Department of Public Health and Informatics

Bangabandhu Sheikh Mujib Medical University (BSMMU)

A Baseline Survey of Adolescent Health and Rights Enhancement Through Innovation and System Strengthening

QUALITATIVE STUDY REPORT

Dr. Fariha Haseen, Ms. Sabrina Sharmin,
Dr. Dilip Kumar Basak, Mr. Subrata Kumar Bhadra, Ms. Nusrat Sharmin,
Dr. A M Zakir Hussain Prof. Syed Shariful Islam

May, 2018

Kingdom of the Netherlands

Department of Public Health and Informatics

Bangabandhu Sheikh Mujib Medical University (BSMMU)

A Baseline Survey of
Adolescent Health and Rights Enhancement
Through Innovation and System Strengthening



Kingdom of the Netherlands

Research Team

Dr. Fariha Haseen, Associate Professor, Department of Public Health & Informatics, BSMMU & Project Coordinator, ADOHEARTS Study

Ms. Sabrina Sharmin, Seniorr. Research Officer, ADOHEARTS Study

Dr. Dilip Kumar Basak, Research Officer, ADOHEARTS Study

Mr. Subrata Kumar Bhadra, Research Associate, NIPORT, MOHFW, ADOHEARTS Study

Ms. Nusrat Sharmin, Research Assistant, ADOHEARTS Study

Dr. A M Zakir Hussain, ADOHEARTS Study

Prof. Syed Shariful Islam, Dean Faculty of Preventive & Social Medicine,
Chairman, Department of Public Health & Informatics, BSMMU and
Project Director, ADOHEARTS Study

Acknowledgement

‘A Baseline Survey of Adolescent Health and Rights Enhancement Through Innovation and System Strengthening’ is a study conducted by the Department of Public Health and Informatics (DPHI), Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, Bangladesh. It is an initiative of evidence generation of the government, UNICEF and The Embassy of The Kingdom of the Netherlands.

First of all, the Authors would like to express their gratitude to Professor Dr. Kamrul Hasan Khan, Vice Chancellor, BSMMU; Professor Dr. Md. Shahidullah Sikder, Pro Vice Chancellor (Research & Development), BSMMU; Prof. Md. Sharfuddin Ahmed, Pro Vice Chancellor (Administration), BSMMU; Professor Dr. A.S.M. Zakaria, Pro Vice Chancellor (Academic), BSMMU; and Professor Md. Ali Asgor Moral, Treasurer, BSMMU for their guidance in conducting the study.

The authors would like to express their gratitude to Dr. Kazi Mustafa Sarwar, Director General, Directorate General of Family Planning (DGFP); Professor Abul Kalam Azad, Director General, Directorate General of Health Services (DGHS); Dr. Mohammad Sharif, Director MCH-Services and Line Director (MCRAH), DGFP; Dr. Md. Jahangir Alam Sarker, Line Director MNC&AH, DGHS; Dr. Md. Jaynal Haque, Program Manager, A&RH, MCH Services Unit, DGFP; Dr. Mohammad Yousuf, Deputy Director and Program Manager, Adolescent and School Health Program, DGHS; Dr. Aman Ullah, Deputy Program Manager, Adolescent and School Health Program, DGHS; Dr. Khaleda Islam, Director, Primary Health Care, DGHS; and Dr. Md. Manjur Hossain, Assistant Director (MCH), DGFP who gave valuable feedbacks and advice on the conduction of the survey.

The authors are specially grateful to Ms. Maya Vandenent, Chief Health, UNICEF, Bangladesh; Dr. Md. Ziaul Matin, Health Manager, Health Section, UNICEF; Dr. Abu Sadat Mohammad Sayem, Health Specialist, UNICEF; Dr. Farhana Shams Shumi, Health Officer, Adolescent Health, UNICEF; Dr. Minjoon Kim, Health Officer, UNICEF; Dr. Shahana Nazneen, Adolescent Health Consultant, UNICEF; and Dr. Shimul Koli Hossain, Adolescent Health Consultant, UNICEF for their valuable support in designing the study, developing the data collection tools, and kindly reviewing the report and giving their valuable comments.

A special gratitude to Ms. Annie Vestjens, First Secretary SRHR and Gender, the Embassy of The Kingdom of the Netherlands; and Ms. Mushfiqua Zaman Satiar, Senior Advisor-SRHR, Gender, the Embassy of The Kingdom of the Netherlands for supporting the survey.

The authors acknowledge the contributions of the health and family planning service managers in the four study sites for supporting conduction of the study. A warm thank also goes to BSMMU colleagues who made important contributions to this study. Special thanks go to field data collection team for their dedication and sincerity in collecting qualitative and quantitative information for the study. Finally, we feel grateful to the participants of this study for their patience and cooperation.

List of Abbreviations

ADOHEARTS	The Adolescent Health & Rights Enhancement through Innovation and System Strengthening
AFHS	Adolescent Friendly Health Services
AFSRHS	Adolescent friendly sexual and reproductive health services
AH	Adolescent Health
AHP	Adolescent Health Program
CS	Civil Surgeon
DPHI	Department of Public Health and Informatics
CHCP	Community Health Care Provider
DGFP	Directorate General of Family Planning
DGHS	Directorate General of Health Services
ICPD	International Conference on Population Development
SDG	Sustainability Development Goals
SRH	Sexual Reproductive Health
SACMO	Sub-Assistant Community Medical Officer
UHC	Upazila Health Complex
UH&FPO	Upazila Health & Family Planning Officer

Table of Content

List of Tables

Executive Summary

Adolescence is a time in life that harbors many risks and dangers, but also opens great opportunities for sustained happiness and wellbeing through education, promotion of positive outcomes and prevention of risks. Low accessibility to and utilization of general health, and sexual and reproductive health (SRH) services create a universal concern since unhealthy lifestyle, malnutrition, unintended pregnancies, unsafe abortions, sexually transmitted infections (STIs) have been shown to contribute to a high morbidity and mortality rates in adolescents. Access to primary health services is seen as an important component of care for adolescents. In Bangladesh socio cultural norms limit disclosure of information about SRH and relevant issues to unmarried adolescents.

In the era of Sustainable Development Goals (SDG) 'Adolescent health' is one of the major agenda for Government of Bangladesh. Beside Government initiatives, development partners like the Embassy of the Kingdom of the Netherlands provides assistance to improve adolescent wellbeing. Bangladesh Government, UNICEF and the Embassy of The Kingdom of the Netherlands took an initiative of evidence generation through 'Adolescent Health & Rights Enhancement Through Innovation and System Strengthening (ADOHEARTS)' project. ADOHEARTS project was initiated in October 2016 and will continue till December 2020 in Gazipur, Tangail, Khulna and Jamalpur districts and in Khulna City Corporation.

As a part of activities under ADOHEARTS project Directorate General of Family Planning (DGFP) of the Ministry of Health and Family Welfare (MoH&FW) has taken initiatives to form adolescent health coordination committee (AHCC) with support of UNICEF from national to union levels.

Department of Public Health and Informatics (DPHI) of Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, Bangladesh has conducted a baseline survey in four ADOHEARTS districts. The baseline survey comprises of i. Household survey, ii. Health facility survey, and iii. Qualitative study. The Qualitative study was conducted to identify challenges of adolescent health services and scopes of improvement in adolescent health and services in Bangladesh.

Qualitative information was collected from August to September, 2017 in Gazipur, Tangail, Khulna and Jamalpur districts through Key Informant Interviews (KII). Trained interviewers conducted 24 KIIs with health and family planning service managers (CS, DDFP, ADCC, UH&FPO, UFPO, MO MCH-FP), and gatekeepers at district and upazila levels.

Our study found that health and family planning (H&FP) service managers and gatekeepers could identify and acknowledge the importance of adolescent health coordination committee (AHCC) formed at the DGFP. They knew that AHCC was not established yet, while the process of developing AHCC has been started. Gatekeepers' were asked about adolescent health program (AHP) in their locality. Most of them had no idea about AHP but some of them are aware about adolescent corner in few health facilities. Some of them are also aware about EPI program, adolescent club, school based program, and nutrition program.

According to H&FP service managers, major challenge of adolescent health services is low presence of adolescents at facility level. Inconvenient service providing time for adolescents; lack of publicity, and lack of awareness among adolescents and parents regarding adolescent friendly health services (AFHS) also contribute to low utilization of the services. Early marriage is identified as another major challenge for low utilization of AFHS. H&FP service managers mentioned other types of challenges which are related to service delivery like, limited logistics; poor maintenance of privacy, scarcity of trained service providers, insufficient BCC materials for adolescents; insufficient medicine supply.

H&FP service managers were asked to give their suggestions for better AFHS. They put emphasis on ensuring privacy in health facility; special service hours for adolescents; gender sensitive service providers; separate manual and separate register for them. They identified the importance of involvement of gatekeepers in adolescent health program; strengthen school health program; raise awareness among adolescents and gatekeepers; peer group formation; and collaboration between government and NGO. Some of them asked for antidepressant and antipsychotic medicine for adolescents at facility level. Besides they mentioned about continuous monitoring and supervision of AHP.

We have asked gatekeepers to share their opinions on how to better AFHS. They mentioned about raising awareness among adolescents and parents; involving gate keepers in AHP; arranging health education program and establish adolescent corner in schools; ensuring door to door services through service providers; developing BCC materials for adolescents; peer group formation; and collaboration between government and NGOs.

The qualitative study included both service managers' and gatekeepers' perspectives. These findings will also assist to develop an effective research design for testing good practice model to improve adolescents' access to health services.

The study conducted by BSMMU (2016) found that current information and available services for adolescents are not specific for adolescents and quality of such information and services is often poor, inappropriate and inadequate.

Chapter 1: Introduction

1.1 Introduction

Adolescence is a period of life with specific health and developmental needs and rights. It is also a time to develop knowledge and skills, learn to manage emotions and relationships, and acquire attributes and abilities that will be important for enjoying the adolescent years and for assuming efficient adult roles (WHO 2011; Lloyd CB, 2005). Adolescence is a time in life that harbors many risks and dangers, but also opens great opportunities for sustained health and wellbeing through education, promotion and prevention efforts.

Today, there are 1.2 billion adolescents in the world, forming 18% of the world population; of them (88%) live in developing countries. More than half the world's adolescents live in South Asia, East Asia and the Pacific region, each of which contains roughly 330 million adolescents (UNICEF, 2012). The latest Bangladesh National Census in 2011 estimated that there are approximately 36 million adolescents in the country constituting one fifth of the 150 million populations.

Low accessibility to and low utilization of general health, and sexual and reproductive health (SRH) services create a universal concern since unhealthy lifestyle, malnutrition, unintended pregnancies, unsafe abortions, sexually transmitted infections (STIs) contribute to a high morbidity and mortality rates in adolescents (Izugbara 2010; León 2002; Pathak 2010; Simões 2011; Ziraba 2000). Access to primary-health services is seen as an important component of care, including preventive health for adolescent.

Two decades of research in both developed and developing countries have drawn attention to the barriers (e.g. limited information, unavailability of services, lack of trained human resources etc.) adolescents face in accessing health services. Evidence suggests that gatekeepers' disapproval, lack of basic information on adolescent health (AH) and parent pressure discourage adolescents from accessing SRH information and services. Communication gap between parent and adolescent on mental health, nutrition, and SRH issues continues to be socio-cultural taboos in the society. In Bangladesh socio cultural norms

limit disclosure of information about SRH and relevant issues to unmarried adolescents specially boys (Abajobir et al. 2014).

There is huge gap in evidence how to delivery adolescent friendly health services (AFHS) through existing health systems in Bangladesh. The country needs solid evidence to invest resources in the next Health SWAP, 2017-2021 to scale up evidence-based AFHS intervention with right delivery strategy. Most of the models in this regard in Bangladesh are limited to NGO sectors and concentrated in urban areas. AFHS implementation through government health system is going on in limited scale through Government, UNICEF, UNFPA and other partners without having concrete evidence on how to deliver the services effectively and efficiently. So it was a need of the time to assess the health service system of Bangladesh to examine the accessibility and availability of adolescents to the services that they require within the system, with the aim to find out gaps and to identify scope of improvement of AHS and adolescent health program (AHP).

The Lancet adolescent health series published in 2012 reiterated that 'Failure to invest in the health of the largest generation of adolescents in the world's history jeopardizes earlier investment in maternal and child health, erodes future quality and length of life, and escalates suffering, inequality, and social instability'. The lack of a gender-and-needs responsive adolescent health framework, inadequate investments to this sector, or the lack of appropriate engagement and participation of adolescents themselves as rights holders will leave critical gaps in a country's overall development trajectory.

The sustainable development goal (SDG) 3 of the 2030 Agenda for Sustainable Development is devoted to "ensure healthy lives and promoting well-being for all at all ages". SDG target 3.7, should ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and program, which are directly linked with adolescent SRHR. Goal 5 to achieve 'gender equality and empower all women and girls' is also linked to SRHR. SDG 10 on reducing inequality and SDG 16 on inclusive societies are linked with SRHR too.

In the era of Sustainable Development Goals (SDG) 'Adolescent health' is one of the major agenda for Government of Bangladesh. Beside government initiatives, development partners like UNICEF, UNFPA and WHO provides assistance to improve adolescent wellbeing.

1.2 Adolescent Health & Rights Enhancement Through Innovation and System Strengthening (ADOHEARTS) Project

Adolescent Health & Rights Enhancement Through Innovation and System Strengthening (ADOHEARTS) is an initiative for evidence generation for the government, UNICEF and the Embassy of the Kingdom of the Netherlands. The thought behind ADOHEARTS is to increase resources for AH as evidence shows investments in adolescent health and wellbeing bring a triple dividend in teen ages, adult life and for their next generation. ADOHEARTS project has been enunciated in October 2016 and will continue till December 2020 in Gazipur, Tangail, Khulna and Jamalpur districts as well in Khulna City Corporation.

ADOHEARTS aims to address knowledge gap through evidence generation on scalable model of AFHS using existing public health system. ADOHEARTS will provide technical assistance for advocacy and implementation of National Adolescent Health Strategy (NAHS0 2017-2030) and the related action plan, through testing/ recommending feasible and cost effective service delivery model, creating demand for quality AH and counseling services, strengthening health system and mainstreaming successful interventions through existing Government health systems.

1.3 Adolescent Health Coordination Committee (AHCC):

As a part of activities under ADOHEARTS project Directorate General of Family Planning (DGFP) of the Ministry of Health and Family Welfare (MoH&FW) has taken initiatives to form adolescent health coordination committee (AHCC) with support of UNICEF from national to union levels. At National level two committees will work on AH, i. National Steering Committee will work through MoH&FW's two wings-Directorate General of Health Services (DGHS) and DGFP. This committee will contribute to develop policy and strategic direction in implementation of national plan of action under the national strategy for AH, which will provide a platform for coordination among different stakeholders working towards

improving AH and the wellbeing of the country, and ii. National Core Committee will facilitate and monitor the efforts and communicate with DGHS, DGFP and other directorates as needed for better implementation of AH programs. At divisional Level, Divisional AH Program Management and Coordination Committee will guide, support and monitor AH programs at the divisional level. At district Level, District AH Program Management and Coordination Committee will implement, monitor and evaluate district level adolescent programs, in collaboration with other partners. At Upazila level, Upazila AH Program Management and Coordination Committee will take care of service delivery at facility and community levels, complemented by other departments, local government structure, community groups and organizations to develop upazila level plans and programs and implement in collaboration with health, education and other relevant departments/ sectors/ organizations; promote and support adolescent friendly health services, including counseling and referrals; promote and create provision of life skills and ASRH rights education in schools and health facilities. At Union level, UH&FWC/RD and Adolescent Health Service Management Committee will take care of AH service delivery at the facility and community levels.

1.4 Baseline Survey:

Department of Public Health and Informatics (DPHI) of Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, Bangladesh has conducted a baseline survey entitled ‘A Baseline Survey of Adolescent Health & Rights Enhancement Through Innovation and System Strengthening’ as an activity of ADOHEARTS project in four districts. Baseline data on ADOHEARTS indicators were required for monitoring and evaluation of ADOHEARTS program in future. This study included perception of adolescents’, parents of adolescents’, service managers, service providers, and gatekeepers.

The baseline survey comprises of i. Household survey, ii. Health facility survey, and iii. Qualitative study.

1.5 Rationale:

Globally, there is an increasing sense of urgency that something different must be done to respond more effectively to the needs of adolescents. Promoting and protecting adolescent health will lead to great public health, economic and demographic benefits.

AFHS implementation through government health system is going on in limited scale through Government, UNICEF, UNFPA and other partners without any concrete evidence on how to deliver the services. So, it was need of the time to assess the health service system of Bangladesh, to explore the accessibility and availability of services for adolescents, and to find out gaps and to identify scope of improvement of AHS and AHP.

UNICEF took initiatives to support government in introducing adolescent friendly health program in 100 health facilities in 04 districts (Khulna, Bhola, Jamalpur and Nilphamari) and two city corporations (Dhaka and Khulna City Corporations.) to initiate adolescent friendly health services (AFHS) in 2015. Besides, UNICEF initiated a new step to promote adolescent health services by launching ADOHERATS in 2016.

As a component of activities under ADOHEARTS project 'A Baseline Survey of Adolescent Health & Rights Enhancement Through Innovation and System Strengthening' was taken to not only facilitate the intervention design but also to provide vital information about the health system strengthening activities which may be necessary or appropriate for its success. An assessment before the intervention ensures optimal utilization of the resources and facilitates to prioritize the areas for strengthening.

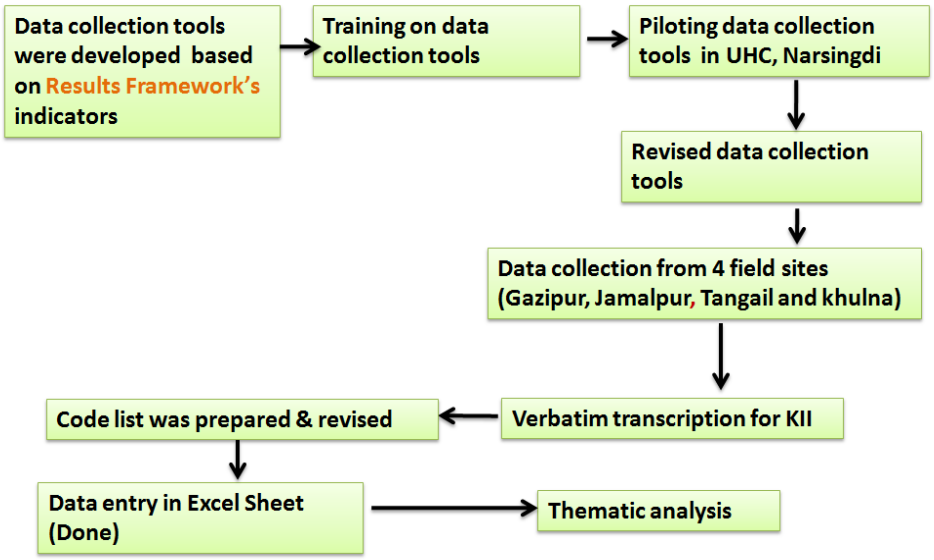
1.6 Objectives of Qualitative Study:

The Qualitative study was conducted to assess the following ADOHEARTS programme parameters set in the results framework.

i. Challenges of adolescent health (AH) services
ii. Suggest scopes of improvement in adolescent health (AH)

Chapter 2: Research Design and Methodology

2.1 Qualitative Component Activities:



2.2 Study Design and Data Collection Tools:

The qualitative study collected data through KII with H&FP service managers, and with gatekeepers through separate guidelines;

i. One KII guideline for H&FP service managers
ii. One KII guideline for gatekeepers

2.3 Training on Qualitative Data Collection Tools:

Seven days training was conducted on KII guidelines for H&FP service managers, and KII guideline for gatekeeper from 24th to 25th July, 2017, 2nd to 3rd August, 2017, and 7th to 9th September, 2017.

2.4 Pre-testing of Data Collection Tools:

Data collection tools were pre-tested at Upazila Health Complex (UHC), Raipura Upazila, Narsingdi on 7th August, 2017.

Table 1: Pre Testing of Data Collection Tools

Data Collection Tool	Types of Respondent	Health Facility	No. of Interview
KII Guideline	UH&FPO	UHC	1
	MO MCH-FP	Union Health & Family Planning Center (UHFPC)	1
	Total number of KIIs		**2**

2.5 Selection of Study Sites:

This study was carried out in four purposively selected ADOHEARTS project districts of Bangladesh; Gazipur, Tangail, Khulna, Jamalpur. Tangail. Government is implementing an intervention on adolescent health with support from UNICEF in selected health facilities of DGHS, DGFP in Gazipur, Tangail, Khulna, Jamalpur. Tangail districts.

Tangail is a high population district (population size is 3,923,000); with 272,993 girls aged 12-19 yrs.

Jamalpur is one of the highest prevalence district of Child Marriage in Bangladesh, where 68.2 percent of girls (20-24 years) were married before 18 (MICS 2013 prevalence).

Gazipur is Human Papilloma Virus (HPV) vaccine demonstration district. HPV vaccine interventions among 10-14 years old will be integrated into the EPI program in future through support from UNICEF.

Khulna also has a high prevalence of child marriage, where 58.9 percent of girls (20-24 years) were married before 18 years (MICS 2013 prevalence).

2.6 Sampling and Sample Size:

In each district KII was done at district and upazila level only. At district level we interviewed civil surgeon (CS), Deputy Director of Family Planning (DDFP), and at upazila level, we interviewed upazila health and family planning officer (UH&FPO), UFPO, in absence of UFPO, we interviewed Medical Officer (MCH-FP), and Assistant Director for Clinical Contraception (ADCC). In each district, one Upazila Health Complex (UHC) was selected. UHC was selected based on the criteria of having AHP or plan to have AHP in one year. We interviewed gatekeepers at district and upazila level. Gatekeepers' selection criterion was their involvement in any AHP at district or upazila level.

KII respondents were purposively selected. Twenty-four KIIs were conducted in four districts. Of 24 KIIs, 16 KIIs were conducted with H&FP service managers, and 8 KIIs were conducted with gatekeepers. Types and number of respondents for KII are given in Table 2, and table 3.

Table 2: Total Number of key informant interviews (KII) in four districts

Total Number of key informant interviews (KII) in four districts			
Health & FP Service Managers			
	District Level	**Upazila Level**	**Total**
Gazipur	2	2	4
Tangail	2	2	4
Jamalpur	2	2	4
Khulna	2	2	4
Total	**8**	**8**	**16**
Gatekeepers			
	District Level	**Upazila Level**	**Total**
Gazipur	1	1	2
Tangail	1	1	2
Jamalpur	1	1	2
Khulna	1	1	2
Total	**4**	**4**	**8**

Table 3: Type of respondents in four districts

Type of respondents in four districts			
Health and Family Planning Service Managers in four districts			
SL	**District**	**Designation, and Institution**	**District /Upazila Level**
1.	Jamalpur	Civil Surgeon	District Level
2.	Jamalpur	Deputy Director of Family Planning (DDFP)	District Level
3.	Jamalpur	UH&FPO, Sarishabari UHC, jamalpur	Upazila Level
4.	Jamalpur	UFPO, Sarishabari UHC, Jamalpur	Upazila Level
5.	Gazipur	Civil Surgeon	District Level

6.	Gazipur	DDFP	District Level
7.	Gazipur	UH&FPO, Kaliganj UHC	Upazila Level
8.	Gazipur	ADCC, Kaliganj UHC	Upazila Level
9.	Khulna	Civil Surgeon	District Level
10.	Khulna	DDFP	District Level
11.	Khulna	UH&FPO, Dacope UHC	Upazila Level
12.	Khulna	MO MCH, Dacope UHC	Upazila Level
13.	Tangail	Civil Surgeon	District Level
14.	Tangail	Deputy Director of Family Planning	District Level
15.	Tangail	UH&FPO, Delduar UHC, Tangail	Upazila Level
16.	Tangail	UFPO, Delduar UHC, Tangail	Upazila Level
		Gatekeepers in four districts	
SL	**District**	**Designation**	**District /Upazila Level**
1.	Jamalpur	Journalist, and Director of Unnayan Sangha	District Level
2.	Jamalpur	Upazila Secondary Education Officer (USEO)	Upazila Level
3.	Gazipur	Government Primary Zila Education Officer	District Level
4.	Gazipur	Social Service Officer	Upazila Level
5.	Khulna	Zila Education Officer, Khulna	District Level
6.	Khulna	Upazila Education Officer, Dacope	Upazila Level
7.	Tangail	Zila Mohila Kormokorta	District Level

8.	Tangail	Manager, Surjer Hashi Clinic, Tangail Upazila	Upazila Level

2.7 Data Collection:

The qualitative study was implemented in Gazipur, Tangail, Khulna, and Jamalpur during August to September 2017. From each of the selected study sites potential study participants (CS, DDFP, UH&FPO, and UFPO) were contacted directly, and asked for time from them for KII before data collection. Pretested data collection tools were used to collect data. Interviews were conducted in Bangla. All KII interviews were audio recorded.

2.8 Data Management:

The project coordinator and other investigators provided training to data collectors and supervised and monitored pre-testing activities in different tiers of health facilities. During data collection the research team supervised and monitored data collection activities to ensure data reliability and validity.

A team consisting of the investigators, consultant, and data analyst did editing. The major objective of supervision was to verify that the guideline for KII had been properly followed. Responses to such guidelines were recorded and transcribed (Verbatim).

2.9 Data Analysis and Interpretation:

The data were analyzed, under the overall guidance and supervision of the investigators. Transcription (verbatim) preparation was started during data collection period. After reviewing transcripts, we prepared code list and revised the code list. From the beginning, thematic analysis was done to understand the inner perspective. Initial coding of transcripts was conducted and themes were then visually mapped, with the inclusion of quotes, to provide a detailed picture of the information pertaining to each theme that emerged from the interviews.

2.10 Ethical Consideration:

The study obtained ethical approval from Institutional Review Board (IRB) of BSMMU. During data collection the research team did supervision and monitoring to ensure the ethical issues. Permission to work with the health facilities was granted by the relevant provincial, district and sub-district health authorities. Permission was taken separately from DGFP and DGHS. Permission was also obtained from civil surgeon and DDFP at district level data collection. Participation in the study was voluntary.

Informed written consent was obtained from all participant before enrolment into the study. Each individual was free to decide either to participate or deny. Each participant was assured that their information will be handled confidentially and they are free to disagree to participate or to drop out from the study at any time. Confidentiality was strictly maintained for study subjects. There was no use of participants' names in the study, so each participant was assigned a study number, which has been used during the study. Consent was also taken for recording of the interviews. All information was kept confidential.

2.11 Constraints:

During data collection period data collection team faced some challenges. It was difficult to get time from the respondents of KII. H & FP service managers were very busy. However, after explaining the study objectives and building good rapport with all respondents, this problem was overcome.

Interruption during KII was another problem. As the Key Informants (KIs) were very busy with their day to day activities and services at district level and upazila level, some of them were not able to provide sufficient time to the field team for interviews.

Qualitative data collection team faced challenges to reach Jamalpur field sites due to flood in the data collection period.

Chapter 3: Results

3.1 Adolescent health coordination committees (AHCC):

We asked H&FP service managers about the establishment of AHCC. All of them knew that AHCC was not established yet, and the process of developing AHCC has been started. The H&FP service managers felt the importance of AHCC.

H&FP Managers and gatekeepers identified and acknowledged the importance of adolescent health coordination committee (AHCC). From their viewpoint AHCC will help to get support from different departments. AHCC will support to take decision; to monitor AHP and service providers' activities; to implement plan; and to get better outcome. They also thought that service providers will get direction through this committee.

3.2 Gate Keepers' Knowledge about Adolescent Health Program:

Without adequate family and social support adolescents are particularly vulnerable to risky behavior and poor health and thus require gatekeepers' support. Considering gatekeepers' role, this study tried assessing their knowledge regarding AHP. Gatekeepers' were asked about AHP in their locality. Some gatekeepers are aware about adolescent corners in health facilities. Some of them are aware about EPI program, adolescent club, school based program, and nutrition program

3.3 Challenges of Adolescent Health Services:

H&FP service managers were asked about challenges of adolescent health services. According to them major challenges:

Low presence in health facilities: Adolescents' presence is low at the health facilities. This may be because the AHS had been only recently launched. Some adolescent do not come to health facilities because of shyness. Many people hold conservative attitudes towards ASRH needs.

Inconvenient service providing time: Inconvenient service providing time for adolescents is a challenge. Usually, AFHS has been provided during school hours, making it difficult for school-going adolescents. Some service providers identified the regular service hours as inconvenient for school-going and working adolescents:

> *'The adolescents are either going to school when our centers are open or they are going to industry; so that their times are not matching with us'.*
> - H&FP service manager, Gazipur

Lack of publicity: Services for adolescents are poorly publicized.

Lack of awareness among adolescents and parents: Lack of awareness among adolescents and parents regarding AFHS also contributes for low utilization of services. None seems concerned of AH issues.

> *'Both the adolescent and guardian do not think that they need health service'.* H&FP service manager, Gazipur

Communication gap between parents and adolescents: According to some respondents, communication gap exists between parents and their adolescent children on ASRH issues.

Early marriage: Early marriage is identified as another major challenge for low utilization of AFHS.

> *'Because of early marriage, many adolescents are not aware about their health'.*
> - H&FP service manager, Khulna

H&FP service managers mentioned other types of challenges which is related with service delivery like:

Limited logistics: There is no separate register for adolescent in most of the health facilities.

Maintenance of privacy: One more challenge in providing AFHS is lack of privacy. The importance and need for separate spaces for AFHS to ensure their privacy was revealed during KII.

Scarcity of medicine: Service managers identified inadequate medicine supply for adolescents as an obstacle to provide AHS.

Shortage of trained service providers: Service managers also identified shortage of trained manpower on adolescent health.

Insufficient BCC materials for adolescents: Concerns were raise regarding the insufficient BCC materials. There were few posters, brochures, leaflets or flip charts for adolescent.

3.4 Scope of Improvement

a. Suggestion of H&FP service managers:

H&FP service managers were asked to share their opinions for ensuring better adolescent friendly health services (AFHS). They put emphasis on:

Ensuring privacy in health facility: If privacy is not ensured, adolescents may be reluctant to seek care or treatment. So, there is a need to ensure privacy at facilities for adolescents.

Special service hours for adolescent: There should have separate arrangement for adolescents. Recommendations also include offering AHS after or before school hours.

Publicity about AFHS: Huge publicity is needed. Specific campaigning strategies to popularize the AFHS, such as: advertisement through television and banners is required.

Gender sensitive service provider: Recommendation was given on the need to have female service providers for adolescent girls and male service providers for adolescent boys to make them comfortable.

Separate manual and separate register: Need separate manual and separate register for them.

Strengthen school health program: School health program should be made more effective. To provide health education through school health program would be an effective way to reach a large number of adolescents. Suggestion came to provide health education in the schools using multimedia;

> *'We need to explain* easily; *so that they can understand* easily *and they will be able to overcome their shyness'.* H&FP service managers

Raise awareness among adolescents and gatekeepers: The need to increase awareness and motivate adolescents through group counseling or personal counseling is paramount. Some of the respondents mentioned that both adolescents and parents feel uncomfortable discussing SRH issues with each other. This communication gap can be addressed by raising awareness among the parents and gatekeepers in the community.

Collaborate between government and NGO: H&FP managers felt that collaboration between government organization and NGO to provide AHS would be an effective way to serve a large number of adolescents.

Involvement of gate keepers in adolescent health program: Better health services for adolescents should include facility focused as well as individual and family focused services since the environment that adolescents live in as well as the supports provided in the community are important. Some of the respondents suggested involving gatekeepers and local leaders such as UP chairmen, UP members, religious leaders, teachers, parents in AHP.

Trained service providers: Need **for** trained service providers on AH is felt strongly.

Strengthen monitoring system: There should be continuous monitoring and supervision option of AHP, as well as of service providers.

Some of them asked for antidepressant and antipsychotic medicine for adolescents at facility level.

b. Suggestion of Gate Keepers:

We have asked gatekeepers to share their opinion for bettering AFHS. They mentioned about:

Raising awareness among adolescents and parents: Raising awareness through different meeting, seminar and workshop was suggested. Meeting with local people to let them know about available AFHS service provision of health facility should be arranged.

> *'We are not aware about adolescent health. Parents are not concerned. Boys or girls, usually in case of girls' parents' lack of awareness was observed'.*
>
> - Gatekeeper, Khulna

Involving gate keepers in AH program: Adolescents' use of health services is influenced by the social values, attitudes, and taboos (perceived or real) of gatekeepers. Ensuring that these gatekeepers are also involved in awareness generation efforts.

Arranging health education program in the schools: suggestion was given to establish adolescent corner in school operated by the teachers. School teachers can provide information about AH and encouraging adolescents to visit the health facilities.

Designated service provider for adolescents: In order to ensure AHS the health facilities need to ensure designated provider having knowledge on AH.

Ensure door to door services through health service providers: Involving Field Level Staff to provide door to door services was also suggested. Some respondents recommended involving field-level staff in publicizing and providing AFHS among the communities like SACMO, health assistant, CHCP etc.

> *'Field level staff should come at community clinic, stay one day in community clinic to develop awareness of adolescents, and motivate them'.*
>
> - Gatekeeper, Jamalpur

Peer group: The gatekeepers gave emphasis on peer group formation.

> *'Form a peer group… among them make one leader, educate adolescent through them'.*
>
> - Gatekeeper, Tangail

Collaboration between government and non-government organization: The gatekeepers gave emphasis on collaboration between government and NGOs.

> *'There should be collaboration between government and NGOs, otherwise there is a chance of duplication'.*
>
> - Gatekeeper, Jamalpur

Chapter 4: Utilization of the Study Findings

Preliminary key findings of qualitative study have been shared with different stakeholders during dissemination seminars. The qualitative results will be shared with MOH&FW, DGFP, DGHS, non-government organizations, and development partners, UNICEF, WHO, UNFPA, WHO, icddr,b, UPHCP, BRAC and other relevant organizations.

This study offers an evidence for drawing new proposals with dynamic strategies and new openings for launching different programme components like developing and piloting Bangladesh specific adolescent health indicators to establish reporting and monitoring system for adolescent friendly health services, examining counseling services for adolescents in government and NGO health service system and utilization of school health clinics as referral corner.

The findings will also assist to design implementation research for testing good practice model to improve adolescent's access to health services.

Based on the result, we can outline an end line study in same sites with control areas. Finally, the study results may encompass areas like policy development, future study plan and reorganize the health facilities for adolescent population.

Chapter 5: Conclusion and Recommendations

Study team recommendations are as follows:

- Information about AH services should be widely disseminated among adolescents, service providers, gate keepers and parents of adolescents.
- Ideally to ensure privacy a separate space for adolescents is needed in health facilities. In reality at all tiers of health facilities (from district to union level) this is not feasible, as of now.

- Train staff to be gender sensitive to meet the general health needs, SRH, nutrition and mental health needs of adolescents. Sensitize and build the skills of health care providers to respond to the needs of all categories of adolescents.
- Develop links with school-based health clinics.
- Sensitize gate keepers in adolescents' life and about their role in supporting adolescents.
- Examine the feasibility and acceptability of flexible hours and maintenance of privacy for adolescents and gender sensitive service providers in government health system.
- To draw adolescents as clients in the health facilities, holistic care has to be offered that addresses their physical and emotional needs and increases their knowledge which would support positive behaviors, and improve physical and psychological health needs. Schools are important to explore adolescent health needs.

This study has reflected on health service manager' and gatekeepers' perception about adolescent health services. Their perceptions are very important to shape the adolescents' life. This study also provides a sound basis for decision makers in national and international institutions to invest in efforts to expand the reach of good quality health services to adolescents at community and at health facility level.

The qualitative study included both service managers' and gatekeepers' perspectives. These findings will assist to develop research designs for testing good practice model to improve adolescents' access to health services. This study will not only facilitate the intervention design but also provide vital information about the health system strengthening activities including recognizing opportunities and challenges of adolescent health service and programs. Finally, the study results may be used in areas like policy development, future study plan and reorganize opportunities for adolescent population.

REFERENCE

Abajobir AA, Seme A. (2014) *Reproductive health knowledge and services utilization among rural adolescents in east Gojjam zone, Ethiopia: a community-based cross-sectional study*. BMC health services research.14(1):1.

Izugbara CO, Ngilangwa DP. (2010) *Women, poverty and adverse maternal outcomes in Nairobi, Kenya*, BMC women's health,10(1):1.

León CJ, Hernández AL, Hernández HM. (2002) *Effect of socio cultural factors on maternal and perinatal morbidity with or without mortality among adolescents seen in 3 states of the Mexican Republic*. Ginecologia y obstetricia de Mexico, 70:320-7.

Lloyd CB. Growing up global: the changing transitions to adulthood in developing countries. Washington, D.C., The National Academies Press, 2005

Pathak PK, Singh A, Subramanian S. (2010) *Economic inequalities in maternal health care: prenatal care and skilled birth attendance in India*, 1992–2006. PloS one, 5(10):e13593.

Simoes PP, Almeida RM. *Geographic accessibility to obstetric care and maternal mortality in a large metropolitan area of Brazil* (2011) International Journal of Gynecology & Obstetrics, 112(1):25-9.

UNICEF. Progress for Children A report card on adolescents Number 10, April 2012 https://www.unicef.org/media/files/PFC2012_A_report_card_on_adolescents.pdf Accessed on July 2017

World Health Organization (WHO), Sixty-fourth World Health Assembly. Resolution WHA 64.28: Youth and health risks. Geneva, 2011 http://apps.who.int/gb/ebwha/pdf_files/WHA64/A64_R28-en.pdf, accessed on 7 December, 2017

Ziraba AK, Madise N, Mills S, Kyobutungi C, Ezeh A. (2009), *Maternal mortality in the informal settlements of Nairobi city: what do we know*, Reproductive health. 6(1):1.

ANNEXURE

Persons involved in Qualitative Study:

Study Research Team Members

Name	Designation
Dr. Fariha Haseen	Associate Prof. DPHI, BSMMU, and Project Coordinator, ADOHEART Study
Ms. Sabrina Sharmin	Senior Research Officer, ADOHEART Study
Dr. Dilip Kumar Basak	Research Officer, ADOHEART Study
Ms. Nusrat Sharmin	Research Assistant, ADOHEART Study
Mr. Subrata Kumar Bhadra	Research Associate, NIPORT, and Consultant, ADOHEART Study
Dr. AM Zakir Hussain	Former Director Primary Health Care & Disease Control, DGHS, and Consultant, ADOHEART Study
Prof. Syed Shariful Islam	Dean, Faculty of Preventive and Social Medicine, Chairman of Department of Public Health and Informatics (DPHI), BSMMU, and Project Director, ADOHEART Study

Members of the Technical Review Committee

Name	Designation
Dr. Md. Ziaul Matin	Health Manager, UNICEF
Dr. Riad Mahmud	Former Health Specialist, UNICEF
Dr. ASM Sayem	Health Specialist, UNICEF
Dr. Farhana Shams Shumi	Health Officer, UNICEF
Dr. Minjoon Kim	Health Officer, UNICEF
Dr. Shahana Nazeen	Adolescent Health Consultant, UNICEF

Qualitative Training Team

Name	Designation
Prof. Syed Shariful Islam	Dean, Faculty of Preventive and Social Medicine, Chairman of Department of Public Health and Informatics (DPHI), BSMMU, and Project Director, ADOHEART Study
Dr. Fariha Haseen	Assistant Prof. DPHI, BSMMU, and Project Coordinator, ADOHEART Study
Sabrina Sharmin	Senior Research Officer, ADOHEART Study
Dr. Dilip Kumar Basak	Research Officer, ADOHEART Study
Mr. Subrata Kumar Bhadra	Research Associate, NIPORT, and Consultant, ADOHEART Study

Field Enumerator for Qualitative Study

Name	Designation
Rikta Khanam	Data Collector
Tania Tazrin	Data Collector

Picture:

1. Training Picture

iii. Pictures of the Pre testing:

iv. Qualitative Data Collection Picture

Civil Surgeon

DDFP

v. Challenges During Data Collection

A flooded UHC in Dacope, Khulna