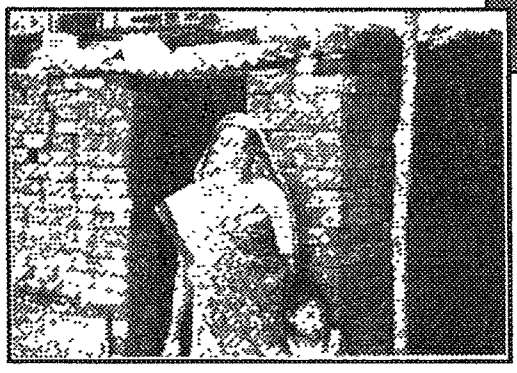


# INTRODUCTION

# CHAPTER I

# INTRODUCTION

Malnutrition is one of the consequences of social injustice as well as a factor contributing to its maintenance. History shows that societies that meet women's and children's nutritional needs also lift their capacities for greater social and economic progress. Even in countries where poverty is entrenched, nutrition can be protected (UNICEF 1998). More important, nutrition of women should be protected as it has long term consequences on future generations.

Malnutrition among women is a major nutrition problem in its own right. Over the decades of the 70s, 80s and 90s, this problem has continued to be of major dimensions. Undernutrition and anemia are the two major nutritional deficiency disorders among women in the developing world including India. The ACC/SCN database reveals that the high levels of underweight (weight less than 45 kg) among Asian women (over 60%) are related to both thinness (Body Mass Index less than 18.5) and stunting (height below 145 cm) (ACC/SCN 1992).

As regards anemia, regional data from WHO (1992) show very high anemia prevalence for women in South Asia (60%), South East Asia (50%) and most regions of Africa (40-50%). For the subset of pregnant women, figures are as high as 79% in South East Asia, 61% in Eastern Mediterranean, 44% in Africa, 39% in Western Pacific, 29% in Americas and 20% in Europe (WHO 1996a). Nearly half the global total number of anemic women live in the Indian subcontinent (WHO 1991) and in India alone, the prevalence of pregnancy anemia may be as high as 88% (ICMR 1989). These women thus enter and continue their pregnancies with a highly compromised nutritional status giving birth to low birth weight babies, transmitting malnutrition through generations, from the mother to the newborn child. Evidence suggests that prepregnancy weight, pregnancy weight gain, and iron status are critical indicators of pregnancy outcomes for both the mother and the newborn (Gillespie 1997).

## ANTENATAL CARE AND QUALITY OF IMPLEMENTATION

Insufficient maternal care during pregnancy and delivery is largely responsible each year for nearly 600,000 maternal deaths and an estimated 5 million infant deaths either just before or during delivery or in the first week of life. Out of the 88 countries for which data are available, the situation is particularly desperate in 13 countries, including India, as shown in Table 1.1 (UNICEF 2000).

It has been well documented that antenatal care (ANC) throughout pregnancy is a necessary (if not an adequate) intervention for reducing maternal and perinatal mortality by recognizing complications during pregnancy and for improving the health of pregnant women (WHO 1996b). In particular, the nutrition related components of ANC are extremely important from the point of view of a favorable pregnancy outcome. The nutrition related components of ANC services include: iron supplementation, monitoring of weight gain during pregnancy, and nutrition education and counseling.

There is a widespread desire to improve maternal health services and make optimum use of women's contact with these services. Studies have demonstrated that the availability, context and quality of antenatal care varies enormously amongst developing countries, and that they are generally much lower utilized in countries with high maternal mortality, thus arriving at a consensus in favor of antenatal care (Rooney 1992).

In India, the coverage and utilization of ANC services is quite unsatisfactory. Even where coverage is adequate, the quality of these services remains dubious. In the state of Gujarat, the percentage of women receiving ANC (at least one antenatal visit) was 75.5% and of women receiving iron tablets was 69.3% as reported in the National Family Health Survey (NFHS) 1992-93 (IIPS 1995). According to the more recent figures of NFHS-2, 1998-99 (IIPS 2000), the percentage of women receiving antenatal checkup and IFA supplements (at least once), was found to be improved in

**Table 1.1 : Lowest Coverage of Antenatal Care in the World**

| Country | % of women (aged 15-49) attended by skilled health personnel at least once during pregnancy |
|---|---|
| Chad | 23 |
| Nepal | 24 |
| Mali | 25 |
| Bangladesh | 26 |
| Pakistan | 26 |
| Cambodia | 34 |
| Yemen | 34 |
| Niger | 39 |
| Morocco | 42 |
| Mauritania | 48 |
| Eritrea | 49 |
| **India** | **49** |
| Tanzania | 50 |

Source: UNICEF (2000)

Gujarat, i.e., 86.4% and 78.0% respectively. However, data on monitoring of weight gain during pregnancy were not reported in both the surveys.

One of the reasons for the poor utilization of the ANC services could be the poor quality of implementation of these services. For many years, quality of care was considered a luxury not available to developing countries that were mainly striving to expand the coverage of services. Now, the perspective has changed, and quality is seen as a key element in the provision of health care for ethical reasons and as a factor closely related to effectiveness, compliance and continuity of care (Langer et al 1998).

Quality of care (QOC) is all about the relationship between health care services, service providers and their users. Quality can be assessed in the process of service delivery, a program's capability to provide services at a desired level, and its impact on clients' health (ICOMP 1997). Quality of care frameworks have been developed for the areas of family planning (Bruce 1990), women's health (Mensch 1993), and more recently, for safe motherhood programs (WHO 1995). These frameworks are discussed in the Review of Literature (Chapter II-Section I).

Studies assessing QOC have mainly been carried out in the area of family planning and the major focus of these studies has been on the technical quality of health services/programs as assessed by their outcome. The measurement of the subjective dimension of quality of antenatal care has only seldom been attempted – in the United Kingdom and as a part of the WHO Antenatal Care Randomised Controlled Trial in four developing countries, namely Argentina, Cuba, Saudi Arabia and Thailand (Langer et al 1998). However, there is very little information available on the quality of implementation, particularly of nutrition services as a part of the ANC services in the context of an urban health system, taking into account the perspectives of both the service provider and the client.

Poor quality of implementation of health services is in turn related to poor program management components, which may adversely affect the quality of antenatal care and maternal nutrition services. They include: poor training, lack of clarity regarding the service providers' specific job functions, inadequate supervision, multiplicity of records and registers or poor management information system, irregular and inadequate supplies and equipment, poor rapport of the providers with their clients, and ineffective and sporadic use of Information-Education-Communication material for counseling the clients (WHO 1995, ACC/SCN 1991, NIHFW 1984).

All these components are a part of the overall health system. The World Health Report 2000 (WHO 2000) defines a health system to include all the activities and people whose primary purpose is to promote, restore or maintain health. The three fundamental objectives of a health system are:

- improving the health of the population they serve;
- responding to people's expectations;
- providing financial protection against the cost of ill-health.

## URBAN HEALTH SYSTEM AND THE HEALTH SYSTEMS RESEARCH METHODOLOGY

Health systems are expected to be affordable, equitable, accessible, sustainable, of good quality, and perhaps to have many other virtues as well. The more accessible a system is, the more people should utilize it to improve their health. A system that is more responsive to what people want and expect can also lead to better health because potential clients are more likely to utilize care if they anticipate being treated well (WHO 2000).

An urban health system is quite unique as compared to a rural health system in terms of addressing the health needs of the urban population, especially the urban poor. Urbanization is a major factor in the demographic growth of developing countries which has already reached dramatic proportions in countries like India (Rossi-Espagnet 1987). This has resulted in a rapid growth of urban slums and shanty towns

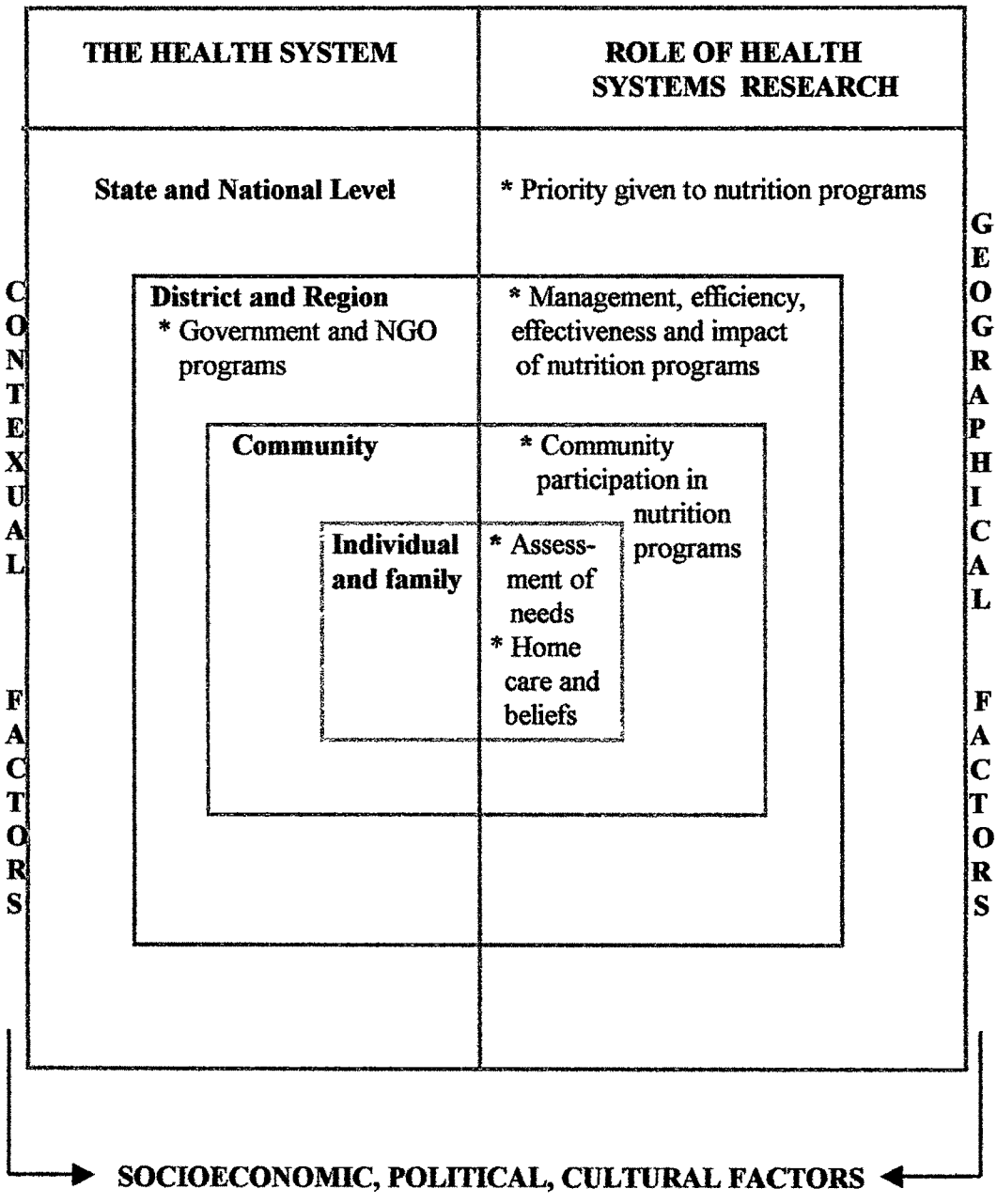
in cities, which reside the urban poor, whose health needs are not adequately met by the existing government health systems. Of the urban poor, the worst hit are the women, children and pregnant women.

Adequate antenatal care including nutrition care has a definite potential for diminishing maternal and infant deaths, particularly in the perinatal period (Viteri 1987). However, there is tremendous frustration among the clients with gross deficiencies in the provision of ANC services, and there are growing gaps between their expectations and the providers' performance. The providers also face certain difficulties due to the rigidity of the system as well as the lack of community support. This situation makes a strong case in favor of using the **Health Systems Research** (HSR) **Methodology** to understand the factors responsible for impeding and improving the quality of implementation of antenatal care services, with a focus on the neglected area of nutrition care services in an urban health system.

HSR involves the collection of information about services, programs or systems with a view to assessing the need for them, examining their design and operation, and evaluating their efficiency, effectiveness and impact. It is a part of the process of service development, aiming primarily to improve services or their components (Omran 1990).

Figure 1.1 (adapted from Varkevisser et al 1991) depicts the **role of Health Systems Research** in the context of nutrition programs at various levels: individual and family, community, district and regional, and state and national level. In the milieu of nutrition programs, HSR assesses the nutrition needs of an individual and his/her family, taking into account the cultural beliefs that they may have. At the community level, HSR is useful in assessing the community's participation in nutrition programs. At the district and regional level, it evaluates the management, efficiency, effectiveness and impact of the nutrition programs; and at the national level, HSR helps discover the priority given to these programs. At all these levels, HSR takes into

## Figure 1.1: Nutrition Programs: A Health Systems Approach



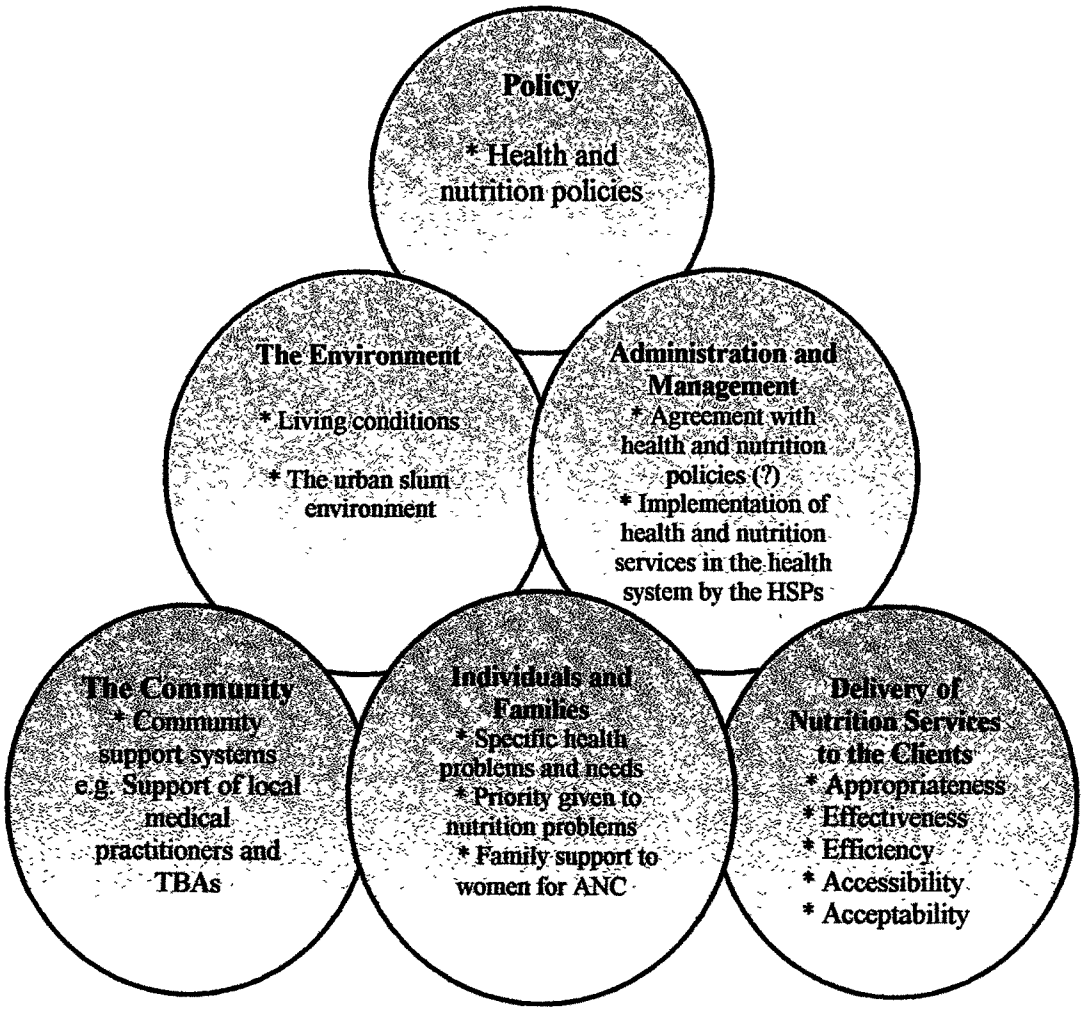

Adapted from: Varkevisser et al (1992)

account the socioeconomic, political, cultural, contextual and geographical factors which may influence the implementation of nutrition programs in a health system.

The **major components of HSR** or areas of major concern in HSR are displayed in Figure 1.2 (adapted from IDRC/WHO 1991). The component of policy deals with the health and nutrition policies at the national and state levels. The environment includes the living conditions of the community, in the present study, the urban slums. The administration and management component assesses whether the health and nutrition services are implemented in an integrated manner and agree with the policies. As regards the community, the presence of support systems such as the local medical practitioners and traditional birth attendants (TBAs) is taken into account. The component of individuals and families assesses their specific health and nutrition related problems, priority given to nutrition problems by the family, and the family's support to the women for utilizing ANC. With respect to the delivery of nutrition services, their appropriateness, effectiveness, efficiency, accessibility and acceptability by the clients is evaluated, thus looking at the holistic picture of nutrition services in the context of the health system through which they are implemented.

**To sum up,** the utilization of health services is a complex behavioral phenomenon related to the organization of the health service delivery system. It is affected by the availability, quality, costs, continuity and comprehensiveness of services. Social structure and health beliefs also affect the use of health services. While quality of care in family planning has been addressed in surveys, the quality of implementation of services in other dimensions of reproductive health such as maternal care and nutrition services during pregnancy remains largely unknown, e.g. content of antenatal visits, and priority given to nutrition services like anemia control. Although data are available on coverage of antenatal care services, the perception of implementation and utilization of antenatal care services from the point of view of both the health service providers and their clients has not been adequately assessed. There is little understanding of the socio-cultural context of the interaction between

## Figure 1.2 : Major Components of Health Systems Research




Adapted from: IDRC/WHO (1991)

the health service providers and their clients. There is also a need to explore the factors related to the health service delivery system which may adversely affect the provision of services, especially reasons for poor quality.

Therefore Health Systems Research Methodology highlighting these issues through qualitative and participatory methods can provide insights into the quality of implementation of nutrition related antenatal care services by observing the provider - client interactions, interviewing key people and analyzing existing policy and program documents, a critique of some of the documents is presented in the Review of Literature (Chapter II-Section II). Further, integrating qualitative and participatory research methods with quantitative methods would give an in depth understanding of the health system through which nutrition related ANC services for pregnant women are implemented. For example, quantitatively investigating the prevalence of anemia among the clients, and assessing their perceptions regarding anemia and its treatment would provide a more holistic understanding of the anemia control program and possible remedies to improve its implementation.

This study therefore has attempted to use the HSR Methodology in the context of nutrition services in the antenatal care program of an urban health system i.e. of the Vadodara Municipal Corporation, Vadodara.

The **major objective** of this research was:

**To study the urban health system of the Vadodara Municipal Corporation with respect to the quality of implementation of nutrition services for pregnant women in the antenatal care program, and to facilitate qualitative improvements in these services using the Health Systems Research Methodology.**