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AVAILABILITY OF DRUGS AND LOGISTICS ON VILLAGE HEALTH AND NUTRITION DAY IN RURAL AND URBAN AREAS OF SOUTH GUJARAT, INDIA

Manan J Patel[1], Prakash B Patel[2], N B Patel[2], R K Bansal[3]

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Author's Affiliation:
[1]Post-graduate student; [2]Assitant Professor; [3]Professor & Head, Surat Municipal Institute of Medical Education & Research, Surat, Gujarat, India

Correspondence:
Dr. Manan Patel
Email- mananpatel14@gmail.com

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ABSTRACT

Introduction: VHND session is a great opportunity for reaching to pregnant women and children less than 5 years of age. Objective of the study was to assess the status of drugs and logistics availability on Village Health and Nutrition Day (VHND) in rural areas of Tapi district and Surat city areas.

Methods: This cross sectional study was conducted during September 2013 to February 2014. Out of 28 Primary Health Centres (PHCs) of Tapi district 9 were selected and out of 40 Urban Health Centres (UHCs) of Surat City, 16 were selected by random number table. Checklist of essential logistics for VHND was prepared and used to collect the data.

Results: Logistics used during Antenatal care like sphygmomanometer, stethoscope, examination table, measure tape and adult weighing scale were available at more VHND session in rural areas compared to urban session sites. Medications like iron folic acid tablets, paracetamol tablets and calcium tablets were present in more than three forth of the session at both urban as well as rural areas. Availability of Zinc tablets and cotrimoxazole tablets were very poor in urban area in contrary to rural area where they were available at almost all VHND session. Overall, logistics availability was better at rural VHND sessions in comparison to urban sessions.

Conclusion: Logistics availability was poor in urban area compared to rural area. Reasons behind the same need to be explored and appropriate corrective measures need to be taken which might help to improve services provided during VHND sessions.

Key words: Child health, Maternal Health, Family Planning, VHND, UHC, PHC

INTRODUCTION

The Village Health and Nutrition Day (VHND) session is a great opportunity for reaching to pregnant women, eligible couples and children less than 5 years of age.[1] In urban area, this type of community primary health care services are provided on Community Outreach sessions.[2] Drugs & Logistics are very essential component of these sessions to provide effective first contact primary health care.[1] For comprehensive service provision including antenatal care, immunization, family planning and micronutrient provision, all the drugs and logistics are required. For continuous supply of all types of required drugs and logistics, health managers have to remember the five 'rights' of logistics management: right quality, right quantities, right materials, right time and right place.[3]

All these drugs and logistics are supplied under different health programmes by various departments of state and national government.[4] There are many organizational differences between the health systems of Municipal Corporation and district which can be

reflected on conduction of VHND or community outreach sessions.[2,5]

With this background, we assessed the Village Health and Nutrition Day (VHND) or Community Outreach sessions at rural areas of Tapi district and Surat city areas with an objective to compare the status of drugs and logistics availability at these sessions.

METHODS

This cross sectional study was conducted during September 2013 to February 2014. We aimed to cover at least one third of all the government health centres of Tapi district and Surat city. Health and family welfare activities of Tapi district is carried out under the supervision of Chief District Health Officer, Govt. of Gujarat. Similarly, these activities are carried out in Surat city under the supervision of Medical Officer of Health, Surat Municipal Corporation.

We listed all the health centres according in ascending order of name of the area or village where they are located. Out of 25 Primary Health Centres (PHCs) of Tapi district 9 were selected and out of 42 Urban Health Centres (UHCs) of Surat City, 16 were selected by random number table. VHND session organized by the health centre, alternatively urban and rural, was visited one in a week and data was collected using checklist of essential drugs and logistics for VHND prepared according to guidelines of drugs and logistics management.[3] Availability of drugs and logistics was assessed keeping in mind the necessary quantity and quality. Data was entered and analyzed using Microsoft Excel software.

RESULTS

In the present study, total 25 VHND sessions were covered including 9 sessions at Primary Health Centres of Tapi district and 16 sessions at Urban Health Centre of Surat city. Table 1 shows that logistics used during antenatal care like sphygmomanometer, stethoscope, examination table, measure tape and adult weighing scale were available at more VHND sessions in rural areas compared to urban session sites. Various testing kits related to antenatal care were not available at any urban sites.

Medications like iron folic acid tablets, paracetamol tablets and calcium tablets were present in more than three forth of the session at both urban as well as rural areas. Iron folic acid syrup were available at only 3 session sites out of 25 sites visited. Availability of Zinc tablets and Cotrimoxazole tablets were very poor in urban area (6.3%) in contrary to rural area (77.8%) where they were available at almost all VHND session. (Table 2) All the vaccines necessary according to Universal Immunization Programme of India were available in sufficient quantity and quality at all the 25 session sites included in the study. Other necessary logistics related to immunization services were also available sufficiently at almost all the sites.

Table 1: Availability of logistics related to Antenatal care services at VHND sessions

Drugs & Logistics	Sessions Organized by PHCs (n=9)	Sessions Organized by UHCs (n=16)
Iron & folic acid Tablets (large)	9 (100.0)	12 (75.0)
Folic acid tablets	8 (88.9)	15 (93.8)
Adult Weighing scale	9 (100.0)	13 (81.3)
Blood pressure apparatus	9 (100.0)	12 (75.0)
Stethoscope	6 (66.7)	12 (75.0)
Examination table	3 (33.3)	3 (18.8)
Inch tape	6 (66.7)	2 (12.5)
Foetoscope	2 (22.2)	0 (0.0)
Haemoglobin testing kit	6 (66.7)	0 (0.0)
Urine testing kit/ uristix strips	7 (77.8)	0 (0.0)
Pregnancy testing kit	9 (100.0)	1 (6.3)
Iodized salt	9 (100.0)	5 (31.3)
Calcium tablets	9 (100.0)	16 (100.0)

*figures in the parenthesis are percentages

Table 2: Availability of logistics related to Child health care services at VHND sessions

Drugs & Logistics	Sessions organized by PHCs (n=9)	Sessions organized by UHCs (n=16)
Child Health services		
ORS Sachets	9 (100.0)	11 (68.8)
Cotrimoxazole tablets	6 (66.7)	1 (6.3)
IFA Tablets (small)	7 (77.8)	15 (93.8)
IFA syrup	1 (11.1)	2 (12.5)
Zinc sulphate tablets	7 (77.8)	1 (6.3)
Vitamin A Syrup	8 (88.9)	15 (93.8)
Plastic Spoon for Vitamin A	8 (88.9)	15 (93.8)
Albendazole tablets	8 (88.9)	5 (31.3)
Child Weighing scale	9 (100.0)	14 (87.5)
Infant Weighing scale	7 (77.8)	4 (25.0)
Thermometer	8 (88.9)	4 (25.0)
Gention Violet	6 (66.7)	0 (0.0)
Nutrition supplements from ICDS	7 (77.8)	10 (62.5)
Immunization services		
AD (0.1ml) Syringes	9 (100.0)	16 (100.0)
AD (0.5 ml) Syringes	9 (100.0)	16 (100.0)
Functional Hub Cutter	9 (100.0)	15 (93.8)
Red & Black Bag	9 (100.0)	16 (100.0)
Paracetamol tablet	9 (100.0)	16 (100.0)

*figures in the parenthesis are percentages

Table 3: Availability of logistics related to Family Planning and various registers at VHND sessions

Drugs & Logistics	Sessions organized by PHCs (n=9)	Sessions organized by UHCs (n=16)
Family Planning services		
Condoms	6 (66.7)	8 (50.0)
Oral Contraceptives	8 (88.9)	7 (43.8)
Emergency contraceptive pills	3 (33.3)	2 (12.5)
Records & Registers		
Blank Mamta Cards	9 (100.0)	14 (87.5)
Referral cards	3 (33.3)	6 (37.5)
Due list of Beneficiaries	5 (55.6)	7 (43.8)
IMNCI forms	4 (44.4)	3 (18.8)
IMNCI chart booklet	2 (22.2)	1 (6.3)
Register 4 and 5	6 (66.7)	5 (31.3)
ICDS growth monitoring chart register	7 (77.8)	7 (43.8)

*figures in the parenthesis are percentages

As shown in table 3, family planning logistics like condoms, oral contraceptive pills and emergency contraceptive pills were present at less than half of the urban session sites only. Due list of beneficiaries were not available at almost half of the session sites at both urban and rural areas only.

DISCUSSION

In the present study, we have compared the availability of drugs and logistics at Village Health and Nutrition Day sites organized at rural area of Tapi district and urban area of Surat city. Various logistics required at these sessions are supplied under Reproductive, Maternal, Newborn, Child and Adolescent health (RMNCH+A) programme, Universal Immunization Programme of India, Family Planning programme or under state government supply.[3,6,7]

According to findings of our study, logistics used during antenatal care were available at more VHND sessions in rural areas compared to urban area. Various testing kits related to antenatal care were not any urban sites. The main reason for this discrepancy between urban-rural session sites is that urban sessions being more focused on immunization services rather than antenatal or family planning services. According to NUHM guidelines, urban outreach sessions conducted mostly at anganwadis of urban slum areas aimed at providing comprehensive primary health services to the beneficiaries.[2] But at many urban session sites, it was observed that these logistics were not at all used by health workers for the examination of antenatal women.

In our study, we found that certain essential medicines were found at only three forth of the session sites while diarrhea management drugs like oral rehydration solution (ORS) and zinc sulphate tablets were very poorly available at urban session sites. This may be due to some procurement and distribution issues from central drug store to particular urban health centre. Close monitoring and supervision is very important for better management of drugs and logistics.[8]

Supply of essential medications in Gujarat state is maintained, monitored and supervised by Gujarat Medical Services Corporation Limited which is an undertaking of Government of Gujarat. They ensure timely distribution of the essential medicines and equipment.[9] It is likely that unavailability of certain drugs at particular session site of a district or a city area may be the result of improper material management at local levels, ignorance of the health care workers about the use of the particular drug or logistic and scarcity of staff (mainly pharmacists) trained in material management.[10] Situational analysis by modern management techniques can be of use in such situation. They can help healthcare managers to identify strengths and weaknesses of current practices; opportunities to improve and challenges hindering the process.[11]

Family planning logistics like condoms and oral contraceptive pills were present at less than half of the urban session sites only. All the necessary vaccines and logistics related to immunization were available in sufficient quantity and quality at all the 25 session sites included in the study. Due list of beneficiaries of VHND session were not available at almost half of the session sites at both urban and rural areas which is to be maintained by ASHA and anganwadi worker. It gives idea about number of children and pregnant women to be called for immunization and identifies the children missed the scheduled dosage of vaccine. Its unavailability shows deficiency in the work of village level health care workers.

In this study, overall logistics availability was poor in urban area compared to rural area. Urban sessions are aimed to cater primary health services to urban poor and without drugs and logistics this task seems difficult. It is thought that urban population have better access to basic health care services. Despite the supposed proximity of the urban poor to urban health facilities their access to them is severely restricted and they suffer from poor health status. As per NFHS 3 data[12], 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 and almost 60% of urban poor children miss total immunization before completing 1 year. Thus there is a need to strengthen VHND sessions by regular and uninterrupted supply of drugs and logistics especially in urban areas.

CONCLUSION

Availability of essential drugs and logistics related to antenatal care, child health and family planning were poorly available at urban outreach session or VHND session compared to rural sessions. Vaccines and logistics related immunization services were sufficiently available at both urban as well as rural sites.

RECOMMENDATIONS

Reasons behind poor logistics availability should be explored and appropriate corrective measures need to be taken which might help to improve services provided during VHND sessions. Health care managers should be trained in drugs and logistics management. Procedural hindrance of using untied fund for local purchase of logistics should be explored and authority should be delegated for the same to medical officers and staff nurses.

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