

# Evaluation of Maternal Health Services at Session Site During Health and Nutrition Day in Urban Slums of Western Odisha

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## Abstract

**Background** :UHND would serve as a common platform to deliver maternal and nutrition services to the urban poor population. This study was formulated with the **Objectives** :1) To assess the availability of resources for providing maternal health services in the study area. 2) To determine the utilisation pattern among the beneficiaries at session sites.3) To study the association of socio-demographic characteristics of the beneficiaries with the utilisation of services by them. **Material & Methodology** : A cross-sectional study carried out in the UHND sessions being conducted under UHTC of Burla for a period of 3 months i.e August-October 2019. 25 UHND session sites were taken for input and process evaluation & 4 pregnant women from each session i.e total of 100 were included for outcome evaluation. Data collected by semi-structured, pre-tested checklist which includes questionnaire's regarding the presence of service providers at the session site, availability of required equipment's and the direct observation of service provision at the site and the benefits of the services availed by the beneficiaries. **Results**: Out of 25 UHND sessions being conducted under UHTC, Burla it was found out that 24 i.e (96%) of session sites were conducted as per micro-plan. Display of IEC banner was at 80% of session sites. Fetoscope was not available at all the session sites while measuring tape and gloves were available at 56% and 68% of session sites. Abdominal examination & FHS auscultation was not done in any session site due to absence of Privacy & fetoscope. In our study it was found that service utilisation is inadequate among 48% of the beneficiaries. **Conclusion**: Satisfactory maternal services were provided in many session sites, but still there is some lacuna in the services. Effective training and retraining of all health workers at regular interval is required for a better outcome.

**Keywords** : UHND, urban slums, maternal health services, AWC, U-ASHA.

## Introduction

Anganwadi Centres (AWC) acts as a strong platform for maternal and child health services along with promoting effective inter-sectorial convergence. The Village Health and Nutrition Day (VHND) acts as an interface between the community and the health system. It has contributed significantly in bringing about

the much needed behavioural changes in the community and improving the health-seeking behaviour of the community, leading to better health outcomes in the rural areas. <sup>1</sup>

However, in urban areas, there was no such mechanism in place to look after the health needs of the urban poor especially those who live in urban slums or slum like conditions.

As per Census 2011, the urban population has reached 37.7 crores which is 31.16% of the total population, compared to 28.6 crores people as per Census 2001. <sup>2</sup> According to expert group planning commission- 2009, Odisha is having the 2nd highest rates of urban poverty i.e (37.6%) after Bihar (43.7%).<sup>3</sup>

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A study conducted by Rao et al in Chandigarh, had observed that maternal and child health indicators among slum people showed 2–3 times worse conditions than those of in the urban areas. <sup>4</sup>

So keeping in mind, the health of the urban poor; Government of India had launched the National Urban Health Mission (NUHM) in 2013 in the urban areas on the lines of the UHND which will address the health of the urban poor by facilitating equitable access to available health facilities by rationalizing and strengthening the existing capacity of health delivery system.

The NUHM framework highlights the need of convergence between ICDS and health where by MAS/ Urban ASHA in coordination with the ANM would organize Urban Health and Nutrition day in close coordination/collaboration with the Anganwadi Worker (AWW). It is envisaged that UHND would serve as a common platform to deliver maternal, child health care, nutrition and WASH services to the urban poor population.

It would help in delivering health care services at the door steps of the un-served and underserved urban population thereby leading to an improvement in the RMNCH +A indicators. This study was formulated against this background with the **Objectives** :1) To assess the availability of resources for providing maternal health services in the study area. 2) To determine the utilisation pattern among the beneficiaries at session sites.3) To study the association of socio-demographic characteristics of the beneficiaries with the utilisation of services by them.

## Methodology

It was an observational cross-sectional study carried out in the UHND sessions being conducted under UHTC of Burla for a period of 3 months i.e August-October 2019.

**Study population** : Pregnant women who came to the session sites for availing the services on the day of visit were included. All the sessions were included.

**Sample size** : 25 UHND session sites were taken for input and process evaluation [ Under VSS Medical college supervision total of 25 UHND sessions were conducted and all the 25 UHND sessions were included

for our study purpose] & 4 pregnant women from each session i.e total of 100 were included for outcome evaluation.

**Sampling method** : Convenient sampling was used to select pregnant women for the study purpose.

**Study tool**: Data collected by semi-structured, pre-tested checklist which includes questionnaire's regarding the presence of service providers at the session site, availability of required equipment's and the direct observation of service provision at the site and the benefits of the services availed by the beneficiaries.

**Data collection method**: UHND sessions were conducted at AWC on every Tuesday and Friday of each month. On each week on these 2 days we visited the AWC and taken the detail information regarding the services availability with the help of checklist having various questionnaire and also by in-depth interview after taking prior consent from ANM & the pregnant women.

**Data analysis**: It was done using statistical software SPSS VER.17. All the data were analysed by frequency and percentage. The categorical variables difference was found out by using chi-square. The difference was said to be significant if p-value is <0.05.

Ethical clearance taken from IEC committee of the institution of VIMSAR, Burla.

### Operational definitions :

Input and process indicators were evaluated by observational method and outcome indicator assessed by in-depth interview of the beneficiaries.

**Input indicators** -assessed by : Observing the display of IEC banner, availability of various instruments, medicines, MCP card available with the beneficiaries, maintenance of registers at session sites on the day of visit.

**Process indicators** -assessed by : Observing various activities carried out by the health workers towards the beneficiaries on the day of visit to the UHND session sites.

**Outcome indicators** -assessed by: Utilization of the services given at UHND by the beneficiaries

v Utilisation of the services by the beneficiaries :

We included 7 parameters to assess the utilisation of the services by beneficiaries i.e are :Awareness about the importance of IFA tablets,knowledge regarding proper diet and personal hygiene, aware about the danger signals, aware of exclusive breast feeding, aware about contraception and its usage, aware about complementary feeding & choosing the place of delivery.

Each parameter are given a score of 1 if the beneficiaries have awareness/knowledge regarding it

and score value of 0 given to those who are not aware or have any knowledge about it.So total score was 7.

*Adequate* : If score value >4 &*Inadequate*: If score value ≤3.

## Results

Out of 25UHND session being conducted under UHTC,Burla it was found out that 24 i.e (96%) of session sites were conducted as per micro-plan.

**Table I: Mobilization of the beneficiaries to the UHND session site done by : (n=25)**

Beneficiaries mobilised by :	Frequency (%)
ASHA	16 (64%)
AWW	2 (8%)
AWH	7 (28%)
TOTAL	25 (100%)

Table I suggest that majority of beneficiaries were mobilized to the session sites by ASHA i.e. (64%) followed by 7(28%)Anganwadi Helper.

**Table II : Input Indicators assessed at UHND Session site : (n=25)**

Indicators	Yes	No
Display of IEC banner at session site	20(80%)	5 (20%)
Prior hand information given to beneficiaries	23 (92%)	2(8%)
Beneficiary list available with the health workers	24 (96%)	1(4%)

Table IIillustrates that display of IEC banner was at 80% of session sites while prior hand information to beneficiaries and beneficiary list available with health workers was 92% and 96% respectively on the day of visit to the session site.

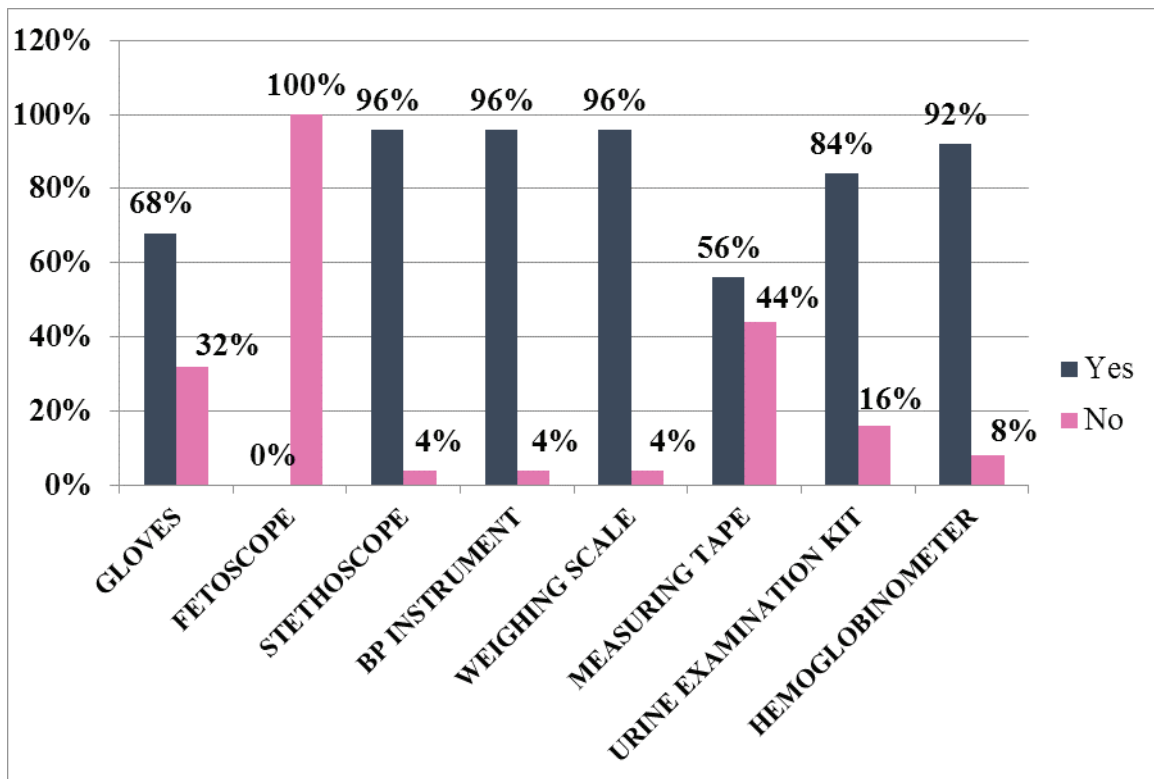


Fig I: Availability of various instruments at UHND Session sites (n=25)

Figure.I demonstrates that in this study BP instrument, weighing scale, stethoscope, were available at 96% of the sessions. Fetoscope was not available at all the session sites while measuring tape and gloves were available at 56% and 68% of session sites.

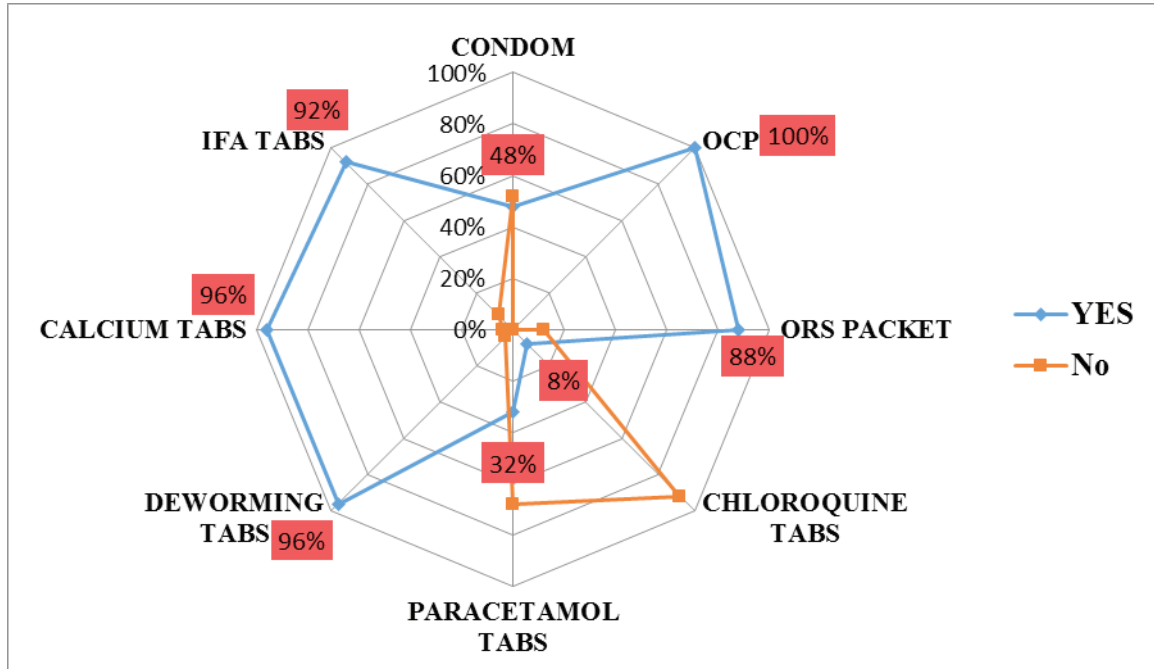


Fig II. Medication availability at UHND session site (n=25)

According to Figure II., Chloroquine tablets were available only at 8% session sites followed by paracetamol tablets (32%) and 48% condoms. Still there is need for increase in the availability of medications from government aspect's on regular basis so that availability must be 100%.

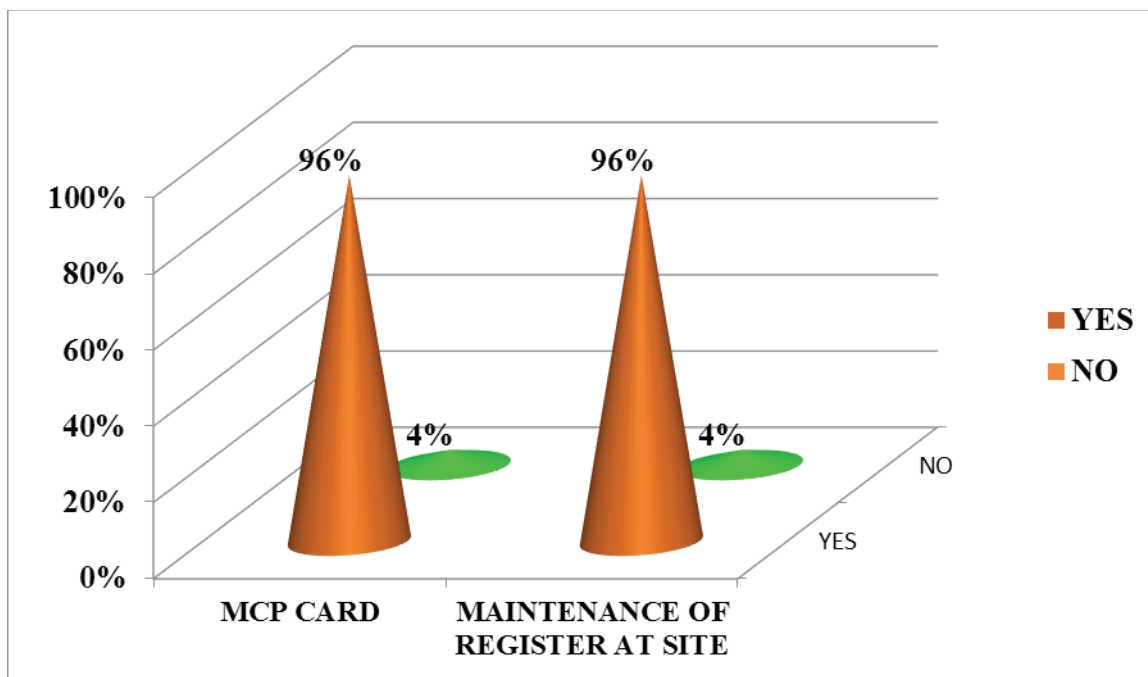


Fig III. Availability of MCP card and maintenance of Register at UHND Session site (n=25)

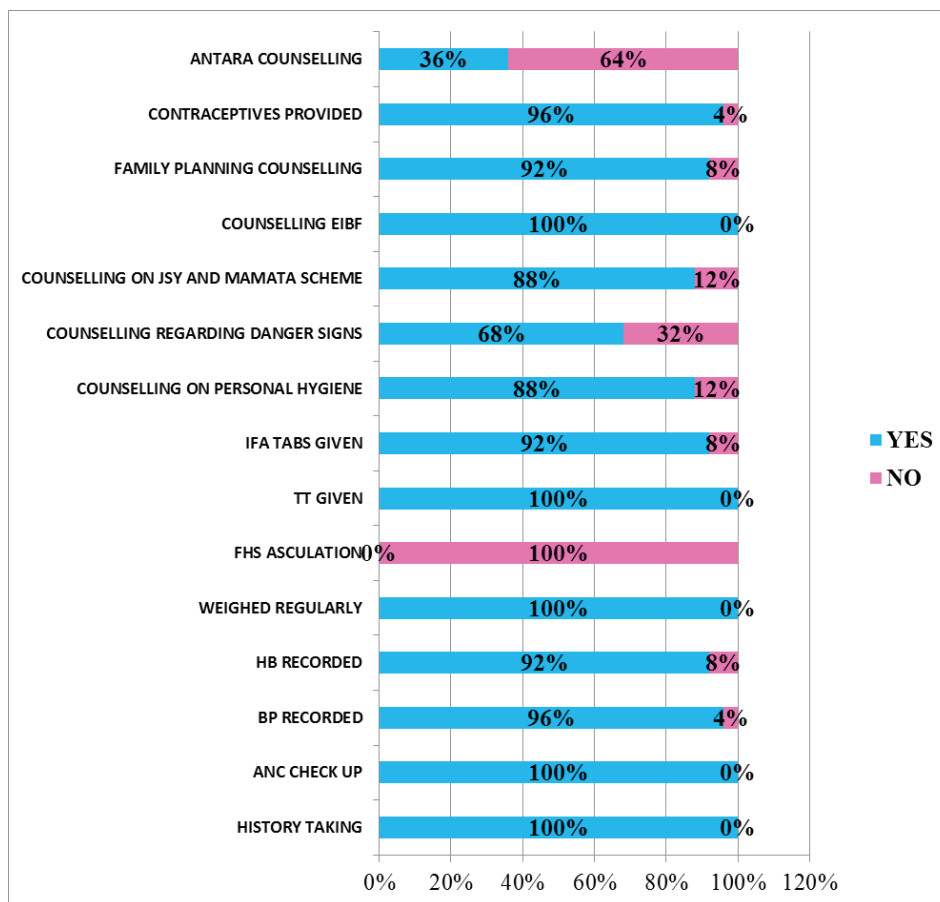
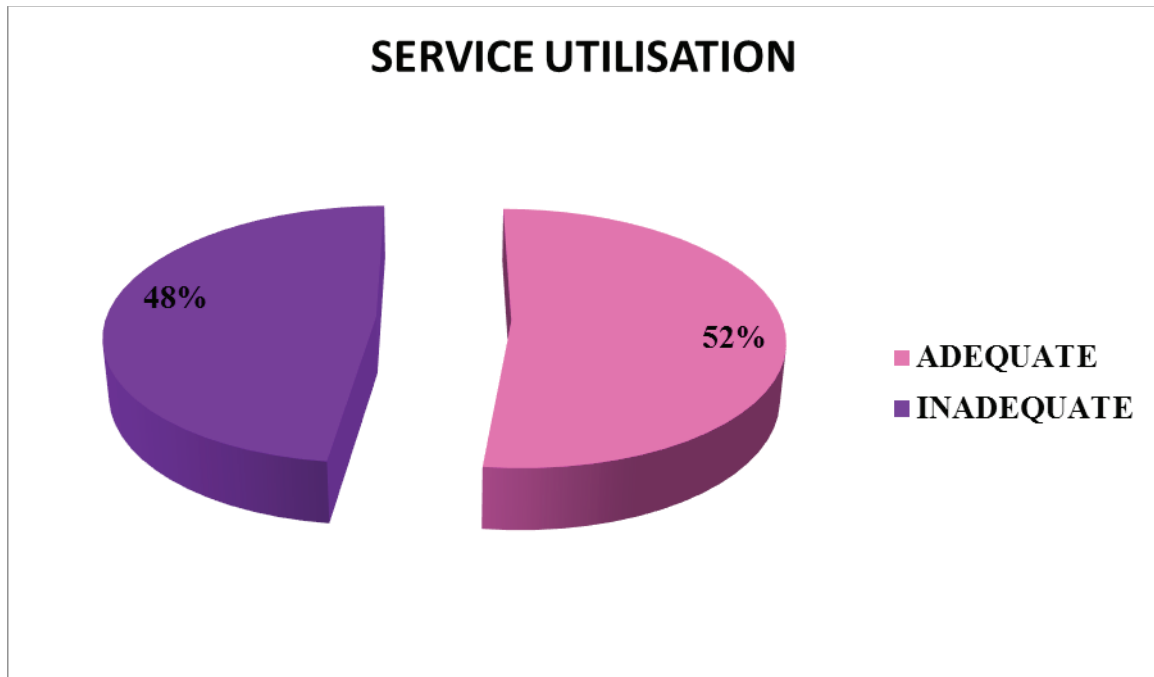


Fig IV. Activities observed on the day of visit to the UHND session site i.e(Process indicators) (n=25)

Figure IV. shows that registration of pregnant women, history taking, weigh measurement & T.T were done at most of the sessions. In about 96% of the sessions BP measurement was done.FHS auscultation was not done in any session site due to absence of fetoscope while Antara counseling was done only at 36% session site.



**Fig V. Utilization of services by beneficiaries (n=100)**

**Table III : Association of Socio-demographic characteristics with the utilization of services by the beneficiaries**

Socio-demographic characteristics	Utilization of services		Total	P-Value Chi-Square (X <sup>2</sup> )
	Adequate	Inadequate		
1) Age of beneficiaries				
<19years	5(5%)	20(20%)	25(25%)	P=10.866 X <sup>2</sup> =0.004*
19-25 years	21(21%)	18(18%)	39(39%)	
>26 years	22(22%)	14(14%)	36(36%)	
Total	48(48%)	52(52%)	100(100%)	
2) Literacy status of beneficiary				
Illiterate	12 (12%)	31(31%)	43(43%)	P=17.491 X <sup>2</sup> =0.001*
Primary	13(13%)	13 (13%)	13(13%)	
Secondary	16(16%)	3(3%)	3(3%)	
Higher secondary & above	7(7%)	5(5%)	12(12%)	
Total	48 (48%)	52(52%)	100 (100%)	

**Cont... Table III : Association of Socio-demographic characteristics with the utilization of services by the beneficiaries**

3) Occupation of beneficiaries				
Home-maker	20(20%)	33 (33%)	53(53%)	P=4.760 X <sup>2</sup> =0.029*
Working lady	28(28%)	19(19%)	47(47%)	
Total	48(48%)	52(52%)	100(100%)	
4) Family type				
Nuclear	22(22%)	38(38%)	60(60%)	P=7.719 X <sup>2</sup> =0.005*
Joint	26(26%)	14(14%)	40(40%)	
Total	48(48%)	52(52%)	100(100%)	

Table III suggests that those beneficiaries whose age was >26 years, having educational qualification more than primary level, who were working lady and those belonging to joint family had adequate utilisation of services. The group difference was found to be significant with chi-square value as 10.866, 17.491, 4.760 & 7.719 respectively with (P<0.05).

### Discussion

UHND sessions aims to provide a basket of health and nutrition services along with counselling to the community through community involvement on a pre-designated day, time and place, in every urban slum areas throughout the country.

In our study we found out that out of 25, 24 i.e (96%) of session sites were conducted as per micro-plan. Display of Mamta Day IEC banner at the session site is necessary, so that the nearby people can come to know the exact location of the session site. Display of banner should be at such place which can be visible to all. It was displayed at 80% of session sites on the day of visit in our study.

Mobilization of beneficiaries is one of the important activities, which is a reminder to the beneficiaries to come to the Anganwadicenter for availing the services. Majority of beneficiaries were mobilized by ASHA i.e. (64%) followed by 28% Anganwadi Helper. While prior hand information to beneficiaries and beneficiary list available with health workers was 92% and 96% respectively on the day of visit to the session site.

Study conducted by Mehta et al <sup>(5)</sup> had observed that all 19 sessions were held as per micro-plan at the mentioned session sites. Beneficiaries were mobilized by the urban Accredited Social Health Activist (ASHA) or Anganwadi Helper (AWH) at all session sites visited; however, at only 10 i.e (52.6%) sites, the beneficiaries were informed a day ahead of the session. Mamta Day banner was displayed at (89.4%) of session sites. Only 15 sites had a list of due beneficiaries.

Contrary to this, in another study conducted by Parmaret al. (6) in rural area of Vadodara district has found out that the beneficiaries were informed 1 day before the Mamta Day at almost 93% session sites.

The equipment's and logistics are quite essential and plays a pivotal role in ensuring service delivery. In this study BP instrument, weighing scale, stethoscope, were available at 96% of the sessions. But haemoglobin meter, urine examination kit, gloves and measuring tape were available in 92%, 84%, 68% and 56% of sessions respectively. Where as fetoscope is unavailable at all the session sites. MCP cards were available in 96% of the sessions and maintenance of registers were also done at 96% of sites, it was observed that in those sessions.

Though privacy is essential to be maintained during health checkups, it was observed in our study that bed with screen/curtain was not available at any sessions and abdomen checkup could not be done because of lack of privacy of women.

Medicines like IFA i.e (92%), calcium (96%), OCP (100%), deworming tablets (96%) were present in most of the sessions but paracetamol tablets & chloroquin tablets were supplied in less amount i.e (32%) & (8%) respectively.

In a study by Mehta et al in Vadodara city, Gujarat shows supply of MAMTA (MCP) cards were available at most of the UHND sessions. Iron and folic acid (IFA) tablets and plain folic acid tablets was available only at 9 and 2 session sites respectively out of 17 sessions. The abdominal examination of the woman by abdominal palpation including auscultation of fetal heart sounds were not performed at any session site. Also no separate curtains or arrangements were available for ensuring privacy of women being examined at any of the session sites which were similar with the finding of our study. (5)

Regarding maternal service, registration of pregnant women, history taking, weigh measurement & T.T were done at most of the sessions. In about 96% of the sessions BP measurement was done. Haemoglobin estimation was done at 92% of session and IFA tablets given at 92% of sites respectively. Counselling to the beneficiaries regarding personal hygiene, danger signals, on JSY/Mamaschem, family planning & on EBF were done at 88%, 68%, 88%, 92%, 100% respectively. Antarcounselling done in (36%) of the sessions only. The abdominal examination and FHS auscultation of the woman were not performed at any session site.

Study conducted in Surat city by Gandhi et al (7) had found out that 91.8% of pregnant women at the session sites were weighed and weight was recorded. BP of pregnant women was measured properly and recorded in 40 i.e (65.57%) of session sites. Nearly 88.5% of the total ANC's observed were given IFA tab. Health and nutritional advice were given to 90.16% of the ANC observed. However in terms of session sites only in 8.11% sites anaemia examination was done.

Another study conducted by Kotecha et al. (8) revealed in his study that in 95.6% sessions, pregnant women were weighed and weights were recorded. BP of pregnant women was measured properly and recorded in 90% of session sites. Advice for next antenatal check-up was provided along with dietary and relevant counselling in 63.3% of session sites. No session sites performed abdominal palpation due to lack of privacy which is similar with the finding of our study.

According to National Family Health Survey-III data, (9) blood and urine tests were conducted for 60% and 58% of women, respectively.

It was observed in the study by Kotecha et al. (8) that breastfeeding advices & family planning counselling were not given to any pregnant women in any session sites which is in contrary to our study finding.

In our study it was found that service utilisation is inadequate in 48% of the beneficiaries and adequate among 52%. As age increases utilisation of services adequate.

It was observed that those beneficiaries whose age was >26 years, having educational qualification more than primary level, who were working lady and those belonging to joint family had adequate utilisation of services. The group difference was found to be significant with chi-square value as 10.866, 17.491, 4.760 & 7.719 respectively with ( $P < 0.05$ ).

## Conclusion

Satisfactory maternal services were provided in many session sites, but still there is some lacuna in the services. With regard to the availability of instrument & logistics, although majority of the essential items were found to be available, focus needs to be given to abdominal examination and FHS auscultation, since they were not practised at many sites. Counselling on anaemia must be emphasised. Effective training and retraining of all female health workers, ANMs, and Anganwadi workers at regular interval is required for more better outcome. Regular supervision and monitoring of all sessions must be held at the health-care facilities according to the supervision plan. All channels of communication should be used to make UHND session a highly visible public health activity for maternal survival.

**Conflict of Interest-** None.

**Funding** – No.

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