INTRODUCTION

Vitamin A deficiency and iron deficiency anemia are major public health nutrition problems in the world. About 10 million children develop eye problems and half a million are blind every year due to vitamin A deficiency (Sommer and West 1987). In India, every year about 80,000 disadvantaged preschool children develop corneal lesions due to vitamin A deficiency and about a third of them become completely blind (Vijayaraghavan & Reddy 1987). Iron deficiency affects over a billion people in the world. Young children and women in the reproductive group are worst affected (ACC/SCN 1992). The prevalence of iron deficiency anemia in India ranges from 60-70 percent among both women and children and 30-40 percent among adult males and older children (Narasinga Rao 1987). The prevalence of iron deficiency anemia is as high as 90 percent among pregnant women in some parts of India (NIN 1994).

The deleterious effects of vitamin A and iron deficiencies are well known and have been documented by several researchers. Besides the damage to eyes, vitamin A deficiency affects the epithelial tissues of respiratory, gastro-intestinal and genito-urinary tracts. It increases the susceptibility to infection and exacerbates the effects of many diseases. The undesirable consequences in children include inadequate growth and development. The causal relationship between vitamin A status and morbidity and mortality has been established (Sommer & West 1987, Mason et al 1987, IVACG 1976). Iron deficiency anemia results in potential impairment of infant motor and mental development and academic achievement of school children. Low birth weight in new borns, increased perinatal and maternal mortality and decreased effort tolerance and work capacity are some other adverse effects of iron deficiency anemia (INACG 1989, INACG 1987).

In view of the wide prevalence of vitamin A deficiency and iron deficiency in India and their far reaching biological and socio-economic implications, the Government of India launched prophylactic programmes on a national scale to combat these deficiencies during the Fourth V Year Plan (1969-74).

The National Programme for the Prevention of Blindness due to Vitamin A Deficiency (also known as Vitamin A Prophylaxis Programme or VAP) envisaged the administration of half yearly massive oral doses of 200,000 IU of vitamin A to preschool children in the age group of 1 to 5 years. Under the National Nutritional Anemia Prophylaxis Programme (NAP), folifer tablets containing iron and folic acid are given to the pregnant women, lactating women, family planning acceptor women (sterilization and IUD acceptors) and children between the ages of 1 to 12 years. The adult tablets consist of 60 mg of elemental iron and 0.5 mg of folic acid, while the children receive tablets containing 20 mg of elemental iron and 0.1 mg of folic acid or an equivalent liquid preparation. These preparations are given for a period of 100 days once every year of beneficiary status.

These National Programmes for the control of blindness due to vitamin A deficiency, and nutritional anemia, are implemented through the Health and Family Welfare infrastructure in the urban and rural areas of the country. In the rural areas, the programme implementation is through the Primary Health Centres and Subcentres and in the urban areas, through the Family Welfare Centers, and other maternal and child health organizations. National Programmes like the Integrated Child Development Services (ICDS) are also involved in the implementation of these two nutrient programmes. The multipurpose worker (female) is the grassroot level worker and is the link between the community and the implementing authorities (ICMR 1989, Vijayaraghavan and Pralhad Rao 1978).

These national programmes have been in operation for several years now. Several studies have indicated that vitamin A deficiency and iron deficiency disorders are still widely prevalent in the country. A few studies on programme evaluation in several States of India (ICMR 1989, Vijayaraghavan and Pralhad Rao 1982) have pointed towards a lack of appreciable impact and certain operational weaknesses in the programmes. It was found that the knowledge of functionaries as well as the beneficiaries regarding the programmes was insufficient, supplies were irregular and inadequate, and record maintenance was unsatisfactory. The reasons given by the functionaries for poor coverage of beneficiaries included heavy work load, especially that of family planning work. However, it was observed that the poor coverage was due to reasons other than heavy work load. These results clearly indicate the need to improve the management components of these programmes.

It is being increasingly realized that the success or failure of nutrition interventions depends to a large extent on the managerial skills of the programme implementors and programme manager at different levels (ICMR 1986). Attempts to improve the organization, structure and functioning of services will meet with little success without efficient management (WHO 1974). The concept of process evaluation provides for the inclusion of a number of sequential stages and elements, which, interacting with each other make up a total delivery and impact system of a nutrition programme (Gopaldas 1987).

Further, it has been reported by several investigators that Family Planning Programme (FP) is being focused upon at the cost of other programmes in government health services (Chandok et al. 1988, Ratanjeet 1987, Murthy and Satia 1976). It would be relevant to know as to what extent is the implementation of the national nutrition programmes adversely affected by the perceived excessive emphasis on family planning work.

Justification of the present study :

In view of the above, it becomes imperative to evaluate the management of the national nutrition programmes. An in depth analysis of the situation at the providers level would provide the much needed information on the implementation of these

programmes. Further, empirical evidence is required to prove or disprove the observations of programme implementors that excessive focus on the family planning programme obstructs the effective implementation of other health programmes of which NAP & VAP are components. This area, till now, has been a neglected area of research.

Further, evaluations of nutrition programmes thus far utilized quantitative methodologies in the collection of data. These primarily involved administration of large scale survey questionnaires, which can indicate the presence or absence of various components but are unable to answer the questions of "why" and "how" behind these components (Gulati 1993). Besides, the quantitative data obtained mainly depended on the statements of functionaries and beneficiaries of the programme. In practice, there may be variations in the actual behaviour and statements of respondents (Scrimshaw and Hurtado 1987). Qualitative information in the area of evaluation and operations research investigating the processes in delivery and acceptance of health services is rare (Shariff 1991).

Besides, state of Madhya Pradesh was not included in the comprehensive nation wide evaluations of the nutrition programmes discussed earlier. Further, there have hardly been any studies which included urban as well as rural areas.

Against this background, it was decided to undertake the present study in urban and rural Indore with the following objectives:

1. To conduct an in-depth study of selected management components pertaining to the National Nutritional Anemia Prophylaxis Programme and National Programme for the Prevention of Blindness due to Vitamin A deficiency (hence forth referred to as NAP and VAP respectively).

2. To assess the role of Family Planning Programme (FP) in influencing the implementation of NAP and VAP.

3. To assess the impact of NAP and VAP on beneficiaries.

4. To assess the relative strengths and weaknesses of the qualitative and quantitative research methods used in achieving the study objectives.

5. To make recommendations for improving the management of NAP and VAP in the health services infrastructure of Indore.