Antenatal Care and Birth Preparedness Status Amongst the Recently Delivered Mothers in Jehanabad District, Bihar

By

Lisa Kutiyal

Dissertation submitted in partial fulfillment of the requirements of the degree

MBA Hospital and Health Management

Academic year, 2017-2019

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INSTITUTE OF HEALTH
MANAGEMENT RESEARCH
(WHO Collaborating Centre for District Health System Based on Primary Health Care)

IIHMR UNIVERSITY

TO WHOMSOEVER MAY CONCERN

This is to certify that **Lisa Kutiyal** student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone internship training at **Care India** from **4 Feb to 7 May**.

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish her all success in all her future endeavors.

Dr. P.R Sodani

Professor, Pro President and Dean-Training

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CERTIFICATE

The certificate is awarded to

Lisa Kutiyal

In recognition of having successfully completed her
Internship in the department of

Bihar Technical Support Program

and has successfully completed her Project on

ANTENATAL CARE AND BIRTH PREPAREDNESS TRENDS AMONGST THE RECENTLY DELIVERED MOTHERS IN JEHANABAD DISTRICT OF BIHAR.

Date: 07/05/2019

CARE INDIA, BIHAR

She comes across as a committed, sincere & diligent person who has a strong drive and
zeal for learning
We wish her all the best for the future endeavors

Deputy Director-Human Resources

THE IIHMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **"Antenatal care and Birth preparedness status among recently delivered mothers (0to2months) of Jehanabad district of Bihar"**and submitted by **Lisa Kutiyal** Enrollment No **0593** under the supervision of **Dr P.R Sodani** for award of MBA in Hospital and Health Management in Health and Hospitals of the University carried out during the period from **4Feb to 7May** embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.

Signature

ACKNOWLEDGEMENT

Every successful story is a fruit of an effective team work, a team which comprisesof a good coach and good team players. Likewise, this project report is no exception.This has been a meticulous effort of a group of people along with me. I want to takethis opportunity to thank each one who has been a part of this report.To start with, I take immense pleasure to thank **Dr. Ashok Kaushik** (Professor cum Proctor and Dean(Academics IIHMR)) and **Dr. Hembhargav**(*Placement cell , IIHMR*) forplacing me in such an esteemed organization (Care India) to perform my dissertationand start my career with; and my mentor, **Dr. P.R Sodani** (Professor , Pro-President and Dean TrainingIIHMR) for his advice andencouragement for the successful conduction of my project.I am highly indebted to Dr. Sunil Babu, Chief of Party (BTSP)Care India, Bihar for providing me with this opportunity to be a part ofBihar Technical support program team at Care India, Bihar.Also, I wish to thank Mr. Neeraj Sinha (District technical Lead, JehanabadCare India) for his continuousguidance in the dissertation and arranging transport and other requirements forthe completion of my desired field visit.

Lastly,I would like to express my gratitude to my family and friends for being a constant source of inspiration for me.

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S. No. Description

LIST OF ABBREVIATIONS

Sno.	Acronyms	Full form
1	MDGs	Millennium Development Goals
2	LQAS	Lots Quality Assurance Sample
3	FLW	Front Lin Worker
4	IFA	Iron Folic Acid
5	ASHA	Accredited Social Health Activist
6	VHSND	Village Health Sanitation and Nutrition Day
7	VHSNC	Village Health Sanitation and Nutrition Committee
8	BCC	Behavior Change Communication
9	MLE	Monitoring Learning Evaluation
10	AWW	Anganwadi Worker
11	AWH	Anganwadi Helper
12	ICDS	Integrated Child Development Services Scheme
13	MDM	Mid-Day Meal
14	INHP	Integrated Nutrition and Health Programme
15	SHGs	Self Help Groups
16	ANM	Auxiliary Nurse Midwife
17	WHO	World Health Organization
18	MMR	Maternal Mortality Ratio
19	EDD	Expected Date of Delivery
20	TT	Tetanus Toxide
21	DDK	Disposable Delivery Kit
22	MoHFW	Ministry of Health and Family Welfare
23	MoWCD	Ministry of Women and Child Development
24	DPO	District Programme Officer
25	CDPO	Child Development Programme Officer
26	LS	Lady Supervisor
27	IEC	Information Education Communication
28	THR	Take Home Ration
29	HSC	Health Sub Centre
30	ANC	Ante Natal Care
31	AWC	Anganwadi Centre

DISSERTATION PROJECT

INTRODUCTION

Maternal mortality remains to be a significant burden in many of the developingcountries. More than 40% of pregnant women are experiencing acute obstetric problemsglobally. Nearly about 300 million women (2007) in the developing world suffer frompregnancy and childbirth-related morbidities. (1)Reduction of MMR has been recognized as a priority across the global leaderships.Millennium Development Goals (MDG) of the United Nations declared the target ofachieving 200 maternal deaths per lakh of live births by 2007 and 109 per lakh of livebirths by 2015.

Majority of maternal deaths occur during labor, delivery, and within 24 hours postpartum.Notjust the medical causes, numerous inter-related socio-cultural factors alsocontribute for the delay in care-seeking and thus, contribute to these deaths. Care seekingis delayed because of the delay in

(a)Identifying the complication,

(b)Deciding to seek care,

(c)Identifying and reaching a health facility, and

(d)Receiving adequate and appropriate treatment at the health facility. (2)

Birth preparedness—i.e. advance planning and preparation for delivery—can do muchto improve maternal health outcomes. Birth preparedness helps ensure that women canreach professional delivery care when labour begins. In addition, birth preparedness canhelp reduce the delays that occur when women experience obstetric complications, suchas recognizing the complication and deciding to seek care, reaching a facility whereskilled care is available and receiving care from qualified providers at the facility. Keyelements of birth preparedness include:

• Attending antenatal care at least four times during pregnancy;

• Identifying a skilled provider and planning for reaching the facility during labour;

• Setting aside personal funds to cover the costs of travelling to and delivering with askilled provider and any required supplies;

• Knowing what community resources like, emergency transport, funds,communications, etc. are available in case of emergencies;

• Having a plan for emergencies, i.e. knowing what transport can be used to get to thehospital, setting aside funds; identifying person(s) to accompany to the hospital and/orto stay at home with family; and identifying a blood donor. (3)

A proper assessment of the present statistics of birth preparedness in a state like Bihar(with a high MMR) can help in giving direction for designing interventions tohandle birth and pregnancy complications, address the gaps in birth preparednesspractices and contributing to tackle the maternal morbidity and mortality significantly.Also, this is a key component of globally accepted safe motherhood programs.

RATIONALE

Every pregnant woman is at a risk of any sudden and often unpredictable complicationthat could lead to death or injury to the mother or to her infant. Hence, it is highlynecessary to practice strategies to tackle these problems as they arise.There is evidence from studies conducted in different parts of the world that promotingBirth Preparedness improves preventive behaviors, improves knowledge of mothers about danger-signs, and leads to improvement in care-seeking during obstetricemergency. Various such studies are focused on states like Karnataka, Madhya Pradeshand Delhi, but no major evidence could be gathered in the context of Bihar. Thus, this

study is being proposed, with the objective of assessing the status of Birth Preparednessand ANC trends amongst the women in Jehanabad district,Bihar.The study is intended to serve as a need's assessment survey, designed to determine thelevel of awareness, attitude and behavior of women and their families to birthpreparedness, and complication readiness.Keeping in consideration, the recall bias after a significant time lapse after delivery, andto assess the activities during the entire

course of pregnancy, as well as, the time ofdelivery; the study was proposed to be conducted amongst the mothers of 0 to 2 monthschildren.

RESEARCH QUESTION

What is the statusof Ante-Natal Care and Birth Preparedness among the mothers of 0 to 2 Months old children in Jehanabad district of Bihar?

OBJECTIVES

General Objective

To assess the status of Ante-Natal Care and Birth Preparedness amongst the mothers of0 to 2 months old children in Jehanabad district,Bihar.

Specific Objectives

· To review the status of visits and counselling by FLWs to pregnant women during their course of pregnancy.

· To determine whether pregnant women in Jehanabad get their pregnancyregistered timely and receive appropriate Ante Natal Care.

· To determine whether women in the village get proper vaccinations andnutritionsupplementations, as required during pregnancy.

· To assess whether the women and their families keep a proper plan for childbirth in place during their pregnancy.

LITERATURE REVIEW

Allyson C. Moran *et al* (2006) in their cross-sectional study entitled 'Birthpreparednessfor Maternal Health: Findings from Koupéla District, Burkina Faso'published in the **Journal of Health, Population and Nutrition** conducted amongst 180women of Western Africa, who had given birth within 12 months of the survey; foundthat 46.1% had a plan for transportation, and 83.3% had a plan to save money. Womenwith these plans were more likely to give birth with the assistance of a skilled provider.Most women saved money for delivery but had fewer concrete plans for transportation.Their findings highlight how birth-preparedness and complication readiness may beuseful in increasing the use of skilled providers at birth, especially for women with aplan for saving money during pregnancy. **(6)**

An article on 'Birth preparedness and complication readiness – a qualitativestudy among community members in rural Tanzania' by **Furaha August *et al* (2015)**published in the **Global Health Action Publishing** used FGDs as a tool for datacollection. Twelve focus group discussions were held with four separate groups: youngmen and women and older men and women in a rural community in Tanzania. Resultsexpressed a perceived need to prepare for childbirth. There was awareness of theimportance of attending the ANCs, reliance on family support for practical and financialpreparations such as saving money for costs related to delivery, tendency of movingcloser to the nearest hospital, and to use traditional herbs. Community recognizedthat pregnancy and childbirth complications are preferably treated at hospital. Facilitydelivery was preferred; however, certain factors including stigma on unmarried womenand transportation were identified as hindering birth preparedness and hence utilizationof skilled care. **(7)**

A research article titled 'Awareness of Birth Preparedness and ComplicationReadiness in South-eastern Nigeria' published in **ISRN Obstetrics and Gynecology,**by **John E. Ekabua (2011)** talks about a multi-centric study involving 800 women.Educational status was found to be the

best predictor of awareness of birth preparedness,but not a good predictor of intention to attend four antenatal clinic sessions. Plan toidentify a means of transport to the place of childbirth was related to greater awarenessof birth preparedness and planning to save money for childbirth was associated withgreater awareness of community financial support system. **(8)**

A study by **Acharya *et al* (2012)** published in the **Indian Journal ofcommunity medicine,** entitled 'Making Pregnancy Safer—Birth Preparedness andComplication Readiness Study Among Antenatal Women Attendees of A PrimaryHealth Center, Delhi', conducted among 417 antenatal attendees at a primary healthcenter, Palam, New Delhi from January to April 2012, indicated that the birthpreparedness was very low (41%). Majority (81.1%) had identified a skilled attendant atbirth for delivery. Nearly half of the women (48.9%) had saved money for delivery and44.1% women had also identified a mode of transportation for the delivery. However,only 179 (42.9%) women were aware about early registration of pregnancy. Only onethird(33.1%) of women knew about four or more antenatal visits during pregnancy.Overall, only 27.8% women knew about any one danger sign of pregnancy. **(2)**

A study conducted by **Prof. Deoki Nandan *et al* (2008-09), NIHFW**, inassociation with **UNFPA and Department of Community medicine, S.S. MedicalCollege, Rewa**, titled 'A study for assessing birth preparedness and complication readiness intervention in Rewa district of Madhya Pradesh' used a thirty-clustersampling technique to survey the study area. Seven indicators was developed andBP/CR Index was derived by them during data collection, supplemented with in -depthinterviews, knowledge assessment of Skilled birth attendants and FGDs. Study revealsthat HCPs have adequate knowledge of ANC, but they are not able to implement birthpreparedness at community level. Birth Preparedness index in the study population wasfound to be quite low (47.5%). It was significantly high in above poverty line families,higher educational level and in-service and business group. Indicators like, knowledgeof danger signs (18.6%), transportation services (18.6%), 1st trimester registration(24.1%) and population saved money (44.2%) was also found to be lower. **(9)**

Dr. Smitha P.K. (2011) conducted a study entitled 'Birth Preparedness andComplication Readiness of ASHAs under the safe motherhood intervention programmeof NRHM at Koppal, Karnataka' at **Sree Chitra Tirunal Institute for MedicalSciences and Technology,**

Thiruvananthapuram to understand whether communityhealth workers (CHWs) there are equipped with the knowledge and skills essential tohelp pregnant women developing complications get an appropriate health care; and ifthe support and supervision they get from higher authorities is adequate to carry outtheir assigned tasks in a rural backward district of Karnataka. The results indicated ascore for BP/CR out of 8, which showed a maximum score of 8 in 3(1.4%), 4-7 in147(71%) and 1-3 in 57(27.5%). However, knowledge of antenatal care (ANC)

components was good with >=90% in 104(50.2%) of ASHAs. Birth preparednessservice provision was significantly associated with birth preparedness knowledge level,experience, number of rounds of training, practical training and recent training. **(10)**

METHODOLOGY

Study design and area

A cross-sectional descriptive study involving the mothers of past 2 months born infants,residing in Jehanabad district, Bihar.

Study population

Participants of this study were the women who had delivered a child in the past 2months 29 days (i.e. the child is 0 to 2 months of age) and present in the village at thetime of data collection and consenting to participate in the study.

Eligibility criteria

- Inclusion criteria –all the mothers of children who were born between Feb , March and April 2019.
- Exclusion criteria– beneficiaries who were not available at the time of data collection.

Sample size calculation

$$N = z2.\ p(1-p) / d2$$

Where, N= minimum sample size z = value of standard normal deviation p = expected or probability of previous studies d= maximum allowable deviation

Using the above formula of Sample size calculation,

In our case, sample size = 244 (at 90% Confidence level and 5% Margin of Error)

Z= 1.64d= 0.005P= 0.64

Sampling technique - Convenience sampling - A convenience sample is a type of non-probability sampling method where the sample is taken from a group of people easy to contact or to reach.

Data Collection

Participants were identified by convenience sampling of eligible women present in thevillage at the time of visits. Data was collected by the means of surveying theparticipants, by personally visiting the households of the eligible respondents in thevillage.

Data collection for the study was spread over a period of 3 months duration, in the monthof 4 Feb – 7 May.

Beforehand, all aspects of confidentiality were reassured. Only those who gave a properconsent participated in the study. In case a respondent felt tired or uncomfortable, shecould take a break, following which survey process could resume. Theparticipants were free to terminate the survey at any time.

Tools and techniques

The data collection technique was survey-based, using the 'Ante Natal Care and BirthPreparedness' section of a standard pre-tested questionnaire, called "LQAS+", used bythe Bihar TSU, Care India; specifically designed to target the mothers of children aged0 to 2 months. (Along with a checklist to capture the status of government provisionsand services like IFA logistics, home visits by FLWs, AWC functioning,etc.)

Data analysis

The collected data was compiled and analyzed using various functions in MicrosoftOffice Excel software. Frequency tables, Bar Charts and Pie Graphs are used torepresent the findings of this study in the report, as and where required

LIMITATIONS

- Due to language barrier and lengthy interview questions the intended target sample size couldn't be possible.
- Due to a limitation of time for data collection, the intended sample size could not be met, which can result in a greater margin of error, and thus the results may have a slight deviation from the true picture of the study population**.**

FINDINGS(all figures in percentages)

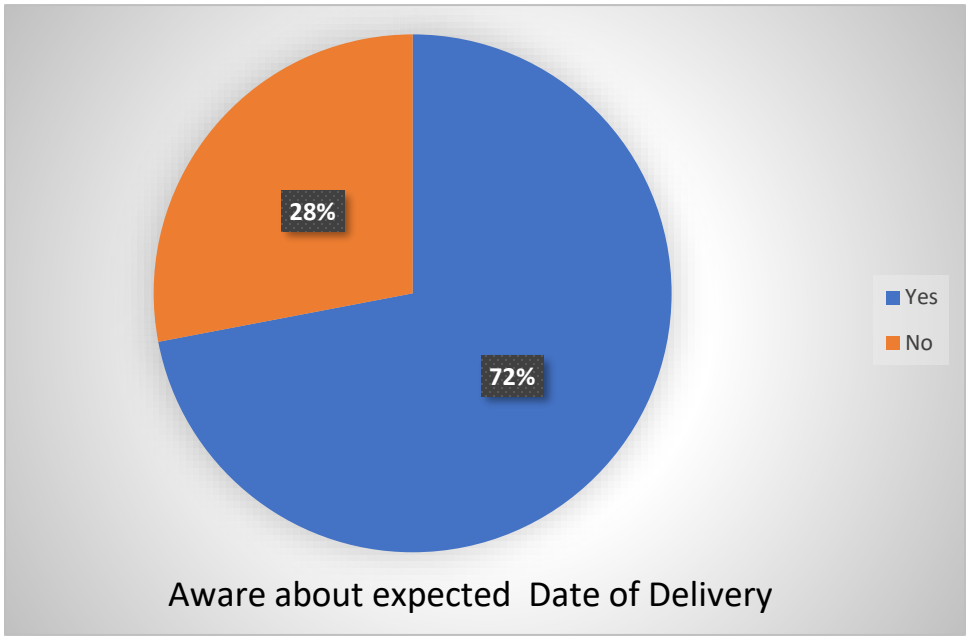

Fig1. Proportion of women in the study group, who were aware of their EDD duringpregnancy.

A significant proportion of women in the community wereaware of their expected date of

delivery, during the pregnancy period.

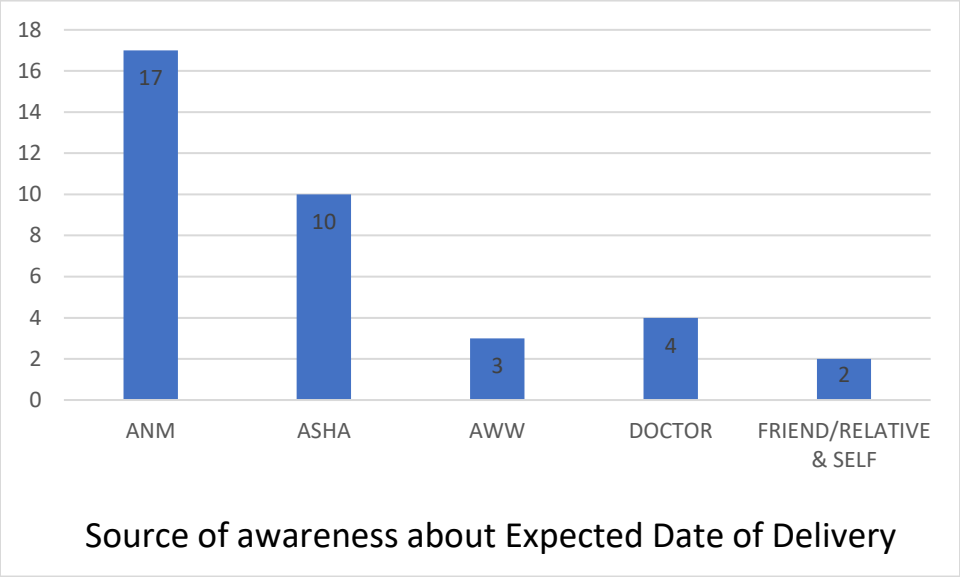

Fig 2. Proportion of respondents who got to know about EDD.

Amongst the women who were aware about their EDD, half of them got to know about this by either an ANM or ASHA ortold by any Doctor.

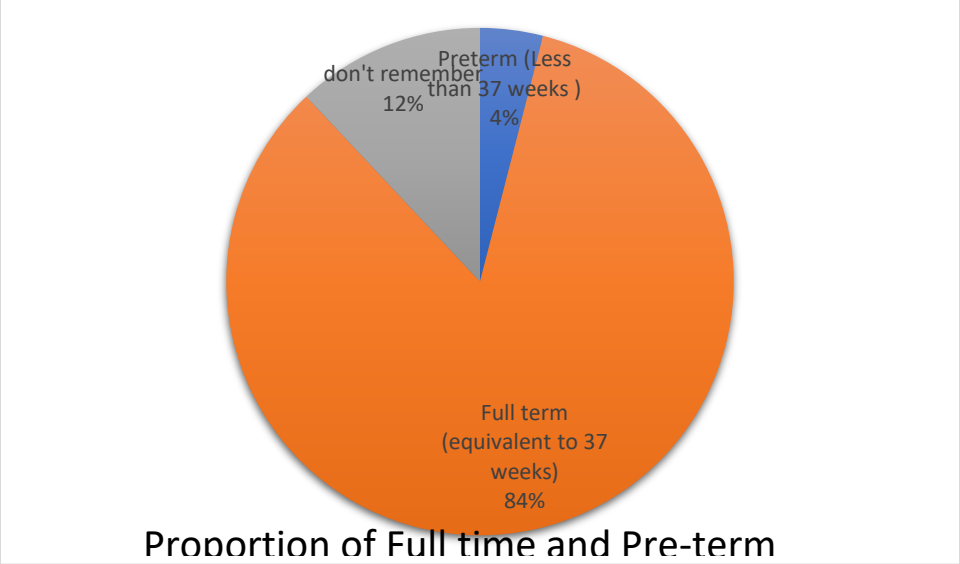

Fig 3. Proportion of full-time and Pre-term babies in the study group.

Most of the women in the study group had normal full-term babiesie having gestation period of equivalent to 37 weeks or more) whileonly 4% women babies were pre-term and the rest rest respondents either didn't remember or didn't knew.

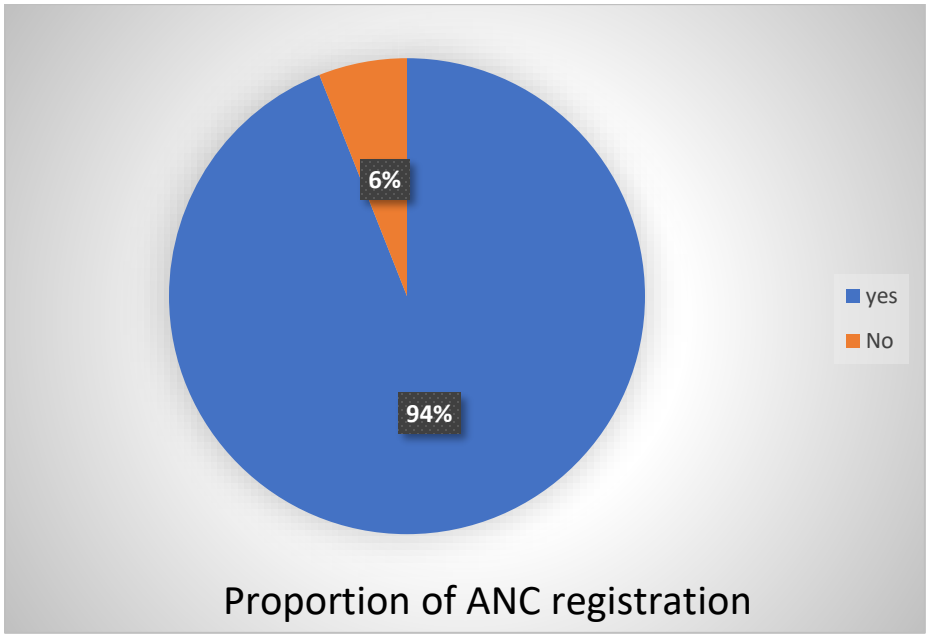

Fig 4. Proportion of respondents who got their pregnancy registered.

The women got their pregnancy registered was 94 % which in turn is a marvelous figure with the AWC while rest 6% didn't get registered herself maybe because of migration behavior.

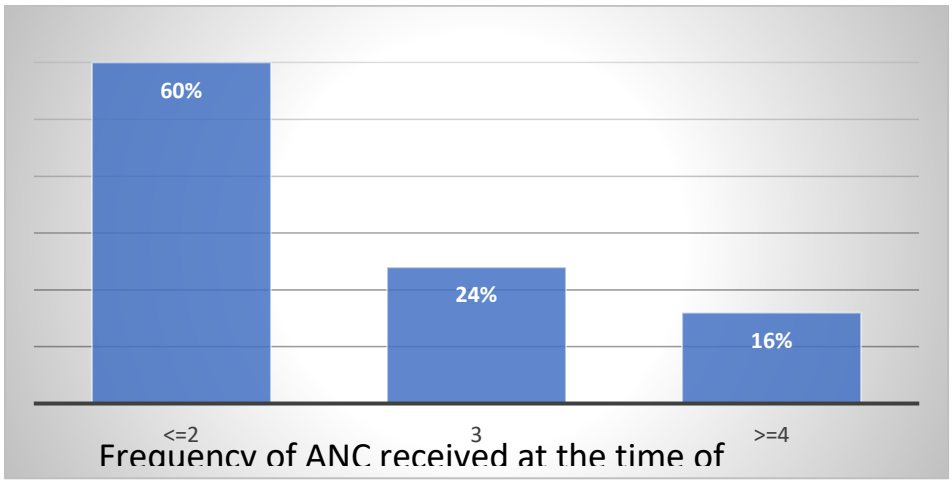

Fig 5. Number of times antenatalcheckup received by pregnant women

Out of 94% registered respondents 60%were the one who received less or equivalent to 2 ANC checkups while only 16% of the respondents had at least 4 ANC which is not a good proportion and depicts lack of compliance towards health checkup at the time of pregnancy.

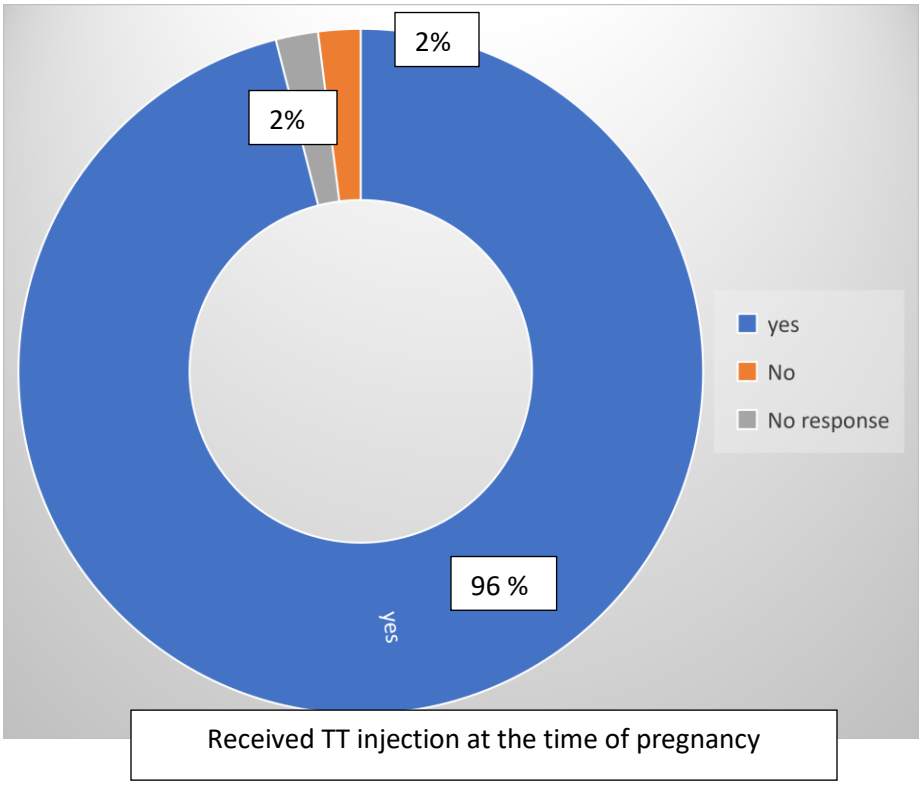

Fig6. Proportion of respondents who received TT injections during pregnancy.

Vast majority of PW i.e. 96% got TT vaccination at the time of her gestation which is a quite good figure.

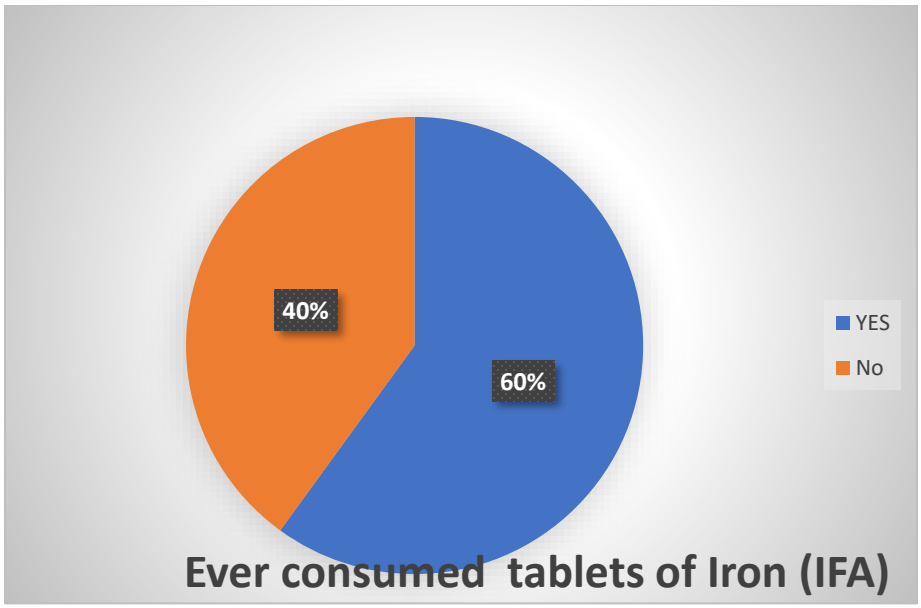

Fig7. Trends of IFA consumption during pregnancy in the study group.

60.% of PW consumed IFA tablets showan inadequate trend as compared to TT consumption.

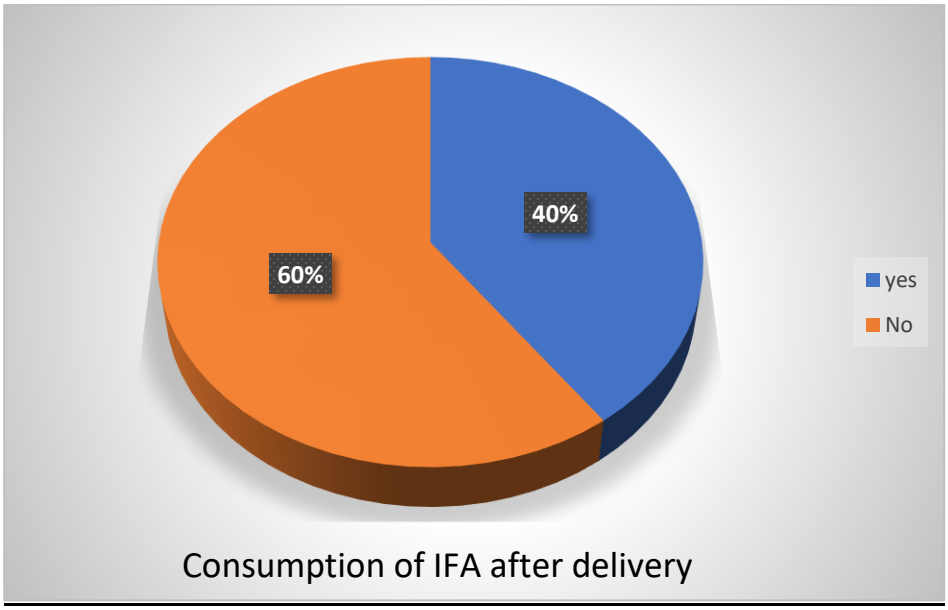

Fig 8. Out of the ones consuming IFA during pregnancy, trends of continuedconsumption post-partum.

Although the trends of IFA consumption don't seem to be good, the trends ofcontinuing it post-partum (43.5%) produce a better picture.

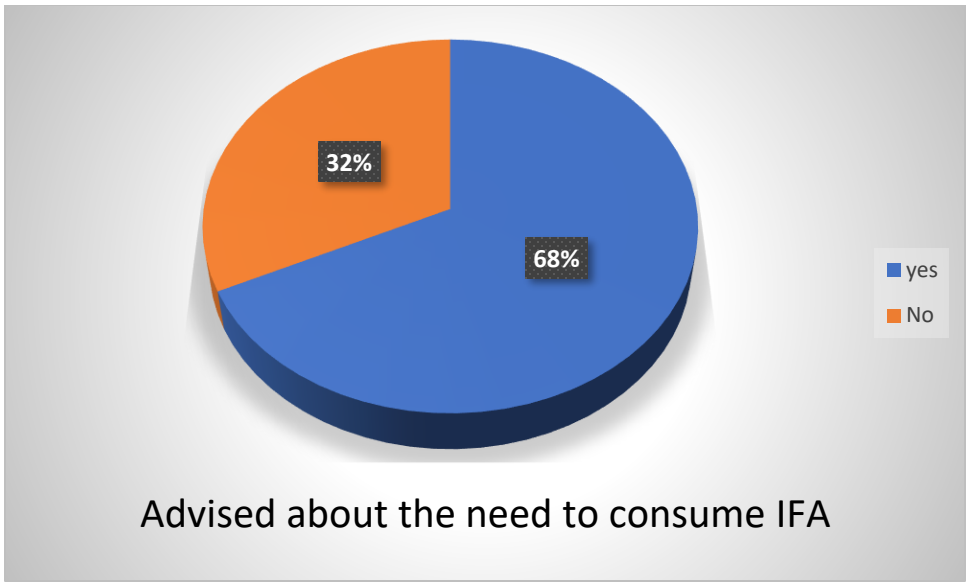

Fig9 Proportion of women who received any advice regarding IFA consumption byFLWs.

There is reduction in the number of counselling related to IFA i.e.68% after seeing the pregnant women who received IFA supplementation.

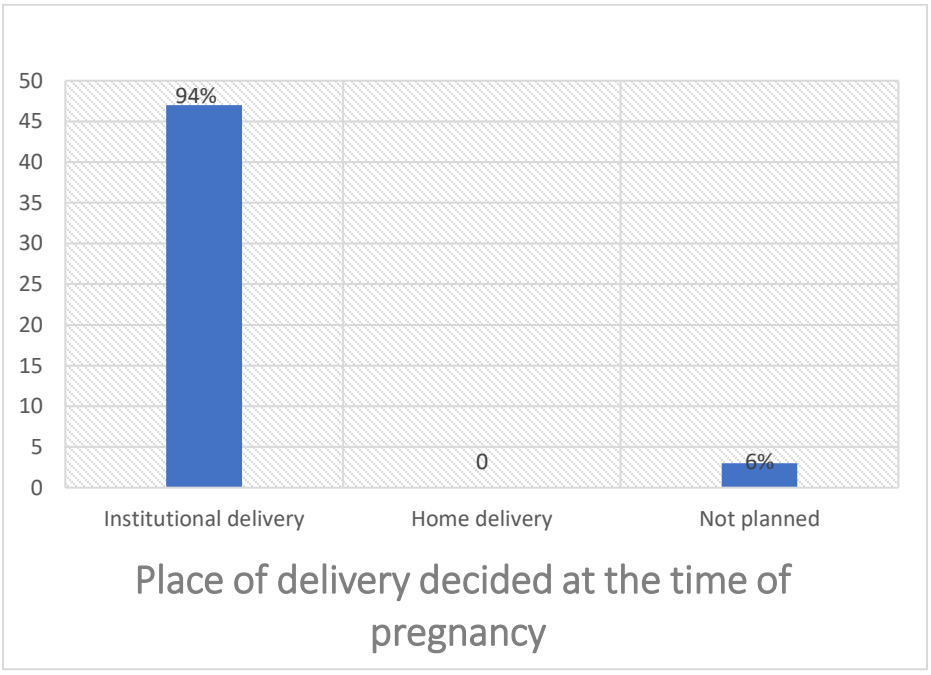

Fig 10. Place of delivery which was decided at the time of pregnancy

A good proportion (94%) of the deliveries were planned to happen in an institution, which is a pretty good trend to be present in the community.

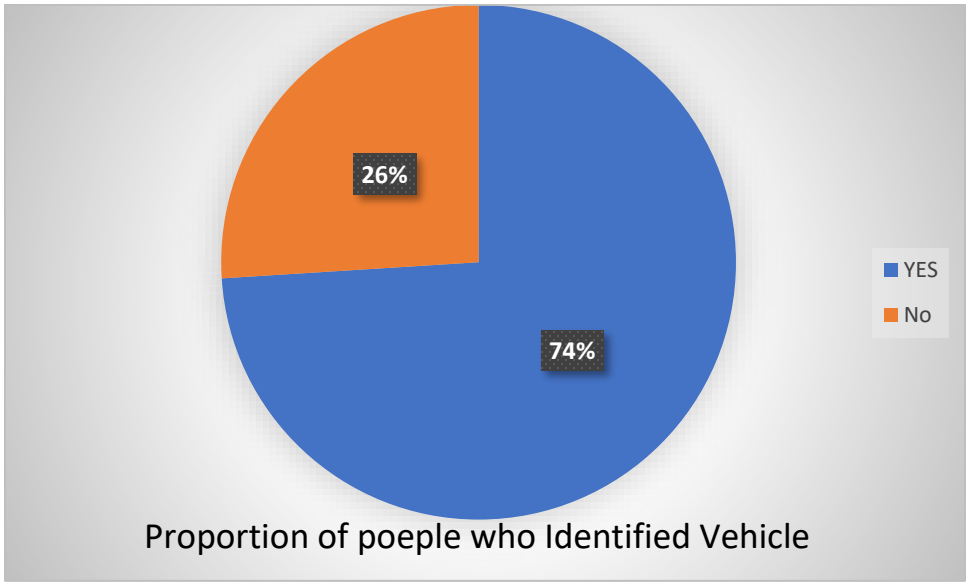

Fig11. Proportion of respondents who identified vehicle

Only 26% were not already prepared with a vehicle identified to take them to the facility for an emergency or delivery.

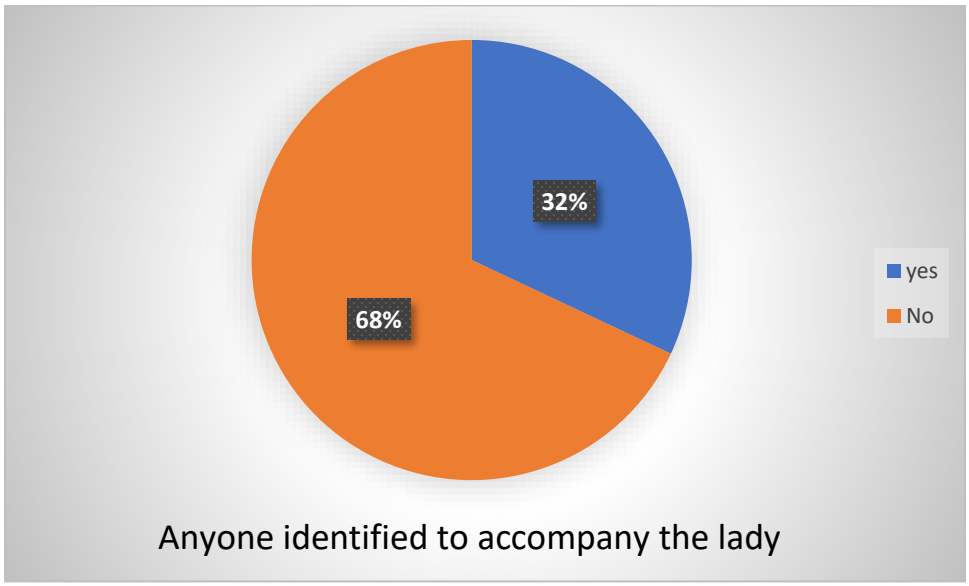

Fig12. Respondents identified to accompany the lady, to the facility or in emergency.

A very small proportion (just 32%)identified a companion for the pregnant lady to the facility, at the time of delivery which is a good figure

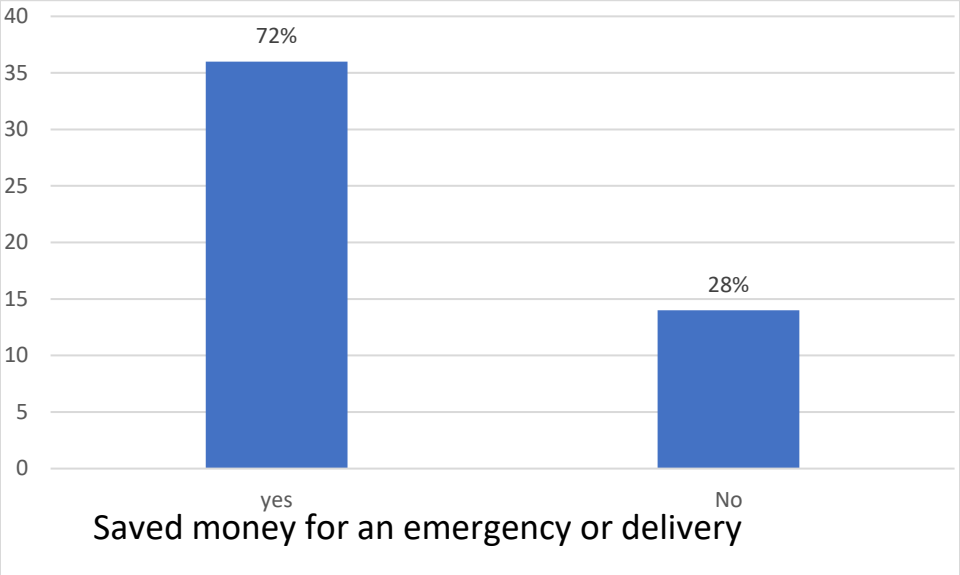

Fig 13 Proportion of respondents who put aside some money at the event of delivery

The figure in terms of birth preparedness was seen in putting aside money for the event of delivery was 72%

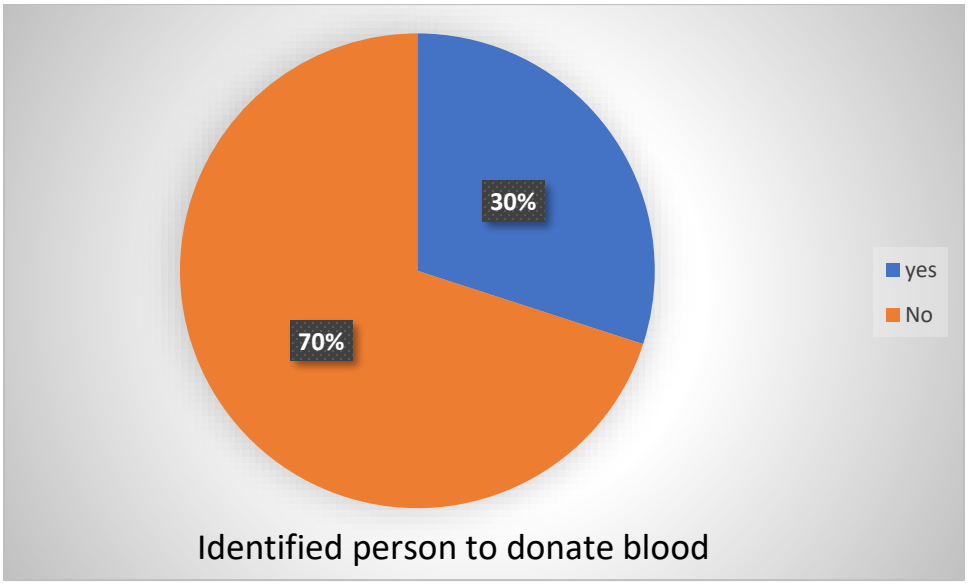

Fig14. Proportion of respondents who identified someone in the family in case blood is required

30 % of the respondents had identified any person for donating blood in case of emergency out of which only 70% haven't identified.

Fig 15. List of things kept ready for an emergency home delivery (*Prasavpoorv kit*)

The only thing that was ready for delivery during pregnancy was a cloth fir the baby.
All other desired materials were missing from the preparations talked about.

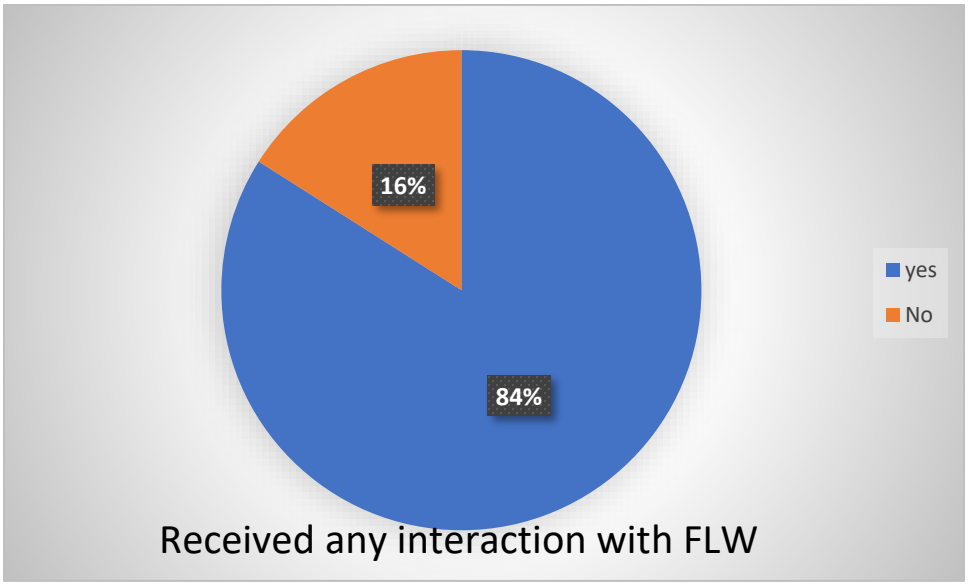

Fig16. Proportion of women who received any interaction from FLWs duringpregnancy.

Just 16% of the of the women did not had a personal interaction with any of the FLWs during

the course of their pregnancy, while rest 84% had any interaction with FLW.

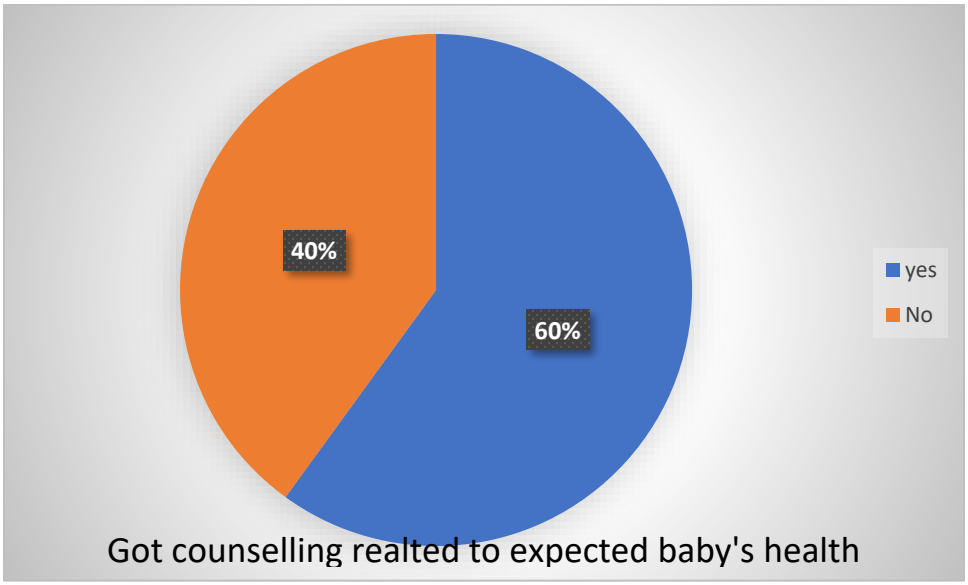

Fig17. Amongst the ones reporting FLW visits, total number of visits by FLWs talking about baby's expected health

Only 60% of women interacted with FLW regarding baby's expected health.

DISCUSSION

Only 72% of the women were aware of their EDD (Expected Date of Delivery) during their pregnancy,amongst which, either they came to know about this through ANM ,orASHA estimated it through friend or relative ; also, 94% of the women interviewed, got their pregnancyregistered, all of which suggests the efficiency and activeness of Front LinesWorkers in the district. Along with this, only about less than half of the interviewed women, everreceived any ANC and amongst them even, only 8.2% received 4 or more ANCs; whichsuggests that the trends of pregnancy-specific care are quite deficient in this village.A good proportion of women (98%) have received TT injections during their pregnancy,although the remaining essentially need to be targeted. While just ,out of 60% of the women consuming IFAduring pregnancy only 40% have continued it post-partum as well. Alongside, merely 10% ofwomen have received an

advice for consuming full course of IFA from FLWs. Thus,the gap in IFA consumption could be a combined effect of the supply side problems inIFA tablets, lack of counselling by FLWs and the side effects caused by it. A propercounselling about the importance of these tablets and the management of side-effectsmay serve a greater purpose in this.A good number, i.e. 94% of the deliveries were planned to be conducted in aninstitution, which is a very important part of birth preparedness. A reason for this mightbe the incentives which are given to ASHA workers for each institutional delivery, dueto which they are highly interested in popularizing this practice.Although a fair proportion of women had planned an institutional delivery in advance,but a relatively lesser proportion could identify a vehicle to reach the facility at the timeof delivery; also, families of a very few women in the study group identified a person toaccompany her to the facility. Money is a necessary requirement to handle thecomplications at the time of delivery, if it occurs, and a figure of 72% for this is a good indicator of birth preparedness in the community.As Similarly cited in the study of Rajesh P et al lack of money and transportation is a barrier for seeking and reaching health care facility. Saving money and arranging transport ahead of time reduce these barriers.

Although most of the women could identify an institution for their delivery, but most of them did not had a back-up plan for handling an emergency at thetime of delivery, and merely any of the women were prepared with a person to assist heror a home delivery, if it was to happen. Even after a robust distribution of *Prasavpoorvtaiyari*kits at the AWCs and a regular use of these kits in VHSNDs for educatingthe women on birth preparedness, there was a highly evident deficiency of keepingthese items ready for the event of delivery.

A lack of FLW interaction is clear in the community, and it is a very bigconcern, as they are a major source of proper information and capacity building of thewomen in a village. Although, atleast amongst the ones who received any interactionfrom FLWs, these interactions were fairly quite frequent, which is still a quite goodpicture, but indicates that the FLWs must be a little biased in her approach for choosinghouseholds for her visits, either on the basis of the distance from her own place of stay orfrom the AWC, or alternatively, based on the caste composition in her area.

CONSLUSION/RECOMMENDATIONS

The various indicators assessed in the study indicate an entire list of issues andproblems associated with birth preparedness and ANC trends amongst the recentlydelivered mothers in Jehanabad. Since the study group was comprised ofmothers who have delivered in the past two months, the study potentially produces anear to present (last year) picture of the ANC and birth preparedness trends in thecommunity.

A major gap was found in the tendency to get the pregnancies registered, and similarwas the state of receiving a sufficient number of ANCs. This should be a major concern,because until a pregnancy is registered, none of the benefits can be given to the pregnantlady.

The trends of TT vaccinations during pregnancy are surely good, but on the contrary,the picture of IFA consumption is not very good. This was further supplemented by alack of counselling by FLWs about IFA supplementation. So, this serves to be ground totarget the deficiencies in the implementation of nutrition-related interventions duringpregnancy. A proper monitoring and regular refresher training of FLWs about thevarious techniques of community mobilization and her home visits can majorly help inimproving these indicators.

A gross deficit was found in the awareness of women about the need to consume iron folic acid tablets during delivery and also after delivery (which showed a decreasing trend during and post delivery). Targeting this by intervening on the VHSNDsand Home visits in particular can aid in improving the picture of maternal morbidity andmortality in the community in particular, by means of enlightening about the importance of consuming IFA and how it can help in increasing the chances of normal delivery .

Although the trends of planning for institutional deliveries are quite good in thecommunity, but in contrast to this, the birth preparedness trends produce a gloomypicture. Birth preparedness

plays a significant role in reducing the chances ofunmanageable pregnancy related emergencies, and a proper counselling by the FLWs is the only way to improve this amongst the population.

Overall, the study suggests a major requirement of capacity building and activeness of FLWs in their areasand brings forward the importance and need for regular home visits to the pregnant women, and the gross need for monitoring and supervision of FLW activities on VHSNDs and her regular day-to-day work , which will serve to improve the picture of malnutrition in the community.

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ANNEXURE

ANTE NATAL CARE AND BIRTH PREPAREDNESS

Q. NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
1	What is the name of your youngest child?	_____ (NAME OF THE CHILD)	
2	Is (NAME) male or female?	MALE ..... 1 FEMALE 2	
3	What is the date of birth of (NAME) and time of birth?	DATE OF BIRTH D D M M Y Y Y Y	
4	Do you have an MCP card or immunization card for (NAME)? **[SHOW CARDS]**	YES .....1 NO..... → 2	
4a	If Yes, "May I see it"	CARD SEEN .....1 CARD NOT SEEN.....2 →	
4b	Is Expected date of delivery written?	YES .....1 NO..... 2	

Q. NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
4c	Is date of maturity (DOM) written?	YES.....1 NO..... 2	
5	When you were pregnant with (NAME), did anybody inform you about your expected date of delivery/ taught you how to calculate EDD?	YES.....1 NO 2	▶
5a	Who?	DOCTOR.....1 NURSE.....2 ANM .....3 ASHA.....4 AWW .....5 /FRIEND/RELATIVE..... ....6 OTHER_____88	
5b	Did he/she tell you about your expected date or taught you how to calculate it?	TOLD YOU THE DATE .....1 TAUGHT YOU HOW TO CALCULATE IT 2	
6	At how many months of pregnancy was (NAME) born	MONTHS OF PREGNANCY .....☐☐ DON'T REMEMBER.....99	
7	When you were pregnant with (NAME), did you register your pregnancy?	YES.....NO 2	
8	In which month did you register your pregnancy?	MONTHS OF PREGNANCY .....☐ DON'T REMEMBER.....99	
9	How many times did you visit for/received antenatalcheck-up (ANC)?	NUMBER OF TIMES ....☐☐ DON'T REMEMBER.....99	

Q. NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
10	During your pregnancy with (NAME) did you take TT injection?	YES .....1 NO .....2 →	
12 a	If yes, how many times did you take a TT injection?	NUMBER OF TIMES ..... DON'T KNOW / DON'T REMEMBER 99	
13	When you were pregnant with (NAME) did you receive tablets of Iron (IFA)?	YES .....1 NO .....2 →	
14	How many of these tablets did you receive in all?	NUMBER OF TABLETS..... DON'T KNOW / DON'T REMEMBER 999	
15	Did you ever consume these IFA tablets?	YES .....NO → 2	
16	From which month of your pregnancy with (NAME) did you start taking these tablets?	MONTH OF PREGNANCY..... DON'T REMEMBER 99	
17	Of the tablets given to you, how many did you consume in all during your pregnancy?	NUMBER OF TABLETS..... ..... DON'T REMEMBER 999	
18	Did you continue taking these tablets after delivery?	YES .....1 NO 2	

Q. NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
19	**[INSTRUCTION: ASK ONLY IF THE WOMAN DID NOT TAKE ALL THE TABLETS SHE WAS GIVEN OR DID NOT CONSUME AT ALL] (CHECK Q214 AND 217.)** Why did you not take all/any tablets that you were given?	DID NOT SEE BENEFIT ..... A FORGOT..... B Didn't liked ..... C LOST THE TABLETS ..... D DELIVERED BEFORE CONSUMING ALL ..... E FORBIDDEN BY FAMILY MEMBERS/RELATIVE/NEIGHBOR/FRIENDS ..... F **SIDE EFFECTS:** CONSTIPATION .....G DIARRHOEA .....H ABDOMINAL DISCOMFORT.....I NAUSEA/VOMITING .....J BLACK STOOLS..... K BLACK TONGUE .....L BLACK SKIN .....M OTHER_____88 (SPECIFY)	
20	Were you ever advised by the ASHA/AWW/ANM about the need to take all the tablets you were given?	YES.....1 NO 2	
21	When you were pregnant with (NAME), did you take any other tablets or tonic or injection for IFA (for making your blood strong), other than the tablets that I showed you? ,	YESNO a. TABLETS ..... 1 2 b. SYRUP ..... 1 2 c. INJECTION ..... 1 2 other _____88	
22	From where you got those?	PRIVATE DOCTOR.....A PHARMACY .....B GOVT HOSPITAL.....C OTHER_____88 (SPECIFY)	
22a	During last pregnancy, did you receive Calcium tablets (show and ask)?	YES ..... 1 NO..... 2 →	

Q. NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
22b	How many such tablets did you receive and how many did you consume during your last pregnancy?	NUMBER OF TABLETS (RECEIVED) ... .☐☐☐ DON'T REMEMBER (RECEIVED) .....998 NUMBER OF TABLETS (CONSUMED) . .....☐☐☐ DON'T REMEMBER (CONSUMED) 999	
INSTRUCTION: Now I would like to ask you about the planning and preparedness of delivery during your pregnancy.			
23	When you were pregnant with name where d**id you plan to deliver, at home or in an institution?**	AT HOME .....1 → IN AN INSTITUTION .....2 NOT PLANNED .....3 →	
24	In which health facility you or your family member planned to have delivery?	MEDICAL COLLEGE .....1 DISTRICT HOSPITAL .....2 SDH/FRU .....3 PHC.....4 CHC .....5 APHC / SUBCENTER .....6 PRIVATE HOSPITAL / CLINIC.....7 OTHER_____88 (SPECIFY)	
25	Had you or your familyidentified vehicle in advance that you would use to reach health facility?	YES .....1 NO.....2 →	
26	Which vehicle did you identify?	AMBULANCE.....1 JEEP/CAR .....2 MOTORCYCLE/SCOOTER .....3 BUS/TRAIN .....4 TEMPO/AUTO/TRACTOR.....5 /CART/RICKSHAW.....6 BICYCLE.....7 ?)	
27	When you were pregnant with (NAME), did you or your family identify one or more persons who would accompany you to a health facility for delivery or in case of emergency?	YES .....1 NO 2	

Q. NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
28	When you were pregnant with (NAME), did you or your family identify anybody in advance for donating blood in case of emergency?	YES .....1 NO 2	
29	When you were pregnant with (NAME), did you or your family put aside money specially for use during delivery or in an emergency?	YES .....1 NO 2	
30	Had you identified any specific facility to go to in case you experienced a serious emergency during your pregnancy or delivery?	YES .....1 NO .....2 →	
31	Which one did you identify?	MEDICAL COLLEGE .....1 DISTRICT HOSPITAL .....2 SDH/FRU .....3PHC .....4 CHC .....5 APHC / SUBCENTER .....6 PRIVATE HOSPITAL / CLINIC .....7 OTHER _____ 88 (SPECIFY)	
32	In case of emergency, had you identified vehicle in advance that you would use to reach health facility??	YES .....1 NO .....2 →	
33	Which vehicle did you identify?	AMBULANCE .....1 JEEP/CAR .....2 MOTORCYCLE/SCOOTER .....3 BUS/TRAIN .....4 TEMPO/AUTO/TRACTOR .....5 CART/RICKSHAW .....6 BICYCLE .....7 OTHER _____ 88 (SPECIFY)	
34	When you were pregnant with (NAME), did you or your family identify one or more persons who could accompany you in case of emergency to visit a health facility?	YES .....1 NO 2	

Q. NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
35	When you were pregnant with (NAME), was any amount of money kept aside for the purpose related to delivery and allied emergency? Did you kept the things required for an emergency home delivery (*Prasavpoorvkit*) kept ready?	YES .....1 NO .....2 DDK..... New blade…….. New clean thread…… Soap…… Clean cloth for child…….. Clean cloth pad for mother…….	

Questions related to FLW's

		A. ASHA	B. AWW	C. ANM
36	When you were pregnant with (NAME) did ASHA / AWW/ANM come to your home to meet you anytime during the pregnancy?	YES ..... NO.....	YES ..... 1 NO 2	YES ..... 1 NO 2
37	At any time during the pregnancy, did (ASHA/AWW/ANM) ever come to your home to talk to you about you or your expected baby's health?	.....		.....
38	How many times did the (ASHA/AWW/ANM) visit you at home to talk to you about you or your baby's health in the last three months of your pregnancy?	☐☐	☐☐	☐☐