ISSN 1605-2021

লোক-প্রশাসন সাময়িকী
উনত্রিংশত্তম সংখ্যা
ডিসেম্বর ২০০৩/অগ্রহায়ণ ১৪১০

Designing School Adolescents' Reproductive and Sexual Health Education Program : Bangladesh Perspectives

Kazi Hasan Imam *

Abstract : *Reproductive health situation in the country and reproductive and sexuality health problems especially HIV/AIDS and other STIs etc. around the country is alarmingly high. This makes people of Bangladesh, especially the adolescents and young adults highly vulnerable to deadly degeneration process. Concerning the present and up-coming situation, the study suggested to introduce a scientifically identified need-based and age-specific reproductive and sexual health education program in the regular curriculum of school education system. Parenting roles in such education has been given due importance. The study also suggested to realize the emergence and urgency of the issues at all levels, in the family, community and nation as a whole for safeguarding the country's future generations.*

1.0 Introduction

Reproductive health and sexuality education is an integral part of adolescents' development. School Adolescents face great diversity of challenges in maintaining their reproductive and sexual health. Adolescence is a time of rapid personal, physiological and social developments and of learning about gender roles, life skills as well as about sexuality and relationships. Adolescence is a critical time for developing healthy behaviors towards sexuality, reproductive rights and responsibilities. According to the World Health Organization (WHO) the term "adolescent" refers to the children, who fall within the age-group of 10 to 19 years that comprise a large part of the country's total population.

In many societies, educating children about sex is not a task that parents and other family members find easy. Many feel uncomfortable in talking to the children about the subject. Perhaps they are reluctant to expose their own lack of knowledge about anatomy, physiology or other related information. They may worry about how much information to give at what age, based on the unfounded belief that the provision of this information will lead young people to experiment sex. Adult family members, therefore, tend to shy away from actively educating youth about the issues relating to sexuality. Many people fail to realize that giving no information or evading young people's questions can send negative messages about sexuality.

* Deputy Director, Bangladesh Public Administration Training Centre (BPATC), Savar, Dhaka.

The concept of teaching school adolescents' reproductive and sexuality health (R&SH) issues is still an unfold chapter in our formal education system. The dimensions and magnitudes of reproductive and sexuality health problems emerging in and around the country have been alarming to create a systematic learning avenue of the issues for adolescents and young adults to save the nation from deadly degeneration process. But the existing socio-cultural practices, religious values and superstitions stands against efforts need to be made for introducing such issues in the prevailing education system.

Studies suggested, when young people do not get information at home they seek answers elsewhere — from peers, media or their observations of other adults. This can lead to misinformation and the persistence of damaging myths, making young people vulnerable to unwanted and unprotected sexual experiences. The result may be unplanned pregnancy, sexually transmitted infections, genital mutilation and low self-esteem.

Family is considered as the best learning institution for all children, where parents usually can play vital roles in children's learning processes. Teachers are regarded as the guide, philosopher and ideal model for the students. They have the power to guide children's development towards healthy sexuality as a natural, normal and progressive experience within the life cycle. In some cultures, parents and family members such as aunts, uncles, elder sisters and grandparents are influential sources of knowledge, beliefs, attitudes and values for children and youth. Therefore, the study intends to design such a learning situation where parents, teachers and the others can get involved in developing school-adolescents' appropriate knowledge and attitudes towards reproductive health and sexuality.

1.1 Reproductive Health and Sexuality Education : Concepts and Issues

WHO defined "Reproductive Health" as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity in all matters relating to the reproductive system and to its functions and process (Akhter, et.al.1996, p.1). The International Conference on Population and Development

(ICPD) held in Cairo in 1994 recommended a "reproductive and sexual health care package" comprising of as many as nine broad elements[1], where adolescents have been considered as a major target group of reproductive and sexual health education (Akhter, et.al.1996, pp.10-11).

The Millennium Development Goals (MDGs) have set out same sorts of action plan or targets to combat reproductive and sexual health problems (UNDP, 2003, pp. 27-32). UNFPA argued that reducing poverty requires progress in adolescents' reproductive health needs. The comprehensive reproductive health care programme incorporates the following components of care:

- Information, education and counselling, as appropriate, on human sexuality, reproductive health and responsible parenthood;
- Education and services for prenatal care, safe delivery and post natal care, especially breast feeding, infant and women's health care;
- Prevention and appropriate treatment of infertility and counselling of the couple;
- Prevention of unsafe abortion and the management of the consequences of abortion;
- Diagnosis and treatment of reproductive tract infections (RTI);
- Diagnosis and treatment of sexually transmitted diseases and other reproductive health conditions;
- Family Planning counseling, information, education, communication and services; and
- Diagnosis and treatment of complications of pregnancy, delivery and abortion.

---

[1] The package includes (a) Family Planning, (b) Women's Health and Safe Motherhood, (c) Unwanted Pregnancies, (d) Primary Health Care, (e) Child Survival and Health, (f) STDs and RTIs, (g) HIV/AIDS, (h) Adolescents and (i) Disabled Person.

The results from a recent survey conducted in Shanghai show that most of the parents don't know whether they should answer or how to answer the questions when they are asked about sex by their children. Their main priority is their child's test scores. Only 35.5 percent of them concentrate on their children's physical and psychological health. Children and adolescents need accurate and comprehensive education about sexuality to practice healthy sexual behavior as adults. An US studies indicate that teenagers have the highest rates of sexually transmitted diseases (STDs) of any age group. HIV can damage teenagers' health and reproductive ability. AIDS is not curable. HIV infection is increasing most rapidly among young people. A good number of AIDS cases were diagnosed among adolescents (13-19 years of age).

However, reproductive health care and sexuality education reduces sexual risk-taking behaviors, focuses on recognition of social influences, changes individual values, group norms, builds social skills, reinforces clear and appropriate values, strengthens individual values and group norms against unprotected sex.

1.2 Adolescents' Reproductive Health and Sexuality Education Scenario in Bangladesh

Communication about reproductive and sexual health with youth in Bangladesh is clouded with shame and silence. Sex education is not offered in Government or out-of-school education programs. About 42 percent of the country's total population is less than 15 years old and one in every three female youths within age-group of 15-19 years is either a mother or pregnant with her first child, as many as 50 percent youths are sexually active. A recent survey on male clients at an STI clinic indicates that 30 percent of them had sex with unmarried girls. HIV/AIDS rates are currently low but likely to increase steadily. The policy makers are very much concerned about HIV/AIDS spread in the neighbouring countries. Other sexually transmitted infections (STIs), late-term abortion and reproductive tract infections, though not as catastrophic as HIV/AIDS, are growing risks for Bangladeshi youths who are unprepared to meet these challenges.

Studies suggest that the pictures of reproductive and sexual health issues initially cause some shyness, but with more explanation,

people accept them. Although there is no formal institutional arrangement for learning reproductive and sexual health issues, people learn them through natural processes, from health care providers, Kabiraj (traditional healers), Shasthya Shebika (Community Health Workers), pharmacists and quacks. These are not befitting ones for the school adolescents and young adults in getting appropriate reproductive and sexual health education information. But there are some growing interventions, those are at least providing some helpful guidelines to the adolescents and young adults in this regard. The most important ones have been furnished below.

- Different GOs, development partner organizations and NGOs like UNFPA, UNICEF, ICDDR'B, ACTIONAID, DAWN Forum, Save the Children (UK and USA), Bangla Women's Health Coalition (BWHC), Bangladesh Population and Health Consortium (BPHC) etc. organizes seminars, workshops, symposium, advocacy meetings and conferences targeting policy makers, professionals, journalists, researchers, teachers, social leaders, institutional/departmental heads and other influential persons to advocate on adolescents' reproductive health (ARH) in Bangladesh.

- Other than organizing advocacy meetings, ICDDR'B, Population Council, UNFPA, UNICEF, Bangladesh Institute of Research for Promotion of Essentials and Reproductive Health Technologies (BIRPERHT) etc. disseminate their research/survey findings, raise awareness and undertake action programs on ARH.

- BRAC, BIRED and some other local and national NGOs organize community level advocacy meetings with teachers, parents of adolescents, local leaders, Imams, representatives of youth clubs etc. to help them understand the importance of ARH.

- VHSS and some other NGOs organize advocacy meetings among officers and workers to discuss adolescents' reproductive health related issues for assessing their progress.

- Some NGOs and development partner organizations have been working on creating some practicable documents on ARH

including STDs/HIV/AIDS and maternal mortality etc. issues and disseminating messages to their target groups.

- Different development partner organizations and NGOs have been imparting training on advocacy skills regarding ARH.
- Mass media campaigns are also playing a vital role in advocating the importance of the issues, creating awareness and getting social support, influencing policy makers and GOs/NGOs involvement etc.
- In collaboration with development partner organizations, different GOs have been undertaking development projects related to advocacy on reproductive health and gender issues or reproductive and sexual health issues where adolescents have been given due importance.
- UNFPA and some NGOs have been working on development of ARH curriculum, training manuals, booklets, study reports, interactive training videos, news letters etc. Different NGOs have targeted adolescent groups to provide them with ARH messages and advocacy counseling.
- Different organizations and NGOs are catering ARH related peer counseling services covering adolescents of different age-groups. In-school and out-of-school programs, family life education of the Concerned Women for Family Planning (CWFP), BRAC etc. have earned respect of the community.
- Video drama, folk songs, television shows etc. related to ARH are organized by different organizations.

In spite of all these efforts, adolescents' reproductive and sexual health situation is not improving at an expected rate. Experts opine that combating adolescents' reproductive health and sexuality problems requires a well-defined curriculum that has to be introduced in formal education program.

1.3 Curriculum Development for Education Program

Bhatt identified as many as four ideology groups, who conceived and determined curriculum for education program in four different ways (Bhatt 1996, pp. 1-8). The Social Efficiency Ideology group, who believes in "scientific instrumentalism", recognizes the needs

of the clientele, objectives of activities, competencies and changing behavioural patterns of the society (within a cause-effect, action-reaction or stimulus-response context) as the core considerations of curriculum. The Scholar Academic Ideology group believes in the perspective of academic disciplines in a hierarchical framework of searching for, disseminating and learning of the truth within one part of the universe of knowledge. The Child Study Ideology group focuses directly upon the needs and concerns of the individual child, where learning becomes an affair involving the drawing out of the inherent capabilities of the child and the teacher becomes as a facilitator. They also consider the contents, environments, unit of works, materials and methodologies as the integral parts of curriculum. The Social Reconstruction Ideology group views curriculum in social perspective, where the very survival of the society is believed to be threatened because of its traditional and ineffective mechanisms to deal with problems and actions need to be directed towards reconstructing the society with a new strategic vision. Barnes identified set-objectives, designed contents, adopted methodologies, knowledge, skills & competencies of the instructors, needs of the clientele groups, management, control and evaluation systems as the principal domains of curriculum (Barnes 1985, pp. 1-30 & 109-131). Raffe emphasized on contexts rather than contents (Raffe 1985, pp. 67-69). Bhatt and Sharma considered the process and the procedural aspects with time-dimension as important issues of curriculum development or improvement (Bhatt and Sharma 1992, pp. 41-66).

Workers within the field of curriculum have sought for many years to determine a proper definition of the word "curriculum". The end result of their endeavors always seems to be the additions of another new improve definition over the issue and further criticism of other inadequate definitions (Bhatt 1996, p. 14). A classroom teacher might believe that curriculum is "all of the planned and organized experiences designed to help students learn that take place within the institution". An institution guidance counselor might assert that curriculum is "all the experiences the students encounter within the institution — be they planned or unplanned, organized or unorganized, instructional or non-instructional". A Director in charge of supplies for the institution might think that curriculum is "all of the instructional materials — books, notes,

audio-visuals, other learning kits etc. — used within the institution by the teachers to help students learn". The others might conceive curriculum that "consists of the curriculum guides or course syllabi published by the authority of the institution". "Some curriculum writers have claimed that the definitional issues surrounding the word curriculum are of little significance, and that no matter how the word curriculum is defined, the definition does not significantly affect the types of issues and problems dealt with by either curriculum workers or the curriculum field as a whole" (Bhatt 1996, p. 17). However, the present study has encompassed all the elements, as conceived by the above mentioned different ideology groups, under the purview of curriculum.

1.4 Objectives of the study

The main focus of the study is to design an adaptable and effective reproductive health and sexuality education program for school adolescents. The study assumes that parents and school teachers might have profound crafts of inculcating such knowledge and attitudes required in shaping the school adolescents' reproductive and sexual behaviour. However, the specific objectives of the study are :

a. to assess school adolescents' knowledge and attitudes towards and needs for reproductive health and sexuality education;

b. to devise a befitting reproductive health and sexuality education program for school adolescents; and

c. to determine adaptable and effective means and suggest appropriate policy measures for implementing such program for the school adolescents;

1.5 The Conceptual Framework of the Study

Although all the adolescents and young adults are not covered by the country's secondary education system, introduction of R&SH education would develop a new generation consensus in the society that might help in combating the existing and upcoming R&SH problems. Before introducing such issues in the regular curriculum of the existing education system, one must try to understand how

the parents, the school teachers and the targeted adolescents conceive the issues and in what form and to what extent they will accept or accommodate the efforts, which need to be undertaken to overcome the problems. Therefore, the study has attempted first to assess the knowledge and attitudes of the concerned parents, teachers and school adolescents towards the issues and to determine what roles the parents and school teachers are currently playing in enhancing the school adolescents' knowledge and attitudes towards the issues. Then attempts have been made to determine the most effective ways and means for the parents and school teachers in playing such roles. The study has also attempted to determine the extent of R&SH issues to be appropriate to introduce in the school curriculum at different levels of school education programs.

In determining the most effective ways and means for the parents and school teachers in playing roles for enhancing adolescents' knowledge and attitudes towards the issues and in determining the appropriate extent of R&SH issues to be introduced at different levels, the study has analysed the prevailing differences in views among and within rural-urban structures, different gender groups and educational systems environment [i.e. co-education system and mono or uni-education system (e.g. boys' school and girls' school)].

1.6 Rationale of the Study

The tremendous social, economic and demographic changes in and around the countries of the world today have placed the adolescents at crossroads. Out of six million adolescent students reading in the country's 14,000 secondary schools, 3.5 million male students are kept in dark about reproductive health and sexual education. A survey conducted by an NGO named Population Council, revealed that less than 20% of the female adolescent students who take home economics as a subject got a chance to study on sexuality (The Independent, January 13, 2003).

Adolescents constitute more than one-fourth of the country's total population. This large group is at risk for a wide variety of reproductive health problems, such as unwanted pregnancies and STD/HIV/AIDS, especially if reproductive health (RH)

information and services are not available or used. In general, reproductive health knowledge among adolescents is low. The majority has no idea about the changes associated with puberty (e.g., menstruation or wet dreams) until they experience them. Their knowledge of symptoms, transmission and prevention of RTI/STDs and HIV/AIDS is inadequate. Moreover, adolescents generally do not go to the proper health care providers for their reproductive health problems.

Traditionally, early marriage prevents premarital sex. However, as the gap between age at menarche and marriage increases, adolescents are at risk from unprotected sex. Although social customs discourage premarital or extramarital sexual relationships in Bangladesh, such relations were reported in several studies (Cash, 2004, p. 1).

Adequate and appropriate knowledge on reproductive health and development of positive attitudes towards sexuality issues at early stage would prevent malpractices and nourish healthy sexual attitudes. This might be easier than changing practised-old unhealthy habits later. These relatively low cost programs might help prevent early pregnancy, HIV/AIDS and STDs (FOCUS, 1997). Many of the infrastructures and other elements required for successful implementation of the programs are already in existence. Experience suggests that reproductive health education in schools and family spheres would bring the adolescents in a broader context of developmental issues (Family Health International, 1997).

In almost every country, the delivery of sex education through school faces legal, financial, cultural and religious resistance as well as opposition from community leaders, school teachers, parents and even from the students themselves. Other obstacles in most countries include lack of active support, commitment, and coordination from ministry of health and education, school officials, lack of national skilled personnel, training materials, lack of mechanisms, strategies, organization and plan to supervise, monitor and evaluate programs; lack of research capability and infrastructure in school health programmes etc. (FOCUS, 1997).
Till today, motivational activities, counseling & advocacy towards promising future of adolescents remain un-addressed. In Bangladesh, strong family structure and family values play a major

role in shaping adolescents' life style but fails to respond to adolescents' needs for reproductive health information. Although parents tend to act as role models for their children but they remain escapist to provide reproductive information.

In this backdrop the parents and school teachers must have to play important roles in educating the school going adolescents regarding reproductive health and sexuality. The study would find out the ways and means for enabling them to play the appropriate roles. Therefore, the study would be of immense help for the parents, school teachers, adolescents, trainers, policy planners, gender specialists and researchers of relevant fields.

2.0 Methodology of the Study

An empirical approach has been followed for conducting the study. Both primary and secondary information and data have been used for the study. Relevant published and unpublished documents have been consulted. A questionnaire survey method was used adopting a stratified random sampling procedure. In order to prepare the questionnaire a pilot survey was conducted with the help of a preliminary questionnaire. The questionnaire was finalized on the basis of the feedback from the pilot survey. Moreover, some eminent line consultants, subject experts, education specialists, curriculum developers, policy planners and line researchers have been consulted in conducting the study.

Three schools[2] were selected in such a way that can reflect the differences of the respondents' views in rural-urban settings and in educational systems environment (i.e. co-education and mono/uni-education i.e. in boys' school and in girls' schools). Importance was given in selecting the educational institutions so that it reflects the country's average picture of the issues under consideration. The total sample size of the study was 311. Stratification was made on the basis of category — parents, teachers and school adolescents — of the respondents. It may be mentioned here that the students of class-VI to XII were considered as targeted school adolescents. The samples were further stratified into rural-urban class

[2] The selected schools were : (a) BPATC School and College, Savar, Dhaka, (b) S. K. Pilot High School, Mirzapur, Tangail and (c) Mirzapur Pilot Girls High School, Baimhati, Mirzapur, Tangail.

structures and gender groups i.e. males and females. Thereafter, a purposive random sampling procedure was followed to collect data from the target groups. The samples were collected in such a way that they could represent their corresponding stratified sample groups. The representative ratios of designed samples were approximately 1 : 1 : 3 in respect of parents, teachers and school adolescents and in respect of male-female and/or rural-urban it was almost 1 : 1.

The study used both simple and cross-tabulation for its analyses. Other statistical techniques, such as corresponding weighing methods to responses with ranks were employed for analyzing and interpreting data. The analytical description has been made mostly according to the corresponding tables and statistical techniques and tests employed (but no table has been presented to minimize the volume of the article).

3.0 Analysis and Findings

Studies indicate that the impact of reproductive and sexual health is not limited to the individual, family, or society at large. It extends across national boundaries to the world as a whole (Akhter, 1994, p. 10). The inability of individuals to address the reproductive and sexual health problems persistently aggravates the damaging health scenario of the country. The adolescents constitute a vital group of any society, who can shape a country's future. Appropriate addressing of the school adolescents' reproductive and sexual health problems has multiplier effects and implications on the individuals, society and the nation as a whole.

Experience suggests that adolescents and youth face multiple barriers to accessing reproductive and sexual health services and maintaining their reproductive health (Ingwersen and Proctor, 2001, p. 15). Studies suggested that the adolescents experience fewer unwanted pregnancies and are less likely to acquire sexually transmitted diseases where comprehensive reproductive and sexual health education, greater social openness regarding sexuality and adolescents' greater ease of access to reproductive health services exists in a society (Singh, 2000, pp. 14-23). Socio-economic disadvantage may contribute to differences in rates of teen-age pregnancy, childbearing and STDs (Johnes et. al. 1985, pp. 53-63).

Studies indicates that socio-economically disadvantaged adolescents often develop sexual relationships at an earlier age (Blum, 2000, pp. 1879-1884) and have less reliance on use of contraceptives (Manning, 2000, pp. 104-110). A comparative study of safe sex practices among girls in Mozambique showed that girls who were married young faced social and psychological barriers to accessing reproductive health services and they were exposed to a range of reproductive health problems that they would not have encountered prior to marriage (Ingwersen and Proctor, 2001, p. 15).

The information on reproductive and sexual health issues in Bangladesh is too scanty to warrant any meaningful interpretation of the status of our country in this regard. Non-existence of information on the issues related to adolescents' problems has made the situation rather more critical for undertaking appropriate interventions or for suggesting to undertake any intervention to this end. Therefore, the present study would mainly depend upon the gathered and generated primary information and data for its analysis.

3.1 Assessment of Attitudes towards Reproductive Health and Sexuality Education Issues

The attitudes towards R&SH issues and reproductive or sexual behaviours are, to a great extent, determined by one's family, educational, cultural, religious and other socio-economic backgrounds (Hossain, 2002, p. 26). Family integration and social values have critical importance in shaping one's reproductive and sexual behaviours. Gender imbalance in sexual decision making influences adolescents' reproductive and sexual behaviours. A study observed that over 57 percent (unmarried) adolescent girls in Malawi find easy to take risk of pregnancy than to ask a partner to use condom (Helitzer-Allen, 1994). Such many other social values and practices exist in different parts of the world. The normal socio-cultural practices of one society may be treated as critical offence in another society by its social norms or by legal practices. And their attitudes towards those issues are developed accordingly.

The people of Bangladesh maintain certain social, family and religious values. There is no data base regarding adolescents

R&SH situation in Bangladesh. Unmarried adolescents do not have access to reproductive and sexual health services. They tend to carry many of their R&SH problems unknowingly. All these influence in shaping one's attitudes towards R&SH issues.

It is often forgotten that the reproductive functions are superimposed on a woman's or an adolescent girl's general health and how well she can cope with the reproductive functions depend very much on her general health status (Chowdhury, 1994, p. 27). The prevalent culture in the country dictates that girls and women have to refrain from eating certain types of food (food taboo) during menstruation and failing to adhere these restrictions would cause heavy bleeding, severe cramps that would lead to infertility, which is again considered as the worst fate for a woman in the society.

Although biologically women need a bit of lesser calorie than men, they require additional cares and calories during and after pregnancy, lactation and menstruation, which are often ignored. Statistics shows that the girl children in Bangladesh suffer from consistent deprivation of nutrition. Girls under-5 and 5-14 years of age usually consume 16% and 11% less calories than those of the boys respectively (Rogers, 1995, p. 97). It is not only a condition prevalent among the young girls; women in Bangladesh also suffer from malnutrition for various socio-economic reasons. They eat last and less, although they have the majority share in family food production (Muntemba, 1995, p. 135). All these create a "Vicious Cycle of Malnutrition" for them. This cycle creates multi-dimensional R&SH problems derived from malnutrition, throughout their life. Therefore, the Government should undertake a strategic plan to improve the adolescents' generic nutritional status for getting rid of their R&SH problems.

3.1.1 Attitudes Towards Major RH&SE Issues

In most of the world, the majority of young people become sexually active during their adolescent years. Therefore, they should have appropriate, accurate and age-sex-specific knowledge about the issues concerned.

The study observed a growing consciousness about different reproductive and sexual health issues amongst school adolescents, parents/guardians and teachers. But there are lack of openness, coordination gaps, lack of institutional arrangements and proper environment for the school adolescents to learn about those issues in appropriate manner. Surprisingly, most of the respondents (more than 70%) believe in several myths, which are very unscientific and nourish those beliefs and maintain them during menstruation cycle. Such beliefs are much stronger amongst the responding females than the males. Similarly, most of the respondents (<77 – 89%) nourish and maintain several food taboos during pregnancy, which are also very unscientific in nature. These need to be taken as serious concerns for mass motivation, conscientization and advocacy efforts.

3.1.2 Existing Sources of School Adolescents' Knowledge /Guidelines

Adolescents report a variety of sources from where they know about sexuality and reproductive health. In many settings, a large proportion of adolescents seem to rely on the least reliable sources — other young people or the entertainment media. They go to different sources for different kinds of information. For example, news media can be an important source for information about HIV/AIDS. In most of the cases, parents are not the primary source of information, although young women may rely on their mothers for information about menstruation and pregnancy risks (UN, 1995, pp. 3-13). Adolescent boys found relying more on teachers, health care professionals and their friends.

Studies on young people's knowledge, attitudes and practice find a mixture of anxiety and ignorance, over confidence etc. They tend to absorb their knowledge haphazardly from family, friends and other peers, school, television, movies and so on. The result is widespread ignorance, partial information, mistaken beliefs and myths. Studies has repeatedly indicated that the best solution, specially for the adolescents — the future generation of a nation — is formal sex education that provide accurate information at the right time and at the appropriate age and encourage responsible behaviour and tend to delay the onset of sexual activity.

The respondents of the present study identified parents, more specifically mother, aunt, grand mother, female house tutor, cousin, sister-in-law, friends/peer group, neighbours, school teachers, print media, electronic media and other media as the sources of adolescents' knowledge and guidelines regarding reproductive and sexual health information. Among those mother (91.5%) and sister-in-law (91.5%) have been identified as the existing sources of R&SH information by most of the urban female respondents. The scenario is almost similar to those of rural female respondents. Mother has been identified as the source of R&SH information by most of the urban male (74.0%) respondents. Although, mother (57.8%), friends/peer group (54.2%), aunt (51.8%) and sister-in-law (50.6%) have been identified as the existing sources of information by more than fifty percent of the rural male respondents, there is no single most important source of such information for rural school adolescents. Both the rural and urban respondents identified sister-in-law, parents, mother, grand mother, aunt as the most important sources of information. The statistical test employed indicates that there is no significant difference of views amongst both rural-urban and male-female respondents regarding the school adolescents' existing sources of knowledge and guidelines about R&SH information.

Again, Most of the responding school adolescent girls opine that they receive R&SH information mostly from sister-in-law (90.2%) and mother (79.3%). Other sources of information identified by more that fifty percent of them are cousin (67.1%), friends/peer group (59.8%), grand mother (57.3%), neighbours (54.9%) and aunt (51.2%). Only mother (56.7%) has been identified as the existing source of information by more than fifty percent of the male school adolescents.

3.1.3 Comfortable Sources of School Adolescents' Knowledge/ Guidelines

Women in Bangladesh usually feel more comfortable discussing their medical problems with women physicians. Services of male physicians are used only in life threatening situation or only when no better expertise is available (Khanam, 1994, p.21.). But female health professionals are far less than desirable. The present study

also picturizes the same scenario in regards to getting R&SH information.

Although, there are gender preferences amongst both the sexes in regards to feeling comfortable in receiving R&SH information, the study reveals that there is no single source, which the adolescents find most important and comfortable. The respondents, even the adolescents themselves could not come out of the existing cycle of information in finding out a single or more most important and comfortable source(s) from where they would like to get R&SH information. In fact, as there is no existence of systematic avenue of transferring age-appropriate, accurate and gender-specific R&SH information to the adolescents and young adults in the country, the respondents might have found themselves confused in choosing better alternatives or options. However, mother, sister-in-law, cousin, grand mother, aunt, friends/peer group and neighbours have been placed in the list of important sources by the respondents, who might not have the satisfying level of knowledge about the issues.

Peer influences appear to be very prominent in adolescents' behviours. Young people find often easier to talk to a friend or someone closer to their age group especially about sexuality. Therefore, training and education involving peer approach may be an effective means. Bothers and sisters can also act as role models for their positive behaviours.

3.1.4 Learning Needs Identification and Appropriate Learning Environment

Sex education is considered to be a contemporary social problem. School can give adolescents the fact and behavioural skills of healthy relationships which they need to become responsible adults and can break the cycle of ignorance, denial and shame that often passes from one generation to the next.

The challenge in teaching sex education in schools comes mainly from parents and students. Sometimes parents in many parts of the world want the school to take the responsibility so that they do not have to make an attempt to this end. But some other parents feel that it is their responsibility and want to censor what their children are being taught in the school. Some teachers opine that it is not their responsibility to take on such a heavy burden like teaching

sex education. Religious values also play a major role in challenging schools.

However, education programs are recognized as an effective means of addressing the adolescents' reproductive and sexual health needs (Ingwersen, 2001). Despite strong opposition to such programs particularly from religious leaders, decision makers and the media, sexuality education programs have a proven ability to increase knowledge about pregnancy, reproduction, contraceptive methods, to delay the onset of adolescents' sexual activity, to promote gender equality and to develop adolescents' responsible sexual behaviours. An analysis of 68 research reports on sexual health education reveals that it does not encourage increase sexual activity rather it delays the onset of sexual activity, reduces pregnancy and STDs (Ingwersen, 2001). BRAC has been found successfully implementing in-school reproductive health education program incorporated into the curriculum for the drop-outs, where emphasis is placed on involving parents (UNFPA, 2003, p. 33).

More than 90 percent to 99.99 percent respondents identified a number of areas that have been suggested to incorporate into regular curriculum for the school adolescents. According to the respondents' views the adolescents can learn all the R&SH topics/issues both in school and in family environment. But their intensity, magnitudes and approaches may be different. Analysing the views of the respondents the study suggests that :

(i) the following aspects of R&SH issues have been suggested to be taught in the school environment with greater emphasis:

(a) Physical and mental changes at puberty, (b) The problems brought about by changes at puberty, (c) Knowledge & Awareness of Menstruation, (d) Do's and don'ts during the Menstrual Cycle, (e) Symptom, causes and effects of Reproductive Tract Infections, (f) Prevention and management of Sexually Transmitted Diseases & STI/HIV/AIDS and Hepatitis B & C (g) Spread of Sexually Transmitted Diseases & STI/HIV/AIDS & Hepatitis B, (h) Misconception about Wet Dream, (i) Do's & Don'ts during the pregnancy, (j) Reproductive Right, (k) The sources of information on Reproductive Health Care Services (l) Causes & effects of infertility, (m) The availability of existing Reproductive Health

Care Services, (n) The sources of information on Reproductive Health Care Services, (o) Causes of Eclampsia and (p) Existing values (family, religious, legal, socio-cultural etc.) about Reproductive & Sexual Health Issues.

(ii) the following aspects of R&SH issues have been suggested to be taught in the family environment with greater emphasis:

(a) Physical and mental changes at puberty, (b) The problems brought about by changes at puberty, (c) Knowledge & Awareness of Menstruation, (d) Do's and don'ts during the Menstrual Cycle, (e) Symptom, causes and effects of Reproductive Tract Infections, (f) Prevention and management of Sexually Transmitted Diseases & STI/HIV/AIDS and Hepatitis B & C, (g) Spread of Sexually Transmitted Diseases & STI/HIV/AIDS & Hepatitis B, (h) Misconception about Wet Dream, (i) Do's & Don'ts during the pregnancy, (j) Causes and effects of miscarriage, (k) Causes and effects of unwanted/unexpected pregnancy, (l) Adolescents' pregnancy & its consequences, (m) Food-intake during pregnancy/abortion/MR, (n) Birth Control Methods, (o) Reproductive Right, (p) The sources of information on Reproductive Health Care Services, (q) Causes and effects of Menstruation Regulation (MR)/ abortion, (r) Causes & effects of infertility, (s) The availability of existing Reproductive Health Care Services, (t) The sources of information on Reproductive Health Care Services, (u) Causes of Eclampsia and (v) Existing values (family, religious, legal, socio-cultural etc.) about Reproductive & Sexual Health Issues.

3.2 Proposed Reproductive Health and Sexuality Education Program

Ignorance is never considered as a blessing. Educating adolescents about reproductive and sexual health is a must. Only the questions remain, to what extent, at what level/stage or in what form/method/mechanism it would be appropriate to teach or deliver. As far as the areas and contents of the curriculum are concerned, the present study suggests incorporating all those identified above in the regular curriculum of school education program. Parents and teachers can play unique roles in enhancing

school adolescents' R&SH knowledge and positive attitudes. But there is a need for breaking the existing shields. For example, the HIV/AIDS-advertisement in/on the media provided a big breakthrough for developing mass awareness on the issues. So would be the scenario of R&SH education for school adolescents. Once started, it would get momentum for its practical benefits. But there should be competent teachers at the school level with specialized knowledge and skills on the issues to be taught and they should guide school adolescents' parents under school arrangement for home learning, so that they would not suffer from misconception or misinformation. Peer learning may also be encouraged, which may be brought under the broad framework of the program.

3.2.1 Appropriate Learning Stage

All the respondents, irrespective of rural-urban class structures, gender groups, category and educational systems environment, strongly argued that all the classes from VI-XII would be the appropriate stage of learning (a) "aspects of physical changes of male and female at puberty" in the educational curriculum. On the other hand, all of them have suggested to introduce (b) "prevention and management of sexually transmitted diseases & STI/HIV/AIDS & hepatitis B" and (c) "knowledge about how sexually transmitted diseases & STI/HIV/AIDS & hepatitis B spread" in classes from VI-VII and (d) "aspects of mental changes of the adolescents at puberty" in classes from IX-XII. More than 90 percent of them have suggested to introduce (e) "aspects of mental changes of the adolescents at puberty" in classes from VI-VII, (f) "knowledge and awareness of the problems brought about by changes at puberty" in classes from VI-X, (g) "prevention and management of sexually transmitted diseases & STI/HIV/AIDS & hepatitis B", (h) "knowledge about reproductive rights", (i) "knowledge about the sources of information on reproductive health care services in classes from IX-XII and (j) "existing values (family, religious, legal, socio-cultural etc.) about reproductive & sexual health" in classes from IX-X and (k) "knowledge about how sexually transmitted diseases & STI/HIV/AIDS & hepatitis B spread" in classes from XI-XII. Again, more than 80 percent of the respondents suggested to introduce (l) "knowledge of birth control

methods", (m) "knowledge about effects of unwanted pregnancy" and (n) "knowledge about the availability of existing reproductive and health care services" in classes from IX-XII, (o) "knowledge about how sexually transmitted diseases & STI/HIV/AIDS & hepatitis B spread", (p) "knowledge about the sources of information on reproductive health care services" and (q) causes of eclamsia in classes from IX-X and (r) "knowledge awareness of the problems brought about by changes at puberty", (s) "knowledge about the sources of information on reproductive and sexual health care services and (t) "existing values (family, religious, legal, socio-cultural etc.) about reproductive & sexual health education" in classes from XI-XII. More than 70 percent of the respondents suggested to introduce (u) "adolescents' pregnancy & its consequences" in classes from VI-XII, (v) "knowledge & awareness of menstruation" in classes from VI-IX, (w) "causes and effects of menstruation regulation(MR)/abortion" and (x) "knowledge of food-intake during pregnancy/knowledge of abortion/MR in classes from IX-XII, (y) "knowledge of reproductive rights", (z) "knowledge about the sources of information on reproductive and sexual health care services", (aa) "knowledge about effects of unwanted pregnancy" and "existing values (family, religious, legal, socio-cultural etc.) about reproductive & sexual health education" in classes from VI-VIII, (ab) "do's during the menstrual cycle", in classes of IX-X and (ac) "don'ts during menstrual cycle", (ad) "awareness/knowledge of the symptom of reproductive tract infections", (ae) "knowledge about how miscarriage occurs", (af) "knowledge about effects of miscarriage", (ag) "knowledge about the unexpected pregnancy and its effects", (ah) "knowledge about the sources of information on reproductive health care services" and (ai) "causes of eclamsia" in classes from XI-XII. The rest of the issues identified have been suggested to incorporate in the curriculum of educational systems in respective classes from VI-XII.

The study observed a major difference in views of the parents/guardians and teachers regarding appropriate learning stage of identified R&SH issues in school environment with those of the school adolescents. All the responding parents/guardians and teachers argued that all the issues identified would be appropriate to incorporate for all the school adolescents from classes VI-XII.

But a considerable of the responding school adolescents have been found not interested to learn about (a) do's and don'ts (basically the myths) during menstrual cycle, (b) symptoms of reproductive tract infection, (c) misconception about wet dreams, (d) do's and don'ts during pregnancy, (e) how miscarriage may occur, (f) effects of miscarriage, (g) how unwanted pregnancy occurs and its consequences, (h) food intake during and pregnancy/abortion/MR, (i) birth control, (j) causes and effects of MR/abortion, (k) reproductive rights, (l) causes and effects of infertility, (m) availability of existing reproductive health care services, (n) the sources of information on reproductive health care services and (o) causes of eclampsia. All or almost all of them were found highly interested in learning (a) aspects of physical and mental changes of adolescents of both sexes at puberty, (b) problems brought about by the changes at puberty, (c) STDs/HIV/AIDS and hepatitis B&C and how they spread etc. and they have suggested to introduce all these issues in every stages from classes VI-XII. In fact, they feel ashamed or shy of learning the issues in open forum on which they showed no interest. Analyzing the views given by the respondents, the present study prescribes to incorporate all the issues listed above in the regular curriculum for the school adolescents of class VI-XII. But the detailed contents and their means of presentation may vary from class to class, which may be developed by concerned expert groups.

3.2.2 Means of Effective Parenting Roles

Although a lot of adolescents do not admit, over and over again, research confirms that the adolescents who have warm, involved and satisfying relationships with their parents are more likely to do well in school, to have better social skills and to have lower rates of risky sexual behaviour than other adolescents. But the adolescents having poor relationships with their parents are more likely to have psychological and other problems. Research also suggests that the adolescents whose parents are very strict and do not allow their children any degree of independence are more likely to engage in risky behaviours.

Parents and other adult family members who are acquainted with or participate in sexual education programs are often more willing to fevour other efforts such as in-school sex education for the adolescents (www.pathfind.org/focus.htm).

Most of the respondents, irrespective of urban and rural class structures, opined that (a) existence of a Parents'-Teachers' Organization (74.0%), (b) visiting the school fortnightly by the parents (58.5%), (c) arrangement of Parents-Teachers Conference (73.0%), (d) communication between parents and children in response to children's questions and experiences (65.3%), (e) adoption of parental consultation process for amendments of teaching materials (78.8%), (f) parents' delivery of parts of the sex education programme at home (65.0%), (g) arrangement for running parents' workshops (54.3%) and (h) a process of meeting the individual needs of adolescents by the parents at home etc. would be the most effective parenting roles in enhancing school adolescents' knowledge and positive attitudes towards R&SH issues. The proportion of school adolescents who support those means is relatively lower than those of the parents and teachers. Again, the responding girl adolescents have been found comparatively more supportive to those interventions than the boys.

3.2.3 Means of Effective Teachers' Roles

School teachers are considered to be the architects of school adolescents' future, of their behaviours and life skills. The study observed almost similar views of the respondents regarding the means of the most effective teachers' roles in enhancing school adolescents' knowledge and positive attitudes towards R&SH issues.

Most of the respondents, irrespective of urban and rural class structures, opined that (a) existence of a Parent Teacher Organization (74.0%), (b) visiting the school fortnightly by the parents (58.2%), (c) arrangement of Parents-Teachers Conference (68.5%), (d) administrative and financial support for effective R&SH education (60.0%), (e) adoption of teachers consultation process for adolescents' sex education classes (60.8%), (f)

adoption of teachers' consultation process for amendments of teaching materials (67.2%), (g) school teachers to be supplied with copies of sex education materials (64.0%), (h)) arrangement for running teachers' workshops (57.6%), (i) engaging qualified teachers for R&SH education (65.3%) and (j) a process of evaluation of the efficacy of different programs to be run by the teachers etc. would be the most effective teachers' roles in enhancing school adolescents' knowledge and positive attitudes towards R&SH issues.

3.2.4 Breaking the Shields and Bridging the Gaps

The study indicates that most of the responding parents and teachers (81.6%) and school adolescents (82.8%) consider R&SH education as an important issue. But most of them have never had any conversation with each other about any aspect of the issue. They are not even questioned by either side. Parents and teachers do not find easy to talk about the issue to their children and students. Students are found ashamed of asking R&SH issue-related questions to their parents or teachers. In fact, cultural barriers strongly stand against such initiatives. The study suggests that a formal arrangement of educating school children about R&SH issues would be the best option to this end. Observations and research findings suggest that sensitizing parents and school teachers is an important determining factor of success of any school-based reproductive and sexuality education program in anywhere in the world. This can be supplemented by the measures prescribed in 3.2. Moreover, Sexuality education has great potential to reach a large audience, at least in countries where a high proportion of young people attends school. A major challenge is to expand the use of approaches and the curricula that have been successfully tested on a small scale. The study also observed that GOs'-NGOs' efforts (96.5%), mosque-based programs led by imams (98.1%), seminars, workshops, conference programs to be organized by the Board of Education (83.6%), programs to be undertaken by the print and electronic media (94.9%), community organizations and civil societies (95.8%) will of immense help in the processes of breaking the shields and bridging the gaps.

4.0 Suggested Policy Measures and Conclusion

Reproductive and sexual health education is getting importance day by day throughout the world. The study observed growing awareness about the disastrous danger of the R&SH problems, specially the HIV/AIDS/STDs and RTIs issues. The future generation has to face more challenges to cope with the problems. Therefore, young generation, especially the adolescents and young adults need to be ready to fight such challenges. Preparing school adolescents would be a step forward to this end.

4.1 Suggested Policy Measures

The present study suggested the following measures, which need to be undertaken under a broader framework of national development:

- There should be a regular and systematic process of generating age and gender specific data and information on adolescents' reproductive and sexual health (R&SH) issues.
- The adolescents should be provided some parts of the R&SH education (as identified in the needs identification part) by their parents at home.
- Reproductive and sexual health education should be functionally considered as the most important tool for enhancing school adolescents' knowledge and bringing about their positive attitudinal changes towards R&SH issues.
- The Government should undertake a strategic plan to improve the adolescents' generic nutritional status for getting rid many of their R&SH problems.
- Since the school adolescents have been suffering from the ignorance of accurate, appropriate and age-sex-specific R&SH information and services, the Government should undertake policies, plans and programs to make them easily and affordably available for them in a systematic manner.
- Parents and teachers should be considered as the role models for enhancing school adolescents' knowledge and

attitudes on R&SH and accordingly, their capabilities to guide adolescents' reproductive and sexual behaviours should be developed first.

- It is highly necessary to incorporate positive family, social and religious values in the reproductive and sexual health education system, if such education is introduced for the school adolescents in the country.

- All the identified R&SH issues should be incorporated in the regular curriculum for the school adolescents of classes VI-XII. But the magnitudes, dimensions and approaches of teaching such issues under regular curriculum should be age-specific and befitting to their level of acceptance.

- The process of enhancing school adolescents' R&SH knowledge should incorporate a package program consisting of establishing a school-based parents'-teachers' organization, parents-teachers consultation, peer counseling, parents' workshops, guidance and text-based life skills education.

- Only qualified and devoted teachers should be engaged in implementing school based R&SH education programs for the school adolescents where parents should participate occasionally for acquiring appropriate knowledge and self-motivation.

- There should be process of monitoring and evaluating the efficacy of R&SH education programs to be run by the teachers.

- Appropriate and adequate copies of R&SH education materials for the parents, school teachers and the school adolescents should be developed and made easily available at schools.

- Advocacy, counseling and motivation exercise training need to be undertaken for the concerned teachers and parents on how to teach, motivate and advocate adolescents about R&SH issues effectively.

- A parents'-teachers' sensitization programme should be undertaken involving social, community and religious leaders, educationists, programme managers and media. Workshops, seminars conferences, advocacy, counseling etc. would be effective means to such efforts.
- Adequate financial, administrative and political supports need to be extended to make the efforts a success.

4.2 Conclusion

Adolescents' reproductive and sexual health problem is not their individual problem. It is a social as well as national problem. But the problem should be owned at individual, family, community, social and at national level. Still, parents and school teachers would be the best architects to develop a new generation adolescents capable of coping with the existing and up-coming challenges in R&SH arena. Adequate financial, administrative and political supports would make the efforts effective and lead them to a success.

Bibliography

Abma JC, Chandra A, Mosher WE, Peterson LS, Piccinino LJ. (1997) Fertility, Family Planning and Women's health: New Data from the 1995 National Survey on Family Growth. National Center for Health Statistics. Vital Health Stat.

Agyei WK, Epema EJ, Lubega M. (1992) Contraception and Prevalence of Sexually Transmitted Diseases Among Adolescents and Young Adults in Uganda. Int J Epidemiol.

Akhter, Farida (1994). : "Reproductive Rights : A Critique from the Realities of Bangladesh Women". In : Jahan, Roushan, Mahmuda Islam, Nurunnahar Fyzennessa and Hamida Akhtar Begum, ed. Reproductive Rights and Women's Health. Women for Women, Dhaka, pp. 41-58.

Akhter, Halida Hanum, M. Hafizur Rahman and Shehlina Ahmed (1996). : Reproductive Health Issues and Implementation Strategies in Bangladesh. Bangladesh Institute of Research for Promotion of Essential & Reproductive Health and Technologies (BIRPERHT), Dhaka.

Akhter, Halida Hanum (1994). : "Concept Presentation Related Issues on Reproductive Health. In : Jahan, Roushan, Mahmuda Islam, Nurunnahar Fyzennessa and Hamida Akhtar Begum, ed. Reproductive Rights and Women's Health. Women for Women, Dhaka, pp. 1-16.

American College of Obstetricians and Gynecologists, (1992) Committee on Adolescent Health Care. Adolescent Sexuality Kit: Guides for Professional Involvement. 2nd ed. Washington, DC: American College of Obstetricians and Gynecologists

Adolescent Health and Development, The key to the Future. World Health Organization. Paper prepared for the Global Commission on Women's Health. WHO, 1995, Geneva

Aplasca MRA, Siegel D, Mandel JS, et al. (1995) Results of a Model AIDS Prevention Program for High School Students in the Philippines. AIDS;9 (Suppl 1):S7-S13.

Barnes, Douglas (1985). : Practical Curriculum Study. Routledge & Kegan Paul, London, Boston and Henley.

Bhatt, B. D.(1996). : Curriculum Reform : Change and Continuity. Kanishka Publishers, New Delhi.

Bhatt, B. D. and Sharma, S. R. (1992). : Principles of Curriculum Construction. Kanishka Publishing House, Kailash Nagar, Delhi.

Blum J. et. al. (2000).: The Effects of Race/Ethnicity, Income and Family Structure on Adolescents Risk Behaviour, American Journal of Public Health, 90(2).

Cash, Kathleen, Hashima-E-Nasreen, Sharful Islam Khan, Abbas Bhuiya, Mushtaque R. Chowdhury and Sadia Chowdhury (2004). : "Sexual Health for Rural Bangladeshi Youth". An Internet Research Mimio.

Cates W, McPheeters M. (March 25 1997) Adolescents and Sexually Transmitted Diseases, Current Risks and Future Consequences. Presented at the Workshop on Adolescent Sexuality and Reproductive Health in Developing Countries: Trends and Innovations, National Research Council,Washington.

Centers for Disease Control and Prevention (1995) Youth Risk Behavior Surveillance-United States, 1993. Morbidity and Mortality Weekly Report.

Chhabra S. (1992), A Step Towards Helping Mothers with Unwanted Pregnancies. Indian Journal of Maternal and Child Health.

Chowdhury, Sadia Afroze (1994). : Women's Health in Bangladesh and Role of NGOs. In. Roushan Jahan et. al. ed. Reproductive Rights and Women's Health, Women for Women, Dhaka, pp. 27-40.

Earth Barbara, (2001) Class lecture on Reproductive Health ED 50.13 Society Technology and Health, January 2001 term, Gender and Development Program, AIT, Bangkok, Thailand.

Eggleston E, Jackson J, Hardee K, et al. (1996) Sexual Activity and Family Planning: Behavior, Attitudes and Knowledge Among Young Adolescents in Jamaica. Paper Presented at the Population Association of America Annual Meeting, New Orleans.

Global Forum for Health Research (2000). : The 10/90 Report on Health Research 2000. Switzerland.

Grunseit A, Kippax S. Effects of Sex Education on Young People's Sexual Behavior. Report Commissioned by the Youth and General Public Unit, Office of Intervention and Development and Support, Global Program on AIDS, WHO. North Ryde: National Centre for HIV Social Research, Macquarie University, Nd.

Helitzer-Allen, D. (1994).: An Investigation of Community-Based Communication Networks of Adolescent Girls in Malawi for HIV/STD Prevention Messages. Research Report Series No.4, International Centre for Research on Women.

Hossain, Dr. Ekram, Kazi Hasan Imam, Syed Shamsul Alam and Mohammad Manjurul Hoque (2002).: Assessment of Attitudes of Government Officials of Different Levels Towards Gender Issues in Bangladesh. BPATC, Savar, Dhaka and UNFPA, Bangladesh.

Ingiwersen, Rachel and Dianne Proctor (2001).: Adolescent Reproductive and Sexual Health in the Developing World. Australian Reproductive Health Alliance, Development Bulletin 56, Canberra, Australia.

Jahan, Roushan, Mahmuda Islam, Nurunnahar Fyzennessa and Halima Akhter Begum (1994).: Reproductive Rights and Women's Health. Women for Women, Dhaka.

Johnes, EF et. al. (1985).: Teen-age Pregnancy in Developed Countries : Determinants and Policy Implications, Family Planning Perspectives, 17(2) : 53-63).

Kane TT, DeBuysscher R, Thomas TT, et al. (1993) Sexual Activity, Family life Education and Contraceptive Practice Among Young Adults in Greater Banjul, The Gambia. Stud Fam Plann.

Khanam, Sadiqa Tahera (1994). : Available Health Care for Women. In : Jahan, Roushan, Mahmuda Islam, Nurunnahar Fyzennessa and Halima Akhter Begum ed.: Reproductive Rights and Women's Health. Women for Women, Dhaka.

Khanna, J., Van Look PFA and Grifin PD (ed.) (1992).: Reproductive Helath : a key to a brighter future. Special Programme of Research, Development and Research Training in Human Reproduction, In : Biennial Report (1990-1991), Geneva, The World Health Organization.

Lunin I, Hall TL, Mandel JS, et al.(1995) Adolescent Sexuality in Saint Petersburg, Russia. AIDS.

Manning, WD, Longmore MA and Glordano PC (2000).: The Relationship Context of Contraceptive Use and Premarital Pregnancy Among American Teen-agers, Family Planning Perspectives, 32(3).

Momen, M A (June 30, 2000) Adolescent Reproductive Heath: The Bangladesh Perspective, Observer Magazine.

Mongella, Gertrude (1995). : Women and Education : The Ultimate Lever. In : Haider, Raana. : A Perspective in Development : Gender Focus, The University Press Limited, Dhaka.

Muntemba, S & Dankelman, I (1995). : In : Haider, Raana. : A Perspective in Development : Gender Focus, University Press Limited, Dhaka.

Population Council.(1992) Need for Family life Education in Zaire. Africa OR/TA Project Update.

Raffe, David (1985). : "The Content and Context of Educational Reform. In : Curriculum & Assessment : Some Policy Issues. ed. Raggatt, Peter & Weiner, Gaby, Pergamon Press, oxford, New York etc.

Reproductive Health in Bangladesh A Sectoral Review, (April 1996) UNFPA, Bangladesh.

Risks and Realities of Early Childbearing Worldwide: Issues in Brief. (1997) New York: The Alan Guttmacher Institute.

Report on the Workshop on Curriculum Development on Reproductive Health and Gender Issues 23-27 August 1999,BPATC and UNFPA, Dhaka, Bangladesh.

Rogers, Barbara (1995). : Women and Nutrition and Health. In : Haider, Raana. : A Perspective in Development : Gender Focus, University Press Limited, Dhaka.

Roystion, E. and Armstrong S. (ed.) (1989).: Causes of Maternal Death : Preventing Maternal Deaths. WHO, Geneva.

Ruusuvaara L. (1997) Adolescent Sexuality: An Educational and Counseling Challenge nn N Y Acad Sci.. Russell-Brown P, Rice JC, Hector O, et al. (1992) The Effect of Sex Education on Adolescents in St. Kitts-Nevis. Boletin de la Oficina Sanitaria Pan Aamericana.

Sharma V, Sharma A. (1994) The Approach of The Letterbox: A Model of Sex Education in a Traditional Society. Rev Med Suisse Romande;

Sharman, Wendy (1997).: Children & Adolescents with Mental Health Problems. Bailliere Tindall, London.

SIECUS National Guidelines Task Force. (1996) Guidelines for Comprehensive Sexuality Education. 2nd Edition. New York: SIECUS.

Singh, S. and Darroch JE (2000).: Adolescents' Sexual Health in Europe and the US — Why Differences? Advocates for Youth, Washinton DC.

Sthapit Sabitri (1999) Gender, Autonomy and Women's Reproductive Health: Manmauu Kathmandu, Nepal, Thesis no GD-99-9,AIT, Thailand.

UN (1995).: Population and Development. Vol. 1, Programme of Action Adopted at the International Conference on Population and Development :Cairo, Department of Economic and Social Information and Policy Analysis, United Nations, New York.

UNDP (2003). : Human Development Report 2003. Millennium Development Goals : A Compact Among Nations to End Human Poverty, New York, USA.

UNFPA (2003). : State of World Population 2003, Making a Billion Count : Investing in Adolescents' Health and Rights.

The World's Youth (1996) Chart. Washington: Population Reference Bureau.