ASSESSMENT, PREVENTION AND CONTROL OF IRON DEFICIENCY ANAEMIA AMONG ADOLESCENT GIRLS, PREGNANT AND LACTATING MOTHERS IN RURAL GURUGRAM, HARYANA

Anemia is a public health problem that affects population in both rich and poor stratas of the society. The anemic condition makes one vulnerable to diseases and is one of the most common disorders affecting Indian population. Although the primary cause of anemia is iron deficiency, it seldom occurs in isolation. In most cases it frequently coexists with a number of other causes, such as malaria, parasitic infection, nutritional deficiencies and haemoglobinopathies. It can occur at all stages of the life cycle, but is more prevalent in young children, pregnant women and lactating mothers.

Under the Maternal Child Health program, Sukarya with the support of Population Foundation of India, New Delhi implemented a pilot project (in May 2006) to reduce the prevalence of anemia among the high risk groups comprising of pregnant women, lactating mothers and adolescents. The project covered ten villages in Gurugram and Sohna blocks belonging to two Integrated Child Development Schemes (ICDS) circles i.e. Nathupur and Jharsa with an approximate population of 30,000.

The overall objective of the project was to reduce the prevalence of anaemia among the project population. The first step in this direction was a base-line assessment of existing prevalence of anemia in the focus groups. This was followed by developing an understanding of the knowledge, attitude and practices of the project population surrounding the issue. Based on the findings of the initial assessment specific interventions were planned at the preventive and curative levels. The project focused primarily on behavior change communication to effectively motivate the project population to adopt healthy practices to reduce the risk of anemia. This involved promotion of knowledge, encouraging the adoption of appropriate healthy practices.
and making provision of needed health products and services at the community level for anemia reduction.

**KEY STRATEGIC INTERVENTIONS**

1. **Promoting use of Double Fortified Salt**
   One of the key interventions for anaemia prevention was the launching of the double fortified salt (Health salt) in all the ten project villages. This product under the brand name of “Health Salt” was tested at National Institute of Nutrition, Hyderabad under ICMR, New Delhi, Food and Nutrition Board laboratory under Women and Child Development Department of Government of India was certified by the Bureau of Indian Standard (BIS).

2. **Reinforcing Iron Vessel for Cooking**
   A study made by the department of Studies in Food Science and Nutrition, University of Mysore suggests that the availability of iron, in relation to total iron of greens cooked in iron utensils is either comparable or marginally higher than those cooked in other metallic utensils. Since the total iron content of greens cooked in iron utensils is high, the actual amount of available iron also increases. Promoting use of an iron pan for cooking was thus one of the significant program strategies for anemia prevention. Sukarya promoted the importance of the iron karahi extensively through group meetings, one-on-one interactions and counselling. Nutrition demonstration workshops were the major platform to build awareness on the usage of iron karahi and iron ladle.

3. **Nutrition workshops at the Community level**
   It has been seen that malnutrition is the most common and critical health problems prevailing among the rural and urban poor that impacts their overall health and well-being. Through nutrition demonstrations and workshops information and knowledge were imparted on balanced diet that can be prepared from cheap, nutritive, locally available food. The demonstrations held under the guidance of a nutritionist were organized to showcase healthy cooking methods to encourage people to adopt healthy cooking practices. Since women are primarily responsible for cooking in the household, a change in their eating and cooking habit would result in positive change in the dietary habits at the household level. Thus, the focus of the intervention was to sensitize the women in order to bring about a change in the cooking methods of the community.

<table>
<thead>
<tr>
<th>Changes noticed in the respondents’ dietary habits and consumption pattern</th>
<th>Pregnant Women</th>
<th>Lactating Mothers</th>
<th>Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eating three complete meals in a day</td>
<td>61.62%</td>
<td>62.5%</td>
<td>55.71%</td>
</tr>
<tr>
<td>Regularly taking green leafy vegetable</td>
<td>69.7%</td>
<td>60%</td>
<td>56.67%</td>
</tr>
<tr>
<td>Consuming one lemon every day</td>
<td>40.4%</td>
<td>32.5%</td>
<td>33.81%</td>
</tr>
</tbody>
</table>
Consuming fruits at thrice a week | 34.34% | 30% | 28.1%
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**Consuming Swasthya Namak daily** | 49.49% | 50% | 35.24%
Other | 20.2% | 27.5% | 25.71%
Sample size | 99 | 80 | 210

**BEHAVIORAL CHANGE COMMUNICATION**
One of the key strategies of improving health through behavior change communication focused on encouraging adoption of healthy practices by delivering informative and educational program tailor-made to suit the needs of the audience.

This involved developing appropriate health messages for various stakeholder groups. Specific communication methods were used while focusing on effectively delivering these health messages to varied groups on a continuous and sustained basis to result in adoption of healthy practices. The various informal methods used at the community level included talks, street plays, puppet shows, health games, health quiz, nutrition demonstrations, cooking competitions, discussions with mother’s groups, baby shows etc.

1. **The IEC material** produced on nutrition, health and hygiene, reproductive health care etc. included posters, flip charts, leaflets, handouts, and recipe books etc. to educate the high-risk groups of pregnant, lactating women and adolescents.

2. **A Janani Record book** was developed as part of our reproductive health program to keep track and record of the pregnant and lactating women in the project.

3. **Prabhavshali Vyanjan Vidhiyan’ Recipe book (in Hindi)**, a recipe book was launched providing simple recipes that are easy to prepare using locally available ingredients in a short time and is rich in iron and vitamin C to help prevent anemia by giving information on simple food preparation and the requisite adult daily requirement of iron in one’s diet.

4. **Production of a Documentary Film – Jab Jago Tab Savera**
The film ‘Jab Jago Tab Savera’ focuses on strategic importance of antenatal care for timely identification and management of anemia and the need for active engagement of men as partners while dealing with women’s health concerns.

5. **Radio Program** - To reach out to a wider population, Sukarya coordinated with 92.7 FM to air anemia prevention messages through radio.