

# A Report on Fetal Anomalies Identified on Ultrasonography in a Tertiary Care Center in Tribal Area - 2016-2017

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**Abstract:** This report presents the 2-year data on fetal anomalies identified in-utero on Ultrasonography in Rajiv Gandhi Institute of Medical Sciences, Adilabad. It was observed that the identification of fetal anomalies was significantly associated with the timing of ultrasonography. Majority of the third trimester fetal anomalies identified did not have their second trimester ultrasonography, hence probably missed an early diagnosis. This report concludes emphasizing the requirement of increased awareness among antenatal community in tribal areas on Anomaly scan to detect the fetal anomalies early in the gestational period.

**Keywords:** Ultrasonography, ultrasound, fetal anomalies, congenital anomalies, tribal

## 1. Introduction

Detection of fetal anomalies in-utero is a major concern for a Radiologist or Obstetrician to prevent fetuses with major anomalies reaching third trimester or birth. In Tribal areas it is even more problematic as the awareness on the importance of ultrasonography among the antenatal community is deficient. In this study we evaluated the association of timing of ultrasonography

### Aims and Objectives

To present a concise report on the fetal anomalies identified in-utero, in a tertiary care center in a tribal area.

## 2. Materials and Methods

Data was collected from Ultrasonography registers from Department of Radiology, RIMS, Adilabad. The details of all the patients who had undergone a gestational ultrasound were included in the study.

### Inclusion Criteria:

- Age more than or equal to 18 years
- Gestational age more than 13 weeks.

### Exclusion Criteria:

- Age less than 18 years
- Gestational age (0-13 weeks)

## 3. Results

A total of 18,049 reports were included in the study. In the year 2017, 8732 reports and in the year 2018, 9317 reports were analyzed. A total of 29 and 36 fetal anomalies were identified in 2016 and 2017 respectively.

The Fig 1 and Fig 2, shows the number of Fetal Anomalies identified in the Year 2016 and Year 2017 respectively. Fig 3 shows the number of fetal anomalies identified trimester wise.

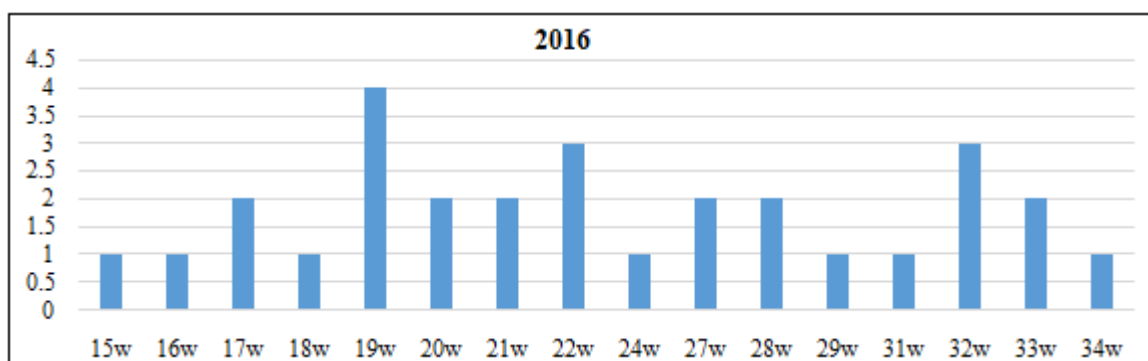
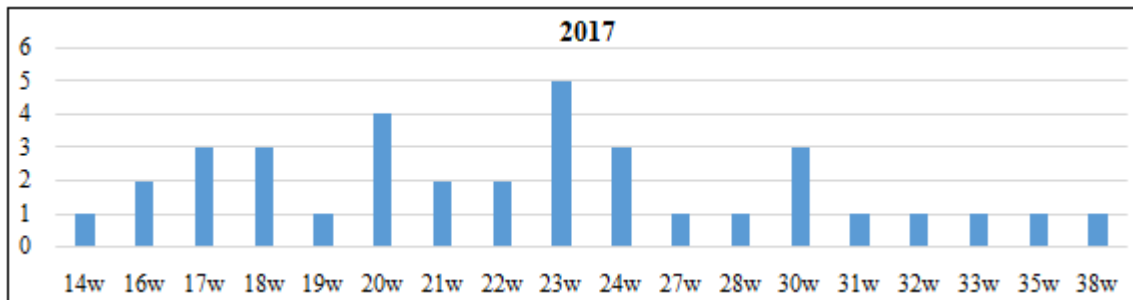
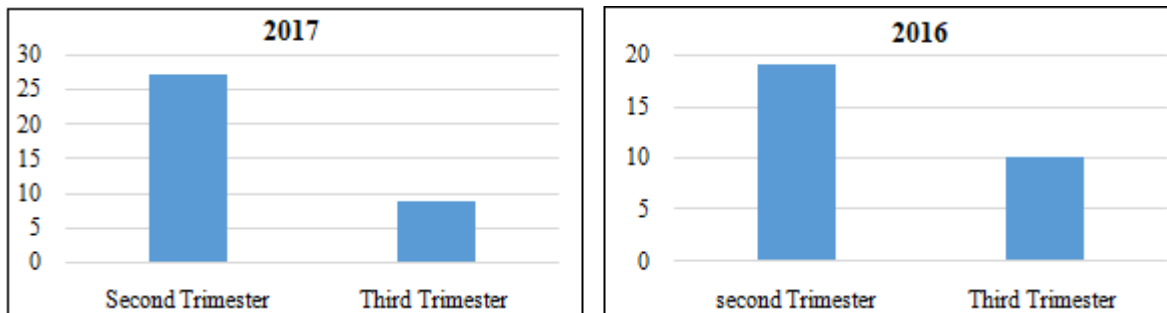


Figure 1: Number of Fetal Anomalies identified in the Year 2016



**Figure 2:** Number of Fetal Anomalies identified in the Year 2017



**Figure 3:** Number of Fetal anomalies identified in second and third trimesters in the Year 2016 & 2017

The data was analyzed using Fisher's Exact Test (Two Tailed). It was found that the association of second trimester ultrasound was statistically significant with identification of fetal anomalies ( $P=0.0002$ ) in the year 2016 and  $P<0.0001$  in the year 2017.

#### 4. Discussion

A total of 18,049 reports were included in the study. In the year 2017, 8732 reports and in the year 2018, 9317 reports were analyzed. A total of 29 and 36 fetal anomalies were identified in 2016 and 2017 respectively.

It was observed that out of 8732 ultrasonography's in the year 2016, 2729 were conducted in second trimester and 6003 were conducted in third trimester. In the year 2017, 3156 were conducted in second trimester and 6161 were conducted in third trimester. There were a large number of antenatal cases which had their first ultrasonography in their third trimester, when compared to second trimester.

In its 2016 antenatal care recommendations for pregnant women, the World Health Organization recommends one ultrasound scan before 24 weeks gestation to estimate gestational age, improve detection of fetal anomalies and multiple pregnancies.<sup>1</sup>

But in tribal set up where the resources are limited it has been a continuous effort to increase the number of antenatal checkups and also increase the number of ultrasonographical examination of the fetus. Our study hereby stresses the need for increased awareness sessions and community health care programs in the tribal areas.

#### 5. Conclusion

This report concludes emphasizing the requirement of increased awareness among antenatal community in tribal

areas on second trimester anomaly scan to detect the fetal anomalies early in the gestational period.

#### References

- [1] WHO recommendations on antenatal care for a positive pregnancy experience: ultrasound examination. 2018, <http://apps.who.int/iris/bitstream/handle/10665/259946/WHO-RHR-18.01-eng.pdf;jsessionid=F06D48BEB8F5E48664E8FEEEB6D5BDB6?sequence=1>.