

***“***Assessment of quality of antenatal care provided to pregnant women receiving health care in union level health and family welfare centers in the selected union of Golapganj Upazila in Sylhet district***”***

A dissertation submitted by:

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ID: 192-0109-011

In partial fulfillment of the requirement for the degree of Masters of public health (MPH)

**UNIVERSITY OF SOUTHASIA (USA)**

Date of submission:

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*“To*

*My Beloved Parents and Respectful Teachers*

*For their deep love, support and inspiration to do this works”*

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## “Assessment of quality of antenatal care provided to pregnant women receiving health care in union level health and family welfare centers in the selected union of Golapganj Upazila in Sylhet district”

Submitted by Md. Atiqur Rahman for the partial fulfillment of the requirement for the degree of Masters of public Health (MPH).

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| **Acronyms** |
| UniSA University of South Asia |
| SPSS Statistical package for social service |
| ND Nicotine Dependency |

**Abstract**

**Objective**

To assess the quality of antenatal care among pregnant women

**Methods**

This was a descriptive cross-sectional study to find out the prevalence of dental caries and permanent first molar among 12 years old school going children at madan Netrokona, Districts

**Result**

Among 112 participants 52% was girl and 48% was boys. 19% of the respondents were belong from 9-10 years age group. And 48% and 33% were belong from 11 years and 12 years age group. Almost 25.0% and 22.80% of participant’s father and mother have no literacy respectively. Among all the guardians primary was completed by 50% (father) and 45.60% (mother). 12.20% participant’s father were completed secondary education and 24.7% of the participant’s mother completed the secondary education. 50.60% of respondent’s mother were housewife and 15.40%, 5.20% and 28.80% were involve with service, business and other occupation respectively. In addition to this, 42.3%, 25.4% and 32.30% of the participants father were involve with service, business and other occupation. 32.0% were suffering from dental caries on different teeth among them 37.65% were have caries in first molar. 32% of the respondents visit to dentist in last six months. Among all the participants 30% brush their teeth two times a day. Among all the participants sugar was consume by 10.11%, 75%, 12.80% respectively whereas 1% never consumed sugar. Almost 45.80% respondents consume chocolate occasionally whereas 51.60 and 37.02% eat junk food and drink carbonated beverages respectively. Only 1.1% drink fruit juice regularly while 31.60%, 27.80%, 39.5% consume fruit juice 1-3times/day, occasionally and never respectively. However, Gender, Oral hygiene, visit dentist during last 6 months and consumption of sugary food items was found statistically significant as p-value was less than .05.

**Conclusion**

The present study was conducted to assess the Prevalence of dental caries among the children age between 9-12 years. More than one third of the population were suffering from caries in first permanent molar.

**Keywords**

Dental caries, cariogenic food etc.

**Chapter-One: Introduction**

##### INTRODUCTION

Antenatal care (ANC) has long been considered a critical component of the continuum of care for women during pregnancy, with the potential to contribute to the survival and thriving of women and newborns [2]. This essential service allows women to be screened during their pregnancies for pre-existing conditions and potential complications, allows for initiation of timely and appropriate treatment, and provides a platform for women to receive counselling, which can support them to protect their health and that of their baby throughout the antenatal, birth and postnatal periods. Moreover, ANC is becoming increasingly important as a service as the world undergoes an obstetric transition. In this transition, preventable maternal mortality is becoming predominantly the result of indirect causes and non-communicable diseases, which requires more individualized care. ANC can provide an optimal platform for catering the individual care by screening and timely management. Promisingly, utilization of ANC has been increasing steadily throughout the past decades, with 86% women worldwide now attending at least one ANC contact and 62% receiving at least four ANC contacts between conception and birth. However, even as ANC utilization has increased over the past two decades, the content and quality of this care have fallen under increased scrutiny, as poor-quality compromises the potential benefits of care. With the new targets set out in the Sustainable Development Goals (SDGs) aiming to reduce maternal and newborn deaths to unprecedented levels, and the ambitious ‘Survive, Thrive, Transform’ agenda of the Global Strategy for Women’s, Children’s and Adolescent’s Health, ensuring the quality of maternal and newborn health (MNH) services, including ANC, is as important as ever.

The World Health Organization (WHO) recently updated its ANC guidelines based on the global evidence base [1]. The new guidelines are notable in their adoption of a human rights-based approach and a focus on people-centered care. This emphasizes not only clinical service provision but also the experience of care; so that adolescent girls and women are able to benefit from a positive pregnancy experience. Moreover, it is now recommended that each woman attend eight of more routine ANC contacts between conception and birth, rather than the four or more suggested by the previous model [1]. The new guidelines are more expansive and comprehensive than the previous model, and clearly have the potential to improve the pregnancy experience and outcomes. During the Millennium Development Goals-era, the global coverage of ANC contacts inched forward, but many countries struggled to ensure adherence to the recommendations contained in the previous model. Based on this experience, it will be challenging for the countries with limited resources to ensure the adherence to the more comprehensive recommendations. A number of studies have explored the degree to which the recommended content of ANC contacts are adhered to in different countries. In general, these studies demonstrate the poor status and existing gaps related to the content of ANC contacts, even in the context of high-resource settings, much less in low and middle-income countries (LMICs).

Bangladesh has made impressive gains in reducing maternal and neonatal mortality over the past several decades, but total number and rates of these deaths remain too high. Moreover, the latest Bangladesh Maternal Mortality Survey suggests that progress in reducing maternal mortality has stalled. Use of key MNH services remains critically low. Indeed, only 37% pregnant women attend at least four ANC contacts, 47% of births occur in health facilities and 48% (6% in the case of home-based births) of women receive postnatal care from a skilled health-care professional within the first two days after birth. While the BMMS-2016 revealed that use of skilled health services during pregnancy has increased over the past decade, this has not translated into an expected reduction in maternal mortality between 2010 and 2016. This suggests that focusing solely on increasing coverage of these services is not sufficient to translate into improved health. The content and the quality of these contacts must also be ensured [1].

**Justification of the study:**

The objectives of this study are to describe the coverage and content of ANC contacts in the context of rural hard to reach union level health facilities in Sylhet. This study will bring an opportunity to strengthen the health systems in union level health facilities of Sylhet through assess the different contents of quality antenatal care among the key beneficiaries (pregnant women) are receiving health services during pregnancy i.e. basic indicators of ANC (Weight taken, BP measure, Urine sample collection, Blood sample collection & Inform about danger signs) and cordial behavior from providers including proper counseling etc.

**Research Question:**

How to assess that quality of antenatal care has ensured among the pregnant women receiving health care from those health facilities in the Union of Sylhet district?

**Chapter two-Literature review**

##### Literature review

The major challenges of maternal and child health are maternal and child morbidity and mortality in the developing world including Bangladesh. These are associated with inappropriate health seeking behaviour in pregnancy and childbirth. As a result, WHO and UNICEF established the safe motherhood initiative with a major focus on prenatal care which includes early presentation at antenatal clinic (ANC) where risk factors can be identified and managed, and safe delivery of live babies can be ensured.

Many previous studies in Bangladesh examined the socio-economic and demographic factors associated with the utilization of ANC, PNC, and delivery care among Bangladeshi women (Amin et al., 2010; Islam, 2017; Mosiur Rahman et al., 2011). However, all these studies focused on the determinants of ANC, delivery care or PNC separately instead of assessing the determinants of maternal care seeking behaviour collectively along the full continuum of care as recommended by WHO. The findings of these studies usually masked the differentials in the quality of maternal care received, as quality of care may remain poor while the individual coverage of ANC visits, delivery and PNC visits observed to be high. According to the WHO recommended standard model, utilization of maternal care should be viewed collectively by the comprehensive use of pregnancy, delivery, and the postnatal care. This type of measure of maternal health care provides a basis of comparison between women receiving adequate care and inadequate care. In a recent study, similar approach has been adopted by Larsen et al., (2016) to examine the predictors of health care seeking behavior during pregnancy, delivery, and the postnatal period in rural Tanzania.

Health care seeking behaviours are specific actions taken to maintain health or remedy health problems, including health behaviour during pregnancy, household self-treatment of common ailments, reliance on care available within a community’s indigenous health system or referral for care outside of the community (Yamini et al., 2017). In the developing world, data from all but two of 30 countries reviewed showed that the number of ANC visits had a positive effect on birth weight. In Israel, almost three times as many deaths occurred among newborns of women who had not attended ANC (Cavallaro et al., 2013). 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 (El Arifeen et al., 2013). 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) (WHO, 2013a). Further, while 74% of urban women receive ANC from a trained provider, only 49% of rural women have such access (Rahman et al., 2003). Improving access to quality ANC and sustaining its implementation must be prioritized for the country to achieve the health Sustainable Development Goals.

**Chapter Three-Research Methodology**

##### 3.1 Study Objectives

**General objectives:**

* + To assess the quality of antenatal care among pregnant women.

**Specific objectives:**

* + To assess the satisfaction among women on the quality of antenatal care they are receiving from UHFWCs.
  + To assess the communication between service providers and pregnant woman
  + To assess the physical facilities are available for service delivery in order to ensure the quality of antenatal care

**3.2. Conceptual Framework**

Outcome Variables

Independent Variables

**Socio-demographic Variables**

* Age
* Gender
* Parents Occupation
* Parents Education

* Dental Caries
* Caries on first molar

Oral Hygiene

Dietary Habit

(Cariogenic food)

##### 3.3 Study design:-

A facility based cross-sectional method will be applied as design. Questionnaire, observation tools will be used to collect data.

##### 3.4 Study Location

One sub-district (Golapganj) in Sylhet district will be targeted for the study. Data will be collected from the pregnant women are receiving health care from five (5) selected union level Govt. health facilities i.e. UHFWCs on the quality antenatal care, availability of medical equipment/logistics and its functionalization, ANC register will be taken for the study.

##### 3.5 Study population

Pregnant women who are receiving health care services from union health and family welfare centers (UHFWCs) and the permanent residents of the unions under Golapganj upazila will be targeted and take as sample whether they are delivered the quality health services.

##### 3.6 Sample population

Pregnant women

##### 3.7 Study Period

Study will be commenced from January to April, 2020.

##### 3.8 Inclusion Criteria

This review will be focused:

a) Pregnant women;

b) People who are intended to take part in the study.

##### Exclusion Criteria:

The study will exclude:

a) Women who are not pregnant;

b) Pregnant women in case of not willing to participant in the study and in regards of physically disabled or mentally retarded.

##### 3.8 Sampling Technique

##### Observation, Convenience sampling will be used for sampling to collect data from the selected FWCs.

##### 3.9 Sample Size

1. The sample size is 379 using the theory i.e. n=

|  |  |
| --- | --- |
| n = | Z 2 \* pq |
|  |
| d 2 |

Here,

**n** = desired sample size (when the population>10,000)

**Z** = standard normal deviate; usually set at 1.96, which correspond to 95% confidence level.

**p** = Prevalence of study among adolescent population is performs study 30.6% (0.306). (Khan, Mahjabeen. (2013). Prevalence of Dental Caries in the first permanent molars in children between 8-12 years. Journal - Alabama Dental Association. 22. 119-123.).

**q** = 1-p

**d** = degree of accuracy required, usually set at 0.06 level

That is too difficult to fulfill the participants within 6 months because there was a pandemic of COVID-19. And the researcher is under graduate and completed his research within a limited time, so for the better work 112 participants were selected for the study.

##### 3.10 Data collection technique: -

A pretested semi-structured questionnaire was used for the respondents to be interviewed. This questionnaire was developed by using selected variables according to the study objectives.

##### 3.11 Data Collection Tools

**Socio-Demographic variables:** Following socio-demographic variables were collected by using a semi-structured questionnaire, such as: age, sex, religion, education, occupation and income of parents.

**Dental Caries:** Whether present or absent

**Oral Hygiene:** Do you maintain oral hygiene, do you clean or do you brush your teeth two times a day, Mode of cleaning teeth, Duration of brushing, Do your child brush teeth regularly these information were taken.

**Dietary History:** This information was taken on frequency of having cariogenic food such as Sugar, Choclate (Frequency/day), Junk food, Carobonated drinks, Fruit juice

**3.12 Interview Schedule (Non Clinical Data)**

Non clinical data was collected after the diagnosis part. Non clinical information were socio-demographic background,oral hygiene, dietary history.

**3.13 Data management and analysis plan:**

Data was collected from the respondents by face to face interview followed by inclusion and exclusion criteria.one questionnaire was used for each respondent. The collected data was edited by checking and rechecking. The data was analyzed by using the software SPSS-20.

* Descriptive statistics will be calculated for all of the variables, including continuous variables and categorical variables.
* The association between dental disease and smoking were estimated by doing Chi square test.
* The association between dental caries and hygiene practices and dietary history were estimated by doing Chi square test.
* The P-value less than 0.05 was regarded as significant for this study. The data was presented by table, graphs and charts.

**3.14 Ethical Considerations: -**

* This study ensures not harm the research participants in any way whatsoever and respect of the participants will be given priority. All study participants will be fully informed that their participation is voluntary and that they have the right to withdraw from the study at any time. They will also be informed that refusal to participate in the study would not involve any penalty. Written and informed consent will be obtained from each participant once they are fully informed. Privacy, anonymity and confidentiality of the participants will strictly be maintained during data collection and analysis.
* Will take ethical approval from University of South Asia (UNISA)

**Chapter-Four: Results**

**Table 1: Missing identification in the dataset**

|  |  |  |
| --- | --- | --- |
| **Characteristics** | **Valid Frequency (Percentage)** | **Missing Frequency (Percentage)** |
| Age | 37 (100%) | 0 (0%) |
| Address | 37 (100%) | 0 (0%) |
| Education | 37 (100%) | 0 (0%) |
| Chief compliance | 37 (100%) | 0 (0%) |
| Pregnancy Week | 37 (100%) | 0 (0%) |
| No of visit | 37 (100%) | 0 (0%) |

Table 1 represents the valid frequency and percentage (without missing) of each variables of the data. In this study we used seven variables and each of the variables didn’t show any missing values.

**Table 2: Distribution of respondents based on age (n=37)**

|  |  |  |
| --- | --- | --- |
| **Age of pregnant women** | **Frequency** | **Percentage (%)** |
| 16 | 1 | 2.7 |
| 17 | 2 | 5.4 |
| 18 | 5 | 13.5 |
| 19 | 9 | 24.3 |
| 20 | 10 | 27.0 |
| 21 | 3 | 8.1 |
| 22 | 5 | 13.5 |
| 23 | 1 | 2.7 |
| 25 | 1 | 2.7 |
| Total | 37 | 100.0 |
| Mean (SD) | 19.78 (1.81) |  |

Table 2 represents the percentage of age of the 37 pregnant women came to visit UHFWCs to take antenatal care. Among them, a significant number of pregnant women 27.0% (n=10) were in age of 20 and smaller percentage of pregnant women 2.7% (n=1) were 16, 23 and 25 years old that they came to visit UHFWCs for take antenatal care.

**Table 3: Distribution of respondents based on education (n=37)**

|  |  |  |
| --- | --- | --- |
| **Education (in class)** | **Frequency** | **Percentage (%)** |
| 2 | 1 | 2.7 |
| 3 | 5 | 13.5 |
| 4 | 4 | 10.8 |
| 5 | 21 | 56.8 |
| 6 | 3 | 8.1 |
| 8 | 3 | 8.1 |
| Total | 37 | 100.0 |

Table 3 represents the percentage of education by individual highest level of education (class) of the 37 pregnant women who came to visit UHFWs to take antenatal care. Among all pregnant women, highest number of women 56.8% (n=21) were studied class five (primary level) and smaller percentage of women 2.7% (n=1) were studied class 2 only.

**Table 4: Distribution of respondents based on chief compliance (n=37)**

|  |  |  |
| --- | --- | --- |
| **Chief compliance** | **Frequency** | **Percentage (%)** |
| Chest pain | 3 | 8.1 |
| Diarrhea | 1 | 2.7 |
| Edema | 1 | 2.7 |
| False pain | 1 | 2.7 |
| Lower abdomen pain | 6 | 16.2 |
| Weakness | 1 | 2.7 |
| Leg pain | 1 | 2.7 |
| Missed period | 1 | 2.7 |
| No complain | 1 | 2.7 |
| PUD | 3 | 8.1 |
| Vomit | 3 | 8.1 |
| Vomit &WK | 1 | 2.7 |
| Weakness | 11 | 29.7 |
| Weakness | 2 | 5.4 |
| WKSLBP | 1 | 2.7 |
| Total | 37 | 100.0 |

Table 4 represents the percentage of chief compliance of the 37 pregnant women that the reason for visit UHFWCs Among all compliance, a large number of pregnant women 29.7% (n=11) were complaint that they feel weak and then 16.2% (n=6) were complaint that they feel lower abdomen pain.

**Table 5: Distribution of respondents based on pregnancy week (n=37)**

|  |  |  |
| --- | --- | --- |
| **Pregnancy week** | **Frequency** | **Percentage (%)** |
| 2 | 1 | 2.7 |
| 3 | 1 | 2.7 |
| 4 | 2 | 5.4 |
| 6 | 1 | 2.7 |
| 7 | 1 | 2.7 |
| 8 | 6 | 16.2 |
| 9 | 12 | 32.4 |
| 18 | 1 | 2.7 |
| 29 | 1 | 2.7 |
| 31 | 1 | 2.7 |
| 32 | 4 | 10.8 |
| 34 | 1 | 2.7 |
| 36 | 5 | 13.5 |
| Total | 37 | 100.0 |

Table 5 represents the percentage of 37 pregnant women with pregnancy week. Among them, a large number of pregnant women 32.4% (n=12) were came in UHFWC with 9 weeks of pregnancy and 16.2% (n=6) were came in UFFWC with 8 weeks of pregnancy.

**Table 6: Distribution of respondents based on number of visit (n=37)**

|  |  |  |
| --- | --- | --- |
| **Number of visits in UHFWCs** | **Frequency** | **Percentage (%)** |
| 1 | 10 | 27.0 |
| 2 | 2 | 5.4 |
| 3 | 24 | 64.9 |
| 4 | 1 | 2.7 |
| Total | 37 | 100.0 |

Table 6 represents the percentage of number of visits in UHFWCs of the 37 pregnant women. Among 37 women, a large number of pregnant women 64.9% (n=24) were visit 3 times in UHFWCs for antenatal care and a small number of pregnant women 2.7% (n=1) were visit highest 4 times in UHFWCs for antenatal care.

**Table 7: Distribution of respondents based on inform health status (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 32 | 86.5 |
| No | 5 | 13.5 |

**Table 8: Distribution of respondents based on check blood pressure (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 28 | 75.7 |
| No | 9 | 24.3 |

**Table 9: Distribution of respondents based on inform blood pressure status (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 20 | 54.1 |
| No | 17 | 45.9 |

**Table 10: Distribution of respondents based on check height (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 16 | 43.2 |
| No | 21 | 56.8 |

**Table 11: Distribution of respondents based on check weight (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 26 | 70.3 |
| No | 11 | 29.7 |

**Table 12: Distribution of respondents based on test anemia (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 27 | 73.0 |
| No | 10 | 27.0 |

**Table 13: Distribution of respondents based on test blood sample (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 23 | 62.2 |
| No | 14 | 37.8 |

**Table 14: Distribution of respondents based on inform anemia status (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 28 | 75.7 |
| No | 9 | 24.3 |

**Table 15: Distribution of respondents based on advice iron tablet (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 23 | 62.2 |
| No | 14 | 37.8 |

**Table 16: Distribution of respondents based on inform birth preparedness (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 30 | 81.1 |
| No | 7 | 18.9 |

**Table 17: Distribution of respondents based on behavior SP (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Very good | 14 | 37.8 |
| Good | 11 | 29.7 |
| Fair | 7 | 18.9 |
| Bad | 4 | 10.8 |
| Very bad | 1 | 2.7 |

**Table 18: Distribution of respondents based on maintained privacy (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 34 | 91.1 |
| No | 3 | 8.9 |

**Table 19: Distribution of respondents based on provide counselling (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 29 | 78.4 |
| No | 8 | 21.6 |

**Table 20: Distribution of respondents based on provide counselling (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 29 | 78.4 |
| No | 8 | 21.6 |

**Table 21: Distribution of respondents based on advised any test (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 27 | 73.0 |
| No | 10 | 27.0 |

**Table 22: Distribution of respondents based on have BP machine (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 26 | 70.3 |
| No | 11 | 29.7 |

**Table 23: Distribution of respondents based on have thermometer (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 25 | 67.6 |
| No | 12 | 32.4 |

**Table 24: Distribution of respondents based on have stethoscope (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 24 | 64.9 |
| No | 13 | 35.1 |

**Table 25: Distribution of respondents based on have measuring tape (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 28 | 75.7 |
| No | 9 | 24.3 |

**Table 26: Distribution of respondents based on have test tube with holder (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 26 | 70.3 |
| No | 11 | 29.7 |

**Table 27: Distribution of respondents based on have weight machine (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 25 | 67.6 |
| No | 12 | 32.4 |

**Table 28: Distribution of respondents based on have combined reg (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 28 | 75.7 |
| No | 9 | 24.3 |

**Table 29: Distribution of respondents based on have urine strips (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 15 | 40.5 |
| No | 22 | 59.5 |

**Table 30: Distribution of respondents based on have telquist for Hb estim (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 30 | 81.1 |
| No | 7 | 18.9 |

**Table 31: Distribution of respondents based on have folic acid tablet (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 31 | 83.8 |
| No | 6 | 16.2 |

**Table 32: Distribution of respondents based on check ANC card (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 27 | 73.0 |
| No | 10 | 27.0 |

**Table 33: Distribution of respondents based on have patient examination bed (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 30 | 81.1 |
| No | 7 | 18.9 |

**Table 34: Distribution of respondents based on have counselling chart (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 23 | 62.2 |
| No | 14 | 37.8 |

**Table 35: Distribution of respondents based on have doppler (n=37)**

|  |  |  |
| --- | --- | --- |
|  | **Frequency** | **Percent** |
| Yes | 27 | 73.0 |
| No | 10 | 27.0 |

**Chapter Five**

**Discussion, Conclusion, Recommendations**

**Discussion**

The objectives of this study were to assess the satisfaction among women on the quality of antenatal care they are receiving from UHFWCs, to assess the communication between service providers and pregnant woman and to assess the physical facilities are available for service delivery in order to ensure the quality of antenatal care. Pregnant women came to receive ANC at 5 UHFWCs under Golapganj upazila. Altogether, 37 respondents were interviewed. The mean age of the respondents was 19.78 years. Most respondents (27.0%) were within age range of 20 years followed by 19 years (24.3%). This finding is consistent with Mansur et al., a study done at three upazila health complexes, Bangladesh in 2014 (Mansur et al., 2014). In their study, they found the mean age of the ANC seekers was 24.6 years, while minimum and maximum ages were 21 and 25 years, respectively.

In our study, it seems to be that ANC service seekers are in group of young age mothers. We found that more than half of the women (56.8%) have highest education level was primary school and 8.1% had highest education level grade 6 and 8. On the other hand, Ikenna showed only 10% the women had not been educated (Ikenna, 2015). Out of 37 pregnant women, highest 11 (29.7%) compliance weakness in UHFWCs visit followed by lower abdomen pain 6 (16.2%).The study found that a greater proportion of women visited UHFWCs in 9 weeks for seeking care at the facility settings. In terms of service contents, other studies, including a study based on a large and nationally representative dataset (i.e., Bangladesh Health and Demographic Survey 2014) show similar trends (Jo et al., 2019). The latest WHO guidelines for a positive pregnancy experience suggests a minimum of eight contacts to improve the utilization and quality of ANC (WHO, 2013b), our study findings identify a number of critical health systems constraints which affect the quality of service and care-seeking behaviors to achieve this goal. Some women (12 out of 36) made their first ANC visits as late as 27 to 32 weeks of gestation, a major deviation from the standard guideline.

We found that distribution of the centres by availability of instruments, investigations materials and accessories are 100% present in UHFWCs, qualified providers are enough, so one provider had to cover all patients. Advanced diagnostic equipment is available their, which not needed effective referrals to the clinic for those identified with danger signs. While ANC consists of several subcomponents of services varying with pregnancy stages, major service content was identified in the areas of some physical examinations (e.g. edema or ultrasonogram), routine tests (e.g. blood grouping or urine test), and counselling on high risk pregnancy such as prior pregnancy history, danger signs of current pregnancy and preparation for delivery. Our results indicate that the UHFWCs plays an important role in the provision of ANC services. We found that some of the indicators related to the content of ANC contacts were better in the UHFWCs, especially in terms of performing physical examinations, ultrasound and danger sign counselling.

**Conclusion**

The present study was conducted to assess the Prevalence of dental caries among the children age between 9-12 years. 37.65% were have caries in first molar.

**Recommendations**

Overall, our findings suggest that both ANC coverage and content in UHFWCs are satisfactory. Based on this, we recommend future research to understand more fully the factors which prevent women from seeking ANC, both early in pregnancy and the recommended times between conception and birth. It is critical to understand these factors so that the national programs can take course corrective measures to address them appropriately and support more to visit UHFWCs frequently.

**Limitations of the study**

* The potential of recall bias might have an important limitation of this study. Based on the pregnancy outcomes, the women’s recall regarding ANC contacts and content might have changed.
* Budget and time constrain are also the limitation for this study.
* Language barrier might happen because study data will take from Sylhet district.
* Study population i.e. pregnant women might feel sick or discomfort.

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**Annexes**

INFORMED CONSENT

University of South Asia

 Code:

Name of the Respondent: Date:

I am Md. Atiqur Rahman, student of MPH program, University of South Asia. As a course requirement I am doing a research on **“Prevalence of dental caries in permanent first molar among 12 years old school going children at madan Netrokona, Districts”**. I am inviting you to participate in this research study.

I need Some Valuable Information from you as a part of my academic purpose. Your cooperation will be highly appreciable. You can refuse to answer any questions or may leave at any time you feel like. If you refuse or leave you will not face any problem.

All the information given by you will be kept confidential also you don’t share it with anyone. Your identity will not be disclosed. Only study related personnel will be allowed to see the information.

I would appreciate your cooperation. If you agree to join the study please sign at the space indicated below.

Investigator’s Signature & Date Volunteer Signature & Date

Witness Signature/ Thumb impression & Date

School of Public Health

University of SouthAsia  
Banani-1213, Dhaka Bangladesh

Study Questionnaire

**Study Title:** Prevalence of dental caries in permanent first molar among 12 years old school going children at madan Netrokona, Districts

Date of Interview :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(dd/mm/yy)

**Section A: Socio-demographic Information:**

|  |  |  |
| --- | --- | --- |
| Name: | Age in years: | Sex:  ☐ Male  ☐ Female |
| Class: | Religion:  ☐ Muslim  ☐ Others |  |
| Education Level of father:  ☐ No education  ☐ Primary  ☐ Secondary  ☐ Others | | Education Level of mother:    ☐ No education  ☐ Primary  ☐ Secondary  ☐ Others |
| Occupation of father:  ☐ Service  ☐ Business  ☐ Others | | |
| Occupation of mother:  ☐ Service  ☐ Housewie  ☐ Business  ☐ Others | | |

**Section B: Diagnosis Part**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Dental caries: | |  |  |  |  | | --- | --- | --- | --- | | Upper right | 1, 2, 3,4, 5, 6,7,8 | 9,10,11,12,13,14,15,16 | Upper left | | Lower right | 32,31,30,29,28,27,26,25, | 24,23,22,21,20,19,18,17 | Lower left | |

**Section C: Oral Hygiene knowledge of the parents**

|  |  |
| --- | --- |
| Did you visit dentist in last 6 months | ☐ Yes ☐ No |
| Do you maintain oral hygiene? | ☐ Yes ☐ No |
| Do you clean or do you brush your teeth two times a day? | ☐ Yes ☐ No |

**Section D: Dietary Habit**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Foods that causes caries** | **Frequency of eating** | | | |
| **≥4** | **1-3 times/day** | **Ocassionally** | **Not at all** |
| **Sugar** |  |  |  |  |
| **Choclate (Frequency/day)** |  |  |  |  |
| **Junk food** |  |  |  |  |
| **Carobonated drinks** |  |  |  |  |
| **Fruit juice** |  |  |  |  |