Material and Method: care received patient versus non-antenatal care received. To study emergency cases and to study the foeto-maternal outcome in antenatal factors which contribute in non-attendance of antenatal clinics in WHO in 2002 (7).

Objectives: physical access and availability of healthcare and family welfare socioeconomic factors, standard of living and education and less by Utilization of material services in rural areas is mainly driven by registered deliveries by 20.7% (6). After JSSK scheme institutional deliveries increased by 20.32% and transportation from home to institution and back to home. (5)(13) and consumables, free diagnostic test, free blood, free diet, and free and IMR under this scheme pregnant; women are entitled to free drug and thus, screening risk cases with their effective rectification.(1)

Introduction: Antenatal care is a preventive branch of obstetrics. Its aim is not only to preserve the physiological aspect of pregnancy but also for a better outcome of a healthy baby who can handle all the hazards of the environment.

India is committed to reducing maternal mortality ratio is less than 100/100,000 live births by the year 2010. Effective antenatal care would prevent or to detect at the earliest the medical and obstetrical complications, anemia, hypertensive, diabetes, heart disease, T.B., nephritis and obstetrical-pre-eclampsia, malpresentation, multiple pregnancy, disproportion, placenta previa, and thus, screening risk cases with their effective rectification.(1)

Annually 5 lakh people died globally as result of pregnancy and childbirth (2)

Goal 5 (a) of the millennium development goals aim to improve maternal health with the target of reducing the maternal mortality ratio MMR by 75 % between 1990-2015(3)

The best thing that antenatal care could accomplish is to influence women to have an institutional delivery with a trained attendant at birth.

In INDIA, MMR has declined from 212 in 2007-2009 to 178 in 2010-2012 (4)

GOI has launched JSSK on 1st June 2011 with an aim to reduce MMR and IMR under this scheme pregnant; women are entitled to free drug and consumables, free diagnostic test, free blood, free diet, and free transportation from home to institution and back to home. (5)(13) After ISSK scheme institutional deliveries increased by 20.32% and registered deliveries by 20.7% (6).

Utilization of material services in rural areas is mainly driven by socioeconomic factors, standard of living and education and less by physical access and availability of healthcare and family welfare services.

The traditional approach was replaced by focused antenatal care by WHO in 2002 (7)

Objectives: The objective of this study is to analyze the various factors which contribute in non-attendance of antenatal clinics in emergency cases and to study the foeto-maternal outcome in antenatal care received patient versus with non-antenatal care received. To study the socio economic causes for not receiving antenatal care

Material and Method: The present study was conducted in Department of Obstetrics and Gynaecology, Pannadhai Mahila Chikitsalya, Udaipur from January 2017 to Dec 2017. In all 1000 pregnant women booked and unbooked were studied who were delivered in Zanana Hospital.

Group 1 - Booked cases with ANC card of hospital or some other hospital(500).

Group 2 – Unbooked cases who did not attend ANC clinic anywhere and delivered in hospital (500).

The type of booking were as Douglas classification 1980,

Adequate (A): Clinic attendance starting in the first three months of pregnancy.

Fairly adequate (B): Clinic attendance starting in the second three month pregnancy.

Inadequate (C): Attendance only in the last three months of pregnancy.

All the patients were questioned about their residence, type of antenatal booking, about their socio-economic status, educational status of the mother. Condition of mother and baby was noted throughout hospital stay and at the time of discharge. Patient were interrogated to find out reason for not attending ANC centre acc, they were group into

(A) Patient having no knowledge about ANC

(B) Patient living in areas where there is non availability of ANC service

(C) Patient were not able to come because of non-accessibility to ANC.

(D) Working women who could attend the ANC center.

(E) Patient were not able to attend the ANC clinic because of social hurdles.

SES classification according to BG Prasad scale 2017 done.

RESULT: Most of the booked cases were from urban areas (63.2%) as compared to 36.02% of cases from rural areas 70% of emergency cases of unbooked were from rural areas.(graph 1). 11.4% in urban compared to 0.4% among rural patients in booked cases have adequate booking (graph2) . Majority of booked cases were in between age
group 21-30 years (77%) (graph 3). 78% of the socio-economic class 1 mothers receive adequate antenatal care as against nil in the class 4th and 5th (graph 4). 80% literate mothers were adequately booked, whereas 5.8% in emergency group (table 1).

In booked cases 77.6% patients (HB level was > 11 gms) were not anemic, while in unbooked 66.2% have mild anemia, 17.2% have moderate anemia & 2.2% severe anemia (table 2). 82.4% booked cases were delivered normal as compared to 86% in unbooked cases. LSCS were 12% booked and 9% unbooked (Graph -5).

Caesarean section and forceps deliveries were slightly higher in booked cases due to liberal attitude, small family norm and their awareness.

92% of booked case delivered full term where as 63% of emergency group (graph 5) 90% babies weight 2.5 kg or more in booked cases and 60.8% in unbooked babies group (table 3).

Still birth rate was 0.99% in booked case and 13.9% (Graph 6) perinatal mortality rate was 24 and 180 per 1000 birth in booked and unbooked cases (table 4).

Out of 1000 cases maximum percentage of women i.e. 35.9% failed to have antenatal care adequately mainly due to social hurdles. (Graph 7) 20.1% of women are working women.

23% do not have the knowledge of antenatal care.

6.8% failure due to non-availability

8.3% failure due to non-accessibility

**DISCUSSION** — Most of the booked cases were from urban areas (63%) and having better education and socio-economic status. Because of easily accessibility to the hospital hence number of patients availing adequate and fairly adequate antenatal care was more in the urban patients. Socio economic status of the patients has its influence on antenatal care because of high literacy, increased awareness, increased per capita income and easily accessibility.

KAP study found that almost all the variables such as age, education, occupation, parity, type of family and socio economic status had a significant association with awareness about ANC(8).

The higher percentage of illiterate women in emergency group probably accounted for their unawareness and ignorance towards antenatal care.

A Agrawal et al. in this study in 2007 found that ANC received was significantly lower among illiterate women (9).

Though anemia is prevalent in booked cases, but severity of the same is much less.

Priyanka et al. study shows that severe anemia 125 (36.5%) out of 342 severe anemic patient were not registered (10).

Caesarean section and forceps deliveries were slightly higher in booked cases due to liberal attitude, small family norm.

In Tuldhar et al study the overall cesarean section was 17.4% and the rate seems to be higher among women with ANC as this could be due to fact that all cases of elective CS planned only in booked rate of cases (11).

There is two times higher rate of premature babies in unbooked cases. Baby weight is also influenced by type of antenatal care.

Taludhar study the proportion of low birth weight and preterm babies was higher in women with inadequate or no ANC (11).

Perinatal mortality was about 7 times higher in unbooked cases. Tuludhar study (found at the perinatal mortality rate was similar in no ANC and inadequate ANC group it was 16 times higher than that in the with more than 4 visit) (11).

The lack of appreciation of available antenatal facilities was found more in lower socio-economic classes, who were reluctant to attend the antenatal clinic regularly.
Causes of failure

Graph 5:

Distributions according to cause of non-attendance of ANC

Mode of delivery

Graph 6 (pie chart):

Distribution of cases of live birth and stillbirth in booked and unbooked

Graph 7:

Distribution According to Cause of Non Attendance of ANC

TABLE 1  Educational status of the mother in booked and unbooked group Significant

<table>
<thead>
<tr>
<th>S. NO</th>
<th>Education Status</th>
<th>Booked</th>
<th></th>
<th>Unbooked</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Illiterate</td>
<td>52</td>
<td>10.0</td>
<td>408</td>
<td>81.6</td>
</tr>
<tr>
<td>2</td>
<td>Primary</td>
<td>43</td>
<td>8.6</td>
<td>63</td>
<td>12.6</td>
</tr>
<tr>
<td>3</td>
<td>Middle</td>
<td>73</td>
<td>14.6</td>
<td>29</td>
<td>5.8</td>
</tr>
<tr>
<td>4</td>
<td>Higher secondary</td>
<td>157</td>
<td>31.9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Graduate and Post-Graduate</td>
<td>175</td>
<td>35.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>500</td>
<td>100</td>
<td>500</td>
<td>100</td>
</tr>
</tbody>
</table>

\[ x^2 = 630.27; \text{Significant} \quad [P < 0.05] \]

Table 2

DISTRIBUTION OF CASES ACCORDING TO ANAEMIA IN BOOKED AND UNBOOKED GROUPS

<table>
<thead>
<tr>
<th>No.</th>
<th>Hb level in g/dl (anaemia)</th>
<th>Booked</th>
<th></th>
<th>Unbooked</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>≤ 10 g/dl (not anaemic)</td>
<td>55</td>
<td>93.2</td>
<td>166</td>
<td>47.4</td>
</tr>
<tr>
<td>2</td>
<td>8-10 g/dl (mild anaemia)</td>
<td>4</td>
<td>6.7</td>
<td>45</td>
<td>20.0</td>
</tr>
<tr>
<td>3</td>
<td>6-8 g/dl (moderate anaemia)</td>
<td>--</td>
<td>--</td>
<td>11</td>
<td>4.9</td>
</tr>
<tr>
<td>4</td>
<td>≥ 6 g/dl (severe anaemia)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>59</td>
<td>9.9</td>
<td>222</td>
<td>22.2</td>
</tr>
</tbody>
</table>

\[ x^2 = 365.12; \text{Significant} \quad [P < 0.05] \]

Table 3

DISTRIBUTION OF CASES ACCORDING TO GESTATIONAL AGE OF THE BABY IN BOOKED AND UNBOOKED CASES

<table>
<thead>
<tr>
<th>No.</th>
<th>Gestational age in weeks</th>
<th>Booked</th>
<th></th>
<th>Unbooked</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>≥ 37</td>
<td>54</td>
<td>92.0</td>
<td>200</td>
<td>90.0</td>
</tr>
<tr>
<td>2</td>
<td>32 - 37</td>
<td>5</td>
<td>8.4</td>
<td>20</td>
<td>9.0</td>
</tr>
<tr>
<td>3</td>
<td>&lt; 32</td>
<td>--</td>
<td>--</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>59</td>
<td>29</td>
<td>222</td>
<td>22.2</td>
</tr>
</tbody>
</table>

\[ x^2 = 77.03; \text{Significant} \quad [P < 0.05] \]

Table 4 Perinatal mortality in booked and unbooked

<table>
<thead>
<tr>
<th>No.</th>
<th>Perinatal mortality rate per 1000 birth</th>
<th>Booked</th>
<th></th>
<th>Unbooked</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Still birth</td>
<td>5</td>
<td>66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Early neonatal birth</td>
<td>7</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Total perinatal deaths</td>
<td>12</td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Total birth</td>
<td>500</td>
<td>500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Perinatal mortality rate per 1000 birth</td>
<td>20</td>
<td>180</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compliance with ethical standards.

1. Conflict of interest: The authors declare that they have no conflicts of interest.

2. Ethical approval: The following study has been approved by PDMC ethics committee, RNT. Medical College, Udaipur.

Reference:

4) Special bulletin on maternal mortality in India 2016-12. Sample registration system office of register general India DEC 2013
5) Maternal health division, department of family welfare, ministry of health and family welfare GOI April 2010
9) Impact on ANC on maternal and perinatal studied at Nepal medical college Tuladhar/Dhakal 2011