INTRODUCTION
Children are in a constant phase of development. Their body is in a phase of constant wear-tear and repair, their brain is developing, bones are growing. These growing children require constant supplementation of calories, proteins and micronutrients to keep the pace of increased demands of the body. Since childhood is the most vulnerable phase in the life of human being, nutritional inadequacies will result in the hampering of the development of the body. [1]

Measures of child undernutrition are used to track progress towards Millennium Development Goal 1: Eradicate extreme poverty and hunger. Database of UNICEF revealed 161 million under-five year olds were stunted globally in 2013. Between 2000 and 2013 stunting prevalence declined from 33% to 25%. [2]

Three standard indices of physical growth that are used to describe the nutritional status of children include: Height for Age, Weight for Height and Weight for Age. [3]

According to NFHS III data, 48 % of children under five years of age are stunted, 43% are underweight and 20% are wasted, 24 percent of the children are severely stunted and 16 percent are severely underweight.5.5RS based under five mortality rate in India, for the year 2010, is 59 per thousand and it varies from 66 per thousand in rural areas to 38 per thousand in urban areas. [4]

Child under nutrition is a major contributor to the Global hunger index (GHI). [5,6,7]. Anganwadi literally means a courtyard. Anganwadi centres have been established by Social and women Welfare department of Government of India. [8]

Anganwadi centre is a part of ICDS (Integrated Child Development Services) scheme initiated in 1975. [9]

The first 6yrs of life is the most crucial period in a child's growth and development as 40% of the physical growth and 80% of the mental development is believed to take place during these years. [10]

Malnutrition is called as “silent emergency”. The prevalence of underweight children in India is among the highest in the world and is nearly double that of Sub-Saharan Africa. [11]

About 13.12% of the Indian population consists of children between 0-6years. [12]

The Integrated Child Development Services Scheme, which was started in India in 1975 October takes a step further ahead. The package of services provided are supplementary nutrition, immunisation, health check-up, referral services, nutrition and health education and non-formal preschool education. [13]

Malnutrition is an important indicator of child health. Malnutrition at the early stages of life can lower child resistance to infections, increase child morbidity and mortality. Assessment of nutritional status of children in early stages can improve their life. Study of epidemiological factors associated with nutritional status and comparison in urban and rural area with special reference to anganwadi services will help to identify factors contributing for malnutrition.

AIM & OBJECTIVE
To assess and compare nutritional status of 0-6 years children from urban and rural areas of anganwadi centers with special reference to anganwadi services.

METHODOLOGY
This cross-sectional study was conducted among children up-to 6 years registered in anganwadi. Malnutrition of children in urban and rural area were studied with special reference to anganwadi services.

RESULTS ICDS scheme was used by 77% children in urban area and by 80% children in rural area regularly. 84.02% children of urban area and 93.25% children of rural area had taken vitamin A. 84.86% of children in urban area and 91.33% of children in rural area had taken deworming tablets.

Conclusion Malnutrition was more when ICDS scheme participation in anganwadi, vitamin A supplementation and deworming were low.

KEYWORDS
Anganwadi Services, Nagpur, Nutritional Status
study subjects (45%) were from age group from 12-35 months. Same picture was seen in both urban (46%) and rural area (44%). Mean age of study subjects was 29.45 ± 18.31 months (0-72). Mean age of urban study subjects was 29.75 ± 17.79 months (0-72). Mean age of rural study subjects was 29.14 ± 18.85 months (1-72). Median age of study subjects was 27 months. Median age of study subjects in urban area 27.5 months. Median age of study subjects in rural area 26 months.

Table 2 - Prevalence of malnutrition= 53.50%. Prevalence of malnutrition in urban area= 57.50%. Prevalence of malnutrition in rural area= 49.50%.

Table 3 - ICDS scheme was used by 77% children in urban area and by 80% children in rural area regularly. 84.02% children of urban area and 93.25% children of rural area had taken vitamin A. 84.86% of children in urban area and 91.33% of children in rural area had taken deworming tablets.

Table 4 – There was significant difference in nutritional status when compared for participation of ICDS in anganwadi in both urban and rural area as p value were < 0.001 in both areas. Proportion of malnutrition was more when vitamin A was not taken by children. This difference was significant in rural area (p value= 0.02), but not significant in urban area (p value 0.08). Proportion of malnutrition was more when deworming was not done. This difference was significant in urban and rural area as p values were 0.0003 and 0.04 respectively.

Table 2- Distribution of study subjects by nutritional status. (n=400)

<table>
<thead>
<tr>
<th>Nutritional Status</th>
<th>URBAN N (%)</th>
<th>RURAL N (%)</th>
<th>TOTAL N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>85(42.50)</td>
<td>101(50.50)</td>
<td>186(46.50)</td>
</tr>
<tr>
<td>Malnourished</td>
<td>115(57.50)</td>
<td>99(49.50)</td>
<td>214(53.50)</td>
</tr>
<tr>
<td>Underweight</td>
<td>74(37.00)</td>
<td>56(28.00)</td>
<td>130(37.50)</td>
</tr>
<tr>
<td>Overweight</td>
<td>02(01.00)</td>
<td>02(01.00)</td>
<td>04(01.00)</td>
</tr>
<tr>
<td>Obesity</td>
<td>02(01.00)</td>
<td>00(00.00)</td>
<td>02(00.50)</td>
</tr>
<tr>
<td>Stunting</td>
<td>85(42.50)</td>
<td>69(34.50)</td>
<td>154(38.50)</td>
</tr>
<tr>
<td>Wasting</td>
<td>37(18.50)</td>
<td>34(17.00)</td>
<td>71(17.75)</td>
</tr>
</tbody>
</table>

* 68 children were less than 9 months. So, they were not eligible for vitamin A supplementation.
@ 98 children were less than 18 months. So, they were not eligible for deworming.

Table 4- Distribution of study subjects according to malnutrition by anganwadi services.

<table>
<thead>
<tr>
<th>Anganwadi services</th>
<th>URBAN N (%)</th>
<th>RURAL N (%)</th>
<th>TOTAL N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malnutrition N (%)</td>
<td>75(48.70)</td>
<td>62(38.75)</td>
<td>98(61.25)</td>
</tr>
<tr>
<td>Normal N (%)</td>
<td>79(51.30)</td>
<td>62(38.75)</td>
<td>141(58.75)</td>
</tr>
</tbody>
</table>
| Energy Malnutrition (PEM) among 1-6 years children in rural Lucknow, Uttar Pradesh, India.

There was also an insignificant difference (p=0.402) was found between PEM in children and utilization of Anganwadi services by them and majority (56.3%) of children were malnourished who were not having complementary food from Anganwadi Centre. Statistically a significant association (p<0.001) was found between PEM and condition of housing and environmental sanitation. Nearly three fourth (72.6%) children were affected with PEM who were living in poor conditions of housing and environmental sanitation. [16]


147 (71.7%) children were attending Anganwadi regularly and taking supplementary food, while 58 (28.3%) were not attending the Anganwadi regularly. Out of 58 children not attending Anganwadi, the major reason was not having an attendant to bring i.e. 47%, while 19% parents were found ignorant. [17]

Priyanka R, et al (2016) conducted an assessment of the nutritional status of under-five children in a rural area of Thrissur district, Kerala, India. Majority of children, 280 (77.8%) utilized anganwadi services. [18]
CONCLUSIONS

Malnutrition was more when ICDS scheme participation in anganwadi, vitamin A supplementation and deworming were low.

REFERENCES:

[12] Census of India 2011, Provisional Population totals, paper 1 of 2011, India series 1,73