



# Niramaya

Newsletter



Niramaya Health Foundation, Mumbai - 400 014.

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## Micronutrient Deficiency Disorders



Dr. K. S. Vardhachary

The 1990 World Summit for Children singled out deficiencies of three micronutrients — iron, iodine and vitamin A — as being particularly common and of great concern for women and children in developing countries. The Summit set goals for the virtual elimination

of iodine and vitamin A deficiencies and the reduction of iron deficiency anemia in women by one third by the year 2000. Since then, knowledge of the prevalence and importance of deficiencies of zinc and folate have also been recognized. And more is being learned every day about the importance of micronutrients for both the physical and cognitive development of children.

### Micronutrients

- Iron
- Folate
- Vitamin A
- Iodine
- Zinc

*Micronutrients, so called because they are needed by the body only in minute amounts, play leading roles in the production of enzymes, hormones and other substances, helping to regulate growth, activity, development and the functioning of the immune and reproductive systems. Adequate intake is especially crucial during early childhood and other periods of rapid growth, pregnancy and breast-feeding.*

### Iron

- Iron deficiency anemia, the most common nutritional disorder in the world, lowers resistance to disease and weakens a child's learning ability and physical stamina. It is a significant cause of maternal mortality, increasing the risk of hemorrhage and infection during child birth.
- Nearly 2 billion people are estimated to be anemic and millions more are iron deficient, the vast majority

### Editorial

During this quarter Niramaya has been in the midst of frenetic activity. Over 3000 children under 5 years have had micronutrient intervention camps and over 2000 mothers and adolescent girls had hemoglobin testing done and given iron therapy. Over 100 sessions for Health education of women in the communities and for adolescent sexuality education in schools and communities for both boys and girls kept our health educators and doctors on their toes. Our camps for the children and women working in dumping grounds were well received. Over 600 beneficiaries were treated during this quarter with camps held twice weekly in the mobile van. Health education sessions were also conducted for them, especially on personal hygiene and addiction.

More and more Shelter homes in Mumbai requested Niramaya to conduct health check up camps and health education sessions for their children and staff on regular basis and to develop long term working relationships. This task is now in progress and we look forward to continued collaborative efforts for better benefits to the children.

We also organized a first of its kind meeting for dialogue among all four NGOs working in the communities for better coordination of our respective activities and provide greater benefits to beneficiaries, and to also avoid duplication of efforts and reduce operational costs for all the concerned NGOs.

This quarter also saw launch of an important initiatives by Niramayees namely Niramaya Nidhi and start of Street play group "LAKSHVEDI"

Good work Niramayees

Dr. Janaki Desai...  
Hon. Medical Director

of them women. A range of factors cause iron deficiency anemia, like inadequate diet, blood loss associated with menstruation and parasitic infections such as hookworm.

- A single dose of antiworm medicine can eliminate or significantly reduce intestinal worm infections, an important cause of anemia.
- Almost 7 in 10 children in the age group of 6 months to 5 years are anemic. (NHFS 3)

### **Folate**

- Folate is a B vitamin that helps in the formation of red blood cells. Folate also regulates the nerve cells at the embryonic and fetal stages of development, helping to prevent serious neural-tube defects of the spinal cord and brain.
- Folate deficiency causes birth defects in the developing fetus during the earliest weeks of pregnancy — before most women are aware that they are pregnant.
- It is also associated with a high risk of pre-term delivery and low birth weight.
- It also contributes to anemia, especially in pregnant and lactating women, and may be associated with increased risk of maternal death and illness.

### **Vitamin A**

- Over 100 million young children suffer from vitamin A deficiency. It is a contributing factor in the 2.2 million deaths each year from diarrhea among children under five and the nearly 1 million deaths from measles. Severe deficiency can also cause irreversible corneal damage, leading to partial or total blindness.
- The prevalence of night blindness in 0 - 4 year group is 0.6% in India.
- Supplementation reduces the risk of death of a child deficient in vitamin A by 23 per cent. In 1997 alone, the lives of at least 300,000 young children were saved by vitamin A supplementation programmes in developing countries.

### **Vitamin A toxicity**

- Very rarely Vitamin A toxicity has been seen in some children who inadvertently received large doses either due to wrong labeling or administration of Vitamin A by multiple agencies around the same time. This can be avoided by better supervision and care.

### **Iodine**

- Iodine deficiency is the single most important cause of preventable brain damage and mental retardation in new borns.
- In pregnant women it significantly raises the risk of pregnancy-related death, stillbirth and miscarriage.
- An estimated 43 million people worldwide suffer from varying degrees of brain damage and physical impairment due to iodine deficiency, including 11 million who are cretins, afflicted with profound mental retardation. Some 760 million people have goitres, the swelling of the thyroid gland in the neck that is the most common and visible sign of iodine deficiency.
- The successful global campaign to iodize all edible salt is reducing the risk of iodine deficiency, which threatened 1.6 billion people as recently as 1992. About 12 million infants born in 1996 were spared that risk thanks to iodized salt, and the number of babies born cretins is estimated to have dropped by more than half, from 1,20,000 in 1990 to under 55,000 worldwide.

### **Zinc**

- Zinc promotes normal growth and development and is an element in enzymes that work with red blood cells, which move carbon dioxide from tissues to lungs. It also helps maintain an effective immune system.
- Zinc deficiency in malnourished children contributes to growth failure and susceptibility to infections which increases the risk of maternal and infant death.
- There is however no data on the prevalence of zinc deficiency. It usually occurs where malnutrition is prevalent and is now recognized as a public health problem in many countries.
- Trials in Bangladesh, India and Indonesia have shown reductions of about one third in the duration and severity of diarrhea in children receiving zinc supplements and a median 12 per cent decline in the incidence of pneumonia.
- Zinc deficiency, increasingly recognized as widespread among women in developing countries, is associated with long labor. A number of studies have found that zinc supplementation reduces complications of pregnancy.

**Dr. K. S. Vardhachary...**

*(Thanks to Mrs. Kamala Krishnan  
Reproduced from an UNICEF report)*



## RISING TREND OF ANEMIA IN ADOLESCENT AND YOUNG WOMEN



**Dr. Sheetal Bhandare**  
Programme Officer

### Anemia

Iron deficiency, or anemia, is the most common nutritional disorder in the world. 4-5 billion people (66-80%) of the global population is iron deficit.

- 2 Billion anemic people (30% of global population) in the world are anemic.

The prevalence of anemia is disproportionately high in developing countries, due to poverty, inadequate diet, certain diseases, pregnancy and lactation, and poor access to health services. In pregnancy it is associated with premature births, low birth weight, and perinatal and maternal mortality.

### Anemia in children

Babies, toddlers and preschoolers and teenagers are at higher risk of iron deficiency, mainly because their increased needs for iron may not be met by their diets. Without intervention, a child whose diet does not provide him or her with enough iron will eventually develop iron deficiency anemia.

The signs and symptoms of iron deficiency anaemia in children can include:

- Behavioural problems
- Repeat infections
- Loss of appetite
- Lethargy
- Breathlessness
- Increased sweating
- Strange 'food' cravings (pica) like eating dirt
- Failure to grow at the expected rate

It is important to educate parents and community members, in order to reduce anemia levels of toddlers and preschoolers Steps to decrease anemia levels for children could include:

- Increasing iron intake through supplementation
- Treating children at regular intervals for parasites
- Giving the child a better start by improving maternal health during pregnancy and by reducing blood loss from hemorrhage during birth.

### Is anemia a significant problem for young adults?

A significant percentage of adolescents (27% in developing countries as opposed to 6% for the developed countries) in the developing world are estimated to be anemic, causing considerable health consequences for this age group. They are particularly susceptible because of their rapid growth and associated high iron requirements. Body

growth slows down late in adolescence, at which point the iron status of boys appears to improve. But the situation is very different for girls, as they have a continuing need to replace iron lost during menstruation.

Girls often enter their active reproductive years with poor iron status. A great many girls in the world (at least 25%) will have had their first child by age 19, and great more shortly afterward.<sup>14</sup> Because pregnancy requires more iron for increased blood production, an iron deficit can result in negative reproductive consequences.<sup>15</sup>

A 1997 survey of 12-18 year old girls in rural India found an anemia prevalence rate of 82.9% among girls in school and 92.7% among school drop out girls.

In what ways can adolescents be reached in order to improve their iron status?

Early adolescence is a critical period for addressing anemia in both girls and boys. Adolescents can often be reached through educational and social activities. Existing settings such as schools and health facilities may offer opportunities to integrate nutrition education and actual services to reduce anemia. Nutrition awareness and education are particularly important given adolescents' poor knowledge of anemia, diet and health generally and of iron-rich foods specifically. Channels for reaching youth include:

- Educational settings - schools can incorporate nutrition education into family life education, health education, AIDS prevention courses, vocational training activities as well as organize sessions for out-of-school youth.
- Health facilities - health centers, clinics and hospitals can offer information about improving iron status. They can also provide services for anemia screening, reducing blood loss, and increasing iron intake.
- Community outreach - peer education projects, workplace educational sessions, and social/recreational activities can incorporate nutrition education into their programs.
- Media and public information - practical information about nutritional needs can be communicated to young people through all forms of mass media (TV, radio, print materials, movies) as well as by traditional media (plays, folk drama, fairs, puppet shows).

Tenth five year plan 2002-2007 goal.

- To reduce prevalence of anemia by 25% and moderate and severe anemia by 50% in children, pregnant and lactating women and adolescents.

In practice, nutritional education can be addressed within any setting or program that deals with reproductive and other health issues.



## EVENTS...



**Niramaya, is grateful to Dr. Georg Von der Decken, father of Freda our volunteer for contributing Haemoglobin Estimation Kits**



**Recipe competition by Community women.**



**Selection of Best Nutritive Recipe**



HIV/AIDS poster exhibition during Ganesh festival.

*!! Congratulations !!*



Dr. K. S. Vardhachary on being appointed as the Trustee of Shanmukhanand Trust.



Dr. Rupesh Mahajan for joining MPH course in UK, best wishes from Niramayees

### ध्येय

मी, सुषमा धुरे, वय ४७ वर्षे निरामय हेल्थ फाऊंडेशनमध्ये गेल्या ८ वर्षांपासून काम करते आहे. मी भांडुपमध्ये मध्यम झोपडपट्टी विभागातील कोकणनगर वसाहतीत माझे पती व माझ्या तीन मुलांसह राहते. माझे पती ठाणे आगार एसटी महामंडळ येथे वाहतुक नियंत्रक म्हणून काम करतात. त्यांचा पगार आमचा संसार व मुलांची शिक्षणे यासाठी पुरेसा नव्हता. संसाराच्या सुरुवातीस मी नोकरी करत नव्हते. एस्.एस्.सी. पर्यंत शिकल्यानंतर घरच्या आर्थिक अडचणींमुळे मला पुढे शिक्षणे अशक्य होते. माझे उच्चशिक्षणाचे अपूर्ण स्वप्न मुलांद्वारे पूर्ण करावे असे मला वाटत होते. माझे दोन्ही मुलगे व एक मुलगी शालेय अभ्यासात हुशार होती म्हणूनच मुलांचा आर्थिक अडचणींवर मात करून उच्चशिक्षित करायचे हे मी माझ्या जीवनाचे ध्येय ठरवले.

निरामयमध्ये काम करण्याआधी माझ्या मैत्रिणीने मला 'प्रथम' या संस्थेविषयी सांगितले. नवऱ्याच्या संमतीने मी ट्रेनिंगसाठी गेले. तब्येत बरी नसतानादेखील जिद्दीने सकाळी ट्रेनिंग व संध्याकाळी दवाखाना असे करून ट्रेनिंग पूर्ण केले. सुपरवायझर म्हणून मी कामही करण्यास सुरुवात केली व ध्येयपूर्तीच्या दिशेने एक पाऊल पुढे टाकले.

घरच्या खर्चात हातभार लागल्यामुळे थोडी बचत करणे शक्य झाले व त्याच्या विनियोग पूर्णतः मुलांच्या शिक्षणासाठी होऊ लागला. १९९९ मध्ये मी निरामय संस्थेमध्ये आरोग्यसेविका म्हणून रुजू झाले. गरीब गरजू लोकांसाठी काम करताना मला पगारासोबतच अतिशय सात्विक समाधान मिळते. समाजसेवा करण्याचे भाग्यमाझ्यासारख्या व्यक्तीला मिळाले यासाठी मी निरामयची अतिशय ऋणी आहे.

माझी मुलगी प्रियंका नेहमी म्हणायची की मला डॉक्टर किंवा कलेक्टर व्हायचे आहे. भांडुपच्या सह्याद्री शाळेत दहावीला ८७.४६ टक्के गुण मिळवून ती पहिल्या क्रमांकावर आली तेव्हा तिचे हे स्वप्न नक्की पूर्ण करायचे असे आम्ही ठरवले. वैद्यकिय शिक्षणासाठी लागणारी फी बघून मात्र तिची समजूत घालावी लागली. 'दात आहेत तर चणे नाही, चणे आहेत तर दात नाहीत' अशी आमची अवस्था होती. पण प्रियंकाचा निश्चय ठाम होता. ती मला म्हणाली, "आई आपल्या गावी डॉक्टर नाहीत, आपल्या समाजातही कोणीही डॉक्टर नाहीत. आजारी माणसांना दुसऱ्या गावी उपचारसाठी जावे लागते. जर मी डॉक्टर झाले तर मला लोकांची सेवा करण्याची संधी मिळेल." जिद्दीने तिने सी.ई.टी.ची परिक्षा दिली व उत्तम निकाल लागला. शासनाच्या कोट्यातून कोल्हापूर येथे 'गंगा एज्युकेशन मेडिकल विद्यापीठा' येथे प्रवेश मिळाला.

या सगळ्या प्रवासात निरामयच्या संचालिका डॉ. जानकी देसाई यांचे अतिशय मोलाचे सहकार्य आम्हाला लाभले. निरामयमध्ये मी मेहनतीने व कष्टाने ध्येयपूर्तीचा ध्याय घेऊन निष्ठेने काम केले व आज मला त्यांचे फळ मिळाले. या संस्थेचा आधार मिळाल्याने माझ्या मुलीचे डॉक्टर बनण्याचे ध्येय पूर्ण झाले. म्हणून मी निरामयाची कायमची ऋणी आहे.

सौ. सुषमा धुरे...✍

### एका दिवसासाठी मुलगा झाला तर...

मुलगा म्हणजे वंशाचा दिवा अशी आपल्या भारतीय संस्कृतीची परंपरा आहे. मी जर एका दिवसासाठी मुलगा झाले तर मी सर्वप्रथम आपल्या आई वडीलांची सेवा करीन.

मुलगी म्हणजे परक्याचे धन असे म्हटले जाते. आपल्या संस्कृतीत मुलीचे स्थान केवळ चूल आणि मूल इतकेच आहे. मुलीला सर्व बंधनांनी बांधलेले असते. कोणतीही गोष्ट किंवा कोणतीही कृती करताना मुलीला आपल्या घराचा आई वडिलांचा विचार करावा लागतो. मुलगी जरी लग्नानंतर पतीच्या घरी गेली तरी तिला तेथे ही खुपच कष्ट, हाल अपेष्टा भोगाव्या लागतात.

परंतू, मुलगा ह्या कोणतेही काम नसते. तो एक स्वतंत्र असतो. त्याला आपल्या मर्जीप्रमाणे वागता येते. त्याला कोणतीही बंधने नसतात. मी जर मुलगा असते तर मी नवनवीन फॅशनचे वेश पोशाख परिधान केले असते. मी प्रत्येक मुलीच्या मनाचा विचार केला असता.

मुलीच्या पतीच्या मृत्युनंतर तिला सर्व प्रकारचे त्रास भोगावे लागतात, मात्र मुलाच्या बाबतीत असे होत नाही. लोक त्याला दुसऱ्या लग्नासाठी प्रोत्साहन करतात. ज्याप्रमाणे मुलासारखे मुलींनाही वागणे मिळाली पाहिजे. आपल्या देशात स्त्री पुरुष समानता अशी घोष वाक्ये बोलली जातात परंतू खरे तर तसे नाही. मी सर्व प्रथम मुलगा होऊन मुलींनाही मुलाप्रमाणे समान हक्क आणि अधिकार प्राप्त करून दिला असता.

परंतू मुलापेक्षा मुलीचे आयुष्य हे माझ्यासाठी खुपच सुखकारक आहे कारण मुलीला देवाने आई होण्याचे वरदान दिले आहे, तसे मुलांना नाही. देवा मी मुलगा होण्यापेक्षा मुलगी होणेच भाग्याचे समजेल.

रेशमा राजेंद्र पाडेकर...✍

(स्वामी रामानंद हायस्कूल)

### NIRAMAYA NIDHI :- NIRAMAYEE'S OWN FUND

Working with Niramaya is a rewarding experience: the satisfaction Niramayees get from bettering the lives of needy is gratifying. Such shared experience has created a spirit of camaraderie among us and prompted an initiative to establish a self-help effort for the welfare of Niramayees.

After intensive brainstorming and consensus among ourselves, and with encouragement given by Board of Directors, we have now decided to establish a Niramaya Nidhi i.e. Niramayees' own fund. Niramayees will develop the Nidhi by contributing to it from their salaries every month. The funds will be deposited in the Niramaya Nidhi bank account, and a five elected member committee will manage it. The detail rules and regulations for the utilization of the Nidhi will be drafted by a committee, which will guide its working and activities. Nidhi will be used for the benefit of the Niramayees on need basis.

While more complete guidelines for the utilization of the Nidhi are under preparation, we are very happy to report that the Hepatitis B vaccination of Niramayees has been unanimously agreed as the first activity to be undertaken through the Nidhi. We look forward to undertaking more such welfare activities for Niramayees in the days ahead.

### COMMUNITY REPORT

Community home visits is an important tool which we use for community involvement and their participation in health care. A total of 286 homes were visited with repeat visits in 115 houses in our operational area at Raman Mama Nagar.

During the visit 46 children in age group of 0-2 years were identified, of these only 30 were fully immunized, this inspite of nation wide campaign for immunization of children program. 16 children who were not immunized were taken to the Health post and were appropriately immunized. Amongst these children, we also found 31 children with varying grades of malnutrition. All the mothers were given nutrition education including cooking demonstration. The mothers who were lactating were also counseled on breast feeding and weaning practices. In addition, 12 pregnant women were identified and were convinced for regular antenatal checkups and to take iron, folic acid and calcium supplements regularly.

In our visits, we also identified 174 adolescents of which 53 were school going and 21 were school dropouts.

Health Education is an important component of our home visits to stress on the need for personal hygiene, common problems encountered by women, family life education and nutrition. Towards that end, 140 women in the age group of 19-35 years and 46 adolescents attended the training sessions.



### *Niramaya Laughter Challenge*



*Sardarji was filling up application form for a job. He was not sure as to what to be filled in column "Salary Expected". After much thought he wrote : 'Yes!*



*Sardar & his wife going 2 city in auto....  
driver adjusted mirror..*

*sardarji shouted u r seeing my wife...  
go & sit back i will drive the auto...*

*The children had all been photographed, and the teacher was trying to persuade them each to buy a copy of the group picture. "Just think how nice it will be to look at it when you are all grown up and say, 'There's Priya; she's a lawyer,' or 'that's Rahul. He's a doctor.' A small voice at the back of the room rang out, "And there's the teacher. She's dead."*



## MY FIRST TWO WEEKS WITH NIRAMAYA



Freda

My first two weeks in Bombay are nearly over. And there is a lot to write about Niramaya...

I arrived in India on a REALLY hot Friday afternoon. This country was (and still is!) overwhelming... the city with so many people, dirt, traffic, noise all the animals (cows!!)..., ... ,....! I have never in my life seen a place like this before. But right from the start I

really liked everything (except the smell...!!!)

A few days later I started working as a volunteer with Niramaya. Dr Desai and my aunt Fra told me a lot about Niramaya and its projects. But it was not how I had visualized. It is much better than that.

When I arrived in the office for the first time I was cordially received. The whole team was SO "jolly"...all the time they were laughing...you could hear their giggle quite a while before you enter the office... I have never seen such a "happy" atmosphere in a German office...

In the last two weeks I accompanied the team and went with the big van to all the different slum areas and shelters to have a look at everything.

On my first visit to the "Panvel Shelter" which is quite far and outside Mumbai. I had my first experience with these children and was incredibly impressed. The children had suffered many bad things in their life but inspite of that they

seemed SO happy. After their health-education (I was surprised that they paid so much attention!!!) they did a little sing- and dance show.....it was soooooo amazing!!! I was really sad to leave them and go back home.

The next day I went to a Balwadi Camp. I was shocked to see all these mothers who were so young, skinny and malnourished. They were nearly my age...nearly every woman was mother of 3 or more children.

I also had an opportunity to attend the Dumping Camp. I had never imagined people could live like that. It seemed so unrealistic. I sat in this van, watching all the people and children out there in their little huts. I saw children roaming naked, children in the age of 4 or 5 carried their younger siblings in their little arms but they never looked unhappy.

Firstly I had time enough to see and realise what GREAT work all the doctors and health workers were doing. Secondly I had a bit time to get "used" to the slums and the huge poverty before I started working there. Of course I am "prepared". I now know how slums look like...seeing with my OWN eyes and not in pictures or TV was of course quite different...!

Thirdly I had time to think about what my role in Niramaya could be. I think there is a lot one can do with a non-medical background to help these people, especially the Shelter and street children.

I am looking forward to DO something and be a part of the team for the coming 6 months and am very excited and happy to be a part of the Niramaya family.

Freda...✍️

### *Help us*

Your support by way of donations could greatly help us improve the services rendered. All donations made to Niramaya are entitled to 50% tax exemption under section 80G of the Income Tax Act. Niramaya invites you to join hands with us by contributing in any of the following ways :

- » General monetary contributions - any amount is welcome.
- » Infrastructure - office space, vehicle, computers, printers, etc.
- » Medicines & medical instruments/supplies.

Cheques should be made out to "Niramaya Health Foundation" and mailed to our office.

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