

## **A STUDY OF SUPPLY, PROCUREMENT, AND DISTRIBUTION OF IFA UNDER RCH PROGRAMME IN LUCKNOW DISTRICT, UTTAR PRADESH**

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### **Abstract :**

*The impact of the Government's National Nutritional Anaemia Control Programme ( NNACP) Program, now a part of RCH, has been limited due to poor supply and distribution system of iron supplements. In this paper, an attempt has been made to assess the current supply, procurement and distribution system of IFA tablets from the Lucknow district up to the Sub Centre level,*

*The study revealed that the supply pattern of IFA tablets, which are provided through KIT A, has been grossly erratic at all the levels. Contrary to the RCH guidelines, the grass root level workers are no where involved in demand estimation procedure, which is done by GOI on the basis of fixed population of a sub-centre of 5000. The transportation of these kits to the sub-centre also poses a problem with ANMs'. Though the tablets are supplied for pregnant and lactating women, and children aged one to five years, the monitoring of distribution of IFA at State, district, PHC and sub-centre levels, if any, is done only for pregnant women.*

### **Key words :**

National Nutritional Anaemia Control Programme, Iron, Folic Acid, Auxillary Nurse Midwife, Reproductive and Child Health.

National Nutritional Anemia Prophylaxis Programme (NNAPP) was launched by Union Ministry of Health in 1970 in all the States of India. The programme targeted the vulnerable sections of the society including pregnant and lactating women and preschool children (1-5 years of age). An evaluation of the programme in 11 states of India including U. P., showed that the programme failed to make any noticeable impact in reducing the incidence of anemia despite being in operation for 15 years. Improper storage and irregular supply, poor knowledge of

the programme among health functionaries and ineffective monitoring of the programme were the main reasons responsible for this poor performance.

In 1990, Government of India (GOI) redefined the policy on control of nutritional anemia and National Nutritional Anaemia Prophylaxis Programme (NNAPP) was renamed as "National Nutritional Anemia Control Programme" (NNACP). In 1992, the policy on nutritional anaemia was made an integral part of CSSM programme and in 1997, it was incorporated in RCH. With the launch of CSSM, two types of drug kits -Kit A and Kit B were introduced for direct supply to the districts, The Iron Folic Acid (IFA) tablets are now supplied as



part of drug Kit A<sup>2</sup>. For each sub centre, two kits are sent biannually. In Kit A, IFA tablets are sent in two forms- IFA large (L) and IFA small (S). 15 boxes of IFA (L) and 13 of IFA (S) containing 1000 tablets each are present in each Kit A. Thus a total of 30,000 IFA (L) and 26,000 IFA (S) are supplied to one subcentre annually. In addition to IFA tablets, Kit A also contains ORS packets (150), Cotrimoxazole tablets (1000) and Vitamin A bottles (6).

The current study attempts to find out the existing system of IFA logistics through Kit A and whether in any way, it is impeding in the accomplishment of programme objectives.

**Objectives :**

1. To study the supply, procurement, and distribution system for IFA tablets at the district, PHC and sub-centre level.
2. To study the factors affecting supply and distribution and to suggest operational strategies to overcome the same.

**Material and Methods :**

The study has been carried out in the Lucknow district of Uttar Pradesh. Stratified random sampling was used for studying the supply and distribution system of IFA tablets. From Lucknow district, PHC Sarojini Nagar was randomly selected and from this PHC, a total of six Sub-centres were selected- two each at

distance of <5 km, 5-10 Km and > 10 km from the PHC.

The primary data to study the supply and distribution was generated using in-depth interviews from the various key role players at different levels in the health system. These were conducted with the concerned programme officers at the State, district and PHC/CHC levels. ANMs who are the main distributors of IFA to the beneficiaries and AWWs who assist in their work were also interviewed on the logistics aspect of IFA as well as on their awareness about the NNACP.

The secondary data was obtained from the State, district, PHC and sub-centre levels by reviewing the records and through direct observations. The supply and procurement of Kit A containing IFA tablet was studied using the records maintained by the State and District level officials. The records of past 5 years were studied.

**Observation and Discussion :****1) Supply and distribution system**

Procurement and Supply : GOI has engaged Hospital Services Consultancy Corporation (HSCC) for procuring IFA for the states every year. HSCC is informed about districtwise list of subcentres in the states and also details of specification and packing of IFA to



be procured. On receiving the instructions from GOI, HSCC procures the supply through tender from qualified manufacturers on agreed terms and conditions. The firm providing lowest rate for supply enters into agreement and given the supply order. The supply is received either at the Central Depot of Director General of Stores and Supplies or sent directly to the district Chief Medical Officer (CMO) for distribution to the rural areas or Director General Family welfare (DG, Family Welfare) for supply to urban areas. When the procurement order is given to the supplier, DG family Welfare and CMOs are intimated through covering letter and invoice about the details of supply, quantity, specification, batch number, date of expiry, weight, transport agency etc. for receiving the supply.

The quantity is determined at the rate of two kits to each subcentre. Districts with larger rural population have more number of subcentres and consequently get greater number of kits, for example - Lucknow, with smaller rural population, has only 204 Subcentres and thus receives a total supply of 410 Kit A annually, whereas Azamgarh district, with a larger rural population, has 476 subcentres and receives a supply of 950 Kits annually.

The kits are sent from the Centre in their own vehicles (usually trucks) hired on a contract

basis. Transportation charges are borne by the GOI. There is no fixed time for delivery. Most of the times, the delivery of kits is made without any prior notice. The supply to rural areas of the Uttar Pradesh has been at a fixed rate of 36,595 kits per year from the GOI.

For the urban units, the kits are sent first from the GOI to the State HQ situated in Lucknow district, from where the CMO of the concerned district collects kits allotted for its urban units. For the urban units of the State, the kits are sent annually to the State head quarters from the GOI.

Once the supply is received, DGFW / CMOs are expected to verify the supplies, acknowledge the receipt and return one copy of verified invoice to the dispatcher. A sample of the supply is sent for analysis to confirm the desired quality and specification. Once these are confirmed, the received supply is released for utilization by client.

Monthly reports from sub-centre, PHC and District are compiled and the report is prepared and released by the State on the annual coverage of pregnant women through IFA. It is surprising that the targets are fixed at the state level only for pregnant women and not for the other beneficiaries like lactating women and children.



**(a) At the District level :**

**Demand estimation :** For the rural units each district receives Kit A based on the estimated number of sub-centres in the district. There are 204 sub-centres in the Lucknow District and thus, there is a requirement of 408 Kit A for the rural areas.

For the Urban units a fixed quota is allotted to each district based on the health units existing in the district as given below

| Facility                    | No. of kits per year |
|-----------------------------|----------------------|
| District Level PPC          | 15 kits              |
| District Hospital           | 12 kits              |
| Post Partum Centre          | 12 kits              |
| Urban Family Welfare Centre | 6 kits               |
| Health Post                 | 6 kits               |

Lucknow district has two district post partum centres, two sub district post partum centres, eight urban family welfare centres, one district hospital and three health posts.

**TABLE - 1**

**Supply pattern of Kit A for rural areas of Lucknow district (1991-2002)**

| Year    | No. of Sub-centres | No. of Kits required | No. of kits received |
|---------|--------------------|----------------------|----------------------|
| 1997-98 | 204                | 408                  | No supply            |
| 1998-99 | 204                | 408                  | 410                  |
| 1999-00 | 204                | 408                  | 408                  |
| 2000-01 | 204                | 408                  | No supply            |
| 2001-02 | 204                | 408                  | 410                  |

**TABLE - 2**

**Supply pattern of Kit A in PHC, Sarojini Nagar of Lucknow district (1994-2002)**

| Year    | No. of Sub-centres | No. of Kits required | No. of Kits received |
|---------|--------------------|----------------------|----------------------|
| 1997-98 | 35                 | 70                   | No supply            |
| 1998-99 | 35                 | 70                   | 68                   |
| 1999-00 | 35                 | 70                   | 33                   |
| 2000-01 | 35                 | 70                   | 34                   |
| 2001-02 | 35                 | 70                   | 70                   |



**Procurement and Supply :** For the urban areas of Lucknow, the supply has been extremely erratic. The secondary data reveals supply of 228 kits in year '99-'00 followed by a year of no supply (2000-01). In 2001-02, 180 kits were supplied for the urban areas.

For the rural areas, Kit A directly reaches the office of CMO offices from the GOI. Table-1 shows that the fixed supply of 408 sanctioned kits for 204 subcentres in rural areas could not be maintained. The supply pattern has been irregular with supply being disrupted twice in the district during last 6 years, once in 1997-98 and again in 2000-01. CREATE3, which surveyed the supply pattern for last 3 years in the State of U.P., also states that supply got disrupted during the year 2000-2001 and that arbitrariness at the district level resulted in infrequent supply to the PHCs and thereby, to the sub-centres.

**(b) At the PHC/Sub-centre level :**

**Demand estimation:** PHC Sarojini Nagar has 35 sub-centres. Accordingly, 70 Kits are supplied biannually to the PHC.

**Procurement and supply :** From the CMO office, the kits are dispatched to the PHC in either the vehicles of CMO office or in those of PHC depending upon the availability of the vehicle. Transportation of these kits to the PHC is often a tedious job because of scarcity of

vehicles. Frequently, the vehicles are borrowed from other departments of the Government to get the job done. Most of the times, several rounds are needed for sending the entire set of kits allotted to each PHC as the kits are large and the mode of transport not spacious enough to accommodate the entire lot. From the PHC, the ANM comes and collects the kit. The interviews with the ANMs revealed that as the kits were large and heavy, they usually preferred carrying the boxes of 1000 tablets on their routine weekly / monthly visits to the PHC. Occasionally, the PHC arranged for dispatch of Kit to the sub-centre, if mode of communication was available, or if the sub-centre was too distant from the CHC, but this occurred only seldom. The investigator did not find Kit A with its contents in any of the selected Sub-centres. Self delivery of IFA tablets was the mode adopted by all the ANMs.

The supply of Kit A at the PHC Sarojini Nagar is shown in **Table 2**. The supply of kit A has not been constant, the fixed quota of 70 kits being received only twice in last 6 years. Even in the years when districts received its requisite supply, the allotted kits did not reach the PHC.

**2) Factors affecting Supply and Distribution:**

**(a) Limited Knowledge and incorrect practices of Health Functionaries -** In the present study, it was found that the ANMs were aware about



giving the IFA to only pregnant mothers. As regards to the beneficiary status of lactating mothers and preschool children, the knowledge of ANMs was better than that of AWWs. While pregnant mothers were universally covered with IFA tablets by both the category of workers, practice of distribution of IFA tablets to lactating mothers and children was based more on their nutritional state rather than on anemia status. Only weak lactating mothers and children were provided with the IFA tablets. GOI norms about treatment schedule of lactating mothers and children are clear neither at the ANM level nor at AWWs level. The occasional T.T. or polio campaigns also impede the workdays of ANMs. Consequently, significant activities like ANC monitoring, tablet distribution receive a setback.

The 42-column register in which the records of ANC were maintained had only two columns for IFA tablets distribution (60 tablets to each pregnant mother). There was no record to validate the distribution of remaining 30 tablets for prophylaxis, or remaining 100 for treatment.

Shubhada et al in "Health Systems Research for Anemia Control and Pregnancy", conducted in Vadodara, also revealed that the system was lacking in structure and had no designated days for tablet distribution, no tracking system in place to record the number of tablets distributed or consumed, and client follow-up

and counseling by ANMs were inadequate.

**(b) Improper Supply estimation Procedure-**

There is no system in place to enquire State about actual requirement for the year. The population of Lucknow district has increased since last census with subcentres catering to population more than the established norm of 5000. New subcentres have not been created. Consequently the kits would fall short of the requirement, but this shortage has not been estimated and reported at any level. The probable reason for this might be due to the fact that distribution and monitoring of IFA tablets is by and large done mainly on estimate of pregnant women. Even if the tablets fall short of the requirement the shortage is compensated by distributing IFA small to the pregnant women. System does not track the distribution and consumption to the client.

These findings were similar to the study conducted by CREATE3. This study was done in 10 districts and 20 PHCs of Uttar Pradesh. This report also says that GOI is using fixed population of 5000 and national level statistics to calculate the sub centre requirement.

**(c) Problems in Transportation of supplies-**

In the present study, it was found that transportation of Kit A to the CHC/PHC from the district level was often a problem because of scarcity of on-road vehicles. Moreover as the



kits are large and several rounds were needed before the kits reached their destination, two kits are allotted to each sub-centre in the year. But the whole of Kit A reaches only those sub-centres whose governing PHC has facility of transport. There is no separate space for storage of Kits. For the sub-centres, where Kits are not dispatched, ANMs carry Kit A in boxes of 1000 tablets as it is convenient.

A survey by CREATE<sup>3</sup>, of supply and procurement of IFA tablets in 10 districts and 20 PHC's also revealed that ANM's carried the kits to the subcentres. It was a difficult and tedious job for them, as the expenses involved in carrying the kits were not reimbursed.

### **Discussion :**

The findings of the present study clearly indicate that anemia programme is not been given enough importance either at the district, PHC and subcentre level, The supply system of IFA tablets in the district suffers from severe lacunae in areas of demand estimation, maintenance of records, monitoring of distribution and compliance with IFA. To make the programme successful efforts should be directed for estimation of demand of IFA at grassroot level. The state and the districts should give the programme a greater priority. Monitoring should be done not only of distribution but consumption as well. There is in addition dearth of adequate transportation facility at all the

levels. Inadequacy of on road vehicles and limitation of available workforce to load and unload the kits are major problem areas, which need to be tackled

Subcentres which are the focal point of health care delivery at the village level are dependent largely upon the ANMs practices and knowledge which are in general unsatisfactory. Frequent training and monitoring of their activities is needed to give an impetus to the slow pace to the programme.

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