SUMMARY & CONCLUSION
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The present study entitled "Study of congenital heart diseases in Bundelkhand region" was performed over 62 patients of congenital heart disease, who attended the Pediatric out patient department of admitted in the Pediatric ward of M.L.B. Medical College, Hospital, Jhansi from September, 1989 to August, 1990. Detailed history of present illness, past illness, family history, antenatal history for exposure of drugs, sex hormones, radiation or any illness during that period was taken. Details of developmental mile stones were asked in every case. Detailed physical & systemic examination was done in all the individuals. Routine hematological studies, chest skiagrams and electrocardiogram were done in all the cases. We also included echocardiographic findings of the patients, who already had it with them while they attended the hospital or shown to us in follow up after getting it done at hospital equipped with such facility. 40 out of all had such records.

Diagnosis was made and later they were classified according to classification of congenital heart disease given by Beverly, C. Morgan (1978). Observation were tabulated and later data were analysed.
The prevalence of congenital heart disease was found to be 1.45% as per our hospital records were available. Age of patients ranged from 7 days to 13 years and among them 46.8% were of less than one year of age. Males dominated in the study except for ASD and male female ratio was 1.9 : 1. Family history of congenital heart disease was present in 4.8% patients. Incidence of associated congenital disease was 6.4% in our study. In 6.5% of patients, positive history of Oestrogen/Progesterone intake was present.

There was a statistically significant difference among motor mile stones in both acyanotic and cyanotics while it was insignificant for social and speech mile stones as calculated by observing developmental quotient. 13% patients found to be having marked malnutrition (grade III & IV by Indian Academy of Pediatrics classification) and 87.5% of them (7 out of 8) were having CHF along-with left to right shunt (6) and TGA (1).

The sample was dominated by acyanotic patients, who constituted the bulk (80.6%) of this series. VSD was the commonest type of anomaly present in 48.2% of our patients. Among them 26.7% were of mild type, 23.3% of moderate and 50% were of severe type of VSD.
ASD comprised 12.9%, PDA 8.1%, Tetralogy of Fallot 8.1% and TGA 4.9% of all the patients. Endocardial cushion defect, Coarctation of aorta, Aortic stenosis, Aortic insufficiency, Pulmonary stenosis, Ebstein's anomaly, Tricuspid atresia, Hypoplastic left heart syndrome and Anomalous systemic venous drainage were rare anomalies and we found only one case of each group.

Normal ECG was seen in all the cases of mild and 71% cases of moderate type of VSD. But in patients with large VSD, RVH was found in 60% and RVH in rest of them. 3 out of 4 cases of isolated ASD had RVH and rSR' pattern in right chest leads, the remaining had normal ECG.

LVH was the feature of 60% cases of PDA (rest had EVH), coarctation of aorta, aortic and mitral insufficiency. RVH was found in all the cases of tetralogy of fallot, 2 out of 3 cases of TGA, Ebstein anomaly and in hypoplastic left heart syndrome.

Radiologically most of the cases of large VSD, ASD and PDA showed increased pulmonary circulation except the cases which were associated with pulmonary stenosis were lung fields were normal. Oligemic lung fields were seen with all the cases of tetralogy of fallot, tricuspid atresia and Ebsteins anomaly. The pulmonary blood flow was found increased in cases of TGA and hypoplastic left heart syndrome.
Cardiomegaly was evident in 62% cases of acyanotic and 58% cases of cyanotic heart disease. Bootshaped heart was seen in 60% case of Fallot's tetralogy while only one out of three cases of TOA had characteristic egg shaped appearance of heart on skiagram. Right aortic arch was seen in only one case of tetralogy of Fallot.

Among 50 acyanotic heart disease patients, in 32 cases echocardiographic report was also available but the diagnosis was not changed which was made by clinical examination, ECG and X-ray. Though it was improved as many combinations or associated defects as ASD and VSD both were seen in 3 of the suspected VSD cases and VSD were also seen in a case of PDA and bicuspid aortic valve in a case of aortic stenosis were discovered. It also seems to improvise the assessment of size of septal defects. On the other hand among cyanotics, echocardiography helped a lot in diagnosis except for Fallot tetralogy which was fairly recognised by clinical examination. ECG and X-ray chest.

Following conclusions could be drawn from the present study:

1. Comparable prevalence (1.45%) of congenital heart diseases was found in Bundelkhand region of various type of congenital heart diseases.
2. Males dominated in the study except for TDA in all the types of congenital heart disease. Overall male female ratio was 1.9 : 1.

3. Motor mile stones were significantly delayed in cyanotics compared to acyanotic patients while social and speech mile stones were indifferent.

4. Presence of associated congestive cardiac failure seems to be an important cause of malnutrition in congenital heart disease patients.

5. All acyanotic heart diseases and also tetralogy of Fallot of cyanotic group can fairly be diagnosed by clinical examination, ECG and X-ray chest. In rest of the cyanotic heart disease, echocardiography and other invasive investigations seems to be necessary.