## **CHAPTER I**

#### INTRODUCTION

# 1.1 Background of the Study

Malnutrition is the state of being poorly nourished which include under nutrition, i.e. being underweight for ones age or short for ones age dangerously thin or low weight for height (wasted) or deficient in vitamins or minerals. Underweight plays a part in more than half of all children death worldwide (UNICEF, 2011). Pregnancy is a time of increased nutrition needs, both to support the rapidly growing fetus and to allow for the changes occurring in the women's body. Through out pregnancy, recommended intake of vitamins and minerals are higher than for the recommendation of folic acid which is 50 percent higher and the recommendation for iron is doubled in pregnancy. Vegetation can easily meet these nutrient needs.

South-Asia countries carry the highest burden of malnutrition in the world. Seventy-three millions out of 146 millions malnourished children are only in these countries, i.e. half of world's under-five children. Forty-six percent of all under-five children in this region are malnourished (UNICEF, 2011).

An important component to decrease maternal mortality is to increase the proportion of babies delivered under medical supervision. The NFHS 1996 found that only 8 percent of births are delivered under health facilities, while data from NDHS 2011 indicated that there had been very little improvement in this area. This shows that use of health facilities is still far away from average Nepalese women. There are two possible reasons for this. First they are not aware of the importance and availability of the services or they may think that the quality of services at health institutions is so poor that it will not make any difference for them.

Food and nutrition are the important and basic biological needs for human beings. Beside this it is most necessary for the pregnant women. If the pregnant women got less nutritional food the can affected from various disease. Such as animals, exclamatory, fever, weakness etc.

In the context of Nepal, Nepalese women are facing various health problems due to the lack of knowledge about nutrition and its effects on health.

The nutritional and health condition of Nepalese women and adolescent girls is extremely poor. It is generally manifested intake of calories and protein and in poor access to health services. Many studies have shown that the weight and height of Nepalese women are substantially less than that of women in developed countries.

Nepal is a poor country, where maternal mortality ratio is comparatively high (229 per 100000 live birth) like other developing countries. In Nepal around 66.75 percent of total deliveries take place at home. Early marriage is also found common in Nepal. As, many as 24 percent of adolescent girls in the rural areas have given birth to at least one child. While about 48.4 percent of the women receive antenatal care, a large number of women in remote area are not contact with workers during pregnancy. Trained attendants assisted only 50.5 percent of the childbirths in 2011. As many as 80 percent born are under weight (MOHP, 2012)

Principally in most of the society though women are valued for their reproductive role, their reproductive health has been poorly protected. Study shows that 800 women die per day as a result of complication during pregnancy or child birth and more than one quarter of all adult women in the developing world suffer from pregnancies or child birth related illness and injuries in 2012 (WHO, 2013). Maternal mortality dropped by 50% during 1990-2010. Therefore, properly managed health care facilities provided at the time of pregnancy and delivery and up to 6 weeks after delivery can save the life of nearly 3,42,900 globally women as well as the life of their babies. 99% of maternal death occurs in developing countries. MMR is higher in rural areas. Young adolescents face higher risk. Skilled care can save mother and child (WHO, 2013).

In total Nepalese women 17.5 percent are pregnant out of it 10 percent pregnant is miss pregnant and 40 percent of the women stayed in high risk condition (NDHS, 2011). In total pregnant women, 51 percent has taken below of daily food intake and 36 percent of the women have taken sufficient daily food intake. 13 percent of the women has taken more than daily food intake. Out of 4 pregnant women, 1 pregnant women are affected by malnutrition. It has been shown that 75 percent of the women

are normal condition, 67 percent of the women are affected by severe malnutrition. 4.7 percent reproductive age and 16.7 percent of pregnant women are affected by night blindness (NDHS, 2011).

According to WHO, the pregnant women should check up 4 times during their pregnancy. But due to the lack of knowledge of safe motherhood programme, the women have dropped out. The government has conducted this program in each district. Only 40 percent of the women have been completed it. 53 percent of expected women have been 1.8 to average No. of ANC visits. 8.4 percent of expected pregnancy has been deliveries conducted by TBA. 16.1 percent of expected pregnancies deliveries have been conducted by health worker. This condition shows the iron distribution in pregnant women is also low. 71.7 percent of the urban women and 36.1 percent of the rural women have checked up in their pregnant period.

Although, there were many problems about women's diet before 1998, we don't have any introduction about this situation. But the survey held in 1998 has shown clear condition of women's balance diet. According to this survey 25 percent of women are suffering from malnutrition in National level and there are 36 percent of women suffered from malnutrition in Terai. According to the analysis of World Health Organization (WHO), there are more than 20 percent of women suffered from the malnutrition that is caused the problem of public health-malnutrition women are thick, weak and they seem to be unsuccess to earn economy-such kind of women give birth malnutrated and weight less baby.

Nearly two-third of women in reproductive age are anemic, while this proportion increases to 75 percent among pregnant women. This high proportion of anemia among Nepalese women results in high maternal morbidity as well as mortality. Moreover, the days lost due to sickness are found to be greater for women than men.

Nutritional anemia is a serious problem in pregnancy, which affects 60 to 70 percent of pregnant women. With hemoglobin levels less than 10 gms; is to 30 percent of all maternal deaths are due to anemia. Anemia may develop if the diet does not provide enough Iron, protein, vitamin  $B_{12}$  and other vitamins and minerals needed in the production of hemoglobin and the formation of erythrocytes. The combination of poor diet and chronic loss of blood makes for particular susceptibility to severe anemia in

pregnancy, anemia has a significant impact on the health of the fetus as well as that of the mother. Anemia, especially if severe, may impair the oxygen delivery to placenta ant fetus and interfere in normal intrauterine growth.

Successful pregnancy requires continuous adjustment in maternal body composition metabolism and the functions of various physiological systems. The physiological condition of women influences their Nutritional status because most Nepalese mothers are pregnant too frequently, malnourished, anemic and during of cause which can be easily prevented. Nepalese society has been some socio economic conditions cultural norms and practices. Which determine the nutritional status of a family and the women.

A nutritional diet is required for the maternal well being and a healthy baby. Normal pregnancy needs an adequate amount of protein, fats, calcium, vitamins, magnesium and zinc.

Various status on the average daily dietary intake of calories in pregnant women indicated that this varies from 1000-1900 calories, the intake of proteins is around 40 grams. The calories and protein intake needs of pregnant women are lower than those of lactating women and higher than those of the non pregnant, non lactating women. The average daily iron intake of pregnant women averages 17.1 mg. In general the dietary intakes of all the women in the urban slums are lower than the Indian council for medical Resources (ICMR) recommended daily allowances, it may be improved by making nutritional education and supplementary nutrition to the pregnant women.

The data suggest that there is not much improvement in the nutritional status in the whole world in the past years on spite of every endeavor made to reduce the burden of malnutrition. The condition is even worse for the south Asian countries including Nepal (Pudasaini, 2010).

In this research, the study area's medical facilities is very poor condition because of one sub health post four out rich clinics and immunization center are four.

The villages do not have any doctor and nurse, but paramedical have available. AHW is one, VHW is one, one MCHW have been provided to health facilities. But they have not provide sufficient health services.

The above data indicate that nutritional status of pregnant women is poor condition. The rural area's women are suffering from the anemic condition daily dietary intake is very poor. Therefore, in this research, the researcher studies nutritional status at rural area's pregnant women by observation method.

## 1.2 Statement of the Problem

In Nepal, problem concerning the reproductive health are intense, so the investigator wants to find out nutritional status during pregnancy condition. The policy of the Nepalese government is to provide improved infrastructure of health care services through out the country, so the people in the rural areas will benefit from it. Nepal has launched various projects in order to fulfill this target in complication with the organization like WHO, UNICEF, USAID etc by the implementation of the primary health care policy in Nepal's rural areas health post and sub health posts have been established, which also provide nutrition program and pregnant health care services.

In Nepal almost all the indicators like female literacy, female life expectancy, female infant mortality, maternal mortality, economic status, health care services of female show a fundamental social bias and inequality in favor of men. It is also found that female education or awareness in health services directly affects the nutritional status during the pregnancy, which consequently affects child health (CMR 92.2/1000), and the utilization of the health services. The maternal mortality rate is found very high in Nepal. Which is the highest in the world (229 per 100,000 live birth). It is tragic that so many women die while giving birth to new baby (CBS, 2013).

Recent data from a nation wide micronutrient prevalence survey indicate that nearly three out of 4 pregnant women in Nepal are anemic in Nepal is considered to be inadequate intake of iron from foots followed by parasitic infections vitamin 'A' deficiency and vitamin 'C'. All these factors are prevalent in Nepal although they very in terms of intensity in different geographic regions (Christel, 2012).

Research was supposed to be good and effective as it can bring something change or help the desired aspect. This study is mainly focused on nutritional status of pregnant of Dalit community of Ramkot VDC. However, it will be helpful in many ways. Mostly, pregnant Dalit women of Ramkot VDC will be benefited form this study regarding their knowledge of nutritional status. They could step to bring something

change is their practice. This study will help the concerned agencies and government to lunch such health program. Especially it will be fruitful for concerned agencies to lunch nutritional programme in some and such other communities. Another benefit can be for further researcher who intends carry out study in the related health programmers.

Pregnancy period is critical and vulnerable. Due to the lack of proper nutrition, different problems appear. As a result, they give birth of malnutrition baby, which increases morbidity and high maternal mortality. Because of lack of knowledge about pregnant and nutrition. Most of the women have been suffering from the malnutrition i.e. anemic, Vitamin 'A' deficiency, other micronutrient deficiency like zinc, float, protein, vitamin 'C' vitamin 'D', vitamin 'B' complex. This situation makes them to feel guilty, shy and separate from family and society during pregnancy. Nepalese society is mostly dominated by Hindu religion where pregnancy is a very secret affair and is not discussed freely in family and society before cleared being society. Women are very shy to take about pregnancy and nutritional problem and is rarely discussed with husband or other members in the family. Some where pregnant is regarded as special event as a biological process. Most of women during pregnancy could not get appropriate quantity of nutrition facilities. Iron distribution is very low by Nepal Government. It is due to the lack of proper management to handle the nutritional phenomenon.

Nutritional status during pregnancy period is seen low because in the average girls and women have 40 percent more work load that boys and men among the several socio-economic factors, female literacy (as defined as being able to read, write and count) is understood to be a prime factor in increasing infant and women mortality in Nepal especially through like of modern health services; like regular dietary intake, iron food, milk, fish, meat, protein and regular check up of Nutritional condition of health body on the one hand. It is also caused because of delay decision to reach in the health institution on the other hand. They believe in traditional habits.

Iron deficiency is the world's most wide spread nutritional disorder and is more prevalent in developing countries among poor population. It particularly affects young children, especially low birth weight infants and woman of reproductive age, especially those who are pregnant; an developing countries, nearly and young children

and pregnant women have low body iron stores. Iron deficiency is the main cause of anemia and is usually associated with other factors that cause or contribute to anemia, such as nutritional deficiencies (folic acid, vitamin 'A' and 'B'). Malaria, Intestinal parasitic infestations (especially hook worm, schistosomiasis and amoebiasis) and chronic infections including HIV infections. This study mainly focuses on the control of anemia.

The researcher selected dalit community of Ramkot V.D.C of Kathmandu for the studies. There are 4751 population in total among them 51 percent are females. The literacy rate is 70 percent. (VDC Office, Ramkot, Kathmandu)

The Nutritional status of pregnant women depended on the different myths and values culture and tradition, education, occupation, economic condition age, number of child bearing depended with pregnancy and Nutrition.

# 1.3 Objectives of the Study

The main objectives of this study is to find out malnutritional status of pregnant women in Dalit community of Ramkot VDC, Kathmandu District. The specific objectives of this study are as follows:

- (I) To find out knowledge of nutrition and food on pregnant women.
- (II) To find out food practice of pregnant women during pregnancy.
- (III) To find out impacts of malnutrition for women during pregnancy.

# 1.4 Research Questions

The problem of the study is concluded the following research questions.

- (I ) To what extent educational status, economic condition and occupation corresponds with nutritional status of pregnancy women?
- (II) How does the current age, number of child bearing, family size corresponds with nutritional status of pregnancy women?
- (III) How does the caste corresponds with Nutritional status of pregnancy women?

# 1.5 Significance of the Study

During pregnancy period, increase requirement of various vitamins and minerals are needed. Minerals included calcium, magnesium and zinc. Calcium deficiency in pregnant women cause increased blood pressure. Myocyte construction and arteriolar construction. Magnesium deficiency includes hypomagnesquemia, hypomagnesuria and hypocalcaemia. Zinc deficiency causes congenital malformations, neural tube defects and intrauterine growth retardation. To prevent these deficiency leaf vegetables, cereals, grain, pulses, meat, nuts etc. should be consumed frequently by the pregnant women.

The ICMR recommended dietary allowance was not followed by many of the village women. They didn't also take rest. The main cause for such a low intake these women. It was also seen that women consumed foot only after every body has eaten. Nutritional education programmes should be rendered to rural women through orientation training camps on regular intervals.

Longitudinal studies on the nutrient intake of pregnant women should that intake of calories, protein, calcium and iron by the pregnant women in all the trimesters was for below. It was also found that the intake of all nutrients by the pregnant women was significantly in the second and third trimesters than that in the first trimester. The factors that exerted a significant effect on the food intake were family income and trimesters of pregnancy.

Nutrition is an essential component of parental care during the pregnancy period. A balance diet contributes to a successful pregnancy by reducing complications and promoting adequate fetal growth and development. The purpose of this study is to provide general pregnancy health care provider as the other research.

But in Nepal, the existing situation showed that the pregnant women have least knowledge and practice on Nutrition because it is considered as sensitive and controversial subject in the family and society. Some studies have been conducted on the issue of nutritional studies have been conducted on the issue of nutritional status of pregnant women and found that it is lack of knowledge and about food for pregnant women they are suffering from malnutrition.

In Nepalese context the existing educational system is not satisfactory about pregnant age and nutritional status because of many superstition, myths—and values have been adopting in the society. The government has not conducted the policies satisfactorily in rural areas. So the study will help the pregnant women to understand the situation and to realize them to adopt appropriate food and nutrition in the pregnancy. Similarly in Ramkot this type of study has not been done yet. Therefore the study will play vital role to analyze the nutritional status of pregnant women.

The study will be based on all dalit pregnant women in Ramkot VDC. These pregnant women are suffering from the malnutrition. It leads to serious nutritional status of pregnant women to their future life and their own child.

Several studies have focused on rural Nepal, but the present study has been planned to study pregnancy's Nutritional management of rural pregnant women. Thus the present study is expected to clarify many unclear issues related to maternity care and maternal health. This study will show nutritional status of pregnant women according to different variables. In addition the above mentioned things the significance of the study are as follows.

- (I) This study will be useful for the concerned agencies to formulate the plan and policies for the nutritional status of the pregnant women, in the study area and in general.
- (II) To know about the nutritional status of pregnant women in Ramkot.
- (III) The study will provide guidelines for further study or research to the interested researchers.

# 1.6 Delimitation of the Study

The delimitations of the study are marked by time, area, financial and research materials. The limitations of the study can be stated as follows:

- (I ) The study was conducted in all pregnant women of dalit community of Ramkot village in Kathmandu.
- (III) The study was based on the pregnant women from the Ramkot village only.

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(IV) The main sources of this study is primary data from selected respondents.

(V) This study was only concerned to 120 respondent pregnant women.

(VI) The data was collected during 2071-12-15 to 22 in the given area.

1.7 **Definition of the Term Used** 

Nutrition: Science of food and relationship to health or Nutrition is a food nourish

which is appropriate by used for any an animals.

Pregnant: The condition of having a developing embryo or fetus in the body after

union of an ovum and spermatozoon. It is also biological process.

**Heamoglobin**: Oxygen carrying pigment of the erythrocytes formed by the

developing erythrocyte in the bone marrow made up of four different globin poly

peptide chains each chain each composed of several hundred aminocids.

**Malnutrition:** Any disorder of nutrition or Deficiency of Nutritional status.

**Emergencies:** Sudden injure demanding immediate action.

Calories: Any of a variety of units of heat defined the amount of heat required to

raise 1gm at water 1°C at a specified temperature, the calories used in chemistry and

biochemistry is equal to 4.184 joules. Abbreviated cut large c kilocalorie: the calorie

used in metabolic studies small calories.

**Management:** dealing or controlling practice of the family during pregnancy.

Knowledge: Information, understanding and skills gained through learning or

experiences.

**Household:** it is defined as a group of people related to blood, marriage or adoption

that hare a joint kitchen and income.

**Pregnancy:** The condition of having a developing embryo or fetus in the body. After

union of an ovum and sperm. In women duration of pregnancy is about 240 days.

**Delivery:** The process by which the fetus and the placenta are expelled from the uterus.

**Occupation:** A person can have several occupations but here the major source of his income is considered as the main occupation.

#### CHAPTER II

## REVIEW OF THE RELATED LITERATURE

The chapter deals with the related literature of nutritional stares of there pregnant women as well as nutritional status during pregnancy. Nutrition for pregnant women, nutrition and pregnant women. It also includes the studies which were previously done. Further more some theoretical literature include in policies and programs and empirical literature which were previously conducted in the related field. Finally, the conceptual framework also includes to shows the variables related to the study.

#### 2.1 Theoretical Literature

Estimated that more than 60 percent of pregnant women in developing counties had hemoglobin concentration indicative of iron deficiency (WHO, 2013) another study estimated that the incidence of anemia ranged form 5 percent to 15 percent in the united states and 20 percent to 80 percent in other countries.

Mild and moderate degree of maternal lender nutrition continue to be widely prevalent among poorer segments of the population in developing countries. The majority of these women consume only 12:00 1800 kcal/day throughout their reproductive year (Mahfouz, 2012).

Nutritional food as well as micronutrient food is necessary for a healthy living. Abrams 1989, states that maternal nutritional states reflected by short maternal structure, low pre-pregnancy weight, low maternal weight gain during pregnancy. Low maternal body stores and deficient energy intake is associated with low birth weight. Hence women of reproductive age should be encouraged to begin pregnancy with good health and dietary intake that allows them to achieve adequate muscle mass, a minimum of 16-18 percent body fat 300-500 mg of iron stores and an adequate stores of other nutrients (Seoane, 2012).

Nutrition has a broad influence on reproduction. The nutritional status of women affects fertility, the course of pregnancy and fetal growth and development. The importance of nutrition extends to the period of location, when the composition of

human milk and the duration of Brest-feeding depend, in part, on maternal nutritional status (Christel, 2012).

An Egyptian survey (1991-1992) of maternal morbidity found that 63 percent of women are anaemic. That study confirmed the importance of anaemia in pregnant adolescent and in women who have recently had a pregnancy.

Estimated that more than 60 percent of pregnant women in developing countries had hemoglobin concentrations indicative of iron deficiency (WHO, 2013). another study estimated that the incidence of anemia ranged from 5 percent to 15 percent in the united states and 20 percent to 80 percent in other countries.

According to the Nepal's measurement status survey 1998, the overall prevalence of current nigh blindness in women of reproductive age and pregnant women was 4.7 percent and 6 percent respectively, while 16.7 percent of women showed having night blindness during their last pregnancy. 3 Iron deficiency anemia is by for the most common nutritional problem in Nepal affecting approximately three quarters of the women and children. Anemia is one of the underlying factors in pregnancy and child birth morbidity. Anemia reduce work capacity of adults by 10-30 percent.

Mild and Moderate degree of maternal lender nutrition continue to be widely prevalent among poorer segments of the population in developing countries. The majority of these women consume only 1200-1800 Kcal/day through out their reproductive years (Joshi, 2012).

## 2.2 Empirical Literature

Women suffer from lack of medical facilities at cases of pregnancy complications, malnutrition, anemia and many other diseases related to their reproductive function. Although nationwide data on anemia are not available, the department of health based on small hospital surveys, has estimated more than 50 percent of women in 15-19 age group to be anemic. [Atlas of south Asian children and women (1996)]

Atlas of south Asian children and women (1996) states that anemia is widespread in south Asia with a prevalence of 40-60 percent, higher among children and women of child-bearing and during pregnancy. The immediate causes of Iron Deficiency

Anemia (IDA) are inadequate nutrient take of bio-available iron foliate vitamin B complex, vitamin c and protein, intake of interfering factors such as hydrates and tea disease such as repertory infection, intestinal parasite and diarrhea and increased blood loss, the underlying causes of IDA are low context of essential nutrients in food, inadequate hygiene practice, poor sanitation and poor basic health education services,. Including control at meteoric parasites such as hook warm, round worm, child bearing pattern and high intake of iron absorption inhibitors such as tea.

# **Nepal Micro-Nutrient Status Survey 1998**

Although Nepal government, ministry of Health and Population with child health department conducting different 6 types of program for promoting Nepali people's health condition in nutritional status in level of the nation which are following:

Growth monitoring
 Protection and promotion of Brest-feeding.
 Anemia control
 Treatment of vitamin 'A' deficiency.
 Control of Iodine deficiency Disorder.
 De-worming program.

This program was distributed by Government Health Facilities Institution in Nepal's central Hospital to sub health post in VDC.

The most common cause of anemia in Nepal is considered to be inadequate intake of Iron from foods followed by parasitic infections. The data indicator according to iron intake among pregnant women (F.Y. 2012/2013) inadequate 71 percent and 29 percent adequate.

Since more than two decades antenatal iron supplementations is in place in Nepal. However, the coverage and compliance of antenatal supplementations is beyond satisfaction. There is big gap between supply and demand of iron tablets. The coverage and compliance of iron tables is poor as compared to its availability.

Therefore F.Y. 2011/2012 the child health division, Nutritional section with the support of micronutrient Initiative (M1) and WHO has began the intensification of Antenatal Iron Supplementation Program (IAISP) in five districts namely Jhapa, Morang, Dhanusha, Mahotari and Saptari. The main purpose of initiating this program is to accelerated demand for iron tablets during pregnancy and postnatal period and meet their demands through that existing health outlets as well as community based outlets. This is not a new program as such but a new approach to increase coverage and compliance of antenatal iron supplementation.

A base line study was carried out in the district where IAISP has been implemented. The findings in the program areas revealed that 27 percent and 47 percent of pregnant women took iron tablets in the second and third trimester respectively. Similarly dropout rate during second trimester was 19 percent and 25 percent in the third trimester. Lack of Knowledge about Importance of iron tablets was stated to be the main reason for not taking iron supplementation.

The following general strategies have been pursued to address the nutritional section in Nepal.

- Promote facilitate and utilize community participation and involvement for all nutritional activates.
- Develop understanding and effective co-ordination between the various sections and divisions in the Development of Health services i.e. Family health division, management and logistics divisions. The National Health Training Centre (NHTC) and the National Health Education, information and communication centre (NHEICC).
- Decentralize authority to the Region, District, Health post, sub-health post ad community for needs assessment, planning, implementation and monitoring.
- Conduct National Advocacy and social mobilization campaigns and
- Integrate/incorporate activities (such as the explanted programme on immunization, the integrated management of childhood illness, maternal, child health and family planning programmes etc into nutrition plans.

Any pregnant adolescent is at nutritional risk because her own needs for growth and development are compromised by the extra demands on their system from the growth and development needs of the fetus. Low income, leading to an inadequate diet are limited access to appropriate medical care, may contribute significantly to nutritional risk. Early nutrition intervention is essential and consubstantially change the course of events and improve pregnancy outcome. Prema Ramchantran, nutrition in pregnancy

Basic Research studies on Nutritional requirements during pregnancy undertaken in developed countries during the 50s and 60s strengthen. The nutrition scientists view that pregnant women need more food. The epidemiological during pregnancy obtained mainly from developing countries and the ready availability of methods of safe delivery of large babies lead to the obstetricians Finally joining to the nutrition is scientists in advocating extra food intake during pregnancy.

It ha long been recognized that anemia is a major nutritional problem in pregnancy in poorer segments of the population in developing countries. Several large scale surveys on hemoglobin status of urban and rural pregnant women from low income groups have been undertaken during the last 40 years.

Indian women from low income groups in the 50s showed that prevalence of anemia was between 50 and 90 percent in the third trimester of pregnancy. Anemia was found to be mainly due to Iron and float deficiency.

Muralia (2012 stated that about 90 percent of cases of anaemia in pregnancy are of the iron deficiency type. The remaining 10 percent of cases embrace a considerable variety of acquired and hereditary anaemia including folic acid deficiency and hemoglobinopathy in east Africa.

# Country Briefing Papers (ADB report): Women in Nepal fertility Health survey, 1996.

Women suffer from lack of medical facilities in case of pregnancy complications, malnutrition anemia and many other diseases related to their reproductive functions. Although nationwide data on anemia are not available, the department of health based on small hospital surveys, has estimated more than 50 percent of women in 15-19 age group to be anemic.

Atlas of south Asian children and women (1996) - stated that anemia is widespread in south Asia with a prevalence of 40-60 percent, higher among children and women of child bearing age and during pregnancy. the immediate causes of iron deficiency Anemia (IDA) are inadequate nutrient intake of bio-available iron foliate, vitamin B Complex, vitamin C and protein, intake of interfering factors such as hydrates and tea; disease such as respiratory infection, intestinal parasites and diarrhoea and increased blood loss, the underlying causes of IDA are low content of essential nutrients in food, inadequate hygiene practice; poor sanitation and poor basic health education services, including control at malaria, parasites. The basic causes of IDA are poverty, lack of awareness of food value and inadequate health policies.

Human Development in South Asia (2012) Stated that 70-80 percent young Nepali women are anemic and 64 percent of old pregnant Nepali women are anaemic. the causative factors of anemia other than nutrient deficiency include malaria, intestinal parasites such as hook worm, round worm, child bearing pattern and high intake of iron absorption inhibitors such as tea.

At least two fifth of pregnant women are anemic in most of countries of south Asia. The proportion of pregnant women who are anemic ranges from 45-47% in Pakistan and India to 58-62 percent in Bangladesh, Sri Lanka and Maldives and 73-75 percent in Bhutan and Nepal about 80 percent of women in reproductive ages were reported to be suffering from vitamin 'A' deficiency in Nepal (Mahfouz, 2012).

## **Annual Report (2011/2012)**

The pregnant women was higher than non-pregnant women (74.6% Vs 66.7%) due to the increased demands for iron resulting from the increased blood volume and growth of fetal placenta and material tissues. The overall prevalence of anemia among women was highest in the Terai and lowest in the hills. Although "Severe Anemia" was higher in the hills.

Karki (2009), Conducted a study about risk factors of anaemia in pregnancy at the material and child health clinic out urban health training centre, stated that the risk factors considered in the study were extremes of maternal age (< 20 years and > 30 years), lower socio-economic status, illiteracy, partiy > 2, spacing < 2 years, caloric intake < 80 percent of expected women and history of worm infestations.

Report on Intensification of Antenatal supplementation on 23 August 2001 by Ministry of Health, UNICEF and Helen Keller International on the problem of Anemia in Nepal.

It was recommended that implementers need to be aware that supplementation during pregnancy should not be viewed as treatment of anemia rather to maintain the iron states of women during pregnancy. So that they hope fully not to slip into more severe anemia.

Chalise (2012) women in the study of 5500 women within 48 hours of delivery, 41 percent had a hemoglobin concentration below log/l in another 632 women who had ante-natal care only 32 percent had hemoglobin concentration below 10g. per iron deficiency appeared to be the most common of anemia and briefly review iron balance during pregnancy.

Nepal has made significant strides in the fight against two major global nutrition problems deficiencies of iodine and vitamin 'A' according to the first nation - wide micronutrient status survey released this month. But anemia, another global nutrition problem, continue to trap Nepalese in a vicious cycle of poor growth and ill health.

Reducing anemia, the deficiency of iron, is the new challenge. The survey shows that 68 percent of women and 78 percent of pre school children suffer from anemia. Anemia also affects 75 percent of Nepali pregnant women. This is alarming because during pregnancy, the fetus requires its own supply of iron that can only be obtained from the mother (Chalise, 2012).

Anemia greatly increased the risk of mother suffering complications in labor and delivering a low Birth weight baby and helps put both the mother and child in a vicious cycle of malnutrition.

A study was contacted by Sharma on Safe motherhood practices of women in Rural Nepal in 2012.

The study which was based on Mulpani VDC of Kathmandu district analyzed the chains in socio-cultural characteristics and their effect on safe motherhood practices. It was found out that socio-cultural factors played considerable role in influencing

women's life as these factors govern women's status in family ad the society Gender discrimination start as early as infancy and continued through out child hood affects girls care nutrition and education relating in malnourished under educated and low self esteem teenagers. It is generally assumed that tradition and socio-cultural factors to a large extent determine women's health.

Seeking behavior and their decision making with in the house hold with respect to women's health needs and health care. These same factors also influence of marriage age out first pregnancy and type of health care received during pregnancy child birth and the postnatal period (Period).

# 2.3 Implication of Literature Review

From the above literature, it is found that the most common cause of anemia in Nepal is, or is considered to be, inadequate intake of iron from foods followed by parasitic infections: around 70 percent of the most at-risk population group. Pregnant women are not consuming adequate amount of iron from the daily diet. So from the literature review it implies that pregnant women are suffering from malnutrition.

# 2.4 Conceptual Framework

The study has tried to measure the concept and nutritional status with the available scaling methods wherever applicable to make the study more reliable and objective. Age, education, economic status, occupation, family size, caste and Number of child bearing was Independent variables and its level or nutritional status of pregnant women was taken as dependent variable.

The elaborated introduction of the subject matter, identification of the problem, objectives and the literature review has helped to set up of framework of concepts for the purposed study. It is generally observed that the maternal health is related with social and environmental factors. Moreover, the pregnancy has symbolic significance groups has its own perception of viewing pregnancy hence has set at rituals and traditions that guide the pregnancy period and to be specific hemoglobin (Hb) condition at pregnant women which represent a variable dependent upon socio-economic factors, Geographical factors, age and Number of child bearing factors.

Familial background like size of the family availability of family support, interpersonal relationship among family members and other kinds are also assumed as determining factors. Relationship with husband is a single most influencing factors.

Pregnant own education level, educational level of husband and health awareness etc are also counted. Economic status and spending capacity are also crucial in pregnancy management and health of mother turning pregnancy.

Demographic factors like age of mother, age at pregnancy, religions factors and geographical factors like rural or remote place and accessibility to health care services may have influences on our dependent variable.

## **CHAPTER III**

#### **METHODOLOGY**

A system of broad principles or rules from which specific methods or procedures may be derived to interpret or solve different problems within the scope of a particular discipline. Unlike an algorithm, a methodology is not a formula but a set of practices.( http://www.businessdictionary.com/definition/methodology.html#ixzz3i IWsQq14).

"Methodology is the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. Typically, it encompasses concepts such as paradigm, theoretical model, phases and quantitative or qualitative techniques. A methodology does not set out to provide solutions - it is, therefore, not the same as a method. Instead, a methodology offers the theoretical underpinning for understanding which method, set of methods, or so-called "best practices" can be applied to specific case, for example, to calculating a specific result." (Wikipedia)

A research methodology, thus, comprises of research design, tools of data collection, study population, sample size, sampling procedure, validation tools, analysis and presentation of data, etc. as needed.

# 3.1 Research Design

Research design is "a detailed outline of how an investigation will take place. A research design will typically include how data is to be collected, what instruments will be employed, how the instruments will be used and the intended means for analyzing data collected."

(http://www.businessdictionary.com/definition/research-design.html#ixzz3iIZuQZZ2)

Research design of this study was descriptive type of method. To evaluate and analysis the dalit pregnant women of this VDC different statements were used by which existing quantity can be measured. Quantative study is essential to enhance the description of variables and to show the relationship among them.

# 3.2 Study Population

The study was done on malnutrition status of pregnant women in dalit community of Ramkot VDC Kathmandu District. The total population of the village is 4751. (VDC Records, Office of the Local Registrar). 190 pregnant women in a year (Ramkot Sub-Healh Post). Among them 120 pregnant were taken for the study by simple random sampling method.

# 3.3 Sampling Techniques and Sample Size

For the study the researcher selected pregnant women in dalit community of Ramkot village of Kathmandu District, according to HMIS (Health Management and Integrated System) formula the pregnant women was 4 percent of the total population.

#### 3.4 Data Collection Tool

The success of this study depends on collection of information and data. If the data are reliable and accurate, the effective and useful study will be found out. For this the researcher made the relevant interview schedule for the primary data which was prepared on the basis of nature and objectives. For interview close and open types questions were used. Similarly secondary sources of data are collected from books, articles and previous study reports, local administrative body and the sub-health post

## 3.5 Finalization of the Tool

For the finalization of the tool the researcher made the relevant interview schedule. Then 10 per tested respondents of study area was selected to ensure its practicability and avoid error of tool. The tool improved further on the basis of the per-test results. At last, the tool was finalized on the basis of feedback and suggestion of the supervisor.

#### 3.6 Data Collection Procedure

For data collection procedure, the research met the responsible pregnant women of Dalit community of Ramkot VDC of Kathmandu district. The researcher visited accidently reaching every possible households. The researcher used interview schedule which was prepared before. Then asked for their information purposively.

When the respondents agreed to response the researcher recorded the reply given by them on the form in a face of face situation.

# 3.7 Methods of Analysis and Interpretation of Data

After collecting necessary data from the respondents were classified in the sample items. Then the data were tabulated into different categories and presented into sample percentage. Figure and chart were used to analyze it. In order to analyze to data, possible errors and inconsistences were removed. It was descriptive study, so the quantitative information were interpreted and explained in detail. Description and interpretation were limited by the objectives of the study.

In the data processing, the field questionnaires are carefully checked to remove the possible errors and inconsistencies for the edit of raw data. The necessary data will been tabulated by Statistical Package for Social Sciences (SPSS) programme of computer and interpreted according to need at data indifferent figures such as bar diagram, pie chart, histogram and line diagram on the basis of percentage higher proportion. Finally the summary, findings and conclusion have been drawn and required recommendation is stated.

## **CHAPTER IV**

#### ANALYSIS AND INTERPRETATION OF DATA

This chapter is mainly concerned with the analysis and interpretation of data colleting from the respondents. After collecting the data, all completed questionnaires were checked, coded, classified and tabulated to make more clearly by using computer program. Analysis and interpretation has been made with the help of tables, chards and graphs to make presentation clear. The information are organized on the title of demography characteristics nutritional knowledge, and awareness, existing feeding practices of pregnant Dalit community women and impacts of pregnant women in the community.

# 4.1 Demographic Characteristics

This study is completely based on 'Dalit community' ethnic group of Kathmandu district of Nepal. Some of the socio-economic characteristics of such people found from field visit are presented here it is understood that literacy lead to same what better life than that of literacy. If people of community are well educated, their food habits are too better and they are also ware of any kinds of problems. So it was searched of the educational status of pregnant Dalit community women of Ramkot V.D.C. ward no. 9 with is this study. The educational status is shown as follows:

**Table No. 1: Educational Status of the Respondents** 

<b>Educational Status</b>	No. of Respondents	Percentage
Illiterate	99	82.5
Non Formal Education	10	8.3
Primary Level	8	6.6
Lower Secondary Level	2	1.6
Higher Secondary Level	1	0.83
Total	120	100.00

Above table show that the community, 82.5 percent were illiterate, 6.6 percent were found to have passed primary education, 1.6 percent were found to have studied upto lower secondary level and 0.83 percent was found holding higher secondary degree or

above. Here, in this ward had no college, only on community school is there and no literacy program is running now. This poor education status among the respondents predicts a poor nutritional of health status among them.

## 4.1.1 Source of Income

Source of income determines the economic status of an individual in the society we see the various source of income according to the development of a society. It the community is well developed and enough literate, definitely the sources are more and income may be satisfactory. However the source is influenced by different aspects like education, culture and their obligates etc.

Table No. 2 : Distribution of Respondents by their Source of Income

Source of Income	No. of Respondents	Percentage
Farming	34	28.3
Labour	78	65.00
Job	8	6.7
Total	120	100.00

Above table no. 2 shows that out of 120 respondents the majority of respondents were labour. Which is 65 percent, and the minority is job holders 6.7 percent likewise 28.3 percent were in farming.

# 4.1.2 Occupational Status

The out of 120 respondents the total number of respondents were found housewife. It indicated that all of them dependent to their husband in terms financial aspect and which influenced in expenditure pattern in health.

# 4.2 Knowledge Related Information

Knowledge is the power of understanding all the information in the context, knowledge about nutrition is related to what is nutrition, what contains in nutrition.

In order to measure the level of knowledge of respondents on nutrition, different kinds of questions were formatted upon it. The result related variables are given below:

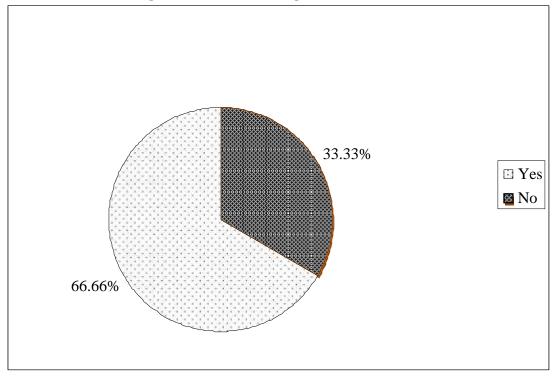


Figure No. 1: Knowledge about Nutrition 1

Above figure No. 1 shows that 33.33 percent respondents out of 120 households were known about the nutrition or nutritional food and 66.66 percent were unknown about it.

The respondent has poor knowledge on nutrition because there is lack of education and lack awareness programs.

# **4.2.1** Source of Knowledge of Nutrition

The main source of knowledge on media was Radio, TV, and Newspaper. Which provide all kinds of knowledge very fast to the people. Here, the main source of knowledge about nutrition and balance diet was media, neighbours, health workers and other. Show the following table

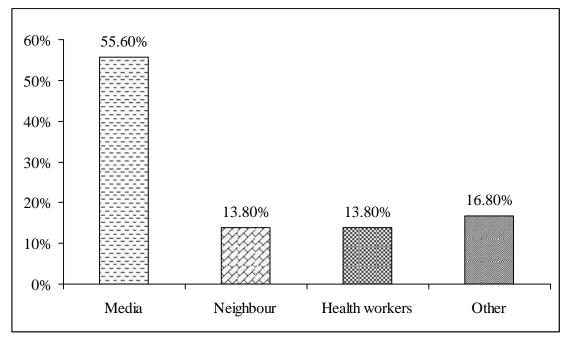


Figure No. 2: Source of Knowledge of Nutrition

According to this figure, 55.6 percent respondents out of 40 households got knowledge through the media, 13.8 percent the knowledge vice their neighbours, 13.8 percent from health workers and 16.8 percent from other sources. The table shows that the high percentage source of knowledge was media. They mostly method T.U. listened radio nobody read newspaper.

# 4.3 Existing Food Practices

After the discussion using some questions about knowledge of nutrition and its effects. The researcher intended to have further information aboard their existing feeding practice. Food practices refer the habit of the taking food of the people which affects their health.

Taking meal everyday is necessary for health and survival neither over feeding nor less than enough feeding is good for health so taking food appropriately in right and it gives good nutrition in human body. Otherwise one can be suffered of different health problems in the context of pregnant women, nutrition is most essential. Because growthness of their child and her body. So, here the researcher, intended to find out the existing feeding practices of the respondents which effects on their health. So, the

researcher made some questions to the respondents to know about the frequency of food (Nutrition) they eat a day. The result is given below:

**Table No. 3: Usual Foods of Respondents** 

<b>Usual Foods</b>	No. of Respondents	Percentage
Dal	6	5
Tarkari	18	15
Both	72	60
Other	24	20
Total	120	100.00

According to this table, out of 120 respondents, 5 percent had Dal in their meal, 15 percent had Tarkari and 20 percent were found to have other use. The percentage of respondents using only Dal is low and using both Dal and Tarkari is high. Generally their usual and common food was Dal, Rice and Tarkari. The percentage of respondents who had only Dal or Tarkari in their meal was because of their low economic status. They may be malnutrition and 20 percent used to have other foods i.e. curry, pickle, egg, milk and meat in their meal.

# 4.3.1 Times of Food Used

According to national sample, individual needs 210 Kg grains every year in average. But only 180 Kg is in the use by individual. (Department of Health Service, 2063). Likewise the condition of respondents from the desire area of research was found the same because of the quantity of the food they were using frequency of food eaten. It was identified that the grains used by them was not sufficient what they should had.

Table No. 4: Times of Foods Used

Times of Foods Used	No. of Respondents	Percentage
2 times in a day	20	16.6
3 times in a day	70	58.33
4 times in a day	20	16.6
5 times in a day	10	8.33
Total	120	100.00

The table shows that 16.6 percent had two times in a day, the respondents four times in a day is also same percent of respondents there times in a day is high respondents who had good economic condition were took three times in day. Which is high and the people who had low economic condition and low educational status the were no any information about how much to take nutrition (food) in pregnant period. So, it was seen that the body structure is not growthing sufficiently.

# 4.3.2 Food Preferred by Respondents

The food preference is different from one another we can see the different types of food i.e. pried, roasted, boiled etc. To identify the interest on food from the respondents they were asked some questions and the following choices of respondents were found.

 Food Preferred
 No. of Respondents
 Percentage

 Fried
 60
 50.00

 Boiled
 12
 10.00

 Roasted
 36
 30.00

 Raw food
 12
 10.00

120

100.00

**Table No. 5 : Food Preferred by the Respondents** 

The above table no. 5 show that it is clear that 50 percent of people and it 120 households liked to eat fried things such as meat, fish and daily used Tarkari likewise, 30 percent like roasted food. Similarly, 10 percent liked raw food and 10 percent of them liked boiled, people who preferred the things boiled was resulting some stomach problem. Diarrhoea, Abdomen Pain and digestive problem were their problems.

# **4.4** Food Practice During Pregnancy

**Total** 

Pregnancy period is very sensitive period of mothers. Once if they are neglected it may have bad effects on newly born baby and mothers as well. A mothers nutritional status during pregnancy is important both for the child intrauterine development and for protection against maternal morbidity and mortality (Nepal Demographic and Health Survey, 2011).

There are many questions prepared to get some information about the food, nutrition given during that period which is as follows: Green vegetables, meat, fish and fruits are necessary to enhance the energy in our body. In the lake of these, various health problems can affect the health. Particularly, during pregnancy energy and nutrition is necessary more than as usual which can have good result on mother and child health and growth.

After taking some information about existing feeding practices of certain group the researcher was further eager to take information about feeding practices during pregnancy. Researcher asked some questions concerning feeding behaviour and came to identify some information which is elaborated in the following table:

**Table No. 6: Food Preferred by the Respondents During Pregnancy** 

<b>Extra Diet in Pregnancy</b>	No. of Respondents	Percentage
Yes	120	100.00
No		
Total	120	100.00
If yes, Kind of Extra Diet		
Milk	6	5.00
Fruits	6	5.00
Egg	32	26.7
Meat	58	48.3
Green Veg. (Sag)	-	-
Horlicks	7	5.8
All	11	9.2
Total	120	100.00

Above table No. 6 show that the cent percent respondents were taking extra diet or nutritional food. Among them respondents the majority of respondents 58 (48.3%) were taking meat, 32 (26.7%) were taking extra egg, 24 (20%) were taking all kinds of extra nutritional foods, 11 (9.2%) were taking horlicks. There was almost nobody to have only saag (green vegetable) during the pregnancy. In addition some respondent were found to be using some extra nutrition like Ghee pregnancy period is a critical period which is not a normal period so a good combination of nutrition is

needed for pregnant women. But it may also harm to the health if much more than required is supplied.

The pregnant women is supplying the necessary nutrition to the growing fetus for normal growth and development they need to have extra diet in comparison to normal times, which help to maintain good health of both pregnancy women as well as growing fetus in womb.

Table No. 7: Respondents Take Daal is their Daily Meal

Daily Used Daal	No. of Respondents	Percentage
Black Daal	5	4.1
Mushuro	60	50.00
Black + Mushuro	8	6.6
Rahar	35	29.1
Chana	4	3.3
Others	8	6.6
Total	120	100.00

Above table No. 7, shows that majority number of respondents 60 (50%) were using Mushuro Daal is their daily meal. Likewise minority respondents 4 (3.3%) were Chana 35 (29.1%) were using Rahar Dall. Out of 120 households 5 (4.1%) respondents were used black Dall only and others Dall is Mugi, Karau etc. using were 6.6 percent. The high respondents were used Mushuro have good practice in using daal is their daily meal for increase iron and hemoglobin.

Table No. 8: Frequency of Taking Daal in a Day

Frequency of Taking Daal	No. of Respondents	Percentage
One times in a day	80	66.66
Two times in a day	30	25.00
Three times in a day	-	-
Not used	10	8.3

Above table no. 8 shows that majority of respondents 80 (66.66%) were taking daal one times in a day. 30 (25%) respondents had take two times in a day likewise no all respondents were used three times in a day and respondents not used daal at all in a

day were 10 (8.3%) . there is close creation between frequency of taking daal of pregnant mother and general good health of pregnant women as well as growing need more protein, iron and her nutrition value to meet the growing fetus also. So, all the pregnant women have 80 take daal at least two times in a day which is considered good habit.

Table No. 9 : Knowledge about Need of Increasing Iron Containing Diet During
Pregnancies

Need of Increasing Iron Containing Diet	No. of Respondents	Percentage
To Prevent iron deficiency disease (Anemia)	16	13.3
To promote and maintain general health	67	55.8
To meet the needs of growing fetus	32	26.6
Other	3	2.5
Don't know	2	1.6

Above table No. 9 shows that respondents the majority of respondents 55.8 percent were knowledgeable as to promote and maintain general health as the need of increasing iron containing diet to promote and maintain general health and the minority 1.6 percentage were not know about need of iron containing diet, 13.3 percent of respondent were known as to prevent iron deficiency disease (anemia) and 26.6 percent respondents were known as to meet the needs of growing fetus.

**Table No. 10: Knowledge about More Iron Containing Vegetable** 

<b>More Iron Containing Vegetable</b>	No. of Respondents	Percentage
Green Vegetable	17	14.1
Cauliflower	10	8.3
Chana	12	10.0
Potatoes	40	33.3
Others	21	17.5
Don't Know	20	16.8
Total	120	100

Above table no. 10 shows that majority of respondents 33.3 percent were responded as more iron contain vegetable is potatoes, 14.1 percent were responded regarding iron contain vegetable is green vegetable, 8.3 percent were responded more iron

containing vegetable as cauliflower, 10 percent were responded that cabbage contains more iron rather than other. Likewise 17.5 percent respondents were said other kinds of vegetables contain more iron and 20.8 percent of respondents they don't know about iron containing vegetables.

# 4.5 Impacts of Pregnant Women

Regarding health and health problem, out of 120 respondents, cent percent respondents were checked from the doctors during their pregnancy. Though most of the respondents were little educated, they were award about it which is considered good practice for increasing good health

Table No. 11: Number of Respondents Taking Prescription by the Doctor

Taking Prescription by the Doctor	No. of Respondents	Percentage
Yes	100	83.3
No	2	1.6
Sometimes	5	4.1
Depending on Situation	13	10.8
Total	120	100.00

Above table shows that, 83.3 percent of respondents were taking prescription by the doctors. Among them some were educated and award about health. So they followed the prescription of the doctors, likewise, 1.6 percentage were not followed, 4.1 percent were followed sometime because of their laziness and business of work and 10.1 percent of respondents were taking prescription by depending on situation.

Table No. 12: Distribution of Respondents Having Sexual Relationship During the Pregnancy Period

Sexual Relationship	No. of Respondents	Percentage
Yes	117	97.5
No	3	2.5
Total	120	100.00

After asking some questions about the taking medicine of the respondents, the researcher started asking about their sexual relationship during the pregnancy period.

Researcher it was found that out of 120 respondents, most of the respondents were took sexual relationship during their pregnancy. It was 97.5 percent which is high and 2.5 percent were not took sex in this period. The respondents who took sexual relationship in this period were also well educated.

Table No. 13: Distribution of Respondents Suffering from Odema

Suffering from Odema	No. of Respondents	Percentage
Yes	60	50.00
No	60	50.00
Total	120	100.00

Table No. 13 shows that, respondents suffered and not suffered from odema is equal, 50 and 50 percent respondents were said that they were suffered from odema because of their laziness, low economic condition bad practice of feeding behaviour and bad practice of taking medicine.

Table No. 14: Distribution of Respondents Facing Problem of Vegenarian

Facing Problem of Vegenarian	No. of Respondents	Percentage
Yes	30	25.00
No	60	50.00
Sometimes	30	25.00
Total	120	100.00

Vegenarian is a critical or major problem in this period above table shows that the majority of respondents 50 percent were not faced the problem of vegenarian, 25 percentage of respondents were faced and 30 percent were also sometime faced from the vegenarian problem. The percentages of respondents faced from vegenarian problem were equal.

**Table No. 15: Feeling Anemia During the Pregnancy** 

Feeling Anemia During the Pregnancy	No. of Respondents	Percentage
Yes	7	5.8
No	75	62.5
Don't Know	38	31.7
Total	120	100.00

According to this table No. 15 out of 120 households, 5.8 percent respondents were felt or suffered from anemia disease which is minority and 62.5 percent of respondents were not suffered from anemia during pregnancy. The table shows that the majority of respondents were not suffered from anemia, they answered taking iron supplement tablets and adequate balance diet for management (preventing) of anemia likewise 31.7 percent of respondents were answered don't know about it. Most of respondents good practice in management of anemia.

**Table No. 16: Feeling the Back Paining of Respondents** 

Feeling Back Paining	No. of Respondents	Percentage
Yes	22	18.3
No	70	58.3
Don't Know	28	23.4
Total	120	100.00

Table no. 16 shows that, out of 120 respondents 18.3 percentages were feeling back pain during their pregnancy period, 58.3 percentages were not feeling, so likewise 23.4 respondents were feeling sometimes it. The good practice of eating behaviour, taking fruits or nutritional food and caring of they it was seem that the most of the respondents had good health. They didn't felt back pain in their pregnancy period.

Table No. 17: Feeling the Problem of Insomnia

Feeling the Problem of Insomnia	No. of Respondents	Percentage
Yes	7	5.8
No	105	85.00
Don't Know	13	10.8
Total	120	100.00

Insomnia is also a problem of pregnant women. It can be seen to the maximum pregnant women. Above table no. 15 shows that the majority of respondents not feeling the problem of insomnia were 85 percent. Sometime feeling it were 10.8 percent and fully feeling of the problem of insomnia is minority which is 5.9 percent.

**Table No. 18: Suffering from Arthritis** 

Feeling Anemia During the Pregnancy	No. of Respondents	Percentage
Yes	5	4.2
No	115	95.8
Total	120	100.00

Arthritis is also a serious problem of pregnant women. Table no. 16 shows that 95.8 percent of respondent were not suffered from the arthritis it was majority and 4.2 percent of respondents were suffered from the arthritis.

Out of 120 respondents, the cent percent of respondents were vomited during pregnancy no at all respondents were not vomiting is this period. Vomiting is important and major symptoms for pregnant woman. The certain area's respondents all the respondents were faced vomiting during pregnant period.

**Table No. 19: Vomiting of the Respondents** 

Frequency of Vomiting	No. of Respondents	Percentage
Daily	110	91.6
Sometimes	10	8.4
Total	120	100.00

When the researcher, become more eager to know about vomiting and it frequency of the respondents, it was found that the frequency of vomiting of the respondents is high. Which is 91.8 percent and the respondents who had vomiting sometimes is 8.4 percent respondents who vomited daily were seem weakness and this.

Table No. 20: Feeling Difficult in Breathing Wring Pregnancy

Feeling Back Paining	No. of Respondents	Percentage
Yes	6	5.00
No	95	79.1
Don't Know	19	15.9
Total	120	100.00

Here, the problem related with respondent is considered difficult in breathing. In the Nepali context among the pregnant women some women could be feeling difficult in breathing.

Table no. 20 indicates that 79.1 percentage were not feeling difficult in breathing it was high and the low percentage 5 percent were feeling difficult in breathing but 15.9 percentage were feeling it sometimes. The respondents who were not feeling difficult in breathing were looked healthy.

**Table No. 21: Feeling Breast Paining During Pregnancy** 

<b>Breast Paining During Pregnancy</b>	No. of Respondents	Percentage
Yes	14	11.6
No	95	79.1
Sometimes	11	9.3
Total	120	100.00

Above table no. 21 shows that the majority of respondents were not feeling breast pain in their pregnancy period. It is 79.1 percent likewise, 11.6 percent of respondents were feeling breast pain in this period, and 9.3 percentage were felt it sometimes.

Varicosa is a dangerous problem for pregnant women. It can bring further major problem in pregnant were.

Table No. 22: Number of Respondents Feeling Varicosa during Pregnancy

Feeling Varicosa	No. of Respondents	Percentage
Yes	67	55.8
No	53	44.2
Total	120	100.00

Above table no. 22 shows that 55.8 percent of respondents were suffered from the vericosa. Which is high and 44.2 percent were not suffered from it.

Table No. 23: Problem of Pregnancy Period

<b>Problem of Pregnancy Period</b>	No. of Respondents	Percentage
Yes	90	75.00
No	30	25.00
Total	120	100.00
If Yes, Problems are :	1	
Lower abdomen Pain	36	30.00
Epigastria Pain	15	12.5
Back Ache	4	3.3
Itching and Swelling Valve	2	1.6
Anorexia	6	5.00
Headache	1	0.8
Nausea and Vomiting	20	16.6
Dizziness	3	2.5
Leg Pain and Swelling	3	2.3
Total	120	100.00

Above table No. 23 shows that out of 120 respondents, the majority of respondents were had problem in this pregnancy. Likewise, 30 percent had lower abdomin pain problem, which is high and the minority of respondents 0.8 percent were had headache problem in this period.

Most of respondents were not detect the problems and some were complained different problems in this pregnancy like minor to major problems. Respondents were not faced some problems, like, pelvic bleeding, leg, high blood pressure, burning maturation and symphasis joint rain. Respondents who were had any kinds of problems, it is good that they are in health care centre early which can manage further action to save mother and foctus.

# 4.6 Summary of Findings

Pregnancy is a very sensitive period of mothers once if they are neglected it may have bad effects on newly born baby and mothers as well. A mother's nutritional status during pregnancy is important both for the child's intrauterine development and for protection against maternal morbidity and mortality. Nutrition plays a vital role in the health of people. Inadequate nutrition may cause malnutrition. So sufficient nutrition is very important for pregnant women, inadequate feeding practices and health care practices are not sufficient in Nepal. Therefore, this study about feeding practices was carried out at Ramkot VDC ward no. 9 of Kathmandu district.

Malnutrition is one of the main problems among the people specially children and pregnant women. This problem is result of poor feeding, high rate of population growth limited land area, long working hours for mothers, likewise, in adequate coverage of health services, low literacy rate of women and superstition and traditional concept about pregnant women, lack of awareness on health and nutrition on feeding practices in during pregnancy period are main cause of the poor feeding practices in Dalit community in Kathmandu district, ward No. 9 of Ramkot VDC. Due to such causes suffering of different communicable and non-communicable disease. Like: malnutrition vomiting and digestive problems. After analysis and interpretation the data the following data were obtained the major findings of the study are as follows:

- (I) The majority of respondents 82.5 percent were found illiterate, where as the percentage of literate respondents were found 17.5 percent.
- (II) 4.5.2 To make a diving, the different sources of income had been found some respondents were dependent on their farming. The source of income from the laboure is high 65 percent, 28.3 percent were farming and the minorities of the 67 percent were found job holders.
- (III) Regarding the occupation of the respondents, hundred percent of respondents were engaged in housewife
- (IV) It has been found that the high 66.6 percent of respondents were unknown about nutrition. It was seen especially because of their low awareness status and illiteracy. The remaining 33.3 percent were found having general basic knowledge about nutrition. Those having some knowledge about nutrition come to know through the media, neighbour, health worker and other sources.

- (V) The respondents having knowledge about nutrition through media was high it was 55.6 percent.
- (VI) The respondents having knowledge about nutrition through neighbour is 13.8 percent.
- (VII) It has been found that, the respondents having knowledge from health workers were 13.8 percent, likewise, having knowledge from others was 16.8 percent.
- (VIII) The respondents having food thrice a day were 66.6 percentage, four times a day were 16.6 percent and two times is a day were also 16.6 percent. It has been found that the majority of respondents had their food thrice a day
- (IX) Regarding the food feeding practice of the respondents, the maximum respondents 50 percent preferred the fried food, 30 percentage were found having their food by resting. And a few 12 percent were preferred by boiling and raw food.
- (X) The majority of the households used much more spice in their meal were 85 percent and only 15 percentage were found using little spice in t heir meal.
- (XI) As regard to the way of processing drinking water, maximum respondents 96.7 percent were used the water for drinking without any processing. Only a few 3.3 percent were found using filter to process the water there was nobody using medicine and boiling the water for processing.
- (XII) During pregnancy 48.3 percentages were given meat, 26.7 percentage will given egg, 9.2 percentage were provided all kinds of nutritional sources. Likewise, 5.8 percentage were presided horlicks, and 5 percentage were used milk and fruits. Maximum were found having meat as diet during pregnancy.
- (XIII) The majority of respondents 66 percent were taking mushuro together.
- (XIV) The minority of respondents 3.3 percent were taking chana in their meal

- (XV) The respondents 4.1 percent were using black Daal in their meal, likewise,6.6 percentage were taking black plus mushro Daal in their meal
- (XVI) Regarding practice of taking Daal in a day the great number 66.6 percent of respondents were taking Daal one time in a day.
- (XVII) The respondents 25 percent were taking Daal two times in a day and nobody used Daal three times in a day not used Daal anytime were 8.3 percentage.
- (XVIII) The minority of respondents 1.6 percent were said that don't know about it. More iron containing vegetable is potatoes like were the minority of respondents 8.3 percent were knowledgeable about iron cantering vegetable is cauliflower.
- (XIX) Among 120 respondents, hundred percent respondents were checked by the doctors nobody was checked by their husband and friends.
- (XX) Most of respondents 97.5 percent were found having sexual relationship in this period and 2.5 percentages were not found having sexual relationship in this period.
- (XXI) Majority of 50 percent respondents were suffering from odema. The researcher had found that the respondents were not suffering from the odema problem were also same.
- (XXII) As regard to the problem of vegenarian of the respondents maximum 50 percent respondents were not facing and facing from it daily and sometimes was same 25 percent.
- (XXIII) Regarding facing of anemia, the majority of respondents 62.5 percent were not facing of anemia and the minority of respondents 5.8 percent were facing of the anemia problem.
- (XXIV) The high percentage of respondents not feeling of the back paining were 98.3 percent and sometimes feeling were 23.4 percent.

- (XXV) Majority of the respondents 85 percent were not feeling the problem of insomnia.
- (XXVI) The cent percent of respondents were vomiting in the pregnancy period.
- (XXVII) The majority of respondents 91.6 percent were vomiting daily and 8.4 percent were vomiting sometimes in the pregnancy period.

#### **CHAPTER V**

#### CONCLUSION AND RECOMMENDATIONS

#### 5.1 Conclusion

The poor nutritional status of children and women has been considered a serious problem in Nepal for many years. The most common forms of malnutrition in the country are protein energy malnutrition Iodine deficiency disorders (IDD), Vitamin a deficiency (VAD), and iron deficiency anemia (IDA). Initiatives have been underway for more than 3 decades with national nutritional strategies developed in 1978, 1986 and 1998. several programs with an explicit nutrition component have been launched in Nepal under the initiative of the nutrition section of the ministry of health and population (Nepal Demographic and Health Survey 2011).

Educational status plays very important role for nutritional status. The women who have education of SLC or above are under mild and moderate nutritional status. They have no sever nutritional status who have high economic status, they have normal nutritional status and who have low economic status they have mild and moderate nutritional status food purchasable is directly related with the financial capacity. In this research, housewife is a major occupation of pregnant women so they have not sufficient nutritional status mostly. They are under the moderate and serve nutritional status.

Among the total 120 households, most of the respondents were illiterate in this study area. The majority of households in regards to their survival was from the labor everyday. Only a little had been found making their living from the job most of the respondents were unknown about nutrition, balance diet and the source of nutrition.

However some of them were found having a little knowledge about it. The respondents having both daal and Tarkari in their daily meal was high. It was found that the majority of households were preferred fried food use of spice in their meal was very high. The practice of process of drinking water was poor. No process was done to make the water drinkable by almost of them the use of meat in their meal for

nutrition is high. The use of fruits, egg, milk other nutritional substances in this period was not satisfactory.

The knowledge of respondents about need of increasing iron containing diet is satisfactory. Anyway they have little knowledge which considered as good. Likewise, the respondents were facing some kinds of health problems in this period such as, back pain breast pain, headache, vegenonin, pelvic bleeding etc. any way most of them were not facing the dangerous problem respondents were facing with problem is very low.

## 5.2 Recommendations

According to the findings and conclusion the following recommendation are being made:

# 5.2.1 Recommendations for Improvement

- I) Awareness training programs should be conducted about nutrition.
- II) Refreshing training programs should be conducted time and again..
- III) The local organization e.g. club or health related institution should involve in the health programs to spread the knowledge among the backward communities.
- IV) The educational programs regarding nutrition for elders should be launched within the community.
- V) The women literacy rate should be increase about literacy classes, provide incentives to encourage empowerment increased enrollment to girls to school.
- VI) Health planners and decision makers need to recognized the importance of avavailability of basic health services to all people.
- VII) Quick decision has played a major role in saving pregnant and children's life during pregnancy and also delivery.

- VIII) Mother during pregnancy has a medical significance which should be continued our traditional food like ghee, milk, meat, egg, fruits, green vegetables which needs to by promoted balance nutritional status of pregnancy.
- IX) Encourage to use family planning methods for appropriate child bearing causes by health services centre.

# **5.2.2** Recommendations for National Policy

- I) The government should make strong policies to increases ANC (Antenatal Checkup) by health workers.
- II) The concerned authorities should develop strong policies for formation of health education programmes and stress on its implementation rural to urban areas.
- III) Iron tablets should be made available through out the country out affordable price or free available of FCHU, H.B., TBA and ORC in each wards of rural areas.

# **5.2.3** Recommendations for Further Study

This study concerns with only nutritional status of pregnant women there is large many space to research on this field so it is suggested to carry out the study in the areas as follows.

- The study was limited of pregnant women to find out nutritional status but other ways could be taken like anthropometrics, Assessment, clinical observation and body mass index.
- II) The comparative study on nutritional status between pregnant women and non-pregnant women.
- III) The further researcher can do comparative study on nutritional status of pregnant women on urban and rural area of Kathmandu district.

#### REFERENCES

- IV) Atlas of South Asian Children and Women, (2012). *Iron Deficiency Anaemia*; 8(a):16.
- V) Chalise S. (2012). Socio-cultural Management of Pregnancy and Case of Anemia in Urban Context, Unpublished Thesis T.U.
- VI) CBS (2013). *National Census Report 2001* Ministry of Environment and Population Nepal.
- VII) Christel B. (2012). *Health Advice About Anaemia During Pregnancy*, Netdoctor Co. UK, Feb.
- VIII) Galego, E. (2012). Severe Anaemia in Pregnancy, Report of a workship held at. the institute of child and mother health in Dhaka, Bangladesh, published by the ottawa.
- IX) <a href="http://www.businessdictionary.com/definition/methodology.html#ixzz3iI">http://www.businessdictionary.com/definition/methodology.html#ixzz3iI</a>
  WsQq14
- X) https://en.wikipedia.org/wiki/Methodology
- XI) Joshi Y.K. (2012), Knowledge and Practice Regarding Prevention of anemia among pregnant Women Attending in Anteenatal Clinic in Materinity Hospital, Thapali, unpublished thesis T.U.
- XII) Karki Y.B. (2009). Reproductive Health Knowledge among Unmarried Adolescents in Western Nepal. A Journal, d of R.H. FPAN, Vol. 2.
- XIII) Mahfouz A A. et al. (2012). *Anemia Among Pregnant women in the Asia Region*, Saudi Arabia: An epidemiologic Study. Tropical Medicine and public Health, South East Asia Mar 25 (1): 84-7.
- XIV) Ministry of Health and Population, (2012). *Maternal Mortality and Morbidity Study, Family Health Division*, Kathmandu: MOHP.
- XV) Ministry of Health and Population, (MOHP). (2012). *Safe Motherhood in Nepal*, Safe motherhood in Nepal, Kathmandu: MOHP.
- XVI) Muralia 1 et al. (2012). Perception Regarding Need Antenatal Care Among Rural and Urban Mother in New Delhi, India: Journal of Public Health.

- XVII) NDHS. (2011). *Demographic and health survey report 2011*. Kathmandu: MOHPP.
- XVIII) Office of the Local Ragistrar (Ramkot VDC, Kathmandu.
- XIX) Owen P. et al. (2012). *Anaemia During Pregnancy*. Atenprimaria, UK. Feb; 28 (19):4.
- XX) Pudasaini, S.P. (2010). *Safe Motherhood Challenges*, Nepal Population Journal, Vol. 2-3, No. 2, (pp. 1-13). Kathmandu: CDPS
- XXI) Ramkot Sub-Healthpost, Ramkot, Kathmandu
- XXII) Seoane, N L. (2012). Nutritional Anthropometry in the Identification of Malnutrition in Chilhood. Jtrop Pediatr 17:98-104.
- XXIII) Sharma R. (2012). Pregnancy and Nutrition Obstetric and Gynacology Today. September 1969 1 (3) P.
- XXIV) UNICEF, (2011). *Children and Women of Nepal*, A Situation Analysis, Kathmandu: UNICEF
- XXV) WHO. (1991). Prevention and Management of Severe anemia in pregnancy. Report of a Technicl working group 10-22 May 1991, Maternal Health and Safe Motherhood. Program Division of Family health, Geneva.
- XXVI) World Health Organization, (2013). Reproductive Health in the South-East Asia Region, Geneva: WHO