CHAPTER III

PROPROSAL

Effect of nutrition training on the mobilization of FCHVs for the prevention of iron deficiency anemia during pregnancy.

3.1.Background Introduction:

More than 75% of the pregnant women studied in Nepal are anemic and may benefit from a iron supplementation and increased consumption of iron and vitamin c foods. The reason for poor nutritional status of women are multiple. Most of the adults in Nepal start off as stunted children. Stunting in early childhood(more than 50 % of children under 5 years of age are stunted in Nepal.) ultimately results in stunted adults. Inadequate intake of food is another reason for poor nutritional status (Adhikari R.K, 1997). There are conditions specific to women which make their nutritional status precarious. Some of these can be listed as follows:

3.1.1. Early marriage

A study (New Era, 1993) found that 68% of the women in Nepal get married by the age of 18 years. The mean age of marriage was reported to be 15.8 years. Early marriages by leading to early pregnancies interfere with the pubertal growth of the women and result in poor nutritional status.

3.1.2. Heavy work load: It has been estimated by various studies that the work burden of adult women exceeds that of adult men by 23 to 43% in Nepal.

3.1.3. Discrimination against women in distribution of foods: There are various anecdotal reports suggesting that women are the last ones to eat, eat the leftovers and do not get enough food during lean periods when the food supply is low.

The nature of a woman's role is such that she usually feeds her husband and children first and eats last, By the time her time to eat comes, nothing much may be left in the pot. In some communities, the daughters-in-law are required by tradition to eat after feeding everybody else. However there are some communities where all the members of the family males and females sit together to eat and there is no discrimination against women in the distribution of foods.

3.1.4. Non availability of green leafy vegetables: In many hilly areas and even in terai regions green leafy vegetables may not be available during dry seasons. In some communities people may store these vegetables in dried form to eat in the lean periods. Some of the poorer members of the community eat wild growing stinging nettles, amaranth and ferns and home maid gundruk and masewra and get enough iron. Due to, the low prestige of these food items relatively affluent members of community do not get the benefit from these vegetables.

3.2 Rational of the study

A pregnant women is considered to be anemic when the concentration of hemoglobin in her bloodstream is below 11g/dl. Iron deficiency anemia is most common and widespread in developing countries affecting an estimated two-thirds of pregnant women, compared with 14 percent of pregnant women in developed countries. The highest rate is found in Asia followed by Africa (WHO, 1998). The condition plays an important part in maternal mortality ,both directly and indirectly Death from anemia is the result of heart failure, shock or infection. While less severe anemia may not cause death directly ,it infrequently contributes to maternal deaths from other causes. For example anemic, women do not tolerate blood loss as well as healthy women and therefore are more likely to die if they start to hemorrhage, and because anemia lowers resistance to disease such women are more susceptible to puerperal infection. Twelve hospitals in Indonesia between 1977 and 1980 found the maternal mortality rate for anemic women to be 700 per 100,000 live births as against 197 per 100,000 for non-anemic women(WHO, 1998).

In an underdeveloped country like Nepal, women are at great risk when they become pregnant. Out of every 100,000 women 539 die during pregnancy or during delivery, which means that actually 12 women die every day. In developed countries, very few women die during pregnancy and child birth. (SMHN, 1996). The main factor contributing to the deaths is poverty, but many deaths are due to ignorance and lack of education. In Nepal many young girls and women do not get to eat 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. The family and the community can help a lot by being aware of these facts and by providing their guidance and help the women whenever it is needed. The first thing the family can do is to provide nutritious food especially rich in iron and vitamin A to the women. This can be done easily by every household just by promoting kitchen gardening and producing green vegetables. By increasing the vitamin A and iron intake, the rate of death in pregnancies goes down. Green vegetables contain a lot of Vitamin A and iron which are two important nutrients necessary for pregnant women (SMHN, 1996). This also saves money for the family.

The immediate medical causes of maternal deaths are well known and similar for women all over the world; they are hemorrhage, infection, toxemia of pregnancy and obstructed labor. These, together with anemia are responsible for more than 80 percent of all maternal deaths reported from developing areas (WHO, 1998). Behind the medical causes there are logistic causes, failures in the health care system, lack of transport etc. And behind these are all the social, economic, cultural and political factors which together determine the status of women and girls, their health and their reproductive behavior

The risk of a maternal death begins with the health and nutrition of the future mother during childhood. From an early age they may be underfed and overworked and the poorer the community the more likely is this to be the case. The resulting childhood legacy of short stature, low body weight and anemia coupled with early marriages and childbearing are major contributors to maternal deaths. Where socioeconomic conditions are poor and the status of women is low there is little possibility of regulating their reproductive behavior. Too many children, too early, too close together and too late are major risk factors which increase women's chances of dying as a result of pregnancy or childbirth. Access to culturally accepted family planning information and services would enable women to avoid such high risk pregnancies and save many lives.

Women's nutrition is especially important throughout their lives. During pregnancy and lactation good nutrition is crucial for mothers and the baby's health. If mothers diet before and during perinatal is insufficient, her child and own health will be at risk. A nutritionally inadequate diet exposes perinatal mothers to the risk of morbidity and mortality .Because girls and women often get less food and less nutritious food than they need they are more likely to get sick. Here the common illness caused by poor nutrition is Anemia. A person with anemia has weak blood. This happens when red blood cells are lost or destroyed faster than the body can replace them (Burns, A.A., 1998). Because women lose blood during their monthly menstruation, anemia is often found in women who are between puberty and menopause. About half of the world's pregnant women are anemic because they need to make extra blood for the growing baby. Anemia is a serious illness. It makes a women more likely to get other kinds of disease and affects her ability to work and learn. Anemic women are more likely to bleed heavily or even die during childbirth. The signs of anemia are :

- Pale inner eyelids, tongue and nails
- Weakness and feeling very tired
- Dizziness, especially when getting up from sitting or lying position
- Fainting
- Fast heart beat

The most common cause of anemia is not eating enough food rich in iron, since iron is needed to make red blood cells. Other causes are malaria which destroys red blood cells and any kind of blood loss such as heavy monthly bleeding, childbirth, bloody diarrhea (dysentery) from parasites and bleeding stomach ulcer. Therefore to prevent the high prevalence of iron deficiency anemia, my intervention is to train the FCHV because there is shortage of health man power in the community(Annual report, 1995). FCHV are local women who have close contact with the families in their ward. The FCHV should be interested, literate and have at least 2 children. So I have selected purposively FCHVs from 2 selected villages of Nawalparasi District. I have selected them to give additional training on nutrition regarding the prevention of iron deficiency anemia (IDA) because they have been successful and popular in controlling diarrheal disease, acute respiratory tract infection and in the vitamin A program. As they are interested In giving health services to the community, I conclude that they will help to decrease the prevalence of anemia in their village by providing nutrition education.

3.3. Problem statement

Iron deficiency anemia is the most common nutritional cause of anemia, a serious public health problem in Nepal. Pregnant women and women of reproductive age are the most vulnerable group. IDA affects over 2000 million people worldwide (FAO, 1995). WHO estimates that more than half the pregnant women in the world have anemia (Mother-baby package, 1994). An estimated 58 percent of pregnant women in developing countries are anemic with the result that infants are more likely to be born with low birth weight and depleted iron reserves. IDA results from consuming diets with insufficient iron, reduced iron availability, increased iron requirements and losses due to parasitic infections. Anemia in children and infants is associated with retarded growth and development of cognitive abilities and low resistance to infections. In adults it causes fatigue and lowers work capacity. Maternal anemia has been identified as the cause for as many as 20 percent of maternal deaths. It also leads to intra-uterine growth retardation, low birth weight and increased rates of perinatal mortality (Dawson, R., 1997).

South-East Asia alone contributes 40 percent of the world total of women who die from hemorrhage, infection, high blood pressure, obstructed labor, unsafe abortion and a range of diseases that are aggravated by pregnancy, such as malaria, hepatitis anemia and heart disease. Many of these deaths can be prevented, since the life threatening conditions do not require expensive techniques and can be treated cost effectively at district hospitals(WHO, 1997). The women who suffer and die are mostly those who are neglected as children, married as adolescents, poor and illiterate, underfed and overworked and subjected to harmful traditional practices (WHO, 1970).

Maternal mortality is now recognized as a symptom of neglect and failure- the society's neglect of women's and girl's health and failure of the health care system to meet their health needs. This situation has to change. A high level of political commitment, strengthening of the health infrastructure and generation of societal, community and family support to pregnant women will improve the situation.

A Nepali women has 1 in 32 chances of dying because of pregnancy or child birth in comparison to a women in a developed country where the chance is 1 in 10,000. At present about 4000-6000 women die of causes related to pregnancy and childbirth. Many more thousands of pregnant women suffer from different types of morbidities arising during pregnancy and childbirth. In Nepal women of child bearing age (15-49 years) constitute 23 percent of the total population of 21 million in 1996 (HMGN, 1998). It is estimated that 900,000 women became pregnant in 1997. Out of the total pregnancies 40 percent are said to be at high risk pregnancy. The Family Health Survey carried out in 1996 estimated the total fertility rate (TFR) to be 4.6 and National Maternal Mortality Ratio at 529/100,000 live births. The Family Health Survey and other research findings have confirmed the leading immediate causes of maternal deaths to be due to hemorrhage, sepsis, toxemia and obstructed labor, most of which are preventable with the provision of adequate antenatal care, safe delivery practices, timely referral and well organized and accessible Family Planning services. So as IDA is one of the contributory factors of high maternal mortality in Nepal, it is very important to prevent and control the prevalence of IDA among pregnant women IDA can be prevented or decreased by giving additional nutritional training to FCHV regarding the IDA so that they are able to give nutrition education to the pregnant mothers regarding the prevention of IDA.

3.4. Site of Study

The site chosen for this study is Nawalparasi District which is 200 kilometers from Kathmandu .Nawalparasi District is in the Western Development Region of Nepal. The total population of Nawalparasi district according to the 1991 census is 436,275. This is a plain fertile land . Most of the people are farmers and farm laborers but few are employees in India. Rice , wheat, sugarcane and vegetables are the main crops of this district.

The reason for choosing this district is that it is reasonably accessible from Kathmandu and according to the Joint Nutrition Support Program study in1986, a high incidence 95 percent of anemia among mothers of children between 6-36 months was found there. There is a total of 18 FCHVs in two villages: (Dumkibas and Ramnagar) who have been chosen to give the training regarding iron deficiency anemia. These FCHVs of these two villages were chosen because these villages are near the highway and easily accessible. The training will be given in Dumkibas health post. Health facilities of Nawalparasi District are as follows:

District Hospital---1 Health Centers -----2 Health Posts ---- 10 Sub-health posts---52

3.5. Purpose of the study

The purpose of the study is to reduce the prevalence of IDA by increasing the consumption of iron rich and iron absorbent food among pregnant women through the female community health volunteer by giving them training regarding the prevention of IDA. Training of the health care provider is a major component regarding knowledge, attitude and behavior towards the prevention of IDA. The main focus of the study is to give training to the female community health volunteer concerning IDA and application of knowledge to increase the consumption of iron rich and iron absorbent foods. The evaluation will be carried out after completion of a one year program intervention.

3.6.Goal of the project.

The goal is to reduce the maternal morbidity and mortality of pregnant women in rural areas of Nepal caused by nutritional anemia which can be prevented by reducing iron deficiency anemia.

3.6.1 Objectives of the study.

A. General objectives:

To reduce the prevalence of nutritional anemia, particularly iron deficiency anemia among pregnant women through FCHV training in selected villages of Nawalparasi District.

B. Specific objectives:

1. To increase nutrition related knowledge of the FCHVs regarding the prevention of IDA during pregnancy.

2. To increase the knowledge of FCHV about the importance of iron rich and iron absorbent foods to prevent IDA during pregnancy

3 To increase the knowledge of the FCHV about the consumption by pregnant women of locally available iron rich and iron absorbent foods which will prevent IDA.

4. To assess the change in behavior of FCHV in relation to health education for prevention of iron deficiency anemia.

3.7. Research Question:

Does nutrition education to FCHV improve their knowledge and practice regarding the prevention of IDA during pregnancy?

3.8. Proposed Program

The main focus of this study is to provide training to the FCHV to improve or to increase consumption of foods rich in iron and promotion of foods that enhance iron absorption, especially by pregnant women in order to reduce the incidence of IDA to reduce maternal morbidity and mortality. Therefore I am proposing the training of FCHV as an initial phage of the program regarding the prevention of IDA of selected villages of Nawalparasi District. The proposed plan includes the FCHVs of two selected villages and the training will be provided in one of the health posts of these villages. After 12 months of program implementation an evaluation will be made. Official statistics will also be used to evaluate the implemented program. The proposed intervention program is discussed below.

Table 3.1 Propose program

| S.N | PROGRAMMES | COMMENCEMENT DATE |
|-----|--|----------------------|
| 1. | Planning the program with NHTC/Research Committee | November 1999 |
| 2. | Conducting the training on Nutrition Education | January 2000 |
| 3. | Implementation of Services through FCHVs | February 2000 |
| 4. | Monitoring and supervision of the program | June 2000 |

The monitoring and supervision of nutrition education provided by FCHV after training to the community will be as planned in which monitoring will help to determine the achievement of services and supervision will help FCHVs to perform their job better by improving knowledge and skill with feedback by the supervisor.

3.9. Training Program for Female Community Health Volunteers (FCHV)

A Introduction.

FCHVs are an integral part of the primary health care system. They are considered to be the key to bringing primary health care services and information to

the home. FCHVs are the most important health persons in the overall Ministry of Health service delivery strategy. They are the only health workers who have routine direct contact at the family level through household visits. They are local women who are trained for a 24 days of period and supervised by the health post staff. If they have trained for additional nutrition education regarding iron deficiency anemia, it's a sign and symptom they are able to increase their knowledge about iron deficiency anemia and provide nutrition education regarding the prevention of iron deficiency anemia to the community. Regular supervision of their work by the District Health Supervisor will increase their ability to perform their duties well. In addition to that, incentives in terms of annual increment pay increases, official recognition and selection for upgraded training will encourage them for community work.

B. Rationale to choose this FCHV training is;

According to the Annual Report of DHS (1995-1996), there is a severe shortage of trained human resource in the central and at peripheral institutions. So the FCHV program was developed and introduced during 1989-1990 in order to expand the coverage of basic primary health care services in the country. Their most important responsibility is to promote community involvement in the primary health center program.

The main objectives of the FCHV program are:

1. To provide rural women with basic knowledge of primary health care specially related to the health of mothers and children.

2. To enhance self help in the communities through mobilization of local women and other resources.

 To promote community participation for the best utilization of available health and family planning services in order to reduce infant and maternal mortality and fertility rate.

C. Training Objectives:

The main objective of this training is to improve the knowledge, and practices of FCHVs regarding the prevention of iron deficiency anemia during pregnancy. At the end of the training, the FCHV will be able to :

1. To demonstrate ability to talk with pregnant women in a friendly manner and show warmth and concern.

2, To demonstrate ability to give nutrition education to the pregnant women.

3. To define and know about iron deficiency anemia.

4. To describe the nature, causes and signs and symptoms of diseases.

5. To describe the effects of iron deficiency anemia during pregnancy and on infants.

6. To explain the prevention of iron deficiency anemia among the pregnant women.

7. To state the locally available and affordable iron rich and iron absorbent food in their villages

8. Give adequate nutrition education to pregnant women regarding IDA.

To achieve the above objectives the following content will be included.

Content of topic:

1. Definition of iron deficiency anemia

- 2. Descriptions of causes and consequences of iron deficiency anemia
- 3. Prevalence of iron deficiency anemia.
- 4. Importance of iron
- 5. Prevention of iron deficiency anemia
- 6. Sources of iron rich and iron absorbent foods

Training Approach.

A competency based and participatory approach of training will be applied in the nutrition education training. Active participation and discussion are essential to develop practical skills of giving nutrition education to the community. Trainers will explain the skills or tasks to be learned and then demonstrate them. After completion of the demonstration/ discussions, the trainer will observe the FCHV in their practice of skills. The trainer will encourage health workers to contribute what they have learned which helps encourage FCHV to participate more actively. In the participatory training approach trainers will encourage the health workers to contribute what they know about the topic being discussed. This approach encourages the health workers to participate and discuss actively in the training. It also helps to share their experiences with other group members

D. Training Methods

Group discussions, group work exercises, demonstrations, role playing ,lectures are the methods of nutrition education for the FCHVs. Lecture methods of training will be used infrequently during the training because training will be organized for developing the knowledge and working skills of the FCHV.

E. Duration of training

The duration of training program will be 3 days. The date of training will be confirmed after discussion with the District Health Office (DHO) of Nawalparasi District.

F. Venue of Training

Training will be conducted in Dumkibas Health post. The reason for choosing this place for training is because of availability of physical facilities, appropriate place for practical session. The center is closest to the District health office so that if necessary help during the training can be obtained.

G. Trainees.

Trainees will be 18 FCHVs from the 2 villages of Nawalparasi District. One village has 9 wards and each ward has 1 FCHV, so altogether there are 18 FCHVs.

H. Trainers

The required trainers for the training will be available from the health posts, National Health Center Kathmandu and District Health Office Nawalparasi. The trainers are already trained in nutrition education. For this purpose the researcher will request the Director of National Health Training Center to provide the trainer

3.10. Impementation of the program

The researcher will organize a meeting with the Regional Health Director, Regional Training Center and District Health Office, Nawalparasi to form an implementation team to implement the program through FCHV in the two selected villages, Dhumkibas and Ramnager. These villages are selected because they are near the main highway road so they are easy to access and of FCHVs are available.

After completing the nutrition education training the trained FCHVs will provide nutrition education to the pregnant women in their villages. In one village the average number of pregnant women is about 324, so one ward has 36 pregnant mothers. Because one village has 9 wards, each of which has one FCHV, each FCHV has to give nutrition education to 36 pregnant mothers.

3.11. Health education practice of FCHV.

Following the training practice program FCHVs will implement their knowledge gained in practice. They will visit the pregnant women regularly and give nutrition education to them. Their health education practice will be supervised and motivated by the trained ANMs. During the nutrition education program FCHV will put other family members also especially mother-in-law because she can influence the pregnant women's food intake. Nutrition education to pregnant mother and the family members, especially mother-in-law husband is vital. As mother-in-law has the authority of household she is the powerful key person of the family. The mother-inlaw is the decision maker in relation to family upbringing and family welfare activities. She is the one who controls the activities of the family members. The daughter -in-law has to work very hard under her control. The mother-in law is responsible for giving advice and taking care of her pregnant daughter-in-law so she should be given education regarding the prevention of IDA during pregnancy. So mother-in-law after gaining the knowledge on IDA would give more foods containing iron to her daughter-in-law, which foods are locally available and look after her daughter-in-law during pregnancy.

As FCHVs are the main primary health care providers in the community she has the direct contact with the family during home visits so she has the good relationship with the family and the family also respects them ,listen them and follow her advice. So to increase the consumption of locally available iron rich and iron absorbent foods by the pregnant women, mother-in-law and husband should be given nutrition education so they will take care and look after the diet of the pregnant women which will prevent the occurrence of IDA during pregnancy.

3.12 .Supervision and monitoring activities.

Supervision is an important process of any implemented program which helps to carry out activities more effectively and efficiently. Supervision is an important part of improving the performance of health workers in the success of any program. Supervision will help to FCHVs to perform their nutrition education job better by improving knowledge and skills. FCHVs will learn about nutrition education skills from the training and they will apply these skills of nutrition education in actual problem solving situations.

Periodic supervision of nutrition education services by trained supervisors will help the FCHVs to perform their work more effectively. It helps to see the FCHV if they are doing their work using the knowledge, and skill gained from the training. A total of 3 ANMs will be selected as supervisors from the near by health posts and they will be trained on supervision activities for two days in order to supervise the FCHVs activities adequately. After being trained they will visit FCHVs. Each ANM will supervise 6 FCHVs. Supervision will be done by the direct observation method at the working spot in the health post.. Trained ANMs will evaluate FCHVs competency, instruct them in what to do, teach additional skill as needed and help to solve problems as they arise. The program supervision will be done twice in the 8 months of regular nutrition education session.

The main purpose of monitoring services is to look at FCHV work performance progress and achievement of services in health posts.

3.13. Evaluation of the training

Evaluation is an important aspect of the training. It helps to know the effects of the training on FCHVs in terms of their knowledge and skills. It also helps to improve the future training activities. Training evaluation includes three stages such as (1) Training process (2) Learning Outcome (3) Trainee's behavioral changes by evaluating the knowledge, attitude and skills of the trainees.

3.13.1. Training process evaluation

Training process evaluation is the observation and description of how the training is being conducted. It suggests, strengths, weaknesses and potential improvements in the future training program. It focuses on the training objectives, contents, methods, materials, duration, and effectiveness of the trainers in conducting training.

3.13.2. Learning Outcome Evaluation

Knowledge, and behavior of the FCHVs is major component of the program. Training is provided to enhance such types of knowledge and the skills of the trainees. It is necessary to measure whether their knowledge and skills has improved or not. Therefore pretesting and post testing will be done before and after training with semistructured questionnaires.

Pretesting is necessary to know the existing knowledge of the trainees. We can measure the level of the knowledge of FCHV pre-testing. Pre-testing of trainees help to identify the topic that needs more emphasis and which needs less emphasis during training period. It will help both to the health workers and trainers to carry the training smoothly. It will carried at the first day of the training course.

The main purpose of pretest includes sharing experiences between trainers and health workers and comparing these with the post-test to see whether they have gained knowledge and skills. The post -test is essential to measure whether their knowledge has increased as designed for effective nutrition education.

3.13.3. Behavioral Change Evaluation

After one month of training an evaluation will be able to know whether FCHVs behavior have changed or not. The behavior such as greeting, introducing herself, inviting them to sit comfortably, dealing politely, listening, eye contact, expressions, providing information, showing concern and interest about problem will be observed during training. Observation of each FCHV worker before and after training will be compared to determine if there are any changes in their behaviors A checklist will be used for observations.

A.Study population.

The study population will be 18 FCHVs from the two villages of Nawalparasi district. Because one village has 9 wards and each ward has one FCHV, there will be a total of 18 wards for the two vilages.

B.Inclusion criteria

Local resident women aged 25 or above, who had been serving the community on volunteer basis as FCHV for at least 5 years and who are interested in participating in the study.

E.Sampling

There is no need of sampling as 18 FCHVs are selected purposively from the 18 wards of the 2 villages in Nawalparasi District.

F.Data collection

1. Focus group discussion (FGD) is defined as a group discussion in which a small number of respondents (usually 6-9), under the guidance of a moderator, talk about the topics of special importance for a particular research study. Focus group discussion is a method of group interviewing related to a particular topic or an issue to a homogenous group of people. It is basically a qualitative method of research. I

will use FGD with the FCHV at the end of intervention to find out their perceptions on the appropriateness of the service they provided.

The focus group discussion will be conducted with the help of a moderator, who will be the incharge of the health post. The discussion will be started with introduction of participants, objectives of the discussion and getting permission to use the tape recorder. The VHW will be the note taker. Prior to the FGD, the moderator and note -taker will be trained for conducting this type of discussion. The objective of the discussion with the FCHVs is to collect information on their knowledge, behavior and beliefs regarding iron deficiency anemia and the appropriateness of their service.

G. Survey Questionnaire:

This type of questionnaire will be used to get actual information from FCHVs regarding iron deficiency anemia. This type of data collection will determine the knowledge, , beliefs and behavior of the service providers.

The semi-structured interview is suitable for use with illiterate people and also has a higher response rate than a written questionnaire. It can be used in both qualitative and quantitative techniques. The semi-structured interview techniques contains a core of structured and unstructured questions. The aim of a semistructured interview will be to explore more accurate information about iron deficiency anemia. Similarly ,a semi- structured interview will help to determine specific responses and measurement on certain topics which could not be identified by open-ended questions and will help to move from more general open-ended questions to more specific questions. Thus, this interview technique is the appropriate tools to explore knowledge, attitude, behavior regarding iron deficiency anemia. The semistructured questions prepared for pre-test and post-test is included in appendix IV.

The 3 village health workers (VHWs) from the near by health post will be recruited as interviewers. They will be given training on interview techniques in both theory and practice. Each VHW will interview 6 FCHVs and will collect data and finish by 15 days.

3.14. Activities Plan with Time table.

| ACTIVITIES | 1999 | | 2000 | | | | | | | | | | |
|--|----------|----------|------|------|------|------|-----|------|------|-----|------|------|-----|
| | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug | Sept | Oct. | Nov |
| Meeting of research team Orientation and Discussion | | | | | | | | | | | | | |
| Pretest Data Collection | + | | | | | | | | | | | | |
| Training of Female community Health Volunteer | | + | | | | | | | | | | | |
| Implementation of the Programmer | | | 4 | | | | | | | * | | | |
| Monitoring and Supervision | | | | | 4 | -> | | | 4 | + | | | |
| Selection of the Interviewer | | | | | | | | | 4+ | | | | |
| Training of the Interviewer | | | | | | | | | | •• | | | |
| Data Collection(post-test) | | | | | | | | | | | 4 | | |
| Data Analysis | | | | | | | | | | | | •• | • |
| Report Writing | | | | | | | | | | | | | 4) |

3.15 Budget of the study

Budget and manpower required to conduct the study is given below. These are tentative figures and prepared on the basis of the present trend of payment in Nepal.

| Description | Number | Days | Allownaces/Day In U.S.S | Total U.S.S | |
|----------------|--------|------|----------------------------|----------------|-----|
| Researcher | 1 | 3 | 9 | 27 | |
| Trainer | 5 | 3 | 6 | 90 | |
| Supervisor | 3 | 30 | 5 | 450 | |
| Trainees | 18 | 3 | 5 | 270 | |
| Interviewer | 3 | 15 | 3 | 135 | |
| Assistant | 3 | 3 | 3 | 27 | |
| Total | | | | 999 | |
| Transportation | | | | 500 | |
| Stationary | | | | 500 | - 8 |
| Miscellaneous | | | | 300 | |
| Contigency | | | | 500 | |
| Grand Total | | | U | S = 2799 | |

3.16. Ethical Issue

This study aims to identify the low usage of iron rich and iron absorbent food among the pregnant women. The training, monitoring and supervision of the FCHV, will be helpful in increasing the consumption of iron rich and iron absorbent food In this course only training of the FCHV and implementation of the nutrition education program will be highlighted with emphasis on not hurting the sentiments or harassing anyone. Unethical procedures, violation of people's rights and dignity will be avoided.

The goal in conducting this study is to increase the consumption of iron rich and iron absorbent food and reduce the prevalence of iron deficiency anemia in Nepalese women by providing training to FCHV.

3.17. Limitation of the study

The major limitation of the study is that _it is relevant only to 2 selected villages of Nawalparasi district and the FCHVs working in it. So it cannot be generalized to other parts of the country. Similarly training needs of the FCHV cannot be generalized to other FCHVs of the country. This study covers only 18 FCHVs from 2 villages each of which has 9 wards and each ward as one FCHV. But main thing is that if the program is succeed in achieving the goal it can be further expanded Nationwide.

For training of the female community health workers and programming of the nutrition education, researcher have to obtain permission from the Ministry of Health. Without permission from the Ministry of Health it is impossible to carry out this program in Nawalparasi district.

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