A Study on Levels and Determinants of Maternal Morbidity in a Selected Rural Health Center of Sunamganj District, Bangladesh

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Abstract

Topic: A Study on Levels and Determinants of Maternal Morbidity in a selected rural health center of Sunamganj District, Bangladesh. **Introduction:** WHO Maternal Morbidity Working Group (MMWG) defines maternal morbidity as "any health condition attributed to and/or aggravated by pregnancy and childbirth that has a negative impact on the woman's wellbeing". Maternal morbidity is a topic of more concern than maternal mortality. However, maternal mortality is just the tip of the iceberg of the health problems of women. Many women do not die of causes related to pregnancy but suffer severe morbidities. In developing countries, pregnancy and childbirth related complications are the leading causes of disability among women aged 15-49 Years. The world development report estimated that 18 percent of the burden of disease for these women is due to maternal causes. In September 2000, 189 world leaders signed a declaration on eight Millennium Development Goals (MDGs) to improve the lives of women, men, and children in their respective countries (United Nations Millennium Declaration, 2000). Goal 5 calls for the reduction of maternal mortality by 75 percent between 1990 and 2015. Goal 5 was later supplemented by MDG 5b on universal access to contraception. MDGs 5a and 5b have been important catalysts for the achieved reductions in maternal mortality levels in many settings over recent years. **General objective:** To determine the levels and Determinants of Maternal Morbidity in a selected rural health center of Sunamganj District, Bangladesh. **Specific Objective:** 1. To find out the Socio-Demographic Data of Pregnant women in a rural health center-KAITACK RHC of Sunamganj District, Bangladesh, 2. To find out the levels and causes of maternal morbidity in antenatal period. 3. To find out the levels and causes of maternal morbidity in intranatal period. 4. To find out the levels and causes of maternal morbidity in post natal period. **Method:** A descriptive Cross-sectional study was carried out. Data was collected through interview, Verbal autopsy, general examination, gynecological, examination, obstetrical examination, other clinical examination, investigations and screening. **Study population:** Pregnant women and postnatal women attended at rural health center- KAITACK RHC of Sunamganj District Bangladesh. **Study area:** Rural health center- KAITACK RHC of Sunamganj District Bangladesh. **Estimated Sample Size:** 1000 (one thousand) **Results and Findings:** Among the respondents maximum are of 21 to 25 years age group next to which 26-30 years age group. Community people 79% are Muslim and 21% hindu. All are coming from rural areas. Most them are housewives and less are doing jobs. Socio economic status is within lower to middle class. Primary Education account 45% and secondary education 30%. Majority women are primi next to which 2nd gravida. Poorer suffers most. Socio economic status is inversely proportional to morbidity status. High Status has less morbidity. It is found that minor morbidities like morning sickness and Peptic ulcer disease in pregnancy contribute about 90% of the cases. Next to which anemia 56% & UTI 25% during Pregnancy. Among the respondents major determinants of morbidity (Moderate to severe) are Pregnancy induced hypertension (PIH) 7%, Gestational Diabetic Mellitus (GDM) 2%, Threatened abortion 3%, incomplete abortion 4%, History of LUCS (Verbal Autopsy) 30%, Ectopic Pregnancy 0.2%, History of Ruptured Uterus (Verbal Autopsy) 0.3%, Prolong Obstructed Labor 7%, History Retained Placenta (Verbal Autopsy) 2%, Postpartum Hemorrhage (PPH) 5%, Puerperal Sepsis 2%, IUFD (0.5)%, PROM (4.4%), APH 1%. **Discussion & Conclusion:** Measurement of maternal morbidity provides a useful tool to assess the quality of maternal health in developing countries where MMR is high (1.72 in Bangladesh) it appears feasible to setup a national reporting system for maternal morbidity. It is demonstrated that is possible to quantify the incidence of maternal morbidity as well as mortality. Access to good medical care and other simple preventive measures can reduce morbidities. Appropriate maternity care during pregnancy and delivery will prevent Obstetric emergencies and reduce maternal morbidity as well as mortality.

Key words: *Levels and Determinants, Rural, Maternal Morbidity and mortality, Selected, Rural health Center.*

INTRODUCTION

Maternal morbidity is a topic of more concern than maternal mortality. However, maternal mortality is just the tip of the iceberg of the health problems of women. Many women do not die of causes related to pregnancy but suffer severe morbidities. In developing countries, pregnancy and childbirth related complications are the leading causes of disability among women aged 15-49 Years. The world development report estimated that 18 percent of the burden of disease for these women is due to maternal causes.

Maternal health received greater attention after the safe motherhood initiative was launched at an international conference held in Nairobi in 1987. Maternal mortality estimates are used to highlight the plight of pregnant women in less developed countries. Pregnancy constitutes a high risk of morbidity and mortality due to associated physiological stress, which is more severe in developing countries like India which is 10 to 20 times higher than that in the developed countries. There are a few studies on the specific problems of pregnancy. Most of them are hospital based, which are not reliable because only about few of the births in India take place in a health facility. These results thus are not representative of the population. Moreover, hospital based studies shed light only on the acute complications of pregnancy. Long-term consequences of pregnancy are not considered in hospital-based studies and, indeed are missing from almost all research. Very few longitudinal studies are available on the pattern of general morbidity amongst the rural pregnant women. In September 2000, 189 world leaders signed a declaration on eight Millennium Development Goals (MDGs) to improve the lives of women, men, and children in their respective countries (United Nations Millennium Declaration, 2000). Goal 5 calls for the reduction of maternal mortality by 75 percent between 1990 and 2015. Goal 5 was later supplemented by MDG 5b on universal access to contraception. MDGs 5a and 5b have been important catalysts for the achieved reductions in maternal mortality levels in many settings over recent years.

The International Classification of Diseases (ICD 10) defined maternal death as "[The] death of a women while pregnant or within 42 days of the end of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes." (p.156) (WHO, 2010) Subsequent guidance on the classification of causes distinguished nine groups of underlying causes, from abortive outcomes to unanticipated complications of management, non-obstetric causes, and coincidental causes (box.1) (WHO 2012).

Definition of Maternal Morbidity

The WHO Maternal Morbidity Working Group (MMWG) defines maternal morbidity as "any health condition attributed to and/or aggravated by pregnancy and childbirth that has a negative impact on the woman's wellbeing" (Firoz and others 2013, page 795). The MMWG emphasizes the wide range significance of indirect conditions in the morbidity that women experience during pregnancy, delivery, or post-pregnancy by listing and dividing more than 180 diagnoses into 14 organ dysfunction categories, ranging from obstetric to cardio-respiratory and rheumatology conditions. The negative impact of pregnancy-related ill health is also highlighted on the basis of subsequent disabilities, including how severely the functional status is affected and for how long. While the origins of maternal morbidity occur during pregnancy, the sequelae might take several months to manifest themselves. This is a major difference from maternal mortality, where deaths are counted during pregnancy and up to one year after pregnancy, but more frequently within 42 days. To capture the negative impact of morbidities requires a longer reference period than expressed in the death definition. An estimated, in 2017, 295000 maternal deaths occurred during the pregnancy, delivery and post delivery period and 94% of these deaths happened in low income countries; of which, bulk amount of deaths were avoidable[1]. Direct obstetric maternal complication accounted for most of the deaths; includes, severe bleeding, maternal infections, eclampsia, obstructed labour and unsafe abortion[2]. Pregnancy Induced Hypertension (PID) is the second leading cause of maternal death during pregnancy and this threat is responsible 10-15% of maternal deaths in Low income countries [3]. The highest mortality is reported among the mothers aged less than 15 years and maternal complication during pregnancy [4].

Even though Bangladesh has performed a remarkable achievement to meet the MDG goal and decreased the rate during the past 20 years nevertheless, the rate is still high compared to middle and high income countries. The rate of the maternal death is 176 per 100,000 live births [5][6]. There is significant role of this improvement resulting from increasing access to maternal care facility delivery and Emergency Obstetric and Neonatal Care (EmONC)[7].

OBJECTIVES

General objective: To determine the levels and Determinants of Maternal Morbidity in a selected rural health center of Sunamganj District, Bangladesh.

Specific Objective:
1. To find out the Socio-Demographic Data of Pregnant women in a rural health center-KAITACK RHC of Sunamganj District, Bangladesh.

2.   To find out the levels and causes of maternal morbidity in antenatal period.
3.   To find out the levels and causes of maternal morbidity in intranatal period.
4.   To find out the levels and causes of maternal morbidity in post natal period.

METHODOLOGY

Conceptual Frame Work of Maternal Morbidity

Independent Variables		Dependent Variable
Socio Demographics Variables		
1. Name: 2. Age: 3. Religion: 4. Occupation: 5. Educational Status: 6. Socio Economic Status: 7. Residence: 8. Age of Marriage: 9: obstractical Status:		
Maternal Morbidity Related Variables 1. Morning Sickness. 2. Hyper Emesis Gavidera. 3. Peptic Ulcer disease. 4. U.T.I (Urinary tract infection) 5. APH (Ante partum haemorrhage) 6. PIH(Pregnancy induced Hypertension) 7. Gestational DM. 8. Threatened Abortion. 9. Incomplete Abortion. 10. Anaemia. 11. Ruptured Uterus : 12. IUFD:		**Maternal Morbidity**
13. L.U.C.S (H/O) 14. Perineal tears 15. PPH (Post partum Hemorrhage) 16. Obstructed Labour 17. Maternal Injuries. 18. Ectopic Pregnancy 19. Malpresentation 20. Prolong obstructed Labor 21. Premature Rupture of Membrane 22. Retained placenta		
23.PPH (Post partum Hemorrhage) 24. Puerperal Sepsis 25. Post Partam Eclamsia. 27. Breast Engorgement.		

Research Questions: What are the causes of Maternal Morbidity in a selected rural health center-KAITACK RHC of Sunamganj District, Bangladesh.

Method: A descriptive cross sectional study was carried out. Data was collected through interview, Verbal autopsy, general examination, gynaecological, examination, obstetrical examination, other clinical examination, investigations and screening.

Study population: Pregnant women and postnatal women attended at rural health center- KAITACK RHC of Sunamganj District Bangladesh.

Study area: Rural health center- KAITACK RHC of Sunamganj District Bangladesh.

Study Period: Nov-19 to Oct-2020
Estimated Sample Size: 1000 (one thousand)

Calculation of Sample Size: Sample size will be calculated using the Formula

$$n = z^2 \frac{pq}{d^2}$$

n= Sample Size
z= Level of Confidence-1.96
p= Estimated prevalence
d= Margin of error
q= (1-p)

Sampling Technique- Purposive Sample had taken to collect information from the place where respondents were available.

Date Collection Tools/Instruments- A semi structure interview instruments had developed to assess the information from the respondents.

Data Analysis: After collection of all data were checked, cleaned and edited. Then data were entered in to the computer with the help of software SPSS for windows programmed version 11.5. After frequency run, data were cleaned and frequency checked. An analysis plan was developed keeping in view with the objective of his study. We use desecrated statistics to summarize and interpreted the data and interpreted the funding through table and proportions.

Data Presentation: Using Tables and Bar Diagram.

Eligibility Criteria:

Inclusion Criteria-
1. Pregnant women
2. Postnatal Women
3. Co-operative Patient.

Exclusion Criteria-
1. Non Pregnant Women
2. Non Co-operative Patient.

Ethical Consideration: The ethical review board of American independent University approved to conduct the study and prior the data collection the heath center sought permission to continue data collection.
Privacy was maintained, scientific objectify maintain, personal information have kept confidential.

Socio Demographic Variables:
Age, Religion, Occupation, Service, Educational Status, Residence, Economical Status.

Pregnancy related variables:

Antenatal Period:
1. Morning Sickness.
2. Hyper Emesis Gavidera.
3. Peptic Ulcer disease.
4. U.T.I (Urinary tract infection)
5. APH (Ante partum haemorrhage)
6. PIH (Pregnancy induced Hypertension)
7. Gestational DM.
8. Threatened Abortion.
9. Incomplete Abortion.
10. Anaemia.

Intranatal Period:
1. L.U.C.S (H/O)
2. Perennial Tear
3. PPH. (Post partum Haemorrhage)
4. Obstructed Labour
5. Maternal Injuries.

Postnatal Period:
1. PPH (Post partum Haemorrhage)
2. Puerperal Sepsis
3. Post Partum Eclampsia.
5. Hypertension.
6. Breast Engorgement.

RESULTS AND FINDINGS

During the study period a total 1000 pregnant women and postnatal women did seek pregnancy and postnatal related services in both indoors and out door department of the rural health center. A descriptive cross- Sectional Study was carried out using questionnaire to evaluate the levels and determinants of maternal morbidity in this Sub-District level rural health Centre. A verbal Permission was taken from the respective authority to carry out the collection of data. I did not use any specific Technique of sampling instead I provided attention to ensure participation as many respondents as possible those who seek antenatal and postnatal care service. The participants were enrolled in the study through purposive sampling technique who met the inclusion criteria. Data was based on maternal morbidity characteristics.

Socio Demographic Variables

Table No-1: Distribution of the Respondents by their age (N-1000)

Age Group	Frequency	Percentage
15-20 years	220	22%
21-25 Years	410	41%
26-30 Years	300	30%
31-38 Years	70	7%
Total	1000	100%

Above Table shows 220 (22%) are from age group 15-20 years, Followed by 410 (41%) from 21-25 years, 300 (30%) are from 26-30 years and 70 (7%) from 31-38 years

Figure 1: Distribution of the Respondents by their age
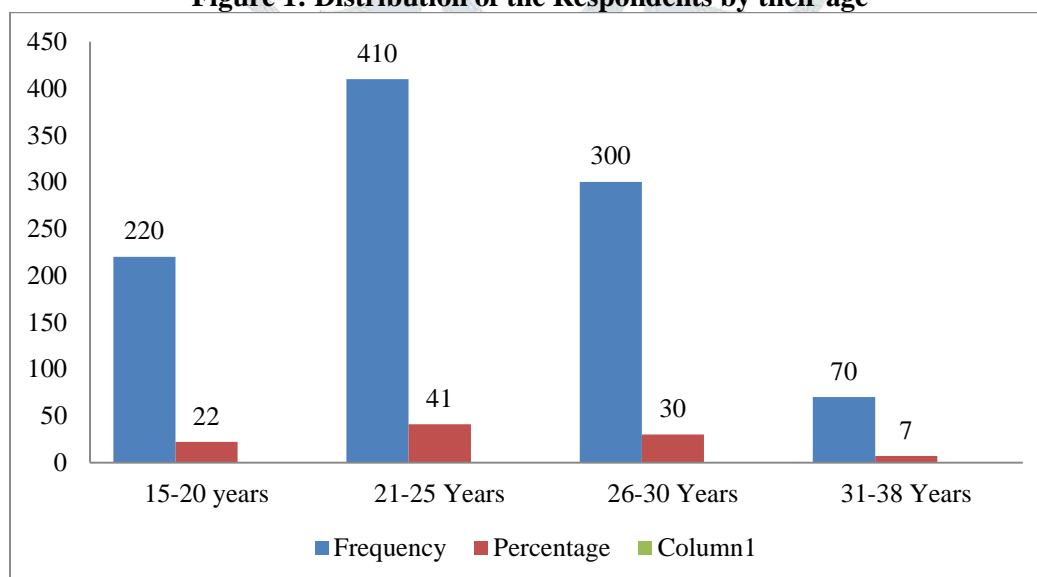
Table No-2: Distribution of the Respondents by their Religion (N-1000)

Religion	Frequency	Percentage
Muslim	790	79%
Hindu	210	21%
Total	1000	100%

Above Table shows 790 (79%) are Muslims and 210 (21%) are Hindu.

Table No-3: Distribution of the Respondents according to their residence (N-1000)

Residence	Frequency	Percentage
Rural	1000	100%
Urban	0	0%
Total	1000	100%

Above Table shows all are Rural.

Table No-4: Distribution of the Respondents according to Age of Marriage (N-1000)

Age of Marriage	Frequency	Percentage
Before 18	180	18%
After 18	820	82%
Total	1000	100%

Above Table shows 180 (18%) are of before 18 and 820 (82%) are of After 18.

Table No-5: Distribution of the Respondents according to Parity (N-1000)

Parity	Frequency	Percentage
Primi	350	35%
2nd gravida	330	33%
3rd gravida	200	20%
4th gravida and above	120	12%
Total	1000	100%

Above Table shows 350 (35%) are of primi 330 (33%) are 2nd gravid 200 (20%) are 3rd gravid 120 (12%) are of 4th gravida and above.

Figure 2: Distribution of the Respondents according to Parity
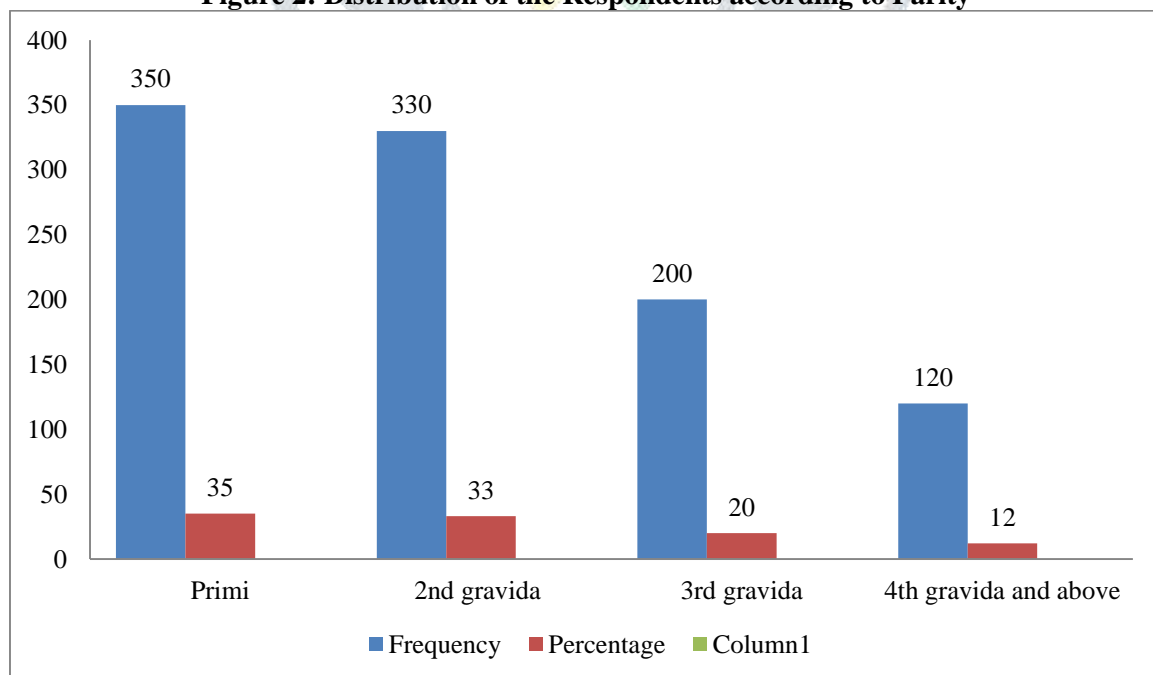
Table No-6: Distribution of the Respondents according to Occupation (N-1000)

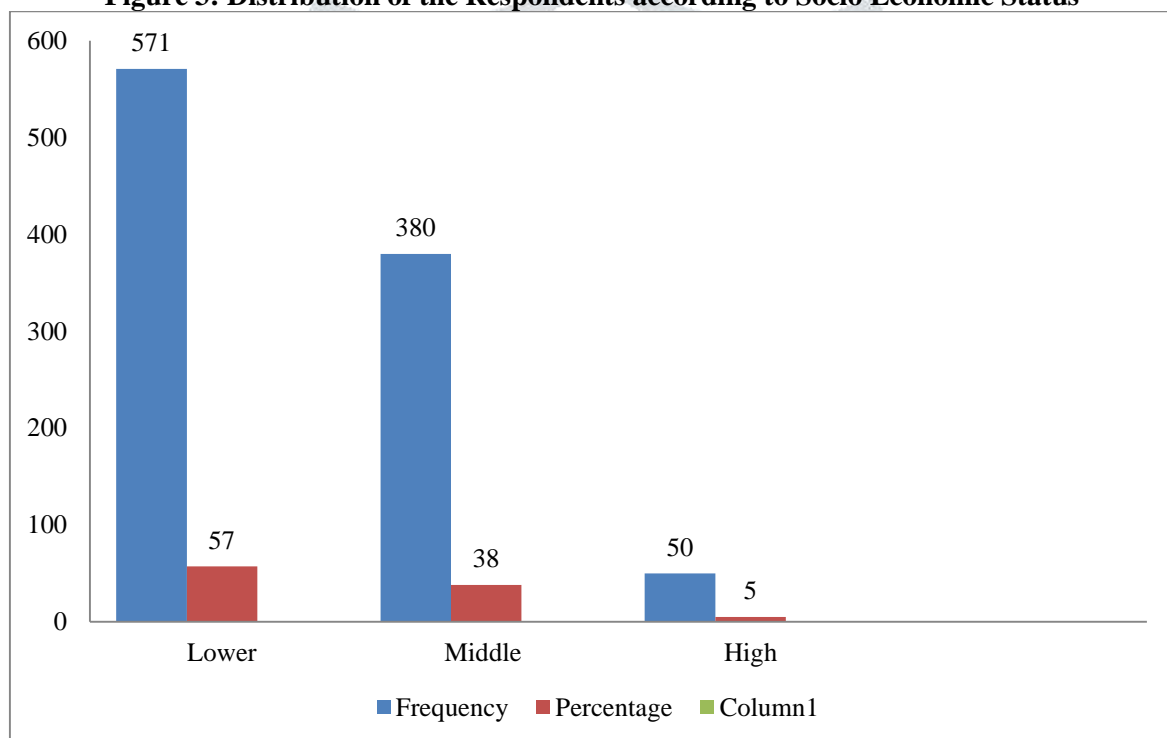| Occupation	Frequency	Percentage
Housewife	800	80%
Job	200	20%
Total	1000	100%

Above Table shows 800 (80%) are House wives and Rest are doing job.

Table No-7: Distribution of the Respondents according to Socio Economic Status (N-1000)

Socio Economic Status	Frequency	Percentage
Lower	570	57%
Middle	380	38%
High	50	5%
Total	1000	100%

Above Table shows Socio Economic Status 570 (57%) of Lower Class, 380 (38%) of Middle Class, 50 (5%) of High Class.

Figure 3: Distribution of the Respondents according to Socio Economic Status

Table No-8: Distribution of the Respondents according to Educational Status (N-1000)

Educational Status	Frequency	Percentage
illiterate	50	5%
Primary Education	450	45%
Secondary Education	300	30%
Higher Secondary and above	200	20%
Total	1000	100%

Above Table shows Educational Status 50 (5%) of illiterate, 450 (45%) of Primary education, 300(30%) of Secondary Education, 200 (20%) Higher Secondary and above.

Figure 4: Distribution of the Respondents according to Educational Status
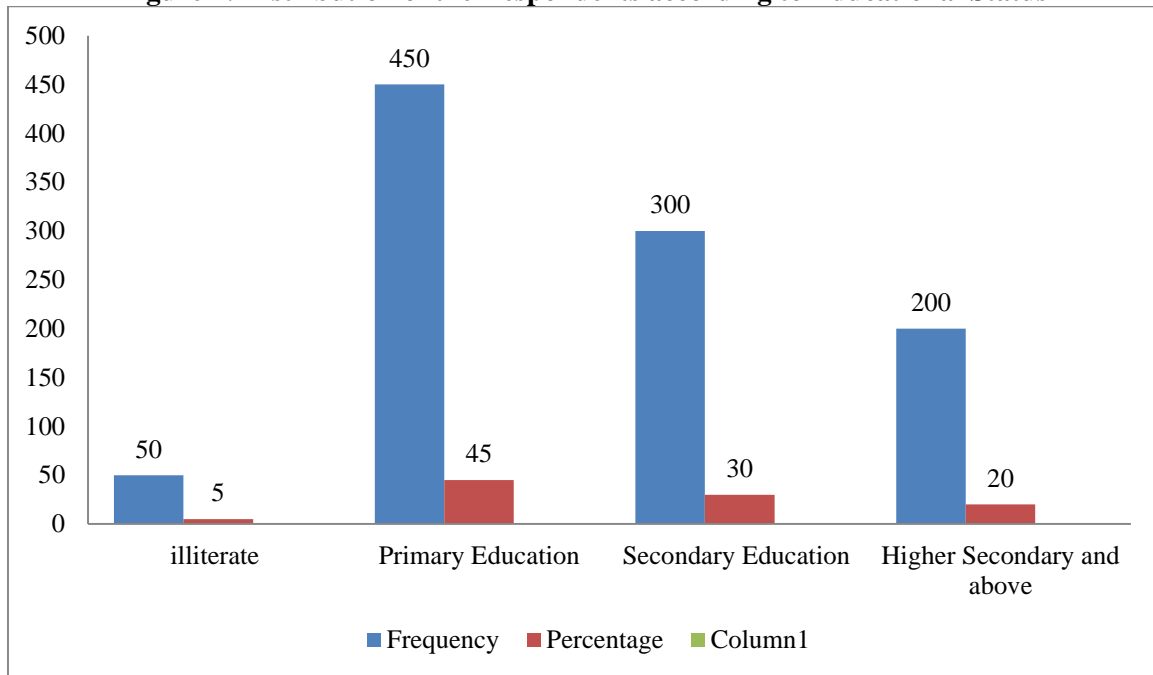
Determinants of Maternal Morbidity

Table No-9: Distribution of the Respondents according to Morning Sickness (N-1000)

Morning Sickness	Frequency	Percentage
Yes	900	90%
No	100	10%
Total	1000	100%

Above Table shows Morning Sickness of Yes 900 (90%), of No 100 (10 %).

Table No-10: Distribution of the Respondents according to Hyper emesis gravideram (N-1000)

Hyper emesis gravideram	Frequency	Percentage
Yes	30	3%
No	970	97%
Total	1000	100%

Above Table shows hyper emesis gravideram of Yes 30 (3%), of No 970 (97 %).

Table No-11: Distribution of the Respondents according to Peptic ulcer disease (N-1000)

Peptic ulcer disease	Frequency	Percentage
Yes	900	90%
No	100	10%
Total	1000	100%

Above Table shows Peptic ulcer disease of Yes 900 (90%), of No 100 (10 %).

Table No-12: Distribution of the Respondents according to Urinary tract infection (N-1000)

Urinary tract infection	Frequency	Percentage
Yes	250	25%
No	750	75%
Total	1000	100%

Above Table shows Urinary tract infection of Yes 250 (25%), of No 750 (75 %).

Table No-13: Distribution of the Respondents according to Pregnancy induced Hypertension (PIH) (N-1000)

Pregnancy induced Hypertension (PIH)	Frequency	Percentage
Yes	70	7%
No	930	93%
Total	1000	100%

Above Table shows Pregnancy induced Hypertension (PIH) of Yes 70 (7%), of No 930 (93 %).

Table No-14: Distribution of the Respondents according to Gestational Diabetic Mellitus (GDM) (N-1000)

GDM	Frequency	Percentage
Yes	20	2%
No	980	98%
Total	1000	100%

Above Table shows GDM of Yes 20 (2%), of No 980 (98 %).

Table No-15: Distribution of the Respondents according to Anemia (N-1000)

Anemia	Frequency	Percentage
Yes	560	56%
No	440	44%
Total	1000	100%

Above Table shows Anemia of Yes 560 (56%), of No 440 (44 %).

Table No-16: Distribution of the Respondents according to Threatened abortion (N-1000)

Threatened abortion	Frequency	Percentage
Yes	30	3%
No	970	97%
Total	1000	100%

Above Table shows Threatened abortion of Yes 30 (3 %), of No 970 (97 %).

Table No-17: Distribution of the Respondents according to incomplete abortion (N-1000)

Incomplete abortion	Frequency	Percentage
Yes	40	4%
No	960	96%
Total	1000	100%

Above Table shows incomplete abortion of Yes 40 (4 %), of No 960 (96 %).

Table No-18: Distribution of the Respondents according to History of LUCS (N-1000)

History of LUCS	Frequency	Percentage
Yes	300	30%
No	700	70%
Total	1000	100%

Above Table shows History of LUCS of Yes 300 (30 %), of No 700 (70 %).

Table No-19: Distribution of the Respondents according to Ectopic Pregnancy (N-1000)

Ectopic Pregnancy	Frequency	Percentage
Yes	2	0.2%
No	998	99.8%
Total	1000	100%

Above Table shows Ectopic Pregnancy of Yes 2 (0.2 %), of No 998 (99.8%).

Table No-20: Distribution of the Respondents according to History of Ruptured Uterus (N-1000)

History Ruptured uterus	Frequency	Percentage
Yes	3	0.3%
No	997	99.7%
Total	1000	100%

Above Table shows History Ruptured uterus of Yes 3 (0.3 %), of No 997 (99.7%).

Table No-21: Distribution of the Respondents according to IUFD (N-1000)

IUFD	Frequency	Percentage
Yes	5	0.5%
No	995	99.5%
Total	1000	100%

Above Table shows IUFD of Yes 5 (0.5 %), of No 995 (99.5%).

Table No-22: Distribution of the Respondents according to Malpresentation (N-1000)

Malpresentation	Frequency	Percentage
Yes	70	7%
No	930	93%
Total	1000	100%

Above Table shows Malpresentation of Yes 70 (7 %), of No 930 (93%).

Table No-23: Distribution of the Respondents according to Prolong obstructed Labor (N-1000)

Prolong obstructed Labor	Frequency	Percentage
Yes	70	7%
No	930	93%
Total	1000	100%

Above Table shows Prolong obstructed Labor of Yes 70 (7 %), of No 930 (93%).

Table No-24: Distribution of the Respondents according to PROM (Premature Rupture of Membrane) (N-1000)

PROM (Premature Rupture of Membrane)	Frequency	Percentage
Yes	40	4%
No	960	96%
Total	1000	100%

Above Table shows PROM (Premature Rupture of Membrane) of Yes 40 (4 %), of No 960 (96%).

Table No-25: Distribution of the Respondents according to History of Retained placenta (N-1000)

History of Retained placenta	Frequency	Percentage
Yes	20	2%
No	980	98%
Total	1000	100%

Above Table shows History of Retained placenta of Yes 20 (2 %), of No 980 (98%).

Table No-26: Distribution of the Respondents according to History Postpartum Hemorrhage (PPH) (N-1000)

Postpartum Hemorrhage (PPH)	Frequency	Percentage
Yes	50	5%
No	950	95%
Total	1000	100%

Above Table shows Postpartum Hemorrhage (PPH) of Yes 50 (5 %), of No 950 (95%).

Table No-27: Distribution of the Respondents according to Perineal Tear (N-1000)

Perineal Tear	Frequency	Percentage
Yes	50	5%
No	950	95%
Total	1000	100%

Above Table shows Perineal Tear of Yes 50 (5 %), of No 950 (95%).

Table No-28: Distribution of the Respondents according to Breast engorgement (N-1000)

Breast engorgement	Frequency	Percentage
Yes	20	2%
No	980	98%
Total	1000	100%

Above Table shows Breast engorgement of Yes 20 (2 %), of No 980 (98%).

Table No-29: Distribution of the Respondents according to Puerperal Sepsis (N-1000)

Puerperal Sepsis	Frequency	Percentage
Yes	20	2%
No	980	98%
Total	1000	100%

Above Table shows Puerperal Sepsis of Yes 20 (2 %), of No 980 (98%).

Table No-30: Distribution of the Respondents according to APH (N-1000)

APH	Frequency	Percentage
Yes	10	1%
No	990	99%
Total	1000	100%

Above Table shows APH of Yes 20 (2 %), of No 980 (98%).

Table No-31: Distribution of respondents according to Socio Demographic Status

Age Group		
Characteristics	**Frequency**	**Percentage**
15-20 years	220	22%
21-25 Years	410	41%
26-30 Years	300	30%
31-38 Years	70	7%
Religion		
Muslim	790	79%
Hindu	210	21%
Residence		
Rural	1000	100%
Urban	0	0%
Age of Marriage		
Before 18	180	18%
After 18	820	82%
Gravida		
Primi	350	35%
2nd gravida	330	33%
3rd gravida	200	20%
4th gravida and above	120	12%
Occupation		
Housewife	800	80%
Job	200	20%
Socio Economic Status		
Lower	570	57%
Middle	380	38%
High	50	5%

Educational Status		
illiterate	50	5%
Primary Education	450	45%
Secondary Education	300	30%
Higher Secondary and above	200	20%

Table No-1: Distribution of respondents according to morbidity status

Morning Sickness		
Characteristics	**Frequency**	**Percentage**
Yes	900	90%
No	100	10%
Hyper emesis gravideram		
Yes	30	3%
No	970	97%
Peptic ulcer disease		
Yes	900	90%
No	100	10%
Urinary tract infection		
Yes	250	25%
No	750	75%
Pregnancy induced Hypertension (PIH)		
Yes	70	7%
No	930	93%
Gestational Diabetic Mellitus (GDM)		
Yes	20	2%
No	980	98%
Anemia		
Yes	560	56%
No	440	44%
Threatened abortion		
Yes	30	3%
No	970	97%
incomplete abortion		
Yes	40	4%
No	960	96%
History of LUCS		
Yes	300	30%
No	700	70%
Ectopic Pregnancy		
Yes	2	0.2%
No	998	99.8%
History of Ruptured Uterus		
Yes	3	0.3%
No	997	99.7%
IUFD		
Yes	5	0.5%
No	995	99.5%
Malpresentation		
Yes	70	7%
No	930	93%
Prolong obstructed Labor		
Yes	70	7%
No	930	93%
PROM (Premature Rupture of Membrane)		
Yes	40	4%
No	960	96%
History of Retained placenta		
Yes	20	2%
No	980	98%

Postpartum Hemorrhage (PPH)		
Yes	50	5%
No	950	95%
Perineal Tear		
Yes	50	5%
No	950	95%
Breast engorgement		
Yes	20	2%
No	980	98%
Puerperal Sepsis		
Yes	20	2%
No	980	98%
APH		
Yes	10	1%
No	990	99%

CONCLUSION

Measurement of maternal morbidity provides a useful tool to assess the quality of maternal health in developing countries where MMR is high (1.72 in Bangladesh) it appears feasible to setup a national reporting system for maternal morbidity. It is demonstrated that is possible to quantify the incidence of maternal morbidity as well as mortality. It is found that minor morbidities like morning sickness and Peptic ulcer disease in pregnancy contribute about 90% of the cases. Next to which anemia 56% & UTI 25% During Pregnancy.

Among the respondents major determinants of morbidity (Moderate to severe) are Pregnancy induced hypertension (PIH) 7%, Gestational Diabetic Mellitus (GDM) 2%, Threatened abortion 3%, incomplete abortion 4%, History of LUCS (Verbal Autopsy) 30%, Ectopic Pregnancy 0.2%, History of Ruptured Uterus (Verbal Autopsy) 0.3%, Prolong Obstructed Labor 7%, History Retained Placenta (Verbal Autopsy) 2%, Postpartum Hemorrhage (PPH) 5%, Puerperal Sepsis 2%.

RECOMMENDATION

The Study Suggest to Develop Skills and knowledge of maternal and child health work force at Upazila Level. Ensuring appropriate training and health education to mothers. Other suggestion to decrease maternal morbidity.
1. Registration of Pregnant mother
2. Antenatal care. (ANC)
3. Screening of high rick pregnant mothers.
4. Field Services and facility Services must have to be ensured.
5. Facility deliveries have to be increased.
6. Both Family Planning and health workers should work jointly.

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