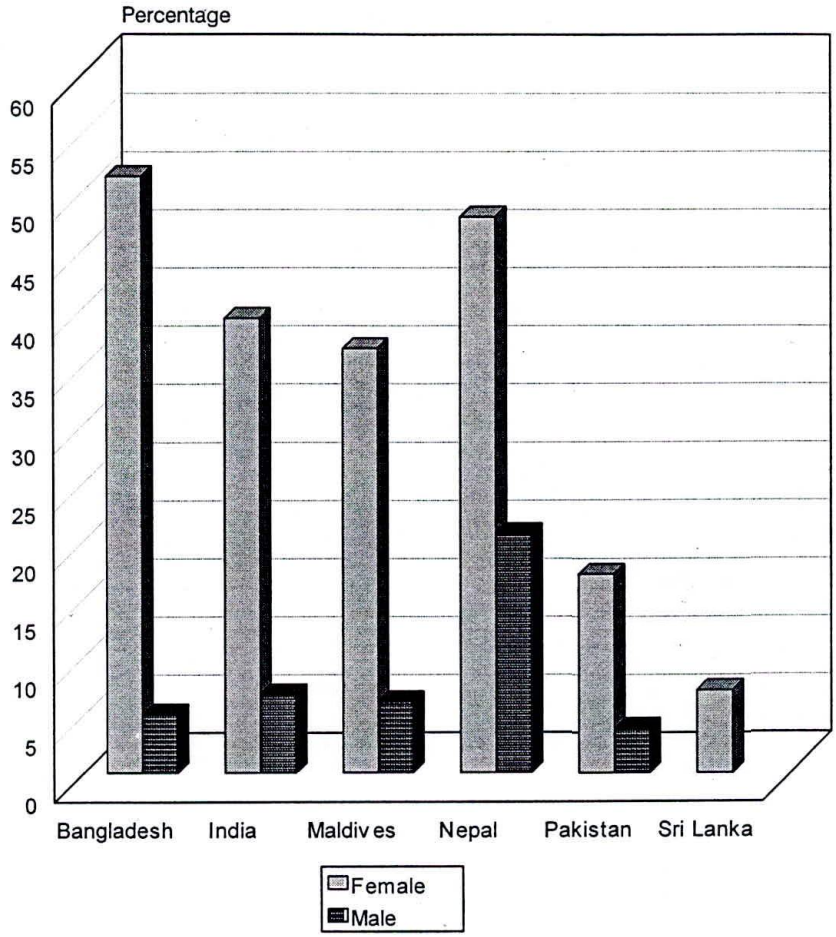
Maldives: Ministry of Planning and Environment. Population and Housing Census of Maldives 1990.

Nepal: Central Bureau of Statistics. Population and Housing Census 1991.

Pakistan: Pakistan Fertility and Family Planning Survey 1996/97.

Sri Lanka: Department of Census and Statistics. Demographic Survey 1994.

Figure 10
Percentage of the Late Adolescents (15-19 Years) Ever Married by Sex, SAARC Countries



In most countries of the region, except Sri Lanka, almost 3 in five women aged 20-24 were married by age 18; and at least one-quarter of those were married by the time they were 15 (see Table 9 and Figure 11). The proportions of females aged 20-24 married by the time they were 18 and 15 were lowest for Sri Lanka, accounting for only 12 percent and 1 percent of the total female population of the corresponding age group, while these were highest for Bangladesh, followed by Pakistan, Nepal and India. At least 70 percent of women aged 20-24 in Bangladesh and Pakistan were married by the time they were 18. The corresponding proportions for Nepal and India were 60 percent and 55 percent respectively. About one-third of women aged 20-24 in Bangladesh, one-quarter in India and one-fifth in Nepal were married by the time they were only 15.

In most countries of the region almost three in five women and one in four women were married by the time they were 18 and 15 respectively.

Table 9: Percentage of Women 20-24 who were First Married by Exact Age 12, 15, 18, 20; and Median Age at First Marriage Among Women 20-49 Age, SAARC Countries

Country	Percentage of Women who were First Married by Exact Age				Median Age at First Marriage		
	12	15	18	20	20-24	20-49	25-49
Bangladesh (1993-94)	7	47.2	73.3	82.1	15.3	14.4	14.1
Bhutan	NA	NA	NA	55.4	NA	NA	NA
India (1992-93)	11.8	26.1	54.2	71.4	17.4	16.4	16.1
Maldives (1990)	NA	NA	NA	NA	NA	NA	NA
Nepal (1996)	NA	19.1	60.3	75.7	17.1	16.4	16.2
Pakistan (1994-95)	2.2	33.4	71.9	86.3	16.9	NA	17.3
Sri Lanka (1993)	NA	1	12	24	NA	NA	22.4

Source: Bangladesh: Bangladesh Demographic and Health Survey, 1993-1994, 1994.

Bhutan: Report on National Health Survey, June 1994, Health Division, Thimphu, Bhutan, January 1996.

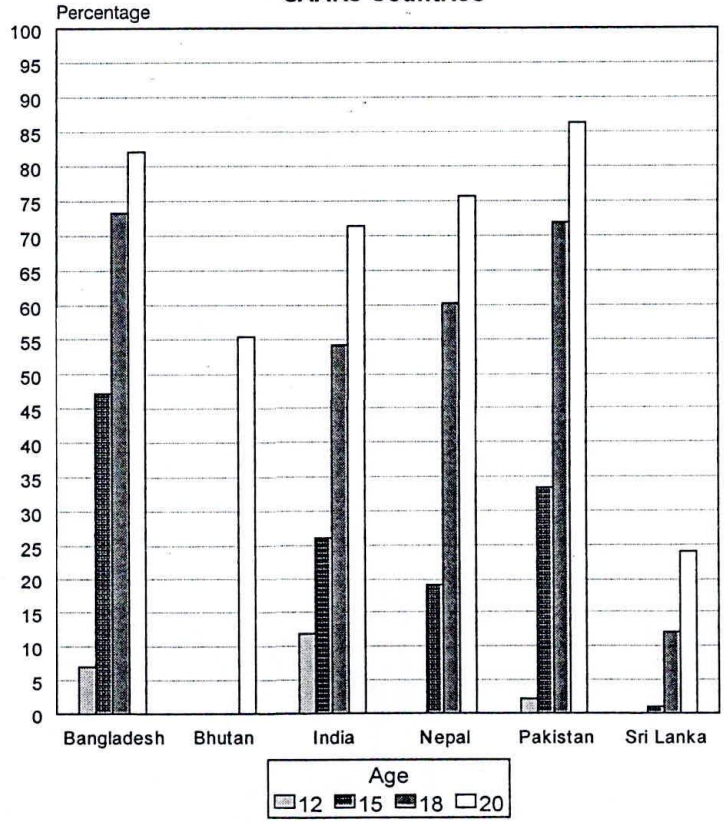
India: National Family Health Survey, 1992-93, August 1995.

Nepal: Nepal Family Health Survey, 1996, March 1997.

Pakistan: Pakistan Contraceptive Prevalence Survey 1994-95, Final Report, 1998.

Sri Lanka: Singh S. et.al. 1996. 'Early Marriage Among Women in Developing Countries'. International Family Planning Perspective, 22, 148-157.

Figure 11
Percentage of Women Aged 20-24 who are First Married by Exact Age 12, 15, 18 and 20, SAARC Countries



C.2 Median Age at Marriage

In most countries of the region, the median age at first marriage for the youngest cohort (20-24 years) is higher than that of the older cohort (25-49 years), indicating increasing age at marriage in recent decades (see Table 9). However, the median age at first marriage even for the youngest cohort remains much below the official legal age at marriage for most countries of the region, except for Sri Lanka (see Table 10). In Sri Lanka, the median age at marriage is much higher than the legal age at marriage.

Table 10: Legal Age of Marriage, SAARC Countries

Country	Female	Male
Bangladesh	18	24
Bhutan	18	-
India	18	21
Maldives	-	-
Nepal	18	21
Pakistan	-	-
Sri Lanka	18	18

Source: Bangladesh: Family Law Ordinance of 1961, Quoted in Bangladesh Bureau of Statistics, Bangladesh, Bangladesh Population Census, 1991, Vol. 1, Analytical Report, Sept. 1994.

India: Child Marriage Restraint Act of 1978, Quoted in International Institute for Population Studies, National Family Health Survey 1992-93, Bombay, August 1995.

Nepal: Central Bureau of Statistics, Population Monograph of Nepal, 1995 (Note: The minimum legal age marriage in Nepal is 18 years for males and 16 years for females with consent of parents).

C.3 Pre-marital Sexual Behaviour

Sex outside marriage is considered unethical and widely frowned upon in the socio-cultural setting of the region. In the light of this consideration, very little information on pre-marital sexual behaviour is collected systematically and scientifically. However, few studies which were conducted in Bangladesh and India, despite their limitations in study design and methodologies, reveal a high degree of prevalence of pre-marital sex among adolescent population. The Bangladesh study, based on a rural-urban sample of over 1200 adolescents, reveals that the prevalence of sex among adolescents in general, increases with age and this is higher in urban than in rural areas and among boys than among girls. The data in Table 11 shows that the majority of unmarried urban adolescent boys reported to have engaged in sexual relations by their early teens, while a good proportion of urban unmarried adolescent girls have had sexual relations by their late teens. Over 6 in 10 unmarried urban adolescent boys reported to have had sexual experiences at ages less than 16. The figure rises to 8 in 10 at age 16. More than one in 10 urban unmarried adolescent girls reported to have had

Studies in Bangladesh and India reveal a high degree of prevalence of pre-marital sex among adolescents. Over 6 in 10 and 7 in 10 unmarried urban boys and girls at ages below 16 and 16 reported to have had sexual experiences in Bangladesh, respectively. One in four to one in five has engaged in sexual relations in India. The prevalence of pre-marital sex is higher in urban than in rural areas, and among boys than among girls.

sexual experiences at ages below 16 and 16. This figure rises to one in 5 and one in 3 at ages 17 and 18 respectively. The prevalence of pre-marital sex among adolescents is lowest among rural girls. However, the incidence of pre-marital sex among rural adolescent boys is not uncommon. About one in four to two in five unmarried rural adolescent boys reported to have had sexual experiences at ages 16, 17 and 18, respectively.

Examination of findings of various studies conducted in India on unmarried adolescents and college-aged men reveal that about one in four to one in five has engaged in sexual relations (see Table 12).

Table 11: Experience of Premarital Sexual Intercourse, by Marital Status, Age, and Rural or Urban Residence

Marital Status and Rural/Urban Residence	Age (unmarried) or Age at Marriage				
	<16	16	17	18	19
Unmarried Females:					
Urban	14%	13%	20%	35%	47%
Rural	3%	7%	7%	6%	5%
Total	6%	9%	10%	18%	24%
N	116	90	40	56	37
Married Females:					
Urban	10%	28%	24%	25%	40%
Rural	6%	7%	-	5%	-
Total	8%	13%	9%	12%	29%
N	389	136	54	34	7
Unmarried Males:					
Urban	64%	80%	67%	88%	88%
Rural	4%	26%	25%	38%	44%
Total	31%	40%	36%	54%	61%
N	48	58	55	72	66

Source: Haider, S.J. et.al., 1997. "Study of Adolescents: Dynamics of Perception, Attitude, Knowledge and Use of Reproductive Health Care", Research Evaluation Associates for Development (READ), 1997.

Table 12: Profile of Premarital Sexual Activity of Males during Adolescence: Summary of Results from Various Studies

Sample	Site	Method	Language	Percentage Reporting Sexual Activity in Adolescence	Age at Sexual Initiation	Proportion of Sexually Active Men Reporting:		Author
						Relations with CSW	Condom Use	
1 Adolescents and young adults	16 cities	Self-reported questionnaires	English	28	na	19	na	Watsa, 1993
2 College students aged 19-23, male	Hyderabad	Self-reported questionnaires and FGDs	English	25	17-18	25	rare	Goparaju, 1993
3 Unmarried males* college students (mean age 18) migrants (mean age 20) white collar workers (mean age 24) blue collar workers (mean age 23)	Nasik/ Thane	Face-to-face interviews if illiterate; self-administered if literate	English Marathi	19 25 26 30	17 17 19 18	2** 8** 15** 5**	67 □extre m-ely low□ 53 47	Savara and Sridhar, 1994
4 Adolescent male truck cleaners	Indore	Face-to-face interviews	Hindi	25	na	high	6	Bansal, 1992
5 Adolescent boys aged 16-19	Rural Gujarat	Face-to-face interviews	Gujarati	16	17-18	78	20	Sharma and Sharma, 1995
6 College going adolescent males aged 16-19	Urban Gujarat	Face-to-face interviews	Gujarati	9	na	na	na	Sharma and Sharma, 1995
7 School boys	Delhi	Survey	English	25	na	na	na	Sehgal et.al. 1992
8 Male readers*	all-India	Magazine survey	English	41	17-19	37	na	Savara and Sridhar, 1991

* reporting on adolescent sexual activity retrospectively where necessary
** sexual initiation only
na not ascertained

Source: Jejeebhoy, S. 1996 "Adolescent Sexual and Reproductive Behaviour: A Review of the Evidence from India", International centre for Research on Women, 1996.

C.4 Fertility

C.4.1 Age at First Birth

Childbearing among adolescent women, despite a greater risk to the health of both the mother and child, is very common in most countries of South Asia.

Table 13 and Figure 12 present the percentage distribution of women by age at first birth, according to current age for selected SAARC countries. Data shows that childbearing begins early in most countries of the region. A large majority of women become mothers on or before they reach the age of 20. About one in five women give birth before age 20. The incidence of early childbearing is highest in Bangladesh and lowest in Pakistan, while India and Nepal occupy the intermediary positions. Childbearing commences at least one year earlier among Bangladeshi women compared to Indian and Nepali women and at least 4 years earlier than Pakistani women. The median age at first birth is between 21 and 23 in Pakistan, 19 and 20 in Nepal and India, and 17 and 18 in Bangladesh. The data in Table 13 also shows that the age at which women have their first child has shown little or no increase in India, Nepal and Pakistan, while this has marginally increased in Bangladesh, from around 17 for older women to around 18 for women in their early 20s. *These findings may signal a plateau in the trend towards later age at first birth, particularly for countries which have achieved a median age at first birth 19 or above.*

A large majority of women become mothers on or before the age of 20. Data also signal a plateau in the trend towards later age at first birth.

Figure 12
Percentage Distribution of Women 15-49 by Median Age at Birth, SAARC Countries

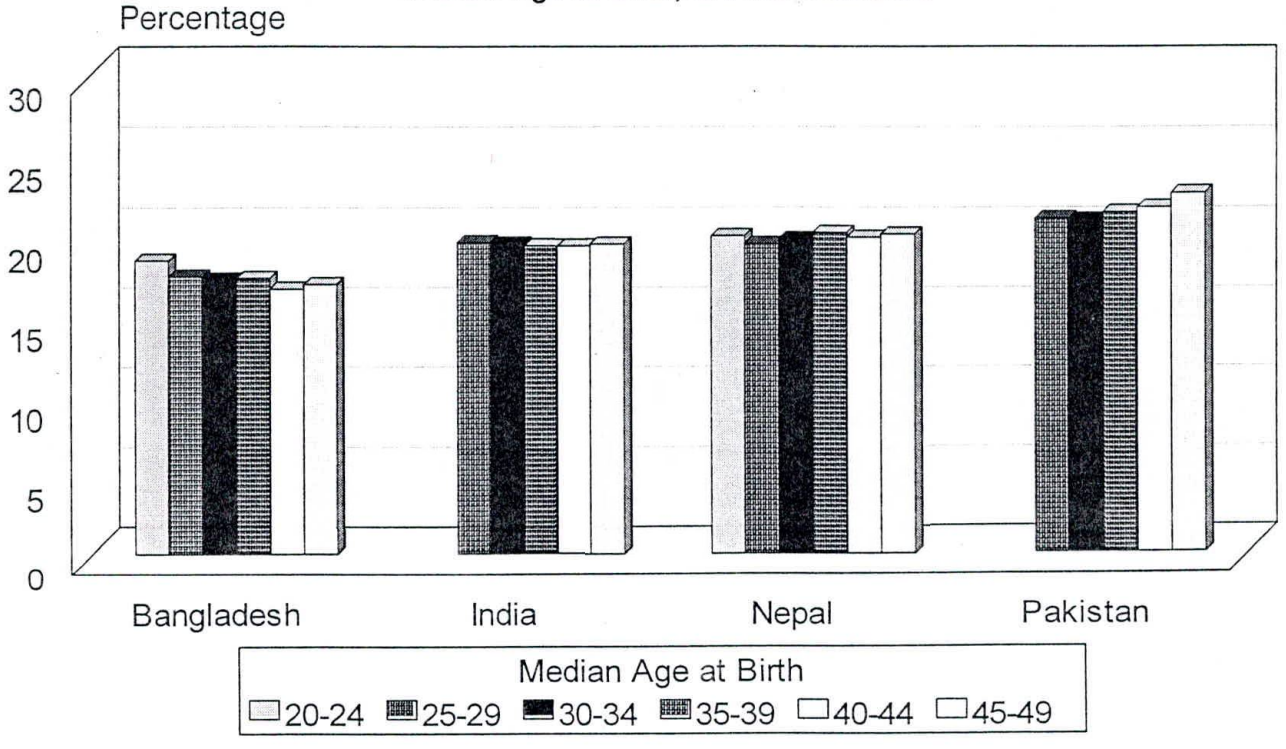


Table 13: Percentage Distribution of Women 15-49 by Age at First Birth, according to Current Age, SAARC Countries

Country/ Current Age	Women with no Birth	Age at First Birth							No. of Women	Median Age at Birth
		<15	15-17	18-19	20-21	22-24	25+	Total		
Bangladesh										
15-19	69.0	9.2	18.9	3.0	NA	NA	NA	100.0	2592	a
20-24	27.6	14.7	31.8	16.8	6.5	2.6	NA	100.0	2087	18.4
25-29	8.0	16.0	41.0	17.8	8.9	6.3	2.0	100.0	2057	17.4
30-34	2.4	15.9	45.7	17.1	8.5	6.5	3.9	100.0	1460	17.2
35-39	1.9	19.3	39.9	18.3	8.4	7.3	4.8	100.0	1200	17.3
40-44	1.9	20.9	48.5	14.7	6.0	5.2	2.8	100.0	878	16.6
45-49	1.3	18.7	45.6	18.4	8.6	4.3	3.0	100.0	656	16.9
India										
15-19	81.4	2.9	11.4	4.3	NA	NA	NA	100.0	23150	a
20-24	33.5	5.1	23.2	20.3	13.4	4.5	NA	100.0	22057	a
25-29	10.7	5.8	27.3	22.2	16.8	12.8	4.6	100.0	18296	19.5
30-34	5.1	5.7	27.4	23.5	17.5	13.2	7.6	100.0	14915	19.4
35-39	4.2	6.3	28.2	22.8	16.5	13.5	8.5	100.0	12577	19.3
40-44	3.9	6.1	27.9	23.6	17.9	12.8	7.8	100.0	9859	19.3
45-49	3.7	7.0	27.6	22.2	16.8	13.9	8.9	100.0	8088	19.4
Nepal										
15-19	81.3	0.9	12.4	5.3	NA	NA	NA	100.0	2229	a
20-24	26.9	1.9	24.3	25.4	16.3	5.3	NA	100.0	1909	19.9
25-29	8.8	3.0	27.5	26.7	18.3	13.0	2.8	100.0	1671	19.4
30-34	5.0	2.3	25.8	24.8	20.3	14.0	7.8	100.0	1387	19.7
35-39	3.2	2.0	22.4	24.0	20.3	17.3	10.8	100.0	1136	20.1
40-44	3.0	3.4	25.9	23.8	21.2	13.5	9.1	100.0	933	19.8
45-49	4.3	3.0	25.5	21.5	19.0	13.7	12.9	100.0	836	20.0
Pakistan										
15-19	87.8	1.5	6.7	4.1	NA	NA	NA	100.0	1720	a
20-24	54.3	3.3	13.9	13.3	10.6	4.8	NA	100.0	1747	a
25-29	23.0	5.3	18.7	18.1	15.7	14.0	5.3	100.0	1745	21.0
30-34	9.2	4.4	20.0	17.3	16.1	19.7	13.3	100.0	1241	20.9
35-39	5.4	3.4	16.4	18.4	16.5	20.6	19.3	100.0	1005	21.4
40-44	5.5	6.3	15.6	15.6	15.5	19.8	21.8	100.0	865	21.7
45-49	5.5	4.8	12.4	15.7	12.9	22.2	26.5	100.0	630	22.6

Note: NA = Not Available
a = Less than 50 percent of women in the age group x to x+4 have had a birth by age x.

Source: Same as in Table 11.

C.4.2 Mean Age at Childbearing

At least one in two adolescent girls has begun child bearing by age 19 in all countries of the region for which data are available, except for Pakistan. In Pakistan, about one-third of adolescent girls begin childbearing by age 19. About one in three to one in four adolescent girls of Bangladesh, India and Nepal and one in 10 of Pakistan has begun childbearing as early as age 17 (see Table 14 and Figure 13).

Early childbearing is the cultural practice in the region. About one-third of adolescent girls begin child bearing as early as 17.

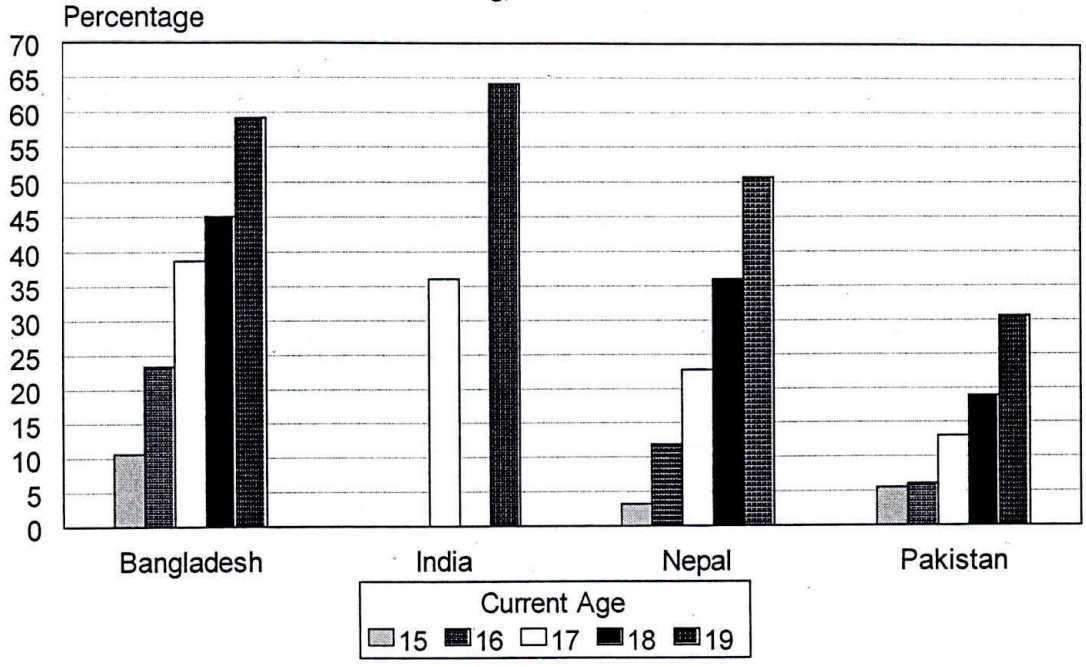
Table 14: Percentage of Women 15-19 who are Mothers or Pregnant with their First Child According to Current Age, SAARC Countries

Country/ Current Age	Percentage Who Are:		Percentage Who Have Begun Child Bearing	Number of Women
	Mothers	Pregnant with First Child		
Bangladesh				
15	6.8	3.8	10.6	615
16	17.1	6.2	23.4	566
17	32.1	6.5	38.7	463
18	38.5	6.5	45.1	539
19	54.4	4.7	59.2	382
Total	27.4	5.6	33.0	2566
India*				
13-16	24.5	11.7	36.1	2170
17-19	52.4	11.7	64.1	7277
Total	46.0	11.7	57.7	9447
Nepal				
15	1.1	2.1	3.2	485
16	6.4	5.4	11.8	469
17	15.0	7.8	22.8	428
18	31.2	4.8	36.0	449
19	44.1	6.6	50.7	399
Total	18.7	5.3	23.9	2229
Pakistan				
15	3.0	2.5	5.5	173
16	3.7	2.5	6.1	381
17	7.6	5.4	13.0	260
18	15.1	3.8	18.9	630
19	27.4	3.3	30.6	276
Total	12.2	3.5	15.7	1720

* refers to ever married women age 13-19.

Source: Same as in Table 11.

Figure 13
Percentage of Women Aged 20-24 who have begun Child Bearing, SAARC Countries



C.4.3 Fertility

Consistent with the practice of early motherhood, it is also observed that a significant proportion of all births in a given year is occurring to adolescent girls aged 15-19 (see Table 15 and Figure 14). The share of all births occurring to adolescent girls ranges from highest, 20 percent in Bangladesh, to 17 percent in India, 14 percent in Nepal, 11 percent in Bhutan, 8 percent each in Maldives, Pakistan and Sri Lanka respectively (see Table 15). By the time a girl reaches the age of 20, she has had 2 children on average in almost all countries of the region, except for Sri Lanka., where a girl produces about one child by age 20.

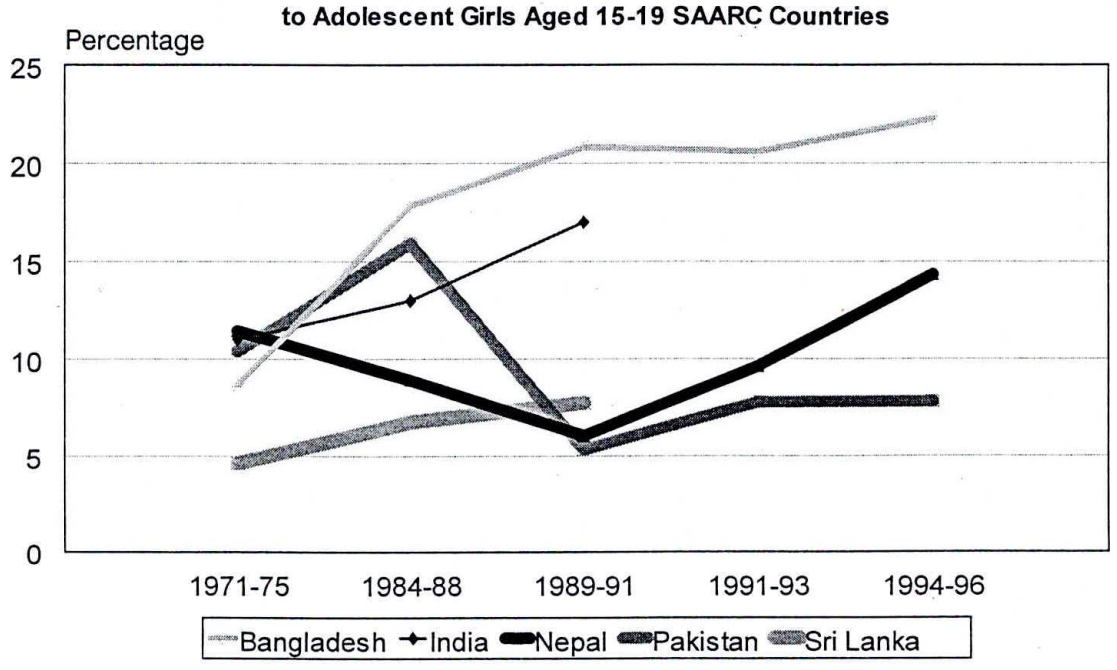
Adolescent girls contribute a significant proportion of total births in a given year and a progressively larger share of all births is occurring to adolescent girls aged 15-19. A large proportion of adolescent births are unplanned.

Table 15: Age-specific Fertility Rates, SAARC Countries

Age	Age-specific Fertility Rates						
	Bangladesh (1996/97)	Bhutan (1994)	India (1992/93)	Maldives (1990)	Nepal (1996)	Pakistan (1996/97)	Sri Lanka (1993)
15-19	0.147	0.120	0.116	0.106	0.132	0.082	0.035
20-24	0.192	0.267	0.231	0.286	0.266	0.245	0.109
25-29	0.150	0.242	0.170	0.303	0.237	0.275	0.134
30-34	0.096	0.195	0.097	0.270	0.154	0.212	0.104
35-39	0.044	0.174	0.044	0.199	0.087	0.145	0.054
40-44	0.018	0.095	0.015	0.096	0.031	0.071	0.014
45-49	0.006	0.024	0.005	0.023	0.012	0.023	0.002
Total 15-49	0.653	1.117	0.678	1.283	0.919	1.053	0.452
TFR	3.27	5.58	3.39	6.42	4.60	5.26	2.26

Source: Bangladesh: Demographic and Health Survey 1996/97.
Bhutan: Report on National Health Survey, 1992-93, August 1995.
India: National Family Health Survey 1992/93.
Maldives: Ministry of Planning and Environment. Population and Housing Census of Maldives, 1990.
Nepal: Family Health Survey 1996.
Pakistan: Pakistan Fertility and Family Planning Survey 1996/97.
Sri Lanka: Demographic and Health Survey 1993.

Figure 14
Trend in Share (Percentage) of All Births Occurring to Adolescent Girls Aged 15-19 SAARC Countries



It is also very disturbing to note that a progressively larger share of all births is occurring to adolescent girls aged 15-19 and this overall trend holds, in general, for all countries of the region (see Table 16 and Figure 14). For example, share of all births occurring to adolescent girls has increased from 9 percent in 1971-75 to 18 percent in 1984-88, 21 percent in 1989-91, 21 percent in 1991-93 and 22 percent in 1994-96 in Bangladesh. A similar trend, although not in the same magnitude, is also observed in all other countries. A large proportion of these births could have been avoided, if timely and adequate services were available, since many of these births were unplanned. Table 17 shows that about one in ten to three in ten births among adolescents is unplanned.

Increasingly high fertility among adolescent girls in most countries of the region is a matter of great concern. The early childbearing will expose adolescent girls and their infants to high risk of mortality and morbidity. This deprive them from continuing their education and becoming economically productive.

Table 16: **Trend in Share (Percentage) of All Births Occurring to Adolescent Girls Aged 15-19, SAARC Countries**

Year	Percentage of All Births Occurring to Adolescent Girls				
	Bangladesh	India	Nepal	Pakistan	Sri Lanka
1971-75	8.65	1971 = 11	1976 = 11.45	1975 = 10.39	1976 = 4.63
1984-88	17.84	1981 = 13	1981 = 8.91	1979/80 = 15.91	1982-87 = 6.74
1989-91	20.81	1993/94 = 17	1986 = 6.04	1984/85 = 5.33	1988-93 = 7.74
1991-93	20.58		1991 = 9.62	1990-91 = 7.77	
1994-96	22.27		1996 = 14.34	1994-95 = 3.90 1994-96 = 7.80	

Source: Various Demographic and Health Surveys (same as in Table 15).

Table 17: Percentage of Adolescent Births that are Unplanned, SAARC Countries

Country	Reference Year	% of Unplanned Births 1/
Bangladesh	1993/94	21
India	1992/93	16
Pakistan	1990/91	11
Sri Lanka	1987*	30

Source: Same as in Table 15.

* Allan Guttmacher Institute, 1998. Into a New World, Young Women's Sexual and Reproductive Lives.

1/ Those who wanted no more births and/or wanted to have at a later date.

C.4.4 Birth Intervals

Not only a high proportion of adolescent girls give birth to children, they also have shorter spacing between births. Closely spaced births increase the risks of maternal and infant mortality.

Adolescent girls have shorter birth intervals.

Data in Table 18 and Figure 15 show that in all countries of the region adolescent women have shorter birth intervals than older women. The median birth interval for adolescent girls aged 15-19 ranges between 24 to 26 months, compared to 38-41 months for women over age 40.

Figure 15
Percentage Distribution of Median Months since Previous Birth, SAARC Countries

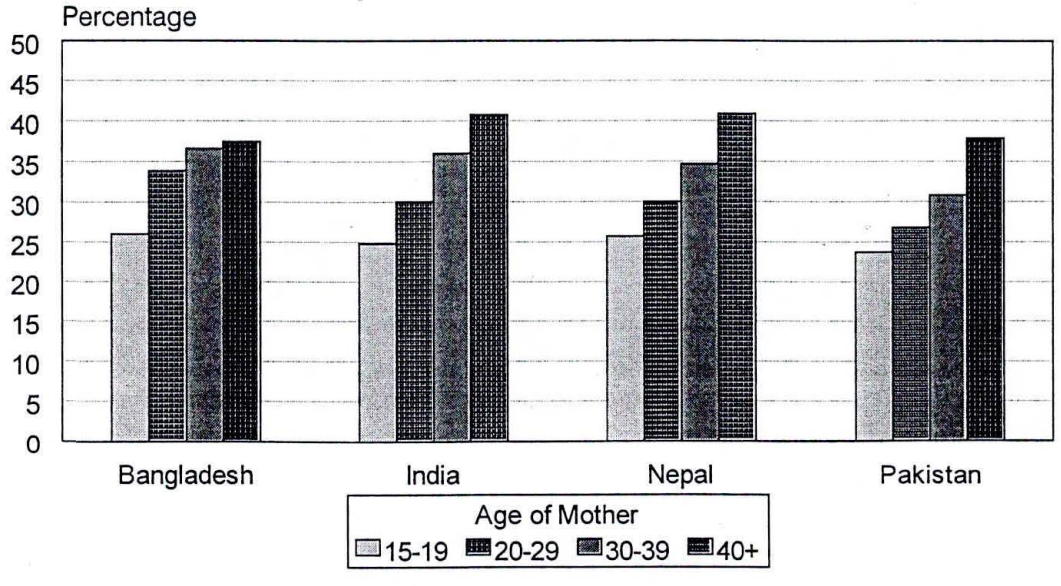


Table 18: Percentage Distribution of Births in the Five Years Preceding the Survey by Number of Months Since Previous Birth, According to Age of Mother, SAARC Countries

Country/ Age of Mother	Number of Months Since Previous Birth						Median Months Since Previous Birth	No. of Births
	7-17	18-23	24-35	36-47	48+	Total		
Bangladesh	**8.3**	**12.0**	**33.5**	**22.2**	**24.0**	**100.0**	**34.7**	**5409**
15-19	17.6	21.7	36.1	18.6	6.0	100.0	26.0	175
20-29	8.9	12.1	35.5	22.1	21.5	100.0	33.9	3311
30-39	6.2	11.5	30.1	22.9	29.3	100.0	36.6	1616
40+	7.3	8.9	28.7	21.2	33.9	100.0	37.5	307
India	**11.8**	**15.1**	**33.8**	**20.8**	**18.6**	**100.0**	**31.6**	**44900**
15-19	22.0	23.2	40.3	11.7	2.9	100.0	24.8	1263
20-24	15.3	18.5	38.8	19.2	8.2	100.0	27.8	12445
25-29	11.2	15.7	33.7	21.8	17.5	100.0	31.8	16093
30-34	8.9	11.9	30.7	21.9	26.6	100.0	35.4	9331
35-39	9.0	10.7	26.8	21.7	31.8	100.0	37.3	4060
40-44	7.0	6.2	26.6	21.4	38.8	100.0	40.0	1338
45-49	4.5	4.9	23.8	21.9	45.0	100.0	43.6	369
Nepal	**9.4**	**14.7**	**36.4**	**22.6**	**17.0**	**100.0**	**32.0**	**5595**
15-19	21.0	20.3	47.2	9.8	1.7	100.0	25.7	88
20-29	10.5	17.0	40.4	21.0	11.2	100.0	30.0	3062
30-39	8.0	12.0	32.5	24.9	22.5	100.0	34.7	2019
40+	5.8	9.5	23.7	25.3	35.7	100.0	40.9	426
Pakistan	**16.7**	**16.7**	**35.6**	**13.6**	**17.5**	**100.0**	**29.1**	**5310**
15-19	32.4	21.0	39.6	6.7	0.3	100.0	23.7	68
20-29	19.8	18.7	37.0	12.6	11.9	100.0	26.8	2452
30-39	14.3	15.9	35.7	14.4	19.8	100.0	30.8	2242
40+	10.3	10.9	27.8	15.7	35.4	100.0	37.9	547

Source: Same as in Table 11.

C.4.5 Ideal Number of Children

Data in Table 19 shows that the mean ideal number of children for ever married adolescent girls exceeds that of the replacement level fertility of around 2.2 children in almost all countries of the region for which comparable data are available, except for Bangladesh.

Ideal number of children of adolescent girls exceeds that of the replacement level fertility.

Table 19: Mean Ideal Number of Children for Ever Married Adolescents Girls, SAARC Countries

Age/Sex	Mean Ideal Number of Children						
	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan**	Sri Lanka
10-14	2.1	NA	2.8*	NA	NA	NA	NA
15-19	2.3	NA	2.7	NA	2.7	3.4	NA

Note: Mean ideal number of children for ever-married women aged 10-49. (*) refers to age group 13-14.
Source: Same as in Table 15.

C.5 Family Planning

The use of contraception is very limited among the currently married late adolescent girls aged 15-19. No more than 11 percent of the currently married late adolescent girls were using contraception in any SAARC country other than that of Bangladesh and Sri Lanka. One third of the currently married late adolescent girls of Bangladesh and Sri Lanka practice contraception (see Table 20 and Figure 16). However, there exists a large unmet demand for contraception among the currently married late adolescent girls (see Table 21). At least one quarter of them would like to limit or postpone their births for some time, but are not practising contraception. The unmet demand for family planning varies within the region by country. It is highest in Nepal followed by India with only 14 percent and 19 percent of demand for family planning satisfied respectively. The unmet demand for contraception is lowest in Bangladesh followed by Pakistan, with 64 percent and 22 percent of demand for family planning satisfied respectively. The unmet demand for contraception is largely concentrated among the spacers than among the limiters, indicating that promotion of and wider availability of spacing methods could lead to greater use of contraception among adolescents.

The use of contraception is very limited among currently married adolescent girls. However, there exists a substantial unmet demand for contraception among them.

Apart from large unmet demand for family planning, a majority of those currently married late adolescent girls who are not currently using contraception have not been contacted for the purpose of family planning, as data from Bangladesh and Nepal shows (see Table 22).

The majority of the currently married late adolescent girls (15-19 years) and their husbands approve of family planning in almost all countries of the region, except for Pakistan (see Table 23). In Pakistan, only one-third of the currently married late adolescent girls and their husbands approve of family planning.

Table 20: Percentage of Currently Married Women (10-24) who are Currently Practising Contraception by Age

Country	Age			
	10-14	15-19	20-24	Total (15-49)
Bangladesh	15.6	32.9	43.1	49.2
Bhutan	-	1.4	9.1	18.8
India	4.7	7.1	21.0	40.7
Maldives	-	11.4	18.9	14.9
Nepal	-	6.5	15.8	28.5
Pakistan	-	6.2	9.9	23.9
Sri Lanka	-	30.3	-	66.1

Source: Same as in Table 15.

Figure 16
Percentage of Currently Married Women (15-19) who are Currently Practising Contraception by Age, SAARC Countries

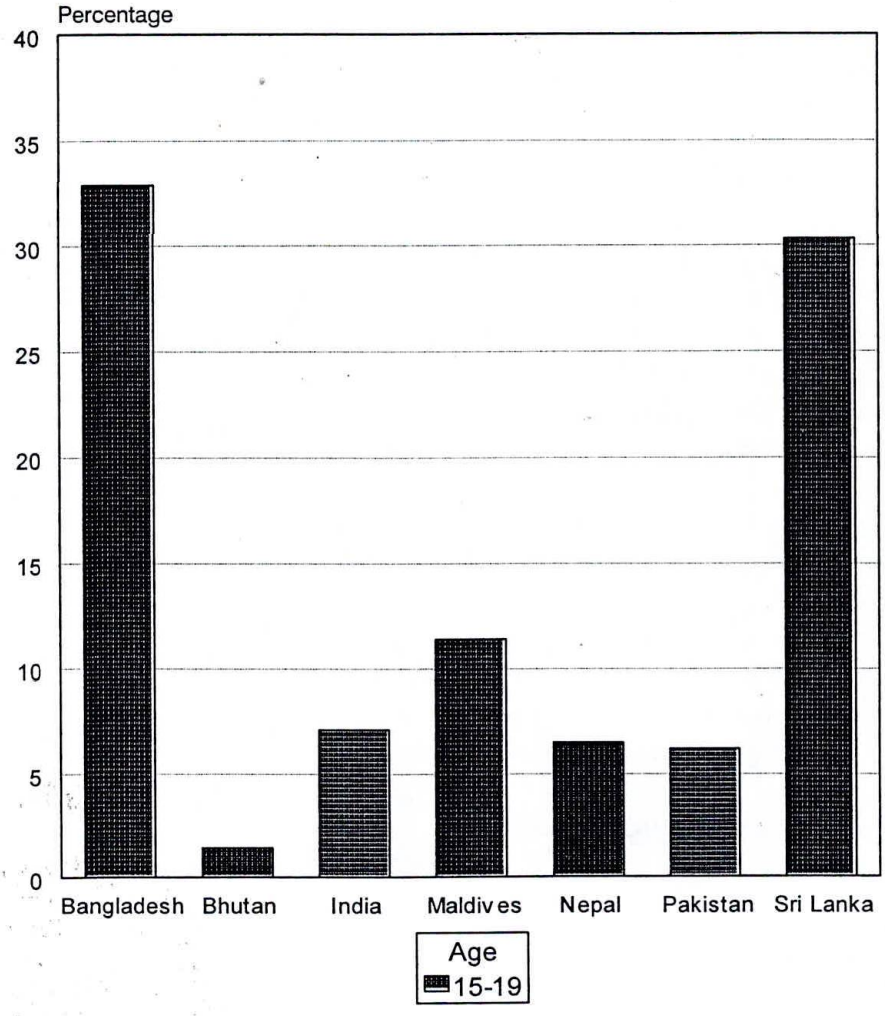


Table 21: Percentage of Currently Married Adolescent Girls with Unmet Need for Family Planning, and the Total Demand for Family Planning Services, SAARC Countries

Country/ Age	Unmet Need for Family Planning 1/			Met Need for Family Planning	Total Demand for Family Planning	Percentage of Demand Satisfied
	For Spacing	For Limiting	Total	Total		
Bangladesh						
10-14	21.3	0.8	22.1	15.6	37.7	41.4
15-19	17.8	0.9	18.7	32.9	51.6	63.8
India						
10-14	29.6	3.6	33.2	4.7	37.9	12.4
15-19	28.2	2.3	30.4	7.1	37.5	18.9
Nepal						
10-14	-	-	-	-	-	-
15-19	38.9	1.6	40.5	6.5	47.0	13.8
Pakistan						
10-14	-	-	-	-	-	-
15-19	-	-	21.7*	6.2*	27.9*	22.2*

Note: 1/ Unmet need for spacing includes women who are not using any method of family planning but say they want to wait two or more years for their next birth. While unmet need for limiting refers to women who are neither pregnant nor amenorrheic, and who are not using any method of family planning but want no more children.

* Pakistan Contraceptive Prevalence Survey 1994-95.

Source: Same as in Table 15.

Table 22: Percent Distribution of Currently Non-users by Whether They Were Visited by a Family Planning Worker or Spoke with a Health Facility Staff Member About Family Planning Methods During the 12 Months Prior to Interview, According to Respondent's Age, SAARC Countries

Country/ Age Group	Contact of Non-users with Family Planning Providers							
	Visited by FP Worker			Not Visited by FP Worker			No FP Services or Information Provided	Number of Women
	Visited Health Facility		Did not Visit Health Facility	Visited Health Facility		Did not Visit Health Facility		
	Discussed FP	Did not Discuss FP		Discussed FP	Did not Discuss FP			
Bangladesh*								
10-14	14.8	1.9						
15-19	29.7	4.3						
20-24	42.3	4.5						
25-29	46.9	4.8						
Nepal								
15-19	0.6	0.9	2.3	1.6	27.2	67.4	94.6	902
20-24	1.2	2.7	2.3	3.9	35.8	54.2	89.9	1350
25-29	1.9	2.0	4.3	5.4	30.5	55.6	86.1	1081

Note: (*) For Bangladesh, the percentage refers to currently married women visited by a FP field worker in the six months prior to the survey.

Source: Bangladesh: BDHS 1993-94.
Nepal: NFHS 1996.

Table 23: **Attitudes of Couples Towards Family Planning (FP), SAARC Countries**

Percent Distribution of Non-sterilised Currently Married Women who know of a Contraceptive Method by Wife's Attitude Toward Family Planning and Wife's Perception of her Husband's Attitude Toward Family Planning, According to Respondent's Age Group, SAARC Countries

Country/ Age Group	Attitudes Towards Family Planning								
	Respondent Approves			Respondent Disapproves			Respondent Unsure	Total	Number of Respondents
	Both Approve	Husband Disapproves	Husband's Attitude Unknown	Husband Approves	Husband's Attitude Unknown	Both Disapproves			
India	**58.4**	**7.0**	**11.6**	**1.3**	**9.3**	**11.5**	**1.0**	**100.0**	**55036**
10-14*	42.0	3.7	24.2	2.2	16.9	8.8	2.2	100.0	273
15-19	56.5	5.6	16.9	1.2	10.0	8.9	0.8	100.0	7927
Nepal	**68.8**	**10.2**	**11.1**	**0.7**	**1.6**	**4.6**	**3.0**	**100.0**	**6462**
10-14	-	-	-	-	-	-	-	-	-
15-19	63.2	6.5	21.7	0.4	1.3	3.8	3.0	100.0	930
Pakistan	**34.1**	**12.5**	**15.0**	**2.1**	**13.4**	**22.4**	**0.5**	**100.0**	**4729**
10-14	-	-	17.4	-	-	-	-	-	-
15-19	33.3	10.5	13.9	2.6	19.6	15.3	1.2	100.0	277

Note: (*) refers to 13-14 age group.
Source: Same as in Table 15

D. HEALTH RISKS OF EARLY MARRIAGE AND CHILDBEARING

D.1 Nutrition

A large proportion of adolescents are malnourished and also short statured which increase the risk of difficult child birth.

Data from Bangladesh and Nepal reveal that a considerable proportion of the currently married late adolescent girls aged 15-19 are acutely malnourished (measured in terms of mean Body Mass Index (BMI)) and short statured (i.e., shorter than cut off point of 145 CM). Data in Table 24 shows that about half and one-third of the currently married late adolescent girls in Bangladesh and Nepal are acutely malnourished respectively (i.e., Mean Body Mass Index (BMI) is less than 18.5 (lg/m2). While about one-fifth and one-tenth of the currently married late adolescent girls in Bangladesh and Nepal respectively are so short statured as to increase the risk of difficult child birth.

Table 24: Among Mothers (15-19 Years) of Children Under Five Years, Mean Height and Percentage of Women Shorter than 145 Centimetres, Mean Body Mass Index (BMI) and the Percentage of Women whose BMI is Less than 18.5 (kg/m2), by Age of Mother: Nepal and Bangladesh

Country	Age	Height			BMI		
		Mean	Percentage <145 cm	Number of Women	Mean	Percentage <18.5 (kg/m2)	Number of Women
Nepal (1996)*	15-19 20-24	150.1 150.9	13.3 13.3	393 1,192	19.7 19.8	30.6 29.8	336 981
Bangladesh (1996-97)	15-19 20-24	149.9 150.2	18.7 18.3	762 1,314	18.6 18.7	50.1 53.6	654 1,155

Note: (*) refers to women who had a birth in the three years preceding the survey.

Source: Nepal: Nepal Family Health Survey 1996.
Bangladesh: Demographic Health Survey 1996-97.

Adolescent boys and girls also fail to meet calorie and protein requirements. Data from India and Pakistan shows that adolescent boys and girls of both the countries fail to meet calorie requirement (see Table 25). About 25 percent of adolescent boys and 20 percent of adolescent girls in India fail to meet the calorie requirement. The corresponding proportion of boys and girls failing to meet calorie requirement in Pakistan are about 14 percent. With regard to protein intake, Pakistani boys and girls meet their requirement while their Indian counterparts fail to meet their protein requirement. Over 30 percent of Indian adolescent boys and girls fail to meet their protein requirement. Protein intake of Pakistani boys and girls exceeds that of their requirement, but they are still short in meeting their calorie requirement. In this situation of relatively higher intake of protein on the one hand and lower intake of calorie on the other, Pakistani boys and girls may still remain trapped under the vicious cycle of protein calorie malnutrition.

The malnourished adolescent boys and girls will find it extremely difficult to realise their full potential and to lead a productive life. Also malnourished and short statured adolescent girls burdened with early pregnancy and childbearing will expose themselves and their babies to higher risk of death.

Table 25: Energy and Protein Intake by Males and Females of Different Age Groups: India and Pakistan

Country	Age Group	Energy, kcal/d				Protein, g/d			
		RDA		% of RDA Fulfilled		RDA		% of RDA Fulfilled	
		Female	Male	Female	Male	Female	Male	Female	Male
India (1975-80)	Adolescents								
	10-12	1950	2150	76.1	72.1	62	59	66.1	72.7
	13-15	2050	2400	79.0	73.9	65.4	76	65.6	64.6
	16-18	2050	2600	84.0	74.5	66	81	72.3	72.3
	Adults	1800	2350	99.4	92.3	50	60	100.8	100.3
Pakistan (1985-87)	6-15	2100	2200	86.4	86.8	45	45	117.8	122.2
	Adult	2100	2900	106.5	87.0	61	72	104.9	101.4
	Pregnant	2500	-	86.6	-	70	-	88.6	-
	Lactating	3100	-	74.1	-	82	-	84.1	-

Note: RDA = Recommended Daily Allowance.

Source: India: UNICEF, 1990, Children and Women in India - A Situation Analysis. Intake based on NNMB Survey in 10 states, 1975-80.
Pakistan: Federal Bureau of Statistics, 1995. Women and Men in Pakistan.

D.2 Infant Mortality Among Adolescent Girls

Children born to adolescent mothers have higher risk of death.

Babies born to adolescent mothers have the lowest chance of survival for various physiological and sociological reasons. This has also been supported by data from Bangladesh, India, Nepal and Pakistan. Data in Table 26 and Figure 17 show that neo-natal, infant and under-five mortality rates are highest among those born to adolescent mothers, while these rates are lowest for those born to mothers aged 20-29. This overall pattern of relationship, observed between age of mother on the one hand and neo-natal, infant and under-five mortality on the other, also holds for every country of the region for which comparable data are available.

The infant mortality rate among the live births of adolescent women is about 30 to 50 percent higher, compared to those of older women aged 20-29. While the neo-natal mortality rate among the live births of adolescent mothers is about 38 to 74 percent higher, compared to those of women aged 20-29 (see Figure 17).

Table 26: Neonatal, Infant and Child Mortality Rates for the Ten-year Period Preceding the Survey, by Age of Mother at Birth, SAARC Countries

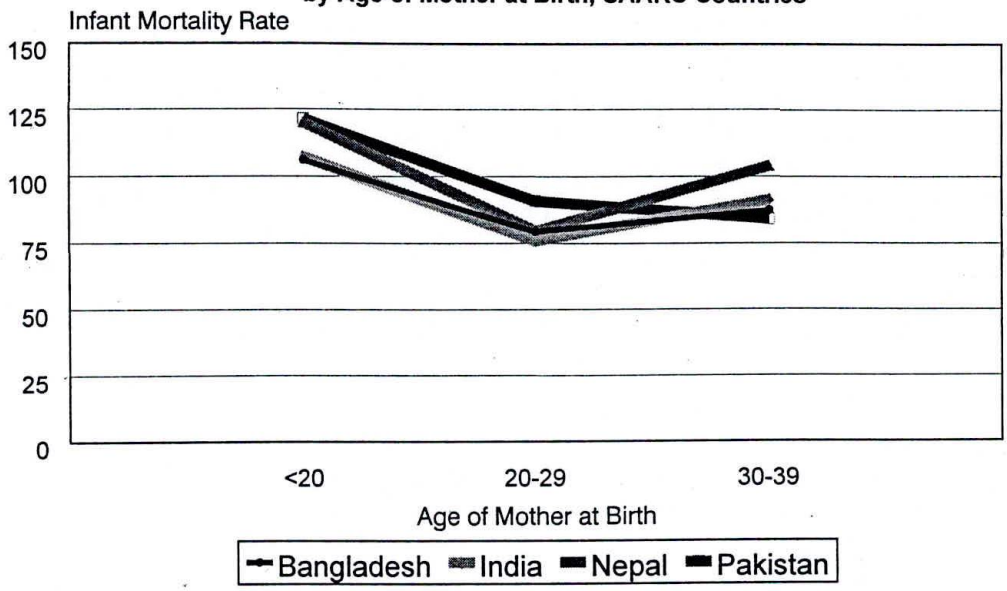
Country	Age of Mother at Birth 1/	Neonatal Mortality (NN)	Infant Mortality (1q0)	Under-five Mortality (5q0)
Bangladesh*	<20	70.2	106.1	145.0
	20-29	46.6	79.3	117.2
	30-39	47.3	87.2	124.7
India	<20	70.8	107.3	140.9
	20-29	44.8	75.8	107.8
	30-39	53.7	91.1	122.3
Nepal	<20	83.4	120.1	158.9
	20-29	48.0	79.5	127.7
	30-39	62.3	103.9	152.8
Pakistan	<20	70.1	121.3	144.8
	20-29	50.9	90.8	116.7
	30-39	48.5	839	113.0

Note: 1/ Rates for age group 40-49 are not shown for other countries because they are based on fewer than 250 exposed persons. (*) For Bangladesh, age of mother at birth 30-39 refers to age group 30-49.

Source: Bangladesh: Demographic and Health Survey 1996-97.
India: National Family Health Survey 1992-93.
Nepal: Nepal Family Health Survey 1996.
Pakistan: DHS, Pakistan Demographic and Health Survey 1990-91.

Source: Same as in Table 15.

Figure 17
Infant Mortality Rate for the Ten-year Period Preceding the Survey by Age of Mother at Birth, SAARC Countries



D.3 Maternal Mortality

The probability of maternal death is higher among the youngest (i.e., adolescent) and oldest women, compared to women of other age-groups in the reproductive span. This is also supported by data from Bangladesh and Sri Lanka (see Table 27 and Figure 18). In rural and urban Bangladesh, the maternal mortality rate of currently married adolescent girls is about 3 times higher than that of the rate of slightly older women aged 20-24. A similar pattern of age differential in maternal mortality, albeit less marked, is also observed in Sri Lanka.

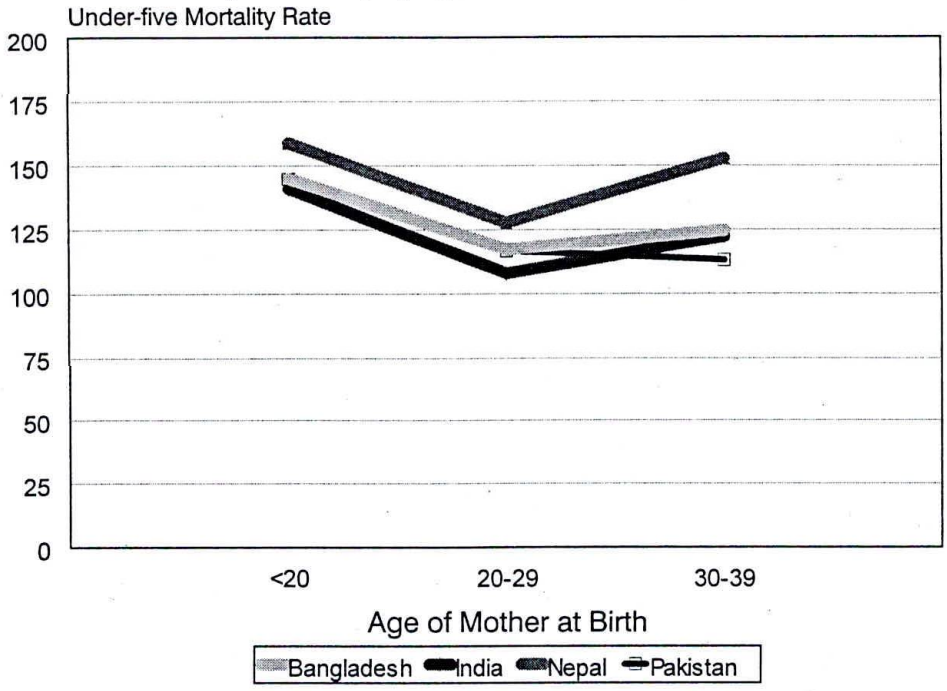
Risk of maternal mortality is higher among adolescent girls.

Table 27: Maternal Mortality Rate (MMR) by Age of Mother, Bangladesh and Sri Lanka

Age of Mother	Bangladesh (1987)*		Sri Lanka (1988)*
	Urban	Rural	
15-19	9.90	11.57	3.50
20-24	2.62	4.58	3.33
25-29	4.61	3.98	2.81
30-34	5.83	4.58	3.50
35-39	6.13	7.75	7.75
40-44	-	11.11	10.10
Maternal Mortality Rate*	5.51	6.13	4

Note: (*) Expressed per 1,000 live births.
Source: UNICEF 1997. Statistics of South Asian Children and Women.
UNFPA 1993. Population Profile of SAARC Countries: With Special Reference to Women, Kathmandu.
United Nations, Sri Lanka: Women in Sri Lanka A Country Profile, UN, 1997.

Figure 18
Under-five Mortality Rate for the Ten-year Period
Preceding the Survey by Age of Mother at Birth, SAARC Countries



From the preceding findings, it is clearly evident that the risks of maternal, neo-natal, infant as well as childhood mortality are closely related to age of mother, with the risk being higher for the youngest and oldest women. It should also be noted that high maternal infant and child mortality are also related to high fertility and frequent births. Therefore, prevention of early and late pregnancies and frequent childbirth would also contribute significantly to the reduction of fertility and mortality, particularly among infants, children and women in the reproductive ages.

D.4 Miscarriage/Still Birth

Adolescent girls are likely to experience higher foetal wastage than older women.

Adolescents have higher propensity to experience adverse pregnancy outcomes than older women. This has been also supported by data from India, Nepal and Bangladesh. About 10 percent, 7 percent and 12 percent of all pregnancies of adolescent girls are terminated by miscarriages and/or still births i.e., foetal wastage in India, Nepal and Bangladesh respectively. The corresponding figures for slightly older women aged 20-24 were 8 and 6 in India and Nepal respectively.

D.5 STDs/HIV/AIDS

Exposure to sexually transmitted diseases is higher among adolescent girls than boys.

Information on the prevalence of Sexually Transmitted Diseases (STDs), including HIV/AIDS for the population in general and adolescents in particular are extremely limited for all SAARC countries. However, the limited information that are available on the incidence of sexually transmitted diseases reveal a gloomy picture. A recent study conducted in Bangladesh revealed a high level of prevalence of Reproductive Tract Infections (RTIs) among both unmarried and married adolescents and STDs among unmarried adolescents. Over 4 in 10 unmarried and married adolescent girls and 1 in 5 unmarried adolescent boys reported to have

had symptoms of RTIs and STDs respectively. The incidence of STDs among married and unmarried adolescent girls in Bangladesh were reported to be 5 percent and 3 percent respectively (Haider, et.al, 1997). In Sri Lanka, about 7 percent of adolescents reported to have had STDs (Sri Lanka Country Paper). In Nepal, adolescents constituted about 16 percent of the HIV/AIDS diagnosed cases, and 72 percent of these cases were adolescent girls (National Centre for AIDS and STD Control, 1998).

D.6 Abortion

Available evidence, although limited, portrays a disturbing picture of adolescent abortion seekers.

Reliable information on abortion seekers in general and for unmarried adolescents in particular are not available for any country in the SAARC region. Demographic and Health Surveys (DHS) conducted in India and Nepal reveal a low abortion rate of 1.3 and 0.4 percent of pregnancies in India and Nepal respectively. The rate of induced abortion is reported to be slightly higher among married adolescent women aged 15-19 than among all married women. These rates are 1.7 vs. 1.3 percent of pregnancies in India and 0.5 vs. 0.4 percent of pregnancies in Nepal. However, small scale studies, particularly the hospital based studies conducted in urban and rural areas reveal a higher rate of abortion, particularly among adolescents, compared to those reported by Demographic and Health Surveys. For example, 6 percent of induced abortion reported to have occurred to adolescent women under age 20 in Nepal. A similar pattern is also observed in India. In Bangladesh, about 4 percent of currently married adolescent women reported to have terminated their pregnancies through menstrual regulation (Haider, et.al., 1997). No information on the incidence of abortion among unmarried adolescent girls are available at national level. However, hospital based studies conducted in Nepal and India confirm that a large proportion of unmarried adolescents girls also seek abortion.

A review of hospital based studies in both rural and urban areas conducted in India and Nepal reveal the following pattern of abortion[1]: (IDS, 1985, 1986 and 1993, Jejeebhoy, 1996)

(i) adolescents account for a disproportionately large proportion of abortion seekers

(ii) adolescent abortion seekers comprise of both married and unmarried girls

(iii) adolescents, particularly the unmarried adolescents, are most likely to seek abortion during the second trimester of pregnancy than older women

(iv) health consequences of abortion are particularly acute for the unmarried adolescent girls who seek abortion during the second trimester.

(v) adolescent abortion seekers tend to repeat abortions.

[1] These findings should be treated with caution as they are limited in scope.

E. REPRODUCTIVE HEALTH CARE

E.1 Antenatal Care

Antenatal care among adolescent women is not satisfactory.

Data in Table 28 and Figure 19 show that although currently married adolescent women in general tend to receive more antenatal care, compared to older women, the majority of them still do not seek antenatal care in Pakistan and Bangladesh. The proportion of currently married women seeking antenatal care is lowest in Pakistan (26 percent) followed by Bangladesh (29 percent), and highest in Nepal (44 percent) followed by India (35 percent).

Table 28: Percent Distribution of Live Births in the Five Years Preceding the Survey by Source of Antenatal Care during Pregnancy according to Mother's Age at Birth: Selected SAARC Countries

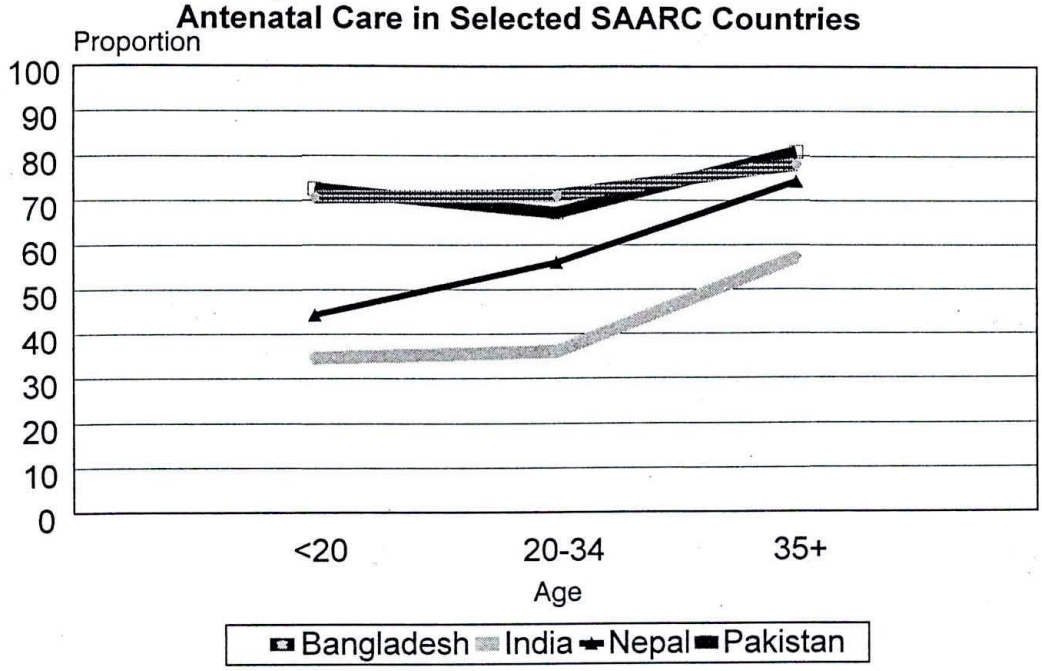
Country	Mother's age at birth	Antenatal care provider*							
		Doctor	Trained nurse/ Midwife**	Traditional birth attendant	Other	No one	Don't know/ missing	Total	Number of Births
Bangladesh (1996-97)	< 20	20.4	6.8	0.2	1.9	70.7	-	100	1997
	20-34	19.8	6.7	0.3	2.1	71.1	-	100	3890
	35+	12.4	7.4	0.0	2.2	78.0	-	100	343
India (1992-93)	< 20	40.8	9.8	0.4	13.3	34.6	1.1	100	11,514
	20-34	40.8	9.4	0.3	12.6	36.0	0.9	100	35,258
	35+	22.5	5.9	0.3	13.1	57.2	1.1	100	2,597
Nepal (1996)	< 20	16.5	33.2	0.7	2.5	44.3	2.7	100	817
	20-34	12.6	26.3	0.8	1.7	56.1	2.4	100	3,136
	35+	6.1	15.9	0.8	1.5	74.2	1.5	100	422
Pakistan (1990-91)	< 20	20.3	3.8	2.7	0.1	72.6	0.5	100	746
	20-34	24.4	4.2	2.6	-	67.2	1.5	100	4843
	35+	13.6	4	1.3	-	80.8	0.3	100	818

Note: * If the respondent mentioned more than one provider, only the most qualified provider is considered.

** For Pakistan it includes lady health worker and trained birth attendant; for Nepal, it includes VHW, MCH worker and other health professionals (health assistant and health post staff)

Source: Same as in Table 15.

Figure 19
Proportion of Mothers who do not Seek Antenatal Care in Selected SAARC Countries



E.2 Vaccination Against Tetanus

Coverage of immunisation of adolescent pregnant women against tetanus needs further improvement.

Data in Table 29 shows that the majority of pregnant adolescent women were immunised against tetanus in most countries of the region, for which comparable data are available, except for Pakistan. In Pakistan only 29 percent of pregnant adolescent women were immunised against tetanus. The proportion of pregnant adolescent women immunised against tetanus was highest in Bangladesh (80%) followed by India (63%). Nepal occupies the intermediate position with 56% of pregnant women immunised against tetanus (see Table 29). Data in Table 29 also shows that a higher proportion of adolescent pregnant women were vaccinated against tetanus, compared to older women, indicating improvement in coverage of immunisation against tetanus over time.

Table 29: Percent Distribution of Births in the Five Years Preceding the Survey by Number of Tetanus Toxoid Injections during Pregnancy according to Mother's Age at Birth: Selected SAARC Countries

Country	Mother's age at birth	Number of Tetanus Toxoid injections					Number of Births
		None	One dose	Two doses or more	Don't know/ missing	Total	
Bangladesh (1996-97)							
	< 20	20.7	12.7	66.4	0.2	100.0	1,997
	20-34	25.4	16.9	57.4	0.3	100.0	3,890
	35+	45.9	12.3	41.6	0.2	100.0	343
India (1992-93)*							
	< 20	37.0	7.7	55.1	0.1	100.0	11,514
	20-34	37.8	6.9	55.1	0.2	100.0	35,258
	35+	62.8	6.8	30.3	0.1	100.0	2,597
Nepal (1996)**							
	< 20	44.0	15.0	40.7	0.4	100.0	817
	20-34	53.5	13.6	32.6	0.3	100.0	3,136
	35+	73.6	9.7	16.7	0.0	100.0	422
Pakistan (1990-91)							
	< 20	71.3	7.2	21.5	-	100.0	746
	20-34	68.7	6.5	24.6	0.2	100.0	4,843
	35+	76.5	5.7	17.3	0.5	100.0	818

Note: (*) For India, refers to live births during the four years preceding the survey.
(**) For Nepal, refers to live births during the three years preceding the survey.
Source: Same as in Table 15.

E.3 Attendance at Birth

A large proportion of adolescent births are unattended by trained health workers.

Only a small proportion of births of currently married adolescent women are delivered at health facilities, accounting for 3 to 11 percent of births in Bangladesh, Nepal and Pakistan, and 24 percent of births in India (see Table 30). Consistent with this finding, it is also observed that over 70 percent of births by women of all age groups still remain unattended by trained health workers in all countries of the region. The proportion of births of currently married adolescent women attended by health workers is lowest in Nepal and Bangladesh (both 14 percent), while this is highest in India (34 percent) followed by Pakistan (31 percent). The attendance of births by health workers is reported to be nearly universal in Sri Lanka.

In terms of proportion of babies delivered at health facilities and attended by health workers, the younger (20-39 years) and older (35 years and above) women occupy the first and last position, while adolescent women occupy the intermediate position.

Table 30: Percent Distribution of Live Births in the Five Years Preceding the Survey by Place of Delivery and Type of Assistance during Delivery according to Mother's Age at Birth: Selected SAARC Countries

Country/ Mother's age at birth	Place of delivery		Assistance during delivery								Number of Births
	Health facility	At home	Doctor	Trained nurse/ Midwife**	Trained TBA	Traditional birth attendant	Friends/ Relatives/ Other	No one	Don't know/ missing	Total	
Bangladesh (1996-97)											
< 20	3.4	95.4	4.8	2.6	7.0	56.7	28.0	0.6	0.2	100	1997
20-34	4.5	94.6	5.6	2.9	7.9	57.2	24.8	1.5	0.2	100	3890
35+	3.3	96.6	3.8	3.1	5.8	60.1	23.3	3.9	0.0	100	343
India (1992-93)1											
< 20	24.0	74.8	20.8	13.5	-	35.1	29.7	0.4	0.5	100	11,514
20-34	27.0	72.1	22.6	12.6	-	34.8	28.8	0.6	0.5	100	35,258
35+	12.5	86.1	10.3	8.8	-	41.3	37.6	1.0	1.0	100	2,597
Nepal (1996)2											
< 20	8.8	90.7	6.9	6.8	-	29.2	52.4	4.6	0.1	100	817
20-34	7.6	91.6	5.7	3.9	-	21.4	57.6	11.3	0.0	100	3,136
35+	4.9	93.9	4.0	2.6	-	17.8	55.5	19.4	0.8	100	422
Pakistan (1990-91)											
< 20	11.0	88.5	10.3	6.8	13.7	55.4	11.1	1.9	0.9	100	746
20-34	14.6	83.7	13.4	6.6	16.8	50.8	9.3	1.4	1.7	100	4843
35+	8.1	91.4	8.0	4.8	18.5	57.7	8.1	2.3	0.6	100	818

Note: 1: refers to live births during four years preceding the survey; 2: refers to live births during three years preceding the survey.
If the respondent mentioned more than one provider, only the most qualified provider is considered.
** For Pakistan it includes lady health worker.
for Nepal, it includes VHW, MCH worker and other health professionals (health assistant and health post staff).

Source: Same as in Table 15.

F. KNOWLEDGE ABOUT SEXUAL, CONTRACEPTIVE AND REPRODUCTIVE HEALTH

F.1 Knowledge of Contraceptive Method

Knowledge of method of contraception among adolescent women is satisfactory, except for condom.

The knowledge of any method, traditional or modern, of contraception among currently married adolescent women is almost universal in all countries, except Bhutan and Pakistan. In Pakistan, 75 percent of currently married adolescent women are aware of at least one contraceptive method, modern or traditional. In Bhutan, only 51 percent of currently married adolescent women are aware of any modern method of contraception (see Table 31).

Table 31: Percentage distribution of currently married women with knowledge (spontaneous + probing) of family planning methods, SAARC countries

Age	Knowledge of method, spontaneous																	
	Bangladesh			Bhutan			India			Nepal			Pakistan			Sri Lanka		
	Any Method	Any Modern Method	Any Traditional method	Any Method	Any modern method	Any Traditional Method	Any Method	Any modern method	Any Traditional method	Any Method	Any modern method	Any Traditional method	Any Method	Any modern method	Any Traditional method	Any Method	Any modern method	Any Traditional method
Total	**99.8**	**99.8**	**76.1**		**74.7**		**95.8**	**95.5**	**39.3**	**98.4**	**98.3**	**44.4**	**90.7**	**90.5**	**38.2**	**99.3**	**99.2**	**72.3**
10-14	99.2	99.2	-		-		77.8*	76.9*	-	-	-	-	-	-	-			
15-19	99.5	99.5	-		51.2		90.4	90.2	-	96.9	96.6	-	75.5	75.4	17.3			
20-24	99.7	99.7	-		-		95.1	94.8	-	98.7	98.7	-	87.5	87.0	32.3			

Note: (*) refers to the age group 13-14

Source: Bangladesh: DHS1993-94, Bhutan: NHS 1994, India: NFHS 1992-93, Nepal: NFHS 1996, Pakistan: PCPS 1994-95, Sri Lanka: DHS 1993.

With regard to knowledge of specific method of family planning, particularly pill, injectable, IUD or implant, the following pattern emerges. The proportion of currently married adolescent women (15-19) knowing any of the above methods is lowest in Pakistan (59%) followed by India (63%), while it is highest in Bangladesh (99%) followed by Sri Lanka (85%) (see Table 32). However, knowledge of condom, compared to other modern methods, is very poor. The majority of currently married adolescent women in almost all countries of the region, for which comparable data are available, except Bangladesh, are not aware of condom. The proportion of currently married adolescent women who know of condom varies from lowest 18 percent in Pakistan to highest 85 percent in Bangladesh followed by 48 and 47 percent in Sri Lanka and India respectively (see Table 32).

With regard to knowledge of sources of obtaining a method, the following pattern emerges: The proportion of currently married adolescent women who know where to obtain a modern method is lowest in Pakistan (32 percent), while this is highest in Sri Lanka (90 percent) followed by India (80 percent) and Bangladesh (70 percent) (see Table 32).

Table 32: Contraceptive Knowledge Among Adolescents (15-19 years) in Selected SAARC Countries

Country and Survey Year	Contraceptive Use			
	% Women 15-19 Who Know			
	Fertile Days in the Menstrual Cycle	About the Pill, Injectable, IUD or Implant	About the Condom	Where to obtain a Modern Method
Bangladesh (1993-94)	-	99	85	70
India (1992-93)	-	63	47	80
Pakistan (1990-91)	3	59	18	32
Sri Lanka (1987)	25	85	48	90

Source: The Allan Gattmacher Institute. Into a New World: Young Women's Sexual and Reproductive Lives, 1997.

F.2 Knowledge of Reproductive Biology

Knowledge of reproductive biology is inadequate among adolescents.

Data from selected SAARC countries on some aspects of reproductive biology reveal very poor knowledge on the subject among adolescent girls. For example, only 3 percent and 25 percent of adolescent girls, aged 15-19, in Pakistan and Sri Lanka respectively could correctly mention the number of fertile days in the menstrual cycle (see Table 32). In Sri Lanka, only 37 percent of adolescent girls, aged 16-19, have adequate knowledge of hymen (Basnayake, 1998). In Bangladesh, 39 percent and 36 percent of unmarried and married adolescent girls (15-19) reported to have had no prior knowledge of menstruation before they experienced it (Haider, 1997).

F.3 Knowledge of HIV/AIDS

Knowledge of HIV/AIDS is poor among adolescents.

Evidence from selected SAARC countries suggests poor knowledge of HIV/AIDS among ever married adolescent girls. For example, about one in five to one in four ever married adolescent girls in Bangladesh and Nepal respectively have ever heard of HIV/AIDS (see Table 33). The data from Nepal also suggests that the majority of those who have heard of HIV/AIDS, could also identify specific ways to prevent it. However, there still remains a large proportion (about one fifth) of those who had heard of HIV/AIDS, but could not suggest any specific way of preventing it (see Table 34).

Table 33: Percentage distribution of ever-married women who have ever heard of AIDS, percentage who received information about AIDS from specific sources and mean number of sources of information about AIDS by age, SAARC countries

Age/sex	Percentage who have heard of AIDS	Number of women	Source of knowledge among those who have heard of AIDS								
			Radio	TV	News Paper	Pamphl-ets	Health worker	Friends/ Relativ-es	Other Sources	No. of women who know of AIDS	Mean No. of sources
Bangladesh	**18.7**	**9127**	**8.0**	**13.0**	**4.3**	**1.1**	**0.6**	**7.2**	**2.3**	**1707**	**2.0**
15-19	17.2	1446	7.6	11.7	2.6	0.6	0.4	6.8	1.7	249	1.8
20-24	19.7	1727	8.8	14.4	3.8	1.6	0.6	7.6	2.7	340	2.0
25-29	20.2	1905	9.2	14.5	5.7	1.2	0.6	6.6	2.5	385	2.0
30-39	19.1	2530	7.3	13.0	4.8	0.7	0.9	7.9	2.1	483	1.9
40-49	16.5	1518	7.1	10.8	3.7	1.4	0.2	6.8	2.7	250	2.0
Nepal	**26.8**	**8429**	**78.7**	**30.4**	**17.7**	**10.8**	**9.0**	**45.3**	**14.6**	**2263**	**2.0**
15-19	24.3	982	79.0	22.9	16.9	9.2	7.9	42.7	19.2	238	1.9
20-24	32.9	1626	80.8	26.8	25.9	12.3	8.6	44.1	11.9	535	2.0
25-29	29.0	1594	78.2	35.1	16.9	12.2	8.9	44.4	17.7	463	2.0
30-39	27.2	2480	79.4	32.3	14.7	10.1	10.0	47.9	12.5	674	2.0
40-49	20.2	1747	74.7	31.3	7.9	8.9	8.6	45.0	15.7	353	1.8

Source: Nepal: Nepal Family Health Survey 1996,
Bangladesh: Bangladesh Demographic and Health Survey 1996-97.

Table 34: Percentage or ever married women who have heard of AIDS and who know specific ways to avoid HIV/AIDS and percentage with misinformation, Nepal 1996

Age	Percentage of women with knowledge of ways to avoid HIV/AIDS										
	No way to avoid AIDS	Abstain from sex	Use condom	Have only one sex partner	Avoid sex with prosti-tutes	Avoid transfusion	Avoid injection	Other ways	Don't know any way	Percentage with any misinformation*	Number of women
15-19	6.7	11.1	34.7	58.1	37.3	16.3	8.0	9.1	17.7	0.6	238
20-24	9.3	13.1	33.5	52.9	33.1	13.2	11.9	9.4	22.0	1.3	535
25-29	8.2	15.7	33.0	53.9	36.9	16.7	12.2	10.7	19.3	1.7	463
30-39	7.0	14.6	30.9	53.0	36.6	11.1	13.1	11.7	20.6	1.6	674
40-49	9.8	10.2	21.5	46.2	34.1	11.6	8.9	9.0	29.7	1.8	353
Total	8.2	13.4	30.9	52.6	35.5	13.4	11.5	10.3	21.8	1.5	2263

Note: (*) Includes avoiding kissing, mosquito bites, and seeking protection from traditional healer.
Source: NFHS 1996.

REFERENCES

1. Integrated Development Systems (IDS), 1985, Hospital Based Study on Abortion in Nepal, Project Report, Kathmandu, Nepal: IDS.

2. Integrated Development Systems (IDS), 1986, A Study on Rural-based Abortion in Nepal, Project Report, Kathmandu, Nepal, IDS.

3. Institute for Integrated Development Studies (IIDS), 1993, Determinants of Abortion and Subsequent Reproductive Behaviour among Women in Three Urban Districts of Nepal (1992-94), Project Report 1, Kathmandu, Nepal, IIDS.

4. Shireen J. Jejeebhoy. "Adolescent Sexual and Reproductive Behaviour: A Review of the Evidence from India", International Centre for Research on Women (ICRW), 1996.

5. Haider, J.S. et. Al. 1997. "Study of Adolescents: Dynamics of Perception, Attitude, Knowledge and use of Reproductive Health Care", Research Evaluation Associates for Development (READ), June 1997.

6. Basnayake, Sriani, "Knowledge and Attitudes about Reproductive Health among Youth in Sri Lanka", Family Planning Association of Sri Lanka, 1986.