

Challenges in supervision, monitoring, and reporting in anemia programme implementation in Odisha, India: A qualitative process documentation

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ABSTRACT

Introduction: Anemia is a major public health challenge in India. Despite national programmes and targeted interventions over the years, the decline has been unsatisfactory. National Iron Plus Initiative (NIPI) was launched by the Government of India with a vision to combat anemia. In this context, we discuss the programmatic facilitators and issues in the monitoring, supervision, and reporting aspects of NIPI implementation. **Materials and Methods:** A process documentation study was undertaken in four districts of Odisha to assess the NIPI implementation. A total of 170 interviews were conducted during March–May 2016 among officials and frontline workers through qualitative techniques such as in-depth interviews, focus group discussions, and process observation. Data analysis was thematic using NVivo software. **Results:** Monitoring and supervision consisted primarily of visiting field sites by supervisors and review of the progress in meetings with inadequate documentation. Lack of coordination and ownership among the various departments involved were observed as revealed in the interviews. Some of the reporting formats were outdated and missed section for IFA syrup. Focus had been on the collection of data, but its utilization for informed decision-making and policy decisions was lacking. **Conclusion:** Better interdepartmental coordination and ownership, streamlining the reporting system and web-based monitoring system need to be prioritized to improve the effectiveness of the programme. The three key departments involved must strengthen the evaluation process for sustained outcomes to reduce anemia burden.

Keywords: Anemia, ICDS, monitoring, reporting, supervision

Introduction

Anemia affects the lives of >2 billion people globally, accounting for over 30% of the world's population. It is the most common public health problem particularly in developing countries occurring at all stages of the life cycle.^[1,2] Iron deficiency anemia affects more people than any other condition, constituting a public health epidemic.^[3] It is particularly severe in pregnant, lactating women and young children, contributing significantly to widespread morbidity and mortality.

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India has not been able to address this nutritional deficiency in its entirety despite palpable economic gains, improvements in the health sector, expanding education, and better living conditions in recent decades. The nationally representative data from the recently concluded National Family Health Survey-4 conclude that the prevalence of anemia is still quite a concern ranging from 53% in women of 15–49 years of age to 58.5% in children of 6–59 months of age.^[4] Although the efficacy of iron–folic acid (IFA) supplementation has been demonstrated, particularly for reducing anemia, national IFA supplementation programmes in many countries have failed in achieving high levels of coverage and adherence necessary to effectively

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reduce anemia.^[5-7] National Iron Plus Initiative (NIPI) is one such programme launched in 2013 by the Government of India envisaged to curtail anemia through a life cycle approach. It includes providing IFA and albendazole to children from 6 months to 19 years of age, women in reproductive age group, and pregnant and lactating females.^[8]

Three years down the launch, a process documentation initiative was undertaken in 2016 to investigate the progress and assess the impeding factors in its implementation. Odisha was chosen to assess the process documentation as the prevalence of any anemia and severe anemia is very high in the state. Hence, Department of Health and Family Welfare, Government of Odisha in collaboration with United Nations Children's Fund, and All India Institute of Medical Sciences, Bhubaneswar planned to expedite the process documentation. The objectives of the process documentation were to evaluate key state and district experiences in implementing NIPI, strengths and challenges in the provision of IFA to children, adolescents, pregnant and lactating women, explore the programmatic lapses, and suggest future recommendations. We intend to discuss in this context the programmatic facilitators and issues in the monitoring, supervision, and reporting aspects of NIPI implementation.

Materials and Methods

Study design

The state of Odisha is situated along the eastern coast of India with a population of 42 million distributed along 30 districts.^[9] It is one of the socioeconomically disadvantaged states faring poorly in health indicators in comparison with other high performing states. For the process documentation, one district from each revenue division of the state was chosen to account for the regional variation. As per the Annual Health Survey (2012–2013) data, districts were ranked by taking the average percentage of consumption of IFA by mothers and children. Bhadrak from the central division, Keonjhar from the northern division, and Kalahandi from the southern division were the districts selected. Along with it, Jagatsinghpur was selected as the fourth district, which was the best performing to understand the variations and factors underlying thereof [Figure 1]. Within the selected districts, one good and one badly performing blocks were purposively selected. Two blocks each were chosen and interviews conducted in Keonjhar and Jagatsinghpur Districts. Only one block from Bhadrak and one from Kalahandi districts were studied as not much of variation of data emerged from the interviews.

Training and data collection

The data collectors were trained in qualitative methods through workshops, group assignments, and field exposure. They were taught techniques for qualitative and survey-based interviews. Supervisory visits were made to retain quality throughout the data collection period.

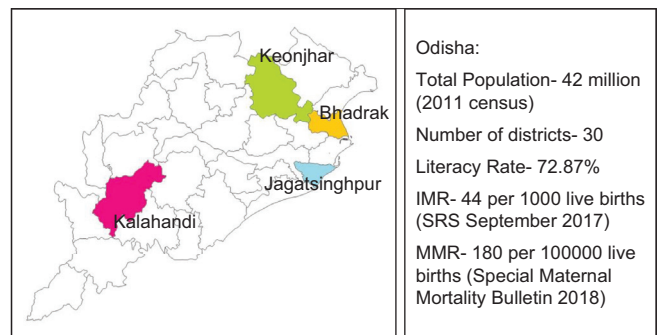


Figure 1: Map of Odisha showing the intervention districts. IMR: Infant mortality rate, MM: Maternal mortality ratio, SRS: Sample registration system

Qualitative survey

The process documentation team conducted 170 interviews during the period of March–May 2016 among officials and frontline workers. In-depth interviews (IDIs), focus group discussions (FGDs), and observations were the qualitative techniques chosen for the process documentation. Officials at state, district, and block level were interviewed individually during IDIs. Groups of sector/cluster officials, field workers, and beneficiaries were interviewed during FGDs. In addition, records of IFA distribution were examined at Village Health and Nutrition Days (VHNDs), Anganwadi Centres (AWCs) and schools, as well as the actual distribution process of IFA at VHNDs and schools was observed.

Respondents were purposively chosen to ensure maximum variability in data and to collect information on a variety of perspectives, which included state, district, block, and sector/cluster officials, field workers, other stakeholders, and beneficiaries. There were 170 respondents in total – 12 state officials, 27 districts, 32 blocks, 16 sectors/clusters, 49 field workers, and 34 beneficiaries – with participants chosen evenly across the four districts. IDIs were conducted in private with respondents, usually in offices and sometimes outside in a private setting. FGDs were conducted among a group of similar people, that is, without their service providers, their supervisors, or elders in the community who could influence their responses. FGDs were conducted primarily in Odia, sometimes in Hindi if the FGD facilitator did not speak Odia, and occasionally in a tribal language.

Data entry and analysis

For the qualitative survey, most interviews were tape-recorded and the electronic audio file was labeled with date, time, designation, place, and type of interview. Set of interview files were sent for transcription and translation into English, and as they were processed, the file name was retained. The transcripts were entered into NVivo qualitative research software. The analysis was done under different thematic areas like IFA administration, compliance, supervision, and monitoring, recording, and reporting, and coordination – government and stakeholders. Ethical permission for conducting this

process documentation was obtained from Institutional Ethics Committee.

Results

The essential structure for monitoring and supervision consisted primarily of visiting field sites including VHNDs, AWCs, and schools by the supervisors and reviewing progress during meetings. It was usually conducted by the Health, Integrated Child Development Services (ICDS) scheme, and the Education department independently [Table 1].

Health department

There was evidence of supervisors visiting sites, which was more frequent at the field and block levels compared with the district level. Medical Officer in Charge and Block Extension Officers reported that they made visits to communities 10 days in each month. A Primary Health Centre Medical Officer (PHC MO) said that he was required to monitor the availability of essential equipments for ANC examination with the auxiliary nurse midwife (ANM) like the sphygmomanometer and weighing machine usually on VHND days. During visits, PHC MO supervised the clinical examination process and distribution of IFA tablets and syrup.

Also, at the block level, Rashtriya Bal Swasthya Karyakram (RBSK) teams revealed that the MOI/C conducts unannounced spot checks on the RBSK screenings at schools and AWCs. In addition, one RBSK team said that they prepare a formatted monthly report which was then reviewed at a monthly meeting.

At the district level, several district health officials expressed a similar sentiment to a District Programme Manager, who described his time constraints: *“Practically I am not able to visit the*

10 times per month required as a minimum for all NHM staff. With all the monthly meetings, court cases, all complaints. I am only able to make field visits 4 days in a month, but I am happy with that.”

Despite the number of visits and meetings for monitoring and supervision, little was mentioned about their content and any subsequent actions taken thereof. Hence, their relevance in identifying and solving the key issues within the system was unclear.

ICDS

In the ICDS context, the AWWs at field level did not report any monitoring of IFA intake by women or children, this being the role of the Accredited Social Health Activists (ASHAs). ICDS supervisors reported that *“we observe pre-school registers, SNP, conduct home visits for VHND, and counsel mothers with malnourished children.”* The AWWs were in agreement and added that if there was any mistake on their part, the supervisors do handholding to do the task correctly.

The notion of monitoring existed strongly among staff of the ICDS, even though IFA consumption was not always among the priority variables being monitored. One district official in Jagatsinghpur said that every month some official from Women and Child Development (WCD) state level visits, arriving unannounced to check on *“all activities of Anganwadi, IEC activity, and IFA supply and expiry date. Last month it was the Deputy Secretary WCD and the immediate senior monitoring official often comes.”*

Despite a strong notion of monitoring, WCD state officials perceive the NIPI programme as the baby of the Health department as ICDS only reports on IFA consumption for out-of-school adolescent girls, who constitute a small portion of NIPI beneficiaries.

Table 1: Supervision of NIPI programme

Department	Level of activity	Personnel involved	Meetings	Remarks
Health	Field/sector level	ANM	Monthly ASHA review meeting	Frequent supervisory visits by ANM, but lack of specification of the content of the visits
	Block level	MOI/C, BPM, MO PHC, RBSK team	Monthly sector/block meeting	MO visited VHND sites for supervision
	District level	DPM	RMNCHA meeting with the collector	Officials expressed time constraints for frequent supervisory visits
ICDS	Field/sector level	AWWs	Monthly sector meeting of ICDS supervisors	No report provided by the AWW, done by ASHAs
	Block level	ICDS supervisor	ICDS review meeting Block meetings with the health department	
	District level	CDPO	Monthly meeting of CDPOs	
Education	Field/sector level	CRCC	Education monthly meetings	Review school records on the amount of IFA received, consumed, and remaining
	Block level	BEO, ABEO	Monthly meetings with CRCC	BEO and ABEO check the administration of medicines at school
	District level	DEO, DPC/SSA	Monthly review meeting	Monitoring system is not frequent because of heavy workload

ANM: Auxiliary nurse midwife, ASHA: Accredited Social Health Activist, AWW: Anganwadi Worker, BEO: Block Extension Officer, BPM: Block Programme Manager, CDPO: Child Development Project Officer, CRCC: Cluster Response Center Coordinator, DEO: District Education Officer, DPM: District Programme Manager, MOI/C: Medical Officer in Charge, NIPI: National Iron Plus Initiative, RBSK: Rashtriya Bal Swasthya Karyakram, VHND: Village Health and Nutrition Day

Education department

By 2016, the education department had begun to increase its level of monitoring and supervision of NIPI activities, in contrast to the initial years. A state-level education official said that the seniors were watching more closely pushing the district officials for taking more initiatives. A block official was motivated to improve the rate of reporting and said that *“Our district was defaulter earlier. But since last year we have given reports.”*

The notion of monitoring existed among those involved in education, even if IFA consumption has not yet become a monitoring priority.

Recording and reporting mechanisms

All respondents agreed upon a similar flow of reporting across departments and districts, except Bhadrak Health and ICDS departments, and the flow of reporting was consistent with the guidelines.^[10]

ANM (with the help of ASHA) → MO I/C → CDMO, with sometimes copy to DWSO

(In Bhadrak, ASHA, ANM → AWW → ICDS Supervisor → CDPO → DSWO (copy to MO I/C).

ANMs said that they reported directly to MOI/Cs instead of Lady health Visitor (LHV) as per the guidelines, as the position was mostly vacant. For the IFA red tablets administered to pregnant women, ANMs reported consumption through the Health Information Management System (HMIS) on a monthly basis. Unfortunately, the template still asked for consumption of 100 or 200 tablets instead of 180 or 360 according to the recent guidelines. Many respondents said that there is no format for reporting IFA consumption for children under 5, nor are the questions about IFA syrup in HMIS. IFA consumption did not feature in the ICDS monthly progress report, the main reporting mechanism.

In the education department, reporting of IFA consumption was inadequate for many units. One Block Extension Officer said *“Some teachers are manipulating the data because their main job is to teach. They do not think these problems are part and parcel of their job. As long as they do not have a sense of ownership for these programmes, the success rate will remain low. We should make them realize the importance of these programmes for kids.”*

Discussion

Regular monitoring, process evaluation, and supportive supervision are the essential components of any intervention programme, particularly nutrition programmes in the mission mode. Strong evidence exists for the efficacy of many nutrition interventions, but the impact of these often fails to meet expectations when integrated into programmatic contexts because of gaps in efficient implementation.^[11,12] When nutritional interventions like IFA are delivered through the health

sector, monitoring is typically integrated into routine systems, but integration has been successful only in already working functional systems.^[13]

While studying the supervision, reporting, and monitoring activities, we came across some noticeable factors which had a direct or indirect bearing on the programme implementation, both in terms of frequency and quality.

1. There is a need for the provision of a web-based monitoring system so that data are not blindly collected from districts without checks and proper monitoring. A mechanism through Health Department or WCD Department needs to be in place to ensure IFA tablets are reaching the end user or targeted beneficiaries
2. An efficient and reliable data management system must be established that will have the capacity to review and analyze reports at the CHC level. Along with this, the possibility of independent third party verification should be explored
3. There was also limited capacity within the programme to utilize the reports by rational analysis and interpretation of data. Though they stressed upon collection of monitoring data, there was no effective mechanism to compile, interpret, and transform results for better decision-making. This may be attributed to limitations in capacity and technical support at district and state levels. If the data collected is put to use for decision-making it will make the process transparent simultaneously motivating the personnel involved in it
4. To achieve the desired outcomes, co-ordination between all the three ministries involved in the NIPI programme need to be improved and strengthened. Though the ownership and supervision of NIPI within the ranks of the education department have increased greatly, there are some supervisors who did not receive IFA reports that lead to lapses in NIPI implementation
5. There is a need to expedite the reporting process to allow for the recording of NIPI results to be combined with the recording of related activities, for example, IFA consumption per student to be on the same form as consumption of Midday Meals in both School and Mass Education and residential schools. This prevents the duplication of data and convergence of related activities
6. Inbuilt mechanisms within the system framework need to be established whereby state officials supervise and hold accountable the personnel who report them. This would ensure timely action and midway corrective measures if mandated
7. There should be periodic interdepartmental review meetings on a common platform in which the targets, process evaluation, and future course of NIPI implementation are adequately discussed for its monitoring and problem-solving.

Studies carried out in other regions of the world have also emphasized that there is a need for improvement in structure and process quality for an effective anemia control programme.^[14] In countries with strong health systems, there has been evidence

of successful integration with a robust administrative monitoring process.^[15] The allied departments must shoulder the responsibility rather than thinking it of an accessory burden through a participatory approach with an expected commitment level. There are some limitations to our study. It was beyond the scope of the process documentation to measure whether the process-level attributes translate into service outcomes. Further research is needed to intricately understand the various factors to effectively link the monitoring and process evaluation to decision-making processes.

Conclusion

Supervision and monitoring frameworks are imperative for the success of any health programme. An inherent monitoring and supervisory network needs to be built in the system to address the issues with implementation and follow up. Better interdepartmental coordination, streamlining reporting system, increased ownership of the programme, and a web-based monitoring system with timeliness are instrumental for successful outcomes. Improving the efficiency and effectiveness of programme activities requires identification of indicators and checklists critical for detecting implementation challenges, integration with parallel programmes and systems, strengthening technical capacity, and a strong political commitment. These inputs from this process documentation study will facilitate an impact on overall programme implementation and in reducing anemia burden substantially.

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Conflicts of interest

There are no conflicts of interest.

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