

**UNMET NEED OF FAMILY PLANNING IN A RURAL DISTRICT
SYANJA, NEPAL**



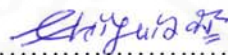
SANTOSH PAUDEL

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Thematic Paper
entitled
**UNMET NEED OF FAMILY PLANNING IN A RURAL DISTRICT
SYANJA, NEPAL**



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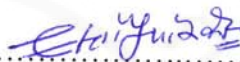
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UNMET NEED OF FAMILY PLANNING IN A RURAL DISTRICT, SYANJA, NEPAL**SANTOSH PAUDEL 5637198 PHMP/M****M.P.H.****THEMATIC PAPER ADVISORY COMMITTEE: SUWAT SRISORRACHAT DR. P. H.
(NUTRITION), TASSANEE RAWIWORRAKUL (PUBLIC HEALTH NURSING)****ABSTRACT**

The unmet need of family planning can be explained as the gap between individual contraceptive behavior and individual fertility preference. This study aimed to investigate the determinants of unmet need of family planning, and explore the associations of unmet need with predisposing, reinforcing and enabling factors, however this researcher has attempted to identify the various situations regarding unmet need in the context of the study, which can be representative of the rural setting of any developing country in Asia. This cross sectional study was carried out in Syanja a rural district, of western Nepal, the population consisted of 295 Married Women of Reproductive Age (MWRA) aged from 15 to 49 years. A clustered random sampling technique was used to select the sample group. Descriptive statistics along with chi-square test was applied to compute the association between variables. A set of structured questionnaires were designed to collect the data. The data were collected from Jan. 19th to Feb. 14th, 2014 in eight village development committees of Syanja district in Nepal.

The result of this study mostly focused on the unmet need which was analyzed through two different methods, on the basis of the WHO definition of unmet need and on the basis of contextual approach. According to the WHO definition, 11 percent of unmet need was identified whereas unmet need on the basis of contextual study was 54 percent. Eventhough the status of current users were good (61.2 percent) the unmet need was still high. Mostly, this is because of the improper choice of family planning methods. About 80% of respondents had a history of early marriage (before 20 years). Mean age of marriage was 19 ± 2.4 years. Significant association was seen between age group, education and number of living children (< 0.05).

Despite a good knowledge and strong social support the status of unmet need was quite high (54%) in the rural setting as a result of the lack of knowledge of the respondent's husbands who were aware of only a few methods for family planning and held onto poor attitudes towards family planning. Dependency of respondents on their husband for decision making and the constraint in making decisions was mainly because their husbands were not present in their home. Thus, the research concluded that the husband's knowledge and attitude regarding family planning should improve and both health literacy and general literacy are different aspects of awareness in the community. Improper choice of family planning methods and early marriage were the major cause behind the high unmet needs of family planning.

KEY WORDS: UNMET NEED / FAMILY PLANNING / RURAL**91 pages**

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LIST OF ABBREVIATIONS

NDHS	National Demographic and Health Survey
FCHV	Female Community Health volunteer
ICPD	International conference for Population Development
IUCD	Intra Uterine Contraceptive Device
MDG	Millennium Development Goal
NGO	Non Government Organization
TFR	Total Fertility Rate
WHO	World Health Organization
KAP	Knowledge Attitude and Practice
WDR	Western Developmental Region
VSC	Voluntary Surgical Contraception
MWRA	Married Women with Reproductive Age group
COC	Combined Oral Contraceptive
DMPA	Depot- Medroxy Progesterone Acetate
DHS	Demographic Health Service
PGR	Population Growth Rate
MMR	Maternal Mortality Rate
IMR	Infant Mortality Rate
TFR	Total Fertility Rate
CPR	Couple Protection Rate
UNFPA	United Nation Family Planning Association
VDC	Village Development Committee
OP	Oral Pills
FP	Family Planning

CHAPTER I

INTRODUCTION

1.1 Rational and Justification of the study

The world moving forward with seven billion peoples which is doubled of the population in 1983. Population management is one of the major challenges for the world. There are many other public health consequences which are challenging human society in every single day. The major concern of public health can be considered as maternal mortality, Infant mortality, food scarcity, malnutrition and many other socio-economical and environmental issues. The Millennium Developmental Goal (MDG) 2015 has also given the special attention for those areas which is connected directly or indirectly with the population growth. Almost all 8 goal of MDG has related with population growth but especially goal number 3, promote gender equality and empower women 4, remove child mortality and 5, Improve maternal health are the close public health concern. (1, 2)

Family planning is one strategy which could be a solution of these problems. Population growth is directly connected with family planning and proper use of contraception. Some 140 million women worldwide who are married or in union say they would like to delay or avoid pregnancy, but are not using contraception. (2) Thus the portion which has not addressed with proper solution is unmet need. Unmet need is especially high among groups such as: Adolescents, Migrants, Urban slum dwellers, Refugees, Women in the postpartum period and three major activities has been proposed to overcome with the high level of unmet need in the developing countries. First one is research to understand the needs and prospective of the groups and to intervene it with the scientific way. Second is developing specific indicators and guidelines to improve the accessibility and third one is to support to the country for necessary actions. (3)

The concept of unmet need of family planning was developed by the early knowledge, attitude and practice (KAP) studies conducted during the 1960s and

1970s. Since then, numerous studies on KAP have shown that there exists a gap between women's desire for limiting or spacing children and use of contraception. The term KAP gap has been gradually replaced by the "unmet need". (4)

In year 2010, total of 287 thousand mothers die because of the pregnancy or related complication in the world. It is a death more than from any other disease or health related issue. If we calculate, it is 150 every minute. Almost all maternal deaths (99%) occur in developing countries. More than half of these deaths occur in sub-Saharan Africa and almost one third occur in South Asia. (7)

A big question is that "Is all the pregnancies that taking place is with the desire and need of those women?" if the women dyeing with such normal and mandatory natural phenomenon which is very important for the existence of human being. Another hand every pregnancy is considered as a medical emergency and risk of life for the women.

Hence the unmet need of family planning is became a major concern of the reproductive health. Unmet need of family planning means those portion of MWRA which have need and wants of limiting or spacing of children but recently not using any modern method of family planning. Therefore we can be defined unmet need of family planning as "Currently married fecund women who want to postpone their next birth for two or more years or who want to stop childbearing altogether but are not using a contraceptive method are considered to have an unmet need for family planning.

Types of needs a) Limiting b) Spacing

1.2 Context study

The Asia continent which occupied about two third of the world population (4.1 billion-2012) with most of the developing and underdeveloped country where 106,793,000 women aged 15-49 with the contraceptive prevalence rate (CPR) only 62%. It varies by country to country, In Thailand it is 70% while The Timor Leste has 7% CPR. Similarly the low range CPR is in Pakistan, Nepal and Philippines with 32, 28 and 26 percent respectively can be observed. The CPR in Nepal, Bangladesh, Bhutan, Indonesia and Myanmar is dramatically improving with

significant increment but still have to work hard to reach the goal within the time frame. Therefore the region of course should be in priority of the programme. (5)

The 603 million women who currently use modern contraception in developing countries, combined with the 215 million women with an unmet need for modern contraception. (8)

Hence, if we compare developed and developing country “ A women lifetime risk of maternal death is 1/7300 in developed country when it is 1/15 in the population of the south Asia region with about 33 times more than the developed world .here we can find a contrast deviation of the problem concentration.

The total population of Nepal is 26,494,504 in 2011. The population of the 14 to 49 women is 71, 14 526 which is 52% of whole women population and 26.85 of total population. Overall population growth rate 1.35 and literacy rate is 65.9% which is different in male and female by 75.1 and 57.4 percent respectively. The ownership of the property in women's is 19.71 where as it is also different in the rural and urban setting by 26.77 in urban and 18.02 in rural women's. This one is also an indicator of women empowerment which can play a role in decision making and choice of family planning methods use. (6)

The contraceptive prevalence rate of Nepal is now 43.73 against the target 67 within the 2015 (MDG). Injectable contraceptive is one of the most familiar methods among all other method.43% of all users use injectable, 29% condom and 19%, 5% and 4% are use oral pills, IUCD and Implant respectively. Although government of Nepal has policy to increase the use of long term family planning methods (IUCD, Implant) thus the use of long term spacing methods are very less used.

Family planning is one of the a priority programme of the government of Nepal and is highlighted in the current three-year interim development plan (2010-2012) but still there is 27 percent of currently married women have an unmet need for family planning services, with 10 percent having an unmet need for spacing and 17 percent having an unmet need for limiting. This is a data, highest in the south East Asian country. That is why it is the major concerned of researcher and scholar too. (9,10)

Nepal has divided into 5 developmental regions namely eastern, central, western, mid-western and far western. The eastern part of Nepal is comparatively more developed than western parts and the indicators of all developments also reveal the same.

The indicators regarding family planning also project the similar scenario as other. The national data for desirable spacing rate 72.7% and for limiting it is 69.1% which is highest in the western developmental region (WDR) with 76.1% among all five regions. Similarly the Couple Protection Rate(CPR) is lowest with 31.7% when the national figure for CPR is 43.7%.The achievements of the family planning programmes also seems quite low then other regions. Voluntary Surgical Contraception (VSC) in the region is only 69 % against the target, decreasing from 79% from previous fiscal years. Unmet need of family planning in the region is about 31% in comparison to the national (27%) it is still high. (9) (10)

Thus a visible impact of unmet need like increasing population, birth rate and family size is experiencing in the Nepal

Syanja represent one of the remote districts in the western region. It is located just middle of the region with lots of rural village with significantly low excess of education, Health and other human basic needs except few village. A diversifying group of peoples stay in the district with lots of Socio cultural, economical, ethnic and geographical heterogeneities.

The data regarding family planning and the service accessibility is also quite measurable. The achievement of family planning targeted is extremely low. New acceptors for sterilization has achieved with 41% when achievement of IUCD and Implant against targeted is only 5.7% and 6.7% respectively which is lowest in comparison to 15 other district in the region.

Although the resource allocation and monitoring is regular and equitable why the indicators are significantly lower. There is no other specific data regarding family planning but it is easily predictable that on the basis of achievement by the district there are not satisfactory family planning services and indicators like total fertility rate, contraceptive prevalence rate and couple protection rate thus the unmet need also quite higher than any other district in the region. (11)

This study will explore the various reasons behind the very low progress in family planning indicator through finding out the associate factors of high unmet need of family planning. The finding can be analyze to get the proper solution of constraints of programme or existed policy to address the problems in the districts similar to Syanja. Thus ultimately will be able to minimized the maternal mortality rate, child mortality and minimize the family size as per the couple intended to designed their family size. a female, families, a community and whole public health system will be in benefited from this study and few recommendation will go to the policy level which will ultimately help to minimized unmet need of family planning.

1.3 Objectives of the study

- 1) To explore the socio demographic, predisposing, enabling and reinforcing factors on Marriage Women with Reproductive Age group to adopt the family planning service.
- 2) To find out the status of unmet need of family planning in syanja district of Nepal.
- 3) To determine the enabling factors (availability and accessibility) of family planning methods among Married Women with Reproductive Age group.
- 4) To find out the association in between predisposing, reinforcing and enabling factors and unmet need of family planning in Syanja.

1.4 Hypothesis

- 1) There is an association between predisposing factors and unmet need of family planning among MWRA.
- 2) There is an association between enabling (availability and accessibility) factors and family planning and unmet need of family planning.
- 3) There is an association between reinforcing factors and unmet need of family planning among MWRA.

1.5 Variables

- ☐ Dependent variable Unmet need of family planning
- ☐ Independent variables

Predisposing factors

- Age, Education, Occupation,
- Place of resident, Number of children, Sex preference.
- Knowledge on contraceptive methods.
- Attitude toward contraceptive method.
- Sex preference.

Enabling factors

- Availability of contraceptives services.
- Accessibility of contraceptives services.

Reinforcing factors

- Husband support
- Village health workers support.
- Health post staffs support/counseling.
- Female community Health Volunteer support.

1.6 Operational definition

Unmet need of family planning: can be defined as “Currently married fecund women who want to postpone their next birth for two or more years or who want to stop childbearing altogether but are not using a contraceptive method are considered to have an unmet need for family planning. The unmet need classified as follow: a) Limiting b) Spacing

1.6.1 Limiting: Limiting unmet need includes pregnant and amenorrhea women whose current or most recent pregnancy was unwanted and non-pregnant and non-amenorrhea fecund women who wish to terminate childbearing altogether.

1.6.2 Spacing: spacing composes of two subsets, which includes pregnant and amenorrhea women whose current or most recent pregnancy was mistimed and non pregnant and non amenorrhea fecund women who wish to postpone their next birth at least 2 years.

Table 1.1 Definition on the basis of National family health policy and the experiences of working in the rural setting in the field of family planning

SN	Number of living child	Condition 1	Condition 2	Condition 3	Status
1	One child	No plan for more child	Using nothing	Husband away(for years)	Unmet need
2	One child	No plan for more child	Using temp. method except IUCD/Implant		Unmet need
3	One child	Plan for more child	Using nothing	Husband away	Met need
4	One child	No plan for more child	No response	Any reason	Unmet need
5	Two children	No plan for more child	Using temp method except IUCD/Implant	Any reason	Unmet need
6	Two or >2 children	No plan for more child	Using nothing	Religious reason	Unmet need

MWRA: Married Women with Reproductive Age (15-49 years) group.

Contraceptive methods: various kinds of chemical or physical agents for birth control.such as pills, injectable (depo provera), IUCD, implant and female sterilization.

Age: refer to the current age of the respondent during this study. The age in this study is classified into four categories: 15-20 years, 21-29 years, 30-39 years and 40-49 years.

Education of women: refers to the highest education that respondent have obtained .the level of education categorize into four categories.

- 1) No education (No evidence of attend school)
- 2) Primary education (at least 5 years of school education)
- 3) Secondary education (At least 10 years of school education)
- 4) Higher education and above (at least 12 years of school education)

Occupation: refers to the women currently engaged work. The status of work has categorized into five categories again

- 1) Government service: working as a civil servant under the government umbrella.
- 2) Private Service: Employee under the private owning institution or agency.
- 3) Business: Self owning business.
- 4) Agriculture: Engage in farming and agriculture.
- 5) Housewife –engage with the house hold work only.
- 6) Other – other than these mentioned above.

Number of living children: Refers to the total number of living children of the respondent women at the time of interview. The number of children categorized into four again: a)No children b) One children c) Two children d) Three children e) four or more children.

Knowledge of contraceptive methods: refers to the current knowledge about the contraceptive methods (all modern methods) in respect of child spacing , or birth controlling or limiting the child .It also consider the understanding and application of the knowledge in her real situation and ability to describe and explain the advantage and disadvantages of the method at the same time.

Knowledge has categorized into three levels: a) Good knowledge
b) Fair Knowledge c) Low knowledge

Attitude towards the contraceptives methods: Means the belief perception of the respondent regarding the contraceptive methods, its use and benefits or hazards.

Attitude has categorized into two levels: a) High attitude
b) Low attitude

Availability and accessibility of contraceptive methods: Means to the place or commodities with skill human resource to deliver the service to the respondents and the distance of the service center, the hospitality that the service provider provides to the clients.

Availability and accessibility has classified into three different categories: a) Good b) moderate and c) low availability and accessibility.

Social support: defined as the flow of help to the women from her husband, friends, health personals, mass media or any other to adopt the family planning service.

Social support also divided into three categories: a) strong social support b) moderate social support and c) Low social support

1.7 Conceptual framework

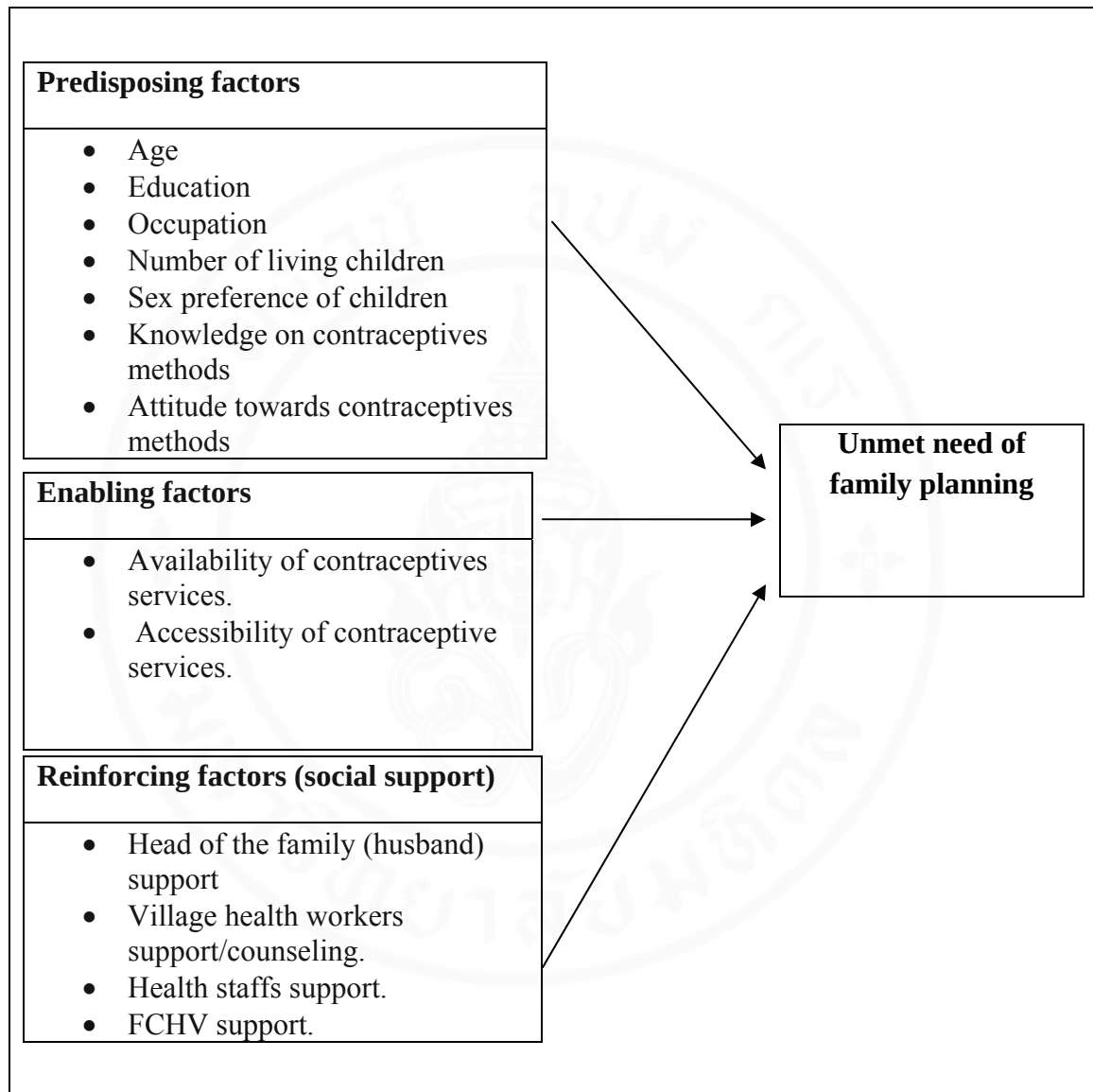


Figure : 1.1 Conceptual frame works

CHAPTER II

LITERATURE REVIEW

2.1 Family planning:

Family planning allows individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births. It is achieved through use of contraceptive methods and the treatment of involuntary infertility. A woman's ability to space and limit her pregnancies has a direct impact on her health and well-being as well as on the outcome of each pregnancy.

“A way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitude and responsible decision by individuals and couples, in order to promote the health and welfare of family group thus contributes effectively to the social development of a country.” (13)

2.2 Different types of modern methods of family planning

2.2.1 Birth spacing

Combined oral Contraceptive Pills (COCs): common COCs are combined low dose pills in 28-day packages. It contains norgestrel (progestin) 0.3 mg and ethinylestradiol (estrogen) 0.03mg in each pill. Proper and consistence used have more than 99% effectiveness.

Injectable contraceptives, Depot Medroxy progesterone Acetate (DMPA): It's also known as Depo-Provera is the injectable contraceptive. DMPA should use every three months the effectiveness of DMPA is also more than 99%.

Sub dermal Implant: There are different types of implant. Jadelle and Sinoplant are two rod implants. Each rod is 2.5 mm in diameter and 43 mm in length and contains 75 mg of levonorgestrel. It protects from pregnancy for up to 5 years. The effectiveness of Implant is also more than 99%.

Intra Uterine Contraceptive Device (IUCD): The IUCD currently available in Nepal is the Copper T 380A. This is non hormonal device. Its action last for 12 years. For consistent and correct use the effectiveness is more than 99 percent.

Condom: Condoms are made of thin latex rubber. Male condoms are widely available in Nepal. Contraceptive effectiveness more depends upon the way it is used. The effectiveness is different for consistent and correct user and common user. The effectiveness range from 98% to 85 percentages. Condom is only the method of family planning which have also significant role in protecting from STI and HIV as well. Female condom also available in the market of Nepal but it's very list used by female.(12)

2.2.2 Limiting

Minilap: This one is the voluntary surgical contraception for women. Minilap is more commonly practicing in Nepal in comparisons to male sterilization, vasectomy. Basically there are two types of surgical procedures, Minilap and Laparoscopy. Its 99.5% effective procedure for contraception

Vasectomy: This one is a permanent surgical contraception for the men. Pregnancy rate after vasectomy is 2 to 3 per 100 women over the first year after their partners have had a Vasectomy.NSV is an effective procedure with a surgical complication rate of less than 2% Failure. This surgical procedure is easier and simpler than minilap and laproscopy.(12)

2.3 Concepts of unmet need of family planning.

The concept of unmet need of family planning was developed by the early knowledge, attitude and practice (KAP) studies conducted during the 1960s and 1970s. Since then, numerous studies on KAP have shown that there exists a gap between women's desire for limiting or spacing children and use of contraception. The term KAP gap has been gradually replaced by the "unmet need". (4)

In 1974 Freedman and Lola Gene Coombs for the first time use survey data to identify the size of the group of countries and they found it to be substantial. They coined the term discrepant behavior to describe the status of such women.

Definition: The percent with an unmet need for family planning is the number of women with unmet need for family planning expressed as a percentage of women of reproductive age who are married or in a union. Women with unmet need are those who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children or wanting to delay the birth of their next child. (13)

2.4 Method of computation of unmet need

The majority of estimates of unmet need for family planning follow the procedure adopted in the Demographic and Health Surveys (DHS), which is regarded as the standard method of computation.

Unmet need for family planning =	Women (married or in a union) who are not using contraception, are fecund, and desire to either stop childbearing or postpone their next birth for at least two years + pregnant women whose current pregnancy was unwanted or mistimed + women in post-partum amenorrhea who are not using contraception and, at the time they became pregnant, had wanted to delay or prevent the pregnancy Total number of women of reproductive age (15-49) who are married or in a union	x 100
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Figure : 2.1 computing formula for unmet need of family planning.

The indicator includes in the numerator:

1. All pregnant women (married or in a union) whose pregnancies were unwanted or mistimed at the time of conception.
2. All postpartum amenorrheic women (married or in a union) who are not using family planning and whose last birth was unwanted or mistimed.
3. All fecund women (married or in a union) who are neither pregnant nor postpartum amenorrheic, and who either do not want any more children (want to limit family size), or who wish to postpone the birth of a child for at least two years or do not know when or if they want another child (want to space births), but are not using any contraceptive method are excluded from the numerator are in fecund women as well as pregnant and postpartum amenorrhea women who became pregnant

unintentionally due to contraceptive method failure, when that information is available. The diagram below offers a visual aid for the computation of the indicator.

2.5 Rationale and interpretation

The concept of unmet need points to the gap between women's reproductive intentions and their contraceptive behavior. The indicator is useful for tracking progress towards the target of achieving universal access to reproductive health. Information on unmet need for family planning complements the indicator of contraceptive prevalence. The sum of contraceptive prevalence and unmet need provides the total demand for family planning.

This indicator provides a measure of the extent of unmet need for family planning at a particular time. When unmet need is measured in a comparable way at different dates, the trend indicates whether there has been progress towards meeting women's needs in this regard. It should be noted that, even when contraceptive prevalence is rising, unmet need for family planning may sometimes fail to decline, or may even increase. This can happen because the demand for family planning increases due to declines in the desired number of children. Changes in the desired spacing of births or changes in the percentage of women who are at risk of pregnancy can also influence the trend in demand for family planning, independently of trends in contraceptive prevalence. (14)

Contraceptive users have risen, but unmet needs remain constraints. Most women today want two, three or four children - fewer than in generations past. The use of modern contraceptive methods, including voluntary sterilization, has increased rapidly over the past 30 years, especially in countries with strong family planning programmes. In less developed regions, contraceptive use approaches 60 per cent of couples. Most of this increase reflects greater contraceptive use by women. But in many countries, poverty and profound inequalities between men and women limit women's ability to plan their pregnancies. So does lack of access to effective contraceptive protection. Differing patterns of contraceptive use may not reflect women's personal preferences as much as political and economic decisions made by governments to emphasize certain methods, the attitudes of medical professionals,

cost, the limited range of methods offered in some countries or an uneven availability of contraceptive supplies.(13)

Research is the main proposed activities to address this unmet need to understanding the needs and perspectives of these groups and to testing interventions to expand access to use of family planning methods. Similarly to develop appropriate indicators to measure unmet need adapting those guidelines to implement the family planning programme for different population groups. At the same time if we can continue the supportive activities to the nations to address the unmet need. Few activities like Introducing best practices to address unmet need, integration and linkages with related stakeholders for financing and sustainability similarly developing national capacity to strengthen health information systems to monitor trends and to evaluate programme efforts to address the unmet need. (13)

2.6 Global scenario on unmet need of family planning

An estimated 222 million women in developing countries would like to delay or stop childbearing but are not using any method of contraception. The major causes behind this include: limited choice of methods; limited access to contraception, particularly among young people, poorer segments of populations, or unmarried people; fear or experience of side-effects; cultural or religious opposition; poor quality of available services; Gender-based barriers etc.

The unmet need for contraception remains too high. This inequity is fueled by both a growing population, and a shortage of family planning services. In Africa, 53% of women of reproductive age have an unmet need for modern contraception. In Asia, and Latin America and the Caribbean – regions with relatively high contraceptive prevalence – the levels of unmet need are 21% and 22%, respectively.

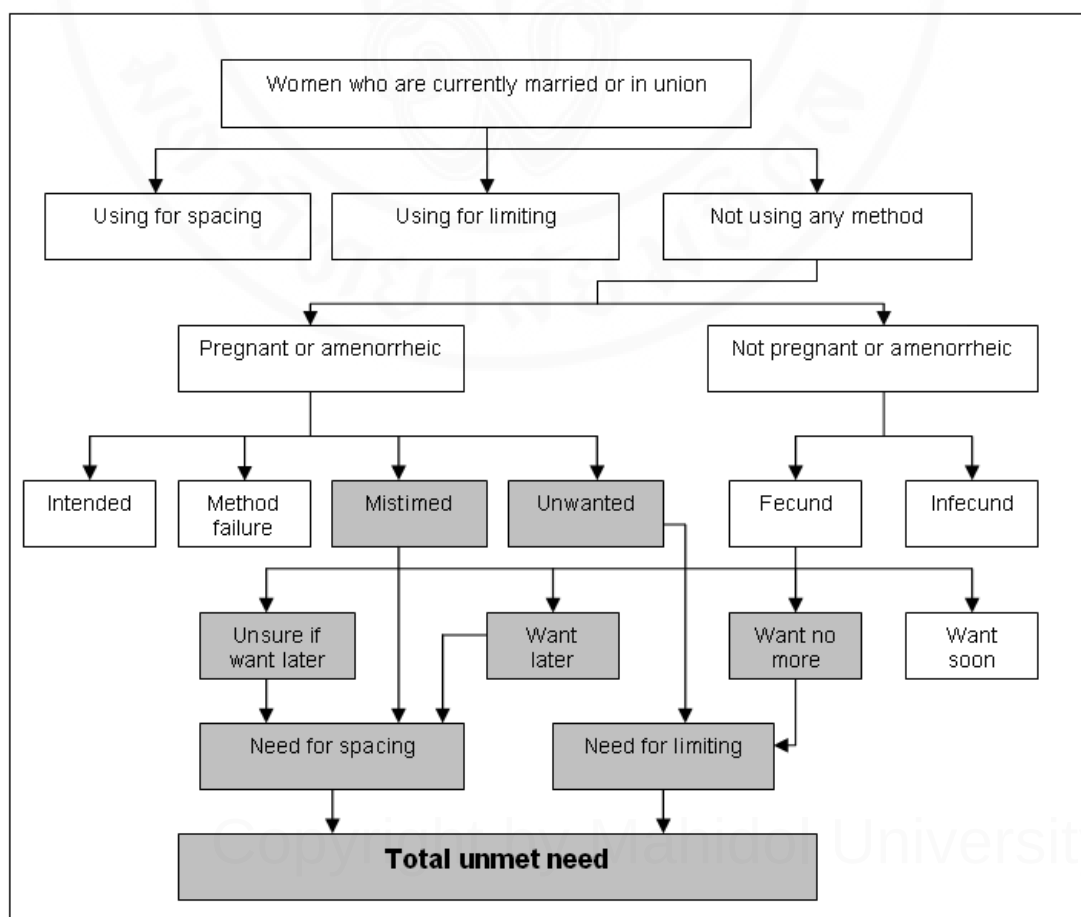
If we see the scenario of South East Asia and Asia pacific region, Nepal still have to do much more to achieve the goal on reproductive health following table shows few glance on it.

Table 2.1 Major indicators of family health in south Asian countries

Countries Indicators	Afgnstan	Bangladesh	Bhutan	India	Nepal	Pakistan	Sri lanka
PGR	3.4	1.3	1.4	1.4	1.7	2.1	0.9
MMR	1800	570	440	450	281	320	58
IMR	165	47	56	54	43	73	17
TFR	6.4	2.2	2.5	2.7	2.7	3.9	2.3
CPR	19	56	31	56	48	30	68
Unmet need	NA	17	NA	13	25	25	18

Unmet need of family planning of different countries reflect a close association with many other indicators like IMR, MMR and Population growth. (38)

2.7 Diagram on computation of unmet need of family planning.



2.8 Review of PRECEDE-PROCEED Model:

It is a planning model specially to promote the health education programme the model designed by Lawrence Green and Marshall Kreuter. The main thrust of this model is that health related behaviors change through volunteer process.

This principle reflected a systematic process on empowering peoples with understanding, motivation, skills and active participation in the community affairs through which they will have an opportunity to improve their quality of life.

The basic theme of this model is with the principle of practice and principle of participation which ensure the behavior change through active participation of intended audience in defining their own high priority problems and to find out the solution.

Despite this model is used widely and considerable a great success, potential users of PRECEDE-PROCEED have some challenges in applying this model. The model is quite data-driven, and its application requires bit more financial and human resources, technical skill, and time resource as well, thus frustrating community planning teams interested in taking immediate action to address a problem. Green and Kreuter has describe situation analysis within the context of the social assessment as a way toward a balanced approach to planning—that is, one that neither shortcuts nor belabors the process. It may be possible to shorten some of the model's intermediate assessment phases by using the growing body of literature on frequently identified community priorities, determinants, and targets for change. The PRECEDE-PROCEED planning process also does not emphasize the specifics

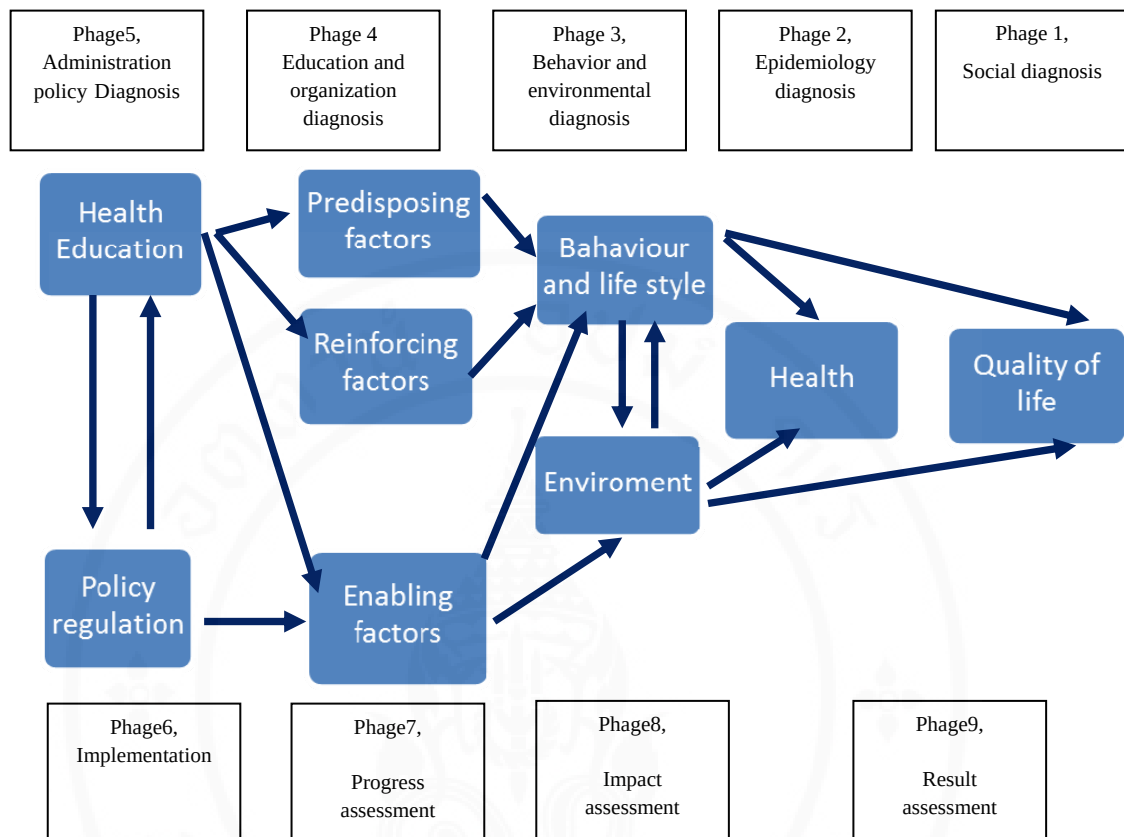


Figure: 2.2 Precede proceed model

Source: BOOK, Health behavior and health education **by** KAREN GLANZ
BARBARA K, RIMER K. VISWANATH

Predisposing factors: "Predisposing factors" are defined in these models as factors that exert their effects prior to a behavior occurring, by increasing or decreasing a person or population's motivation to undertake that particular behavior.

Reinforcing factors: Reinforcement is when a behavior is increased or maintained by its consequences. Reinforcement may be either positive or negative. The term comes from behavioral psychologists -- those who focus on the factors that cause and maintain behaviors (or actions).

Enabling factors: Enabling factors are antecedents to behavior that allow a motivation to be realized" It can affect behavior directly or indirectly through an environmental factor. It includes programs, services and resources necessary for behavioral and environmental outcomes to be realized and in some cases, new skills that are needed to enable health behavior change. (15)

2.9 Literature regarding to the factors related to unmet need for family planning.

2.9.1 Social support:

Social support is defined as “the existence of people on whom we can rely, people who let us know that they care about, value, and love us”. A comprehensive definition of social support is the "resources provided by others" The resources that are potentially useful information or things. (16, 17) On the other way, Social support means having friends and other people, including family, to turn to in times of need or crisis to give you a broader focus and positive self-image”. Social support improves quality of life and provides a buffer against adverse life events. Specific types of social support are beneficial in specific types of situations and there are three types of supports, emotional, instrumental and informational. Emotional (non-tangible) refers to the feeling of being loved, cared for and esteemed by others. Instrumental support refers to the assistant with tasks, such as money and housekeeping. Informational support means providing information to help someone. Social support can get from many different sources such as spouse, relatives, friends, neighbors, co-workers, superiors(16, 18).

Social support from a trusted group or valued individual can reduce the psychological and physiological consequences of stress and enhance immune function. Formal (a church or social club) or informal (meeting with friends) social networks provide a sense of belonging, security, and community. People that are supported by close relationships with friends, family, or fellow members from work, or other support groups are less vulnerable to ill health and premature death(19). For example, individuals suffered from leukemia or heart disease has higher survival rates if they have extensive social support. Social support from primary care providers are generally responsible for providing care for the patients with diabetes who may not compliance to clinical recommendations(3, 5). Therefore, social support is now become an accurate life-saver and there is also a strong relationship between social support and measures of wellbeing.

2.10 Review on Pre-disposing factors

2.10.1 Age

Age of reproductive age marriage women is the one of the most important factors that associates with contraceptive use. There are different findings and results of association of women age and contraceptive use depending on the different time and place of study.

As contraception is one of the important indicators for family planning, we should need to review the thesis related with family planning practice. In a study of “factors associated with the acceptance of family planning among married women of reproductive age in Ullapara Upazila, Bangladesh” by Taslim UK support that there is strong association between age of married women and acceptance of family planning. The result showed that the women who age within 15-29 years were accepting family planning of 64.4% and increased to about 83.5% in the age group 30-39 and 93.2% in the age group 40-49 years (20).

Another study conducted by Vanhnolrath P in Lao mentioned that there was significant association between age and contraceptive practice. The finding showed that the respondents among 30-34 years age group was highest in contraceptive use (75.9%) and those who aged less than 29 years was the lowest in contraceptive use (44.4%) (21).

One of the studies done in Democratic Republic of Congo by Kayembe and Fatuma revealed that teenagers (15-19 years) were the lowest contraceptive use compared with elder age group. The highest age group of contraceptive use in this study was (45-49 years). This study revealed that older women (30-35 years) are like to use modern methods than teenagers because teenagers have less knowledge about modern contraceptive methods (OR=3.04)(22). Therefore, age group and contraceptive use is different with time to time and country to country and age is also basic factor for every research and associated in many health related behavior

2.10.2 Education

Education of respondent plays an important role in various segments like making decision and basic background for health knowledge. One of the study

conducted by Hamadeh in Gulf Arab showed that the women with a lower educational status will have a larger family size and is related with low contraceptive use. Therefore the family size was inversely proportionate to the educational status of women and their husbands(23). Lower contraceptive usage was seen in illiterate women according to the report of UNFPA, the world population 2011(24).

In a study in Afghanistan revealed that contraceptive use before current gestation showed that contraceptive use is low among the women of less educated in Kabul, Afghanistan. The contraceptive use of women who have higher educational level (OR, 1.16; 95%CI, 1.09 -1.22) is more compared with other educational levels(25).

The study in Laos by Vanhnolrath P mentioned that women with secondary or higher level of education practiced family planning (60.7%) higher than primary school (58.9%) and (36.6%) for no educated women. However there is no significant association between educational level of women and family planning practice ($P=0.051$) (21). One of the study in Pakistan indicated that better educated women are more likely to practice contraception than uneducated(26). By reviewing many previous researches, we can conclude that the higher the education of a woman the more use of contraception than others do.

2.10.3 Occupation

There is strongly relationship between occupation status and contraceptive use in some studies. The women those who work outside have considerably lower fertility than those without such experience. The women who have been employed are more likely to use contraception than other women. Some studies suggested that women who have worked outsides can afford for use of contraception but who have never worked outside has less likely to afford.

A study in Bhutan by Lhamu MC revealed that there was significant association between occupation of the women and contraceptives use (p -value .003). In this study, the most of the respondents who used contraceptives were those who are working outside. This study suggested that women who are working outside had information about appropriate method of contraception and had easy access to attend this services(27).

2.10.4 Family Income

Total family income can affect the contraceptive use. The richer the family is, the better chance to access contraception. According to the finding of developing countries, the odds of the poorest 20% compared to the richest 20% of respondents are 74%, 84% and 94% lower for use of modern contraception, taking of antenatal care and skilled attendance at delivery respectively(28).

In a study of contraceptive use among the poor women in Indonesia by Schoemaker J revealed that extremely poor women were less likely to use modern contraceptive or to be used currently than moderately poor women. 43% of the poorest women were using modern contraceptives, compared with 53% of moderately poor and 59% of better-off women. Unmet need for modern family planning was highest among extremely women with poverty(29).

2.10.5 Number of living children

Number of family members especially number of living children is also one of the important factors for getting happily family life. If a family has many children, they will not want more children and they use contraceptive for preventing pregnancy. If a family does not have any children, they will want children to make their family complete.

A study in Laos revealed that married women (25%) who had 0-1 child were using contraceptives and those who had 2-3 living children were currently used contraceptive. The women (61.2%) who had 4-5 children were likely to practice family planning and those who had more than 5 children were practicing 46.6%. There are strongly associated with number of living children and current use of contraception(26).

2.10.6 Number of desired children

Number of desired children is varied with different countries in different situation depending upon the economic factors, religious factors, cultural factors and social norms. The study done by Hamadeh showed that the duration of marriage, ideal number of children, age of women at last delivery and crowding index had positive effects on family size (8).

In a study of “Factors related to the contraceptive use among married migrant women of reproductive age in Maesot, Tak province, Thailand” by Thwin T revealed that women who had desired for additional children (70.69%) were current user and 29.31% didn’t use contraception. The women who had no desired of additional children were 77.61% in current user. There is no significant relationship between number of desired children and contraceptive use(30).

By applying those previous studies, the ideal number of children is different in different regions and it is association with contraceptive use. Hence, the desired number of children is also one of the interesting factors to analyze.

2.10.7 Knowledge on contraception

Knowledge is the first step of behavior change, which was mentioned by most of the behavior change model. Therefore, more women’s knowledge of contraception might increase contraceptive use(31).

A study by Schoemaker J on “Contraceptive use among poor in Indonesia” explored the cause of nonuse. It was found that the most mentioned group of reasons involved knowledge such as lack of knowledge about family planning methods.12% of extremely poor and 9% of moderately poor women mentioned with these reasons, compared with 6% of better off women concluded that knowledge factors had strongly related with acceptance of family planning. They were as strong as or stronger than those found for socio-economic factors. Hence, knowledge of contraception is vital for using contraceptive methods (32).

One of the studies in Democratic Republic of Congo revealed that the women who have explained about contraceptive methods and those who have used before were more likely to be current users. This study indicated that they have more knowledge of modern contraceptive methods than others. This study also mentioned that the teenagers were less knowledge of modern methods (pill, IUD and Diaphragm) compared to the other age group(8).

2.10.8 Attitude on Contraception

Attitude is a proven state of predisposition to response in particular way. It cannot be seen, but can be inferred. Attitude is an important factor in acceptance of contraceptive usage whatever it is positive or negative.

Schoemaker J stated that, in “Contraceptive use among the poor in Indonesia” examined about attitudes toward childbearing and family planning among the three socioeconomic categories of women. The poorer the women, the more children they want in the developing countries according to his result. The mean ideal number of children was 3.4 for extremely poor women, 3.0 for moderate poor women and 2.8 for better-off women (32).

In another study by Thwin among Myanmar Migrant Women in Maesot revealed that 73.83% of current user had good attitude towards contraception and 69.44% had moderate attitude in practicing of contraception. But, in this study there is no significant association between current contraception practice and the respondents toward contraception (30).

2.11 Review on enabling factors

Availability, Accessibility and Affordability on contraception

Availability, Accessibility and Affordability of family planning services are important variables in contraceptive use. They include distance, source, cost and satisfaction of services. Accessibility is the one of the most important factors of unmet need for family planning in developing countries. the highest percentage of women with unmet need in Sub Saharan are Rawanda (37%), Malawi (36%), and Kenya(36%)(14).

In a study of “Factors related to the contraceptive use among married migrant women of reproductive age in Maesot, Tak province, Thailand” showed that contraceptive practice was high in women among accessible to free service. There is a significant association between payment and contraceptive practice (30).

Although the women have knowledge, good attitude toward on contraception and has a strong social support, if they cannot access the services or cannot afford for contraceptives, she cannot perform the behavior successfully. Therefore, we can conclude that these variables were strongly associated among married women and these are one of the important determinants for analyzing in contraceptive use.

2.12 Review on Reinforcing factors

Social Support

Social support can play an important role in a person's decision to use contraception. Most of previous researches could be reviewed variety of social support from health care providers, husband, friends and media. Health care providers involve in key roles for accessibility of the services and often consider as the gateway to the use of contraceptive.

In a study of "Family Planning Advice and Postpartum Contraceptive Use Among Low-Income Women in Mexico" by Barber SL mentioned that women who received information about family planning during Antenatal Care were expressively increased than those who did not receive (OR=2.2)(34).

Husbands also play an important role for couple methods and they can contribute to better use of contraception by their support (34). Schemaker mentioned that the respondent had discussed about family planning with their partner because of socio-economic status. Better economic conditions women, moderately poor women and extremely poor women to have discussion with their husbands are 52%, 46%, and 42% respectively. Therefore decision of husband is significantly associated with higher use of contraception (34).

In a study of "The role of social support and parity on contraceptive use in Cambodia" supported that women who had less discussion with their husbands about contraception were less likely to use contraception than others (OR= 0.6) (35). By reviewing the above studies, there were significant associated with contraceptive use and discussion and support from husband and friends.

A study of "Prevalence and factors associated with practice of modern contraceptive methods among currently married women in District Naushahro Feroze" in Pakistan showed that family planning among women was significantly associated to information family planning exposure through media (37).

CHAPTER III

METHODS AND MATERIALS

The study has designed as a cross sectional one. Conducted among MWRA in Syanja district, Western Development Region, Nepal to find out the underline factors associated with the unmet need of family planning.

3.1 Study Area

The study was conducted at Syanja district of WDR Nepal.

3.2 Study population

The target population of this study was MWRA (15 -49) years living at syanja district.

3.3 Inclusive criteria

Married women with reproductive age.

Married woman who is willing to participate in the study.

Married woman who is living with her husband.

3.4 Exclusive criteria

Married women with reproductive age but pregnant infertile, divorce or widow.

Married women who were not voluntarily agree to be participating in the study.

Married women with reproductive age who were absent at the time of interview.

3.5 Sample size estimation

Sample size will be calculated by the following formula:

$$\text{Infinite population.} \quad n = (z_{\alpha/2})^2 \cdot p(1-P) / d^2$$

n = Minimum sample size α = level of significance

$z_{\alpha/2}$ = standard normal deviation at 95% confidence interval = 1.96

P = Contraceptive prevalence rate (44% - DOHS report 2012)

d = allowable error = .06

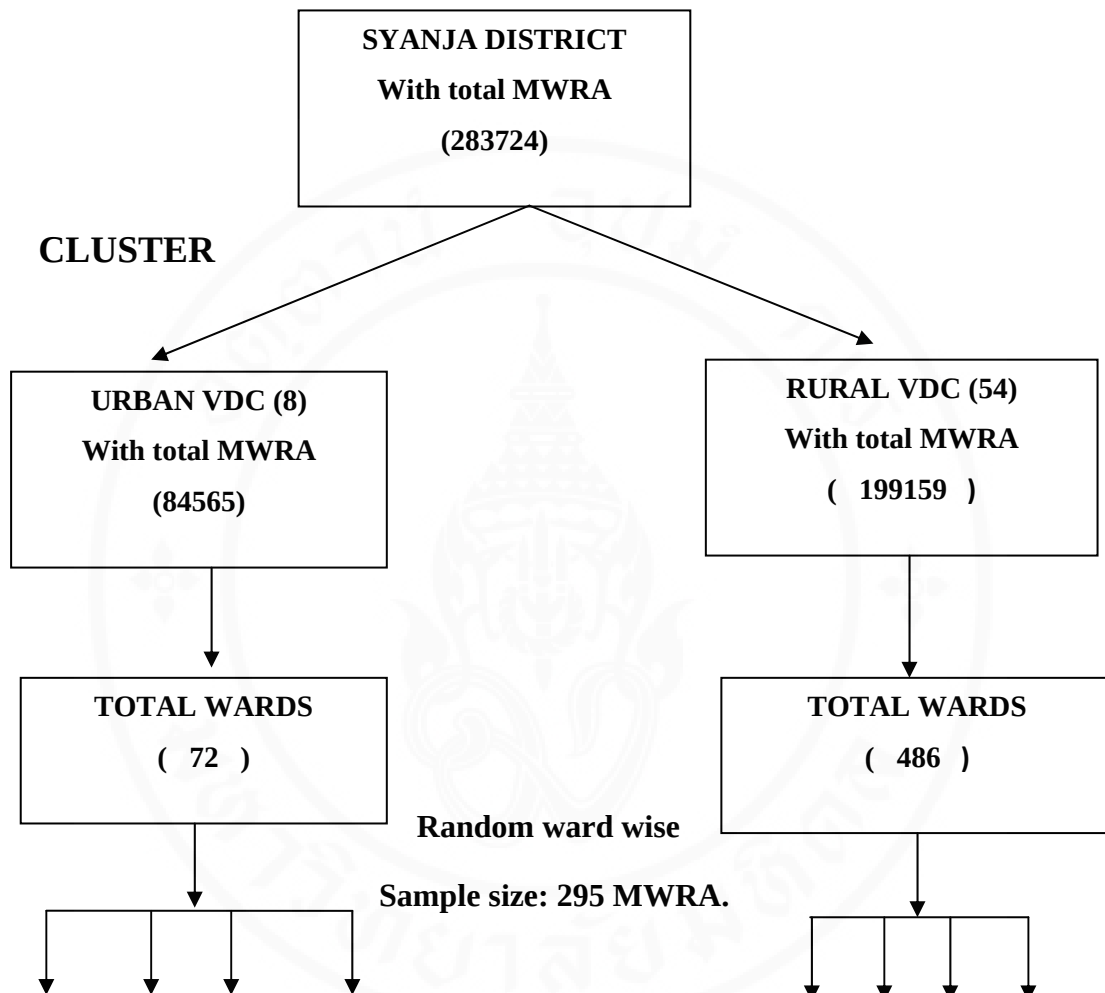
$$n = ((1.96)^2 \cdot (.44) \cdot (1-.44)) / (.06)^2 = 262$$

Total sample size $262 + 20\%$ of $262 = 314$.

3.6 Sampling Methods:

Syanja District has 60 village development committees (VDCs) and two municipalities. All together there are 4 urban intended VDCs and 58 rural VDCs. Every VDC has generally 9 wards. At the beginning a cluster was identified as an urban and rural VDC and then among the wards within those was randomly selected that is 8 wards from urban VDCs and 8 from Rural. From each ward 20 MWRA was selected as respondents. The final selection was done on the basis of residents (House) each alternative house will be selected and found the MWRA if there is not any MWRA another respondent search for another alternative home.

3.7 Sampling frame



3.8 Research instruments

Data collection was carried out by using the structured questionnaires. The questions were asked and filled up by eight trained/oriented volunteers along with the researcher himself. The questions were basically divided into 6 parts.

Part 1. General characteristics:

This part of the questionnaires includes the respondents' age, education, occupation, place of resident and number of living children etc.

Part 2. Knowledge in contraceptive methods:

To assess the knowledge of contraceptive methods 20 statements were asked to the respondents. Each correct answer was provided 1 score and for incorrect answer will consider as 0 score. Following is the total score and the interpretation of the result.

1. Good knowledge: more than 80% of total score (12 to 14)
2. Fair knowledge: more than 60% to 80% of total score (10 to 12)
3. Poor knowledge: less than 60% of total score (score 0-9)

Part 3. Attitude toward contraceptive methods

To evaluate the attitude of respondents toward contraceptives 20 statements were designed. Among those statements seven were positive and remaining seven were negative. The score for the response was provided as following way:

- Positive statements were scored as, Agree=3, undertrained= 2 and disagree= 1
- Negative statements were scored as, Agree=1, Undertrained =2 and Disagree= 3

High level attitude was considered who got more than 80% of possible score (29 to 39)

Low level attitude was considered who got less than 80% of total possible score (0-28)

Part 4. this part includes the reason for unmet need and met need for contraceptive methods.

Part 5. Enabling factors

The availability and accessibility was measured by asking questions including duration and distance of residence to service center for the family planning services etc.

Part.6 Social support towards contraception

To measure the social support, the respondent was asked 10 questions. The answer was 3 rating scales. Agree disagree and no comment. For each answer with agree was provided score 1 for disagree and no comment was provided 0 and finally Social support was computed as follow.

- 1 Good Support - $\geq 80\%$ of total score ($\geq 8-10$ score)
- 2 Fair Support - 60-79% of total score (6-8 score)
- 3 Low Support - $<60\%$ of total score (<6 score)

Part. 7 Availability, Accessibility and Affordability of contraceptive use

Those things was measured by taking their ideas on 10 statements regarding to availability and accessibility, place of service, distance of residence from service center, waiting time, and cost of contraceptive etc. finally the measurement was done on the basis of their responses. 8 to 10 positive responses considered as good availability 3 to 7 positive statement was moderate and less than three positive statements was considered as poor availability.

3.9 Validity and Reliability

3.9.1 Validity: Questionnaires was developed in consistent with operational definitions of variable and some questions were modified based on questionnaires of previous studies in similar field. That was developed after consultation with advisors and experts for its contents, explanation and appropriate wording.

3.9.2 Reliability: Pre-test of questionnaires was done before the interview was conducted in real community setting. About 32 respondents with similar general characteristics were taken as the study population. The purpose for doing pre-test was to find out the problems concerning the structure, component, respondents understanding and revised according to need. The reliability of questionnaires was tested by Cronbach's coefficient of Alpha. The outcome of reliability test was 0.825.

3.10 Data Collection

Before Starting the data collection, I was contacted to local authority of Syanja district and explained about the study and took permission or approval to conducted research in their area. Data was collected by interviewing to respondents. Eight Interviewers were trained before data collection and was explained about objectives of study, and the methodology. Training was conducted one full day and also trained how to inform to participants about confidentiality and many techniques of communicate with respondents to get the reliable data in sensitive questionnaires.

The data was collected from 320 MWRA during 15 January, 2014 to 10th February, 2014. Before interviewing, interviewer was explained about the respondent participation which is very helpful for future family program programme in that area but there is no direct benefit to respondent at current. The respondents were also informed that all their information would be kept confidential.

3.11 Data Analysis

Data analysis was carried out after checking all the questionnaires and enters the data through one the popular social research software programme SPSS. The analysis was also executed with the aid of SPSS program. Analysis basically done through descriptive statistics using mean, standard deviation, percentage, minimum and maximum values to describe dependent variable and independent variables. Chi-Square test was used to describe association between independent variables and dependent variable.

3.12 Ethical Consideration

Permission to conduct the study was obtained from National Health Research Council Kathmandu. The interviewers were explained and oriented the objective of the study before starting every questionnaire and get permission from the respondents. It was also clearly stated that to every respondents if they feel any discomfort they can stop the process of interview any time they want. Therefore, all

the participants had right to self-determination and autonomy was respected. The participation considered as a strictly voluntary and the respondent had given the right to choose not to answer the questions that made her feel uncomfortable. The respondent can ask questions to the interviewer whenever she wants. All the respondent's answers were keeping confidential and only the researcher can access the data. After the data extract from the questionnaire into software, it was destroyed. This study was done after attaining the approval of Ethical Review Committee of Mahidol University (EC Protocol No. 200/2556)

CHAPTER IV

RESULTS

One of the rural districts syanja Nepal was chosen as the study area whereas 295 samples of married women were visited and interviewed. This research focused on the met and unmet need of family planning and the factors associate with it. The Interview was conducted by the researcher along with eight volunteers with some public health knowledge. The data collection had been done from 20th Jan 2014 to 10th Feb 2014. Initially clustered was defined as remote area and urban area. In total, eight Village Development Committee (VDC) were selected for the data collection. Respondent numbers were determined on the proportion basis of number of total MWRA in those VDCs.

Although the sample size we estimated was 316 and the minimum sample size was 261, finally the researcher was able to collect the complete data from 295 MWRA. Therefore all the analysis has been done on the basis of sample size (n) = 295.

The result of this study has presented into 6 parts.

1. Met and unmet need of family planning of MWRA in syanja district Nepal.
2. The association of socio demographic factors, predisposing factors, reinforcing factors and enabling factors with met and unmet need of family planning
3. The descriptive findings of enabling factors (Availability and accessibility) of respondents regarding family planning services.
4. The descriptive findings of reinforcing factors (Social support) in family planning services.
5. The descriptive findings of the predisposing factors (Knowledge and attitude of respondent toward family planning)

6. The socio demographic characteristic of MWRA living in Syanja district Nepal.

4.1 Predisposing factors:

4.1.1 The socio demographic characteristic of MWRA living in Syanja district Nepal.

In this study the socio-demographic characteristics were evaluated according to the response from the study group (MWRA). The age at interview, age at marriage, educational level, occupations, religion, monthly income and total live birth have been evaluated.

Table no. 4.1 shows us the 8.5 % of respondents were belongs to 15-20 years, 42.4 % were come under 21-29 similarly 33.2% 30-39 and 16% belongs to 40-49 years the mean age of respondent at visited time was 30.41 ± 7.8 yrs.

Most of the women had history of early marriage (before 20 yrs) about 80% of the women have history of early marriage and 19% have history of marriage on age 21 to 25 years and very few 1.4% have marriage at the age of 26 to 29 the min age of marriage is 14 and maximum is 28 similarly the mean age of marriage is 19 years and SD 2.4.

More than half (56%) of the occupational status of respondent falls under housewives when 18% are working as a farmer and third most involved occupation is business which is 14.9% remaining are involve in government and private job.

Regarding to the educational status of the respondents, more than 60% have primary and secondary level education when 22% of the respondents have higher secondary level education and only a few (10.5%) respondents were with no education background.

Majority of respondents (91.2%) were Hindu, Buddha religion (6.8%) was second most religion from which the respondents were belonging and a few (1.7%) were Muslims and remaining 0.7% were other religion.

The annual income was another socio economical variable which was categorized into three categories about half of (49.8%) the respondents family income

is in between 10000 to 20000 Rupees similarly 49.5 % have more than 20000 monthly income and very few (0.7%) have income below 10000 Rupees per month.

About one third (30.2%) of the respondents had one living children whereas 35.6 % had two living children and 23.7% had three children. Exceptionally about 5% had more than 4 children and 5.8% had no children till now.

Table 4.1 Socio demographic characteristics of MWRA (n=295).

Characteristics	Number	Percentage
Age in year at interview		
15-20 yrs	25	8.5
21-29 yrs	125	42.4
30-39 yrs	98	33.2
40-49 yrs	47	16.0
Min = 17	Mean: 30.41± 0.858yr	Max: 49
Age at marriage		
10-15 yrs	14	4.7
16-20 yrs	221	74.9
21-25 yrs	56	19.0
26-30 yrs	4	1.4
Min: 14 yrs	Mean: 19 ±2.4yrs	Max: 28 yrs
Educational status		
No education	31	10.5
Primary level(5 yrs)	82	27.8
Secondary level(6-10 yrs)	117	39.7
Higher secondary level(11-12 yrs)	65	22.0

Table 4.1 Socio demographic characteristics of MWRA (n=295). (cont.)

Characteristics	Number	Percentage
Occupation		
Civil servants	18	6.1
Private job (business employee)	11	3.7
Business owners	44	14.9
agriculture	54	18.3
housewife	168	56.9
Religion		
Hindu	269	91.2
Buddhism	20	6.8
Muslim	4	1.4
Others	2	0.7
Monthly income of family		
below 10000 Nrs	2	0.7
10000-20000 Nrs	147	49.8
More than 20000 Nrs	146	49.5
Living children now		
No children	17	5.8
one child	89	30.2
Two children	105	35.6
Three children	70	23.7
4 children	12	4.1
More than 4 children	2	.7

4.1.2 Knowledge level of MWRA regarding family planning methods:

Knowledge is the first primary asset to the clients and the couples for proper choice of method and voluntarily decision making to use any appropriate method of family planning. Therefore it was assessed with 20 statements and the argument/knowledge on it.

The knowledge regarding family planning methods of MWRA of Syanjan district was classified into 3 levels. 39% had a fair knowledge of contraceptive methods and its availability of services similarly 36% had good knowledge and 25% still had with poor knowledge.

Table 4.2 Number and percentage distribution of MWRA knowledge in family planning.

Knowledge level	Frequency	percentage
Good knowledge	107	36.0
Fair knowledge	113	39.0
Poor knowledge	72	25.0
Total	292	100.0

In the table 4.3 have 20 different statements regarding the knowledge of contraceptives are presented. Among 20 statements 17 statements were positive and remaining 3 were negative. Questions were more related to the uses of contraceptives, side effects, specific methods, duration of the methods, advantages and the consideration for choosing different methods etc.

The responses regarding depo- Provera, Oral Pills, condom and over all family planning were given correct by more than 90% respondents when many MWRA had a miss-perception about vasectomy as it can cause the back ache and the response were positive only by 19% similarly a list knowledge was projected about,

IUCD, Tubectomy and implant with 35%, 42% and 48% correct responses respectively.

Table 4.3 Knowledge level of the MWRA

Knowledge Statements	Correct answer	Percent
Use of family planning methods can prevent unwanted pregnancy	268	90.8
OP/Condom/depo are temporary methods of FP methods	269	91.1
Depo-Provera is used once in every three months	267	90.5
OP must be taken in the same time each day	224	75.9
IUCD and Implants are long term FP methods	233	79.0
Nausea and vomiting is side effect of oral pills	188	63.7
IUCD should insertion who have at least one child	144	48.8
Irregular bleeding is a side effect of Norplant	144	48.8
Condom also can prevent STI and HIV.	263	89.2
Vasectomy is a permanent method of FP for male	232	78.6
Tubectomy is a permanent method of FP for female	180	61.0
Reverse of fertility is possible after stopping temp. methods of FP	221	74.2
IUCD is proper method to prevent the birth more than 5 years	196	66.6
OP is a best method for newly married couples.	143	48.5
Vasectomy is a best method to stop children forever	208	70.5
IUCD can move toward heart of women	105	35.6
Vasectomy can cause back ache for male	57	19.3
Tubectomy can harm to the women health	126	42.7

4.1.3 Attitude of MWRA towards family planning methods

Table no 4.4 projected the attitude of the respondents regarding family planning. Total of 20 statements was designed for this purpose. Two categories were executed for the attitude level of the respondents. Positive attitude which was considered to the respondents who had the higher score then mean value score (54

and above) of total score and Negative attitude were considered to those who got the equal or less than the mean value of total scores.

Thus there were 60.7% respondents who had negative/low attitude towards family planning and only 39.3% had a positive/high attitude toward family planning.

Table 4.4 Attitude toward family planning methods

Attitude	Number	Percent
Low level attitude	179	60.7
High level attitude	116	39.3
Total	295	100.0
Min: 28 Max: 72		Mean±SD: 54±5.66

In table no 4.5, the total of 20 statements regarding attitude toward family planning and the responses (strongly agree, Agree, disagree and strongly disagree) to those statements has given.

Table 4.5 Number and percentage distributions of attitude towards family planning methods

Attitude towards family planning methods	Strongly agree		Agree		Disagree		Strongly disagree	
	n	%	n	%	N	%	n	%
Use of family planning benefits women health	2	0.7	37	12.5	188	63.7	68	23.1
Women can prevent unwanted pregnancy by using family planning method	8	2.7	195	66.1	92	31.2	0	0.0
Modern family planning methods are more effective than traditional and natural methods	6	2	43	14.6	203	68.8	43	14.6
Using family planning methods can cause malformation of the baby *	18	6.1	161	54.6	101	34.2	15	5.1

Table 4.5 Number and percentage distributions of attitude towards family planning methods (cont.)

Attitude towards family planning methods	Strongly agree		Agree		Disagree		Strongly disagree	
	n	%	n	%	N	%	n	%
Using family planning method can reduce sexual pleasures*	15	5.1	151	51.2	113	38.3	16	5.4
Most of the family planning methods have more benefits than side effects.	5	1.7	32	10.8	216	73.2	42	14.2
Using family planning methods can cause long term infertility.*	13	4.4	139	47.1	128	43.4	15	5.1
Men /husband should share the equal responsibility of accepting family planning method.	3	1	13	4.4	171	58	108	36.6
Vasectomy can cause long term negative health effects and impotence to men.*	19	6.4	145	49.2	111	37.6	20	6.8
Having large family size has more economical benefits.*	39	13.2	185	62.7	52	17.6	19	6.4
A couple who adopted family planning is a happy family.	4	1.4	22	7.5	205	69.5	64	21.7
Getting pregnant is natural/god gifted phenomenon so it should not control.*	43	14.6	178	60.3	57	19.3	17	5.8
Having sons is important in family.*	20	6.8	121	41	116	39.3	38	12.9
I advise other women to use family planning methods.	6	2	38	12.9	192	65.1	59	20
Vasectomy reduce sexual activity*	15	5.1	181	61.4	81	27.5	18	6.1
Vasectomy is a painful operation*	15	5.1	151	51.2	114	38.6	15	5.1

Table 4.5 Number and percentage distributions of attitude towards family planning methods (cont.)

Attitude towards family planning methods	Strongly agree		Agree		Disagree		Strongly disagree	
	n	%	n	%	N	%	n	%
Though I don't want child pill is proper method*	15	5.1	120	40.7	135	45.8	25	8.5
IUCD and Implant work quite long time similar as permanent methods.	7	2.4	48	16.3	204	69.2	36	12.2
If I want to stop child forever sterilization is the best way.	6	2	34	11.5	169	57.3	86	29.2
Sterilization is an unnecessary health burden.*	33	11.2	202	68.5	43	14.6	17	5.8

* Negative statements.

4.2 Enabling factors:

4.2.1 Availability and accessibility of family planning.

To find out the availability and accessibility of family planning services in the community, 10 statements were designed which were mostly focused on the service centers, human resources and their presence and affordability etc.

According to the available data and format the availability and accessibility were classified into three groups: good, moderate and low. The positive response 8 to 10 belongs to good; 3-7 belongs to moderate and 3 and below positive responses were considered as a low accessibility and availability.

Hence most of (82.4%) the respondents had express a low availability and accessibility of the services in the area 12.9% had moderate and only a few 4.4% respondents had a good accessibility and availability of the family planning services.

Table 4.6 Frequency distribution level of availability and accessibility of family planning services

Status	Frequency	Percent
Good accessibility/availability	13	4.4
Moderate availability/accessibility	38	12.9
Low availability/accessibility	243	82.4
Total	295	100

Table no 4.7 reveals the statements regarding availability and accessibility and the responses of MWRA. According to the responses most of the MWRA (30.8%) were get services through FCHV when a very low (12.2%) access of out- reach camp services was experienced and the access of private clinics also in a very low status (8.8) to the clients. 81% of respondents are not convinced on the 24 hour availability of health workers in the health center for services. The important and final question regarding availability and accessibility, which was about how convenient the family planning service for you, in this question only 19.3% respondents were responded as a convenient and the remaining were against it.

Table 4.7 Frequency distribution of responses on availability and accessibility (n: 295)

Characteristics/statements regarding availability and accessibility	Number	percent
We can go and visit to FCHV to get pills and condom.		
Agree	91	30.8
Disagree/No idea	204	69.2
IUCD and Implant can be provided by trained Nurses and ANM from HP.		
Agree	78	26.4
Disagree/No idea	217	73.6

Table 4.7 Frequency distribution of responses on availability and accessibility (n: 295)
(cont.)

Characteristics/statements regarding availability and accessibility	Number	percent
Sterilization camp is organized every year near by the village.		
Agree	36	12.2
Disagree/No idea	259	87.8
All family planning methods are provides in free of charge.		
Agree	83	28.1
Disagree/No idea	212	71.9
Health workers are available 24 hours in the health center.		
Agree	56	19.0
Disagree/No idea	239	81.0
We should not wait for long time for the service.		
Agree	51	17.3
Disagree/No idea	244	82.7
The services also available in private clinics(n=294)		
Agree	36	12.3
Disagree/No idea	258	87.5
Private clinic have more easy process to get services.		
Agree	26	8.8
Disagree/No idea	269	91.2
Private clinic have more easy process to get services.		
Agree	26	8.8
Disagree/No idea	269	91.2
Payment in the private clinic is affordable.		
Agree	90	30.5
Disagree/No idea	205	69.5

Table 4.7 Frequency distribution of responses on availability and accessibility (n: 295)
(cont.)

Characteristics/statements regarding availability and accessibility	Number	percent
The service available in the area is convenient for me.		
Agree	57	19.3
Disagree/No idea	238	80.7

Table no. 4.8. Demonstrate about the services center for the family planning services. Health posts and sub health post were the most used (61.1%) service center similarly FCHV were providing 11.5% services to client and few of the respondents had experience of getting services from more than two service centers. On the basis of the responses 86.1% the clients have their resident 1 to 3 km far away from the service center secondly 12.9% of respondents were more than 3 km far away from the service center and a very few (1%) respondents only are close to the service centers that is less than 1 km and total of 92.2% of the respondents had to spend 30 minute to 1 hour and remaining were more than 1 hour to reach the service center.

Table 4.8 Most common service centers, duration and distance

Characteristics	Number	percent
Service centers they mostly used for FP services.		
FCHV(Female Community Health Volunteer)	34	11.5
SHP (Sub Health Post)	73	24.7
HP (Health Post)	137	46.4
Private medical hall	11	3.7
From all level	40	13.5
Distance of the service center to take FP services.		
Less than 1 km.	3	1.0
1 to 3 km	254	86.1
More than 3 km	38	12.9

Table 4.8 Most common service centers, duration and distance (cont.)

Characteristics	Number	percent
Duration to reach to the FP service center.		
30 minute to 1 hour	272	92.2
More than 1 hours	23	7.8

4.3 Reinforcing factors

4.3.1. Social support:

Social support is one of the important determinant that realized by many researchers in case of adaptation of family planning services. In this study the response of the respondent were divided into three categories: strong social support, moderate social support and low social support. In total there were 10 statements were designed to find out the social support status of the respondents the respondent who were agree on 8 to 10 statements, considered as strong social support, 6 to 8 were considered as moderate and less than 6 were considered as low social support.

Table 4.9 Total social support status

Status	Frequency	Percent
Strong social support	224	75.9
Moderate social support	40	13.6
Low social support	31	10.5
Total	295	100.0

The table 4.9 reveals many (75.9%) respondents have strong social support to adopt the family planning services and remaining 13.6% and 10.5% have moderate and low level of social support respectively.

In the table below 4.10, Most of the statements have 80% agreed by the respondents. It means most of they do have a strong support from their husbands, friends, and health workers. Specifically, 88.1% of respondents have strong support of

their husbands and 91.5% MWRA are supported by the health workers and about 85% from their friends.

Table 4.10 Social support to use family planning methods

Categories/statements	Number	Percent
My husband encourages me to use FP methods to prevent pregnancy.		
Agree	260	88.1
Disagree	21	7.1
no comments	14	4.7
My husband gives me necessary information on FP services.		
Agree	148	84.1
Disagree	27	9.2
no comments	20	6.8
My husband takes care when I get any health problems because of the family planning.		
Agree	265	89.8
Disagree	14	4.7
no comments	16	5.4
My friends give me information of family planning.		
Agree	257	87.1
Disagree	26	8.8
no comments	12	4.1
My friends encourage me for using contraceptive methods.		
Agree	244	82.7
Disagree	36	12.2
no comments	15	5.1

Table 4.10 Social support to use family planning methods (cont.)

Categories/statements	Number	Percent
FCHV regularly support me to use the contraceptive method.		
Agree	238	80.7
Disagree	38	12.9
no comments	19	6.4
Health workers give me the information regarding family planning.		
Agree	270	91.5
Disagree	19	6.4
no comments	6	2
I got family planning information through media (radio/TV/papers).		
Agree	265	89.8
Disagree	19	6.4
no comments	11	3.7
My husband takes me to health center/camp for FP services.		
Agree	241	81.7
Disagree	35	11.9
no comments	19	6.4
Friend's advice to me when I got side effect from using FP.		
Agree	247	83.7
Disagree	36	12.2
no comments	12	4.1

4.4 Met and Unmet need of family planning:

4.4.1 Unmet need according to the WHO: In this study the analysis of met and unmet need has been compute two different way one is as per the definition of WHO and another as per the context to the study area and some more consideration like use of improper method for improper objective also considered as unmet need.

Table no 4.11 shows the met and unmet need of family planning as per the definition of WHO. Respondent wants to use some type of family planning method but not Using any one of modern FP method during the period of interview. It projected the 88.8% met and remaining 11.2 % is unmet need of family planning.

4.4.2 Computing unmet need on the basis of special considering with few conditions: According to the context of the study area and the numerous situations which could be considered as an unmet or met need of family planning, we have developed a definition to cover wider range of unmet need in the area. Little controversy with WHO definition could be created but still it has been realized that it will cover the unmet need in larger scale which some time does not cover with the WHO definition. It has been tried to be more practically recommend the new way of decreasing unmet need and achieving CPR as per the MDG has been targeted. Table no 4.12 has demonstrated the different condition which can be considered as unmet need for that particular society.

Table 4.11 Met and Unmet need of family planning according to the WHO definition.

Status	Frequency	Percent
Met need (want and used some modern FP method)	262	88.8
Unmet need (want but not using any methods of FP)	33	11.2
Total	295	100.0

4.4.2 Computing unmet need on the basis of special considering with few conditions: According to the context of the study area and the numerous situations which could be considered as an unmet or met need of family planning, we have developed a definition to cover wider range of unmet need in the area. Little controversy with WHO definition could be created but still it has been realized that it

will cover the unmet need in larger scale which some time does not cover with the WHO definition. It has been tried to be more practically recommend the new way of decreasing unmet need and achieving CPR as per the MDG has been targeted. Table no 4.12 has demonstrated the different condition which can be considered as unmet need for that particular society.

Table 4.12 Computing unmet need on the basis of responses considering some condition

SN		Condition 1	Condition 2	Condition 3	Status
1	One child	No plan for more child	Using nothing	Husband away(for years)	Unmet need
2	One child	No plan for more child	Using temp. method except IUCD/Impalnt		Unmet need
3	One child	Plan for more child	Using nothing	Husband away	Met need
4	One child	No plan for more child	No response	Any reason	Unmet need
5	Two children	No plan for more child	Using temp method except IUCD/Implant	Any reason	Unmet need
6	Two or >2 children	No plan for more child	Using nothing	Religious reason	Unmet need

Met and Unmet need on the basis of above mentioned criteria, Table no 4.13. Shows us a heavily contract result with 53.6% unmet need and 46.4% met need of family planning. This could a realistic and contextual unmet need of family planning of this community.

Table 4.13 The met and Unmet need of family planning according to the conditions mentioned above.

Status	Number	Percent
Met need if FP	137	46.4
Unmet need of FP	158	53.6
Total	295	100.0

Table no 4.14 has some related indicators with met and unmet need of family planning on the basis of the responses of MWRA syanja district.

Out of total 295 respondents, 193 (65.6%) have no plan for any further children but only 76 MWRA wants to use some modern family planning method and 180 couples are using one of the modern family planning method. Among 180 only 130 women and 50 man are using contraceptives. Among total users of family planning method (180), 17 vasectomy 12 tubectomy and 12 IUCD /Implant, hence all together 41 respondents have some appropriate method to limit their children but in the purpose of method used, 108 respondents response they want to limit their children. Therefore here we can see the gap in between they want and they are using and another concern is peoples have a wrong choice which is no addressing the purpose of them or they are not using appropriate methods. In this study we tried to compute such many condition as an unmet need and defined it as per the situation and circumstance of the study area and the country policy regarding to family planning.

Table 4.14 Other determinants of met and unmet need of family planning

Characteristic	Number	Percent
Number of children now (N=295)		
No child	17	5.8
One child	88	29.8
Two children	105	35.6
Three children	70	23.7
≥4 children	15	5.1

Table 4.14 Other determinants of met and unmet need of family planning (cont.)

Characteristic	Number	Percent
Planning for further child (n=295)		
Yes we do have plan	101	34.4
No we don't have plan	193	65.6
Desire to use the FP method (n=274)		
Yes I want to use	76	27.73
No I don't want	198	72.26
Using any family planning method by couple (n=294)		
Yes we are using	180	61.2
No we are not using	114	38.8
Method they are using (n=180)		
Oral pills	48	26.7
Condon	33	11.2
Injectable	58	19.7
IUCD/Implant	12	4.1
Tubectomy	12	4.1
Vasectomy	17	5.8
Purpose of Method use (n=180)		
Spacing	58	32.2
Limiting	108	60.0
Economic condition	8	4.4
Poor health	4	2.2
Low age of parents	2	1.1

Table 4.14 Other determinants of met and unmet need of family planning (cont.)

Characteristic	Number	Percent
Reason behind not using any FP		
method(n=203)	36	17.73
To have more child	30	14.77
Husband does not want	9	4.43
Shame	17	8.37
Side effects of contraceptives	101	49.75
Husband out migrated/away	2	0.98
Religion	3	1.47
Lack of information	5	2.46
Far service site		

4.5 Associations between independent variables and unmet need of family planning.

4.5.1 Demographic characteristics and unmet need of family planning.

The association in between age group and unmet need is demonstrated in the table no. 7. It shows a significant association in between the factors (p value- <0.001). The age 40-49 have more (68.1%) unmet need of family planning. With most controversy, less than 20 years of age group have only 20% unmet need.

Similarly the association in between educational level and unmet need also have a significant association with p value 0.001. The respondents with no education and primary education have high unmet need with 61.3% and 67.1% respectively when secondary level and higher secondary level education group have low unmet need (52.1% and 35% respectively)

Occupation has no significant association with unmet need of family planning (p value 0.896). Thus government job holders have 61.1% and private job holder have 45.5% unmet need and other categories have also more than 50% unmet need of family planning.

Most importantly the association in between the live children they do have and unmet need of family planning also have a significant association with p value- <0.001 . MWRA with few children have low and more children have high unmet need of family planning. 5.9% and 31.5% unmet need is projected for no children and one child category when couple with 2 , 3 and 4 children have 61.9%, 78.6%, 64.8% unmet need respectively.

Finally the association between monthly income and unmet need of family planning is not significant with p value 0.560.

Table 4.15 Association demographic characteristic and Unmet need of family planning.

Characteristics	Total number	Need for family planning				P value
		Met need		Unmet need		
		n	%	n	%	
Age groups						
15-20 yrs	25	20	80.0	5	20.0	<0.001
21-29 yrs	125	68	54.4	57	45.6	
30-39 yrs	98	34	34.7	64	65.8	
40-49 yrs	47	15	31.9	32	68.1	
Total	295	137	46.4	158	53.6	
Educational level						
No education	31	12	38.7	19	61.3	0.001
Primary level education	82	27	32.9	55	67.1	
Secondary level education	117	56	47.9	61	52.1	
Higher secondary level	65	42	64.6	23	35.4	
Total	295	137	46.4	158	53.6	

Table 4.15 Association demographic characteristic and Unmet need of family planning.

Characteristics	Total number	Need for family planning				P value
		Met need		Unmet need		
		n	%	n	%	
Occupation						
Gov job	18	7	38.9	11	61.1	0.896
Private job	11	6	54.5	5	45.5	
Business	44	22	50.0	22	50.0	
Agriculture	54	26	48.1	28	51.9	
Housewives	168	76	45.2	92	54.8	
Total	295	137	46.4	158	53.6	
Number of total living birth						
birth	17	16	94.1	1	5.9	<0.001
No children	89	61	68.5	28	31.5	
One child	105	40	38.1	65	61.9	
Two children	70	15	21.4	55	78.6	
Three children	14	5	35.7	9	64.8	
≥Four children						
Monthly income						
Below 20000 Nrs	149	72	48.3	77	51.7	0.560
More than 20000 NRS	146	65	44.5	81	55.5	

*Tested by chi-square and fisher exact test to evaluate the associate

4.5.2 Predisposing, enabling and reinforcing factors and unmet need of family planning.

Table no 4.15. reveals the association in between knowledge level, attitude level, social support level, availability /accessibility of contraceptive services and the unmet need of family planning.

In general no any of those factors has any significant association with unmet need of family planning. In the table good knowledge have bit more (56.1%) unmet need in comparison to the fair knowledge group it is 48.7% and poor knowledge have also not quite high (58.3%) unmet need of family planning.

Regarding to the attitude toward the family planning and unmet need, there is 49% unmet need in positive attitude group and 57.9% in group with negative attitude. Similarly strong social support have 51.8% moderate attitude have 67.5% and low social support have 48.4% unmet need of family planning can be observed.

Regarding to the availability and accessibility of services and the association good condition of availability and accessibility have 46.2% moderate have 46.1% and poor accessibility and availability have 55.6% unmet need of family planning.

Table 4.16 Association between predisposing, enabling and reinforcing factors and unmet need

Characteristics	Total number	Need for family planning				
		Met need		Unmet need		P value
		N	%	N	%	
Knowledge of contraceptive method(n=192)						
Good knowledge	100	47	43.9	60	56.1	0.365
Fair knowledge	113	58	51.3	55	48.7	
Poor knowledge	72	30	41.7	42	58.3	
Attitude toward contraceptive use (n=295)						
High level	143	73	51.0	70	49.0	0.124
Lower level	152	64	42.1	88	57.9	

Table 4.16 Association between predisposing, enabling and reinforcing factors and unmet need (cont.)

Characteristics	Total number	Need for family planning				P value
		Met need		Unmet need		
		N	%	N	%	
Social support to adopt family planning(n=295)						
Good support	224	108	48.2	116	51.8	0.154
Moderate support	40	13	32.5	27	67.5	
Low support	31	16	51.6	15	48.4	
Availability and accessibility of FP services(N=294)						
Good	13	7	53.8	6	46.2	0.262
Moderate	38	22	57.9	16	42.1	
Low	243	108	44.4	135	55.6	

*Computed p value from chi square test.

Table no 4.17 shows the association in between distance, duration and unmet need also cannot observe any significant association. MWRA whose resident is less than 3 km away from the family planning service center have 53.3% and more than 3 km have 55.3% unmet need of family planning. similarly the duration to reach to the health facility for the family planning, less than an hour have 53.7% and more than an hour have 52.5% unmet need of family planning and no significant association with p value 0.481.

Table 4.17 Association between distance/duration to the health facility and unmet need

Characteristics	Total number	Need for family planning				P value
		Met need		Unmet need		
		N	%	N	%	
Distance from the service center (N=195)						
Below 3 kilometer		120	46.7	137	53.3	
More than 3 kilometer		17	44.7	21	55.3	0.481
Duration to reach the service center(N= 295)						
Less than 1 hour		126	46.3	146	53.7	0.530
More than 1 hours		11	47.8	12	52.5	

Table 4.18 Summary of hypothesis

Hypothesis	Result
1. There is association between socio demographic factors and the unmet need of family planning.	
➤ Age is associated with unmet need of family planning	Accepted
➤ Education is associated with unmet need of family planning	Accepted
➤ Occupation is associated with unmet need of family planning	Not accepted
➤ Number of living children is associated with unmet need of family planning	Accepted
➤ Monthly income of family is associated with unmet need of family planning	Not accepted

Table 4.18 Summary of hypothesis (cont.)

Hypothesis	Result
2. There is an association between predisposing factors and unmet need of family planning among MWRA.	
➤ Knowledge of contraceptives is associated with unmet need of family planning.	Not accepted
➤ Attitude toward contraceptives is associated with unmet need of family planning.	Not accepted
3 There is an association between enabling factors and family planning and unmet need of family planning.	
➤ Availability and accessibility of contraceptives is associated with unmet need of family planning.	No accepted
4. There is an association between reinforcing factors and unmet need of family planning among MWRA.	
➤ Social support to MWRA to use contraceptives is associated with unmet need of family planning.	Not accepted

CHAPTER V

DISCUSSION

This study aims to find out the status and determinants of unmet need of family planning and the association between those determining factors and the unmet need in syanja district among 295 respondents.

This section is presented on the basis of the objective of this study along with the hypothesis.

1. Met and unmet need of family planning under the definition of WHO and the practical/contextual approach of country like Nepal.
2. Association between socio-demographic factors and unmet need of family planning.
3. Association between predisposing factors and unmet need of family planning.
4. Association between reinforcing factors and unmet need of family planning.
5. Association between enabling factors and unmet need of family planning.

5.1 Met and unmet need of family planning according to the definition of WHO and further analysis in the contextual approach of Nepal.

In this study unmet need of family planning has analyze in two different approaches. According to the definition of World Health Organization (WHO), there is only 11% unmet need of family planning whereas it was 53.6% according to the criteria below:

Table 5.1 Analysis of unmet need of family planning in context of study area

CN	Total child	Condition 1	Condition 2	Condition 3	Status
1	One child	No plan for more child	Using nothing	Husband away(for years)	Unmet need
2	One child	No plan for more child	Using temp. method except IUCD/Implant		Unmet need
3	One child	Plan for more child	Using nothing	Husband away	Met need
4	One child	No plan for more child	No response	Any reason	Unmet need
5	Two children	No plan for more child	Using temp method except IUCD/Implant	Any reason	Unmet need
6	Two or >2 children	No plan for more child	Using nothing	Religious reason	Unmet need

This practical criterion has developed on the base of family planning policy of the country and the working experiences of the researcher himself. The criteria

- Number 1, with four different conditions has been considered as an unmet need because in the village of rural setting Nepal. Most of their husbands out migrated out of country for employment for at least 6 months to few years. In such condition, if they do not have any plan for further child, they think no need of any family planning because of husband away. When husband come at home mostly in the interval of 6 month they puzzle about the choice of method or sometime may think no need to use and pregnancy without plan. This is very common happening in rural setting of Nepal so it has considered as a condition of unmet need of family planning.

- Number 2, as the family planning policy of government of Nepal prefers not more than two children. If some couple have one child and no plan for further children but using short term family planning methods except IUCD and Implant has considered as unmet need.

- Number 3, if someone has one child and have plan for further baby and not using any method of family planning because of her husband away then it is considered as met need because even she is going to be pregnant in number 1 situation that is not such a big issue.
- Number 4, if couple has one child and no plan for any further child but there is no response what they are using currently then it is also considered as unmet need of family planning.
- Number 5, someone have 2 children ,no plan for further baby but using temporary method except IUCD or Implant because of any reason is considered as Unmet need.
- Number 6, Someone have more than 2 children and no plan for more children but using nothing because of religious reason also considered as unmet need of family planning.

The unmet need of family planning, according to the WHO definition is 11% when the practical approach of unmet need shows us 56.3% unmet need, among MWRA in syanja district Nepal. This result is bit contrast with the NDHS-2011, which is conducted every 5 years. Where the unmet need of family planning is only 27 %.(10)

The age wise distribution of the unmet need also project a contrast with NDHS-11 in this study, age 40-49 years have high (68.1%) unmet need of family planning with most controversy, less than 20 years of age group have only 20% unmet need when NDHS -2011 says the unmet need of family planning under 20 years is more concentrated with 41.5% when 40 and above age women have only about 14.1 percent. the total percentage of unmet need seems quite high according to the criteria which was on the basis of practices issues of family health and problem of Nepal.

Furthermore, Out total of 295 respondents,193 (65.6%) have no plan for any further children but only 76 MWRA wants to use some modern family planning method and 180 couples are using one of the modern family planning method. Among 180 only 130 women and 50 man are using contraceptives. Among total users of family planning method (180), 17 vasectomy 12 tubectomy and 12 IUCD /Implant, hence all together 41 respondents have some appropriate method to limit their children but in the purpose of method used, 108 respondents response they want to limit their

children. Therefore here we can see the gap in between they want and they are using and another concern is peoples have a wrong choice which is no addressing the purpose of them or they are not using appropriate methods. In this study we tried to compute such many condition as an unmet need and defined it as per the situation and circumstance of the study area and the country policy regarding to family planning.

In this study, 61.2 % has used family planning method and remaining were not using any modern method of family planning when NDHS 11 reveals only 49.7% are using the family planning method and remaining 51.3 % are not using. The rate of using family planning method is quite high in syanja district but the purpose and choice of family planning method is not proper, it means there is use of improper methods which contribute to the rate of unmet need to be higher.

A similar study conducted in Morang district of eastern region Nepal by a group of professors of BPKIHS in 2006 had mentioned that there is total 25% of unmet need of family planning and 49.1 % of MWRA are using some modern family planning method.(39)

Worldwide figure of unmet need is varied from place to place. In sub-Saharan Africa, unmet need is as low as 13 percent in Zimbabwe (where 58 percent of married women use a modern method) to as high as 41 percent in Togo (where only 12 percent of women use a modern method). In Asia, Laos reported the highest level of unmet need (40 percent), Nepal has 27% and Vietnam reported the lowest (5 percent).

5.2 Association in between socio-demographic factors and unmet need of family planning:

Age: There is a significant association we found in the age group and unmet need of family planning (<0.001). Age wise distribution of unmet need has found quite different than previous studies. Under 20 years of age group has 20% unmet need of family planning and the unmet need in elder age (21 to 29 and 30 to 39 years age group) has higher (57% and 64%), which is almost reverse of the finding of NDHS 11. If we see the NDHS report 2011, Nepal it is highest (37.5%) in under 20

years age group and continuously lower 36.8%, 30.5%, 26.1%, 13.2% in 20-24, 25-29, 30-34 and 45-49 years group respectively.(10)

Similarly, a study at Calcutta National Medical College by S. K. Bhattacharya, Ram R in 2006 has revealed 20-30 percent of women lie in the age between 15 to 30 years and this is the most productive age group to give birth children. Tuladhar J.M. In their study of unmet need in Nepal also found 57.6 percent of women with unmet need were belongs to 15-30 years age. This shows that unmet need is high in more fertile age group. So the family planning program should address women with unmet need focusing this age group so as to increase the contraceptive prevalence rate and decrease the unmet need.

Education: In this study education the association in between educational level and unmet need also have a significant association with p value 0.001. The respondents with no education and primary education have high unmet need with 61.3% and 67.1% respectively when secondary level and higher secondary level education group have low unmet need (52.1% and 35% respectively).hence the unmet need in no education group has almost 2 times higher than in the group with secondary and higher secondary level education.

In a study conducted by Tuladhar J.M. et al. on unmet need in Nepal stated 43 percent of women with no education had unmet need, whereas only 11 percent of unmet need with higher education was existed. (40) Thus in general as educational level is higher the use of contraceptives is also higher in practice and the unmet need is lower. With bit controversy one study in turkey have shown that higher education level have lower use of contraceptives in comparison to lower education group of women.(41)

Occupation: Occupation has no significant association with unmet need of family planning (p value 0.896). Thus government job holders have 61.1% and private job holder have 45.5% unmet need and MWRA who is engage in agriculture, housewife and self business have 50%,51.9% and 54.8% unmet need of family planning. As there is no association with occupation but in general who is in the government job can assumed with a good education and access of services but still have more unmet need. The region behind it could be an attitude to adopt the family

planning service or they might have some issue regarding to women empowerment and involvement of women in decision making.

Similar study conducted by Irin Akhter factor associated with unmet need of family planning among MWRA in sylhet division Bangladesh” has projected that the unmet need is more (25.5%) existed in house wives in comparison to other working group who have only 9.5% of unmet need. It can be predicted that working group MWRA have more exposure, knowledge and access of service comparing to housewives. (43)

Number of children: Most importantly the association in between the live children they do have and unmet need of family planning also have a significant association with p value- <0.001 . MWRA with few children have low and many children have high unmet need of family planning. 5.9% and 31.5% unmet need is projected for no children and one child category whereas couple with 2, 3 and 4 children has 61.9%, 78.6%, and 64.8% unmet need respectively.

Similar study conducted by Irin Akhter factor associated with unmet need of family planning among MWRA in sylhet division Bangladesh has found almost reverse type of finding with No children have 53% and 1-2 and ≥ 3 children have 18.4% and 23.3% unmet need of family planning.

The reason behind the reverse result could be because of our application of new practical definition of unmet need of family planning and most of the time the younger age group have a good knowledge and education status which encourage them to use family planning as per their need. in this study elderly group have more unmet need. the reason behind this could be most of their husband are out migrated and even they do not have any plan for further baby are using any family planning method which are also included as unmet need according to the practical definition. Therefore the number of unmet need became higher in that age group.

In another study conducted in the eastern tarai region of Nepal in 2006 by a group of professors from BPKIHS to find the Prevalence and determinants of unmet need for family planning in a district of eastern region of, also conclude the same result. That study reveals unmet need increases with the increase in the number of children. The reason may be that the women, in our context, do not end up childbearing below 2-3 children, but they starts thinking of spacing or limiting after

fourth or more children. And unmet need rises, as more women want to control fertility. in their study that once women had their first child, unmet need for spacing decreases with each additional child, whereas the unmet need for limiting births increases with each additional child that a woman has.

5.3 Association in between predisposing factors and unmet need of family planning:

5.3.1 Knowledge and unmet need of family planning- Although, we didn't find significant association in between knowledge level and unmet need of family planning, but still poor knowledge have quite high (58.3%) unmet need in comparison to the fair knowledge, that was 48.7% and good knowledge group had 56.1% unmet need.

As we can generally predict that MWRA with good education have good knowledge of family planning and illiterate or no education have no knowledge of family planning. In our study also have the same scenario. On the basis of this common understanding, if we considered education level is directly associated with knowledge level, in our study there is 10.5% respondents had no education and 27.8% had primary education. Similarly 39.7 and 22.0% of MWRA had secondary level and higher secondary level education.

According to the NDHS result no education and primary education have 22.5% and 30.2% of unmet need of family planning where as the unmet need is further higher in secondary and higher secondary level education with 32.6% and 30.3% respectively.(10) This could be an attitude related issue in this case and being education or literate is only not enough but the health literacy in the population is very important.

5.3.2 Attitude level and unmet need of family planning: The attitude regarding women health and family planning is not still positively internalized by the MWRA. 87.5% still think contraceptives harms to women health and more than half (54.6%) think contraception may cause malformation of the next baby and more than 85% still not convinced in the benefit of family planning methods. They think side

effects are more prominent the benefits. Such things really hinder to the use of family planning in the community.

Similarly most respondents have sensitiveness toward the sexual life and they think contraception reduce the sexual desire. About half, 49.2% of them think vasectomy cause loss of libido and have long term health loss of the man.

Another cultural issue “JASKA CHHORA USKO DHAN” means who do have many sons they will have more property and prosperity, this is still existed in the community more than 75% MWRA of syanja district think that many children do have economically beneficial.

Furthermore a traditional thinking birth as a god gift and it should not control as much possible, this taboo also seems still existed, and more than 75% of the respondents think the way.

They do have some good attitude also regarding to the sharing of their knowledge of family planning to their friends. Nearly 75% shares their ideas and knowledge to their friends but a questionable thing is whether the sharing the knowledge and attitude is enforcing to use family planning or working as reluctant force. 82% of respondents think IUCD as a substitution of the permanent method and at the same time about 80% think sterilization is one unnecessary health burden.

Regarding to the attitude toward the family planning and unmet need, there is 49% unmet need in group with positive attitude and 57.9% in group with negative attitude. It reflects the women who do have the positive attitude with family planning contraceptives they are likely to use the method of family planning but it has no significantly differed the situation. In one study conducted among Myanmar migrant population at Phang-Nga Province, Thailand in 2012 has give the picture that 91% of positive attitude migrants are using family planning method whereas very less (13%) having negative attitude were used family planning and its predictable that unmet need is also coincided with the data of use of family planning. (43)

Another study conducted in sylhet division Bangladesh in 2008 demonstrated just very few (35.7%) respondents have positive attitude toward contraceptives and remaining 64.3% had Negative attitude toward family planning. The association in between the attitude and unmet need was significant in this study but with little controversy in this study 39.7% MWRA had positive and remaining

61.3% had negative attitude toward family planning still there was no such a significant association in between unmet need and the attitude toward contraceptives. (42)

5.4 Association in between enabling factors and unmet need of family planning

5.4.1 Availability and accessibility of family planning services: According to the available data and format the availability and accessibility were classified into three groups: good, moderate and low. The positive response 8 to 10 belongs to good; 3-7 belongs to moderate and 3 and below positive responses were considered as a low accessibility and availability. Hence most of (82%) the respondents had express a low availability and accessibility of the services in the area 12.9% had moderate and only a few 4.4% respondents had a good accessibility and availability of the family planning services.

In this study association in between availability and accessibility of services and the unmet need of family planning had found no significant association. Good availability and accessibility have 46.2%, moderate have 46.1% and poor accessibility and availability have 55.6% unmet need of family planning. To assess the availability and accessibility few questions were also designed about the distance and duration to reach to the service centers from the residence of client. We therefore can say that only availability and access of the services not everything. There is a great role of attitude and knowledge of clients to take the services.

Similarly distance and duration of resident of respondent and the service center was also evaluated. The resident below than 3 km from the service center had 53.3 and more than 3 km had 55.3 % of unmet need similarly duration less than an hour had 53.7 and more than an hour had 52.5 unmet need of family planning.

Most of the clients taking services from Government health post (46.4%) sub health post (24.7%) private medical hall (3.7%) and most importantly FCHV who is providing services in the home based approached. They are providing family planning services in a significant percentage (11.5%) but a limitation with them is

they only can provide a counseling and two method of family planning (pills and condom).

NDHS 11 reported that FCHV are occupied 13.3% among government provision of services (69.0%) similarly 8.5% of clients are taking services from NGOs and private medical ,pharmacy and private hospitals also provide service as a major service center of family planning which occupied 19.8%.(10)

Thus can say family planning services even up to the door of the clients is also available through FCHV and different service centers in their own village to the big hospital and all the services that given by the government facilities are free of charge.

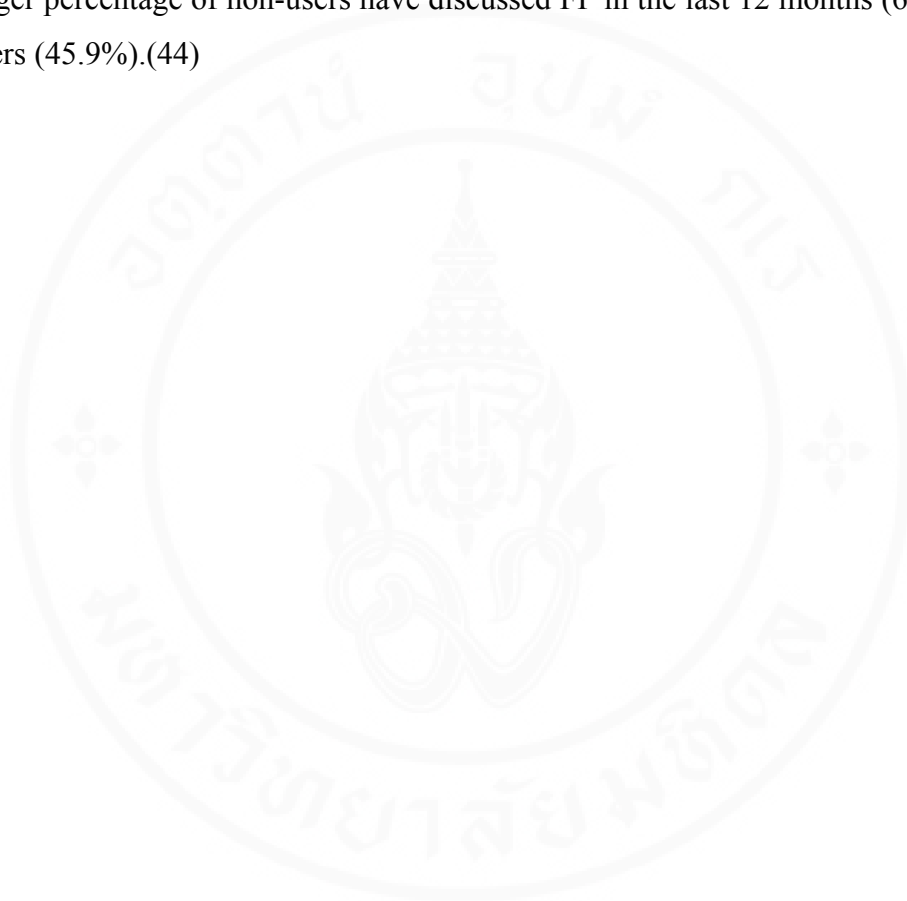
5.5 Association in between reinforcing factors and unmet need of family planning

5.5.1 Social support to adopt family planning services: Although it was not significantly associated (p-value 0.154) with unmet need of family planning. In this study we found a majority (75.9%) of respondent had experienced strong support, 13.6% experienced moderate support and few (10.5%) have expressed their dissatisfaction on the support from the husband, friends or health workers to take the family planning services. Basically the statements were designed to find out the support from the husband, friends, FCHV and health workers. In our study the data demonstrate that more than 80% respondents have the support of husband, friends and health personals as well.

Husband cooperation and support to the wife to use contraceptives is important but in the context of Nepal it is more sensitive and crucial too because of the patroness (male dominated) social structure and the culture.

One study conducted in Nepal on “The effect of spousal communication on contraceptive use in Central Terai, Nepal” in 2010 have found that the spousal communication is often a focal point of community based FP interventions The findings of the study demonstrate that women who discuss FP with their husbands, who perceive husband approval of Contraceptive methods and who have born a son are more likely to use a contraceptive method.

A greater majority of contraceptive users have discussed FP with their spouses (94%) than non-users (55.9%). This observation holds true across district, caste, age, wealth and education. In general, the opposite is observed when reviewing results of discussions within the last 12 months among users and non-users, i.e. a larger percentage of non-users have discussed FP in the last 12 months (65.8%) versus users (45.9%).(44)



CHAPTER VI

CONCLUSION AND RECOMMENDATIONS

This cross sectional study was designed to identify the factors associated with unmet need of family planning in one of the rural district syanja Nepal. The sample size in fact was estimated 320 and the minimum sample size was 261. All 320 questionnaires were prepared and distributed but few of that were missed many data and few were not response by the respondents.

Thus 295 became the final sample that we got the responses. For the data collection a cluster random sampling technique was applied. Out of 61 village development committee(VDC) in the district initially we were defined 3 cluster and selected randomly 8 different VDC and the respondents (MWRA) were choose in convenient sampling way.

Structured questionnaires were designed to collect the data and interview was taken by researcher and eight other volunteer. Session of orientation on the questionnaires and about whole research was organized before send them to the field to collect data. Interview was carried out from 20th of February 2014 to 13th of March.

For the entry, processing and analysis of data a popular computer programme “SPSS” was used. For the analysis of data mostly descriptive statistic was used and frequency and cross tabs were operated to find out the association in between the relevant variables. Chi square and Fisher exact were used as per the relevancy.

6.1 General findings:

In our study 42.4 % were come under 21-29 years group, 33.2% in 30-39 years, 16% belongs to 40-49 years and 8.5 % of respondents were belongs to 15-20 years. The mean age of respondent was 30.41 ± 7.8 yrs. 80% of the women had history of early marriage (before the age of 20) the mean age of marriage is 19 years and $SD 19 \pm 2.4$.

More than half (56%) MWRA were as housewives, 18% were engaged in farming and third most involved occupation is business which is 14.9%.

More than 60% have primary and secondary level education when 22% of the respondents had higher secondary level education and 10.5% respondents were with no education background. Majority of respondents (91.2%) were Hindu and a few (1.7%) were Muslim.

Similarly, 49.8% of the respondents' family income is in between 10000 to 20000 Nrs whereas 49.5 % have more than 20000 monthly incomes. About one third (30.2%) of the respondents had one living children when 35.6 % had two living children and 23.7% had three children. 39% respondents had a fair knowledge of contraceptive methods and its availability of services similarly 36% had good knowledge and 25% had with poor knowledge.

There were 60.7% respondents who had negative attitude towards family planning and only 39.3% had a positive attitude. 85% still think contraceptives harms to women health and 54.6% think contraception may cause malformation of the next baby and more than 85% still not convinced in the benefit of family planning methods. 82% respondents had experienced a low availability and accessibility of the services in the area 12.9% had moderate and only 4.4% had experience of good accessibility and availability of the family planning services.

As we considered distance could be the matter of easy access of services this study reveals 86.1% clients have their resident 1 to 3 km far away from the service center, 12.9% had more than 3 km. similarly 92.2% of the respondents had to spend 30 minute to an hour to reach the service center and remaining had more than 1 hour. 75.9% respondents received a strong social support to adopt the family planning services and remaining 13.6 and 10.5% have moderate and low level of social support respectively.

Regarding to the unmet need of family planning as per the definition of WHO, that was 11.2 %, with a big contrast according to the criteria developed on the basis of the country's policy and practical experience, the unmet need was 53.6%.

6.2 The association in between variables:

There was a significant association in between age group, education level and total live birth unmet need the factors (p value-<0.001). with a contrast with many other research and NDHS 11 Nepal, age 40-49 have 68.1% unmet need and less than 20 years of age group have only 20% unmet need.

There was no significant association was found between knowledge and unmet need. With a bit controversy MWRA with good knowledge have bit more (56.1%) unmet need in comparison to the fair knowledge group it is 48.7% and poor knowledge have also not quite high (58.3%) unmet need.

Regarding to attitude there is 49% unmet need in those group with positive attitude and 57.9% in the group with negative attitude but it has also no significant associations between attitude and unmet need of family planning. Similarly group of MWRA who have strong social support have 51.8% moderate support has 67.5% and low social support has 48.4% unmet need of family planning.

There is no significant association in between availability/accessibility and unmet need of family planning. Good condition of availability and accessibility have 46.2% moderate have 46.1% and poor accessibility and availability have 55.6% unmet need of family planning.

6.3 Recommendation to the policy makers, administrators and programme implementers

1. Although the unmet need (WHO) of family planning found quite low (11.5%), many practical barriers create a reluctance to use the contraceptives. That's way it was realized to develop a criteria on the basis of national policy regarding family planning and family planning practices in the community setting. The unmet need according to new practical definition was quite high (53.6%).It is therefore important to address the population with different situation and under criteria of newly developed definition of unmet need of family planning.

2. The finding regarding demographic characteristics and the association with few variables (Age, education and number of children) were found significant and about 75% of respondents have history of early marriage. This could be one of the determinant of the number of children met or unmet need of family planning and over all women reproductive health because if got early marriage the process of decision making, proper choice for better health and planning of family those all things cannot be in process.

3. Despite of many efforts on health education by ministry of health and population Nepal, the study in syanja district shows that 25% of respondents still have poor knowledge in family planning services. An intensive awareness campaigning on family planning is necessary to increase the knowledge level of MWRA so that necessary increase in CPR and the status of family health could be improved.

4. Very list respondents know about the long term temporary method of family planning (IUCD and Implant) and there is many rumors about the method as well so the special programme to promote awareness and remove the rumors about such methods is important. To increase CPR and that also could be functional as a permanent method or it also could be the substitution of sterilization. Family health division have special focused on these methods to promote but the study shows there is no significant improvement in knowledge level and practice as well. Similarly knowledge about vasectomy and tubectomy also very poor and have many rumors regarding to these so have to intensify education campaigning on those areas too.

5. In this study most of the respondents found to engaged as housewife and not using family planning method because of husband dislike or he is away. This is a big concerned of women empowerment and independency regarding to the decision making and take care themselves and their reproductive health. Therefore some integrated programme for women empowerment and women employment is necessary. This is possible by making a good coordination with related stakeholders.

6. The Demographic characteristic determining magnitude of unmet need are, (i) low age at marriage, which make the women culturally and socially secured and lengthen the reproductive span, so legal age at marriage should be seriously implemented; (ii) Program should focus on female education; (iii) Concept of son preferences – if we can decrease the gender discrimination preferring the male child, the CPR will increase instantly. Therefore an intensive awareness programme is recommended.

6.4 Recommendation for the further research:

1. In this study the association between education level and unmet need has significantly existed but with bit controversy the level of knowledge and unmet need have no association. Further study could be appropriate to find out the relation in between education, knowledge and practice in family planning.

2. Hence this study explore the met and unmet need of family planning in different groups of respondents and the association with different variable but among unmet need how many of them got unwanted pregnancy and furthermore how they manage. Those could be the potential matter of study in future.

3. These studies explore the husband support and the decision has very important role in adaptation of contraceptive. Thus decision making power of women them self could be a crucial matter of adaptation in family planning services. Therefore what factor is affecting to be empowers women at least for the decision like to be pregnant or not.

4. This study demonstrate a very high level of early marriage which could be a factor of unwanted pregnancy and measurable role in decision making for the pregnancy and the number of children etc and the crosscutting issue like economical and educational impact of early marriage also could be another aspect of study in future.

5. This research was cross sectional quantitative type in which interview questionnaire was the tools of data collection. The matter of family planning in our society considered as a culturally very sensitive matter there it is realized that this type of research should be conducted as a qualitative research with in depth interview, focus group discussion and case study in comprehensive way.



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APPENDIX A

33



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It is hereby certified that**

Name-Surname..... Mr.Santosh Paudel Student ID..... 5637198 PHMP/M

Faculty/Institute/College..... of Public Health

Has attended the required classes on Ethics in Human Research

Course..... PHBS 630 Research Methods in Health Science

Faculty/Institute/College..... of Public Health

On..... 2 October, 2013 (Date/Month/Year)

Signature..... 

(..... Assoc. Prof. Chaweevon Boonshuyar)
Course coordinator

Signature..... 

(..... Assoc. Prof. Dr. Surintorn Kalampakorn)
Lecturer

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APPENDIX B

Certificate of Approval
Ethical Review Committee for Human Research
Faculty of Public Health, Mahidol University

COA. No. MUPH 2014-034

Protocol Title : UNMET NEED OF FAMILY PLANNING IN ARURAL DISTRICT SYANJA, NEPAL

Protocol No. : 200/2556

Principal Investigator : Mr. Santosh Paudel

Affiliation : Master of Public Health (International Program)
Faculty of Public Health, Mahidol University

Approval Includes :
1. Project proposal
2. Information sheet
3. Informed consent form
4. Data collection form/Program or Activity plan

Date of Approval : 15 January 2014

Date of Expiration : 14 January 2015

The aforementioned project have been reviewed and approved according to the Declaration of Helsinki by Ethical Review Committee for Human Research, Faculty of Public Health, Mahidol University.

Handwritten signature of S. Nantham in blue ink.

(Assoc. Prof. Dr. Sutham Nanthamongkolchai)

Chairman of Ethical Review Committee for Human Research

Handwritten signature of Phitaya Charupoonphol in blue ink.

(Assoc. Prof. Dr. Phitaya Charupoonphol)

Dean of Faculty of Public Health

420/1 Rajvithi Road, Bangkok, Thailand 10400

Tel. (662) 3548543-9 ext. 1127, 7404 Fax. (662) 6409854

APPENDIX C

Interview Questionnaires ID/code:

*Unmet need /accessibilities of family planning among married women in
reproductive Age group in a rural district, syanja Nepal.*

Ward No:

Village Development Committee (VDC):

District:

Date of data collection. / / 2014.

Name of interviewer:

Signatures.....

Instruction: Please inform MWRA that the questionnaires are for the research purpose and all her answers will be kept completely confidential and not exposed to other purpose.

Please fill the blank and check (✓) where appropriate.

Part 1. Predisposing factors

1.1. Genera characteristics

1. How old are you?.....Years. 2. Age when married.....Years
3. highest education degree attended
 - ☐No education ☐Primary education ☐Secondary education
 - ☐Higher secondary and above
4. what is your current employment status?
 - ☐Government job. ☐Private Job
 - ☐Business ☐Agriculture
 - ☐House wife ☐Others specify.....
5. what is your religion?
 - ☐Hindu ☐Buddies ☐Muslim ☐Others
6. How much money does your family earn in a month?.....rupees

7. How many children do you have now?

☐ No children ☐ 1 child ☐ 2 children ☐ >2 specify.....

8, How many living children do you have?

☐ No children ☐ 1 child ☐ 2 children ☐ >2 Specify.....

9, do you intend to have more children in the future?

☐ No ☐ Yes.....

If yes, How many total sons... daughter.... ☐ Not decided yet.

10, what is your preference gender for your children?

☐ Boy ☐ Girl ☐ No preference

1.2. Knowledge about family planning of the respondent.

S.N.	Statement	Yes	No	Don't Know
1	Use of family planning method can prevent unwanted pregnancy	☐	☐	☐
2	Oral pills. Injection and condom are temporary family planning methods	☐	☐	☐
3	Injection is taken once in every three month	☐	☐	☐
4	Oral contraceptive pills must be taken at the same time each day.	☐	☐	☐
5	IUCD and Implant are the long term family planning methods.	☐	☐	☐
6	Oral pills can cause nausea and vomiting as a side effect.	☐	☐	☐
7	IUCD should used by women who have at least one children	☐	☐	☐
8	Irregular bleeding is one of the side effects of Norplant.	☐	☐	☐
9	Condom can prevent not only pregnancy but also STI and HIV.	☐	☐	☐

1.2. Knowledge about family planning of the respondent.

S.N.	Statement	Yes	No	Don't Know
10	Vasectomy is permanent method of contraception of male.	☐	☐	☐
11	Tubectomy is the permanent family planning method for women.	☐	☐	☐
12	Women can get pregnant again after stopping the use of temporary method of family planning.	☐	☐	☐
13	Pills, condom and injectable methods are available in health post and sub health post.	☐	☐	☐
14	Pills and condom can be provided by FCHV in ward level in free of cost.	☐	☐	☐
15	IUD is the proper spacing method for more than 5 years duration.	☐	☐	☐
16.	For just married couple pill is the best method of family planning	☐	☐	☐
17.	If you want to stop having child forever vasectomy is the best limiting method.	☐	☐	☐
18.	IUCD can move toward the heart.	☐	☐	☐
19.	Vasectomy cause back pain problem to male	☐	☐	☐
20	Female sterilization may cause harm to reproductive health and even death ultimately.	☐	☐	☐

1.3. Attitude related questions

S.N.	Statement	Strongly Agree	Agree	Disagree	Strongly disagree
1	Use of family planning benefits women health	☐	☐	☐	☐
2	Women can prevent unwanted pregnancy by using family planning method	☐	☐	☐	☐
3	Modern family planning methods are more effective than traditional and natural methods	☐	☐	☐	☐
4	Using family planning methods can cause malformation of the baby	☐	☐	☐	☐
5	Using family planning method can reduce sexual pleasures	☐	☐	☐	☐
6	Most of the family planning methods have more benefits than side effects.	☐	☐	☐	☐
7	Using family planning methods can cause long term infertility.	☐	☐	☐	☐
8	Men /husband should share the equal responsibility of accepting family planning method.	☐	☐	☐	☐
9	Vasectomy can cause long term negative health effects and impotence to men.	☐	☐	☐	☐
10	Having large family size have more economical benefits.	☐	☐	☐	☐
11	A couple who adopted family planning is a happy family.	☐	☐	☐	☐

1.3. Attitude related questions

S.N.	Statement	Strongly Agree	Agree	Disagree	Strongly disagree
12	Getting pregnant is natural/god gifted phenomenon so it should not be controlled.	☐	☐	☐	☐
13	Having sons is important in family.	☐	☐	☐	☐
14	I advise other women to use family planning methods.	☐	☐	☐	☐
15	Vasectomy reduce sexual activity	☐	☐	☐	☐
16	Vasectomy is a painful operation	☐	☐	☐	☐
17.	Though I don't want child pill is proper method	☐	☐	☐	☐
18.	IUCD and Implant work quite long time similar as permanent methods.	☐	☐	☐	☐
19.	If I want to stop child forever sterilization is the best way.	☐	☐	☐	☐
20.	Sterilization is an unnecessary health burden.	☐	☐	☐	☐

Part 2. Enabling factors

2.1. Availability and accessibility of family planning.

S.N.	Statement	Agree	Disagree	No idea
1	We can go and visit to FCHV for pills and condom.	☐	☐	☐
2	IUCD and Implant can be provided by trained Nurses and ANM from HP.	☐	☐	☐
3	Sterilization camp is organized every year near by the village.	☐	☐	☐
4	All family planning methods are provides in free of charge.	☐	☐	☐
5	Health workers are available 24 hours in the health center.	☐	☐	☐
6	We should not wait for long time for the service.	☐	☐	☐
7	The services also available in private clinics.	☐	☐	☐
8	Private clinic have more easy process to get services.	☐	☐	☐
9	Payment in the private clinic is affordable.	☐	☐	☐
10	The service available in the area is convenient for me.	☐	☐	☐

2, where do you get family planning services mainly from?

- ☐FCHV ☐Sub Health Post ☐Health post ☐Satellite clinic
☐EPI clinic ☐NGOs ☐Pharmacy ☐Other specify...

3, How far is the place you should go to take the family planning service?

Distance in kilometer.....

4, How long time does it take to reach the place to get the services. Time in hours...

Part 3. Reinforcing factors

3.1. Social support toward family planning.

S.N.	Statement	Agree	Disagree	No Comment
1.	My husband encourages me to use family planning methods to prevent pregnancy.	☐	☐	☐
2	My husband gives me necessary information about family planning services.	☐	☐	☐
3	My husband takes care when I get any health problems because of the family planning.	☐	☐	☐
4	My friends give me information of family planning.	☐	☐	☐
5.	My friends encourage me for using contraceptive methods.	☐	☐	☐
6	FCHV regularly support me to use the contraceptive method.	☐	☐	☐
7.	Health workers give me the information regarding family planning.	☐	☐	☐
8.	I got family planning information through media (radio/TV/papers).	☐	☐	☐
9.	My husband supports me by taking me to health center/camp for the family planning services.	☐	☐	☐
10.	friends give advice to me when I got side effect from using FP.	☐	☐	☐

3.2 Analysis of Met and unmet need of the family planning services.

1. How many children do you have?

☐ No children ☐ 1 child ☐ 2 children ☐ >2 Specify.....

2. do you intend to have more children in the future? ☐ Yes ☐ No

If ☐ No.....

3. Are you or your husband using any sort of family planning method now?

If ☐ Yes... (Next question) If ☐ No..... (Question no -5)

4. Which method you or your husband using now?

☐ Oral pills ☐ condom ☐ injectable
☐ IUD Implant ☐ Tubectomy ☐ Vasectomy

5. Do you want to use any modern family planning method?

If ☐ Yes.....

Yes (ask Next question) ☐ No (skip the question no. 6)

6. why you want use family planning method?

☐ To spacing birth ☐ To limited birth ☐ Poor economic condition
☐ poor health ☐ other specify...

7. why you are not using any method of family planning?

☐ wants more children ☐ husband doesn't want ☐ side effects
☐ Husband away ☐ lack of information ☐ service center very far
☐ shame ☐ religious region ☐ other specify.....

APPENDIX D

अन्तरवार्ता प्रश्नावलीहरु :

कोड संख्या :-

नेपालको एक दुर्गम जिल्ला स्याङ्जामा परिवार नियोजन सेवाको अपरिपूर्त माग बारे प्रजनन उमेरका विवाहीत महीलामा गरिएको एक शोध अनुसन्धान :

वडा नं. -

गा.वि.स. -

जिल्ला -

तथ्याङ्क संकलन गरेको मिति :-

अन्तर्वार्ता लिनेको नाम

सही :-

नोट : कृपया सबै महिलालाई प्रश्न साधु भन्दा पहिला यी प्रश्नहरु खाली सोध अनुसन्धान लागि गरिएको अनि सबै सूचनाहरु गोप्य रहने साथै महिलाले कुनै पनि समय आफूलाई सजिलो महशुस नभएमा अन्तर्वार्ताबाट बहिरिन सक्ने कुरा पनि राम्ररी बताई दिनुहोला ।

कृपया खाली ठाउँ भर्नुहोस र सही उत्तरमा ठिक (✓) चिन्ह लगाउनुहोस

(भाग - क) प्रर्यवर्तक तत्वहरु :

क .१. सामान्य विशेषताहरु

१. तपाई कति वर्षको हुनुभयो ?.....

२. विवाह गर्दा कति वर्षको हुनुहुन्थ्यो ?

३. शिक्षा

☐ पढेको छैन

☐ प्राथमिक शिक्षा

☐ माध्यमिक शिक्षा

☐

उच्चमाध्यमिक वा माथि

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४. तपाईं अहिले कुनै जागिरमा संलग्न हुनुहुन्छ ?

☐ सरकारी ☐ निजी ☐ व्यापार ☐ कृषि ☐
☐ गृहिणी अन्य

५. तपाईं कुन धर्म मान्नुहुन्छ ?

☐ हिन्दु ☐ बौद्ध ☐ मुस्लिम ☐ क्रिश्चियन ☐
 अन्य

६. तपाईंको परिवारले महिनामा सरदर आम्दानी कति छ ?

७. तपाईंले हालसम्म कतिवटा बच्चा जन्माउनु भयो ?

☐ बच्चा छैन ☐ एउटा ☐ दुईवटा ☐ २ भन्दा
 बढी.....

८. तपाईंसँग अहिलेकतिवटा जिवित बच्चा छन् ?

☐ बच्चा छैन ☐ एउटा ☐ दुईवटा ☐ २ भन्दा बढी

९. के तपाईंलाई भविष्यमा फेरी थप बच्चा जन्माउन मन छ ?

☐ छ ☐ छैन

यदि छ भने, कति छोरा..... छोरी.....

१०. भविष्यमा तपाईं कुन बच्चा जन्माउन मनपराउनुहुन्छ ?

☐ छोरा ☐ छोरी ☐ जुन भएपनि

१.२ परीवार नियोजन सबन्धी ज्ञान

क्र.सं.	विवरण	हो	होईन	थाहा छैन
१.	परिवार नियोजनको साधनले नचाहिदा गर्भलाई रोक्छ ।	☐	☐	☐
२.	पिल्स, ३ महिने सुई र कण्डम छोटो अवधिका परिवार नियोजन साधन हुन ।	☐	☐	☐
३.	तिनमहिने सुई प्रत्येक ३ महिनामा लगाईन्छ	☐	☐	☐
४.	पिल्स चक्कि प्रत्येक दिन एउटै समयमा खानुपर्छ	☐	☐	☐
५.	कपर-टी र नरप्लान्ट लामो समयका परिवार नियोजनका साधन हुन ।	☐	☐	☐
६.	खाने चक्की पिल्सको नकरात्मक असर वाक्वाकी लाग्ने र वान्ता हुने हो ।	☐	☐	☐
७.	कपर-टी कम्तिमा एउटा बच्चा भएको महिलाले प्रयोग गर्नुपर्छ ।	☐	☐	☐
८.	नरप्लान्टको नकरात्मक असरहरुमध्ये अनियमित रक्त श्राव पनि एक हो ।	☐	☐	☐
९.	कण्डमले नचाहिदो गर्भलाई रोक्नेमात्र नभएर एच.आई.भि.र यौन जन्य संक्रमणलाई पनि रोक्छ ।	☐	☐	☐
१०.	भ्यासेक्टोमी पुरषेमा गरिने परिवार नियोजनको स्थायी विधि हो ।	☐	☐	☐
११.	टयुबेक्टोमी महिलामा गरीने परिवार नियोजनको स्थायी विधि हो	☐	☐	☐
१२.	परीवार नियोजनको अस्थायी साधनको प्रयोग रोक्ने वित्तिकै महिला फेरी गर्भवती हुन सकिछन	☐	☐	☐
१३.	पिल्स, कण्डम र तिन महिने सुई स्वास्थ्य चौकी तथा उप स्वास्थ्य चौकीमा उपलब्ध हुन्छ ।	☐	☐	☐
१४.	पिल्स र कण्डम महिला स्वास्थ्य स्वयंसेविकाकहाँ वडामा पनि उपलब्ध हुन्छ ।	☐	☐	☐
१५.	पाच वर्ष भन्दा धेरै समयको लागि जन्मान्तर राख्न आ.यू.डि. सहि साधन हो	☐	☐	☐

१६.	हालसालै विवाह भएको दम्पतीमा पिल्स सवै भन्दा राम्रो साधन हो ।	☐	☐	☐
१७	यदि तपाईं अब बच्चा पाउन चाहनु हुन्न भने भ्यासेक्टोमी सवै भन्दा राम्रो विधि हो ।	☐	☐	☐
१८	आ.यु.सि.डि. मुटु तिर सर्न सक्छ ।	☐	☐	☐
१९	भ्यासेक्टोमी गरेपछि पुरुषलाई ढाड दुख्ने समस्या हुन सक्छ ।	☐	☐	☐
२०	महिलाले गर्ने स्थायी परिवार नियोजनले स्वास्थ्यमा असर गर्नुका साथै मृत्यु पनि हुन सक्छ ।	☐	☐	☐

१.३ धारणा सम्बन्धि प्रश्नहरु विवरण

क.सं.	विवरण	अत्यन्तै सहमत	सहमत	असहमत	अत्यन्त असहमत
१	परिवार नियोजनको साधनको प्रयोग गर्नु महिलाको स्वास्थ्यका लागि लाभदायक छ ।	☐	☐	☐	☐
२.	परिवार नियोजनको साधन प्रयोग गरेर महिलाले नचाहिदो गर्भलाई रोक्न सकिन्छ	☐	☐	☐	☐
३.	परीवार नियोजनका आधुनिक विधिहरु परम्परागत र प्राकृतिक विधि भन्दा प्रभावकारी हुन्छन् ।	☐	☐	☐	☐
४	परिवार नियोजनको साधनको प्रयोगले गर्दा जन्मने बच्चा लुलोलंगडो वा अपाङ्गता हुन्छ	☐	☐	☐	☐
५.	परोपकार नियोजनको साधन प्रयोग कर्ताको यौनिक इच्छा शक्ति कम हुन्छ ।	☐	☐	☐	☐
६.	धेरैजसो परिवार नियोजनका साधनहरुको बेफाईदा भन्दा फाईदाहरु धेरै छन् ।	☐	☐	☐	☐
७.	परोवारनियोजनको साधन प्रयोग गर्दा लामो समयसम्म बांझोपन गराउँछ ।	☐	☐	☐	☐

१.३ धारणा सम्बन्धि प्रश्नहरु विवरण

क.सं.	विवरण	अत्यन्तै सहमत	सहमत	असहमत	अत्यन्त असहमत
८.	परिवार नियोजनको साधनलाई स्विकार गर्न श्रीमानको पनि श्रीमतीको जत्तिकै भूमिका हुनुपर्छ ।	☐	☐	☐	☐
९.	भ्यासेक्टोमीले पुरुषहरुलाई लामो समय सम्म स्वास्थ्यमा असर गर्नुका साथै शरिरको सम्पर्कमा बाधा पुर्याउछ	☐	☐	☐	☐
१०.	परिवारको आकार ठूलो भयो भने आर्थिक रुपमा फाईदा जनक छ ।	☐	☐	☐	☐
११.	एउटा दम्पति जसले परिवार नियोजनको साधन प्रयोग गरेको छ, त्यो परिवार खुसी र सुखी हुन्छ ।	☐	☐	☐	☐
१२.	गर्भवती हुनु भनेको प्राकृतिक साथै भगवानको देन हो त्यसैले गर्भधारण प्रक्रियालाई रोक्नु हुन्न ।	☐	☐	☐	☐
१३.	परिवारमा छोरा अत्यन्त जरुरी हुन्छ ।	☐	☐	☐	☐
१४.	के तपाई अरुलाई पनि परिवार नियोजनको साधन प्रयोग गर्न भन्नु हुन्छ ।	☐	☐	☐	☐
१५.	भ्यासेक्टोमीले यौनिक क्रियाकलापलाई कम गराउछ ।	☐	☐	☐	☐
१६.	भ्यासेक्टोमीको अप्रेशन गर्दा धेरै दुख्छ ।	☐	☐	☐	☐
१७.	म बच्चा जन्माउन चाहन्न तर पित्स नै अत्यन्त लाभदायक छ ।	☐	☐	☐	☐
१८.	आयू.सि.डि र इम्प्लान्टले स्थायी परिवार नियोजन जस्तै धेरै लामो समय सम्म काम गर्छ ।	☐	☐	☐	☐
१९.	म सधैका लागि बच्चा जन्माउन रोक्न चाहन्छु भने स्थायी बन्ध्याकरण नै राम्रो उपाय हो ।	☐	☐	☐	☐
२०.	स्थायी बन्ध्याकरण बेकारको भन्फट मात्र हो ।	☐	☐	☐	☐

भाग -२ समर्थ बनाउने तत्वहरु :

२.१ परिवार नियोजनका साधन प्रतिको उपलब्धता र पहुचता

क्र.सं.	विवरण	अत्यन्तै सहमत	सहमत	असहमत
१	हामी पिल्स र कण्डमको लिन महिला स्वास्थ्य स्वमंसेविका कहाँ जान सक्छौ ।	☐	☐	☐
२	आयू.सि.डि. र इम्प्लान्ट तालिम प्राप्त नर्स र अ.न.मी.ले स्वास्थ्य चौकीमा लगाईदिन्छन् ।	☐	☐	☐
३	स्थायी बन्ध्याकरण शिविर प्रत्येक वर्ष घर नजिकै गाउँमा संचालन हुन्छ ।	☐	☐	☐
४	परिवार नियोजनको सवै सेवाहरु निशुल्क उपलब्ध हुन्छन्	☐	☐	☐
५	स्वास्थ्य केन्द्रमा स्वास्थ्य कार्यकर्ता हरु चौविसै घण्टा उपलब्ध हुन्छन् ।	☐	☐	☐
६	हामीले सेवा लिनको लागि लामो समय सम्म कुर्नु पर्दैन	☐	☐	☐
७	यो सवै सेवाहरु निजि संस्थामा पनि उपलब्ध छन्	☐	☐	☐
८	निजि क्लिनिकहरु सेवा प्राप्तिका लागि अझ सजिलो माध्यम हो	☐	☐	☐
९	निजि क्लिनिकमा पैसा तिरेर सेवा लिन महंगो	☐	☐	☐
१०	यो क्षेत्रमा परिवार नियोजनको सेवा पाईने ठाउँ मेरा लागि उपयुक्त छ ।	☐	☐	☐

२.२ परिवार नियोजनका साधन विशेष गरि तपाईंले कहांबाट पाउनु हुन्छ ?

☐ म.स्वा.स्व.से.

☐ उप स्वास्थ्य चौकी

☐ औषधी पसल

☐ स्वास्थ्य चौकी

☐ सेटेलाइट क्लिनिक

☐ अन्य भए

खुलाउनुहोस..

☐ इ.पि.आई क्लिनिक

☐ गैह्र सरकारी संस्था

.....

२.३ परिवार नियोजनको सेवा लिन तपाइ कति टाडा जानु पर्दछ ?

दुरी किलोमिटरमा

२.४ परिवार नियोजनको सेवा लिन जादां तपाईंलाई कति समय लाग्छ ?

समय घण्टामा

भाग ३ सवल गराउने तत्वहरु :

३.१ परिवार नियोजन सम्बन्धि सामाजिक सहयोग

क्र.सं.	विवरण	सहमत	असहमत	केहि पनि छैन
१	मेरो श्रीमान्ले अनिच्छित गर्भ धारण रोक्नलाई परिवार नियोजनको साधन प्रयोग गर्न भन्नुहुन्छ ।			
२.	मेरो श्रीमान्ले परिवार नियोजन सम्बन्धी आवश्यक सूचनाहरु दिनु हुन्छ ।			
३.	परिवार नियोजनको साधन प्रयोग गर्दा स्वास्थ्यमा समस्याआएमा श्रीमान्ले हेरचाह गर्नु हुन्छ ।			
४.	मेरो साथीले मलाई परिवार नियोजन सम्बन्धी सूचनाहरु दिन्छन्			
५.	मेरो साथीले मलाई परिवार नियोजनका साधन प्रयोग गर्न प्रेरित गर्दछन्			
६	म.स्वा.स्वमं से.ले नियमित रुपमा गर्भ निरोधक साधन प्रयोग गर्न सहयोग गर्छन्			

३.१ परिवार नियोजन सम्बन्धि सामाजिक सहयोग

क्र.सं.	विवरण	सहमत	असहमत	केहि पनि छैन
७	स्वास्थ्य कार्यकर्ताले परिवार नियोजन सम्बन्धी सूचना दिन्छन्			
८	मैले परिवार नियोजन सम्बन्धी जानकारी रेडियो, टि.भि. र पत्रपत्रिका बाट थाहा पाएँ ।			
९.	मेरो श्रीमानले परिवार नियोजनको सेवा लिन स्वास्थ्य संस्था/शिविरमा लैजान सहयोग गर्नु हुन्छ।			
१०.	परिवार नियोजनका साधन प्रयोग गर्दा नकरात्मक असर देखा परेमा साथीहरूले सल्लाह सुभाव दिन्छन्			

३.२ परिवार नियोजनका सेवाहरूको परिपूर्ण तथा अपरिपूर्ण आवश्यकताको लेखा जोखा

१. ८. तपाईंसँग अहिलेकति बटा जिवित बच्चा छन ?

☐ बच्चा छैन ☐ एउटा ☐ दुईवटा ☐ २ भन्दा बढी

२. के तपाईंलाई भविष्यमा फेरी थप बच्चा जन्माउन मन छ ?

☐ छ ☐ छैन (अर्को पश्न सोध्नुहोस्)

३. के तपाईं र तपाईंको श्रीमान/श्रीमतीले परिवार नियोजनको साधन प्रयोग गर्नुभएको छ ?

☐ छ (अर्को पश्न सोध्नुहोस्) ☐ छैन (प्रश्न नं. ६ सोध्नुहोस् ।)

४. कुन साधन प्रयोग गर्नु भएको छ ?

☐ पिल्स ☐ कण्डम ☐ तिनमहिने सुई ☐ आई.यु.सि.डि.

☐ नरप्लान्ट/इम्प्लान्ट ☐ भ्यासेक्टोमी ☐ द्युवेक्टोमी

५. तपाईंले के का लागी परिवार नियोजनको साधन प्रयोग गर्नु भएको हो ?

☐ जन्मान्तर राख्न ☐ थप बच्चा रोक्न ☐ आर्थिक अवस्था कमजोर हुन नदिन

☐ स्वास्थ्य खराब हुन नदिन ☐ अन्य भए उल्लेख गर्नुहोस्.....

६. के तपाइ कुनै आधुनिक परिवार नियोजनको साधन प्रयोग गर्न चाहानुहन्छ ?

☐ चाहान्छ ☐ चाहान्छ

७. किन तपाईंले परिवार नियोजनको साधन प्रयोग नगर्नुभएको हो ?

☐ बच्चा जन्माउन ☐ श्रीमानले मन पराउनु हुन्न ☐ लाजले
☐ नकरात्मक असर ☐ श्रीमान टाढा भएकोले ☐ धार्मिक कारणले
☐ सूचनाको अभाव ☐ सेवा सारै टाढा भएर ☐ अन्य भए

.....

समाप्त

APPENDIX E

INFORMATION SHEET

EC-3 Form

1. Title of project: Unmet need of family planning in a rural district syanja Nepal.

2. Study site: Syanja district, Nepal.

3. This project is conducted by Santosh Paudel (*student*)

Under supervision of Major Advisor as follows: Asst.Prof. Dr.Suwat Srisorrachatr

4. Brief Background, Rationale: (use simple word, understandable by volunteer participant)

Rapid population growth in developing and underdeveloped countries with high maternal mortality ratio and the number of co-related issues is the major concerned of human society. The population in 1984 was half of the population today in 2012 (7 billions) and it's estimated that the population in 2050 will be about 10 billion. Most importantly, the burden of rapid population growth and maternal mortality is concise more than 90% in the developing or underdeveloped countries. A total of 287 thousand mothers die because of pregnancy or related complications among those 222 million mothers who want to delay or postponed their pregnancy. Thus unwanted pregnancy and abortion is another concerned issue of maternal health.

Family planning could be a most cost effective intervention for all those consequences but unmet need of family planning in developing country still high. Unmet need of family planning can be defined as “Currently married fecund women who want to postpone their next birth for two or more years or who want to stop childbearing altogether but are not using a contraceptive method are considered to have an unmet need for family planning”

Nepal has high unmet need of family planning in south East Asia (26%). Furthermore western region of Nepal have significantly low contraceptive prevalence rate (31.7%) in comparison to other four developmental regions and the national figure (43.37%) and the unmet need is also higher (31.7%) than national (27%).

Syanja is one of the rural districts among 16 districts under the Western Developmental Region with quite low achievement in family planning programme.

Therefore this study is important to carry out to find out the root cause and associated factors behind high unmet need of family planning. It has been expected that the finding of this study will be benefited to a person mostly MWRA, Family, society and the country as a whole. Furthermore the research will be an asset for the knowledge who want to learn or carry out the research in the field of family planning in future.

5. Objectives:

- To find out the status of unmet need of family planning among the married women of reproductive age group of syanja district, Nepal.
- To explore the socio demographic, predisposing, reinforcing and enabling factors on Marriage Women with Reproductive Age group to adopt the family planning service.
- To determine the availability and accessibility of family planning methods among Married Women with Reproductive Age group.
- To find out the association in between predisposing, reinforcing and enabling factors to adopt the family planning methods MWRA in Syanja.
- To find out the association between service accessibility and the unmet need of family planning.

6. You are invited to be a volunteer/subject to participate in the project:

Yes, few data collectors who are interested to be participate in the research work with minimum of qualification of bachelor degree and participate in the orientation of research (one day) will be allowed for the data collection. Because of

the time constraints and geographical condition of the district I need to take help with volunteers.

7. Research activities which involving you when you volunteer to participate in this research project will be as following: (focus on the parts that involve volunteers/subjects):

- Female Community Health Volunteers will be mobilized to find out the home where the targeted respondent with inclusion criteria is available.
- Data collectors will be oriented and sent to the sampled area to collect the data.
- For the orientation programme to data collectors, one research expert will be hired as a resource person.
- Volunteers mostly participate to collect the data by interview.

8. Period of time that you will be involved in this research activities (Treatment/data collection):

About 3 weeks after obtained approval from Ethical Review Committee for Human research. Faculty of Public Health, Mahidol University

9. Expected benefits of the project to you and to others:

This study has been carrying out to find out the root cause of the high unmet need and low performance of the programme by analyzing the associated factors in the unmet need of family planning in a representative rural district of developing country Nepal. After study it has been expected that the outcome of result will be applicable to interment the programme in more effective way and context friendly so that the achievement of family programme will be obtained. Ultimately minimizing the unmet need of family planning a person mostly MWRA, Family, society and the country as a whole will be benefitted from this study. Furthermore the research will be an asset for the knowledge who want to learn or carryout the research in this field in future.

Volunteers will have some experience of work and also incentivized with few financial support.

10. Risks or any undesirable that may occur to you caused by this research and measure or prevention and risk reduction method which will be provided during participation in the project.

I don't think of any risk to the respondent (Not predicted any)

But during data collection, because of the socio-cultural matter and the women position in the family in the rural setting, most of the time she might have gets permission from her husband and mother in law or head of the family the preliminary communication regarding the brief of research its purpose and the matter of confidentiality and ethical consideration should clearly put in front of them otherwise the respondent may be in trouble later by their family members and the head of the family or even from the husbands as well.

11. How can you securely store the data and keep them confidential? (Such as how to take care data, where are data storage who will access, and how to destroy data and when)

To maintain the confidentiality, selection of the data collectors at the beginning will be done carefully to a responsible, educated and sincere person in research work. They will be oriented for such sincere and confidential matters. Questionnaire after data collection will be gathered as soon as possible and ask to all data collectors to assure the confidentiality. After that the researchers himself take care of those questionnaire with data and process confidentially. All the Questionnaire sheets will be destroyed recently after entry the data in software.

12. The right of the subject (he/she) to withdraw from the project.

All the respondents will be preliminary informed for their volunteer decision to be participate in the research and can withdraw any time during the research if they have any discomforts.

13. Contact address of authorized persons in case of emergency.

1. Dr. Bhash Raj Dhakal (DHO, Syanja-Nepal. Ph No : 00977-063-520142)

2. this research project be approved by the Ethical Review Committee for Human Research, Faculty of Public Health, Mahidol University. Office address at Building 1, 4th Floor, 420/1 Rajvithi Road, Rajthevi, Bangkok 10400, Telephone: 0-2354-8543-9 Ext. 1127, 7404 Fax: 0-2640-9854



APPENDIX F

INFORMED CONSENT FORM

EC-4 Form

Project Title: “Unmet need of family planning in a rural district syanja Nepal”

Responsible person(s) and institute: Mahidol University Thailand.

Date (day/month/year)

I
(Mr./Mrs./Ms.).....
Home address..... Street..... Village number.....
Sub district..... District..... Province..... Postal code.....

I have read and understood all statements in the **information sheet**. I have also been explained the objectives and methods of the study, as well as possible risks and benefits that may happen to myself upon the participation in the study. I understand that the information will be kept confidential and my name will not be declared in any case. I shall be given a copy of the signed **informed consent form**.

I have the right to withdraw from the project at any time without any adverse effects upon myself.

Signature..... (Respondent/informant)
(.....)

Signature..... (Researcher)
(.....)

Copyright by Mahidol University

I cannot read but before having finger print on this **informed consent form**, the investigator/interviewer has read and explained to me in detail about the study, the information sheet and the **informed consent form** until I completely understood.

Signature..... (Respondent/informant)

(.....)

Signature..... (Researcher)

(.....)

BIOGRAPHY

NAME	Mr Santosh Paudel
NATIONALITY	Nepali
DATE OF BIRTH	16 th of Dec.1979
HOME ADDRESS	Pumdi-Bhumdi-3,Kaski, Gandaki, Nepal
E-MAIL	spaudel9@gmail.com
ACADEMIC QUALIFICATION	Master Degree in Health Education, BA, B Ed, H.A. Tribhubhan University, Nepal
WORKING EXPERIENCE	Community Health Worker under ministry of health and population, from 1999 to 2006. Training officer in International Nepal Fellowship (INF), Pokhara from 2006 to 2010 Family planning supervisor, under ministry of health and population from 2010 to 2012. Family health Inspector from 2012 to till the date under ministry of health and population Nepal.