Health Seeking Behavior on Maternal Health Care among Adolescent Mother of Northern Bangladesh

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Abstract

Health knowledge is one of the key factors enabling adolescent women to be aware of their health status in order to seek appropriate health services. This study aims to assess the knowledge and attitude on maternal health care and the contributing factors to being knowledgeable among adolescent mother in Chapinawabganj district, the northern part of Bangladesh. A mixed-method study was conducted over 8 months, A total of 101 adolescent mothers were interviewed employing a predesigneted and open-ended structured questionnaire after taking informed consent, using the Andersen-Newman model as a conceptual framework. The findings of the research shows that 35.6%of adolescent mothers' first marriages occurred as the result of their lower socio-economic status. 42.6% adolescence mothers gave birth to their first babies unexpectedly (not in planned). Only 46.5 % had attended at antenatal care (ANC) and 26.7 % opined that ANC visits should be done within 3 months of pregnancy; whereas, 44.6 % didn't know about postnatal care (PNC) visits. Only 32.7 % of adolescent mothers said that additional food intake is needed during pregnancy. 74.3 % (75 out of 101) expected normal delivery. A traditional birth attendant (TBA) still plays an influence in contemporary rural society, 36.6 % of mothers preferred delivering at home with the help of anTBA. The literacy and socioeconomic status of the adolescent mothers were observed as a major determinant in constructing knowledge and perception. They seldom seek skilled care due to poor social networking and family restrictions that promote maternal complication. Maternal health education and accessible services are in demands for this population.

Key Words: Adolescent mothers, Maternal health knowledge, Antenatal care, Maternal complicacy.

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INTRODUCTION

Adolescent pregnancy is teen pregnancy of women aged between 13-19 years (WHO, 2004; Rexhepi et al,2019; Plionis, 1975). It is a global public health concern, as it has a wide range of socio-economic effects on both mothers and their children,(Islam, 2017; Li et al, 2021; Shahabuddin et al, 2017; Mohr, 2019; Shahabuddin et al, 2016; Ryan, 2009) and, it is one of the major health threats to young women in Bangladesh. The World Health Organization (WHO) estimates that every year, about 16 million women aged 15 to 19 years, and two million girls under the age of 15constitute approximately 11 percent of all deliveries globally (WHO, 2014; Sultana, 2019; Islam, 2017; Doddihal, Katti, &Mallapur, 2015; Kirchengast, 2016; Alemayehu, Haider & Habte, 2010), and each year 70,000 adolescent mothers die of maternal delivery complications in developing countries (WHO, 2014; Kiani, Ghazanfarpour, & Saeidi, 2019). Adolescent mothers are more likely to suffer from obstructed delivery and other severe childbirth and pregnancy-related complications (Fraser, 1995; Banerjee, 2009). Several studies have pointed out adolescent pregnancy can lead to morbidities, such as preterm birth (Dean, 2013), preeclampsia, and eclampsia (Macedo, 2020; Dekker, & Sibai 2001), puerperal endometritis, systematic infections (UNICEF, 2008; Cavazos-Rehg, 2015; Nadeau, Subramaniam, & Andrews, 2016, April), miscarriage (Daily Star, 2019/ Begum, 2019), preterm premature rupture of membranes (Ergen et al, 2017), and maternal mortality (Azevedo, 2015). The risk of maternal mortality is highest for 15 years teenage girls and pregnancy and childbirth-related complications are higher among adolescent girls age 10-19 as compared to women aged 20-24 (Ganchimeg. 2014; WHO, 2019). In South Asia, Bangladesh has the highest rate (35%) of adolescent pregnancy (NIPORT, 2015, Dulitha, 2013; Papri, 2016). According to UNFPA, Pregnancies among girls, less than 18 years of age have irreparable consequences. It infringes on the rights of girls, with potentially fatal implications for their sexual and reproductive health, and imposes high development costs on communities, especially in perpetuating the poverty cycle (Loaiza, & Liang, 2013). Unlike many other countries, Bangladesh odds of adolescent pregnancy without legal courtship. Adolescent fertility in Bangladesh occurs mainly within the context of marriage. Bangladesh has the highest

teenage fertility rate in South Asia, with one out of every ten girls having a child before the age of 15, and one out of every three adolescents being mothers or pregnant by the age of 19 (UNDP,2016; UNFP, 2013; GOVT. of Bangladesh,2012).Our study tries to find out if the adolescent mothers are aware of the precautions that should be taken during their pregnancies? What they know regarding a healthy diet during pregnancy. In this study it is pointed out that Bangladeshi adolescent mothers having inadequate knowledge about health are subjected to death related complicancies in their pregnancies. So, the study of health seeking behavior of adolescent mothers is rationable and a matter of life and death.

Litarature Review

Adolescent girls are more likely to report early, frequent and unplanned pregnancies (typically as the consequence of not using contraceptives, and male dominance in reproductive health decisions) (Raine,011), as compared to women married after reaching the age of 18. These customs are compounded by malnutrition and inadequate antenatal care (ANC) and affect receiving maternal care (Pathak, 1993; Rahman, 2011; Kamal, 2009). The majority of them are unaware of family planning, and even if they are, they do not have convenient access to facilities or do not use them. Family members do not approve of abortions, even if it is an unplanned pregnancy societal value is to give birth to the child. Despite, some progress had made on maternal health status, the estimated maternal mortality ratio (MMR) in BMMS 2016 is 196 per 100,000 live births; the rate has remained almost unchanged in Bangladesh since 2010. In this regard the 4rth Health Population, and Nutrition sector Program 2017-2022 have set the target of reaching an MMR of 105 per 100,000 live births in 2022, the risk of maternal death is high among first-time mothers (215 per 100,000 live births) as well as for parities 4 or higher (BMSS,2016). Maternal health opposite of maternal mortality and morbidity because women who are healthy stand a far better chance of thriving during and after pregnancy than women who are unhealthy, for taking ANC, DC, PNC during pregnancy period and after delivery (WHO, 2017; Stanikzai, 2019; McDonagh, 1996; Tarekegn, Lieberman, & Giedraitis, 2014; Ali, & Chauhan, 2020; Mrisho et al, 2009; Kim & Kim, 2019; Mehari, & Wencheko, 2013; Achia, & Mageto, 2015; Haruna,

Dandeebo, & Galaa, 2019). Knowledge and practices of taking health care service are increasing day by day. But adolescent pregnancy associated with child marriage is the key hindrance to getting proper knowledge on maternal health snatches childhood from adolescent mothers and compromises their development (Mehra et al, 2018; Malhotra et al, 2011; Barman, Saha, & Chouhan, 2020; Patra, 2016; Tarar et al, 2019; Fayokun, 2015). Adolescent maternal and child health is the most priority of the health care providers and health seekers (Pathak, Singh, & Subramanian, 2010; Dingle, Powell-Jackson & Goodman, 2013). Pregnant teenagers or mothers aged 15–19, are not aware of reproductive and maternal health. Their knowledge in this regards is very few and health-seeking behaviors are also low, the risk of maternal complicacy and maternal and neonatal mortality are more associated with socioeconomic factors (education, income, religious belief, accessibility of services, power structure within the family, etc.) (Andersen and Newman, 1990) rather than the age related biological issues.

As a result, in-depth analysis and substantial discussion of adolescent mothers' perceptions and awareness in current sociocultural settings in Northern is needed. Inadequate prenatal care, illiteracy, and low socioeconomic conditions are also factors that influence the outcome of pregnancy in adolescent women. Prenatal and delivery care deficiencies may increase the risk of neonatal morbidity and mortality. Women have been facingvarious difficulties both before and after birth, according to analysis. Women have certain misconceptions regarding the services provided at UHC, in addition to practical difficulties (Khanum, 2002).

Therefore, the current research examines teenage mothers' awareness and attitudes toward maternal health care in northern Bangladesh. The effect of early pregnancy on adolescent health in terms of complications during pregnancy and problems during childbirth are also studied.

Method

The study follwed a mixed-methods analysis that gathered data from adolescent mothers (aged 12-20). To triangulate and test the results, several data sources were used, including case studies and interviews with teenage mothers using an open-ended

standardized questionnaire.The study was conducted in Chapainwabganj district of Rajshahi division, Bangladesh. Research data shows that women aged 20–49 living in the Rajshahi division had the highest risk of adolescent motherhood (93.7%) than other divisions (Islam, 2017). We purposively selected married adolescent girls residing in three Unions of Chapainwabganj: Volahat, Hosenvita and Kanshat. Socio-economic conditions, cultural practices and beliefs, and access to maternal health services are quite similar for the people living in these areas. A total of 101 people were polled for quantitative and qualitative information. In addition to married adolescent girls, which are the main study population, we also collected data from community health workers, community members, government, NGOs, and health providers.Data from adolescent mothers were collected through questionnairesand in-depth interviews (IDIs). They were asked about their knowledge, perception, and practices related to maternal healthcare services and their preferred delivery places and methods. They were also asked about their attandence to ANC. Two female researchers (sociologists, experienced in conducting IDIs) collected the data. Research assistants were recruited and trained to conduct interviews in such a way that prejudices could be minimized (i.e. dominant respondent bias, shyness bias). They followed memory recall theory in order to ensure validity of respondents' answer. Before we started our project a research plan was developed and a field test was conducted in Volahat Union to ensure the quality of the project**.**We used SPSS tools to evaluate data and used the Andersen-Newman model as a coding guide (Andersen and Newman, 1990). The Anderson model is a theory-based paradigm that considers healthcare use as a model in which three variables, namely predisposing factors, need factors, and enabling factors, decide people's access to healthcare services.The model thus adequately facilitated to reveal adolescent girls' knowledge, perception to produce attitudes regarding maternal healthcare-seeking behavior. After reading a subset of the transcripts, an initial coding structure was created based on the study's objectives. When new codes or themes were applied to the system, all of the data was re-evaluated to ensure that it was still relevant. To get a sense of the whole, the data gathered from the questionnaire, IDIs, and case study were scrutinized multiple times.

Ethical Considerations

The research protocol was accepted by the local government bodies and Verbal consent was obtained from all the participants.

RESULTS

In this section of the study. Tables and charts are entirely based on original data. Table 1 demonstrates the state of knowledge on overall ANC criteria, detailed of at least four prenatal visits and proper timing, tetanus toxoid vaccination, and iron and calcium intake, permitted workloads, preferred mode of delivery and place.

SL	Knowledge on maternal health Care								
1	Marital age	Type of first Pregnancy		Total	Percentage (%)				
		Desired	Not Desired						
(12-20years)		f= 43(42.6%)	f= 58(57.4%)	101	(100)				
2	Education		Monthly Family Income and Expenditure						
	Education level	Total	Percentage (%)	Income and Expenditure Range		Income		Expenditure	
	Literate	8	7.92			f	(%)	f	%
	Primary	15	14.85	1000	10000	50	49.5	61	60.4
	Secondary	59	58.42	11000	20000	38	37.6	35	34.7
	H.S.C	11	10.89	21000	30000	9	8.9	5	5.0
	Honours	7	6.93	31000	40000	2	2.0		

	Master	1	0.99	41000	50000	2	2.0		
N=		101	100			101	100	101	100

3	Required Antenatal care (ANC) visit (times)	f	(%)
	Less than 4 times	31	30.7
	At least 4 times	47	46.5
	Don't Know	23	22.8
	Total	101	100.0
4	Should first ANC be done within first 3 months of pregnancy?		
	Within 3 months	27	26.7
5	Should a pregnant mother needed to be [TT] vaccinated within 6 month of pregnancy?		
	Needed	100	99.0
6	Do you think 30 minutes walking during pregnancy is good for health?		
	Good	84	83.2
	Bad	3	3.0
	Don’t know	14	13.9
	Total	101	100.0
7	Can anemia be prevented by eating more iron-contained food during pregnancy?		
	Preventable	98	97.0
	Don’t know	3	3.0

	Total	101	100.0
8	Does pregnant woman need calcium supply?		
	Needed	91	90.1
	Don't know	10	9.9
	Total	101	100.0
10	The amount of food is needed to intake by a pregnant mother		
	Normal	67	66.3
	Additional Eating	33	32.7
	Don't know	1	1.0
	Total	101	100.0
12	Necessity of receiving PNC within 1.5 Months		
	0 times	14	13.9
	3-4 times	42	41.6
	Don't Know	45	44.6
	Total	101	100.0
13	Preferred mode of delivery		
	Normal Delivery	75	74.3
	Ceasarean Delivery	26	25.7
	Total	101	100.0

14	Preferred Place of delivery in normal pregnancy		
	By TBA at Home	37	36.6
	Government Hospital	40	39.6
	NGO run Hospital	1	1.0
	Private Clinic / Hospital	23	22.8
	Total	101	100.0
15	Perceived need to receive health facilities in case of complicacy		
	Needed	101	100.0
16	Preferred treatment type		
	Traditional Treatment by Kabiraj	7	6.9
	Herbal/ Ayurvedic /Homeopath	5	5.0
	Allopath (By MBBS doctor)	89	88.1
	Total	101	100.0

Source: Authors' calculation.

Discussion

Our study has captured the maternal health knowledge of adolescent mothers (respondent's age range at the time of marriage is 12-20), particularly, in rural areas of Chapainawabganj.About 35.6 % percent (income range below 8000 Tk[4].) of respondents belonged to the poor socio-economic family background in which the Father is the major determinant for early marriages. About 49.5 % percent of the respondent's husband's family income within (1000-10000 Tk.) only. It was observed

[4] 8000 Bangladeshi Taka equals to 93$ as of 23.02.2022

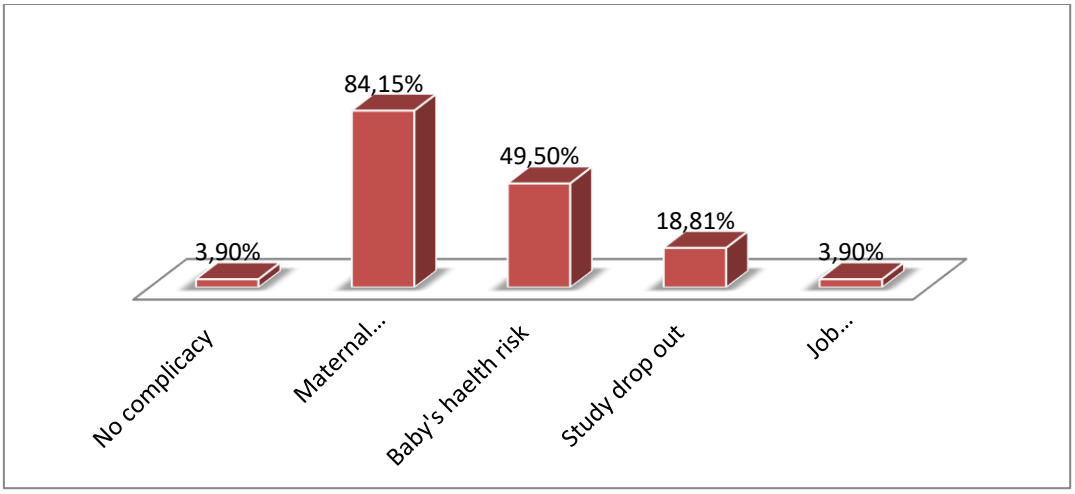
in our study that 57.4% of adolescent mother's pregnancies were desired but in most of the cases, they were unplanned and the rest of them (42.6%) wereundesired, and ocurred as a result of mistiming (wanted later). As many couples use 'menstrual regulation' a term used to refer to early- termination of pregnancy.They have inertia to share information about their pregnancies. Early marriage, reduces the chances of teenage brides' completing their education. According to this study 14.85% of respondents completed primary education, 58.42% received secondary education, and 10.89% got higher secondary education. Nasrin and Rahman (2016) found in their study that one-year delay in marriage would have lifted female years of schooling by three years and resulted in a 6.5 percent rise in female literacy.

As a result of the data analysis addressing the significance of ANC, It was found that 46.5 % of mothers perceived the need of receiving ANC at least four times during gestation, while 22.8 % said that they don't know the required number, 30.7 % expressed the need less than four times. In addition, 26.7 % of the respondents expressed first the checkup should be done within the first three month of pregnancy. The relevant figures are presented in the question number 3 to 4.

Rahman et al's study has reported 55 percent received at least one skilled antenatal care service; 21% received four or more professional ANC and 32% had professionals present during their deliveries (Rahman et al, 2016). Our study reveals that regarding tetanus toxoid injection, prominently a leading number of mothers 99.0% are highly concerned about vaccinationduring the first 6 months of their pregnancy (question number 5). Importantly for this study, most of the women know the benefit of walking 30 minutes or above. About 83.2% of the respondents opined as walking is beneficial to health.However, the fact that walking more than 30 minutes is deteriorative to a healthy pregnancy is perceived by only 3.0 %. The data regarding the significant iron and calcium containing food intake, thus found it 97.0 % of the adolescent mothers knows that taking iron-containing foods or tablets can prevent anemia, and 90.1% addressed the need for calcium supply during pregnancy.

According to 66.3 % of respondents opinion, a pregnant mother does not need to take additional food, rather 32.7 % of respondents seem that pregnant mother should eat on average times, though it is crucial for a baby's proper growth. All women need postpartum medical care after giving birth, to make sure about recovering well from labor and birth, but the surveyed report of our study indicates that 44.6 % of adolescent mothers don't know about the PNC visit within 1.5 months of delivery. Moreover, the majority of the respondents reported that they donot have the guts to make autonomous decisions about maternal care.

Chart:1 Knowledge on Probable consequences arising from adolescent pregnancy



Source: Authors' calculation. (Multiple responces)

The 3.9% of the total respondents whose educational background changing from literate to tenth class (Secondary level School), believe that adolescent pregnancy has no negative consequences, 84.15% of mothers, coming from illiterate to higher secondary educational level perceive that adolescent pregnancy frequently leads to maternal health risk.

The educational level of 49.50 % who have addressedthe low birth weight of the child as a health risk, is from illiterate to honors drgrees. 18.81% of respondents consider study discontinuation as one of the major problems of adolescent pregnancy, literate to masters-level respondent said as so. The problem of job discontinuation stated from

3.9% of respondents had completed class 8 to an honors degree. The facts from the research of the data about the preferred place of delivery is certainly very disappointing from the perspective of the government's initiatives. A maximum number of adolescent mothers (74.3%) admitted that they prefer normal delivery, 36.6 % of respondents preferred delivery by TBA at home in normal pregnancy.They admitted their reasonsto prefer home delivery is the being uncomfortable with getting naked in front of everyone at the labor room during delivery. But at home the people are familiar to them and since they are all women, they would have a mutual understanding regarding the situation. Adolescent mothers have no role in decision making of planned pregnancy to delivery planning from restricted knowledge broadening opportunity (Shahabuddin et al, 2016). Husband and mothers-in-law control the period and life chances of maternity. Father-in-law, Brother-in-law takes the pregnant women to the doctor when a severe problem arises. They prefer female health care providers instead of considering good practitioners (Henry et al, 2015). Even they are not aware of the required number of ANC visits and proper time of visit, thus miss adequate facilities.

The danger signs were almost unknown to them so a delay occurs in receiving treatment. Not having sound knowledge on maternal health, family members prefer normal delivery at home, to handle household works and to satisfy their mother-in-lawtill due date ofdelivery.

Heavy work puts the fetus to be death risk; rural superstitious people consider heavy working helps in swift delivery.

> My mother-in-law compelled me to do heavy work, I tirelessly did, and when my baby was born she didn't cry for getting injured while she was in my sack.

Another case expressed that she had birth pain more than 9 hours, the situation was going out of control but she was told to swim in the pond for easy delivery, her hand and legs gone swelled and had severe headache as a sign of edema but was sent to a local clinic after a long time of suffering.

All of the respondents perceive the severity of complicacy and the need for taking treatment, the enthralling fact here was that the mothers who said they were seeking

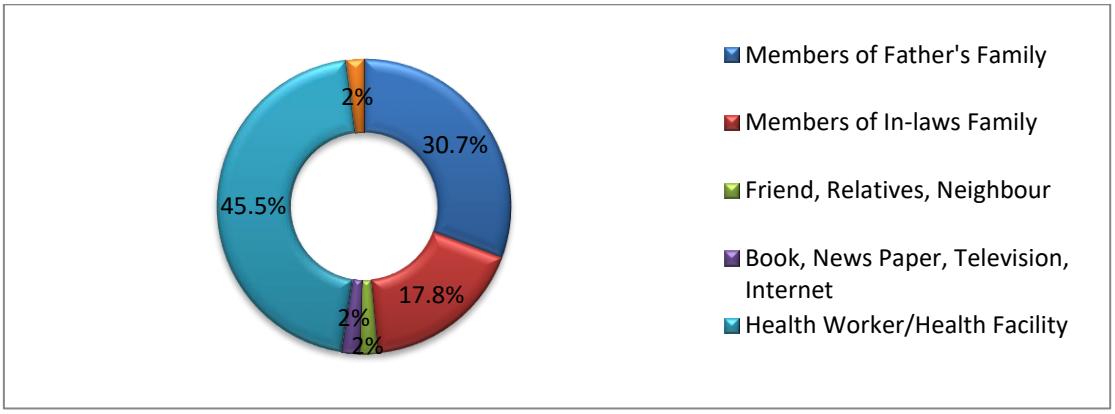
allopathic treatment, were generally those who had had a cesarean birth or had a serious exit complicationexpressed. 88.1% of the respondents expresed thatallopath and treatment from an MBBS doctor are much more authentic and curative. 6.9% of the respondents believe in healing by traditional treatment by kabiraj, 5.0% prefer herbal/ ayurvedic /homeopath for the cost-consuming benefit and no side effects on mother.

The case of Mukti illustrates that physical assault with delay in receiving ANC, and giving delivery by an unskilled TBA can lead to infant mortality:

Case # 1

> Mukti from Bholahat Upazilla did love marriage when she was 14 years old. Got pregnant soon after marriage. She studied till fifth grade, she was obstinate to deliver the child at in-laws' home since she was scared of C-section. Health care providers from BRAC aware of MNCH (Maternal Neonatal and Child Health), but she made her first ANC visit at the seventh month of gestation from feeling pain in her lower abdomen. She was accustomed to getting beaten by her addicted husband, she had prolonged labor and consequently bore a dead child by unskilled TBA.

Figure 1: Sources of Knowledge gain through the media



Source: Authors' calculation.

Health workers played a vital role in the village areas to make aware of receiving ANC during the pregnancy, 45.5% of the respondents went for ANC visit and took treatment. Father's family members become the real well-wisher and caregivers during the pregnancy, 30.7% of the respondents illustrate the fact that accessibility to ANC was

possible by her parental side's knowledge and information sharing. The in-law's family also has an influential role to make aware pregnant mothers, 17.8% of the total number of respondents have disclosed the reality. Friends, relatives, neighbors, print and social media, and doctors are also the key informers of the knowledge.

CONCLUSIONS

The study revealed that most of the adolescent mothers are school dropouts, their knowledge is constructed by personal and physical factors, social and cultural issues, health conditions, policies, practices, and collective circumstances. Having babies during adolescence has serious consequences for the health of the mother and newborn, especially in areas with weak health care systems. Adolescents seldom seek skilled maternal care than adults due to poor social networking and confined knowledge and perception. This study expected that the necessity of first antenatal care during their first trimester is indeed an important point of beginning for delivery care, Women who use maternal health services can be given cash incentives like Nepal, to overcome economic constraints. It is important to reach health care knowledge and facilities door to door by effective strategies, to ensure their decision-making autonomy in line with supposed decisions by their mothers-in-law and husbands. Caregivers and responsible persons related to adolescent mothers, (i.e. Family and In-laws family, community) should come under maternal sensitization factors through workshops or seminars to overcome traditional beliefs. Health personnel should work collaboratively with the education sector and local Government to reduce school dropouts and child marriages, which are essential to the achievement of the Sustainable DevelopmentGoals (SDGs).

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