



Sanjeevani Ayurveda Foundation

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EDITORIAL

This issue of the Newsletter deals with a major health crisis our country is facing, namely anaemia. Anaemia is characterized by a deficiency in blood. It is the most common and most debilitating disease among women and children of India. More than half of Indian women and three-fourths of Indian children are anaemic. Such a high incidence of anaemia cannot be acceptable in any society. It only means that the majority of Indians, especially women and children are debilitated and they are too weak to perform any creative or useful work. This fact seems to be so well-known that even a major multinational cornflake manufacturer claims that its product is part of an effort to achieve the goal of "anaemia-free India".

It is not that this crisis has escaped the attention of the Indian Government. For more than 30 years, the National Nutritional Anaemia Prophylaxis Programme has been trying to eradicate anaemia among women and children, by distributing iron and folic acid (Allopathic) tablets. However, this programme has been a failure. Even after all these years, women and children of India continue to be chronically anaemic as can be seen from the tables. (For a comparison, data from China is also given).

In our practice, we find that the Ayurvedic treatment of anaemia through drugs, diet and regimen, is very efficacious. It is because of the neglect of the Ayurvedic System that anaemia has become unmanageable. If we are serious about eradicating anaemia, Indian Systems of Medicine (ISM) should be incorporated into the national effort. **There is a need to combat anaemia on a war footing. Otherwise this can lead to a great disaster.**

The Tamilnadu Government has taken a positive step towards reducing the incidence of anaemia among pregnant mothers, by using drugs from the Ayurveda and Siddha systems. This is part of an effort to bring the Indian Systems of Medicine (ISM) into the mainstream. About 10,000 Village Health Nurses (VHN) in Tamilnadu are being trained to handle a drug kit containing 50 Ayurveda and Siddha drugs. The main focus is on treating ailments of women and children. Pregnant

mothers will be offered ante-natal (before childbirth) and post-natal (after childbirth) care through this effort. Safe and effective drugs to treat diseases affecting infants and children such as diarrhoea, respiratory disorders etc. are also included in the VHN drug kit. This programme promises to be a model for the whole country.

ANAEMIA - THE AYURVEDIC APPROACH

The human body consists of seven Dhatus or tissue elements which are the building blocks of the body. These seven Dhatus are formed from the food that we consume. Of these, the second Dhatu is blood (Rakta). It is responsible for the sustenance of life itself. When blood is vitiated resulting in a loss of its quality and quantity, one is afflicted by the disease Pandu or anaemia. Therefore anaemia leads to a whole host of problems affecting the life-sustaining factors in the body.

There are various factors which lead to a deficiency in blood in the individual. Improper food is an important cause for anaemia. Excessive intake of salty, sour and pungent (spicy and hot) foods are primarily responsible for the disease. Excessive intake of penetrating (Teekshna) substances such as alcohol can also cause this disease.

It is a commonly-held belief that eating sumptuously prevents anaemia. A father who had brought his daughter to the Ayurvedic Centre was astonished when he was told that his daughter was suffering from anaemia. "How can my daughter have anaemia? She is well-fed and gets enough rest. I thought only the poor suffered from this disease" he said. In this case, although his daughter was well-fed, it was the wrong kind of food that caused the disease. The poor are only more susceptible to this disease as they undertake excessive physical labour and they are also malnourished.

Other important factors that can give rise to anaemia have to do with our daily regimen. Hard physical labour and habitual day sleep are two such factors. Occasionally we hear of persons eating mud which blocks the fine channels in the body thus causing anaemia. Persons who are subject to extreme fear, grief, contemplation, worry, anxiety etc. can also be afflicted by this disease.

SYMPTOMS

A 35-year old woman who had come for treatment looked fatigued and sleepy with a dry and lustreless skin. She suffered from body pain and cramps in her legs. She could not even stand or walk a few steps comfortably without feeling breathless. The slightest physical work left her feeling exhausted. She also had a poor digestion. From her symptoms it was clear that she was suffering from anaemia. Her favourite foods were sour, hot and spicy curries, curd, pickles and other foods which are predominantly salty, sour and pungent. In the afternoons she liked to sleep for at least two hours. Due to such food and regimen which were conducive to anaemia, she became deficient in blood which in turn caused loss of strength.

Some of the symptoms of anaemia are - a throbbing sound in the ears; dislike for food, lack of appetite and poor digestion; excessive salivation; dislike for cold; dryness of the body and lack of sweat; a greenish complexion of the body; lack of strength and a feeling of weakness, tiredness and heaviness. There are aches and pains in the body, breathlessness, giddiness and exhaustion. There may also be fever, swelling around the eyes and loss of body hair. The person is short-tempered, sleepy and not able to speak much. There is pain in the waist, thigh, feet, exhaustion while climbing stairs and cramps in the calf muscles.

Before the actual occurrence of anaemia, there are some premonitory symptoms, known as the Poorva Roopa of the disease. These are - throbbing of the heart, exhaustion, dryness of the body, absence of sweat and excess salivation. The knowledge of premonitory symptoms is a special feature of diagnosis in Ayurveda. The disease can be detected and prevented before its actual onset.

Anaemia is of different kinds depending upon the aggravated dosha, Vata, Pitta or Kapha. Since anaemia is associated with paleness of the skin, it is called Pandu (white). Anaemia should be treated and cured without allowing it to become chronic. When Anaemia is left untreated it becomes chronic and incurable. People who are anaemic, and persist with food and regimen which further aggravate Pitta, can be afflicted with jaundice (Kaamala).

TREATMENT

Anaemia is best treated in the Ayurvedic system of medicine. The patient of anaemia is first of all advised to avoid all food and regimen which cause the disease. The patient is then subjected to cleansing therapies before administering medicines. Cleansing the body before administering the medicines reduces the severity of the disease and also enables better absorption of the drugs by the body.

There are a large number of drugs that can be used to treat anemia. Some of the common drugs are various compounds of iron, such as Kantham, Kaseesam, Manduram and Loham. These are transformed into the bhasma (ash) form and used in medicines such as Punarnavadi Manduram, Navayasam, Dhatri Loham, Saptamrita Loham etc. These compounds are also added to herbs and these preparations are used in the treatment of a wide variety of diseases besides anaemia. There are also other effective preparations like medicinal ghees (ghritam), fermented decoctions (arishtam/asavam) and medicinal powders (choornam), all prepared from herbs. These medicines bring about both a qualitative and quantitative improvement in the blood. They cause no side effects, unlike the iron tablets used in the Allopathic system.

ANAEMIA DURING PREGNANCY

The food and regimen recommended in Ayurveda for a pregnant mother ensures anaemia-free pregnancy. The pregnant mother is advised to follow a diet which is cooling in nature and sweet in taste. All through pregnancy she is advised to consume milk and ghee. Only herbs which are sweet in taste are recommended during this period. Hard physical labour, day sleep and intake of alcohol are forbidden throughout pregnancy. The diet and regimen which are beneficial and those which are harmful for a pregnant mother are the same as those for a person with anaemia. It is easy to see that when pregnant mothers are treated in the Ayurvedic way, there is very little chance of their being afflicted by anaemia.

ANAEMIA - A NATIONAL CALAMITY

Anaemia (also known as iron-deficiency anaemia) can be called India's national disease. It certainly is a national calamity. The figures for anaemia among women and children of our country are truly staggering. It is estimated that more than half of all Indian women suffer from anaemia. According to the National Family Health Survey 1998-99 (NFHS-2), 52% of Indian women are anaemic. But other estimates put this at 90% (see for instance The Hindu dated 4th September 2005). In Bihar, Orissa and West Bengal more than 60% of women suffer from anaemia. In Tamilnadu the figure is 57%.

Anaemia has a major detrimental effect on women's health. Anaemia during pregnancy increases the risk of death or disease of both the mother and the child. Data from the National Nutrition Monitoring Bureau (2003) indicates that in our country, nearly 75% of the pregnant mothers are anaemic. For the eight states for which data is available, anaemia among pregnant mothers ranges from a low of about 50% in Kerala to a high of about 84% in Madhya Pradesh.

In India anaemia is by far the most significant cause of *maternal mortality*, that is, death from pregnancy and child-birth related causes. Every year more than 100,000 Indian women die from these causes. It is estimated that about 40% of these maternal deaths are caused by anaemia and anaemia-related complications. Maternal mortality in India is among the highest in the world - 540 deaths per 100,000 live births. (Compare this with Sweden which has one of the lowest maternal mortality rates in the world, 4 - 5 deaths per 100,000 live births). **India has 10 times the maternal mortality of China and 100 times that of Sweden.**

That anaemia in the pregnant mother leads to a whole host of complications during pregnancy and child-birth has been well documented. Conditions such as abortions, premature births, bleeding during child-birth and low birth weight of infants are associated with anaemia during pregnancy. In general anaemia increases the susceptibility of women to diseases. This is especially so after child-birth. It is also known that anaemic mothers give birth to anaemic children. The more severe the anaemia of the mother, the more severely the child is affected.

Anaemia among women by state

State		% of women with anaemia*	% of Pregnant mothers with Anaemia **
	India	51.8	74.6
North	Delhi	40.5	
	Haryana	47.0	
	Himachal Pradesh	40.5	
	Jammu & Kashmir	58.7	
	Punjab	41.4	
	Rajasthan	48.5	
Central	Madhya Pradesh	54.3	83.8
	Uttar Pradesh	48.7	
East	Bihar	63.4	
	Orissa	63.0	81.5
	West Bengal	62.7	77.1
Northeast	Arunachal Pradesh	62.5	
	Assam	69.7	
	Manipur	28.9	
	Meghalaya	63.3	
	Mizoram	48.0	
	Nagaland	38.4	
	Sikkim	61.1	
West	Goa	36.4	
	Gujarat	46.3	
	Maharashtra	48.5	75.9
South	Andhra Pradesh	49.8	73.8
	Karnataka	42.4	79.8
	Kerala	22.7	50.1
	Tamil Nadu	56.5	69.0

Source : *NFHS-2 (1998-99)

** National Nutrition Monitoring Bureau 2003

ANAEMIA AMONG CHILDREN The health status of Indian children is a cause for great concern. The health of Indian children seems to be even worse than that of the mothers. Deficiency in blood in the beginning of life affects all aspects of the child's growth and development. With more than half of the mothers chronically anaemic, more often than not, children are born with low birth weight (below 2.5 kg). It is estimated that at least one-third of the new-born in India are of low birth weight. Children born with low birth weight are inherently weak. They lack resistance to disease. Low birth weight is a very important cause for *infant mortality* - death before the age of one.

Anaemia among children by state

Percentage of children age 6-35 months classified as having iron-deficiency anaemia by state, India 1998-99

State	Percentage of children with anaemia
India	74.3
North	Delhi 69.0
	Haryana 83.9
	Himachal Pradesh 69.9
	Jammu & Kashmir 71.1
	Punjab 80.0
	Rajasthan 82.3
Central	Madhya Pradesh 75.0
	Uttar Pradesh 73.9
East	Bihar 81.3
	Orissa 72.3
	West Bengal 78.3
Northeast	Arunachal Pradesh 54.5
	Assam 63.2
	Manipur 45.2
	Meghalaya 67.6
	Mizoram 57.2
	Nagaland 43.7
	Sikkim 76.5
West	Goa 53.4
	Gujarat 74.5
	Maharashtra 76.0
South	Andhra Pradesh 72.3
	Karnataka 70.6
	Kerala 43.9
	Tamil Nadu 69.0

Source : NFHS-2 (1998-99)

What is most worrying is the level of anaemia among infants and children of India. About three-fourths of Indian children are anaemic. The percentage of children who are anaemic in the age group 6-35 months, is 74.3%. In this the most vulnerable group is that of 12-24 months. Anaemic children constitute 77.7% of this group.

One would have expected the spread of Modern Health Care System to improve the health of our children. Tamilnadu for instance, has nearly 100% "institutional" deliveries attended by health professionals, high quality medical care, good infrastructure with modern equipment and modern medical professionals. However, infant mortality is high, at 48 deaths for 1000

live births (1994-98). The percentage of children who are anaemic is also high for Tamilnadu. In the age-group 6-35 months, 69% of the children are anaemic. Here too the more vulnerable group is 12-24 months and in this group 74.1% of the children are anaemic. The figures for some of the other states are even higher. In Haryana, Rajasthan, Bihar and Punjab more than 80% of the children in the age group 6-35 months are anaemic.

If we compare the different states in India, the statistics on Kerala are very revealing. The percentage of women in Kerala having anaemia is 22.7%, the lowest in the country. The percentage of children in Kerala, in the age group 6-35 months, who are anaemic, is 43.9%, which is also the lowest in the country. The per capita Net State Domestic Product (NSDP) of Kerala is about the same as that of Tamilnadu, but far lower than that of Punjab which is one of the richest states in India. However, Punjab has one of the highest percentage of children who are anaemic (80%). And Manipur which has one of the lowest per capita NSDP, has one of the lowest anaemia levels among women and children, next only to Kerala. Clearly, the levels of anaemia do not seem to have any relationship with the material wealth of the state.

One conventional argument is that women and children in Kerala have benefited from a wide-spread modern system of health care. However, Manipur does not have a wide-spread modern system of health care. And Tamilnadu which does have a wide-spread modern system of health care has fairly high levels of anaemia among women and children. Therefore, the reach of the modern system of healthcare is also not a factor which explains a low-level of anaemia among women and children.

In Kerala, the household health care practices of the people are even today based largely on the traditional system of health care, Ayurveda. It may not be wrong then to conclude that the low levels of anaemia among women and children of Kerala are due to health practices which are deeply rooted in the Ayurvedic tradition. (Incidentally Kerala also has the best sex ratio (female/male) in the whole country).

NATIONAL NUTRITIONAL ANAEMIA PROPHYLAXIS PROGRAMME

During the Fourth Five-year Plan, the Government of India sponsored a National Nutritional Anaemia Prophylaxis Programme. The stated objective of this programme was to prevent anaemia among mothers and children (1-12 years). The programme involves daily supplement with Iron and Folic Acid (IFA) tablets to prevent 'mild' and 'moderate' anaemia. The target groups are 'at risk' groups - pregnant women, lactating (nursing) mothers and children under 12 years of age. As part of this Programme pregnant women are expected to consume 100 tablets of Iron and Folic Acid over a period of three months during pregnancy. This programme is now a part of the Reproductive and Child Health Programme (RCH) in every state.

The main problem with this Allopathic iron supplement is that it causes severe digestive disorders in pregnant mothers who consume it. Some of the common side effects are - stomach upset or irritation, nausea, vomiting, diarrhoea, constipation, appetite loss, skin rashes and darkened stools. There has been really no proper evaluation of the proportion of pregnant women who actually consumed this supplement. Discussions with village health nurses (VHN) and health department officials reveal that not more than 20-30% of the people who had been supplied these tablets actually consumed them, because of their side-effects. It is also not clear whether anaemia was in fact cured in those women who consumed the supplement, as there was no follow-up and evaluation. In short the Anaemia Prophylaxis Programme of the Government of India seems to be a colossal failure.

Since this Programme is completely based on the Allopathic system, there seems to be no understanding of the causes or the appropriate diet and regimen for Anaemia. Often we come across patients of anaemia who, on the advice of their Allopathic doctors, take plenty of vegetables, green leafy vegetables (Keerai in Tamil) and fruits. Yet they continue to suffer from anaemia. In a recent interaction with a group of 300 VHNs, they were asked to name the most important food for pregnant mothers and for anaemia. They were unanimously of the view that Keerai was the most important food for both. However, from the Ayurvedic point of view green leafy vegetables are irrelevant in both these contexts. In fact green leafy vegetables (Saaka) are considered inferior foods and their constant use is discouraged in the Ayurvedic texts. Programmes which attempt to eradicate anaemia should begin with educating the health professionals in the Ayurvedic approach to anaemia - the causes, appropriate diet and regimen and the Ayurvedic medicines used in its treatment.

CHINA IN 2002

ANAEMIA among urban women	17%
ANAEMIA among rural women	18.8%
ANAEMIA among child-bearing women	20.6%
ANAEMIA among children below the age of two	24.2%
Low birth weight infants (below 2.5 kg)	3.6% of all the live births
Maternal mortality (in 2000)	56.2 per 100,000 births
Data from the Net	

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