Original Research Article

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A study on evaluation of health and nutrition day in urban slums of Berhampur, Odisha

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ABSTRACT

Background: Urban health and nutrition day (UHND) serves as a common platform to deliver maternal, child health care, nutrition and WASH services to the urban poor population. This study was formulated with an objective to study the availability of resources at the UHND, to assess the services provided and to determine the satisfaction by the beneficiaries

Methods: A cross sectional study was conducted in urban slum of Berhampur from November 2016 to January 2017 and 10% of UHND sessions were observed. Data was collected regarding the presence of service providers at the session sites, availability of required equipments and supplies with the help of a semi-structured checklist. In-depth interviews of the service providers and exit interview from the beneficiaries from each session was taken after obtaining their informed consent and analyzed.

Results: Out of 21 sessions, ANMs were present at all sessions but AWWs were present only at 61.9% sessions. Examination table, bed screen were not present at any session. Registration of pregnant women & BP measurement was done at 90.5% but abdominal examination of the woman were not performed. Weighing of children and plotting of weight on the card was done in 71.4% and 52.4% sessions respectively. 78.5% clients were satisfied with the quality of services they received.

Conclusions: There was inadequate logistics identified in many UHND sessions. Hence strengthening of resources and infrastructure as well as regular supportive supervision is recommended to ensure provision of quality services.

Keywords: Evaluation, health and nutrition day, urban slums

INTRODUCTION

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.

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 Also the maternal health services utilization is poor in urban slums compared to the rural area, a recent study by Nimbalkar et al in Anand district in Gujarat supports this findings.³

According to expert group planning commission- 2009, Odisha is having the 2nd highest rates of urban poverty (37.6%) after Bihar (43.7%).⁴

Despite the supposed proximity of the urban poor to urban health facilities their access to them is severely restricted. This is on account of their being "crowded out" because of the inadequacy of the urban public health delivery system. Ineffective outreach and weak referral system also limits the access of urban poor to health care services. The lack of economic resources inhibits/ restricts their access to the available private facilities. Further, the lack of standards and norms for the urban health delivery system when contrasted with the rural network makes the urban poor more vulnerable and worse off than their rural counterpart.⁵

Keeping this in mind, the health of the urban poor (HUP) programme proposed to introduce urban health and nutrition day (UHND) in the urban areas on the lines of the VHND.

The National urban health mission (NUHM) framework highlights the need of convergence between ICDS and health where by MAS (Mahila Arogya Samiti)/urban ASHA in coordination with the Auxillary nurse midwife (ANM) would organize UHND coordination/collaboration with the Anganwadi worker (AWW). It is envisaged that UHND would serve as a common platform to deliver maternal, child health care, nutrition and WASH services to the urban poor population. It would help in delivering health care services at the door steps of the un-served and underserved urban population thereby leading to an improvement in the health status of the urban poor.⁷

This study was formulated against this background with an objective to assess the availability of resources at the UHND under Berhampur Municipal corporation, to study the services provided and to determine the level of satisfaction by the beneficiaries of UHND.

METHODS

This was a cross sectional observational study carried out in urban slum of Berhampur from November 2016 to January 2017. Out of total 210 UHND sessions being conducted under Berhampur municipality, 10% of the session sites were randomly selected from the micro plan. Thus a total of 21 UHND sessions were observed for this study. The exit interviews from 4 beneficiaries from each session (10% of average of the daily attendance of UHND sessions) were done to assess client satisfaction. Also in-depth interviews of the service providers (all the ANMs) were taken for qualitative assessment of their experiences about the UHND sessions. Prior to the study, necessary permission was taken from the CDMO, Ganjam. A semi-structured checklist was prepared for data collection based on the guidelines for UHND in urban areas of Odisha.⁷ Data were collected regarding the presence of service providers at the session site, availability of required equipments and supplies as well as the direct observation of service provision at the site. Each week UHND sessions are conducted on Tuesdays

and Fridays. Hence the sessions were visited on Tuesday/Friday as per the convenience and done by single observer to avoid any possibility of observer bias. It was ensured that the data collection did not interfere with the on-going services. The staff members were briefed about the nature and purpose of the study and consent was taken from them before interview. Exit interview of the beneficiaries were conducted from each session with their informed consent. Regarding the quality of the services it was ranked as good depending on the perception of the beneficiary.

While collecting the information regarding availability of the essential items for providing the services, it was decided that if any item was not available in sufficient quantity as per the demand it would be considered as not available. Also item that was not functioning would also be considered as not available.

Data analysis was done in the department of Community medicine by using Microsoft Office excel for quantitative data and thematic approach for qualitative data.

RESULTS

The study includes findings from the observation of a total of 21 UHND sessions.

All sessions were held as per the microplan. Out of total sessions, 7 (33.3%) of the sessions were not conducted in their own building and were conducted in the residence of the AWW or common meeting place of the community in the slum or verandas of local people. ANMs were present at all the sessions but Anganwadi workers were present only at 13 (61.9%) sessions. Anganwadi helpers and the urban ASHAs were present at 19 (90.5%) and 18 (85.7%) sessions respectively. In none of the session sites the supervisors from health and ICDS were present.

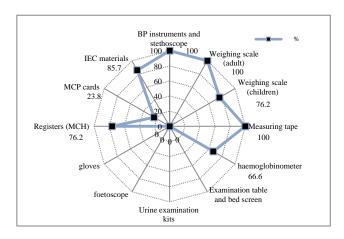


Figure 1: Availability of instruments and other items (n=21).

Considering the availability of the equipments and instruments at the session sites, following items like BP instrument, stethoscope, weighing scale for adults and measuring tape were available at all of the sessions. Weighing scales for children and haemoglobinometer and MCP cards were available in 16 (76.2%), 14 (66.6%) and 5 (23.8%) sessions respectively. MCP cards were present in only 5 (23.8%) sessions. Examination table, bed screen, urine examination kits and gloves were not present at any session. IEC materials and MCH registers were available in 18 (85.7%) and 16 (76.2%) sessions respectively (Figure 1).

Table 1: Availability of drugs and contraceptives (n=21).

Items	No.	%
IFA tablets	21	100
Calcium tablets	18	85.7
Deworming tablets (Albendazole)	14	66.6
Paracetamol tablets	19	90.5
Chloroquine tablets	0	0
ORS packets	20	95.2
Oral contraceptive pills	16	76.2
condoms	15	71.4

In all the visited sessions IFA tablet was available, but stock of calcium tablet was present in (85.7%) sessions and paracetamol in (90.5%) sessions. Chloroquin tablets were not supplied to any of the sessions. Oral contraceptives were available in 16 (76.2%) sessions (Table 1).

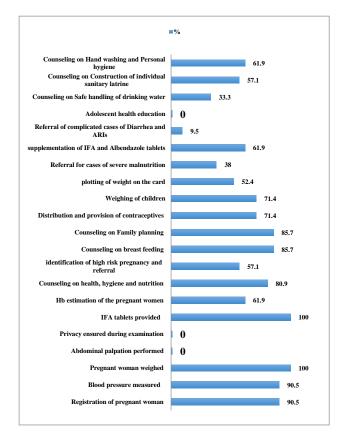


Figure 2: Observation of service delivery (n=21).

Regarding maternal services, registration of pregnant women and BP measurement was done at 90.5% of the sessions and weight of the pregnant women was measured at all sessions. The abdominal examination of the woman by abdominal palpation was not performed at any session site. Also no separate curtains or arrangements were available for ensuring privacy of women being examined at any of the session sites. Haemoglobin estimation was done in only 13 (61.9%) sessions (Figure 2).

Weighing of children and plotting of weight on the card was done in 15 (71.4%) and 11 (52.4%) sessions respectively. Adolescent health education was not given at any session. Counseling on safe handling of drinking water was done in 7 (33.3%) sessions (Figure 2).

Table 2: Client satisfaction with services as perceived by them (n=84).

Sl no.	Sub-elements (questions)	Number (%)	
1	Quality of service received		
	Very good	7 (8.3)	
	Good / Satisfactory	59 (70.2)	
	Not good / not Satisfactory	18 (21.4)	
2	Waiting time		
	More than 30 minutes	5 (5.9)	
	Less than 30 minutes	64 (76.2)	
	Did not have to wait	15 (17.8)	
3	Locality of facility		
	Very close	6 (7.1)	
	Not so far (<15 minutes)	68 (80.9)	
	Far (>15 minutes)	10 (11.9)	
4	Satisfaction with staffs behavior		
	Very good	20 (23.8)	
	Good / Satisfactory	49 (58.3)	
	Not good / not Satisfactory	15 (17.8)	

Exit interview of the clients revealed that 78.5% clients perceived the service provided to them at UHND sessions were of good quality. Waiting time was less than 30 minutes for 76% beneficiaries. Most of the clients were satisfied with the behavior of the staffs (82%) (Table 2).

Table 3: Challenges faced by ANMs.

- 1. Lack of adequate space for waiting arrangement of the beneficiaries
- 2. Examination table not provided
- 3. Curtains for privacy not available
- 4. Inadequate MCP cards
- 5. Facing problem with Sahli's heamoglobinometer to estimate heamoglobin for all the beneficiaries in a session
- 6. Lack of regular supervision

In depth interview of the ANMs revealed that they were getting support of the Anganwadi helpers, social

mobilisers like ASHA and MAS members. However AWWs were absent in many sessions. Before the session they prepare the beneficiary list and made sure that no one was left. Community leaders supported them. Few challenges faced by the service providers are shown in Table 3.

DISCUSSION

The UHND is a platform for the community people to access services for a package of preventive, promotive and basic curative care. Urban growth has led to rapid increase in number of urban poor population, thus putting greater strain on the urban infrastructure which is already overstretched.

Though AWC has been identified as a hub for service provision in UHND, in this study 66.7% of the sessions were conducted in the building of the AWC, but in rest it was conducted either in the residence of the AWW or common meeting place of the community in the slum or verandas of local people.

ANMs were present at all the sessions whereas AWWs were present only at 13 (62%) of sessions. But as per the norm, MAS/urban ASHA in coordination with the ANM would organize Urban Health and Nutrition day in close coordination/collaboration with the AWW. Though AWW is one of the important health care provider who coordinates activities with the ASHA and the ANM, but was found to be absent in many sessions. 8

As per the plan for conducting UHND sessions, LHV, MO, CDPO, ICDS Supervisor are supposed to make supervisory visits to AWCs on UHND.⁷ But it was observed that no supervisory visits were made during the study period.

A study by Mehta et al showed that ANM was present at 14 out of 17 UHND sessions. AWW and Community link volunteer were present at all sessions. The supervisors from health and ICDS as well as other members of the health and sanitation committee were not present at any session.⁹

A study by Orissa technical & management support team on village health and nutrition day (VHND) services found that the supervisory staffs operating at the Block Level viz. LHV/MPHS, BPO, MOIC, CDPO, LS etc. were present in only 2% to 8% of sessions observed by the team. ¹⁰

The equipments and logistics are quite essential and play a pivotal role in ensuring service delivery. In this study BP instrument, stethoscope, weighing scale for adults and measuring tape were available at all of the sessions. But weighing scales for children and haemoglobinometer were available in 16 (76.2%) and 14 (66.6%) sessions respectively. MCP cards were supplied in only 5 (23.8%) sessions and it was observed that in those sessions

beneficiaries had to do the photocopies of the same for using it.

Though privacy is essential to be maintained during health checkups, it was observed that bed with screen/curtain was not available at any sessions and abdomen checkup could not be done because of lack of privacy of women. So also urine examination kits, fetoscope, gloves were not provided to any sessions.

Medicines like IFA (100%), calcium (85.7%), paracetamol (90.5%) were present in most of the sessions but chloroquin tablets were not supplied. Contraceptives were available in 76.2% sessions.

Saxena et al in their study on VHND services in the state of Uttarakhand also observed that blood pressure measuring instrument was available at 13 sites (54.17%), examination table at 3 sites (12.50%) and hemoglobinometer was available at 9 sites (37.50%) only. Adult weighing machine was not available at 10 sites and iron folic acid (IFA) large tablets were not available at 5 out of 23 sites. ¹¹

In a study by Mehta et al in Vadodara city, Gujarat shows supply of MAMTA cards were available at most of the UHND sessions. Iron and folic acid (IFA) tablets and plain folic acid tablets was available only at 9 and 2 session sites respectively out of 17 sessions.

Regarding maternal service, registration of pregnant women, weight, BP measurement and provision IFA tablets were done at most of the sessions. In about 9% of the sessions registration of ANC was not done and for that the concerned health worker explained that due to proximity of the tertiary care centre and private practitioner in the locality many pregnant women did not come to the UHND session for ANC. Haemoglobin estimation done in 13 (61.9%) sessions only. The abdominal examination of the woman by abdominal palpation was not performed at any session site.

A study by Gandhi et al revealed that in majority of UHND sessions, pregnant women were weighed and weight was recorded. BP of pregnant women was measured properly and recorded in 65.57% of session sites. In 88.52% of session sites, abdominal palpation was not performed because of lack of privacy as separate rooms and curtains were unavailable. Similar findings were also reported by Kotecha et al in their study which revealed that in 95.6% UHND sessions, pregnant women were weighed and weights were recorded. BP of pregnant women was measured properly and recorded in 90% of session sites.

In a study by Mehta et al, weighing of the pregnant woman with provision calcium tablets was done at most of the UHND sessions. But provision of Iron & Folic acid (IFA) tablets and plain folic acid tablets was there at 9 and 2 session sites respectively. The abdominal

examination of the woman by abdominal palpation including auscultation of fetal heart sounds were not performed at any session site. Also no separate curtains or arrangements were available for ensuring privacy of women being examined at any of the session sites. Correct blood pressure measurement and record was done at only 4 out of 17 sessions.⁹

Implementation of Growth monitoring specially focusing in the younger age group of 0-36 months is crucial to prevent malnutrition. In the year 2014 considering high child malnutrition rate of Orissa, Parhi et al had advocated for weight measurement of all the children. assessment of their malnutrition level and then referral of the severely malnourished children to Prustikar Diwas.¹⁴ AWWs are responsible to provide growth monitoring services in health and nutrition day and referral of children with severe acute malnutrition (SAM) along with distribution of supplementary nutrition. 15 Here in this study, Weighing of children was done in 15 (71.4%) sessions, plotting of weight on the card was done in 11 (52.4%) sessions and in only 8 (38%) sessions severe cases of malnutrition had been detected and referred. In the study by Gandhi et al, growth monitoring was done in 48 (60%) session sites. Community growth chart monitoring was not seen in any AWCs.¹

Adolescent health education was not given at any observed sessions in this study and perhaps least focused by service providers. The reasons for non-attendance might be due to overlapping of school timings with UHND timings and lack of motivation & poor understanding about the services.

As per the guideline, WASH services like counseling on importance of safe drinking water, safe handling of drinking water, construction of individual sanitary latrine, usage of toilet facilities, hand washing, personal hygiene and household cleanliness is highly essential and need to be strengthened.⁷ In this study counseling on safe handling of drinking water, on sanitation and hygiene were done in 33.3%, 57% and 62% sessions respectively.

As perceived by the beneficiaries, 76% opined that the waiting time of the service was less than 30 minutes, 82% clients were satisfied with the behaviour of the staffs and 78.5% perceived that they received good quality of service on the day of visit. Despite lack of adequate logistics at the sessions, the perceived quality of services by the beneficiaries was good. It might be due to the availability of outreach heath care services close to their dwelling place.

A recent study conducted in a block of Dibrugarh district of Assam on VHND concluded that satisfaction level with the quality and behavior of service provider was very good from the community perspective as evident from exit interview finding. In a study by Saxena et al, exit interview of clients revealed that 64% clients took less than 15 min time to reach at VHND site and 60%

clients waited less than 30 min to avail the services. Almost one third of clients rated the services "fair" (score -3) and good (score-4) on the scale of one to five of ascending satisfaction level.¹¹

In depth interview of the service providers (ANMs) revealed that though they were getting support of the Anganwadi helpers, social mobilisers like ASHA and MAS members as well as community leaders but few challenges were faced by them like lack of regular supervision, irregular supply of equipments and lack of sitting facility for the beneficiaries. In some sessions, there was no suitable place to conduct the sessions for which they manage it by conducting on verandas and houses of the local people.

CONCLUSION

This study shows that UHND sessions provided services to pregnant women and children regularly as per the plan and beneficiaries were satisfied with the services. But few challenges like lack of waiting facilities for beneficiaries, inadequate logistics and lack of supervision were identified. In addition no care was given to the adolescents. Hence strengthening of the infrastructure and regular supportive supervision is recommended to ensure provision of quality services in the sessions.

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REFERENCES

- Census of India 2011. Available at: http://censusindia.gov.in/2011-provresults/paper2/data_files/india/Rural_Urban_2011. Accessed on 3 June 2017.
- Ministry of Health and Family Welfare. National urban health mission framework for implementation, ministry of health and family welfare, India, 2013.
- 3. Nimbalkar AS, Shukla V, Phatak AG, Nimbalkar SM. Newborn care practices and health seeking behavior in urban slums and villages of Anand, Gujarat. Indian Pediatr. 2013;50(4):408–10.
- Government of India, Planning Commission. Report
 of the expert group to review the methodology for
 estimation of poverty, Government of India
 Planning Commission. 2009; Available at:
 http://planningcommission.nic.in/reports/genrep/rep
 pov.pdf. Accessed on 3 June 2017.

- Mission NH. National URBAN Health Mission, Framework for implementation welfare, Ministry of health and family welfare, Government of India, May 2013.
- 6. Mahajan S, Dhingra J. Operational Guidelines for Urban Health and Nutrition Day (UHND) Health of the urban poor (HUP) Program, Population Foundation of India. Oper Guidel UHND, HUP.
- 7. Mission NH. Guideline for Urban Health and Nutrition Day (UHND) in Urban areas of Odisha Mission Directorate National Health Mission, Odisha Department of Health & Family Welfare, Government of Odisha.
- Ministry of Health and Family Welfare. Monthly Village Health Nutrition Day. Heal San Fr. 2007: 1– 28.
- 9. Mehta KG, Pandya CM, Solanki DM. Process evaluation of maternal health service at outreach sites during health and nutrition day (Mamta day) in urban slums of Western India. Int J Community Med Public Health. 2016;3(4):881-5.
- Orissa technical and management support team.
 VHND Assessment Conducted in Six Districts,
 Quality Indicators Developed and Discussed with
 DoH&FW & DWCD. Dep Heal Fam Welf Dep
 Women Child Dev Gov Orissa. 2011: 4–25.
- 11. Saxena V, Kumar P, Kumari R, Nath B, Pal R. Availability of Village Health and Nutrition Day

- services in Uttarakhand, India. J Family Med Prim Care. 2015;4(2):251-6.
- 12. Gandhi SJ, Dabhi M, Chauhan N, Kantharia S. Assessment of maternal and child health services during Mamta days in urban areas of Surat City. Int J Med Sci Public Health. 2016;5(6):1199–203.
- 13. Kotecha I, Singh MP. Process Evaluation of Health and Nutrition Day (Mamta Day) in Urban Slum Areas of Bhavnagar Municipal Corporation. Natl J Integr Res Med. 2012;3(1):111–4.
- 14. Parhi RN, Saxton J. Pustikar Diwas: Convergent Action to Reduce Child Undernutrition in Odisha. Int Food Policy Res Institute. 2014;3:4.
- 15. Health V, Welfare F. Improving the Coverage and Quality of Village Health and Nutrition Days. Intra Health Int. 2012: 1-12.
- 16. Tulika GM, Baruha 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. Clin Epidemiol Glob Health. 2015;3(3):104-9.

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