

**A Project Proposal
For**

**PREVENTION AND CONTROL OF
ANAEMIA AMONG ADOLESCENT GIRLS, PREGNANT WOMEN AND
LACTATING MOTHERS IN GURGAON HARYANA**

**SUBMITTED BY:
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Striving for a better society

INTRODUCTION:

Iron deficiency is the most common nutritional disorder in the world. 66-80% of the world's population may be iron deficient; 2 billion people – over 30% of the world's population – are anaemic, mainly due to iron deficiency, and in developing countries, frequently exacerbated by malaria and worm infections. [WHO 2005]

Iron deficiency affects more people than any other condition, constituting a public health condition of epidemic proportions. Nine out of ten anaemia sufferers live in developing countries; on average, every second pregnant woman and four out of ten preschool children are anaemic. [WHO 2005]

According to WHO, in developing countries the prevalence of anaemia among pregnant women averages 56%, ranging between 35% to 100% among different regions of the world [Gautam et al, 2002]. Anaemia is particularly prominent in South East Asia where its prevalence among pregnant women and pre-school children is estimated to be between 50% and 70% [WHO 2001].

Various studies from different regions of the country (India) have reported the prevalence of anaemia to be between 33% and 100%. National and regional surveys indicate that the prevalence of Iron Deficiency Anaemia (IDA) in India could be as high as 74 percent in children below three years of age, 85 percent in expectant mothers and 90 percent among adolescent girls in some population groups [NFHS-2 1998-99; ICMR 2001]. IDA in infants and children is associated with impaired physical and cognitive development, and in adults with reduced work capacity and hence productivity, overall lowered resistance to disease and increased morbidity and mortality. In women, IDA is also associated with adverse pregnancy outcome. It has been estimated that iron deficiency costs India about 5 percent of its gross national product annually from loss of lives, resources and productivity [Sanghvi 1996].

In India, anaemia occurs in almost 50% of women in reproductive age group. It is the second most common cause of maternal deaths, accounting for 20% of total maternal deaths. Variations in the prevalence rates of anaemia are seen within the country with the lowest prevalence of 33% being reported from Andhra Pradesh to the highest of 98% in Rajasthan. [Gautam et al 2002]

Anaemia affects mainly the women in childbearing age group, young children and adolescent girls. Only about 45 % of pregnant women receive at least three months of iron and folic acid, although the government has instituted this. Association of anaemia with adverse maternal outcome such as puerperal sepsis, ante-partum haemorrhage, post-partum haemorrhages and maternal mortality is no longer a debatable subject. Apart from the risk to the mother, it is also responsible for increased incidence of premature births, low birth weight babies and high perinatal mortality [Roy 2001].

Anaemia during infancy, compounded by maternal under-nutrition, leads to poor brain development. Iron deficiency is also a major cause of permanent brain damage and death in children and limits the work capacity of adults [Smith and Haddad 2000; Swaminathan 2002]. There is not enough appreciation of the serious adverse implications to the future generations arising from the high incidence of low birth weight among the newborn babies. Low birth weight is a major contributor to stunting and affects brain development in the child [Swaminathan, 2004]

The main reasons for IDA have been determined to be inadequate intake of iron, low bioavailability (1-6 percent) of dietary iron from plant foods [Rao et al 1983] due to inhibitory factors, low levels of absorption enhancers in the diet, repeated pregnancies, increased needs during growth and development among children and adolescents, parasitic infestations and chronic blood loss. Poverty compounds these factors through inadequate access to dietary diversity, safe water, knowledge about safe food handling and proper feeding practices [FAO 1997].

The National Tenth Plan has set the goal of reducing the prevalence of anaemia by 25 percent among children and pregnant and lactating women (Government of India, 2002). National programs and institutional approaches are being under-taken to achieve this goal.

The major approaches to controlling IDA, which are not mutually exclusive, are medicinal supplementation with iron and folic acid and food-based approaches, i.e. dietary diversification and fortification of foods, both complemented by programs to counter parasitic infestations. While supplementation with iron is considered necessary for groups at high risk as a short-term emergency measure, it fails to address the root causes and cannot provide the overall long-term benefits of economy and sustainability. Evaluation studies of India's nationwide and long-standing supplementation program showed irregular supplies, non-compliance by the beneficiaries, poor counseling, etc.

OBJECTIVES OF THE PROJECT:

1. Assessment of the existing prevalence of anaemia among the target group.
2. To provide counseling to pregnant women and lactating mothers on nutrition and health.
3. To provide / supervise supplementation of IFA tablets and other vitamins to the target group.
4. To assess the impact of intervention given by Sukarya.

PROJECT SETTING AND DESIGN

The project is proposed to be implemented in 5 villages of Badshahpur Circle of Gurgaon. The villages include Berhampur, Ullahwas, Badshahpur, Kadarapur and Ponsi. Gurgaon is 30 km from the national capital territory of India. The total population of these villages is approx. 25,000. The population of the target group under study is approximately 1200 adolescent girls, 400 pregnant women and 500 lactating mothers. A preliminary survey in the six villages of the Badshahpur circle indicates that anemia is prevalent among young and adolescent girls, pregnant women and lactating mothers. Besides, there is a lack of awareness about the causes, prevention and effective treatment of the disease among the people.

DURATION OF THE PROJECT:

The project will be implemented over a period of 2 years in three phases:

Phase I: Baseline Survey (3 months)

In this phase a baseline survey will be conducted, to determine the existing prevalence of anaemia amongst the target groups, these activities will be conducted in six villages.

The activities will include:

- Assess the prevalence of anaemia using classical cyanemoglobin method.
- Assessing the eating practices/dietary pattern of the target group with a special focus on socio-economic and cultural factors associated with consumption pattern of IFA tablets and reason for its non- consumption.
- Case history of any deaths due to iron deficiency anaemia will also be recorded.

Phase II: Intervention Phase (1 year & 6 months)

During this phase, interventions will be carried out in the six villages based on the findings of the survey. Interventions planned are:

- Sensitization Drives in community with the adolescent groups, expecting and lactating mothers on the causes, impact, prevention and control of anaemia through one-to-one counseling, group discussions, nukkad nataks, puppets, film shows, etc.

- Nutrition and Health Education sessions on the above mentioned issues and awareness camps in the Anganwadi centers with men to increase male involvement, with the gatekeepers to the target group that include elderly women of the community.
- Organizing health camps with the target group for screening, treatment and referral of cases.
- Networking with Government functionaries through Anganwadi worker and ANM for iron supplementation to prevent anaemia in the target groups based on their special requirement (60 mg iron and 400 mg folic acid daily for three months during adolescence, during second half of pregnancy and 3 months post partum)
- Detected cases for *therapeutic supplementation* that aims at correcting established iron deficiency anaemia would be referred to health care delivery system and monitored for treatment.
- Half yearly haemoglobin test to detect any improvement in the iron status by clinical method.
- Awareness meetings, in support of IFA tablets to discard the associated misconceptions, with elderly women group as potential promoter of iron supplementation at family level.
- Close monitoring and recording of the supplementation of TFA tablets to the target group.
- Assisting families in developing kitchen gardens in order to bring change/improve dietary pattern among the target group. Community kitchen gardens through Self Help Groups will be explored.
- Regular monitoring of supplementation of IFA tablets by the AWWs and ANMs will be done and its periodic review will be made by the Project Coordinator of Sukarya and the CDPO/Supervisor of the ICDS Project
- District Programme Officer will be reported about the progress in a regular interval. One important component of the intervention will be to bring the women together into collectives and forming Self Help Groups (SHGs). At least 2 SHGs will be formed in each village. This will not only add on to the unity of the group and give a captive audience for the project but will also contribute to their individual and family savings leading to improved diet intake.

Phase III Evaluation Phase (3 months)

The project will be monitored throughout its period. This phase will be utilized to assess the program impact on target groups. This includes:

- End line estimate of hemoglobin level among the target group, using cyanmethaemoglobin method, to evaluate the change in the prevalence of anaemia
- End line survey by group discussions and other participatory method to assess the changes in the dietary pattern of the target groups will be conducted.
- Checking records with ANM, AWW to confirm the number of target groups who have completed or are currently enrolled for their IFA supplementation.

PROJECT OUTCOME

There will be 80% - 90% decrease in the prevalence of Iron Deficiency Anaemia (Nutritional Anaemia) among the target group in the above-mentioned villages.

PROPOSED BUDGET

Sl.No.	HEADS	TOTAL ESTIMATED COST FOR 2 YEARS
A.	MAJOR ACTIVITIES	
1.	Baseline Survey	Rs.1,00,000
2.	Laboratory Test for Haemoglobin (Cyanmethemoglobin method and the sahli's method)	Rs.1,00,000
3.	IEC activities	Rs.80,000
4.	IEC materials & advocacy	Rs.50,000
5.	Health Camps Rs.4000/ camp 5 camps in a quarter .Total - 40 camps	Rs.1,60,000
6.	Medicine Supplies(Supply of IFA tablets , vitamins etc)	Rs.50,000
7.	Documentation	Rs.20,000
8.	Transportation/ Conveyance	Rs.50,000
9.	Administrative Overheads	Rs.20,000
10.	Evaluation and Impact Assessment	Rs.10,000
B.	PERSONNELS	
1.	Project Coordinator Rs.7000/ month for 2 years	Rs.1,68 ,000
2.	Health Workers -10 Rs.1000/head/ month for 2 years	Rs.2,40,000
3.	Gynaecologist (part time) Rs.1000 / Visit – 40 visits	Rs.40,000
4.	Nutritionist (part time) Rs.500/ month – 40 visits	Rs.20,000
	GRAND TOTAL	Rs.11,08,000

Total Proposed Budget is Rs.11,08,000