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Research Article

Assessment of Village Health and Nutrition Day in District Bhopal, Madhya Pradesh

Pradeep Kumar Dohare[1], Amreen Khan[2], DK Pal[3], Manju Toppo[4], Veena Melwani[5], Shoaib Arshad[6]

[1,2,5]Post Graduate Student, [3]Professor and Head, [4]Associate Professor, Department of Community Medicine, GMC, Bhopal, Madhya Pradesh, India.
[6]Senior Resident, Department of Ophthalmology, Govt. Medical College, Vidisha, Madhya Pradesh, India.
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I N F O

Corresponding Author:
Dr. Amreen Khan, Department of Community Medicine, GMC, Bhopal, Madhya Pradesh, India.
E-mail Id:
doc.amreen.khan@gmail.com
Orcid Id:
https://orcid.org/0000-0001-6378-1754
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A B S T R A C T

Background: Village Health and Nutrition Day (VHND) is organized once every month. This ensures uniformity in mobilizing the community in observing the event in a planned and focused manner. The beneficiaries of the program include pregnant women, lactating mothers, children (0-5 years) and adolescent girls.

Objectives: To assess the functioning of the Village Health and Nutrition Day held at selected villages of district Bhopal and to identify the gaps in services delivery related to the Village Health and Nutrition Day.

Materials and Methods: This was a cross sectional observational study carried out from March 2018 to July 2018. 10% of the session sites were randomly selected from the micro plan (32 sessions). Interviews were conducted on 8 beneficiaries from each session. Also, in-depth interviews of the service providers were taken for qualitative assessment of their experiences about the VHND sessions. Availability of required items was checked. Data analysis was done using Microsoft Office excel and Epi info 7.

Results: All sessions were held as per the microplan. Major source of drinking water is hand pump (78%), 62.5% VHND sites have toilet facility. Anganwadi workers were present only at 27 (84.3%) sessions. Anganwadi helpers and the ASHAs were present at 29 (90.6%) and 31 (96.8%) sessions respectively. Only 3 (9.3%) of the session sites the supervisors from health and ICDS were present. Hemoglobinometer, KITs for urine examination and Vaccine carriers with ice packs were available in 31 (96.8%), 29 (90.6%) and 29 (90.6%). Weighing scales for children, adult and BP instruments were available in 21 (65.6%), 26 (81.2%) and 23 (71.8%) sessions respectively. Foetoscope, measuring tape and stethoscope were available in 9 (28.1%), 11 (34.3%) and 19 (59.3%). Examination table, bed screen and gloves were available in 24 (75%), 28 (87.5%) and 22 (68.7%) of the session. MCP card and MCH registers were available in 24 (75%) and 27 (84.3%) sessions respectively. In all the visited sessions Calcium tablet and ORS packets was available and stock of IFA tablet, vitamin A and AD syringes was

present in 93.7%, 90.6% and 90.6% sessions. Anthelminthic drugs, Paracetamol, co-trimoxazole and chloroquine were available in 96.8%, 87.5%, 81.2% and 68.7% sessions. Anti-TB drugs and stain for fixing BF were available only in 28.1% and 37.5% respectively. Condoms and oral contraceptives were available in 84.3% and 65.6% respectively.

Keywords: Anganwadi Centre, Evaluation, Nutrition, VHND

Introduction

The Village Health and Nutrition Day (VHND) promises to be an effective platform for providing primary health services, especially those belonging to marginalized and vulnerable communities.

Conceptually, VHND is organized once every month (preferably on Tuesday or Friday) either at the Anganwadi Centre (AWC) or at the Sub Health Centre or at an identified common place in the village, as the case may be. This ensures uniformity in mobilizing the community in observing the event in a planned and focused manner. By and large, AWC has been more predominantly identified and recognized as the focal point for the integrated provision of services enshrined under the VHND. It is notable that the VHND also serves as a platform for inter-sectoral convergence covering health, nutrition and hygiene aspects.

The VHND is to be organized once every month (preferably on Wednesdays and for those villages that have been left out, on any other day of the same month) at the AWC in the village. This will ensure uniformity in organizing the VHND. The AWC is identified as the hub for service provision in the RCH-II, NHM, and also as a platform for inter-sectoral convergence. VHND is also to be seen as a platform for interfacing between the community and the health system.

On the appointed day, ASHAs, AWWs, and other will mobilize the villagers, especially women and children, to assemble at the nearest AWC. The ANM and other health personnel should be present on time; otherwise the villagers will be reluctant to attend the following monthly VHND. On the VHND, the villagers can interact freely with the health personnel and obtain basic services and information. They can also learn about the preventive and promotive aspects of health care, which will encourage them to seek health care at proper facilities. Since the VHND will be held at a site very close to their habitation, the villagers will not have to spend money or time on travel. Health services will be provided at their doorstep. The VHSC comprising the ASHA, the AWW, the ANM, and the PRI representatives, if fully involved in organizing the event, can bring about dramatic changes in the way that people perceive health and health care practices.

VHND is being implemented jointly by the Indian Ministry of Health and Family Welfare (MoHFW) and the Department of Women and Child Development (WCD). The philosophy of designing the programme was to provide a platform for interdepartmental convergence in order to deliver comprehensive health and nutrition services through community involvement. The beneficiaries of the program include pregnant women, lactating mothers, children (0-5 years) and adolescent girls. The programme activities are primarily focused on early registration, identification and referral of high-risk children and pregnant women. Additionally, information on key health and nutrition topics are provided at the session site in an interactive manner[3] Health and nutrition days were introduced by the National Health Mission to improve access to essential maternal, newborn, child health and nutrition services.

In India, the rural areas have an organized three-tier health delivery structure. But in urban areas the health set up is ill-organized. As per Census 2011, population of India has crossed 121 crores with the urban population at 37.7 cores which is 31.16% of the total population, compared to 28.6 crore people as per Census 2001.[1]

According to NFHS III (2005-06) data Under 5 Mortality Rate (U5MR) among the urban poor at 72.7, is significantly higher than the urban average of 51.9, More than 46% of urban poor children are underweight.[2]

Undernutrition among women and children remains a major development challenge across India, and is a substantive challenge in the poorer states of India, including Madhya Pradesh. The global and Indian nutrition literature[4, 6] and India's nutrition policies recognize the multifaceted nature of interventions necessary to accelerate progress in nutrition. There are a set of broadly agreed upon nutrition-specific interventions to be delivered along the continuum of care, to improve maternal and child nutrition.[5] These include Iron and Folic Acid (IFA) supplementation during pregnancy, Breastfeeding (BF) promotion, Complementary Feeding (CF) education, vitamin A supplementation in early childhood, and food supplementation for pregnant and lactating women and young children. Even though it is acknowledged that investments to improve nutrition must be fundamentally multi sectoral in nature, it is also estimated that scaling-up ten of these direct nutrition interventions to 90 percent could reduce stunting by

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20 percent and severe wasting by 61 percent,[6] thereby highlighting the importance of attention to strengthening the delivery, reach, and utilization of nutrition-specific interventions.

Madhya Pradesh, a state of 73 million people in central India, has taken steps in recent years to enhance service coverage and foster coordination between ICDS and health programs. These include the initiation of Atal Bal Arogya Evam Poshan Mission (for integrated planning and actions to reduce child malnutrition); Village Health and Nutrition Days (VHNDs); Village Health, Nutrition, and Sanitation Committees (for decentralized health planning and collective actions at the village level); and Village Health Centers (Gram Arogya Kendras).[7]

WHO recommends that areas such as: planning, financing, surveillance, staff and management, social mobilization and links with the community, logistics (including the cold chain), stock management and outreach activities be monitored at district and national level.[8] Under this recommendation for the external monitoring and supportive supervision of immunization pro-gram State Routine Immunization Monitors (SRIMs) are nominated from PSM (Community Medicine) departments of Medical colleges. The SRIMS have to monitor the routine Immunization activity i.e. MAMTA Divas on every Wednesday of the month in their allocated district/ corporation and help the ANMs to carry out the process effectively and efficiently.

This study was undertaken with the objectives to monitor routine immunization & growth monitoring services and to provide necessary feed-back to district and state authorities and suggest corrective actions.

Objectives

The objectives are:

- To assess the functioning of the Village Health and Nutrition Day held at selected villages of district Bhopal.
- To identify the gaps in services delivery related to the Village Health and Nutrition Day.

Materials and Methods

This was a cross sectional observational study carried out in Bhopal from March 2018 to July 2018. Out of total 318 VHND sessions being conducted under district Bhopal, 10% of the session sites were randomly selected from the micro plan. Thus, a total of 32 VHND sessions were observed for this study. On each VHND average of 0benefecaries were registered so 10% of average of the daily attendance of VHND sessions were selected and interviewed. Hence interviews were conducted on 8 beneficiaries (2 ANC, 2 lactating mothers,2 mothers of children between 6 months to 5 years and 2 adolescent girls) from each session. Also, in-depth interviews of the service providers (all the frontline workers) were taken for qualitative assessment of their experiences about the VHND sessions. Prior to the study, necessary permission was taken from the CDMO. For the purpose of data collection, a semi-structured checklist was prepared based on the guidelines for VHND. Information regarding the presence of service providers at the session site, availability of required equipment's and supplies as well as the direct observation of service provision at the site. Each week VHND sessions are conducted on Tuesdays and Fridays and thus visits were planned accordingly. It was ensured that the data collection did not interfere with the on-going services. The staff members were briefed about the nature, purpose of the study and consent was taken from them before interview. Regarding the gaps in services delivery quality of the services it was ranked as good depending on the perception of the beneficiary.

In addition to the above, information regarding availability of the essential items for providing the services was also collected, and all items not available in sufficient quantity as per the demand was considered as not available. Also, all articles and items that were not functioning were also considered as not available.

Data analysis was done in the department of Community medicine by using Microsoft Office excel and Epi info 7.

Results

The study includes findings from the observation of a total of 32 VHND sessions. All sessions were held as per the microplan. Out of total sessions, 13 (40.6%) of the sessions were not organized at Anganwadi center and were conducted in the sub centre, school, house of the ASHA or Pradhan or common meeting place for local people. Major source of drinking water is hand pump (78%) where as 29% of the sessions have No storage facility for drinking water. 20 (62.5%) VHND sites have toilet facility, that too without running water. 18 (56.2%) sites had sitting arrangement facility. ANMs were present at all the sessions but Anganwadi workers were present only at 27 (84.3%) sessions. Anganwadi helpers and the ASHAs were present at 29 (90.6%) and 31 (96.8%) sessions respectively. Only 3 (9.3%) of the session sites the supervisors from health and ICDS were present.

Considering the availability of the instruments and other items at the session sites, following items like Slides were available at all of the sessions. Hemoglobinometer, KITs for urine examination and Vaccine carriers with ice packs were available in 31 (96.8%), 29 (90.6%) and 29 (90.6%). Weighing scales for children, adult and BP instruments were available in 21 (65.6%), 26 (81.2%) and 23 (71.8%) sessions respectively. Foetoscope, measuring tape and stethoscope were available in 9 (28.1%), 11 (34.3%) and 19 (59.3%). Examination table, bed screen and gloves were available

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in 24 (75%), 28 (87.5%) and 22 (68.7%) of the session. MCP card and MCH registers were available in 24 (75%) and 27 (84.3%) sessions respectively (Figure 1).

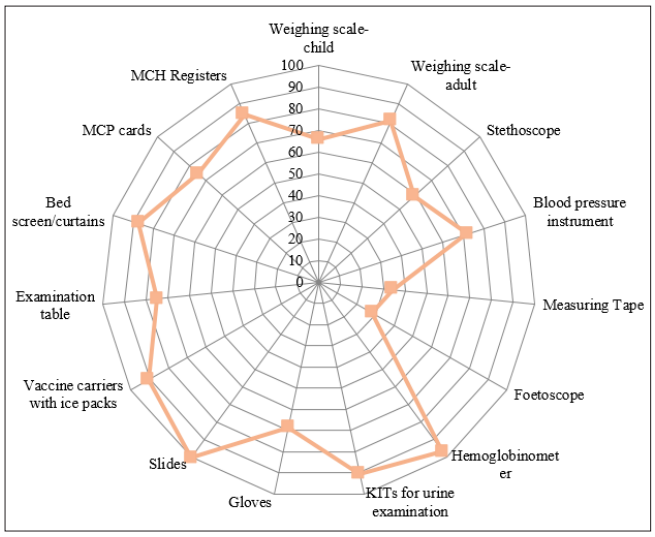

Figure 1.Availability of instruments and other items (N=32)

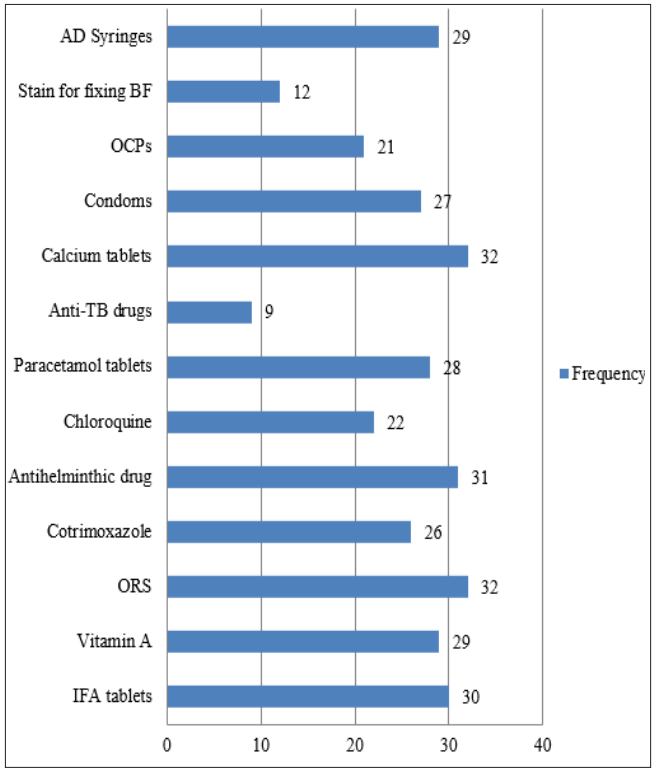

Figure 2.Availability of drugs and other supplies (N=32)

In all the visited sessions Calcium tablet and ORS packets was available and stock of IFA tablet, vitamin A and AD syringes was present in 93.7%, 90.6% and 90.6% sessions. Anthelminthic drugs, Paracetamol, co-trimoxazole and chloroquine were available in 96.8%, 87.5%, 81.2% and 68.7% sessions. Anti-TB drugs and stain for fixing BF were available only in 28.1% and 37.5% respectively. Condoms and Oral contraceptives were available in 84.3% and 65.6% respectively (Figure 2).

Table 1.Availability IEC Materials for VHND

S. No.	IEC materials for VHND	Frequency	Percentage (%)
1.	Information displayed about day, time and site of VHND	26	81.2
2.	IEC About key services	22	68.7
3.	Wall writings in local language	11	34.3
4.	Hoardings at one or two prominent places in the village	0	0
5.	Handbills & Pamphlets	0	0
6.	Information about whom to be involve	15	46.8

Table 1 shows the Availability IEC Materials for VHND which show that Hoardings at one or two prominent places in the village and Handbills & Pamphlets were not present at any session site. 26 (81.2%) of the session site have Information displayed about day, time and site of VHND. IEC materials about key services and Information about whom to be involve were available only in 22 (68.7%) and 15 (46.8%) session respectively. 11 (34.3%) of session have Wall writings in local language (Table 1).

Maternal Health Services

Registration of pregnant women and immunization for tetanus was carried out at all the 32 sites. Among Antenatal Care (ANC) services, blood pressure was measured at 65.6% of the VHND sites, abdominal examination and hemoglobin testing was done at 78.1% and 96.8% respectively. UPT for confirmation of pregnancy and Counselling of pregnant woman on health, hygiene and nutrition & other were carried out at 96.8 session site and only 34.4% of session site was Referring for safe abortion to approved MTP center (Table 2).

Child Health Services

As far as the child health services are concerned, immunization services were provided at almost all the sites (N=32). Out of 32 sites where immunization was provided, at 20 sites auxiliary nurse midwives (ANMs) were ensuring immunization of dropout children also; however, vitamin A was given only at 22 sites. At 26 sites (81.2%) Weighing of children and plotting of weight on the card was recorded and at 21 sites (65.6%) Counselling on and management of worm infestations was done (Table 2).

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Table 2.Status of village health nutrition day services (N=32)

Indicator	Frequency	Percentage (%)
Maternal Health		
Early registration of pregnancies	32	100
Tracking and provisions of services to dropout case	27	84.3
UPT for confirmation of pregnancy	31	96.8
Measurement of weight	23	71.8
Measurement of blood pressure	21	65.6
Immunization for tetanus	32	100
Hb estimation	31	96.8
Abdominal examination	25	78.1
Referral for safe abortion to approved MTP centers	11	34.3
Counselling of pregnant woman on health, hygiene and nutrition & other	31	96.8
Child Health		
Complete routine immunization	32	100
First dose of Vitamin A along with measles vaccine	22	68.7
Immunization for dropout children	20	62.5
Weighing of children and plotting of weight on the card	26	81.2
Provision of supplementary food for grades of mild malnutrition and referral for cases of severe malnutrition	23	71.8
Counselling on and management of worm infestations	21	65.6
Adolescent Health		
Health education	23	71.8
Tetanus toxoid immunization	31	96.8
Family Planning		
Information on use of contraceptives	32	100
Distribution - provision of contraceptive counseling and provision of non-clinic contraceptives such as condoms and OCPs	27	84.3
Information on compensation for loss of wages resulting from sterilization and insurance scheme for family planning	23	71.8
Sanitation		
Guidance on where to go and who to approach for availing of subsidy for those eligible to get the same under the total sanitation campaign	22	68.7
Mobilization of community action for safe disposal of household refuse and garbage	32	100
Health Promotion		
Counselling on healthy life style, proper diet, proper exercise	25	78.1

Adolescent Health

At 23 (71.8%) site were providing health education to adolescent girls on various aspect related to the health and 31 (96.8) site were also immunizing against tetanus (Table 2).

Family Planning

Information about use of contraception was provided at all site where as information on compensation for loss of wages resulting from sterilization and insurance scheme for family planning was available only at 23 (71.8%) site (Table 2).

Sanitation

ASHA at all site were Mobilization of community action for safe disposal of household refuse and garbage whereas only 22 (68.7) site were available Guidance on where to go and who to approach for availing of subsidy for those eligible to get the same under the Total Sanitation Campaign (Table 2).

Health Promotion

25 (78.1%) of the site was providing Counselling on healthy life style, proper diet, proper exercise (Table 2).

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Table 3.Client satisfaction with services as perceived by them (N=256)

S. No.	Parameters	Number (%)
1.	**Quality of service received**	
	Very good	67 (26.1%)
	Satisfactory	132 (51.5%)
	Not satisfactory	57 (22.2)
2.	**Waiting time**	
	More than 30 minutes	33 (12.8%)
	Less than 30 minutes	176 (68.7%)
	Did not have to wait	47 (18.3)
3.	**Site locality**	
	Very close	23 (8.9%)
	Not so far (<15 minutes)	207 (80.8)
	Far (>15 minutes)	26 (10.1%)
4.	**Staffs behavior**	
	Very good	153 (59.7%)
	Satisfactory	98 (38.2%)
	Not satisfactory	6 (2.3%)

Exit interview of the clients revealed that 51.5% clients perceived the service provided to them at VHND sessions were of good quality. Waiting time was less than 30 minutes for 68.7% beneficiaries. Most of the clients said that the behavior of the staffs was very good (59.7%) (Table 3).

Discussion

The VHND provides access to preventive, promotive and basic curative care to the community. It provides an alternative place to the community for seeking the health facilities as it has often been seen that individuals fail to reach the health centre due to their personal limitations.

In the present study, ANMs were present at all the sessions but anganwadi workers were present only at 27 (84.3%) sessions. Anganwadi helpers and the ASHAs were present at 29 (90.6%) and 31 (96.8%) sessions respectively. Only 3 (9.3%) of the session sites the supervisors from health and ICDS were present.

The findings are similar to the findings of study conducted by Orissa technical & management support team on village health and nutrition day (VHND) services found that the supervisory staffs were present in only 2% to 8% of sessions observed by the team.[10]

The availability of instruments and other items are the strength of any VHND session and showcase the efficacy of the same. Slide were available at all session sites. Hemoglobinometer was present in 96.8% sites whereas urine examination KITs and Vaccine carriers with ice packs were available in 90.6% sites. Weighing scales for children were present at 65.6% sessions, for adult at 81.2% and BP instruments at 71.8% sessions. Stethoscope was present at 59.3%, measuring tape in 34.3% and foetoscope in 28.1% sessions. Examination table, bed screen and gloves were available in 24 (75%), 28 (87.5%) and 22 (68.7%) of the session. MCP card and MCH registers were available in 24 (75%) and 27 (84.3%) sessions respectively.

In a study conducted by Tripathy RM et al., BP instrument, stethoscope, weighing scale for adults and measuring tape were available at all of the sessions. Weighing scales for children and haemoglobinometer were available in 76.2% and 66.6% sessions respectively. MCP cards were supplied in only 23.8% sessions and it was observed that in those sessions' beneficiaries had to do the photocopies of the same for using it. Bed with screen/curtain, urine examination kits, fetoscope and gloves were not available at any sessions.[11]

Calcium tablet and ORS packets was available and stock of IFA tablet, vitamin A and AD syringes was present in 93.7%, 90.6% and 90.6% sessions. Anthelminthic drugs, Paracetamol, co-trimoxazole and chloroquine were available in 96.8%, 87.5%, 81.2% and 68.7% sessions. Anti-TB drugs and stain for fixing BF were available only in 28.1% and 37.5% respectively. Condoms and oral contraceptives were available in 84.3% and 65.6% respectively.

In the findings of Tripathy RM et al., medicines like IFA (100%), calcium (85.7%), paracetamol (90.5%) were present in most of the sessions but chloroquine tablets were not supplied. Contraceptives were available in 76.2% sessions.

In the present study, though hoardings related to VHND were placed at one or two prominent places in the village, Handbills & Pamphlets were not present at any session site. 81.2% of the session site had information displayed about day, time and site of VHND. IEC material about key services was present in 68.7% and information about beneficiaries was available only in 46.8% session sites. 11 (34.3%) of session have wall writings in local language. The IEC material is a key ingredient in proving proper services and thus they should be better brought in circulation.

Registration of pregnant women and immunization for tetanus was carried out at all the 32 sites while blood pressure was measured at 65.6% of the VHND sites, abdominal examination and hemoglobin testing was done at 78.1% and 96.8% respectively. UPT for confirmation of pregnancy and counseling of pregnant woman were carried out at 96.8% session site and only 34.4% of session site was referring for safe abortion to approved MTP center. Immunization was conducted all over with 20 ANMs ensuring it amongst dropouts as well. However, vitamin A

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coverage was lower. At 81.2% sites, weight measurement was entered. The counseling for contraception was being done at all sites.

Conflict of Interest: None

Reference

1. Census of India 2011. Available at: http://censusindia.gov.in/2011-prov-results/paper2/data_files/india/Rural_Urban_2011. Accessed on 3 June 2017.
2. Ministry of Health and Family Welfare. National urban health mission framework for implementation. 2013.
3. Tennessean H. Engage in the process of change - facts and methods. World Health Organization, Regional Office for Europe, Copenhagen 2012.
4. Swaminathan MS. Undernutrition in infants and young children in India: A leadership agenda for action. *IDS Bulletin* 2009; 40(4): 103-110.
5. Avula R, Kadiyala S, Singh K et al. The operational evidence base for delivering direct nutrition interventions in India: a desk review. IFPRI Discussion Paper 1299. International Food Policy Research Institute, Washington, DC. 2013. Available from: https://EconPapers.repec.org/RePEc:fpr:ifprid:1299.
6. Bhutta ZA, Das JK, Rizvi A et al. Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?. *The Lancet* 2013; 382 (9890): 452-477.
7. Avula R, Kim SS, Chakrabarti S et al. Delivering for nutrition in Madhya Pradesh: insights from a study on the state of essential nutrition interventions. POSHAN Report No 8. International Food Policy Research Institute, New Delhi. 2015.
8. World Health Organization, Strategic indicators of immunization, 2012. Available from: http://www.who.int/ immuniza-tion/monitoring_surveillance/routine/indicators/en/.
9. Ministry of Health and Family Welfare. Routine immunization - National Rural Health Mission. 2010: 174-75.
10. Orissa technical and management support team. VHND assessment conducted in six districts, quality indicators developed and discussed with DoH & FW & DWCD. Department of Health & Family Welfare and Department of Women & Child Development Government of Orissa 2011: 4-25.
11. Tripathy RM, Panda M, Sahoo JR. A study on evaluation of health and nutrition day in urban slums of Berhampur, Odisha. *International Journal of Community Medicine and Public Health* 2017; 4(9): 3479-3484.

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