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Reasons Of Low Uptake Of Antenatal Care In Bangladesh

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ABSTRACT: Antenatal care (ANC) is widely recognized as an accessible and cost-effective method to improve maternal and perinatal health outcomes. It offers the opportunity to connect women to the health system, and improve maternal and child health outcomes through prevention, health promotion and treatment during pregnancy. ANC can increase access to and chances of using a skilled attendant at birth around labor and delivery – which is when most maternal and newborn deaths occur – through a birth and emergency preparedness plan. However the present study has conducted to determine the socio-economic & demographic factors of the respondents, to identify the indicators that affect the ANC care, to differentiate ages of pregnant women and to evaluate the outcome about pregnant women care among the respondents within the period of time. The study was conducted at Pabna city in Bangladesh. It was a Descriptive type of Cross-Sectional Study. The study place was selected Government-250 bedded general hospital at pabna city in Bangladesh. Purposive sampling method will be used for the study. Total 200 respondents were selected for the Study. Data were collected from primary and secondary sources. Primary data were collected from the respondents of the study area. Secondary data were collected from books, research reports, journals, annual reports, Website of Ministry of Health and family planning internet etc. A pre-designed semi-structured questionnaire was used for data collection. Collected data were analyzed by computer program Statistical Package for the Social Sciences (SPSS). From the result it was found that the women's were lack of decision-making ability about their health and every day affairs, unfavorable attitudes towards antenatal care by family members', insufficient funds for prenatal care, heavy family workload, no permission to go to hospital without a guardian, and inconvenient transportation. Financial constraint was the main reason for not seeking antenatal care from qualified providers during pregnancy. In some cases the respondents did not take antenatal care due to distance of hospital is far from their home. Lack of knowledge is also one of the most important causes of not seeking antenatal care. Some husband did not want to take their wife to the Doctor for check medical checkup and this is one of the most important reasons for not seeking antenatal care. Due to low uptake of antennal care the pregnant mothers face delayed, got still birth death, they got perineal tear got delayed and perineal tear due to low uptake of antenatal care. People should be aware about antenatal care. Government, print and electronic media can play vital role in creating awareness about antenatal care among mass people. Government should establish more hospitals, more community clinic, more Ma o Shishu Kendro so that people can reach those medical centers to receive antenatal care. Government should appoint more employees for providing antenatal care and disseminating antenatal care related knowledge among mass people. Private hospitals and private clinics providing antenatal care should be liberal to the poor people in our society. Many poor people cannot receive antenatal care due to lack of money. Private hospitals and private clinics owners should reduce different cost of services related to antenatal care.

Key words: Antenatal care, low uptake, financial problem, pregnancy, care provider, checkup, breastfeeding, new born child.

INTRODUCTION

Antenatal care (ANC) is widely recognized as an accessible and cost-effective method to improve maternal and perinatal health outcomes. It offers the opportunity to connect women to the health system, and improve maternal and child health outcomes through prevention, health promotion and treatment during pregnancy. ANC can increase access to and chances of using a skilled attendant at birth around labor and delivery – which is when most maternal and newborn deaths occur – through a birth and emergency preparedness plan. Studies show that attending at least four quality ANC sessions is an effective strategy to increase skilled birth attendant use and institutional delivery. Despite substantial progress in primary health care over the last decades, only 21% of pregnant women in Bangladesh receive at least four ANC visits, just 31% of births are delivered at health facilities, and skilled birth attendants assist only 41% of women during childbirth in Bangladesh.

A lack of access to health providers and facilities has contributed to nearly three in four (73%) mothers in Bangladesh not receiving four or more ANC visits from skilled health professionals, let alone the eight 'contacts' recently recommended by the World Health Organization (WHO). Further, while 74% of urban women receive ANC from a trained provider, only 49% of rural women have such access . Improving access to quality ANC and sustaining its implementation must be prioritized for the country to achieve the health Sustainable Development Goals. Measurement of ANC service coverage is often limited to the number of contacts or type of providers, reflecting a gap in the assessment of quality as well as cost estimations and health impact; this is exacerbated by fragmented, pluralistic health systems and imprecise data on health system performance. This study sought to fill a part of this data gap and promotes current efforts to understand 'effective' coverage (i.e. proportion of the target population or population in need is actually benefiting from complete – effective – packages of interventions) beyond 'contact' coverage (i.e. proportion of the target population or population in need contacted by health service providers) of ANC services.

With a special focus on identifying gaps and barriers in effective service delivery, this analysis aims to describe the service subcomponents, costs and characteristics of patients and service provision among various community and facility settings in a rural setting of northern Bangladesh.

OBJECTIVES OF RESEARCH:-

General Objective:

The general objectives of the study is to assess the reasons of low uptake of antenatal care is Bangladesh.

Specific objectives-

The general objectives of the study are as follows:

1. To determine the socio-economic & demographic factors of the respondents.
2. To identify the indicators that affects the ANC care.
3. To differentiate ages of pregnant women.
4. To develop a comprehensive update of research findings.
5. To evaluate the outcome about pregnant women care among the respondents within the period of time.

CONCEPTUAL FRAMEWORK

The first ANC visit and coverage gap of service subcomponents, it is important to specialize and coordinate the roles of community and facility care in resource limited setting to improve effective service delivery. First, it is important to promote the capacity of community-level workers in identifying pregnant women and encouraging them to seek their first ANC at earlier gestational ages. Examination and identification of risk factors from danger signs and prior and current pregnancy can be more systematic and used to triage patients and prioritize service provision, acknowledging the human resource gap and targeting limited care provision capacity to patients who might benefit the most from ANC. Given the differing resource availability and capacity of each setting, effective referral strategies could facilitate service provision to meet the needs and enhance health systems responsiveness at both community and facility levels.

Second, given the high proportion of patient costs out of total societal cost and household income, social financing schemes (e.g. voucher system, conditional cash transfer or community-based financing) should be encouraged for poor households, to reduce potentially catastrophic health expenditures that can result from receiving care especially at child delivery. While the patient costs at community level may seem negligible,

service fees and transportation costs are major cost drivers at the facility level. Such cost barriers may be prohibitive to individuals with fewer resources, who may also be at the highest risk of adverse outcomes. Through demand side financing support, ANC services could be more person-centered and cost-effective by reducing waiting time and transportation costs, and improving service quality based on individual pregnancy stage and barriers in care seeking.

OPERATIONAL DEFINITION

For the interest of the study the following key words have been adopted:

- **Obstetric care:** Obstetric care refers to the care provided to a pregnant woman including uptake of antenatal care (ANC), care at child-birth, management of complications arising during pregnancy, child-birth and soon after delivery.
- **ANC:** Medical checkup which is received by woman during pregnancy from a medically trained provider.
- **Continuation of ANC:** The continuation of medical checkup by minimum 4 visits to a medically trained provider as per WHO guidelines that corroborate with the first visit soon after conception.
- **Discontinuation of ANC:** Discontinuity of receiving minimum 4 visits for check up of pregnant woman as per WHO guidelines.
- **Predisposing factors:** Predisposing factors include the socio-economic and demographic characteristics of the individuals. In the present study these have been considered as: women's age, education, economic status, occupation, gravida, family structure and occupation of the household head.
- **MTP:** Medically trained providers who have higher or graduation degree or also have diploma in medical science, or paramedical degree. Such as: Qualified Doctors, Nurse, Family Welfare Visitor, SACMO etc.
- **Gravida:** A number to indicate the number of pregnancies a woman has had.

METHODOLOGY OF THE STUDY

Study area: The study was conducted at Pabna city in Bangladesh.

Study Design: It was a Descriptive type of Cross-Sectional Study.

Study place: The study place was selected Government-250 bedded general hospital at Pabna city in Bangladesh.

Sample Population: All pregnant women 250 bedded general hospital at pabna city in Bangladesh were the sample population of the study.

Sampling method: Purposive sampling method will be used for the study.

Sample size: Total 400 respondents were selected for the Study.

Sources of Data: Data were collected from primary and secondary sources.

Sources of Primary: Primary data were collected from the respondents of the study area.

Sources of secondary data: Secondary data were collected from books, research reports, journals, annual reports, Website of Ministry of Health and family planning internet etc.

Sample Size: Due to time and financial Constraints the sample size of the study was limited to 94.

Duration of the Study: 24 month

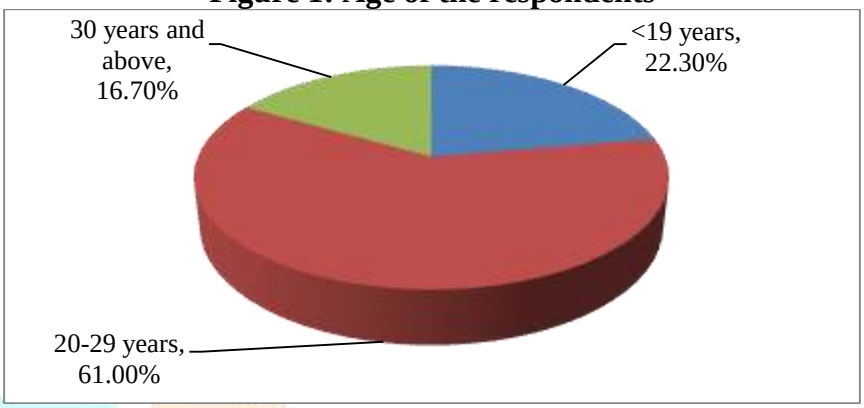
Tool of Data Collection: The tool was prepared by keeping the objectives of the study as the framework that reflect the study variables. A pre-designed semi-structured questionnaire was developed use as data collection instrument.

Procedure of Data Collection: Prior to the interview, the purposes of data collection were explained to the respondents and verbal consent was obtained. Data were collected by face-to-face interview by the investigator.

Data Analysis: Collected data were analyzed by computer program Statistical Package for the Social Sciences (SPSS).

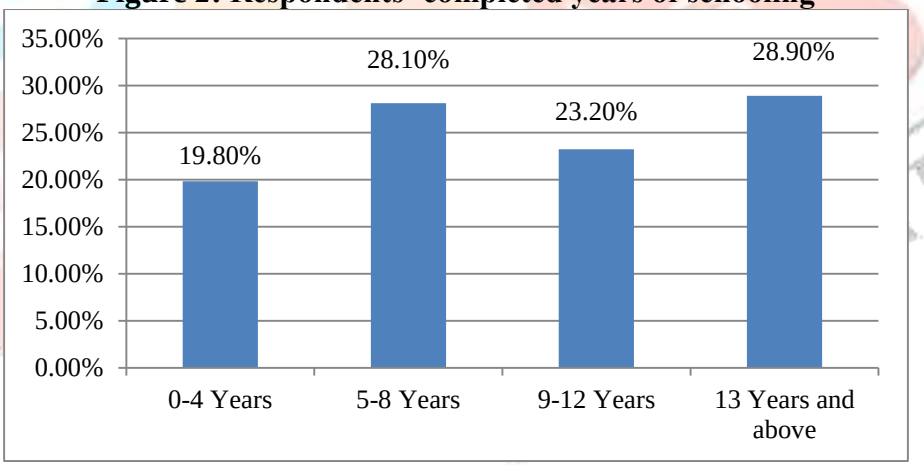
RESULTS AND DISCUSSION

Figure 1: Age of the respondents



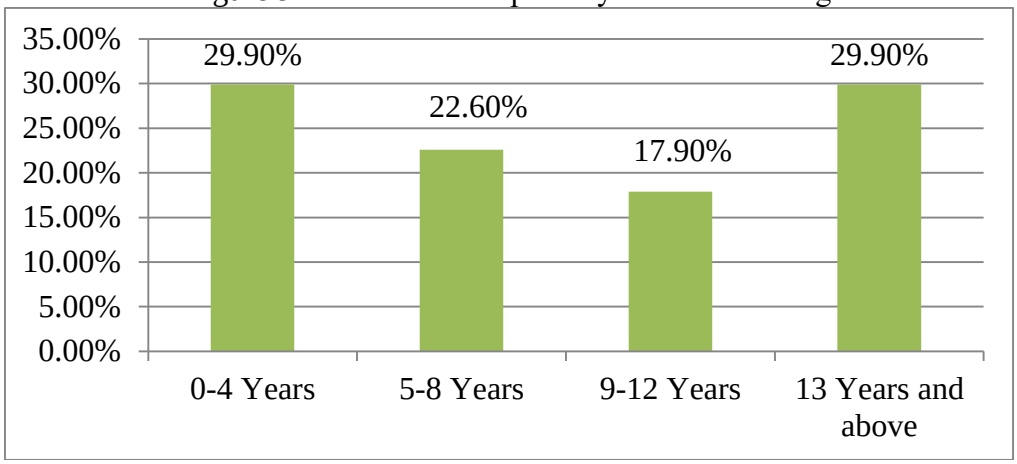
Age of the respondents has shown in the above graph. From the result it was found that 22.30% respondents were age group less than 19 years, 61% respondents were age group 20-29 years and 16.70% respondents were age group 30 years and above.

Figure 2: Respondents' completed years of schooling



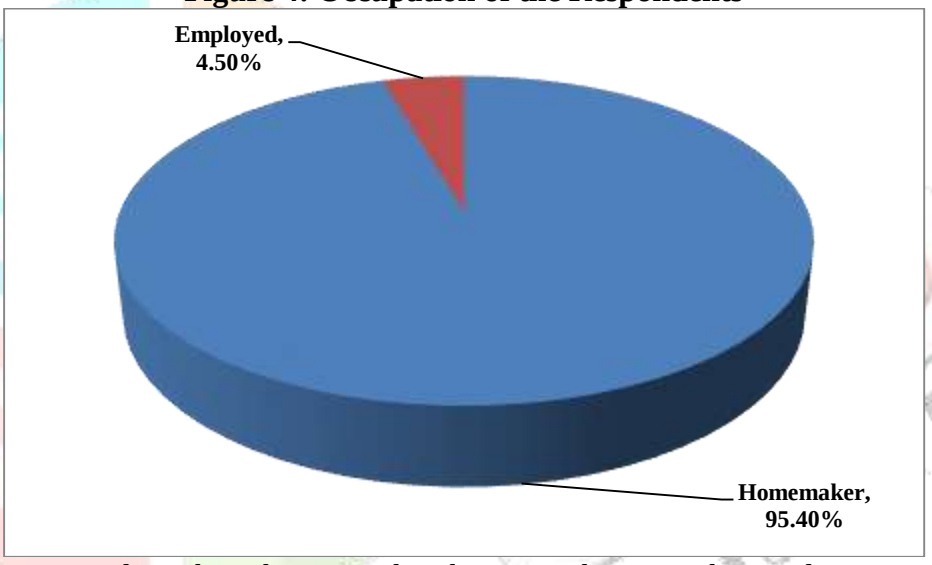
Respondents' completed years of schooling has shown in the above graph. From the result it was found that 19.80% respondents completed 0-4 years of schooling, 28.10% respondents completed 5-8 years of schooling, 23.20% respondents completed 9-12 years of schooling and 28.90% respondents completed 13 and above years of schooling.

Figure 3: Husband's completed years of schooling



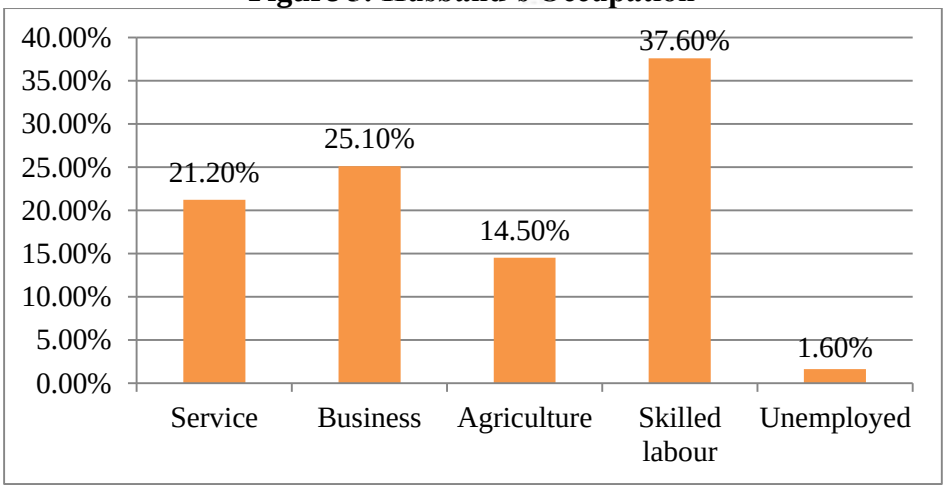
Husband's completed years of schooling has shown in the above graph. From the result it was found that 29.90% respondents' husband completed 0-4 years of schooling, 22.60% respondents' husband completed 5-8 years of schooling, 17.90% respondents' husband completed 9-12 years of schooling and 29.90% respondents' husband completed 13 and above years of schooling.

Figure 4: Occupation of the Respondents



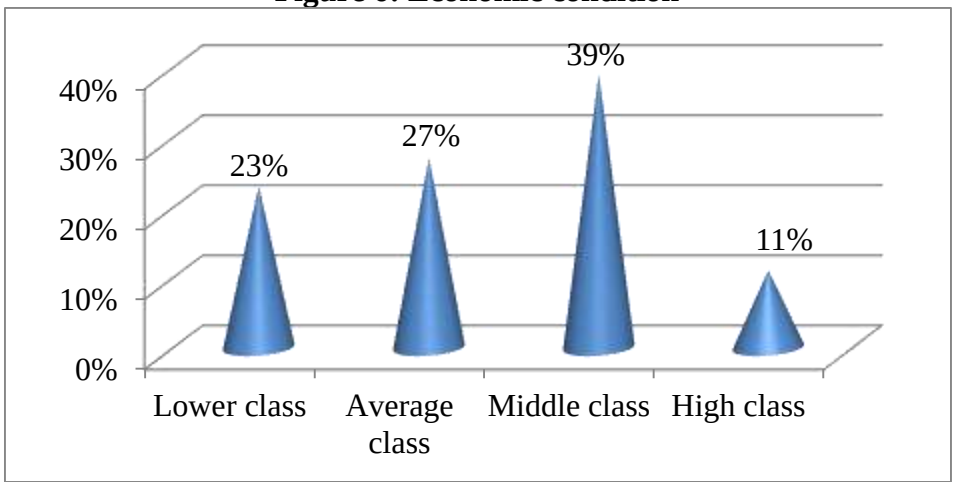
Occupation of the Respondents has shown in the above graph. From the result it was found that 4.50% respondents were employed and 95.40% respondents wee homemaker.

Figure 5: Husband's Occupation



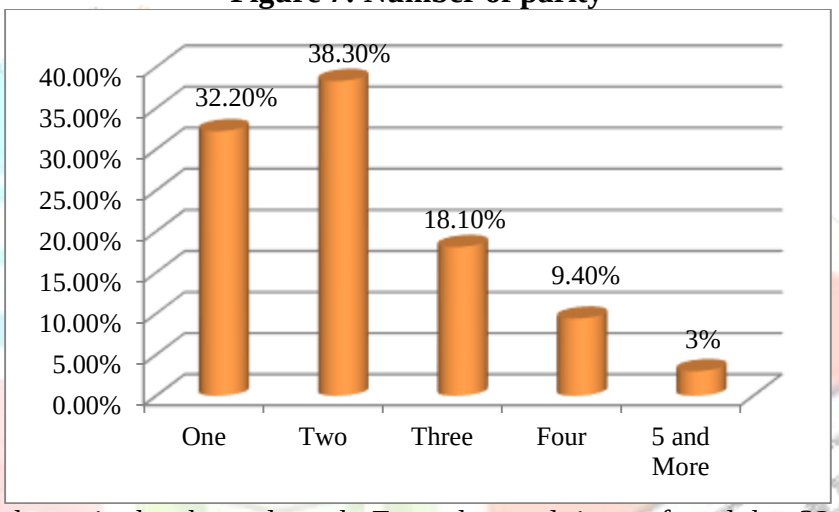
Husband's Occupation has shown in the above graph. From the result it was found that 21.20% respondents' husband were service holder, 25.10% respondents' husband were businessmen, 14.50% respondents' husband were related to agriculture, 37.60% respondents' husband were skilled labour and only 1.60% respondents' husband were unemployed.

Figure 6: Economic condition



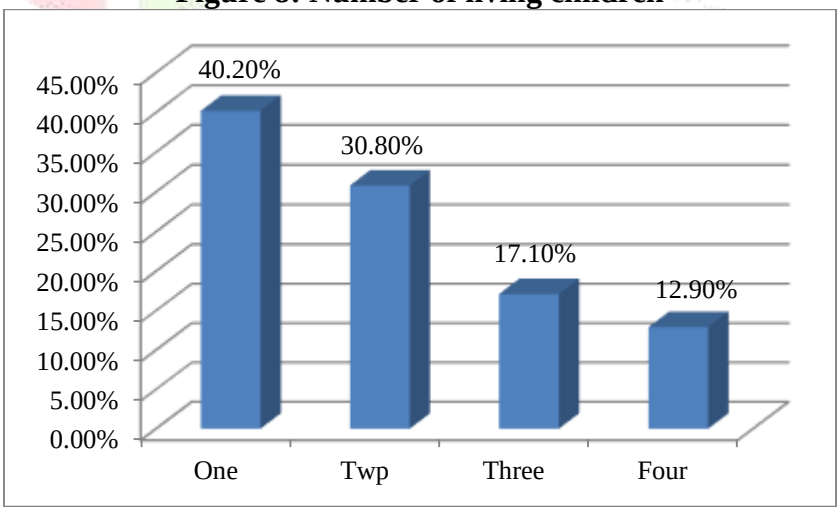
Economic condition has shown in the above graph. From the result it was found that 23% respondents were from lower class, 27% respondents were from average class, 39% respondents were from middle class and 11% respondents were from high class.

Figure 7: Number of parity



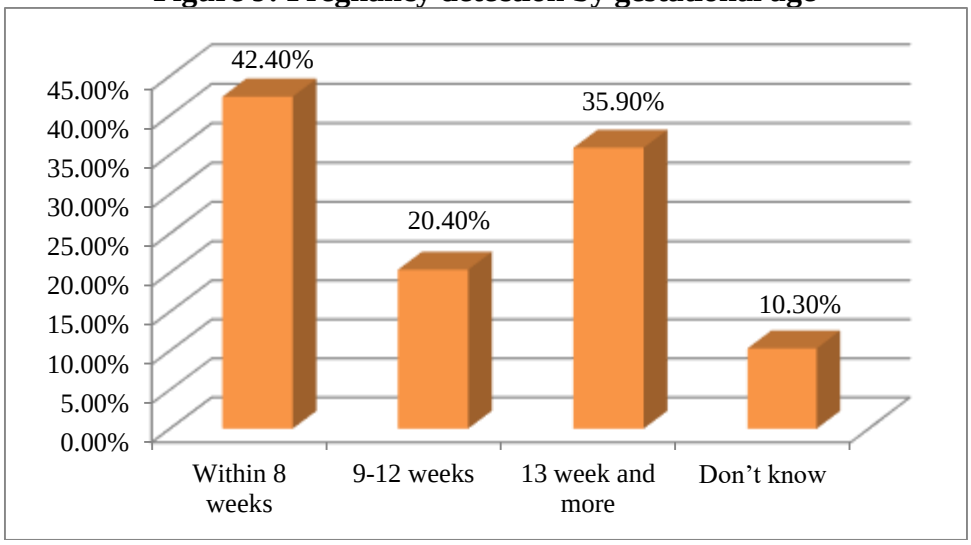
Number of parity has shown in the above d graph. From the result it was found that 32.20% respondents had one parity, 38.30% respondents had two parity, 18.10% respondents had three parity, 9.40% respondents had four parity and 3% respondents had 5 and more parity.

Figure 8: Number of living children



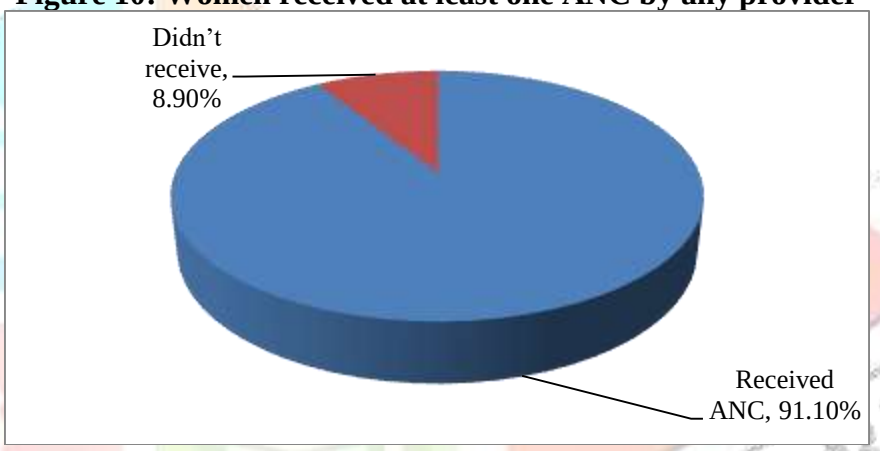
Number of living children has shown in the above graph. From the result it was found that 40.20% respondents had one living child, 30.80% respondents had two living children, 17.10% respondents had three living children and 12.90% respondents had four living children.

Figure 9: Pregnancy detection by gestational age



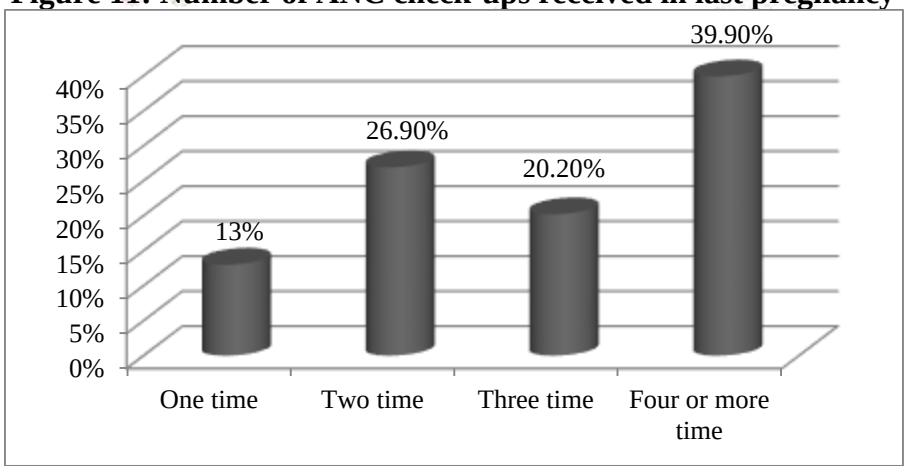
Pregnancy detection by gestational age has shown in the above graph. From the result it was found that 42.40% respondents detected gestational age within 8 weeks, 20.40% respondents detected gestational age within 9-12 weeks, 39.90% respondents detected gestational age within 13 weeks and more and 42.40% respondents don't know about detection of gestational age.

Figure 10: Women received at least one ANC by any provider



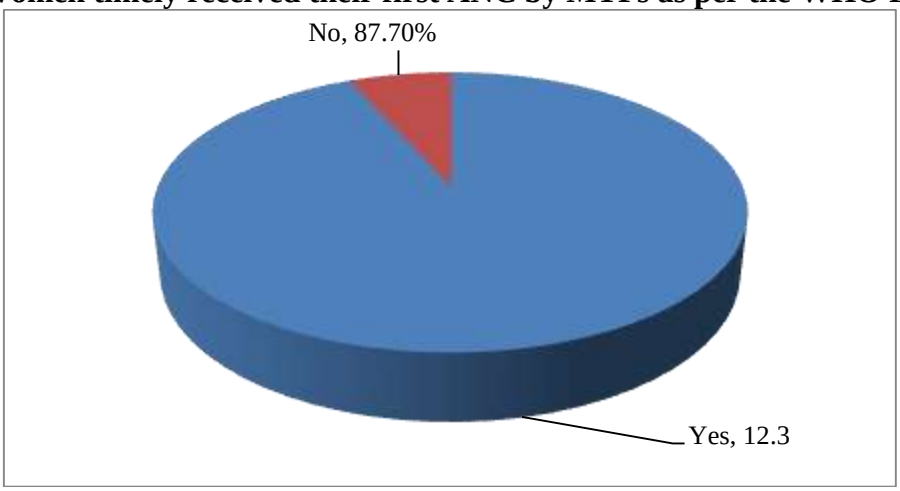
Women received at least one ANC by any provider has shown in the above graph. From the result it was found that 91.10% respondents received at least one ANC by any provider and 8.90% respondents received at least one ANC by any provider.

Figure 11: Number of ANC check-ups received in last pregnancy



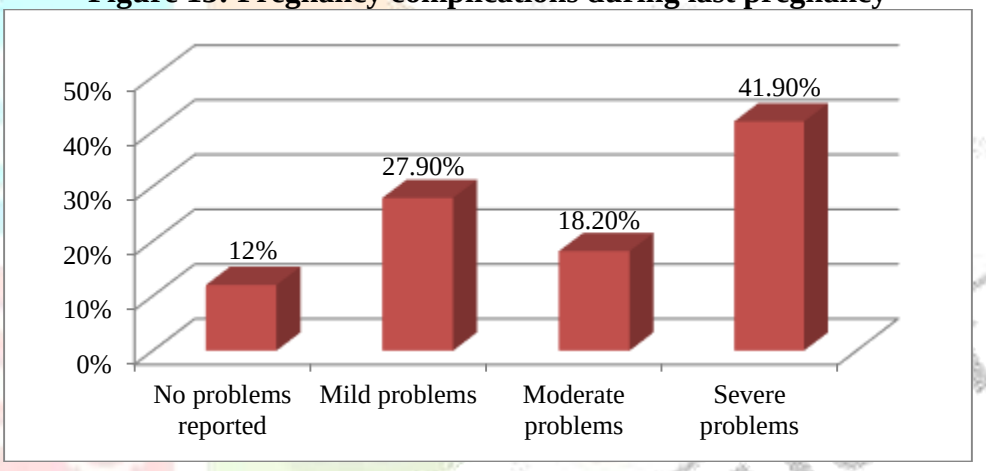
Number of ANC check-ups received in last pregnancy has shown in the above graph. From the result it was found that 13% respondents replied that they received one time ANC check-ups in last pregnancy, 26.90% respondents replied that they received two time ANC check-ups in last pregnancy, 20.20% respondents replied that they received three time ANC check-ups in last pregnancy and 39.90% respondents replied that they received four time or more ANC check-ups in last pregnancy.

Figure 12: Women timely received their first ANC by MTPs as per the WHO FANC model



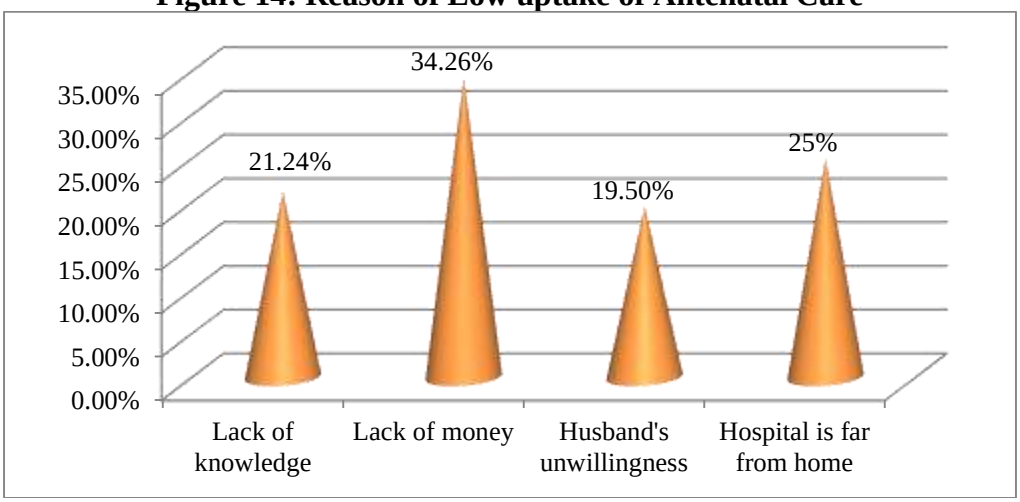
Women timely received their first ANC by MTPs as per the WHO FANC model has shown in the above graph. From the result it was found that only 12.30% women timely received their first ANC by MTPs as per the WHO FANC model and 87.70% respondents did not timely receive their first ANC by MTPs as per the WHO FANC model.

Figure 13: Pregnancy complications during last pregnancy



Pregnancy complications during last pregnancy have shown in the above graph. From the result it was found that only 12% respondents replied no problems during last pregnancy, 27.90% respondents faced mild problems during last pregnancy, 18.20% respondents faced moderate problems during last pregnancy and 41.90% respondents faced severe problems during last pregnancy.

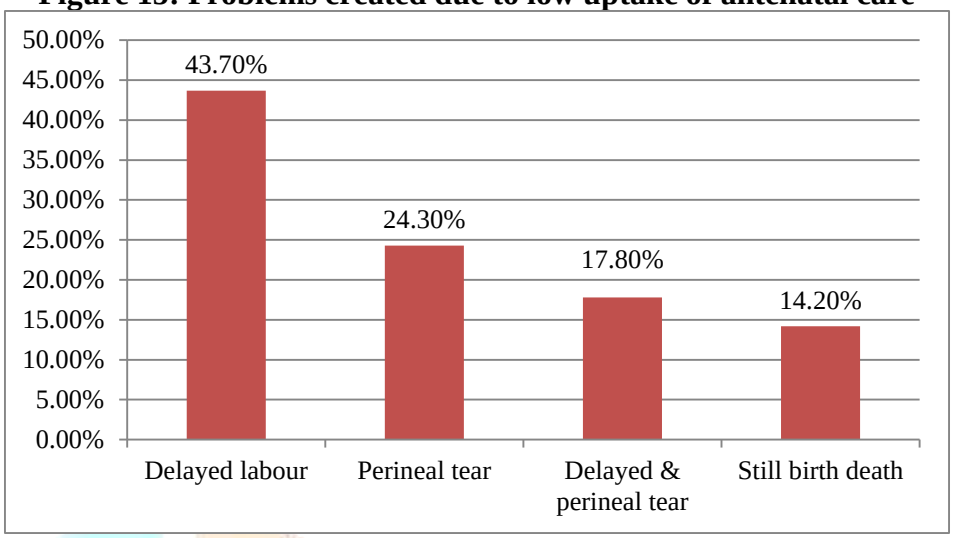
Figure 14: Reason of Low uptake of Antenatal Care



Reason of low uptake of antenatal care pregnancy has shown in the above graph. From the result it was found that 34.26% respondents replied that they did not take antenatal care due to lack of money which was

maximum but only 19.50% respondents replied that they did not take antenatal care due to husband's unwillingness about antenatal care of respondents which was minimum. On the other 21.24% respondents replied that they did not take antenatal care due to lack of about antenatal care and 25% respondents replied that they did not take antenatal care because the hospital is far from respondents home.

Figure 15: Problems created due to low uptake of antenatal care



Problems created due to low uptake of antenatal care pregnancy has shown in the above graph. From the result it was found that 43.70% respondents replied that they faced delayed labor due to low uptake of antenatal care which was maximum but only 14.20% respondents replied that they got still birth death due to low uptake of antenatal care which was minimum. On the other hand 24.30% respondents replied that they got perineal tear due to low uptake of antenatal care and 17.80% respondents replied that they got delayed and perineal tear due to low uptake of antenatal care.

CONCLUSION

There are various socio-cultural issues underpinning participants' perceptions about antenatal care in Bangladesh not being affordable or easily accessed. Among these, the most important issues which emerged from data analysis are women's lack of decision-making ability about their health and every day affairs, unfavorable attitudes towards antenatal care by family members', insufficient funds for prenatal care, heavy family workload, no permission to go to hospital without a guardian, and inconvenient transportation. There is great scope to increase Bangladeshi women's autonomy that will significantly enhance decision-making at the household level and within society. In traditional Bangladesh, the subordinated position of women makes them vulnerable within the family and society, and this is perpetuated when a large number of women are less educated or have no education, nor can move about freely in society. Many policies exist to improve women's autonomy in Bangladesh; however, their situation still appears miserable. Much needs to change if the UN's Sustainable Development Goals are to be achieved in the country. Financial constraint was the main reason for not seeking antenatal care from qualified providers during pregnancy. In some cases the respondents did not take antenatal care due to distance of hospital is far from their home. Lack of knowledge is also one of the most important causes of not seeking antenatal care. Some husband did not want to take their wife to the Doctor for check medical checkup and this is one of the most important reasons for not seeking antenatal care

The causes of discontinuation of receiving ANC always did not depend on women's socio- economic, & demographic condition because it was found that in a large number of cases women from lower economic group or having lower education level received more services, or more qualified services than that of women from higher economic or higher education level. But in certain cases it was apparent that occupation plays a significant role in getting services from different sectors. Due to low uptake of antennal care many problems causes such as the pregnant mothers face delayed, got still birth death, they got perineal tear got delayed and perineal tear due to low uptake of antenatal care.

RECOMMENDATION

1. People should be aware about antenatal care. Government, print and electronic media can play vital role in creating awareness about antenatal care among mass people.
2. Government should establish more hospitals, more community clinic, more Ma o Shishu Kendro so that people can reach those medical centers to receive antenatal care.
3. Government should appoint more employees for providing antenatal care and disseminating antenatal care related knowledge among mass people.
4. Private hospitals and private clinics providing antenatal care should be liberal to the poor people in our society. Many poor people cannot receive antenatal care due to lack of money. Private hospitals and private clinics owners should reduce different cost of services related to antenatal care.

REFERENCES

1. Dutta DC, text book of obstetrics , 8th Edition, New Delhi, Jaypee Brothers Medical Publisher (P) Limited ,2015, P-106
2. SolnesMiltenburg A, van der Eem L, Nyanza EC , van Pelt S, NdakiP, BasindaN, et al. (2017) Antenatal care and opportunities for quality improvement of service provision in resource limited settings: A mixed methods study. PLos ONE 12(12): e0188279. Available from: https://doi:10.1371/ journal.pone.0188279
3. Mxoli WN, Women's perceptions and experiences of antenatal care Rendered By Midwives, 2007, Available from: https://www.semanticscholar.org/paper/Women%27s-perceptions-and-experiences-of-antenatal-by-Mxoli/fd5e6331fc0cc5d7be788e46edfb239c4c95b419
4. Attilakos G, Overton T G, Antenatal care In Edmonds D K ed. Dewhurst's Textbook Of Obstetrics & Gynaecology, London, UK, A John Wiley & sons, Ltd, Publication, December 2011: P-42
5. UNICEF, Antenatal Care, April 2021 Available from: https://data.unicef.org/topic/maternal-health/antenatal-care/
6. Jo, Y., Alland, K., Ali, H. et al. Antenatal care in rural Bangladesh: Current state of costs, content and recommendations for effective service delivery. BMC Health Serv Res 19, 861 (2019). Available from: https://doi.org/10.1186/s12913-019-4696-7
7. Hijazi H.H., Alyahya, M.S., Sindiani, A.M. et al. Determinants of antenatal care attendance among women residing in highly disadvantaged communities in Northern Jordan: a cross-sectional study, Reprod Health 15, 106 (2018). Available from: https://doi.org/10.1186/s12978-018-0542-3
8. Shova SA, Parvin S, jui PA, Mim RT, Sarder M, Khatun A, et al. Knowledge about Antenatal Care of Pregnant Women Attending at Combined Military Hospital, AFMI. Dhaka Cant Session: 2014-2015, Page: 5
9. Muhwava L. S., Morojele N. & London, L. Psychological factors associated with early initiation and frequency of antenatal care (ANC) visits in a rural and urban setting in South Africa: a cross-sectional survey. BMC Pregnancy Childbirth 16, 18 (2016). Available from: https://doi.org/10.1186/s12884-016-0807-1
10. Ogunba BO, Knowledge and Attitude of Women and Its Influence on Antenatal Attendance in Southwestern Nigeria, Journal of Nutrition and Health Sciences, 2017, vol-4, issue-2, P-1.
11. Warii D et. al. Perception of pregnant women of reasons for late initiation of antenatal care: a qualitative cross sectional study, *Warii and George BMC Pregnancy and Childbirth*, 2020, p-2, Available from: https://doi.org/10.1186/s12884-020-2746-0
12. Stuart Campbell and Christoph Lees (ed), Antenatal care In *Obstetrical by ten teachers*, 17th edition, 338 Euston Road, London NW1 3BH
13. Young A., Chard T., The effectiveness of current antenatal care In John Studd (ed) *Progress in Obstetrics & Gynaecology* 12th edition London, British Library Cataloguing in Publication Data, 1996, P-3
14. Sami M et. al. Inequity in maternal health-care services: evidence from home-based skilled-birth-attendant programmes in Bangladesh, Bulletin of the World Health Organization, 2008, vol-4, p-252 Available from: https://doi;10.2471/BLT.07.042754
15. Shahajahan M, et. al. Factors associated with use of antenatal care services in a rural area of Bangladesh, *South East Asia Journal of Public Health*, 2013, 2(2), p 61-66, Available from: http://dx.doi.org/ 10.3329/seajph.v2i2.15956
16. Begum N, et. al. Utilization of antenatal care services in a selected rural area in Bangladesh, *Northern International Medical College Journal*, 2015,6(1), p 25-28, Available from: https://doi.org/10.3329/ nimcj.v6i1.23157

17. Pulok M H et. al. Progress in the utilization of Antenatal and delivery care services in Bangladesh: where does the equity gap lie?, *BMC pregnancy and child birth,* 2016, p1 Available from: https://doi:10.1186/ s12884-016-0970-4
18. Kamal S MM, et.al. Antenatal care practices with associated factors among tribal woman of Bangladesh, *American Journal of Applied Mathematics and Statistics,* 2018, 6(4), p 149-157 Available from: https://doi:10.12691/ajams-6-4-5
19. Akter M S, et.al. Study on antenatal care among mothers in Bangladesh: a country based cross-sectional study, *Dept. of Statistics, University of Rajshahi, Bangladesh*
20. Bhowmik K R et. al. Modelling the number of antenatal care visits in Bangladesh to determine the risk factors for reduced antenatal care attendance, *PLoS ONE*, 2020, p-1, Available from: https://doi.org/ 10.1371/journal.pone.0228215
21. Obago I T, et. al. The Role of Antenatal Care in Predicting Health Facility Delivery among Women in Kenya: Further Analysis of Data from the 2008-09 KDHS, *Demographic and health surveys*
22. Gupta S, et.al. Factors Associated with Four or More Antenatal Care Visits and its Decline among Pregnant Women in Tanzania between 1999 and 2010, *Four Antenatal Visits among Tanzania Women*, 2014, PLoS ONE 9(7): e101893, Available from: https://doi:10.1371/journal.pone.0101893
23. Galle A et. al. Expectations and satisfaction with antenatal care among pregnant women with a focus on vulnerable groups: a descriptive study in Ghent, *BMC Women's Health ,* 2015, p:1, Available from: https://doi:10.1186/s12905-015-0266-2
24. Manianga C et. al. Determinants of antenatal care attendance among pregnant woman living in Endemic Malaria Settings: Experience from the Democratic Republic of Congo, *Obstetrics and Gynecology International*, 2016, p: 1, Available from: https://dx.doi.org/10.1155/2016/5423413
25. Muchie K F Quality of antenatal care services and completion of four or more antenatal care visits in Ethiopia: a finding based on a demographic and health survey, *Muchie BMC Pregnancy and Childbirth*, 2017, p:2, Available from: https://doi10.1186/s12884-017-1488-0
26. Konje E T, et. al. Missed opportunities in antenatal care for improving the health of pregnant women and new borns in Geita district, Northwest Tanzania, *Konje et al. BMC Pregnancy and Childbirth*, 2018, p: 1, Available from: https://doi.org/10.1186/s12884-018-2014-8
27. Maluka S O, et. al. Factors for late initiation of antenatal care in Dar es Salaam, Tanzania: A qualitative study, *Mgata and Maluka BMC Pregnancy and Childbirth,*2019, p-1, Available from: https://doi.org/ 10.1186/s12884-019-2576-0
28. MhajabinS et. al. Quality of antenatal care experience in rural Bangladesh: social support, respect, dignity, communication and counseling, 2020, p-7, Available from: https://doi.org/10.21203/rs.3.rs-22941/v1
29. Hossain S A et. al. Antenatal care practice among Pregnant Women in a selected rural area of Bangladesh, *Northern International Medical College Journal*, 2018, vol.10, p-340, Available from: https://doi.10.3329/nimcj.v10i1.39328
30. Talukder A et. al. Utilization of Antenatal Care Services in Bangladesh: A Cross- sectional study Exploring the Associated Factors, *The Anatolian Journal of Family Medicine*, 2021, Available from: https://doi.10.5505/anatoljfm.2020.97269
31. Manisha Ms. et. al Assessment of knowledge regarding antenatal care among the primigravida mothers attending antenatal OPD-A descriptive survey, *Europian Journal of Molecular & Clinical Medicine,*vol-7, issue-11, P-6617
32. Afaya A et. al Women's knowledge and its associated factors regarding optimum utilization of antenatal care in a rural Ghana: A cross- sectional study, *PLOS ONE*, 2020, p-8, Available from: https://doi.org/ 10.1371/journal.pone.0234575
33. Miltenburg A S et. al Antenatal care and opportunities for quality improvement of service provision in resource limited settings: A mixed methods study, *Quality improvement of antenatal care services*, 2017, p-9, Available from: https://doi.org/10.1371/journal.pone.0188279
34. Shirin S Knowledge, Attitude and Practice of maternal health care among the married women in a rural area of Bangladesh, *Ibrahim Med. Coll. J.* 2011, p-14
35. Matovelo D et. al. Reported knowledge, attitude and practice of antenatal care services among women in Dodoma municipal, Tanzania, *Journal of Pediatrics and Neonatal Care*, 2016, vol:4(1)' p-3, Available from: https://doi.10.15406/jpnc.2016.04.00125
36. Banda C L et. al. on Barriers to utilization of focused antenatal care among pregnant women in Ntchisi district in Malawi, *Tampere School of Health Sciences/Public Health,* 2013, p-4.