

## Quality of Village Health & Nutrition Day Sessions in North 24 Parganas District, West Bengal, India

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**Abstract: Background:** Village Health and Nutrition Day (VHND) has been observed in India as well as West Bengal. **Objectives:** The aim was to study quality of VHND sessions in North 24 Parganas district, West Bengal. **Methodology:** The descriptive, observational study was conducted in all 12 blocks of North 24 Parganas Health District. Two Sub-Centers from each Block were selected by simple random sampling. Interview of ANMs of total 24 VHND sessions were carried out by using semi-structured interview schedule. Epi-info (6 version) has been used to analyze the data. **Results:** All VHND sessions held according to micro-plan (100%) (n=24). Beneficiaries had been mobilized to session sites by ANM, 2<sup>nd</sup> ANM, ASHA and AWW in 04% (1), 25% (6), 17% (4) and 54% (13) sites respectively. Four key messages were being given to the beneficiaries in 75% (18) of VHND session sites; Due list available with ASHA/AWW was 88% (21). **Conclusion:** Continuous monitoring & supportive supervision in all levels, training of health workers, reallocation & infrastructure development may help in organizing quality VHND.

**Key words:** Quality, VHND, ANM

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### I. Introduction

Globally, every year over 500,000 women die of pregnancy related causes and 99 percent of these occur in developing countries. India continues to contribute about a quarter of all global maternal deaths. The Maternal Mortality Ratio (MMR) in India is 254<sup>[1]</sup> per 100,000 live births. Only 47 per cent of women likely in India have an institutional delivery and 53 percent had their births assisted by a skilled birth attendant. As many as 49 % of pregnant women still do not have three antenatal visits during pregnancy. Only 46.6 percent of mothers receive iron and folic acid for at least 100 days during pregnancy. A large number of deaths are preventable through safe deliveries and adequate maternal care. More than half of all married women are anaemic and one-third of them are malnourished (have a body index below normal).

India sees 1.8 million<sup>[2]</sup> deaths every year children under of five years of age and 52 million children are stunted. 1/3 are born with low birth weight, 48% are under weight for their age, 30% are wasted (too thin for their height), 62% preschool children and 16% pregnant women are deficient in Vit.A, 70% preschool children are anemic. The reasons for increased Infant mortality are several, such as low coverage of immunization, vaccine preventable diseases, unsafe drinking water, infection, anemia, missing children for vaccination unhygienic practices are focused here being the poverty, malnutrition and harsh realities for millions of women and children.

Integrated Nutrition and Health Project<sup>[3]</sup> (INHP) developed the concept of Nutrition and health Day (NHD) and rolled out by two phases in 1996-2001 and 2002-2006. Since then it has been replicated across the country in various forms as Village Health and Nutrition Day (VHND) or Fixed Nutrition and Health Day (FNHD) under National Rural Health Mission (NRHM). It combines the principles of fixed-day, fixed-site provision of outreach services such as immunization, antenatal care, food supplements distribution, health and nutrition education with the principles of convergence of services and community participation and monitoring. According to the revised VHND guideline<sup>[4]</sup> circulated by department of Health & Family Welfare, Government of West Bengal on December, 2010, VHND session is being held at the Sub-Centre area once in every week. In each month, on any one Wednesday, VHND is being observed at the Sub-center. Rest of the VHNDs will be held along with immunization session at three or four AWC on Thursday.

A number of studies have been conducted on Fixed Nutrition and Health Day (FNHD) or Village Health and Nutrition Day (VHND), but a few studies have focused on quality issues. Over 58.7 lakh VHNDs were held in 2009-10 and 69.25 lakh during 2010-11 in India<sup>[5]</sup>. In the year 2009-2010, 23962 no. of AWCs conducted VHND out of 90895 no. of AWCs (26.36% AWCs Covered) in West Bengal<sup>[6]</sup>. The Coverage

Evaluation Survey 2009<sup>[7]</sup> shows important gains in infant feeding practices. For example, the rate of initiation of breastfeeding within one hour of birth increased from 25% to 34% nationally while that within one day of birth increased from 55% to 74% nationwide.

Though now VHND services take place almost regularly, there is still long way to deliver truly convergent services and the knowledge of impact of all these services remains deficient. To address this problem, though 3<sup>rd</sup> Saturday convergent meeting, listing of drop-out beneficiaries and Block level MIES meeting are going on, still huge gaps exist in the area of VHND. Thus, to attain sustainable and reasonable success in maternal and child health outcomes, we wish to know how effectively and efficiently VHND programme is rolling out in North 24 Parganas Health district, West Bengal.

## II. Methodology

The study was descriptive, observational to access the quality of Village Health & Nutrition Day sessions. The study was conducted in rural areas of all 12 blocks of North 24 Parganas Health District from July, 2016 – June, 2017. Assessment of infrastructural & quality issues of VHND sessions was done by record analysis & observation of VHND sessions. Considering the feasibility, two sub centers were selected at random by using Epi Info 6 (Version 6.04d – January 2001). A total of 24 VHND sessions were observed. Data triangulation was done by analyzing data from routine sources to have a comprehensive overview of the VHND sessions. Principle investigator has collected information conducting interviews of beneficiaries using semi-structured interview schedule. The data has been computerized and cleaned for any missing information. Epi-info (6 version) has been used to analyze the data. Clearance & approval has been obtained from Institutional (Medical College, Kolkata) Ethics Committee.

## III. Results

**Table 1:** Status of VHND sessions held according to quality indicators (n=24)

Variables	Frequency	Percentage
Session held according to microplan	24	100
Subcentre action plan meeting attended by		
Health Supervisor (HS)	15	63
ICDS Supervisor	8	33
Anganwadi Workers (AWW)	13	54
PRI member	5	21
Used syringe being cut with hub cutter immediately after use	22	92
Counter foil updated following each vaccination	20	83
Four key messages given to parents	18	75
Due list available with ASHA/AWW	21	88
History taken during 1 <sup>st</sup> Antenatal Check-up	18	75
Abdominal palpation done	16	67
Foetal heart sound auscultated	13	54
Group counseling held	12	50

Data have been collected during July, 2016 - September, 2016. Input indicators like proportion of meeting conducted to prepare SC Action plan was 100% (n=24) Proportion of VHND sessions held according to micro-plan was 75% (18). Proportion of ANM has given medicines to AWW & ASHA for distribution 75% (18) & 67% (16) respectively. Process indicators like attendance in the VHND sessions where Health Supervisors, ANM, 2<sup>nd</sup> ANM, HA (M), ASHA, CHG were present 17% (4), 96% (23), 100% (24), 17% (4), 92% (22) & 8% (2) respectively. No PRI member attended any VHND session. Beneficiaries had been mobilized to session sites by ANM 4% (1) & 2<sup>nd</sup> ANM 25% (6) each; by ASHA and AWW in 54% (13) & 17% (4) sites respectively. There was no vaccine vial found in any VHND session site without / unreadable label or VVM unusable stage or expired vaccine or frozen vaccine. It was found that in all 24 VHND session the pregnant woman weighed and the weight recorded, any sick child less than five years being examined and treated/referred, family planning counseling provided to eligible woman/couples, weight being taken for children less than five years, and contraceptives provided to the beneficiaries. As per as logistics concerned, though Stethoscope, weighing scale, all vaccines as per immunization schedule in vaccine carrier, urine testing kit, drinking water, Zink tablets, Cotrimoxazole tablets, IFA tablets (large), Nischay pregnancy test card, Oral contraceptives, blank JSY cards, necessary registers and reporting formats, Hand washing facilities were there in all sessions but Emergency contraceptive pills were available in 75%, Foetoscope 33%, IFA (Small) 83%, Referral card & IMNCI case assessment form 42%, Thermometer 25%, Albendazole 25%, IPC material 33%, Condom 17%, Haemoglobin meter 8%, Growth chart for Boys & Girls 17% & Toilet were in 17% session sites. The output indicators such as proportion of Blocks were reporting regularly. It was found that all Blocks reported regularly. But out of total 12 Blocks, only 3 Blocks (33.3%) reported in time. 25% frontline workers (ANM & 2<sup>nd</sup> ANM) have correct knowledge about job- responsibilities in VHND.

#### **IV. Discussion**

In a cross-sectional observational study conducted by Parmar Ajay et al<sup>[8]</sup> in Sinor block of Vadodara district, Gujarat found that all Mamta day sessions were held according to micro plan with presence of all team members at all centres. However, supervisory visits were observed in only 23% of the sites. 23% of female health workers (FHW) faced problem in technique of giving BCG and Measles immunization. Time of reconstitution was written on BCG and Measles vials at 61.5% sites. Although Anganwadi workers (AWW) weighed children correctly, plotting was not satisfactory in 38 % of children. Odisha has customized the National VHND guidelines<sup>[9]</sup> where VHND (Mamata Diwas) is conducted at Anganwadi centre (AWC) on a monthly basis. Out of 102 VHNDs observed by Orissa Technical and Management Support Team<sup>[10]</sup>, July 2011 revealed that 70% pregnant women and 59% lactating mothers attended VHND at each AWC. While evaluating the process of VHND implementation in Lahuwal Block of Dibrugarh District by Tulika Goswami Mahanta et al<sup>[11]</sup>, significant improvement was observed in PNC 41.7% vs 90.9%; FP counseling 22.2 % vs 45.5%; and counseling on specific health problem 25.3 % vs 43.5. In their study of Vartika Saxena et al<sup>[12]</sup> of the 24 VHNDs observed, blood pressure measurement was done at 11 (45.83%) and weight at 13 (54.17%) sites. A community-based cross sectional study was undertaken by Barua Kabita et al<sup>[13]</sup> from August 2013 to July 2014 in rural areas of three health blocks of Kamrup. Out of the 387 beneficiary mothers interviewed, 86% (333) were aware of the services provided in VHND. Only 32% of them reported the presence of PRI members, school teachers and Self-help group (SHG) members. 76% of the beneficiary mothers who attended VHNDs utilized full antenatal check-up while only 44% availed post-natal check-up. A cross-sectional study<sup>[14]</sup> conducted in Odisha during December 2009-November 2010. 34% beneficiaries had knowledge regarding fixed day approach of VHND, while 24% did not have knowledge regarding any of its purpose. There was significant difference in between awareness and practice among the blocks. A total of 57 (51.4%) beneficiaries were aware that VHND is held every month in their area. A qualitative study was conducted by Dr. V. D. Semwal et al<sup>[15]</sup> in the selected areas of Uttarakhand. The study found that all VHNDs were organized at Anganwadi centers which are well-known places for everyone in the community. The day (Saturday) has already fixed however time and duration were not well communicated to the community. Generally, VHNDs were organized between 11 am to 2 pm however many places, providers change the time of VHND which decreases the participation of the clients. Seventy-five percent of recently delivered women in the selected villages had availed limited services during VHNDs. In another study conducted by Srivastava et al<sup>[16]</sup>, it was found that VHSNCs comprised equitable representation from vulnerable groups when they were formed. More than 75 % members were women. Almost all members belonged to socially disadvantaged classes. Less than 1 % members had received any training. In reality, 62 % committees monitored community health workers, 6.5 % checked sub-centres and 2.4 % monitored drug availability with community health workers. Virtually none monitored data on malnutrition. It is very much encouraging to see that all VHND sessions are being held as planned. The percentage of ANM who has given medicines to ASHA being less due to fact that recently ASHA have been given medicines kit centrally. Involvement of HA (M) in the VHND session is very poor. The quality of vaccine vial and cold chain maintenance is good. Though, in all session sites after reconstitution time is written in the vaccine vials but deficiency is seen in the disposal mechanism and card updating in daily basis. Privacy is another issue. ANMs are not doing properly abdominal examination of the mothers and many places there is no curtain or no separate room for examination especially in the outreach session sites. As the principle investigator is evaluating the VHND all over the district, the quality has been improved on successive months.

#### **V. Conclusion**

It is evident that VHND is not being conducted in comprehensive approach. The convergence among other stake holders like ICDS and PRI is very much deficient. Mostly emphasis poses upon the routine immunization activities but other maternal health services are lacking specially counselling of the mothers, IEC regarding birth preparedness, making aware of them about danger signs during pregnancy, about nutritious & easily available food, VHND session is observed mainly to immunize the mothers and children. Various components of VHND are not taken care of. Continuous monitoring & supportive supervision in all levels, training of health workers, reallocation & infrastructure development of outreach sessions may help in organizing quality VHND and ultimately improvement of all health indicators.

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