

## Evaluating the Fixed Nutrition and Health Day (FNHD) program in the rural area of Shamirpet, Ranga Reddy District and the urban area of Dabeerpura, Hyderabad District.

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### Abstract:

Fixed Nutrition and Health Day (FHND) program combines the convenience of fixed day, fixed site service, with the provision of outreach services such as immunization, antenatal services, fixed food supplement distribution, health and nutrition evaluation and monitoring. The aim of this study was to evaluate the awareness, availability, and the satisfaction of FHND program. A community based cross sectional study was done in rural area of Shamirpet in Ranga Reddy district and urban area of Dabeerpura in Hyderabad District. Thirty cluster methods were used and STATA 11.0 was used to analyze the data. The analysis showed that food supplement distribution was not available as part of FHND program. Also ante and post natal care was also not available in rural areas. This study concludes that there is still a long way to deliver truly convergent service and efforts should be made at policy level and sufficient resources allotted to deliver more and better services through FHND program.

**Key words:** Fixed Nutrition and Health Day, Fixed Day, ANC

### 1. Introduction:

#### 1.1 History of Fixed nutrition and Health Day program

The Integrated Nutrition and Health program started as a ten year program with two phases of five years in 1996-2001 and 2002-2006. It has evolved then and has been widely replicated across the country in various forms as Village Health and Nutrition Day or Fixed Nutrition and Health Day (FHND) under National Rural Health Mission (NRHM). It combines the convenience of fixed day, fixed site service, with the provision of outreach services such as immunization, antenatal services,

fixed food supplement distribution, health and nutrition evaluation and monitoring. The National Rural Health Mission has been launched by the Government of India to carry out necessary architectural correction in the basic health care delivery system, especially in the rural areas with special focus on eighteen states. The goals of FHND are to reduce Infant Mortality Rate, Mortality rate, Fertility rate and aims at population stabilization, gender & demographic balance. Health also has an effect on education, healthier children can learn better spend more time at school and are better learners. India sees 1.8 million 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 and 56% women are anemic. [1]

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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. [2] Demographic, socioeconomic factors, relation to birth order, mothers education, primary care taker, infection, illness, health seeking behavior, feeding practices, and rural environment as per the NFHS (National Family Health survey) estimates. [3]

### 1.2 Services at Fixed Nutrition and Health Day program

Convergence of presently available services in varied timings and places to a fixed place and time is the concept behind FHND. The services provided under this concept nutrition action, community based newborn care, antenatal care and primary immunization, empowering communities & building capacities of functionaries IFA and Vitamin A administration, growth monitoring, treatment for minor ailments, health education, promotion of institutional deliveries, facilitate referral. Also provided are take home rations, for pregnant lactating mothers and children 6-36 months' of age. [4-8]

## 2. AIMS AND OBJECTIVES

### 2.1 Aims

The aim of this study was to evaluate the awareness and performance of Fixed Nutrition and Health Day program in rural and urban areas of Andhra Pradesh state.

**2.2 Objectives** The objectives of this study are, among the beneficiaries of the FHND program:

1. To measure the level of awareness;
2. What is the source of information through which they get to know about the program;
3. What services are utilized by the beneficiaries;
4. Their level of satisfaction about the services, access to services;
5. Any deficiency of services and the utilization of private health care facility;
6. Socio demographic background of the beneficiaries.

## 3. MATERIALS AND METHOD

The study is a community based cross sectional study by design. The location for the study was chosen conveniently in rural area of Shamirpet in Ranga Reddy district and urban area of Dabeerpura in Hyderabad District as the principal investigator had working experience in both the areas.

Figure 1: Map showing the location of the study areas of Shamirpet (B) in Ranga Reddy district and Dabeerpura (A) in Hyderabad District



Though Hyderabad District is urbanized the study area is a slum comprising of 90% minority population, the occupation mostly being petty businessmen and laborers. Community based cross sectional study was done in both rural and urban areas and all children under five years of age will be selected.

The thirty cluster sampling frame method was chosen for generalisable representation of the study area. Selection of thirty clusters was done in both rural and urban areas. The Rural population of Shamirpet, Ranga Reddy consisting of nine sub centers with total population of 52264 which divided by thirty clusters and beneficiaries were selected from the 25 villages to get 210 beneficiaries. Each cluster comprised of 1700 population. Villages The Urban population of Dabeerpura was 12700 comprising of mostly Muslim population and included in six slums. The population was divided by 30 clusters to get 210 beneficiaries. All children under the age of five were included in this study. And preterm, newborn, congenital anomalies, severely ill children were excluded.

Teams of investigators under supervision and after training by the principal investigator, visited the selected households and the care givers of the children were asked to respond to a structured face to face interview arranged by the survey teams. Training workshops and supervised pre test interviews were held in Pilot study was done in the PHC Jawahar Nagar of Ranga Reddy District to standardize the data collection procedure. Each interviewer collected data using the structured questionnaire from both rural and urban areas of 210 beneficiaries each to a total of 420 beneficiaries. Questions were asked regarding the number of children born in the previous five years; age, sex, immunization status of last child, health care provision factors participation in health education, socioeconomic factors, knowledge of vaccine preventable disease, awareness of the program, source of information about the program, satisfaction of the services, access to health facility, any deficiency of services, whether mother delivered the child at home or hospital, how they meet the deficient services and utilization of services.

The collected data was analyzed using STATA 11.0. Chi square tests were performed to analyze the significance of association among variables.

#### 4. RESULTS

As showed in Table 1, one hundred percent of people who responded to the study knew about the FHND program. However in rural areas people knew about FHND through ASHA's and in urban areas people knew through anganwadis. Surprisingly ante and post natal care services were not availed thru the FHND program in the rural areas, whereas in urban area 63% of people availed ante natal care service. Also food supplements were found to not availed or not provided by the service in both rural and urban areas. A high percentage of people; 79% in urban area and 92% in rural area expressed satisfaction with the FHND service.

**Table 1: Village Health and Nutrition Day (VHND) Evaluation**

Variable	Type	Number & Percentage In Urban	Number & Percentage In Rural
No of respondents		N=224	N=205
Know VHND		224 (100%)	205 (100%)
Through Health worker		107 (48%)	117 (57%)
Through ASHA		106 (47%)	203 (99%)
Through Anganwadi		200 (89%)	115 (56%)
Through community		94 (42%)	-
Services Availed	Antenatal services	141(63%)	-
	Postnatal services	23(10%)	-
	Food supplements	3(1.3%)	-
	Health education	212(94%)	16(7.8%)
	Nutrition education	214(95%)	118(57%)
	Janani suraksha yojana	212(94%)	65(31%)
	Family planning	213(95%)	99(48%)
	Neonatal care	-	69(33%)
Satisfied with services		179(79%)	189(92%)

Table 2 shows that in the urban area where the study was conducted the study, nearly 50% of the study sample had 3 or more children and in the rural area 87% had only one or two children, and this was statistically highly significant. This could be due to the fact as shown again in Table 2 that in the urban area where this study was conducted, 93% of the population belonged to Muslim religion whereas in the rural area, they were only 3% and the majority religion was Hindu at 96.5%. This also shows that people of same religion cluster around locations, in both rural and urban areas, and also shown to be statistically highly significant. A high percentage (96%) of people in rural areas owned their own homes whereas only 24% in urban areas owned their home; this again was statistically significant. Although people in rural did not use the FHND service for ante natal care, majority of them at 99% received four or more times the service, as shown in

**Table 2: Socio Demographic Status of VHND survey respondents**

Variable	Type	No (%) In Urban	No (%) In Rural	p-value
No of respondents		N=224	N=205	
No of Children in family	1 2 3 4	25(12.5) 73(35) 80(39%) 20(11.7)	73(36) 104(51) 21(10) 2(1)	<0.001
Gender of children assessed	Male Female	122(55) 100(45)	111(54) 94(46)	0.867
Type of family	Nuclear Extended	157(70) 66(30)	129(64) 74(36)	0.132
Type of House	Own Rented	53(24) 167(76)	179(93) 12(7)	<0.001
Religion	Hindu Muslim Christian	13(6) 207(93) 4(1)	198(96.5) 6(3) 1(0.5)	<0.001
Transport	Car Bike Auto Bicycle Public transport	3(1.3) 36(17.5) 117(57) 5(2.3) 59(27)	0 3(1) 72(35) 3(1) 125(61)	<0.001
Landline Telephone		3(1.3%)	6(10)	NS
Mobile Telephone		220(98)	202 (98)	NS
Television		184(82)	192(94)	NS
Radio		10(4.5)	14(7)	NS

Table 3. Both in rural and urban areas the overwhelming (at 99%) preferred provider was the Government health centers. However when it comes to delivering the baby 56% of rural respondents and 13% of urban respondents chose private service providers. After delivery there is again an overwhelming shift towards government service providers for vaccination. All these data were statistically significant. The average weight of the child in rural area was 2.7 Kgs which was slightly lesser than the average weight of the child in urban area; however this difference was not statistically significant.

**Table 3: ANC, Delivery and Vaccination Status of the VHND Respondents**

Variable	Type	No (%) In Urban	No (%) In Rural	P-Value
No of respondents		N=224	N=205	
ANC Registration		219(98)	205(100)	
Antenatal check up	3 4 5	128(58) 13(5.9) 78(35.6)	3(1) 84(42) 117(57)	<0.001
Type of facility for ANC check up	Govt. - hosp. PHC SC Private - hosp. Other	78(39) 0 116(58) 0 5(2.5)	1(0.5) 45(22) 156(76) 1(0.5) 1(0.5)	<0.001
Place of delivery	Govt. - hosp PHC SC Private - hosp. Others	187(85) 0 3(1.3) 29(13) 1(0.4)	7(4) 56(33) 0 94(56) 10(5.9)	<0.001
Vaccination place	Govt. - hosp PHC SC Private - hosp. Others	98(46) 1(0.5) 110(53) 0 0	1(0.5) 2(1) 167(98.8) 0 0	<0.001
Average weight of child		3.0Kgs	2.7Kgs	NS
Average age of the child		1.4 Months	1.2 Months	NS

## 5. DISCUSSION AND CONCLUSION

As we see from our study the concept of convergence of services are yet to take place. Provision of nutritional supplements are simply not available as part of the FHND service in both rural and urban areas. Also ante and post natal care is also not available at the rural areas.

It is also seen that in rural areas majority of people give birth to babies in privately run health care institutions. FHND should be strengthened to promote deliveries in government institutions. Also it is seen that in the urban slum where this study was conducted family planning advice has not made any significant impact on the population and majority of them have more than two children. FHND should also be strengthened to deliver better advices for family planning.

In conclusion this study shows that although FHND services take place regularly and people are satisfied with the available services; there is still a long way to deliver truly convergent service and efforts should be made at policy level and sufficient resources allotted to deliver more and better services through FHND program.

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**Conflict of Interest:** None