Internship Training

At

INDIA HEALTH ACTION TRUST

A Study To Assess the Availability & Quality of ANC services provided at village health and nutrition day in Budaun District Of Uttar Pradesh

By

DR. PARDEEP KUMAR

PG/15/053

Under the guidance of

DR. B.S. SINGH

Post Graduate Diploma in Hospital and Health Management

2015-17



International Institute of Health Management Research New Delhi

1

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Pardeep kumar student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi, has undergone internship training at India Health Action Trust from February 2017 to April 2017.

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

The Internship is in fulfilment of the course requirements.

I wish him all success in all his future endeavours.

Dr. A.K. Agarwal Dean, Academics and Student Affairs IIHMR, New Delhi

Dr. B.S Singh Associate Professor IIHMR, New Delhi

2



(Completion of Dissertation from India Health Action Trust)

INDIAN HEALTH ACTION TR

UP TSU : H.No. 33, Green Park Bisalpur Road, Bareilly U.P. 243005 Phone : 0581-2520019

The certificate is awarded to

Dr. Pardeep Kumar

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

RMNCH+A

Has successfully completed his Project on

A Study To Assess the Availability & Quality of ANC services provided at village health and nutrition day in Budaun District Of Uttar Pradesh

From February to April 2017

He comes across as a committed, sincere & diligent person who has a strong drive & zeal for learning. We wish him all the best for future endeavours





State Off. : No. 505, 5th Floor, No. 20-A, Ratan Square, Vidhan Sabha Marg, Lucknow-226001, Uttar Pradsh Ph : 0522-4022339

Certificate of Approval

The following dissertation titled "A Study To Assess the Availability & Quality of ANC services provided at village health and nutrition day in Budaun District Of Uttar Pradesh" at "International Institute of Health Management Research, New Delhi is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of Post Graduate Diploma in Health and Hospital Management for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name DI KS Baghethe DIVA AGGARW

Signature

4

UP TSU : H.No. 33, Green Park Bisalpur Road, Bareilly U.P. 243005 Phone : 0581-2520019

Certificate from Dissertation Advisory Committee

This is to certify that Dr. Pardeep kumar, a graduate student of the Post- Graduate Diploma in Health and Hospital Management has worked under our guidance and supervision. He is submitting this dissertation titled "A Study To Assess the Availability & Quality of ANC services provided at village health and nutrition day in Budaun District Of Uttar Pradesh" at "IHAT" in partial fulfilment of the requirements for the award of the Post-Graduate Diploma in Health and Hospital Management.

This dissertation has the requisite standard and to the best of our knowledge, no part of it has been reproduced from any other dissertation, monograph, report or book.

Dr. B.S Singh Associate Professor



State Off. : No. 505, 5th Floor, No. 20-A, Ratan Square, Vidhan Sabha Marg, Lucknow-226001, Uttar Pradsh Ph : 0522-4022339

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH, NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "A Study To Assess the Availability & Quality of ANC services provided at village health and nutrition day in Budaun District Of Uttar Pradesh" and submitted by Pardeep kumar, Enrollment No. PG/15/053 under the supervision of Dr. B.S Singh, Associate Professor-IIHMR, New Delhi for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from February 2017 to April 2017embodies 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.

Radel

Signature

6

FEEDBACK FORM

INDIAN HEALTH ACTION TR

UP TSU : H.No. 33, Green Park Bisalpur Road, Bareilly U.P. 243005 Phone : 0581-2520019

JST

Name of the Student: Pardeep Kumar

Dissertation Organisation: India Health Action Trust

Area of Dissertation: RMNCH+A

Attendance: Full

Objectives achieved:

- Training of NM/ANM on VHND session 0
- Visits to Sub center/Anganwadi centres/ School for observation and assessment Participation in Districts, Block and Zonal Meetings held by an organization

Strengths:

- Hard working and sincere
- Always complete tasks with full dedication .
- Good analytical and communication skills .
- Good Team player .

Suggestions for Improvement: No



(Zonal Fechnical Specialist) Date: 09 May 2017

Place: Bareilly

State Off. : No. 505, 5th Floor, No. 20-A, Ratan Square, Vidhan Sabha Marg, Lucknow-226001, Uttar Pradsh Ph: 0522-4022339

PREFACE

The PGDHM (hospital and health management) course is well structured and integrated course of business studies. The main objectives of practical training at MBA level is to develop skill in students by supplement to the theoretical study of business management in general. Professors give us theoretical knowledge of various subjects in the institute. But we are practically exposed of such subjects when we get the training in the organization. It is the training through which we come to know that what an organization is and how it works. During this whole training I got a lot of experience and came to know about management practices in real that how it differs from those of theoretical knowledge and the practically in the real life.

It's very beneficial to learn health care delivery system at various levels. I observed the implementation of various National Health Programmes at National/State/District levels, I understood various functions of health systems by interactions with key stakeholders, policy makers, programme managers, academicians and researchers.

During my training period I had an overview of various programmes undertaken by Uttar Pradesh Technical Support Unit including the current status of the programmes. I also carried out a small study on-

"A Study To Assess the Availability & Quality of ANC services provided at village health and nutrition day in Budaun District Of Uttar Pradesh"

I have tried to put my best effort to complete this task on the basis of skill that I have achieved during my studies in the institute.

ACKNOWLEDGEMENT

At the onset of the report I would like to express my special gratitude and appreciation for my college authorities for allowing me to pursue my Dissertation from India Health Action Trust, also own as Uttar Pradesh (Technical Support Unit).

I would like to extend my special gratitude for my mentor, Dr.B.S Singh, for helping me in my dissertation and guiding me throughout the process.

I would also like to acknowledge with much appreciation the crucial role of Mr. Sanjivkumar, State Team Leader (RMNCH+A Project), UP (TSU) and Dr. Amritesh Mullick, Zonal Technical Specialist, UP (TSU) who despite of other pre occupations and busy schedule were there to guide me and whose stimulating suggestions and encouragement helped me complete my training.

So I would like to thank all the consultants in various departments and other staff members at IHAT for being so helpful all the time and making this Dissertation project an unforgettable experience.

A special thanks to Mr VikasGothalwal, Exexutive Director, Mr Sanjeev (Team leader), Dr. Seema and Thirumalai N. (M&E Specialist) UP TSU.

Finally, and most importantly, I would like to thank God for allowing me to complete my project, my beloved parents for their blessings and my friends for their help and wishes for the successful completion of this training.

Table of Contents

<u>Sr.No</u>	Contents	Page No
	Preface	8
	Acknowledgement	9
	Abbreviations	16
	Abstract	19
	Organization Background	21
	Introduction to the project	28
	Background	
	Problem Statement	
	Rationale for study	
	Review of Literature	32
	Research Question and Objectives	37
	Methodology	38
	Study type	
	Study duration	
	Study area	
	Sampling procedure	
	Study respondents	

	Sample Size	
	Tools and techniques	
	Data analysis	42
•	Discussion	55
•	Conclusions	56
•	Recommendation	57
•	References	58
•	Annexure:	59-63
	Consent form	
	Interview schedule	

List of tables

Serial number	Title	Page number
A	Assess the availability of prescribed services for Pregnant Women on VHND (Village Health Nutrition Day) as per the guideline and their findings	
A.1	Percentage of pregnant women whose weight was measured at VHND visit	42
A.2	Percentage of pregnant women whose B.P was measured at VHND visit	43
A.3	Percentage of pregnant women whose urine sugar and urine	44
	albumin test is being measured at VHND visit	
A.4	Percentage of pregnant women who received TT dose at	45
	VHND visit	
A.5	Percentage of pregnant women who received > 180 IFA at	46
	VHND visit	
В	Assess the quality of services provided to pregnant woman	
	as per guideline mentioned and findings are given below	
B.1	Percentage of pregnant women whose relevant history	48
	(obstetric/past/ menstrual) was to be taken	
B.2	Percentage of VHND sessions where privacy during	49
	examination was maintained	
B.3	Percentage of VHND sessions where	50
	sphygmomanometer/Digital B.P apparatus was functional	
B.4	Percentage of VHND session where Hb estimation is done	51
	using Sahli-Adams tube/ Rapid Diagnostic Test Kit	
B.5	Percentage of women whose abdominal palpation for	52
	determining fundal height, foetal length done and recorded	

B.6	Percentage of women whose foetal heart sound examined /	53
	auscultated and recorded in MCP Card	
B.7	Percentage of women who was counseled for danger signs	54
	and action to be taken during pregnancy	

List of figures

Serial number	Title	Page number
A	Assess the availability of prescribed services for Pregnant Women on VHND (Village Health Nutrition Day) as per the guideline and their findings	
A.1	Percentage of pregnant women whose weight was measured at VHND visit	43
A.2	Percentage of pregnant women whose B.P was measured at VHND visit	44
A.3	Percentage of pregnant women whose urine sugar and urine albumin test is being measured at VHND visit	45
A.4	Percentage of pregnant women who received TT dose at VHND Visit	46
A.5	Percentage of pregnant women who received > 180 IFA at VHND visit	47
В	Assess the quality of services provided to pregnant woman as per guideline mentioned and findings are given below	
B.1	Percentage of pregnant women whose relevant history (obstetric/past/ menstrual) was to be taken	48
B.2	Percentage of VHND sessions where privacy during examination was maintained	49
B.3	Percentage of VHND sessions where sphygmomanometer/Digital B.P apparatus was functional	50
B.4	Percentage of VHND session where Hb estimation is done using Sahli-Adams tube/ Rapid Diagnostic Test Kit	51

B.5	Percentage of women whose abdominal palpation for determining fundal height, foetal length done and recorded	52
B.6	Percentage of women whose foetal heart sound examined / auscultated and recorded in MCP Card	53
B.7	Percentage of women who was counseled for danger signs and action to be taken during pregnancy	54

ABBREVIATIONS

Abbreviation	Full form of abbreviation
ASHA	Anganwadicentre
ANM	Auxilliary nurse midwife
AWW	Anganwadi worker
AWC	Anganwadicentre
ANC	Antenatal care
ARSH	Adolescent reproductive and sexual health
BCC	Behaviour change communication
BPM	Block program manager
B.P	Blood pressure
ВСРМ	Block community program manager
CHW	Community health workers
СНС	Community health center
FLW	Front line health workers
FRU	First referral unit
GoUP	Government of Uttar Pradesh
H.B	Haemoglobin

ICDS	Integrated child development services
IEC	Information, education, communication
IFA	Iron folic acid
IHAT	India health action trust
MCP CARD	Mother child protection card
MIYCN	Mother infant young child and neonatal
NHED	Nutrition health and education demonstration
NRC	Nutritional rehabilitation center
NRHM	National rural health mission
NM	Nurse mentor
ОСР	Oral contraceptive pills
PMW	Para medical workers
РНС	Primary health center
RKS	Rogikalyansamiti
RMNCH+A	Reproductive maternal neonatal child health and adolescent
TT	Tetanustoxoid
TSU	Technical support unit
SC	Sub center

UM	University of Manitoba
VHSNC	Village health sanitation and nutrition committee
WIFS	Weekly iron folic supplement
WASH	Water, sanitation and hygiene
UPTSU	Uttar Pradesh technical support unit
VHND	Village health and nutrition day

<u>Abstract</u>

Village Health and Nutrition Days (VHND) were introduced by the National Rural Health Mission (NRHM) to improve access to essential maternal, new-born, child health and nutrition services at village level. Purpose of the study was to assess quality and availability of ANC services on VHND sessionin Budaun District of U.P for rural pregnant women and to estimate utilization of the services in beneficiaries and any gaps thereof. A descriptive cross-sectional study with convenient sampling design was undertaken in rural areas of Budaun Districtblock from February 2017 to April 2017 with sample size of 64 pregnant women. They were interviewed using a pre-designed and pre-tested semi structured questionnaire. 86% of the respondents were aware of services provided in VHND, 14% respondents were not aware. Major findings was that 14(22%) of pregnant women observed, who didn't get any TT dose by ANM and 12(75%) of the VHND session observed where privacy during examination was not maintained due to this no abdominal examination was done by ANM. . Moreover, 5(32%) of the VHND session observed where digital B.P apparatus was not functional and 19(30%) of pregnant women who was not counselled about danger signs during pregnancy. This clearly showed that lack of ANC services given by ANM, either due to lack of knowledge or improper logistics supply of medicines and equipment.

Services in VHND were not utilized to the optimal extent by beneficiary pregnant women. Gaps in utilization of services were found mainly in relation to antenatal care.Monitoring and supervision need to be regularized for effective organisation of VHND by Village Health Nutrition and Sanitation committee (VHNSC) which was not supportive. Skill building training of the frontline health workers with emphasis on quality of care in service delivery can be useful to optimize the utilization of the available services in VHND as presence of all the three frontline health workers (ASHA, ANM and AWW) is critical for provision of the intended package of services in VHND.

ORGANIZATION PROFILE

UTTAR PRADESH TECHNICAL SUPPORT UNIT

INDIA HEALTH ACTION TRUST, UTTAR RADESH

BACKGROUND

A Technical Support Unit (TSU) is established for the Government of Uttar Pradesh (GoUP), with the goal of providing techno-managerial support to the GoUP to improve the efficiency, effectiveness and equity of delivery of key RMNCHA interventions. This will be accomplished by supporting the state in the implementation of the nationally launched NRHM RMNCH+A strategy, and in the scale-up of agriculture and financial inclusion services.

The TSU's activities will be focused on the twenty-five most underserved districts in the state, where the aim is to improve RMNCHN service delivery and outcomes within 100 priority blocks. These districts have been selected and agreed upon jointly by GOI, GoUP and the foundation.

The India Health Action Trust (IHAT) will have overall responsibility for executing the TSU project in Uttar Pradesh. The University of Manitoba (UM) will provide key technical and managerial support to all RMNCHN areas, and financial inclusion/agriculture. John Snow International Research & Training Institute Inc. (JSI) will provide technical inputs in the areas of strategic planning and donor/stakeholder coordination, supply/cold chain management, new born care, and immunization. The JSI will also facilitate linkages and alignment of project activities to the Government of India (GoI) policies by providing support at national level.

ORIGIN AND HISTORY

Uttar Pradesh is India's most populous state, with approximately 200 million people, and with weak health infrastructure and poor health outcomes. There is a tremendous opportunity to improve the state execution capacity to enhance the efficiency, effectiveness and equity in health and development. This is the basis upon which the Bill & Melinda Gates Foundation (the foundation) has collaborated to provide technomanagerial assistance to the Government of Uttar Pradesh (GoUP) and this proposed to set up a Technical Support Unit (TSU) to execute against the Memorandum of Cooperation (MoC) signed by the foundation and GoUP in December 2012. The Government of India (GoI) has launched a renewed campaign to improve RMNCH+A performance across India, and the GoUP has followed up the national launch with its own show of commitment through the state RMNCH+A effort.

VISION

To reduce the adverse health and development outcomes to families, mothers, newborns and children by achieving high reach, coverage and quality of effective interventions and services for health (reproductive, maternal, neonatal and child health and nutrition in communities and at health facilities), agriculture and financial inclusion

MISSION

The mission of the TSU is to support the government, not to implement on its own. Building the capacity of the health system to execute according to its own mandate, with strong political, bureaucratic and administrative ownership

OBJECTIVES:

The key **objectives** of the project are to:

- Support the GoUP to improve the quality and quantity of FLW interactions at the community level and within households to drive the eight priority RMNCHA behaviors
- Support GoUP in improving its RMNCHA related primary care services at facilities.
- Support GoUP to improve strategies and systems required to deliver improved FLW capabilities and service delivery at primary care facilities
- Support the GoUP in improving its capacity to fund, contract, and regulate/ mandate private providers
- Support the GoUP in improving the scale and quality of community accountability mechanisms.

CORE VALUES:

The four core values to address the major barriers like poor accountability, poor focus on outcomes, lack of skilful planning and poor policies are as follows:

- 1. Efforts to improve leadership and outcome-focus by ensuring bureaucratic ownership of innovations, strong political will under the foundation-GoUP MOU.
- Strengthening of internal and external accountability mechanisms through developing strong coaching, mentoring and supervisory systems within NRHM and the Directorate of Health/Family Welfare in the GoUP and by creating concurrent monitoring systems using data, dashboards and feedback loops to effect mid-course corrections.

- 3. Improving the skills and capabilities for FLW and primary care performance by ensuring trainings are conducted with high quality by GoUP and the skills and practices are enhanced through appropriate supportive supervision mechanisms and use of Information Communication Technology (ICT) based solutions to improve FLW and facility performance.
- 4. Improving policy, planning and coordination by improving private sector stewardship, funding and contracting processes (such as providers for family planning services, developing new incentive schemes and contracting more management capacity out to the private sector for issues like accreditation), supply chain and G2P (Government to person) payment improvements, select human resource and infrastructure improvements at the field level, better annual planning and fund flow mechanisms.

STRATEGIES

Six structural components which define the *modus operandi* of the TSU have been identified as follows:

- <u>Strengthen FLW skills/capabilities</u>: Strengthen FLW skills/capabilities through supportive supervision and job-aids to improve quality and quantity of interactions in households, at VHNDs and facilities, to increase service access and improve the eight key behaviors around MNCH, nutrition, and FP.
- 2. <u>Build skills/capabilities of providers at facilities</u>: Improve availability of services and quality of care at first level facilities (e.g., block PHCs) and referral facilities by offering improved training and on-site skills building (e.g., nurse mentors and skills labs) combined with improved case sheets, checklists and workflow management tools.
- 3. <u>Improve health system management capabilities</u> to support efficient and effective execution to support the above two areas.
- Ensure robust project planning and funds flow (e.g., PIP processes)
- Establish appropriate roles and responsibilities for supportive supervision at the block, district and state levels
- Leverage ICT to improve data, dis-intermediation, demand and to drive performance efficiencies, especially among FLWs and facilities

- Create robust systems for data collection, analysis, and planning to improve management of the program (e.g., MCTS, HMIS)
- Create robust concurrent monitoring systems to validate data collection by the system and feedback information for immediate and mid-course correction
- Assist the government to execute existing incentive schemes at scale by improving data management, planning and streamlining payment systems
- 4. Support <u>critical infrastructure improvements at the health system</u> level in collaboration with other DPs: support select cross-cutting areas of the health system that act as critical bottlenecks to the first two areas listed above
- Improve supply chain and cold chain management to minimize stock out of essential drugs
- In our role as the state lead partner, ensure alignment with donor/partner efforts in the state; coordinate with other 'units' to catalyze the overall response especially around creating critical infrastructure (e.g. PHCs, FRUs) and HR (staff nurses, supervisors, etc.)
- 5. <u>Improve the government's ability to be better stewards of the private sector, through better management and contracting approaches:</u>
- Assist the government with devising and executing schemes and contracts to outsource select provision to the private sector (e.g., ORS/Zinc scheme to improve distribution, institutional deliveries, clinical services for FP, 'outsourced' management of FRU staff through 'mother NGOs')
- Assist with improving accreditation and payment systems to enable private providers to be paid by the government to increase coverage – e.g., contracting of agencies (such as Public Private Interface Agencies) to oversee accreditation processes and to streamline their function.
- Explore potential options for a primary care pilot involving government and private providers under a capitation-based model
- Work with the World Bank, UNICEF and other partners to ensure harmonization of efforts with other public private partnership (PPP) efforts in the state
- 6. Enable accountability measures to provide feedback on quality of services, <u>improve</u> <u>external accountability</u> and hence drive program change.
- The NRHM construct includes an external accountability framework that includes social audits and involvement of democratic grass root institutions (Panchayati Raj

Institutions) and grievance redressal mechanisms. While progress has been slow, senior politicians and bureaucrats are committed to this vision.

 We would support government to strengthen the functioning of existing governmentmandated accountability structures such as Village Health and Sanitation Committees (VHSCs), RKS (RogiKalyanSamiti) and grievance redressal mechanisms, where beneficiaries can directly register/log their complaints. Our grants would provide state level technical assistance for the state government to contract NGOs to build VHSC capabilities as has been done in other states.

UTTAR PRADESH'S TECHNICAL SUPPORT UNIT -RMNCH+A PROJECT

RMNCH+A:

India has among the highest maternal mortality ratios and infant mortality rates in the world, at 178 maternal deaths per 100,000 live births and 41 infant deaths per 1,000 live births (Sample Registration System, 2013 and NFHS-4). Among all Indian states, Uttar Pradesh, with one sixth of India's population (200 million) has the highest maternal mortality ratio (258 per 100,000 births), and the highest infant mortality (64 per 1,000 live births). One of the main underlying causes of high morbidity and mortality among women and children is the health risk associated with early childbearing, short birth intervals and high parity, often higher than desired. Given this, the Government of India (GoI) has launched a renewed campaign to improve RMNCH+A performance across India, and the GoUP has followed up the national launch with its own show of commitment through the state RMNCH+A effort, and the launch of the 'Hausla' campaign to save mothers and children across the state. A major emphasis of the Government of Uttar Pradesh (GoUP) has been investment in health and development focused on reproductive, maternal, newborn and child health, along with adolescent health (RMNCH+A) through the National Health Mission. To support this, the GoUP recognized that enhancement of the state's execution capacity through better planning and implementation could improve the efficiency, effectiveness and equity of RMNCH+A services, and thereby improve health and development outcomes.

Given this, the GoUP approached the Bill & Melinda Gates Foundation (the Foundation) to provide techno-managerial assistance through the establishment of a

comprehensive Technical Support Unit (TSU) focused on supporting the GoUP to reach its goals in RMNCH+A.

In November 2013, IHAT established a TSU to support the government of UP to increase the efficiency, effectiveness and equity of its execution vis-à-vis the three platforms identified in the Foundation's ICO (India Country Office) strategy for integrated delivery: the government, the private sector, and communities.

The objectives are:

- Support leadership to focus more on outcomes
- Improve the performance of front-line workers (FLW)
- Improve facility performance, coverage and quality of care
- Enhance accountability systems [internal and external] to ensure quality of service delivery at scale
- Improve overall planning, policy formulation and coordination

RMNCH+A project aims to support GoUP in improving the quality and quantity of frontline worker interactions at the community level and within households to drive the priority RMNCH+A behaviours. It also focuses on improving quality of RMNCH+A services at health facilities including supporting critical health systems level improvements.

The project leverages across three platforms of community, facility and systems to provide the necessary support to the functionaries for bringing in a holistic change in acceptance of health-promoting behaviours for RMNCH+A. At each level, technomanagerial support is provided to not only understand the bottlenecks but also undertake hand holding of the necessary intervention.

RMNCH+A approach looks to address the major causes of mortality among women and children as well as the delays in accessing and utilizing health care and services. The RMNCH+A strategic approach has been developed to provide an understanding of 'continuum of care' to ensure equal focus on various life stages. Priority interventions for each thematic area have been included in this to ensure that the linkages between them are contextualized to the same and consecutive life stage. It also introduces new initiatives like the use of Score Card to track the performance, National Iron + Initiative to address the issue of anaemia across all age groups and the Comprehensive Screening and Earlyinterventions for defects at birth , diseases and deficiencies among children and adolescents. The RMNCH+A appropriately directs the States to focus their efforts on the most vulnerable population and disadvantaged groups in the country. It also emphasizes on the need to reinforce efforts in those poor performing districts that have already been identified as the high focus districts.

Introduction

"Healthy Mothers and Children's are the real wealth of Societies."

(WHO)

Pregnancy and Child birth are special events in women's lives and indeed in the lives of their families. This can be a time of great hope and joyful anticipation. The primary aim of antenatal care is to achieve, at the end of pregnancy, a healthy mother and healthy baby. The quality of care is more important than the quantity. Pregnancy requires specialized care generally agreed to preventive activity.

Antenatal care is the systemic medical supervision of women during pregnancy. Its aim is to preserve the physiological aspect of pregnancy and labour and to prevent or detect, as early as possible, all that is pathological. Early diagnosis during pregnancy can prevent maternal ill-health, injury, maternal mortality, foetal death, infant mortality and morbidity. Hence, the earlier in pregnancy a woman comes under the supervision of an obstetrician, the better. (Sheila Haldipu 2004)

Antenatal care refers to pregnancy related health care provided by a doctor or a health worker in medical facility or at home. Antenatal care should monitor a pregnancy for signs of complication detect and treat pre-existing and concurrent problems of pregnancy. It should also provide advice and counseling or preventive care, diet during pregnancy, delivery care, postnatal care and related issues. An antenatal care is necessary for ensuring a healthy mother and baby at the end of gestation. The antenatal period is a time of physical and psychological preparation of birth and parenthood. Becoming a parent is a time of intense learning both for parents and for those close to them. (**Dutta**)

Promotion of maternal and child health has been one of the most important components of the family Welfare Programme of the Government of India and the National Population Policy – 2000. One of the most important component of antenatal care is to offer information and advice to women about pregnancy related complication and possible curative measures for early detection and management of complications. Antenatal care can also play a critical role in preparing a woman and her family for birth by establishing confidence between the woman and her health care provider and by individualizing promotional health messages. Antenatal care is

considered essential for health of both the mother and the child, it is important to analyze the possible factors contributing to its utilization. (**N. C. Saxena 2005**).

The list of any civilization is the measure of consideration and care, which it gives to its weaker sections. In any community, women are especially vulnerable during pregnancy. India has among the highest maternal mortality ratios and infant mortality rates in the world, at 178 maternal deaths per 100,000 live births and 41 infant deaths per 1,000 live births (Sample Registration System, 2013 and NFHS-4). Among all Indian states, Uttar Pradesh, with one sixth of India's population (200 million) has the highest maternal mortality ratio (292 per 100,000 births), and the highest infant mortality (64 per 1,000 live births). One of the main underlying causes of high morbidity and mortality among women and children is the health risk associated with early childbearing. Not follow up forAntenatal care leads to poor maternal health status, complication during pregnancy and risk.

Maternal care includes care during pregnancy and should begin from the early stages of pregnancy. Women can success antenatal care service either by visiting a health centre where such services are available or from health workers during their domiciliary visits. One of the most important components of antenatal care is to offer information and advice to women about pregnancy related complication and possible curative measures for early detection and management of complication. Antenatal care can also play a critical role in preparing a woman and her family for birth by establishing confidence between the woman and her health care provider and by individualizing promotional health messages. (Balwan S Dhillon 2006)

Effective antenatal care can improve the health of the mother and give her a chance to deliver a healthy baby. Regular monitoring during pregnancy can help detect the complication at an early stage before they become life – threatening emergency. However, one must realize that even the most effective scanning tools currently available, one cannot predict which will develop pregnancy related complication. Hence, every pregnant women needs special care. (Manchanda 2005)

Problem statement

Health systems are most effective when health workers are skilled, motivated, and trained to provide high-quality services. Front line health worker's knowledge is one of the crucial aspects of health system to improve the coverage of community based health care programmes and for better service delivery.

The knowledge of pregnant women and frontline workers regarding antenatal care and their compliance to it is one of paramount importance in preventing maternal and infant mortality rate and morbidity.

A study conducted at Safdarjang Hospital New Delhi by ICMR revealed that as 42.6% of perinatal death could be attributed to preventable causes which are directly or indirectly related to maternal disease, complications of pregnancy and methods of delivery (Daftary& Mehta 1984).

One of the study conducted in Chhattisgarh showed an alarming deficiencies in knowledge and performances of skill of the ANMs in relating to antenatal and intranatal care service delivery.

If we are looking at the data fact sheet of NFHS-4 of Budaun District of U.P, this shows very low indicators and poor performance of maternal health care includes antenatal care, consumption of folic acid by pregnant women, full ANC check-ups etc.

Maternity Care	Rural	Total
	(percentage)	(NFHS
		2015-16)
Mothers who had antenatal check-up in the first	35.2	40
trimester (%)		
Mothers who had at least antenatal care visits (%)	7.3	12.6
Mothers whose last birth was protected against	80.3	81.3
neonatal tetanus		
Mothers who consumed iron folic acid for 100 days	7.8	12.3
or more when they were pregnant (%)		
Mothers who had full antenatal care (%)	1.5	5.6
Registered pregnancies for which the mother	79.7	78.7
received Mother and Child Protection (MCP) card		
(%)		

Poor utilization of services reflects cultural and socio – economic constraints as well as perceptions regarding accessibility of facilities and quality of care. Nearly 64.00% of women who did not utilize antenatal services consider it unnecessary reflecting both the traditional notion that child bearing is not an event worthy of medical attention.

The purpose of the study is to identify the knowledge of frontlines workers and availability of services for pregnant women regarding different aspects of antenatal care such as diet, antenatal check-ups, immunization, adequate sleep and rest, exercise, hygiene, breast care, breastfeeding, danger sign and complications of pregnancy to make recommendations to enhance the availability and quality of antenatal care by improving the delivery of antenatal services(both quality and quantity) if they are less; and to continue with the present antenatal service rendering status if the knowledge, practices and availability of services are adequate.

Thus the investigator (ME) felt the needs to explore this area and to assess the knowledge of frontlines workers and availability of services with quality for pregnant women regarding antenatal care at VHND session.

Review of literature

A review of literature is an essential aspect of scientific study. It involves the systematic identification, location, scrutiny and summary of written materials that contains information on a research problem. It broadens the views of the investigator regarding the problem under investigation, helps in focusing on the issues specifically concerning the study.

Polit and Hungler (1996) Review of literature is defined as a broad comprehensive, in – depth, systematic and critical review of scholarly publications, unpublished scholarly print materials, audiovisual materials and personal communications.

Few studies have been done in the field of breast feeding and antenatal care. The investigator has made an attempt to explore studies, publications and reports relevant to the study.

Review of literature is done for the present study and presents in the following headings. Studies and Literature related to quality and practice of antenatal care among antenatal mothers.

- Antenatal care
- Maternal health status
- Pregnancy and risk

Antenatal care

Nahla A Kishk (2009) conducted a comparative study to assess the Knowledge and Practices towards ANC between rural and urban women in Alexandira a cross sectional, community – based house to house survey was conducted in Alexandria using cluster – sampling technique 30 clusters from urban areas and 30 cluster from rural areas. Concerning maternal practices the current study revealed rural/ urban disparities as significantly higher proportions of urban women had proper practices during antenatal period in their last pregnancy as regards utilization earlier initiation and frequent visits of antenatal care.

Susila. C (2008) performed a study to assess the level of self-motivation of primigravidre mothers towards antenatal care at Sree Ramachandra Hospital and Research institute Chennai, among 100 mothers.only 8% of the mothers were with high level of self-motivation towards receiving or following the antenatal care and she finds that there is a responsibility for the nurses to increase the level self-motivation among antenatal mothers.

N.Gerein, S. Mayhew & M. Lubben, (2003) conducted a study to assess a framework for a new approach to antenatal care (ANC) is presented to improve maternal health. Based on evaluations of ANC, safe motherhood programs, gender and social theory it suggests that managers should draw upon existing family and community support systems and develop partnerships beyond the health service. Policy and program changes are required in professional mandates for ANC provides organisation of ANC services, service protocols, training programs policy towards TBAs, referral care and service support system.

Adil H Ibnouf (2002) performed a study about utilization of routine antenatal health care services in Khartoum State, Sudan. Interviews were held among a representative sample of 400 marries women aged 15 - 49 years from both urban and rural localities was approximately 5 times and application of TT vaccination was 3.7 times higher in urban women as compared to women in rural areas. A higher quality of care (odds – ratio 5.8) and shorter walk time (odds ratio 3.1) were significantly associated with more utilization of routine antenatal care services. Mother education showed a nearly significant positive relationship both with use of routine antenatal health care services (odds ratio 2.1)

Maternal health status

Padam Singh, R.J.Yadav (2009) conducted a study to assess the status of antenatal care among pregnant women in India. In that study 89% of the pregnant women availed antenatal visits of which 62% had received three or more ANC visits. Those receiving the second dose of TT or booster dose were about 78%. About 73% of the pregnant women received IFA tablets during their pregnancy. About 53% of the pregnant women had full package proportion of pregnant women who availed full ANC package was lower in rural as compared to urban areas, lowest for ST followed by SC higher for literate women as compared to illiterate women. The population of

Institutional deliveries managed by hospitals and health centres was about 41%, it being higher among literate women and in urban areas. The study revealed that the literacy of women is the key to improve antenatal care of pregnant women. Hence efforts should be made to have information, Education and Communication (IEC) activities targeted to educate the mothers especially in rural areas.

C.S.Metgud, S. M.Katti, M. D.Mallapur and A.S.Wantamutte (2009) conducted a study of Utilization Patterns of Antenatal care among Pregnant women all women (n=130) village in Tanzania who were pregnant at the start of the study and who became pregnant during the study.

Most of the pregnant women (92.31%) were registered for antenatal care, but only 30% of them were registered in the 1st trimester of pregnancy. As regards to TT immunisation70.77% of the pregnant women as received two doses or one booster dose iron and folic acid supplementation was taken by 59.68% of the pregnant women. Nearly 39.52% of the pregnant women were provided with full antenatal care. The main antenatal care provided for the pregnant women was doctor (64.52%). The study shows early and wide spread of the antenatal care, but it also reveals that the antenatal visits of occur late in pregnancy.

S. Kiwawa (2008) conducted a study about the use of antenatal care maternity services for the pregnant women in LeweroDist in Uganda. A sample size of 769 women in the viewed, among that 417 visiting initially, during second trimester 242, during third trimester 266. About the use of antenatal services most the woman delivered in health centers (28.7%), (26.4%) delivered from home, (18.2%) in private maternity homes and (13.8%) in hospital. About maternity service utilization approximately (59.2%) gave birth with a skilled attendant present others delivered other by themselves or with help of at relatives, friends and traditional birth attenders.

Pregnancy and risk

Ali YawarAlam& Akhtar Ali Qureshi (2007) performed a cross sectional survey to access the knowledge and practice of women utilizing and not utilizing antenatal care facilities during their previous pregnancy among 200 married women in the age range 15-49 years were compared by the calculating odds ratios and 95% confidence intervals. Studied showed Pallor was significantly lower among women utilizing antenatal care (57%) as compared to those who were not (77.6%) (O.R.38.95% Cl (.

18-81) p value.02). Tetanus toxoid coverage was higher among women utilizing antenatal care (92%) compared to those who were not (59.2%) (O.R 10.8 95% Cl (4.5-26.2). Knowledge about danger signals in pregnancy and realization of the importance of eating healthy diet during pregnancy was significantly higher among utilizing antenatal care. The finding reveals that lesser prevalence of Anaemia and better tetanus toxoid coverage was seen among women attending antenatal care facilities. Identification of danger signals in pregnancy and recognition of nutritional demands of pregnancy are better understood by women utilizing antenatal care facilities.

Anna &Gunilla (1998) conducted a study to assess the consequences of reduction of the routine programme for surveillance of normal pregnancy. The study of a total pregnant population comparing utilization of care the years before and after a new routine antenatal programme was introduced, a reduction of three to four midwife visits during the second half of pregnancy. All women from the catchment area gave birth in 1990 (n=2008) and 1992 (n=1874) and had attended antenatal care in the area during the second half of their pregnancy were analysed for use of potential primary and secondary care, obstetric interventions, pregnancy outcome and perinatal outcome. The researcher revealed that compliance to the programme improved resulting in a reduction of only 1.8 visits initiated by staff increased slightly, but extra contacts initiated by the mother remained very few. There were no significant difference in material outcome or obstetric intervention and the rates of prematurity, low birthweight, low Apgar score and the need for neonatal interventions were equal both years. The study shows the reduction of three to four scheduled visits in the traditional antenatal care programme can be done without increasing demands for extra visits, need for specialist consultations or emergencies or less favourable outcome.

B.Moller, G.Lindmark (1989) conducted a study of antenatal care at village level in rural in Tanzania among 707 women delivered in the study period. Ninety five percent of the antenatal records were available. Anaemia, malaria and anticipated obstetric problems were the utmost frequent reasons for interventions. Among the women from the area who were delivered in hospital, 90% had been referred there. No relationship was found between the number of antenatal visits and the pregnancy outcome, but prenatal mortality was correlated to a low birth weight. Even with a mean attendance rate of six visits and full coverage by antenatal care maternal and prenatal mortality remains high.

Rationale

Ensuring quality of maternal health services in VHND through improved skills of frontline workers is one the key interventions for reducing maternal mortality and morbidity. There is strong global evidence to show that increasing the skilled health workers to population ratio has led to improvement MMR (Maternal mortality rate).

Antenatal care is one of the four pillars of safe motherhood initiative. Routine antenatal visits may raise awareness about the need for care at delivery. It has been estimated that 25 % of maternal deaths occur during pregnancy, with variability between countries depending on the prevalence of unsafe abortion, violence, and disease in the area.

VHND form the platforms of integrated health, nutrition and WASH (Water, Sanitation and Hygiene) service delivery at community level. Strengthening these platforms for integrated and qualitative MCH service delivery is the prime focus for the DoHFW (Department of Health and Family Welfare) in 2013-14 and this necessitates rapid skill assessment and capacity building of ANMs in the network. It also requires a periodic assessment of available equipment, instruments and consumables as well as provision of equipment, as necessary, in order to ensure adequate supplies for all VHNDs. In addition, there is a need to streamline procurement of logistics along with strong supply chain management and maintenance processes.

There are no studies conducted in U.P which shows the knowledge and quality of antenatal services provided by FLWs on at VHND site so there is a need for such study. Since VHND is a most easily accessible platform for pregnant women to share their problems and gain knowledge about various health issues and different services or schemes which has been provided to the pregnant women by the government so the knowledge level of front line workers needs to be assess on these topics to know whether they are capable of providing these services to the pregnant women which is fundamental to holistic growth for safe mother and childhood. On VHND session, counselling are provided on various facets of life like health, nutrition, lifestyle related behaviour, menstrual hygiene and sexual transmitted infections alongside facilities to promote good health and nutrition can go a long way in easing their transition to womanhood.

Research question

What is the availability and quality of the services available for ANC Mothers on VHND day as per the guidelines?

Objectives

1. To assess the availability of prescribed services for Pregnant Women on VHND(Village Health Nutrition Day) as per the guideline.

INDICATORS

- % of women whose weight is measured during visit.
- % of women whose blood pressure is measured during visit.
- % of women whose urine sugartest is being tested during visit.
- % of women whose albumin test is being tested during visit.
- % of women who received T.T./booster dose injection.
- % of women with $180 \ge IFA$ tablet is provided.
- 2. To assess the quality of services provided to pregnant woman as per guideline mentioned.

INDICATORS

- % of women whose relevant history (obstetric/past/menstrual) is to be taken.
- % of VHND sessions where privacy during examination is maintained.
- % of VHND sessions where sphygmomanometer/digital B.P apparatus was functional
- % of institution where Hb estimation was done using Sahli-Adams tube/Rapid diagnostic test kit

- % of women whose abdominal palpation for determining fundal height, foetal length done and recorded.
- % of women whose foetal heart sound examined / auscultated and recorded in MCP card
- % of women who have counseled for danger signs and action to be taken during pregnancy.

Research Methodology

<u>Study Type</u> – Descriptive research

Study Duration- February to April 2017.

<u>Study Area</u>- Study area is AWC, SC& School where VHND session conducted. Situated in Budaun district.

- Sampling-
- <u>Sampling Techniques</u>- Convenient sampling
- Selection of Respondent-

Service Provider: ANM

Beneficiaries : ANC mother or pregnant mother

(Willing and satisfying the criteria of study)

- <u>**Techniques</u>** Face to Face Interview</u>
- <u>**Tools-**</u> Questionnaire (Semi structured)
- <u>Sample Size</u>- 64 ANC mother, 16ANMs& 16 VHND observation
- AWC, SC, School visited where VHND session were planned during scheduled timeline

Place visited	AWC/SC/School
Binawar Block	Ghatpuri, Bindulia

Sahswan Block	Ughati, Lother
Bisouli Block	Serba, Shichuli
Dehgwan Block	Usmanpur, dehgwan
Dataganj Block	Kuwarpatti, kajikhera
Qaderchok Block	Maharajpur, Noorpur
Mion Block	Abhiyasha, Gudana
Uswana Block	Dalelganj, usawan

The VHND session is organized once a month on Anganwadi Centre or sub center on a fixed day basis (either Wednesday or Saturday) with joint efforts of ANM (Auxiliary Nurse Midwife), AWW (Aganwadi Worker) and ASHA (Accredited Social Health Activist). On an average, there are six to eight AWCs (AnganwadiCenters) under the operational jurisdiction of one Sub Centre and thus there are about eight fixed days in a month per Sub Centre to conduct VHND session.

Criteria for selection of samples

Population will be pregnant women attending antenatal on VHND session

Inclusion criteria

This study includes antenatal mothers

- Antenatal mothers willing to participate in the study
- Antenatal mothers who are between the age group 19-45 year
- Who are available at the time of data collection
- Able to read and write.

Exclusion criteria

Pregnant women who are

- Mothers who are not available at the time of data collection
- Not willing to participate in the study
- Not able to read and write

<u>Data Analysis Plan</u>

Data collected by ANM and ANC beneficiaries who received anti natal care services will be entered into excel sheet and depicted the percentage of various indicators.

OPERATION DEFINITIONS

Quality of services

For evaluating quality services provided under VHND, Diagnostic Criteria has been selected. In this criteria Haemoglobin test is taken for assessment of quality because 7% of mothers died due to anaemia.

Pregnant Women

Pregnant mother refers to women who are pregnant and in the age group between 19 to 45 yrs.

Antenatal Care

Care provided to a pregnant mother in those aspects like diet, exercises, adequate sleep and relaxation, hygienic practices, understanding complications of pregnancy, immunization antenatal check-up, breast feeding, and breast care.

All Services for ANC Mothers under VHND Guidelines

- Registration for ANC
- Identify pregnant women left out from services and provide them services
- Blood pressure examination
- Weighing
- Abdominalexamination
- Hb% estimation
- Urine albumin/protein estimation
- Iron folic acid 100/200 (100 tabs for mild Anaemic& 200 for Moderate, SevereAnaemic
- 2 TT(Tetanus Toxoid) injection
- Referral for high risk pregnancies

List of equipment

• Examination Table

- Stethoscope, Foetal Stethoscope & BP Instrument
- Weighing Machine Adult / Child
- Bed Screen / Curtain
- Haemoglobinometer / Talquist paper (if available)
- Uristix for urine examination
- Measuring tape

Medicines

- Oral Pills / Condoms
- IEC / BCC Materials (Information, Education, communication) / (Behavior Change Communication)
- IFA Small / Large, Liquid IFA, IMNCI drugs, ORS and common medicines for minor ailments
- Pregnancy Kits

Ethical Considerations

- Confidentiality of the respondents will be maintained during the study.
- Respect and dignity of the respondents will be taken care during the study.
- Information received by the respondents will not be misused in any form.

Result Findings and Data Analysis

The observations were made 16 VHND sites in 8 Block across Budaun District. Findings of observations have been substantiated with information provided by ANM, NM, AWW, ASHA & ANC visited women during their interview and review of records/documents. All the functionaries available at VHND site had agree to provide the information.

The data was analysis based on:-

- Participant observation
- Site observation
- Services observation
- A. Assess the availability of prescribed services for Pregnant Women on VHND (Village Health Nutrition Day) as per the guideline and their findings are given below.

 Table A.1.Percentage of pregnant women whose weight was measured at VHND

 visit.

Percentage of pregnant women whose weight was	Percentage
measured at VHND visit.	
46 pregnant whose weight was measured at visit.	72%
18 pregnant whose weight was not measured at visit.	28%

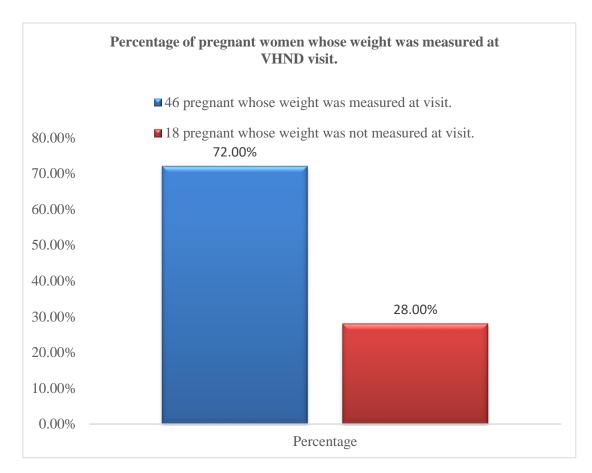


Figure A.1Percentage of pregnant women whose weight was measured at VHND visit

Table and figure A.1 shown, 46(72%) of the pregnant women observed whose weight was measured at 1st VHND visit whereas 18(28%) of pregnant women observed, whose weight was not measured by ANM. Other major finding was that some weighting machine was not functioning properly.

Table A.2 Percentage of pregnant women whose B.P was measured at VHND visit

Percentage of pregnant women whose B.P was measured at VHND visit.	Percentage
56 pregnant women, B.P was measured at visit.	87%
8 pregnant women, B.P was not measured at visit.	13%

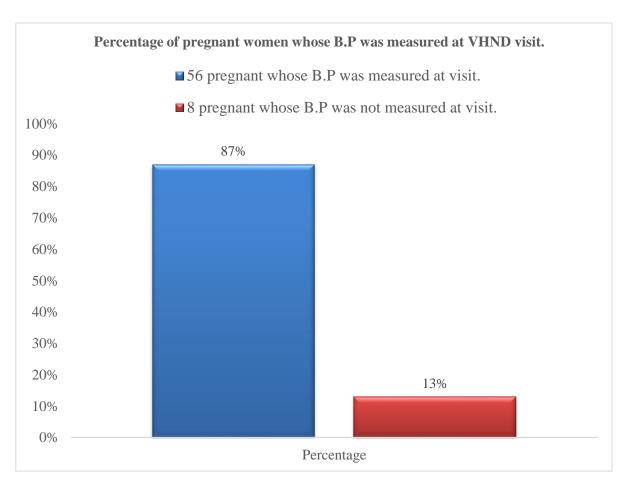


Figure A.2Percentage of pregnant women whose B.P was measured at VHND visit

Table and figure A.2 shown, 56(87%) of the pregnant women observed whose B.P was measured at VHND visit with Digital B.P apparatus whereas 8(13%) of pregnant women observed, whose B.P was not measured by ANM. Other major finding was that B.P was measured by digital B.P apparatus, not by sphygmomanometer.

 Table A.3 Percentage of pregnant women whose urine sugar and urine albumin

 test is being measured at VHND visit.

Percentage of pregnant women whose urine sugar and	Percentage
urine albumin test is being measured at VHND visit.	
22 pregnant whose urine sugar and albumin was measured at	34%
visit.	
42 pregnant whose urine sugar and albumin was not measured	66%
at visit.	

Figure A.3 Percentage of pregnant women whose urine sugar and urine albumin test is being measured at VHND visit.

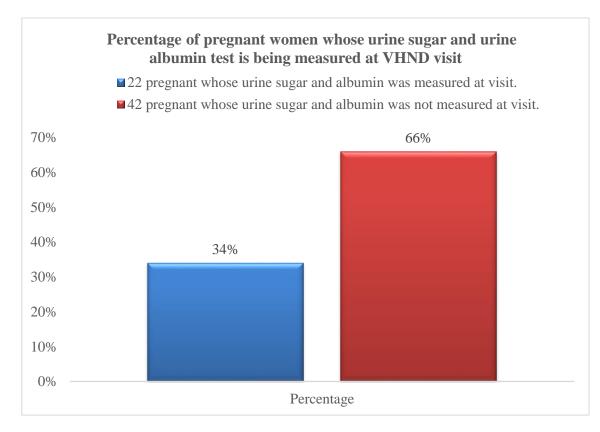


Table and figure A.3 shown, only 22(34%) of the pregnant women observed whose urine sugar & albumin was measured at VHND visit with uristix whereas 42(66%) of pregnant women observed, whose urine sugar & albumin was not measured by ANM. Other finding was that non availability of facility.

Table A.4 Percentage of pregnant women who received TT dose at VHND visit.

Percentage of pregnant women who received TT dose at VHND visit.	Percentage
50 pregnant who received TT dose at visit.	78%
14 pregnant who did not received TT dose at visit.	22%

Figure A.4 Percentage of pregnant women who received TT dose at VHND visit

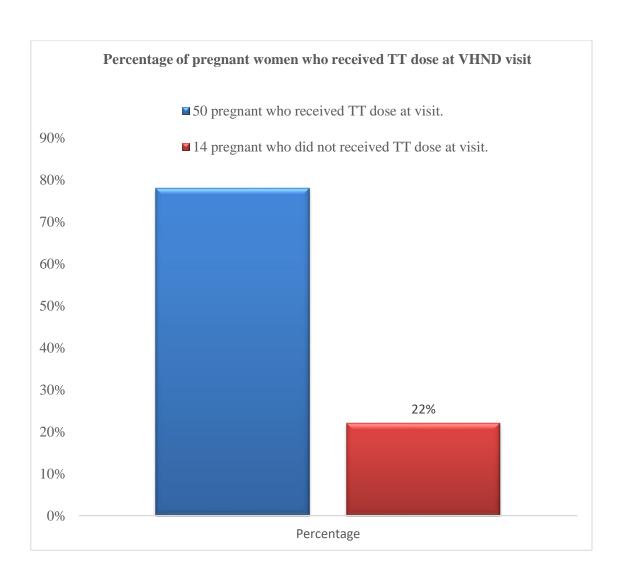


Table and figure A.4 shown, 50(78%) of the pregnant women observed who received the TT dose at VHND visit whereas 14(22%) of pregnant women observed, who didn't get any TT dose by ANM.

Percentage of pregnant women who received > 180 IFA at	Percentage
VHND visit.	
58 pregnant who received >180 IFA at visit.	91%
6 pregnant who did not received >180 IFA at visit.	9%

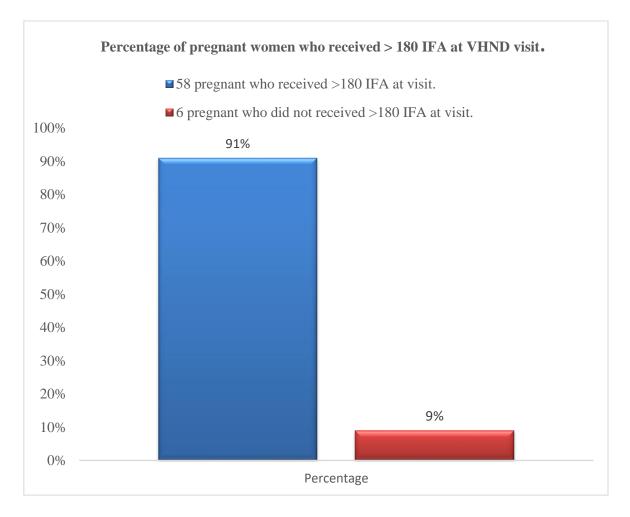


Figure A.5Percentage of pregnant women who received > 180 IFA at VHND visit.

Table and figure A.5 shown, 58(91%) of the pregnant women observed and interviewed whose received the 180 IFA at VHND visit whereas 6(9%) of pregnant women observed and interviewed, whose didn't get 180 IFA.

B. Assess the quality of services provided to pregnant woman as per guideline mentioned and findings are given below.

 Table B.1Percentage of pregnant women whose relevant history (obstetric/past/ menstrual) was to be taken

Percentage of pregnant women whose relevant history (obstetric/	percentage
past/menstrual) was to be taken	
52 pregnant women whose relevant history (obstetric/past/menstrual) was to	81%
be taken	
12 pregnant women whose relevant history (obstetric/past/menstrual) was	19%
not to be taken	

Figure B.1Percentage of pregnant women whose relevant history

(obstetric/past/menstrual) was to be taken

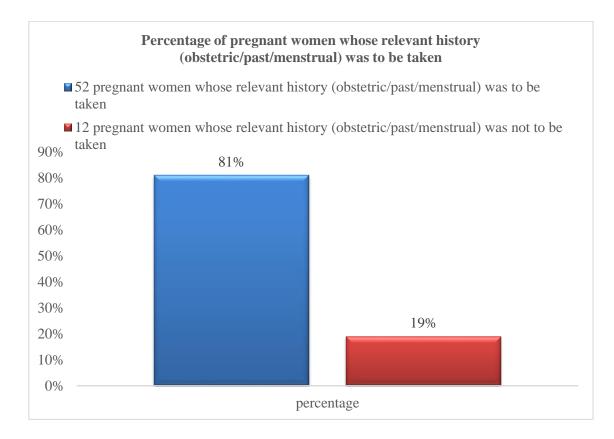


Table and figure B.1 shown, 52(81%) of the pregnant women observed and interviewed whose relevant history was to be taken at VHND visit whereas 12(19%)

of pregnant women observed and interviewed, whose relevant history was not to be taken by ANM.

 Table B.2Percentage of VHND sessions where privacy during examination was

 maintained

Percentage of VHND sessions where privacy during examination	Percentag
was maintained.	e
4 VHND sessions where privacy during examination was maintained.	25%
12 VHND sessions where privacy during examination was not	75%
maintained.	

Figure B.2Percentage of VHND sessions where privacy during examination was maintained.

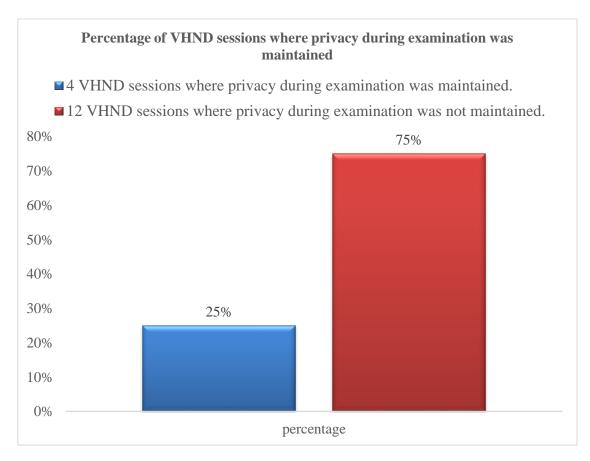


Table and figure B.2 shown, 12(75%) of the VHND session observed where privacy during examination was not maintained whereas 4(25%)of the VHND session observed where privacy during examination was maintained.

 Table B.3Percentage of VHND sessions where sphygmomanometer/Digital B.P

 apparatus was functional

Percentage of VHND sessions where sphygmomanometer/Digital	Percentage
B.P apparatus was functional	
2 VHND sessions where sphygmomanometer was functional	12%
9 VHND sessions where digital B.P apparatus was functional	56%
5 VHND sessions where digital B.P apparatus was not functional	32%

Figure B.3Percentage of VHND sessions where sphygmomanometer/Digital B.P apparatus was functional

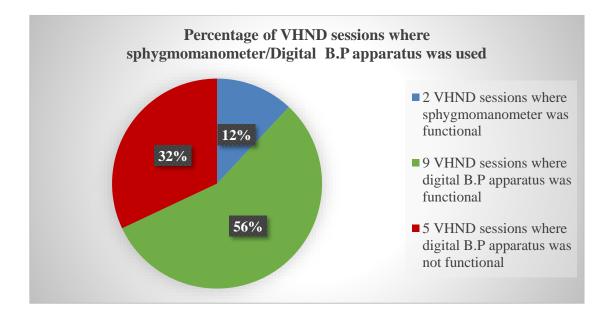


Table and figure B.3 shown, 5(32%) of the VHND session observed where digital B.P apparatus was not functional whereas 9(56%) of the VHND session observed where digital B.P apparatus was functional. And only 2(12%) of the VHND session observed where sphygmomanometer used.

Table B.4Percentage of VHND session where Hb estimation is done using Sahli-Adams tube/ Rapid Diagnostic Test Kit

Percentage of VHND session where Hb estimation is done using	percentage
Sahli-Adams tube/ Rapid Diagnostic Test Kit	
0 VHND session where Hb estimation was done using Sahli-Adams tube	0%
11 VHND session where Hb estimation was done using Rapid Diagnostic test kit	69%
5 VHND session where Hb estimation was not done using Rapid Diagnostic test kit	31%

Figure B.4Percentage of VHND session where Hb estimation is done using Sahli-Adams tube/ Rapid Diagnostic Test Kit

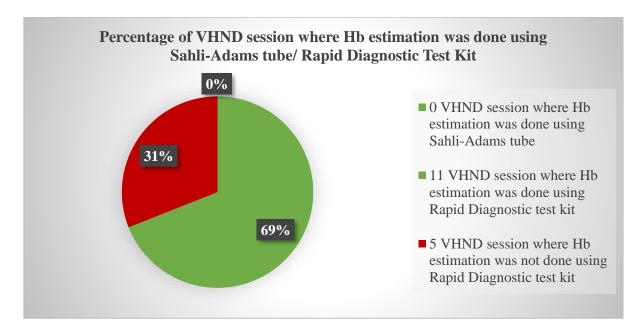


Table and figure B.4 shown, 0(0%) of the VHND session observed where Hb estimation was done using Sahli-Adams tube whereas 11(69%) of the VHND session observed where test was done by using Rapid Diagnostic test kit. And only 5(31%) of the VHND session observed where HB test was not done by any method.

Table B.5Percentage of women whose abdominal palpation for determiningfundal height, foetal length done and recorded

Percentage of women whose abdominal palpation for	percentage
determining fundal height, foetal length done and recorded	
16 women whose abdominal palpation for determining fundal height,	25%
	2.370
foetal length was done and recorded	
48 women whose abdominal palpation for determining fundal height,	75%
foetal length was not done and recorded	

Figure B.5Percentage of women whose abdominal palpation for determining fundal height, foetal length done and recorded

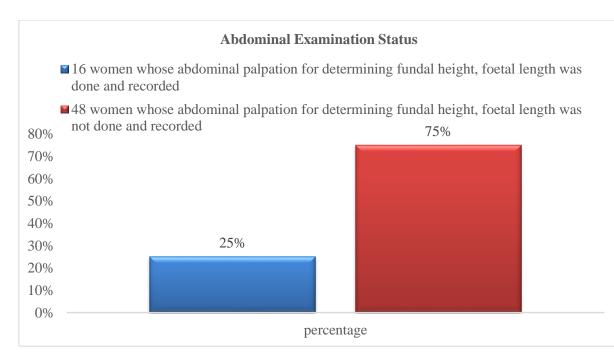


Table and figure B.5 shown, 48(75%) of the pregnant women observed and interviewed whose abdominal palpation & examination was not done by ANM at VHND visit whereas only 16(25%) of pregnant women observed and interviewed, whose examination was done by ANM. Privacy was the main issue.

 Table B.6Percentage of women whose foetal heart sound examined / auscultated

 and recorded in MCP Card

Percentage of women whose foetal heart sound examined /	percentage
auscultated and recorded in MCP Card	
9 women whose foetal heart sound was examined / auscultated and recorded in MCP card	14%
55 women whose foetal heart sound was not examined / auscultated and recorded in MCP Card	86%

Figure B.6Percentage of women whose foetal heart sound examined / auscultated and recorded in MCP Card

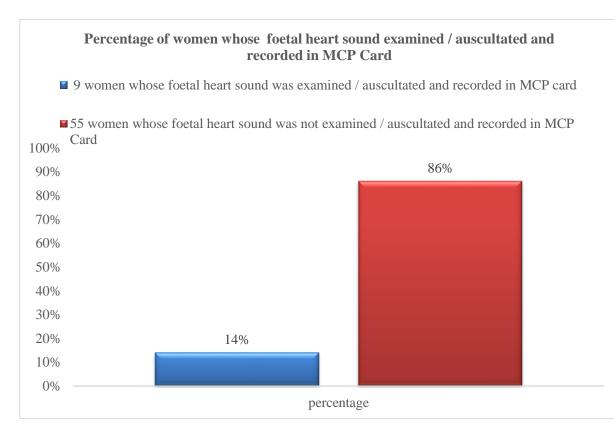


Table and figure B.6 shown, 55(86%) of the pregnant women observed and interviewed whose foetal heart sound was not examined/ auscultated and recorded in MCP card by ANM at VHND visit whereas only 9(14%) of pregnant women whose foetal heart sound was examined/ auscultated and recorded in MCP. Major finding was that non-availability of foetal Doppler and paedia stethoscope.

Table B.7Percentage of women who was counselled for danger signs and actionto be taken during pregnancy

Percentage of women who was counselled for danger signs and	percentage
action to be taken during pregnancy	
45 women who was counselled for danger signs and action to be	70%
taken during pregnancy	
19 women who was not counselled for danger signs and action to be	30%
taken during pregnancy	

Figure B.7Percentage of women who was counselled for danger signs and action to be taken during pregnancy

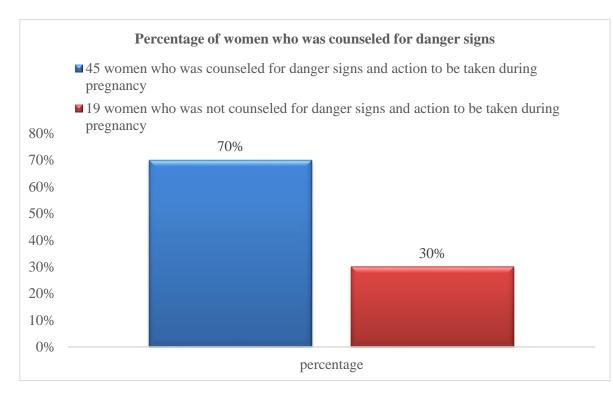


Table and figure B.7 shown, 45(70%) of the pregnant women observed and interviewed who was counselled by ANM at VHND visit for danger sign during pregnancy whereas only 19(30%) of pregnant women who was not counselled about danger signs during pregnancy.

54

Discussion

VHND can be an effective platform for provision of comprehensive primary care to the beneficiaries at their doorstep if organised with full involvement from the community. Comprehensive primary health care would reduce morbidity and mortality greatly at much lower costs to the system and the individual than any other approach, and would significantly reduce the need for secondary and tertiary care.

In the present study, 86% of the beneficiaries were found to be aware about services being delivered in VHND, (majority were informed by the ASHA and/or the ANM) and 14% responded that they didn't have prior information about observation of the day. The above finding is a matter of concern as it reflects deficiency in the part of the concerned health workers to convey the message about organising the day in their village.

Present study found that utilization of antenatal care in the beneficiaries was comparatively low. Observation and interviewed part shown that 18(28%) of pregnant women observed, whose weight was not measured by ANM. Other major finding was that some weighting machine was not functioning properly. 42(66%) of pregnant women observed, whose urine sugar & albumin was not measured by ANM, Due to non-availability of facility.

Major findings was that 14(22%) of pregnant women observed, who didn't get any TT dose by ANM and 12(75%) of the VHND session observed where privacy during examination was not maintained due to this no abdominal examination was done by ANM. . Moreover, 5(32%) of the VHND session observed where digital B.P apparatus was not functional and 19(30%) of pregnant women who was not counselled about danger signs during pregnancy. This clearly showed that lack of ANC services given by ANM, either due to lack of knowledge or improper logistics supply of medicines and equipment.

Best part was that 58(91%) of the pregnant women observed and interviewed who received the 100 IFA at VHND visit and 56(87%) of the pregnant women observed whose B.P was measured at VHND visit with Digital B.P apparatus. Moreover, 52(81%) of the pregnant women observed and interviewed whose relevant history was to be taken at VHND visit.

Conclusion

The present study leads to the conclusion that the complete packages of services in VHND were not utilized to the optimal extent by beneficiary mothers in Budaun district. Presence of all the three frontline health workers (ANM, AWW, ASHA) in any session was found lacking in knowledge, communication, reporting and services providing. Gaps in utilization of services in beneficiaries were mainly found in relation to antenatal care, postnatal care, growth monitoring, counselling for family planning and nutrition and health education. Participation of community members in VHNDs was reportedly found inadequate. Greater community involvement is required to generate demand for essential services like antenatal care and nutrition and health education. Monitoring and supervision need to be regularized for effective organisation of VHND by Village Health Nutrition and Sanitation committee (VHNSC) which was not supportive.Skill building training of the frontline health workers with emphasis on quality of care in service delivery can be useful to optimize the utilization of the available services in VHND as presence of all the three frontline health workers (ASHA, ANM and AWW) is critical for provision of the intended package of services in VHND.

On the other aspects, major reasons of nonattendance elicited from the respondents were: 'inconvenient timing of these sessions' (towards the end of VHND in the afternoon) and 'didn't feel necessary'. A section of the attendees reported that no such education sessions were being held. It implies that Nutrition Health Education and Demonstration(NHED) sessions were notconsidered essential by beneficiaries as well as service providers. This gap in service delivery and utilization demands attention.

Main logistic supply problem was found that irregular supply of IFA, pregnancy kit and uristix. Whatever ANM had had like weighting machine, B.P apparatus not working properly.

Recommendation

- Unavailability of stocks should not be a criteria of training but training should be provided on each and every topic as per the guidelines of VHND.
- Continuous mentoring of ANMs to ensure better confidence in following skills:-
- Measuring FHS by Foetoscope/Stethoscope
- Abdominal examination
- Dangerous signs during pregnancy
- Local resources can be used for maintaining privacy during ANC check-ups.
- Fund of VHNSC can be utilized for it.
- Uninterrupted & Adequate supply of IFA, Uristix, MCP card, TT, OCP etc.
- Convenient timing of these sessions should be there (not in the afternoon)
- Monitoring and supervision need to be regularized for effective organization of VHND by NM, BPM, BCPM etc.
- Nutrition Health Education and Demonstration (NHED) sessions would be done that will be essential for beneficiaries as well as service providers. (Gupshuppottely)
- Greater community involvement is required to generate demand for essential services like antenatal care and nutrition and health education. IEC and BCC can be a medium to create awareness.

Limitation

- Study period of 10 week was very less for quality of VHND services.
- Language is a barrier for communication.
- Sample size was selected from selected VHND session.

References

- 1. MamataDiwas Village Health & Nutrition DayOperational Guidelines
- 2. Impact of Antenatal Care on Maternal and Perinatal outcome: A Study at at Nepal Medical College Teaching Hospital By. Tuladhar H1, Dhakal N2 1Department of Obs/Gyn, KIST Medical College, Imadole, 2Nepal Medical College, Jorpati
- 3. Monthly village health nutrition day guidelines for awws/ashas/anms/pris
- <u>4.</u> "Does antinatal care make a difference to safe delivery? A study in urban Uttar Pradesh, India by Shelah Bloom Theo Lippevold And David Wypij
- 5. "Antenatal Care" byOrnellaLincetto,SeipatiMothebesoane-Anoh,PatriciaGomez,StephenMunjanja
- 6. Improving the Coverage and Quality of Village Health and Nutrition Days by USAID and VISTAAR
- 7. Mahanta TG, Baruah M, Mahanta BN, Gogoi P, Baruah J, Gupte S. Process evaluation of Village Health and Nutrition Day observation (VHND) in a block of Dibrugarh District of Assam. J Clinical Epidemiology and Global Health. 2014 Aug [cited 2014 Aug 4]; Available from: URL:http://www.dx.doi.org/10.1016/ j.cegh.2014.07.001
- 8. 15. National Rural Health Mission.VHND monitoring in the month of April 2013.
 Assam. 2013 Sept [cited 2013 Sept 14]; Available from: URL:http://www.nrhmassam.in/pdf/ .../Report_on_VHND_Monitoring_Assam_2013
- 9. Vistaar Project. Improving the Coverage and Quality of Village Health and Nutrition Days: Technical brief. 2012 Oct [cited 2012 Oct 20];Available from: URL:http:// www.intrahealth.org/.../improving-the-coverage-andquality-of-village-health.../
- <u>10.</u> Maternal health Division Department of Family Welfare Ministry of Health & Family
 Welfare Government of India "Guidelines for Antenatal care" 2005 April (1-22)

Annexure-I

Availability & Quality of ANC services Provided at VHND Session

Interview Schedule

(For Beneficiaries – Pregnant Ladies)

Informed consent: I would like to thank you for taking the time to meet me. My name is I would like to talk to you about your experience regarding the ANC visits during your pregnancy. The interview should take about 10 minutes. The responses will be kept confidential. This means that the interview responses will be shared only with the research team and we will ensure that any information that we include in our report does not identify you as the respondent. Remember, you don't have to talk about anything that you don't want to tell and you can end the interview at any time.

Are you willing to participate in the interview?

Interviewee Signature

Annexure-II

Section -A

Interaction with ANC mothers

Q.1Was / Is relevant history(obstetric/past/menstrual) taken during First ANC visit?

1.Yes

2.No

Q.2 Did/Are you receive the Mother & Child Protection card?

1.Yes

2.No

Q.3Was/ Is your blood pressure measured at each visit?

1.Yes

2.No

Q.4 Was/ Is your oedema checked at each visit?

1.Yes

2.No

Q.5 Was/ Is your weight recorded at each visit?

1.Yes 2.No

Q.6 Was/ Is abdominal examination done?

1.Yes 2.No Q.7 Was/ Is your abdominal palpation for determining fundal height foetal length done and recorded in MCP card?

1.Yes 2.No

Q.8 Was/ Is your foetal heart sound examined / auscultated and recorded in MCP card.

1.Yes 2.NO

Q.9Were/ Are any laboratory tests done during ANC visit?

1.Yes

2.No

(a)Was/ Is Pregnancy confirmation done using Nishchay kit?

1.Yes

2.No

(b) Was/ Is Haemoglobin estimation done at each visit?

1.Yes

2.No

(c) Was/ Is Urine Sugar estimation done each visit?

1.Yes 2.No

(d) Was/ Is Urine albumin estimation done each visit?

1.Yes

2.No

Q.10Were /Are any counselling method used for danger signs during pregnancy?

1.Yes 2.No

Q.11 Was/ Is IFA supplementation provided & counselling done for it?

1.Yes

2.No

Q.12 Were / Are 100 IFA tablets provided?

1.Yes 2.No

Q.13 Did/ Are you receive the TT injections?

1.Yes

2.No

Q.14 Did / Are you get both the doses of TT?

1.Yes 2.No

Q.15 Is advice for next antenatal check-up provided along with dietary and relevant counselling?

1.Yes

2.No

Section -B

(For ANM only) Questionnaire for ANM

Informed consent: I would like to thank you for taking the time to meet me. My name is I would like to ask you some questions about availability of services for pregnant women at VHND session. The interview should take about 10 minutes. The responses will be kept confidential. This means that the interview responses will be shared only with the research team and we will ensure that any information that we include in our report does not identify your details.

Q.1 Is privacy during examination ensured (by way of separate cabin/curtains/sheet)?

1. Yes

2. NO

Q.2 How do you use sphygmomanometer for taking B.P.?

Q.3 Do you use Nischay kit for conforming pregnancy?

Q.4 Do you use Sahli' Adams tube for measuring Hb?

Q.5 What is the value of Hb for high risk cases?

Q.6 Is foetal heart sound examined/auscultate using foetoscope?

Q.7 How do you calculate EDD(expected date of delivery)?

Q.8 Is there timely supply and replenishment of drugs and equipment?