



CHAPTER V

ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the analysis and interpretation of the data obtained in testing the model of empowerment of Female Community Health Volunteers (FCHVs) in increasing contraceptive acceptance among the Currently Married Women of Reproductive Age Group (CMWRAs). Analysis is based on the qualitative and quantitative data obtained from 17 FCHVs and quantitative data obtained from a total of 241 CMWRAs. The data used for the analysis of the process of empowerment of FCHVs included the transcription of the Focus Group Discussions (FGD), available records and observation notes of the facilitator. The qualitative data obtained through FGD were carefully read and key words were identified so as to develop an understanding about the data before analyzing them. Quantitative data obtained from the 17 FCHVs and 241 CMWRAs were analyzed using the descriptive and inferential statistics as applicable.

5.1 Findings of FCHVs

The findings obtained from 17 FCHVs are described in 3 sections. The section 5.1.1 presents the pre-intervention findings of FCHVs in terms of their socio-economic characteristics and attitude towards volunteer job. This is followed by the FCHVs awareness regarding contraception, competence in providing Family Planning (FP) services and confidence in performing their job including the constraints faced by them. Section 5.1.2 describes the intervention findings in terms of the change in the awareness, competence and confidence in carrying out FP service responsibilities. Section 5.1.3 presents the post-intervention follow-up findings on their FP related activities and comparison of these activities with the pre-intervention findings.

5.1.1 Pre-Intervention Findings of FCHVs

5.1.1.1 Socio-Economic Characteristics of FCHVs :

Background of FCHVs in terms of socio-economic characteristics, FCHV-job related characteristics and fertility related characteristics are presented in table 5.1 to 5.3. Table 5.1 below reveals that the age of the 17 FCHVs, who participated in the study varied widely from 20 to 50 years. Nine of them were aged 34 to 50 years and remaining 8 were aged 20 to 26 years. The majority of them (11 out of 17) belonged to Tamang, Lama, Gurung and Magar ethnic groups (Tibeto-Barman race) who observed the Buddhist religion. The remainder group (6 out of 17) included the Brahmin / Chhetri / Newar ethnic groups (Indo-Aryan and Mongolian races) and most of them belonged to Hindu religion.

Table 5.1 : Socio-Economic Characteristics of FCHVs

Socio-economic characteristics	FCHVs	
	No.	Percentage
Age category (N=17)		
20- 29 years	8	47.1
30- 39 years	3	17.6
40- 50 years	6	35.3
Range	20-50	-
Mean±SD	32.9 ± 11.4	-
Ethnic categories (N=17)		
Tamang, Lama, Gurung and Magar	11	64.7
Others (Brahmin, Chhetri and Newar)	6	35.3
Literacy status (N=17)		
Can read & write only	12	70.6
Had formal school education (up to 10 th Std.)	5	29.4
Income generating occupation (N=17)		
No	3	17.6
Yes	14	82.4
Type of occupation (N=14)		
Agriculture	10	71.4
Shop-keeping	2	14.3
Stitching	1	7.1
Service	1	7.1
Family type (N= 17)		
Single	13	76.5
Extended	4	23.5

The above table 5.1 also reveals that the education status of FCHVs varied from just literate to up to 10th standard of schooling. Of the total 17 FCHVs, less than one-third (29.4%) had received formal school education, whereas the rest could just read and write through informal education and adult literacy classes. Fourteen out of 17 ((82.4%) FCHVs were engaged in income generating occupations (ten in agriculture, two in shop keeping, one in stitching and another one in the service) and the remaining three did not work outside their home . In regards to family type, 13 out of 17 (76.5%) FCHVs belonged to single family and rest of them belonged to an extended family (details are given in the Appendix 19).

Table 5.2 below presents the job-related variables of FCHVs. FCHVs gave 5 different reasons for undertaking FCHV training. Perceived personal benefit was revealed as the ultimate goal for undertaking FCHV training. Five out of seventeen FCHVs expressed that their primary reason for undertaking FCHV training was *to earn virtue* by providing service to the people. Four of the FCHVs said that they had taken training *to learn about health* and 3 had felt that the training would help in *self-development*. Another three felt that training would help them in *gaining popularity and social status* in the community and the remaining 2 had hoped that they would have *a job and earning* to supplement their family's income.

Table 5.2 : Job-Related Characteristics of FCHVs

Job-related characteristics	FCHVs	
	No.	Percentage
N=17		
Reason for taking volunteer job		
Earning virtue (through service to people)	5	29.4
Learning about health	4	23.5
Self development	3	17.6
Gaining popularity and social status	3	17.6
Having a job to earn money	2	11.8
Duration of work as FCHV		
2 years	3	17.6
4 years	3	17.6
5 years	7	41.2
11 years	4	23.5

ต้นฉบับ หน้าขาดหาย

Table 5.3 above also reveals that the number of children among the 14 married FCHVs varied from 1 to 6 and 5 (35.7%) of them had their youngest child aged 5 years or less. Half of the married FCHVs were current users of contraceptive (3 of them were using depo, 1 was using pills and rest 3 had permanent operation done), 4 were current non-users of contraceptive (with their youngest child being aged 12 years or more) and for the rest 3 out of 17 FCHVs contraception was not applicable (i.e. menopausal, a widow, or the husband away).

Table 5.4 below presents the education and occupation status of the FCHVs' current husbands. Data on the education status of the FCHVs' current husbands revealed that more of their husbands (76.9%) had formal education than the FCHVs themselves (29.4%). All 13 husbands belonged to income generating occupations with 5 of them being engaged in service.

Table 5.4 : Education and Occupation Status of FCHVs' Husbands

Status of FCHVs' husbands	No	Percentage
N=13		
Education status		
Can read & write only	3	23.1
Had formal school education (Up to SLC)	10	76.9
Income generating occupation status		
No	0	-
Yes	13	100.0
Type of occupation		
Agriculture	4	30.8
Shop-keeping	2	15.4
Labor/carpenter work	2	15.4
Service	5	38.5

5.1.1.2 Attitude of FCHVs towards Volunteer Work

The pre-intervention focus group discussion (FGD) revealed that FCHVs had a positive attitude towards their volunteer work. All of them considered the service to people as a virtuous and noble work. They believed in re-birth and felt that volunteer service to prevent or alleviate the sufferings of people would help them to gather virtue which would facilitate them to have a better living in their next birth.

FCHVs also stated that after working as FCHVs, they developed a feeling of their usefulness to the family and neighbors as they were able to teach health measures to them and people came to them to consult when they had health problems or health concerns. FCHVs expressed that they became more known among their neighbors and community and gained a social respect and appreciation from their communities in the sense, they were invited by the communities too in their family festivals and functions and honored them with agricultural and other gifts. Such feelings of usefulness and gaining respect facilitated them in their health volunteer work.

5.1.1.3 Awareness of FCHVs about Contraception

The pre-intervention FGD was aimed at finding out about the awareness of FCHVs regarding contraception prior to the intervention. The FGD data revealed that all FCHVs had the feeling that children would be essential for a couple to make the family worth living and happy. They valued children as the helping hands in the family routines and as the carriers of the family lineage. Majority of the FCHVs also said that sons in particular are valued because they are necessary for performing the death rituals. Sons are valued as the assets to parents too in their old age as they bring daughters-in-law to care for them, whereas, the daughters would be married off to the other families.

FCHVs were aware, however, that a couple should not have too many children and 2 children would be the ideal numbers. But in practice 7 of the 14 married FCHVs had 3-6 children. Some of them regretted that they were not aware of the existence of FP methods in the past when they had children. The FCHVs who had 4 or more children were also embarrassed to tell the facilitator, the number of children they had.

FCHVs understood the term family planning to mean the permanent method only and they used the term birth spacing for temporary contraception. This was probably because the emphasis of the FP program in the past was more on the permanent methods and temporary methods were introduced at a later date for promoting spacing between births. In regards to contraceptive methods, most of them knew the names of temporary methods as well as the permanent methods. About the

different aspects of contraceptive methods, they generally knew when to begin using contraceptive and how frequently to use them. They stated that depo is a 3 monthly injection, norplant a 5 year contraceptive and Intra-Uterine Device (IUD) a 10 year contraceptive and the male and female sterilization operations as the family planning (child limiting) methods. They lacked the knowledge regarding how the different contraceptives work in the body and what precautions can increase their effectiveness. Regarding their awareness about the availability of different contraceptives at the Kakani Primary Health Care Center (PHCC) (PHCC), some FCHVs did not know that IUD was available in the PHCC. They told that no clients had come to them to consult about IUD and so, they had not felt the need to find out about it. It was also learnt that FCHVs rarely met with one another except in the occasional training programs organized by PHCC where they could discuss their activities.

In regards to the advantages of contraceptives, some of the FCHVs stated that the condom prevents the spread of AIDS, and depo promotes breast milk secretion. In regards to the problems in the use of contraceptives, some of them reported that the daily intake of contraceptive pills was a problem to women, as women tend to forget to take them daily. One FCHV reported how one of the women taking oral contraceptive pills became pregnant because she missed to take the pills in between. FCHVs were aware that depo can increase menstrual bleeding and the pills can reduce milk secretion. They had some myths about contraceptives, which might have contributed to making temporary contraceptive less popular in the community. These were “contraceptive oral pills” get accumulated in the abdomen and cause abdominal obstruction”, “IUD makes the woman weak” and “birth spacing methods result into infertility”.

5.1.1.4 Competence of FCHVs in Providing FP Services

Although FCHVs were supposed to provide out-reach FP services, they had focused their contraceptive services on the clients who approached them on their own with felt need. FCHVs reported that they provided door-to-door family planning education only occasionally when they had visited the community for other purposes

such as the Vitamin A distribution program and Polio immunization program. None of them had maintained the record of the activities they carried out before the intervention.

In regards to distribution of contraceptives, about two-thirds of the FCHVs (12 out of 17) had distributed condom packets to women but none of them had distributed the refill contraceptive pills although specified in the job description. Many of them were able to refer women to health facilities for contraceptive methods but the basis for referral in most cases was the woman's self desire to use a temporary or permanent methods of contraception. FCHVs did not generally make the follow-up visits of these women with the assumption that they would themselves come to FCHVs or the health facility if they developed a problem.

FP education provided by FCHVs was mostly informal and on individual basis. They were not able to convince people why to use contraceptive and suggest which method to choose. They were not able to explain about the real side effects of contraceptive methods because they themselves did not know well. As a result they were not able to provide satisfactory answer to their queries e.g. whether contraceptive pills cause abdominal obstruction, whether vasectomy cause weakness and whether the IUD makes the person lean and thin. Inability to answer the queries of the clients had led to embarrassment in them and had reduced their credibility in the community.

5.1.1.5 Confidence of FCHVs in performing their job

In regards to confidence, FCHVs expressed that they were unsure of their volunteer service activities in terms of whether these were right or wrong. They had no one in the community to consult when they needed help. Following the usual FCHV-training, no one had guided them and given feedback on their work, as to whether they were doing right or wrong. The village health worker (VHW) who was supposed to supervise them resided in another district and contacted them only when he had to inform them about the training programs that were to be held. So they felt the need for someone coming and giving feedback and encouragement.

They expressed that the information they had was inadequate to respond to the queries of the people satisfactorily. So they felt hesitation in approaching to people and did not make house-to-house visit in the community to see how the people are doing. They did not have the courage to distribute oral contraceptives because of the fear of getting blame if the woman develops side effects.

Some of the FCHVs also stated that they had removed their signboard from their house because they feared that they would not be able to provide consultation to people properly. They also felt that they did not have adequate resources to carry out their job well.

5.1.1.6 Constraints Faced by FCHVs prior to intervention

FCHVs expressed that they had initiated their volunteer job with enthusiasm. During the period of their service they had faced constraints in doing their volunteer work successfully. The resource constraint that the FCHVs had come across was the lack of medicines and supplies. FCHVs stated that during FCHV-training, they had received a kit-box with basic medicines and first-aid treatment materials (e.g. gentian violet, tincture of iodine, paracetamol, oral rehydration powder packets, cotton and gauze) and a reference manual. They had distributed medicines free of charge to the clients. When the medicines in the kit-box were finished they could not get them replaced from the PHCC or anywhere else. This hampered their volunteer services. Based on her past experience, one FCHV commented “community people want total family care and their first priority is in the treatment of ailments than in family planning and if there is a sick person in the family and if I go and tell them about family planning only, they will not listen to me”. FCHVs became frustrated, as they did not have any medicine to distribute to clients and they had to refer the clients to health facility even for minor ailments. Some FCHVs remarked that their clients were annoyed at them and told them “ if we have to go to health facility for all medicine, what are you for ?”

It was learnt from PHCC staff that PHCC had started charging for the medicines following the implementation of the drug scheme program of the Government, but FP supplies were not charged and continued to be distributed to the

clients free of charge. This was because of the government's policy of promoting contraception for controlling the growth of population in the country. However, FCHVs stated that they did not get FP supplies (e.g. condom packets) easily. They must first provide the health facility staff the name of the clients to obtain FP supplies to distribute to their clients. Furthermore, FCHVs reported that health facility staff feared that FCHVs would replace the job of the health facility staff. Some of the FCHVs narrated what the PHCC staff had told them, i.e., "if you distribute FP supplies to clients, what services we will provide at the PHCC?"

Similarly, some misunderstanding existed among the community regarding the FCHVs. FCHVs expressed that some of their communities considered them to be a "government server", i.e., taking money from the government to propagate the government's message to the people. As a result, FCHVs found difficulty in convincing people about the importance of certain health measures. For instance, in the "Vitamin A" program, people were reluctant to give vitamin A drops to their children with a false rumor that this drop would produce sterility in their children in future.

FCHVs expressed that the lack of time to devote for volunteer services was another constraint. Owing to scattered housing system in the VDC, many of the FCHVs needed to walk a considerable distance (one hour or more) from their home, in order to visit the CMWRAs in their respective communities. They also said that they also lacked teaching aids including the reference materials for providing FP education to people. These were the constraints reported by FCHVs in doing their volunteer job fully.

5.1.1.7 Summary of the Pre-Intervention Findings:

FCHVs in general had low literacy. Most of them had a time constraint. FCHVs lacked awareness about the different aspects of contraceptives and had myths about contraceptives, which would need to be corrected, in order to support women in the use of contraceptive. They lacked competence, as well as, confidence in dealing with their clients and their services were focused on those people who approached them. The pre-intervention findings revealed a need to take measures to reduce the

constraints faced by the FCHVs and the need to develop a mechanism, which would facilitate FCHVs to serve their clients at a reasonably lesser time.

Although it was not easy for FCHVs to regularly visit each woman individually in their homes and disseminate information on health and / or contraceptives, it would be possible that FCHVs reach many women and save time by meeting them in groups. In regards to timing for such meetings, FCHVs could make use of the least-busy time of women and other occasions when women get together. These occasions include fetching water, working in field and tending to cattle grazing. The nature of their occupation such as shop keeping, stitching and farming might also allow them to come in contact with the community and use such opportunities for health and contraceptive awareness raising programs.

5.1.2 Findings on the Intervention (Process of Empowerment of FCHVs)

FCHVs had a sense of belonging to their communities, a desire to serve them and a felt need for learning. These were the motivating factors for FCHVs to engage in the empowerment training. They took part in the intervention with an expectation that they would gain more knowledge from the intervention that would enable them to carry out their job effectively.

The training session also provided them with the opportunity to clarify their beliefs and to relieve their feeling of inadequacy and insecurity by sharing problems and experiences with the group. One FCHVs indicated her relief by the remark “ it is not only me, others have also faced similar problems”.

A feeling of likeness i.e. homogenous group and a sense of trust among the group made them feel free to express their view and concerns. The participatory approach used in the empowerment training was successful in enabling even the quiet participants to become more vocal and share their feelings with the group. The different components of the empowerment of FCHVs revealed during the intervention in terms of changes in the awareness, competence and confidence among FCHVs in regards to

contraceptive services are described below. This description is followed by a section that narrates about the lessons learned from the empowerment training of FCHVs.

5.1.2.1 Change in Awareness of FCHVs about Contraception

FCHVs stated that prior to intervention they had some knowledge about the families under their care, but they had not been able to view them in totality. The exercise on “drawing of village map” helped them to get the total picture of the households under their care at a glance. One FCHV remarked “ the drawing of map of my village helped me to count easily how many women are there in my village, how many women have small children and will need to postpone from becoming pregnant soon”. She further stated “it helped me to think about the suitable places also for group gatherings”.

All FCHVs had a prior feeling that having many children would not be appropriate for the health and well being of the mother and child. The group analysis using “story-telling-with-scenario exercise” validated their individual feelings. They were able to find problems in the problem scenario such as the overburden to the father requiring additional work, lean and thin pregnant mother and lack of cleanliness, care and nourishment to children due to lack of person and resources to care for the increased number of children. FCHVs expressed that their understanding about the problems of having many children has increased by viewing the problem scenario. Their feeling towards the problem scenario was that of a feeling of discomfort, regret and sadness for the poor condition of the mother and children. They felt sad to see the unkempt, poorly nourished and ill-looking children in the problem scenario. They expressed sympathy for the parents for facing the problem of having many children. FCHVs expressed that their awareness of the consequences of high fertility also increased through sharing of experiences from their communities with one another. Some of the FCHVs narrated to the group about the bad incidents that had taken place in their villages due to becoming mother at a young age, having repeated childbirths at short birth intervals and having too many children.

FCHVs related having many children with such problems in the family as the reduced food share among the family members, increased family expenditure, increased parental responsibilities and lack of care to children and unhappiness in the family and ill health and bad outcome in the mother and children. One of the FCHVs expressed “with increase in the number of children, eating mouths also increase in the family but the production of crops in the field will remain the same”.

They considered two children as the ideal size of children whether girls or boys. FCHVs who had children in the recent past seemed to follow these guidelines in terms of spacing and limiting the number of children. They expressed that the knowledge gained through group sessions would help them in enabling their communities too to increase their knowledge about contraception and modify their myths and misconceptions and to space or limit childbirths using suitable contraceptive methods.

They said that they were better able to understand the relationship between the non-use of contraceptives and high fertility. They identified the prevailing factors of non-use of contraceptives in their communities as ignorance of people about contraception, fear of people related to contraceptives and lack of strong desire for limiting the number of children. FCHVs linked having few children with the well-being and happiness in the family and easy distribution of family resources to children. They clarified that having fewer children would mean neither the parents would have to suffer nor would they have to see the suffering of their children as they would have more time and resources to feed and care for fewer children than for many children. They viewed happy looking parents with two well-spaced, well-nourished children in the ideal scenario of the story-telling-with-scenario exercise with satisfaction. This scenario also motivated them to develop a feeling of hope and optimism that they could play a role in creating such families in their communities. With enhanced awareness of the problems associated with increased number of children, FCHVs stated a feeling of responsibility that they should play a role in preventing such scenarios in the community.

Review session on the different aspects of contraceptives in the core group helped FCHVs to gain knowledge by sharing experiences and clarifying beliefs with each other and by identifying various contraceptives and their use through pictorial aid and real samples of temporary contraceptive devices. They were excited to see the real samples of the temporary contraceptive devices especially the norplant and IUD. Some of them had the fear that norplant will penetrate the body tissue and cause pain in the arm. They touched the norplant tubes and were amazed to find them soft. They also gained knowledge about IUD and its placement in the uterus and about the importance of checking IUD thread after each menstruation. With much interest they listened to the facilitator about the procedure of vasectomy and tubectomy operation. In answer to the common query of FCHVs whether contraceptive pills cause abdominal obstruction, the facilitator explained to them that the pill does not cause obstruction as it easily dissolves. She also showed it through demonstration by placing a pill in water. Through this demonstration, FCHVs got the answer to convince people that they should take contraceptive pills with water.

FCHVs stated that the session on the high-risk conditions for different contraceptives was useful to them in knowing about the health conditions in which the use of some contraceptives might be unsafe to the woman. They expressed that they were better prepared then to help women in choosing appropriate methods and reduce the chances of unwanted effects.

5.1.2.2 Change in Competence of FCHVs in FP Services

Empowerment training sessions helped FCHVs to become better planners and decision-makers. FCHVs recalled their routine activities and analyzed their time allocation to various activities like household routines, cattle grazing and field work and were able to make adjustment in their activities to get spare time for FP related activities with the CMWRAs. Some of the FCHVs also brought out the idea that they could request to share some of their responsibilities with neighbors, such as, in looking after young children and in tending to the grazing cattle while going out for the volunteer services.

They expressed that role-play helped them in developing their skills of facilitation in a more comfortable and less embarrassing way. Through repeated cycles of action with the CMWRAs and reflection on their performances with the peers and researcher, FCHVs were able to improve their skills in facilitating women to use contraceptives. As a result of action and reflection sessions at the community level, they became increasingly self-reliant and required minimal assistance. Almost all of them became more organized and took lesser time in their subsequent action group sessions in compare to their first sessions.

FCHVs expressed that as a result of empowerment training their ability to talk to people increased. Their ability to mobilize and use the resources increased. They said that their hesitation to approach the ward chairperson, PHCC staff, as well as, the Village Health Worker for assistance was reduced. They were able to utilize the knowledge that they had gained about the high-risk conditions of different contraceptives in suggesting suitable contraceptive method to the CMWRAs

5.1.2.3 Change in Confidence of FCHVs in Carrying out FP Services

FCHVs expressed that through empowerment training they gained a wide range of knowledge and skill that they would need to use in carrying out their FP related services. They became sure of what sort of information to be given to which kind of women. They felt that they would be better able to respond to the queries of CMWRAs and help them to get relief from their myths. They considered drawing of seasonal calendar as helpful to them in learning what all activities they carried out in a day and how much of time they spent for each of the activities and how can timing be adjusted. They said that they were much more equipped with information, teaching aids and abilities than before the intervention and they were confident that they can teach CMWRAs better and help them in meeting their contraceptive needs

FCHVs stated that role-play gave them the chance to try out the facilitation skills in a simulated environment and to develop confidence in using these skills with the CMWRAs in the real setting. By playing the role of facilitator and the client in the role-play exercise, the FCHVs said that they realized viewpoints, concerns and

problems of the facilitator, as well as, the participant. Reflection on the role-play performance of individual FCHVs (whether they had made the participants feel comfortable; whether they had encouraged participants to share their views and experiences; whether they had allowed participants to express their concerns and feelings and whether they had provided the information needed to the clients regarding contraceptives) enabled them to get feedback on their performance as to how well they carried out each skill items and what were the areas that required improvement and strengthening. Through role-play exercises, FCHVs expressed that they learnt how to conduct a group session and this eased them in trying out the skill in the community.

FCHVs reported that continual support and reinforcement from the researcher and peers while trying out skills in the community helped them learn new skills and gain confidence to implement the newly learned skills. The presence of peers and the researcher also served as a support to the facilitating FCHV in developing competence and confidence.

5.1.2.4 Lessons Learned from Empowerment of FCHVs

For the successful use of Participatory Action Research (PAR) a degree of trust must be established between the researcher and participants (FCHVs). This necessitates a basic knowledge of the participants and their context to the researcher to enable her/him to work with them. Likewise the participants also need to know about the researcher, to which organization she or he belongs, what is her intention of working with them. The researcher must be accepted by the group as a member and it can be easier if the researcher is introduced to the group through someone whom the group knows in stead of the self-introduction. In this study the village health worker introduced the researcher to the participants (FCHVs).

PAR being from qualitative tradition produces qualitative data that requires the researcher, to select and use appropriate qualitative and quantitative research techniques to which the researcher must be familiar with. Likewise, a researcher with a conventional research background may find difficult to use PAR without getting

orientation on qualitative research techniques, participatory facilitation skills and in releasing the control over the research to participants.

To promote participation of members in PAR, which is a must, the researcher is required to select and use appropriate learning tools. Among the tools, this study found the PRA (village mapping and seasonal calendar) and SARAR) story-telling-with-scenarios) tools as very useful in creating discussion and participation among the low literacy group of participants.

To make it really participatory, the facilitator has the great role to play. Some participants may be very bossy, some may be very reserve and some may keep on talking too much and do not give time to others to talk. So the facilitator needs to encourage the reserve and shy participant to speak without hurting the talkative participants. Apart from this problem, individual differences were seen among the participating FCHVs probably due to the difference in their socio-demographic characteristics. Every one was not learning at the same pace. Some of the FCHVs needed repeated assistance in gaining knowledge and learning skills while others needed less assistance.

Unlike other research, empowerment research produces outcome that benefits not only to the field of research but also to the participants of the research. In this study the empowerment training eased the participants (FCHVs) to carry out their volunteer work to community more effectively.

Empowerment being a gradual process, empowerment training will take longer time than the conventional training and demand more time from the researcher as well as the participants. However, since participants in this study were the FCHVs who already had some training and some experience of working as FCHVs and the study tried to build on the existing knowledge and skill to make them more knowledgeable and skilled and to build up their competence and confidence in using the skills. So the study needed comparatively less time than if it would have been to a new cadre of health worker.

Although empowerment leads to action, it may become a problem for rural women who are already overburdened with their domestic and fieldwork. So it may be unrealistic to expect from them to spend too much of their time in volunteer work. What was expected from them in this study was that they gain adequate knowledge and skill and develop competence and confidence to serve the people so that they can work at their own pace towards helping community women to have better lives.

Although empowerment in itself is a sustainable phenomenon through development of a feeling of ownership and commitment among the participants, occasional follow-up and reinforcement will be appreciable to support in the continuation of the job. The participants in this study had also expressed for such need to keep their work to go on.

In terms of the size of the group for PAR, it should not be too large and probably up to 12 would be a manageable size. In this study the group was little large. Due to various constraints the group could not be split up into two. However, during the group work sessions the large group was divided into 3 smaller groups to facilitate participation of all group members. Likewise, FCHVs also faced difficulty in facilitating the CMWRAs when the group was large because of the side discussions and because of the difficulty in reaching a group consensus. It also took longer time to complete the session when the group was larger. . Likewise, the sessions could not be conducted in open spaces in the village due to the difficulty in maintaining privacy i.e. children coming in and interrupting the group.

In a patriarchal society, just the empowerment of women alone may not be enough to bring the desired outcome the working environment should also be conducive to work. Participants of this study also expressed the need for mobilizing the stakeholders and eliminating the hurdles to facilitate the implementation of their service activities

Role-play could be a useful method of teaching attitude and skills. Although the simulated role-play setting was different from the actual setting, FCHVs in this study

considered such setting to be advantageous in practicing new skills and gain competence and confidence as the simulated setting was safer and less embarrassing to them than the actual setting.

5.1.3 Findings on the FCHVs' Post-Intervention Activities

The minutes of the monthly meetings during the post-intervention implementation phase (July to December 2000) were analyzed in terms of activities carried out, problems faced and solutions planned. Altogether 6 meetings were held with FCHVs. The records of the activities carried out by the FCHVs were noted during each meeting. Findings were as follows.

5.1.3.1 Overview of the Post-Intervention Activities of FCHVs

FCHVs carried out their volunteer work not as regular day-to-day activities but as spared-time activities and FP service as one of their volunteer responsibilities. In addition to it, various seasonal and cultural occasions fell during the 6 months post-intervention follow up period. The month of July was a rainy month when the rural people remained busy planting the rice plants. In the month of October fell the two greatest national festivals “Dashara” and “Dipawali”, which were observed by all ethnic groups. In the month of November people were engaged in reaping, drying and storing rice i.e. the staple crop. These may explain about the low FP activities carried out by FCHVs following the intervention. On the 6th monthly meeting, FCHVs were asked to give their feedback regarding the monthly meetings. FCHVs considered the monthly follow-up meetings to be quite useful to them. Some of them stated that the meetings helped them to assess where they were compared to the group and served as a stimulus to keep them on track and to remind what they need to do in order to be like the other group members. Some said that the meeting served as a forum to discuss their individual problems and get suggestions on the measures they could take. They expressed that such follow-up meetings would be essential to keep their work going on.

The FP related activities carried out by FCHVs during the 6 months post-intervention follow-up period are given in Appendix 20 (Table 5a to 5f). Their activity pattern did not show any particular trend. However, the seasonal events influenced their

activities slightly, with fewer group sessions being conducted with CMWRAs and fewer follow-up visits to CMWRAs being made during the month of July, October and November. Their performance in regards to other FP activities like provision of individual consultations, referral of women for contraceptives and distribution of non-clinical contraceptives did not seem to be influenced by the seasonal events. The summary of the activities carried out during the post-intervention follow-up period revealed that on an average, in a month each FCHV conducted one formal (organized) group meeting, provided FP consultation to two to three CMWRAs, referred one CMWRAs for contraceptive, provided pills or condom to one CMWRA or none, and did the follow-up visit to one CMWRA to find out how she was doing with the contraceptive (Table 5.5).

Table 5.5 : FP-Related Activities of FCHVs During the Post-Intervention Follow-up Period

Activities of FCHVs	Post-intervention follow-up						Mean total in 6 mths
	Mean activities/ FCHV						
	July (1st mth)	Aug. (2 nd mth)	Sept. (3 rd mth)	Oct. (4 th mth)	Nov. (5 th mth)	Dec. (6 th mth)	
Formal group meetings	0.4	1.5	1.7	0.2	0.9	1.4	6.12
FP consultation (No. of women)	1.9	1.8	3.5	2.0	2.5	3.4	15.06
No. of women referred	1.6	1.5	1.4	1.4	1.2	0.7	7.88
No. of women receiving pills	0.0	0.0	0.1	0.3	0.2	0.1	0.76
No. of women receiving condom	0.2	0.7	0.7	0.7	0.8	0.4	3.47
No. of women followed-up	0.7	1.4	1.5	1.3	1.4	1.2	7.29

5.1.3.2 Comparison of Pre and Post-Intervention Findings

Table 5.6 presents the comparison of FP activities carried out by FCHVs in the 6 months period before the intervention and 6 months period after the intervention. The table indicated that following the empowerment training there had been a change in the performance of the FCHVs, which was sustained in the follow up period. FCHVs' record revealed that their formal group sessions on fertility awareness with women after intervention had increased to 6.1, on average, from none before the intervention. The FCHVs reported that they had used any informal opportunities available to them to offer consultation on FP to women. Such informal opportunities were when women

were engaged in social activities such as fetching water, working in field, collecting firewood and fodder and tending to their grazing cattle.

Table 5.6 : FP Activities of FCHVs in the 6 Months Period Before and After Intervention

FP related Activities of FCHVs			N=17
	Before Intervention	After Intervention	“t” test value
	Mean±SD	Mean±SD	
No. of formal group meetings conducted	0.0	6.1±1.2	21.63**
No. of women receiving FP consultations	2.3±1.1	15.1±1.8	23.38**
No. of women referred for FP	1.9±1.1	7.9±1.2	16.05**
No. of women receiving refill pill packets	0.0	0.8±1.1	2.89*
No. of women receiving condom packets	1.2±1.1	3.5±1.6	4.05**
No. of contraceptive-user women followed-up	0.4±0.7	7.3±1.2	21.54**

* p <.05, ** p <.01

As can be seen in the Table 5.6, each FCHV, on an average, provided consultation to 15.1 women in the 6 months period after the intervention, whereas they provided consultation to only 2.3 women before the intervention. After the intervention, all 17 FCHVs had distributed condom packets and seven of them had also distributed refill oral contraceptive pill packets to women. Prior to intervention 12 out of the 17 FCHVs had distributed condoms and none had distributed refill oral contraceptive pills (not shown in the Table). On an average, each FCHV provided oral contraceptive pills to 0.8 women after the intervention compared to none before the intervention and provided condoms to 3.5 women after the intervention as compared to 1.2 women before the intervention. In the 6 months time following the intervention, FCHVs had referred 7.9 women to health facilities for use of a contraceptive method where as they had referred 1.9 women before the intervention. FCHVs had also used the screening charts that were provided to them for helping the women in deciding the suitable contraceptive of their choice. The mean number of FP user women followed-up also increased from that of 0.4 prior to intervention to 7.3 after the intervention (Table 5.1). FCHVs' pre-intervention and post-intervention mean performances were compared using a paired sample “t” test. At the degrees of freedom of 16, “t” is 2.12 at .05 level,

2.92 at .01 level and 4.02 at .001 level. The mean increments in the activities were found to be much higher than the value at .05 (including the difference in refill pill distribution with obtained t value being 2.89)

5.1.3.3 Influence of Socio-Economic Characteristics of FCHVs on their Post-Intervention Activities

Data obtained from the FCHVs regarding their activities in the post-intervention follow-up period were analyzed according to their selected socio-demographic variables age group and education to find out whether these variables influenced in their performance. The results obtained are presented in Table 5.7 and 5.8. For other variables like the occupation and marital status, there were too small numbers in the categories so they were analyzed.

Routine observation of the performance of FCHVs revealed that younger FCHVs (below 30 years) were more mobile and active in regards to FP activities in comparison to the older FCHVs (aged 30 years and above). It was probably because of the cumulative outcome of the co-existence of the other supportive factors in them i.e. higher proportion of the younger FCHVs had a formal education than the older FCHVs and a greater proportion of the younger FCHVs were using a method of contraception (Appendix 5).

Table 5.7 presents the post-intervention activities of FCHVs in the six month follow-up period according to their age group and “t” test findings to see whether the younger FCHVs (aged less than 30 years) performed better than the older FCHVs (aged 30 years and above). The findings revealed that in all activities except in oral contraceptive pills distribution, younger FCHVs performed significantly better than older FCHVs in the 6 month follow up period (with the degrees of freedom of 15, the obtained “t” test values were higher than the value at .05 level which is 2.13).

Table 5.7: Mean Distribution of the Activities of FCHVs in the Post-Intervention Follow-up Period According to their Age-Group

Activities/age group of FCHVs	Post-intervention follow up (Mean)						“t” test value
	1st mth	2nd mth.	3 rd mth	4 th mth	5 th mth	6 th mth	
Formal group meetings							
- Under 30 yrs. (N=8)	0.5	1.8	1.8	0.4	0.9	1.6	3.33**
- 30 yrs. and above (N=9)	0.3	1.3	1.6	0.1	0.9	1.2	
FP consultation (No. of women)							
- Under 30 yrs. (N=8)	1.8	1.5	4.5	1.9	2.6	3.9	2.74*
- 30 yrs. and above (N=9)	2.0	2.0	2.7	2.1	2.3	3.0	
Referral (No. of women)							
- Under 30 yrs. (N=8)	1.8	1.8	1.5	1.6	1.4	0.8	2.57*
- 30 yrs. and above (N=9)	1.4	1.3	1.3	1.2	1.1	0.7	
Pills distributed (No. of women)							
- Under 30 yrs. (N=8)	0.0	0.0	0.1	0.5	0.3	0.3	1.66
- 30 yrs. and above (N=9)	0.0	0.0	0.1	0.1	0.2	0.0	
Condom distri. (No. of women)							
- Under 30 yrs. (N=8)	0.1	0.6	1.1	0.5	1.3	0.5	4.10**
- 30 yrs. and above (N=9)	0.3	0.8	0.3	0.9	0.4	0.3	
No. of women followed-up							
- Under 30 yrs. (N=8)	0.5	1.6	1.6	1.6	1.6	1.0	2.68*
- 30 yrs. and above (N=9)	0.8	1.1	1.3	1.0	1.1	1.3	

* p <.05, ** p <.01

Table 5.8 below presents the post-intervention activities of FCHVs in the six months follow-up period according to their education status. “t” test was computed to see whether the FCHVs with formal school education (N=5) performed better than those with informal education (N=12). The findings revealed that in all activities except in the follow-up of women, FCHVs with formal education performed better than those with informal education in the 6 months follow up period (“t” test value being significant at .05 level).

Table 5.8 : Mean Distribution of the Activities of FCHVs in the Post-Intervention Follow-up Period According to the Educational Status

Activities/educational status of FCHVs	Post-intervention follow-up (mean)						“t” test value
	1 st mth	2 nd mth	3 rd mth	4 th mth	5 th mth	6 th mth	
Formal group meetings							
- Formal education (N=5)	0.4	2.0	1.8	0.2	1.2	1.2	4.12**
- Informal education (N= 12)	0.4	1.3	1.6	0.3	0.8	1.3	
FP consultation (No. of women)							
- Formal education (N=5)	1.8	0.2	5.4	1.8	2.8	4.2	5.93**
- Informal education (N= 12)	1.9	2.0	2.8	2.1	2.3	3.1	
Referral (No. of women)							
- Formal education (N=5)	1.8	1.8	1.6	1.8	1.4	0.8	4.49**
- Informal education (N= 12)	1.5	1.4	1.3	1.3	1.2	0.7	
Pills distributed (No. of women)							
- School education (N=5)	0.0	0.0	0.2	0.8	0.4	0.4	4.01**
- Informal education (N= 12)	0.0	0.0	0.1	0.1	0.2	0.0	
Condom distri. (No. of women)							
- Formal education (N=5)	0.0	0.6	1.2	0.6	1.4	0.6	2.88*
- Informal education (N= 12)	0.3	0.7	0.5	0.7	0.5	0.3	
No. of women followed-up							
- Formal education (N=5)	0.4	1.6	1.8	1.4	1.6	1.2	1.77
- Informal education (N= 12)	0.8	1.3	1.3	1.3	1.3	1.2	

* p <.05, ** p <.01

5.1.3.4 Other Influences

Majority of the married FCHVs reported that they received little interruption from their husbands/family in their work as long as their volunteer work did not interfere with their routine household work. Few (three out of 13) FCHVs expressed that their husbands were quite cooperative to them, who willingly helped them in kitchen work and remained with the children when the wives were away for volunteer work. Having young children did not seem to hamper them in their activities as long as they had some one (a relative or a neighbor) to care for their children when they were away for volunteer work. In some group sessions, when they had no one to care for their children at home, they managed by carrying their children with them.

FCHVs expressed that in the course of intervention they came to know one another better and received help and support from one another when they needed them.

Through their increased contact with CMWRAs, they had also become closer to the CMWRAs and developed a better understanding about them and their problems. A feeling of empathy and desire for caring for the CMWRAs increased among FCHVs. They found it easier to convince CMWRAs who were ignorant and never-users of the contraceptives than the past-users of contraceptives. Among the past contraceptive user women who had discontinued using depo-provera due to side effects, many of them preferred to wait until they would have the desired number of children. Some CMWRAs remained reluctant to use a spacing method but were more willing to use a permanent method after having the desired number of children. CMWRAs who did not consent to use a method fell in group who either had a poor decision making power or who had a strong determination for the desired number of children or who had a negative experience with a method in the past.

FCHVs regarded the use of external facilitator (e.g. researcher) i.e. some one coming from outside the community and supervising them, as conducive in establishing their value in the community. They considered continual support and reinforcement as essential in learning new skills and in gaining confidence to implement the newly learned skills. FCHVs regarded their peers as easily accessible and feasible facilitators who could help them in improving their performance through support and feedback. FCHVs also regarded the presence of their peers as less stressful during the implementation of new skills.

5.2 Impact of Empowerment of FCHVs on CMWRA

A total of 241 currently married women of reproductive age group (CMWRAs) residing in the 9 wards of Kakani Village Development Committee (VDC) and who were not using a method of contraception at the time of the baseline interview, participated in the impact assessment of the empowerment of FCHVs. For the impact assessment, the pre-intervention findings of CMWRAs were used to compare with their post-intervention findings. Pre-intervention findings of CMWRAs also served as a basis for planning the intervention. Section 5.2.1. presents the pre-intervention findings of CMWRAs in regards to their socio-economic characteristics, decision-making status, attitude and knowledge towards contraception.

5.2.1 Pre-Intervention Findings of CMWRAs

Pre-intervention findings obtained from the CMWRAs are presented in sections as follows.

5.2.1.1 Socio-Economic Characteristics of CMWRAs

Table 5.9 presents the socio-economic characteristics of the CMWRAs. The table reveals that most of the CMWRAs were in the young adult age group of 20 to 39 years (92.5%), which is an active period of reproduction. Most of them belonged to Tamang/Lama ethnic group (91.7%), one of the disadvantaged groups in the country. Majority of them (74.7%) had to walk a distance of 1 hour or more from their home to reach the health service facility.

Most of the CMWRAs were illiterate (91.3%) with no income generating occupation (92.1%) indicating their low status in the family (Table 5.9). However, because the majority of them belonged to single families (65.1%), they were likely to enjoy more freedom and independence with less cultural pressure from in-laws than in extended families. In comparison to CMWRAs, more proportion of their husbands was literate (48.5%) and agriculture was their main occupation (52.7%).

Table 5.9 : Socio-Economic Characteristics of CMWRAs

Socio-economic characteristics	CMWRAs	
	No	Percentage
N=241		
Age categories:		
- Below 20 years	5	2.1
- 20-29 years	65	26.9
- 30-39 years	158	65.6
- 40 years & above	13	5.4
Ethnic categories:		
- Brahmin/Chhetri	6	2.5
- Newar	10	4.1
- Tamang/ Lama/ Gurung/ Magar	225	93.4
Educational categories:		
- Illiterate	220	91.3
- Literate	21	8.7
Income generating occupation:		
- No	222	91.3
- Yes	19	8.7
Type of family:		
- Single	157	65.1
- Extended	84	34.9
Distance of HF from the place of residence:		
- Less than 1 hour walk	61	25.3
- 1-2 hour walk	107	44.4
- More than 2 hours walk	73	30.3
Educational status of the CMWRAs' husband:		
- Illiterate	124	51.5
- Literate	117	48.5
Occupation of the CMWRAs' husband:		
- Farmer	127	52.7
- Laborer	65	27.0
- Business	10	4.1
- Service	10	4.1
- Others (driver, tailor, contractor etc)	29	12.0

Early marriage and early childbearing which are the characteristic features of rural women, were predominant in Kakani VDC also, as 78.4% of the CMWRAs were married before they reached the age of 20 years and 59.6% of the CMWRAs became pregnant before reaching the age of 20 years. Although, CMWRAs desired to have 2.4 children on average, in actual, they had 3.8 children on average indicating that 1.4 children per woman were unintended. Majority of them (65.6%) had their youngest

child being aged 5 years or less. So these CMWRAs were still liable to conceive another child if they did not use a contraceptive measure (Table 5.10)

Table 5.10 : Fertility-Related Characteristics of CMWRAs

Fertility related characteristics	CMWRAs	
	Number	Percent
N= 241		
Age at marriage:		
- Below 17 years	68	28.2
- 17-19 years	121	50.2
- 20-24 years	46	19.1
- 25 years & above	6	2.5
Age at first pregnancy:		
- Below 17 years	16	6.6
- 17-19 years	138	53.0
- 20-24 years	80	33.2
- 25 years & above	17	7.0
Average number of child births (Mean±SD)	4.3 ± 1.6	-
Average no of children survived (Mean±SD)	3.8 ± 1.4	-
Average no of children desired (Mean±SD)	2.4 ± 0.7	-
Age of the youngest child:		
- 0-6 months	53	22.0
- 7-12 months	31	12.9
- 13-24 months	15	6.2
- 25 –60 months	59	24.5
- More than 60 months	83	34.4

Although the CMWRAs had 3.8 children on average (Table 5.10), more than two-thirds (71.8%) of them had not used any method of contraception so far and DMPA or depo provera, which was locally known as “3 monthly injection”, was the most commonly used method among the past users (Table 5.11).

Table 5.11 : Contraceptive-Use Related Characteristics of CMWRAs (Baseline Data)

Contraceptive-use related variables of CMWRAs	Responses	
	N	%
Use of contraceptives in past (N=241):		
- No	173	71.8
- Yes	68	28.2
Contraceptive method used in past (N=68):		
- Depo	47	69.1
- Pills	15	22.1
- Norplant	6	8.8
Reasons for discontinuation of contraceptive (N=68):		
- Wanted more children	22	32.3
- Bleeding	15	22.1
- Obesity	12	17.6
- Giddiness	11	16.2
- Forgetfulness	5	7.3
- Weight loss	3	4.4
Reasons for current nonuse of contraceptives (N=241):		
- Fear of side effects	107	44.4
- Unaware	66	27.4
- Desire for more children	25	10.4
- Husband objected	18	7.5
- Postpartum amenorrhoea	12	5.0
- Others (e.g. god gift, dislike etc)	13	5.4

Table 5.11 revealed that CMWRAs had given different reasons for the discontinuation as well as current nonuse of contraceptives. Actual or perceived side effect was the commonest reason for discontinuation (67.7%) as well as nonuse (44.4%) of contraceptives among the CMWRAs. The desire for more children was another reason for discontinuation as well as nonuse of contraceptives. Among the nonusers, ignorance about contraceptives was also a considerable factor leading to non-use.

Table 5.12 : Selected Socio-Economic Characteristics and Previous Use of Contraceptives among the CMWRAs

Socio-economic characteristics of CMWRAs	Previous use of contraceptive		χ^2 value
	Yes No. (%)	No No. (%)	
Age group of CMWRAs:			
- Below 30 years (N=70)	13 (18.6)	57 (81.4)	4.5*
- 30 years and above (N=171)	55 (32.2)	116 (67.8)	
Ethnicity:			
- Tamang/Lama/Gurung/Magar (N=225)	60 (26.7)	165 (73.3)	4.02*
- Brahmin/Chhetri/Newar (N= 16)	8 (50.0)	8 (50.0)	
Type of family:			
- Single (N=157)	49 (31.2)	108 (68.8)	2.15
- Extended (N=84)	19 (22.6)	65 (77.4)	
Education status of CMWRAs:			
- literate (N=21)	16 (76.2)	5 (23.8)	12.1**
- Illiterate (N=220)	52 (23.6)	168 (76.4)	
Income generating occupation of CMWRAs:			
- Yes (N=19)	10 (52.6)	9(47.4)	6.07*
- No (N=222)	58 (26.1)	164 (73.9)	
Age of CMWRAs at marriage:			
- Less than 20 years (N=189)	50 (26.5)	139 (73.5)	1.34
- 20 years and above (N=52)	18 (34.6)	34 (65.4)	
Education status of CMWRAs' husbands:			
- Literate (N=117)	35 (29.9)	82 (70.1)	3.24
- Illiterate (N=124)	33 (26.6)	91 (73.4)	
Distance of Health facility from home:			
- Less than one hour of walk (N=61)	30 (49.2)	31 (50.8)	17.69**
- One hour or more walk (N=180)	38 (21.1)	142 (78.9)	

* p < .05, ** p < .01

Table 5.12 presents the previous use status of contraceptives among the CMWRAs according to their selected socio-demographic characteristics. The chi-square test revealed a significant influence of CMWRAs' age group, ethnicity, education status and income generating activities in the previous use of contraceptive (for one degree of freedom, p value at .05 level is 3.81)). Likewise, the distance of health facility from their residence also seemed to influence the previous use of contraception. Other characteristics like type of family, age of CMWRA at marriage and education status of CMWRAs' husbands did not have a significant influence on the previous use of contraceptive among the CMWRAs

5.2.1.2 Decision-Making of CMWRA

Empowerment of CMWRAs with knowledge and skill and enabling them to use fertility control measures was the goal of the study. One of the indicators of empowerment is considered to be the ability to make decisions. Therefore, to assess the empowerment status of CMWRAs, they were asked some questions relating to their decision making on specific situations, which is presented in the Table 5.13. Data in table reveals a mixed picture that CMWRAs were empowered in certain items and not in other items. For instance, in relation to health care of their children, CMWRAs made decision in most cases (52.7%) where as for their own health care their husbands made decision in majority cases (50.2%). However, in regards to use of contraception in past, more than half (53%) of the CMWRAs either made the decision by themselves or they made the decision together with their husbands in using a contraceptive. This finding also reveals that contraception is a business of women rather than men. It may be partly because of the availability of more contraceptive choices for women and partly because women would be the immediate bearer of the adverse impact of non-use of contraceptive.

Table 5.13 : Decision-Making Status of CMWRAs

Decision-making status of CMWRAs	CMWRAs	
	Number	Percent
Decision maker for health care of children (N=241):		
- CMWRA	127	52.7
- Husband	84	34.9
- Both	20	8.3
- Others (e.g. mother-in-law)	10	4.1
Decision maker for health care of CMWRA (N=241):		
- Self	93	38.6
- Husband	121	50.2
- Both	8	3.3
- Others (e.g. mother-in-law)	19	7.9
Decision maker in past use of contraceptives (N= 68):		
- Self	25	36.8
- Both	11	16.2
- Husband	18	26.5
- Others (e.g. friends, relatives, FCHV etc)	14	20.6

5.2.1.3 Attitude of CMWRAs towards Unintended Pregnancy

Although the majority of the CMWRAs (91.3%) perceived that they were susceptible to occurrence of pregnancy, the problem of unintended pregnancy was not perceived so serious. For instance, about half (53.1%) of them considered the use of abortion as an easy method to get rid of unintended pregnancy and almost one-fourth of them (23.7%) also opposed that “increased number of children leads to economic burden” (Table 5.14). Thus, their readiness to avoid unintended pregnancy was probably not very high to encourage them to use the contraceptive.

Table 5.14 : CMWRAs’ Attitude (Perceived Susceptibility/Seriousness) towards Unintended Pregnancy

Attitude items	Responses in percent		
	Agree	Disagree	Don't know
N= 241			
Perceived susceptibility:			
- Nonuse of contraceptive leads to unintended pregnancy	91.3	5.0	3.7
Perceived seriousness:			
- Increased no. of children adds economic burden	76.3	23.7	-
- Abortion is an easy method to get rid of unintended preg.	53.1	44.8	2.1

Similarly, although CMWRAs realized the benefit of spacing or limiting children (Table 5.15) there were many barriers to spacing or limiting childbirths that probably prevented them from using contraceptives. These barriers included: difficulty in obtaining FP services; desire for son; religious restrictions; fear of side effects; feeling of embarrassment in discussing about contraception; misconceptions such as “lactating woman need not worry about conception”, “contraception is only for limiting childbirths”. Majority (55.6%) of the CMWRAs however, did not perceive the other factor i.e. “getting approval from the husband” as a barrier.

Table 5.15 : CMWRAs' Attitude (Perceived Benefit/Barrier) towards Contraceptive Use

Attitude items	Responses in percent		
	Agree	Disagree	Don't know
N =241			
Perceived benefits:			
- Having few children makes life happy	84.2	15.8	-
- Birth spacing enables parents to care for children better	67.6	32.4	-
- Contraceptive brings understanding in the couple	70.5	27.4	2.1
- Birth spacing promotes maternal & child health	87.6	12.4	-
Perceived barriers:			
- Getting contraceptive service is a problem to many women	65.6	34.4	-
- A couple must have a son	60.2	37.7	2.1
- Husband's approval is essential to use a contraceptive	42.3	55.6	2.1
- Use of contraceptive is prohibited by the religion	60.2	33.6	6.2
- Side effect is a major concern in use of contraceptive	90.9	9.1	-
- Lactating women need not use a contraceptive at all	84.2	9.5	6.2
- Contraceptive is only for limiting children	82.2	17.8	-
- Discussing about contraception is embarrassing	77.6	22.4	-

5.2.1.4 Knowledge of CMWRAs about Contraceptive Methods

On the whole, CMWRAs' knowledge of the contraceptive method seemed to be low (Table 5.16). Among the different contraceptives, they knew more about depo, pills and permanent methods than about norplant, IUD and condom. In regards to different aspects of contraceptive methods most of them knew about the frequency of intake of depo and pills and surgical methods i.e. vasectomy and laparoscopy as permanent methods. They lacked the knowledge of the timing of initiation of the contraceptives, mechanism of action, possible side effects and the precautionary measures to promote the effectiveness of contraceptives.

Table 5.16 : CMWRAs' Knowledge About Contraceptive Methods

Knowledge items	N =241	
	Correct Responses	
	No.	%
Oral contraceptives (pills) should be taken daily	96	39.8
Pills should be taken in a sequence from the packet	25	10.4
Pills can cause nausea	64	26.6
Depo is taken at three month intervals	117	48.5
Depo is started within 7 days of menstruation	45	18.7
Depo can be taken by breast feeding mothers	41	17.0
Norplant is inserted under the skin	20	8.3
A norplant can prevent pregnancy for 5 years	33	13.7
A woman using norplant can continue her activities as before	12	5.0
IUD is inserted into the uterus	20	8.3
After each menstruation woman should check for the IUD thread	8	3.3
IUD can increase menstrual flow	31	12.9
Condom is a temporary method of contraception for men	38	15.8
Condom prevents sperms from leaking in the vagina	8	3.3
Condoms are not reusable	10	4.1
Vasectomy is a permanent method of contraception for men	95	39.4
In vasectomy the sperm carrying tubes are cut.	18	7.5
Laparoscopy is a permanent method of contraception for women	99	41.1
In laparoscopy tubes that carry egg cells to uterus are cut	17	7.1
Following sterilization operation a man or woman can work as before	19	7.9

5.2.2 Post-Intervention Findings of CMWRAs

The impact of the empowerment of FCHVs was assessed on a total of 241 CMWRAs from the different wards of Kakani VDC. The findings are presented in terms of 1) the nature of consultation received by the CMWRAs from FCHVs, 2) the satisfaction of CMWRAs from the consultation with FCHVs and 3) the change in knowledge, attitude and practice of CMWRAs in regards to contraception.

5.2.2.1 Consultations of CMWRAs with FCHVs

Empowerment of FCHVs had a positive impact both on the frequency and the nature of the consultation of CMWRAs with FCHVs. After the intervention the number of CMWRAs who had consulted with FCHVs about family planning, rose to 227 (94.9%) from that of 19 (7.1%) before the intervention (not shown in the table). Among the CMWRAs who had consulted with FCHVs, the duration of their consultation which was always for less than half-an-hour before the intervention increased to more than

half-an-hour in 38.3% of their consultations after the intervention (Table 5.17). Prior to intervention, CMWRAs consulted with FCHVs mainly for child-limiting methods. Following the intervention, their consultation for child spacing increased and they started consulting for side effects also there by revealing that CMWRAs' awareness about contraception had widened.

Table 5.17 : CMWRAs' Consultation with FCHVs Before and After Intervention

Descriptions of CMWRAs' Consultation with FCHVs	Before Intervention (N=19)		After Intervention (N=227)	
	No.	%	No.	%
Time:				
- Less than 1/2 hour	19	100.0	140	61.7
- 1/2 hour or more	0	0.0	87	38.3
Topic:				
- Side effects of contraceptives	0	0.0	19	8.4
- Child limiting methods	15	78.9	94	41.4
- Child spacing methods	4	21.1	114	50.2
Purpose:				
- Getting information	10	52.6	118	52.0
- Choosing FP methods	3	15.8	54	23.8
- Changing a method	0	0.0	10	4.4
- Clarification of doubts	2	10.5	31	13.7
- Discussion on problems	4	21.1	14	6.2
Outcome:				
- Desired information received	10	52.6	171	75.3
- Desired information not received	9	47.4	56	24.7

More than half of the CMWRAs before as well as after the intervention agreed that the purpose of discussion was to get information on contraceptives. However, after the intervention 75.3% CMWRAs received the desired information as compared to that of 52.6% before the intervention. (Chi-square test was not performed because more than one cell had the expected frequency of less than 5)

5.2.2.2 Satisfaction of CMWRAs with the Consultation with FCHVs

Table 5.18 presents the satisfaction that the CMWRAs had from the consultation with FCHVs before and after the intervention. The findings indicated that after the intervention 78.4% CMWRAs found FCHVs to be easily accessible for consultation as compared to that of 31.6% before the intervention. The post-

intervention findings also indicated that CMWRAs were given more time by the FCHVs for consultation as compared to the pretest. Similarly, 62.1 % CMWRAs in the posttest said that they could express their doubts and concern about conception freely as compared to 21.1% in the pretest. Further, more women (87.2%) reported that they received the information on contraceptives that was required for making an informed choice as compared to 36.8% in the pretest.

Table 5.18 : CMWRAs' Satisfaction with the Consultation with FCHVs

Satisfaction with	Before Intervention (N=19)		After Intervention (N=227)	
	No.	%	No.	%
	Accessibility of the FCHVs	6	31.6	178
Adequacy of the time spent in consultation	6	31.6	165	72.7
Freedom to express problems or concerns	4	21.1	141	62.1
Adequacy of information received on FP methods	7	36.8	198	87.2

5.2.2.3 Knowledge, Attitude and Practice of CMWRAs Regarding Contraception

Table 5.19 reveals that the number of CMWRA who could name at least one contraceptive had significantly increased after the intervention ($\chi^2=71.7$, $p < .001$). On the part of specific knowledge and attitude about contraceptives, the change in the mean scores over time was found to be statistically significant ($t=59.16$ and 60.59 respectively, $p < .001$). The table also reveals that among the 241 contraceptive non-user CMWRAs, 53.9% had started using a contraceptive of one type or the other after the intervention. In regards to the contraceptive use pattern, about two-thirds of the CMWRA or their spouses used temporary methods and one-thirds used permanent method.

Table 5.19: Knowledge, Attitude and Practice of Contraception and Satisfaction with Contraceptive Use among CMWRA Before and After Intervention

Measures	N= 241	
	Before Intervention	After Intervention
Can name one contraceptive method at least (%)	70.5	98.8**
Knowledge of specific contraceptives: Mean±SD	3.4±2.8	10.6±2.8**
Attitude towards contraception: Mean±SD	32.3±4.4	43.8±4.3**
Current (at the time of data collection) use of contraceptives in total (%)	0.0	53.9
- Pills	0.0	8.7
- Depo-Provera	0.0	12.0
- IUD	0.0	4.1
- Norplant	0.0	2.5
- Condom	0.0	7.9
- Vasectomy	0.0	15.4
- Tubectomy	0.0	3.3
Satisfaction with the contraceptive method:		
- Willingness to continue the method (%)	NA	80.6
- Willingness to recommend the method (%)	NA	77.5

** p<. 001

Table 5.19 also revealed that male sterilization was the method of choice among 82% of the permanent contraceptive method users (N=45). The most commonly adopted temporary contraceptive method was the depo-provera followed by pills and condom. Most of the CMWRAs expressed their satisfaction with the contraceptive method they were using, in terms of their willingness to continue the method (80.6%) and willingness to recommend the method to others (77.5%).

5.3 Health Service Facility Record

The primary health care center was not the only health service facility where clients received contraceptive. They could receive contraceptive services from the private clinic also that was situated at a more convenient site for the villagers. They could also obtain contraceptive services from the health service facilities available at capital district, Kathmandu. Thus the record of the primary health care center revealed a low contraceptive use status (Table 5.20). Among the contraceptive users, depo-provera

was the most popular and commonly used contraceptive in the previous 4 years period. Use of pills was also in increasing trend although comparatively few women used it. The trend in the use of IUD was not predictable, as it did not follow a regular pattern (Table 5.20). Condoms were freely distributed through condom boxes kept outside the entrance of the health facility and no record was maintained of the clients receiving condom (as per the government policy).

Table 5.20 : Trends in the Use of Contraceptives from the Primary Health Care Center

Year	No. of new cases attending the PHC for		
	Pills	Depo provera	IUD
2053 (May 1996-April 1997)	-	27	6
2054 (May 1997- April 1998)	3	40	3
2055 (May 1998- April 1999)	5	54	5
2056 (May 1999- April 2000)	11	63	4
Total	19	184	18

Table 5.21 presents the number of new acceptors of contraceptives in the six months period before and after the intervention as recorded in the primary health care center. The record revealed an increase in the new-users of pills, depo and IUD by 2 folds or more following the intervention. The record of condom distribution was not maintained but the staff at the health facility reported somewhat increased demand for it following the intervention period.

Table 5.21 : New Acceptors of Contraceptives in the Primary Health Care Center during the Six Months Period Before and After the Intervention

Period	No of new cases attending the PHC		
	Pills	Depo-Provera	IUD
Before intervention (November 1999 to April, 2000)	6	32	2
After intervention (July to December, 2000)	15	60	8
Increment	9	28	6