3rd International Conference on

GYNECOLOGY AND OBSTETRICS

June 21 – 22 , 2019 | Osaka, Japan

Prevalence and analysis of inborn birth defects in a tertiary level hospital in Bangladesh

Asma Habib, Neke Akhter and **Nurul Haque**
Bangladesh Medical College and Hospital, Bangladesh

Objective: To assess the prevalence of congenital defects and to investigate the maternal and perinatal aspects in relation to the detailed ICD coding of each individual case using The NBBD data collection system under Global surveillance in collaboration with Center for Disease Control (CDC), Atlanta and All India Institute of Medical Science AIMS, New Delhi and Bangabandhu Sheikh Mujib Medical University (BSMMU) as the Focal point of investigation.

Methods: All births and terminations of pregnancy beyond 24 weeks with structural and sonographically detectable birth defects from October, 2014 to October, 2018 in the Department of Obstetrics and Gynaecology of Bangladesh Medical College and Hospital were carefully scrutinized and detailed information regarding the maternal and associated clinical risk factors were compiled using the New Born Birth Defects (NBBD) surveillance system. Among that period all births (Live birth and still birth) were counted to have a prevalence data of birth defects using the total number of births as the denominator and the number of birth defects as the numerator.

Result: The prevalence of detectable birth defects among the 2002 total births (which includes 110 still births) was found to be 4.34% (87/2002 x 100). According to birth defect category using the ICD-10 coding system, 11 broad categories were found.

Musculoskeletal deformities Q65-Q79 were the highest (25/87), followed by congenital malformation of the nervous system Q00-Q07 (15/87) and congenital malformation of eye, ear, face and neck Q10-Q18 (14/87). The birth defects were categorized as isolated, syndrome and sequence; among the 87 cases, 44 were isolated defects, 40 were syndromic / multiple birth defects and 3 were result of Potter sequence. Regarding maternal variables, maternal age <18 years was 23.4%, 18-25 years was 48.93% ,26-33 years was 23.4% and ≥ 34 years was 6.4%; father's age < 35 years   was 74.5% and ≥ 35 years 25.5%%, parental consanguinity was present in 4.3% of case. Majority of pregnancies were singleton 95.7% leaving only 4.3% of pregnancies being Twin pregnancies. Reviewing the gestational age, 69 (73.4%%) of babies were less than 34 weeks and 26.6% remaining were equal to/more than 34 weeks of gestation reflecting a higher frequency of prematurity or pre-term delivery either induced or spontaneous onset. Regarding the mode of delivery, vaginal birth was conducted in approximately 74% of cases and C-Section was performed in remaining cases, the indication of C-section was guided by obstetric causes such as previous C-section and maternal desire for an elective abdominal delivery. Results of the foetal variables by sex distribution showed a significant male predominance (51/87) 51

male, 26 female and 10 ambiguous. Reviewing babies according to gestational age, 64 (73.4%%) of babies were less than 34 weeks and 26.6% remaining were more than 34 weeks of gestation reflecting a higher frequency of prematurity. The studied foetal variable as categorized by weight, as ≤1500gm (extreme low birth weight ELBW) was 23.4%, 1501-2499gm (Low birth weight LBW) was 50% and ≥2500g (Average birth weight) was 26.6 %. The percentage of babies that were born livebirth was 87%, 17 % were stillbirth: a significant portion of those terminated late were found macerated. Data was also compiled regarding the following risk factors: Previous history of birth defects/ previous still birth/ previous spontaneous abortions/ terminations for birth defects which did not reveal significant differences.

Conclusion: The low prevalence reflects the gross under-reporting of birth defects. The study notified only the most visible defects in most cases. However, the study is part of an ongoing surveillance programme which has incited much alertness among the participants regarding documentation. The prevalence records and the type of defects may help in the expansion of these programs for the development of future preventive strategies.

Biography

Asma Habib has completed her post-graduation in Obstetrics and Gynecology at the age of 30 years from Bangladesh College of Physicians and Surgeons, Dhaka Bangladesh. She is working as Assistant Professor in the Department of Obstetrics and Gynecology and has special attention to feto-maternal medicine. She was selected as FIGO FELLOW 2018. She has published more than 20 papers in reputed journals.

asma.imam2003@yahoo.com