

ECLAMPSIA : BACKGROUND OF THE SUFFERER

Rowshan Akhtar¹ Shamima Sidiqua²

Abstract

To determine the socio economic background of eclampsia patient.

This prospective cross sectional was conducted in Chittagong Medical College and Hospital from March 2004 - February 2005 . Four hundred and twenty five patients were enrolled in this study.

About 92% of patients with in 15-25 years, primigravida is predominant 72%. Most of the patients came from rural area 75% and illiterate 48% and from a poor family background 71.5%. Most of the patients had no or irregular ante natal care (ANC) 92% & 80% came directly to hospital .

Eclampsia is a preventable condition if pre-eclampsia is diagnosed by ANC. So mass awareness regarding the importance of ANC in prevention of eclampsia is essential. Establishment of comprehensive (EOC) services in the upazilla health complexes can improve the maternal condition. Female education, employment, empowerment is urgently needed to reduce the incidence of this killer disease.

Introduction

Eclampsia is a multisystem disorder with complex pathogenesis, which is not completely understood. Eclampsia is defined as the occurrence of convulsions during pregnancy or in the first 10 days post partum with at least two of the following features within 24hours after convulsion: hypertension (DBP> 90), Proteinuria (at least plus protein in random urine sampling or more than 3 gm in a 24 hour urine collection), Thrombocytopenia (platelet count of <100 x 10⁹) or raised serum aspartate¹. The incidence of eclampsia has been reduced to 0.2- 0.5% of all deliveries in developed countries. But in Bangladesh about 5% of the total pregnancies develop eclampsia². There are approximately 3.6 million births per year in Bangladesh and over 10000 women develop eclampsia each year³. It is one of the common cause of maternal mortality and responsible for 16% of

maternal death⁴. The low socio economic condition among the rural people of Bangladesh is the main cause of absence of antenatal care and development of eclampsia. Various superstitions and social taboos also are preventing from not taking care of pregnancy. Bad communication and absence of near by hospital facilities are also adding to the problem.

Methodology

This prospective cross sectional study was carried out in the department of Gynaecology and Obstetrics of Chittagong Medical College and Hospital (CMCH) from March 2004 - February 2005 . Chittagong Medical College and Hospital is a tertiary level hospital with a large drainage area – the Chittagong City and 14 upazilla, It is a government set up and most of the services are provided here free of charge, most of the patients are from low socio economic class.

A total number of 425 patients were enrolled. All patients having convulsion due to eclampsia and included . Patients come with convulsion other than eclampsia e.g. epilepsy, malaria, septicemia, meningitis, encephalitis, cerebral hemorrhage, high fever, hepatic coma, were excluded.

A protocol was made for these cases covering age, parity, residence, economical status, level of education, number of ANC, referral authorities, time interval between attack and hospital admission, distance from CMCH and types of transport. Preliminary information were obtained from the patients attendants. Regular ANC defined as 4 or more check up by an authorized service provider and irregular check up means < 4 visits. Comprehensive EOC means facilities for caesarean section, blood transfusion, assisted vaginal delivery and removal of placenta, use of anticonvulsive cytotoxic drug. antibiotics. The results were illustrated in the form of Bar chart and Pie chart.

Results

Total number of deliveries during this period is 10950. The incidence of eclampsia in this study was 3.88%. As the study was done to see the socio demographic status of the patients, the charts were set to see the age, parity, residence, economic status, educational status, no of ANC, referral authority interval between attack and hospital admission & distance from CMCH.

1. Assistant Professor of Gynae & Obstetrics
Chittagong Medical College, Chittagong
2. Assistant Professor of Gynae & Obstetrics
Chittagong Medical College, Chittagong

Correspondence: Dr Rowshan Akhtar

Table - I : Showing the age incidence of the patient (N=425)

Age	No. of Cases	Percentage
<20 yrs	71	17%
20-25 yrs	324	75%
>25 yrs	30	8%

Table -II : Showing parity distribution of the patient (N = 425)

Parity	No of cases	Percentage
Primi	305	71.5%
Multi	110	26%
G. Multi	10	2.5%

Table - III : Showing residence of the patients (N=425)

Residence	No of cases	Percentage
Rural	319	75%
Urban slum	92	21.5%
urban	14	3.5%

Table- IV : Showing socio-economic status (N=425)

Socio-economic Status	No of cases	Percentage
Poor	301	71.5%
Low middle class	113	26%
Middle class	11	2.5%

Table - V : Showing educational status of patient (N=425)

Educational Status	No of cases	Percentage
Illiterate	205	48%
Primary	170	41%
High school	50	11%

Table - VI : Showing ANC of the patient (N=425)

ANC	No of cases	Percentage
No check up	255	60%
Irregular check up	135	31.5%
Regular check up	35	8.5%

Table- VII : Showing transport used by the patients (N=425)

Transport	No of cases	Percentage
Auto	285	67%
Tempo	100	23.5%
Ambulance	40	9.5%

Table- VIII : Showing referred authority (N=425)

Authority	No of cases	Percentage
Self	340	80%
General practitioners	50	12%
Primary health center	35	8%

Table- IX : Showing time interval between attack & admission (N=425)

Time	No of cases	Percentage
With in 1 hr	43	10%
Between 1-6 hr	163	38%
After 6 hr	219	52%

Table- X : Showing distance from CMCH (N=425)

Distance	No of cases	Percentage
< 20 kilometer	195	46%
20 - 30 kilometer	43	32%
> 30 kilometer	187	22%

Discussion

Unlike other developed countries, Eclampsia is still a major obstetric problem in Bangladesh constituting average 3-5 percent of all deliveries². This is also consistent with the findings of present study where the incidence is 3.88%. Many studies in Bangladesh showed that eclampsia is prevalent in teenage pregnancy and average age was 23.5 years in study of Firoza⁵. This study also showed that 70% of the patients are in the age range of 15-25 years. Nulliparity, poor socio economic status is a predisposing factor of eclampsia⁶. This study also consistent of the statement 71.5% of patients were primigravida and belonged to poor family and also illiterates. The low socio economic condition amongst the rural people of Bangladesh the major causes of absence of antenatal care and development of eclampsia². In a community based study of maternal morbidities which included 511 eclamptic cases the majority of cases had either no care and were tackled by the "village doctor" also known as village quack⁷. This study also showing that majority of the patients had no irregular antenatal ANC and

75% of the patients were from rural area. Most of the patients came directly, only small amount of 20% referred by doctor or from primary health center. A survey was carried out on husband and mother in laws (who are the principal decision makers about health care in the house hold) to find out the cause of delay in seeking care and in reaching medical facilities, a large "knowledge gap" was found⁸. In addition there were other factors contributing to the delay in reaching EOC, such as distance, transport cost and accountability of the various health facilities⁹. In this study though 46% of patients came from a distance of <20 km, only 10% of patients attended the hospital with in one hour, which is due to ignorance about the grave sequence of the disease, lack of transport facilities and fund. In a study of under utilization of health care services by the rural communities, reasons mentioned for non attendance were scarcity medicine, lack of doctors (in particular lack of female doctors in the case of village women) and rude behaviors of health care providers¹⁰. Here the patients came from different upazillas due to lack of comprehensive EOC facilities in upazilla health complex.

Conclusion

Eclampsia is a preventable condition if pre-eclampsia is diagnosed by ANC. So mass awareness regarding the importance of ANC in prevention of eclampsia is essential. EOC services in the upazilla health complexes can improve the maternal condition. Female education employment, empowerment is urgently needed to reduce the incidence of this killer disease.

References

1. Mohd Nordin Noraihan et all, report of 50 cases of Eclampsia. *The Journal of Obstetrics and Gynecology Research* 2005; 31: 302-308.
2. S. Khatun et all, perinatal out come in Eclampsia, Bangladesh. *The Journal of Obstetrics and Gynecology Research* 1994; 9:53-60
3. Shamsun Nahar, Utility of misoprostal for labour induction in severe pre-eclampsia and eclampsia, *Journal of Obstetrics and Gynecology Research* 2004; 30: 349-352.
4. Emergency obstetric care, Interventions for the reduction of maternal mortality, *Obstetrical & Gynecological society of Bangladesh & UNICEF* September 1993; .
5. Feroza B. Management of Eclampsia, Department of Obstetrics & Gynecology, IPGMR, Dhaka. A dissertation of FCPS Part II, 1987; 79-97
6. Courtney Reynolds, William C Mabie, Bana M. Sibai. Hypertensive Status of Pregnancy, Alan H. Decherney. Lauren Nalson, *Current Obstetrics & Gynaecology Diagnosis and Treatment*, 9th Ed, Bostan Burn Ridge, Mc Grew Hill Companies, 2003;-338.
7. BIRPERHT, Bangladesh Institute of Research for Promotion of Essential and Reproductive Health Technologist. Proceeding of dissentive workshop on Neonatal Morbidity Study, Dhaka, 1994.
8. Shamsuddin L. A review of eclampsia in Bangladesh. *Bangladesh Journal of Obstetrics and Gynecology* 1997;12:1-3.
9. Barkata A. Helali J Knowledge, attitude perception and practices relevant to the utilization of emergency obstetrics care service in Bangladesh. A formative study University Research Corporation 1995 ; 63.
10. Begum A. Under utilization of health care service by rural community of Bangladesh (unpublished FIMC document) 1994.