

CHAPTER I

INTRODUCTION

High maternal mortality is one of the greatest public health problems in the developing countries. About half a million women die each year following complications of pregnancy and childbirth, and almost 99 percent of these deaths occur in the developing countries where half of the women deliver their babies without the help of trained health personnel. The discrepancy between the developed and the developing countries is greater for maternal deaths than for most other health problems. While more than 600 women per 100,000 live births die in developing countries, only 10 women die for of the same numbers of livebirths in the developed countries of Europe and North America. The immediate causes of maternal deaths are hemorrhage, sepsis, toxemia, obstructed labor and septic abortion. But in developing countries, these are aggravated by a number of socio-cultural factors such as limited access to nutritious food, lack of education and the low social status of girls and women (SMPN, 1994)

Maternal mortality is the leading cause of death among the women of reproductive age in Nepal. In a developing country like Nepal, women are at great risk when they become pregnant. Out of every 100,000 women, an average of 539 women die during pregnancy or during delivery in Nepal, compared to developed countries, where very few women die during pregnancy and child birth. The main factor contributing to the deaths is poverty, but a lot of them are due to ignorance and lack of education. In Nepal many young girls and women do not get enough nutritious food. When these women become pregnant they may be anemic and

malnourished. This is dangerous to both the mother and the child in her womb. In Nepal, many small community based studies revealed a maternal mortality rate of well over 1000 per 100,000 live births in selected areas of the country. These survey findings confirm the leading causes of deaths to be due to hemorrhage, sepsis, toxemia, obstructed labor and abortion most of which are preventable with the provision of adequate antenatal care, timely referral and well organized and accessible family planning services (SMPN, 1994-1997).

Anemia directly or indirectly contributes to a significant proportion of maternal deaths in the developing world. Over 2 billion people world wide are iron deficient estimated at about 40 percent of the world's population (WHO, 1991). Prevalence of iron deficiency among various subgroups is estimated at 51 percent for pregnant women, 48 percent for infants and 35 percent for school children.

Anemia is defined as a reduction in the concentration of hemoglobin and in the number of circulating red blood cells. Anemia is a condition in which the blood is weaker than usual because it contains less of hemoglobin. Hemoglobin transports oxygen absorbed from the air in the lungs to all parts of the body. Iron, folic acid, minerals and vitamins are required for the formation of hemoglobin (WHO, 1991). Iron is a mineral present in the body as a constituent of hemoglobin. Because it cannot be made in the body, iron like all essential nutrients, must be obtained from food. Adequate hemoglobin levels are particularly necessary during pregnancy so that the fetus can develop properly, otherwise the newborn infant will have low birth weight and easily become malnourished. Anemic women are 5-10 times more likely to die in childbirth than non-anemic ones.

The Essay Chapter II, describes iron deficiency anemia, its causes, and consequences and prevention of iron deficiency anemia in the rural communities of Nepal. Further, the essay describes issues, reasons and conclusions. The main issue in this topic is how can the consumption of iron rich and iron absorbent food be increased.

Chapter II also describes the predisposing factors; socio-cultural and socio-economic and enabling factors: availability, accessibility and affordability of services and re-inforcing factors which are mass-media and peer groups. It describes and explains the reason for increased iron deficiency anemia in Nepal. In this Chapter there is also a description about the possible strategies for the reduction of iron deficiency anemia in the rural communities of Nepal and an explanation about the best possible solutions for the reduction of iron deficiency anemia: nutrition education with dietary modification through trained FCHVs.

The proposal Chapter III gives an overview about the rationale and methodology used in this study. The general objective of this study is to increase the consumption of locally available iron rich and iron absorbent food among pregnant women in rural Nepal through the training and mobilization of the FCHVs. The specific objective of this study is to develop the curriculum of training for FCHVs, train them according to modules of training.

The main focus of this study is to provide effective nutrition education to the pregnant women of Nawalparasi district through trained female community health volunteers. Training for FCHVs is a major component of the proposed plan. The

purpose of the training is to teach the FCHV to advocate increased consumption of locally available iron rich and iron absorbent food through nutrition education in the rural community of Nawalparasi district.

The monitoring and supervision of the nutrition education services will be done as planned. Monitoring will help to determine the behavior and practices of the FCHVs and supervision will help them to perform their jobs better by improving knowledge.. After completing a year of program implementation in Nawalparasi district, evaluation will be made according to plan and schedule.

Chapter IV describes the data exercise carried out by visiting the Pragatinager village , Nepal. Detailed information on the data exercise is given in chapter IV. The main purpose of data exercise was to improve the proposal by incorporating lessons learned from this data exercise. The focus group was conducted with FCHVs and pregnant mothers of Pragatinager village of Nawalparasi district. An important findings of the data exercise was that the FCHVs were not trained on nutrition education regarding iron deficiency anemia.

Chapter V contains the presentation made during the thesis examination. It consists of transparencies of information which was presented to the examination committee. The annotated bibliography, appendices and other added materials are enclosed after this chapter. It is learnt that the focus group discussion is essential for exploring in-depth information from the clients about iron deficiency anemia. The information that emerged from the focus discussion cannot be taken from any other method of data collection.

Finally, It is hoped that the National Nutrition Programme (NNP) will be the main beneficiary of this study. The findings of the study will be utilized by NNP in order to decide whether such type of intervention can be implemented in other parts of the country. Another beneficiary will be the National FCHV Program. The training in iron deficiency anemia will provide additional skill and knowledge to the FCHVs; therefore, it will be a small complementary effort in developing resources to deal with iron deficiency anemia.