CHAPTER VI

SUMMARY, DISCUSSION, RECOMMENDATIONS AND LIMITATIONS

6.1 Summary of the Study

The purpose of the study was to test the effectiveness of an empowerment model that uses Freire's theory of empowerment education and participatory action research along with reinforcement mechanisms, to empower female community health volunteers (FCHVs) to increase the contraceptive acceptance among the currently married women of reproductive age group (CMWRAs). The effectiveness of the empowerment of FCHVs was determined by assessing the change a) in the awareness, competence and confidence of FCHVs in providing FP services to CMWRAs b) in the family planning (FP) related service performance of FCHVs and c) in the use of contraceptive among CMWRAs.

One group, with a before-during-and-after design was used. The study included a total of 17 FCHVs working in the different wards of Kakani village development committee (VDC) of Nuwakot district. For the assessment of the impact of the study a sample of 241 CMWRAs were used from the 9 wards of the VDC. Intervention consisted of empowerment training of FCHVs at two group levels: core group level (listening and dialogue steps) at a formal training setting and action group level (action and reflection steps) conducted at the community setting. Various tools such as the focus group discussion guide, interview questionnaire, PHCC record review guide and FCHVs' activity record sheet were used to collect the relevant data on the different aspects as follows:

- Baseline assessment was done through collection of data regarding the FCHVs' socio-economic characteristics and fertility and contraceptive use status. It also included collection of data regarding their awareness towards contraception and their competence and confidence in the

provision of contraceptive services to the community including FP services provided by them. Baseline assessment also included collection of data on the socio-economic variables of CMWRAs and their knowledge and attitude about contraception. It also assessed the trends in the contraceptive use pattern of CMWRAs in the VDC through PHCC record analysis.

- Process assessment was done by determining the appropriateness and adequacy of the learning strategies used in the model in increasing awareness, competence and confidence of FCHVs through use of feedback responses, FGD information and observation note of the facilitator.
- Outcome assessment was done by finding out the change in the FP service pattern of FCHVs through their record analysis.
- Impact assessment was made by determining the change in the knowledge and attitude of CMWRAs towards contraception and their use of contraceptive along with the satisfaction with the FP services received from FCHVs and with the contraceptive method they were using through the use of interview questionnaire.

The baseline findings on the socio-economic and fertility status of FCHVs revealed a wide variation in their age (i.e. 20-50 years) with the majority (64.7%) of them falling in the young adult age group of 20 to 39 years. Majority of the FCHVs belonged to Tamang/Lama/Gurung/Magar ethnicity (64.7%) and to the single-family system (76.5%). Only 29.4% of them had a formal school education. However, 14 out of 17 FCHVs (82.4%) were engaged in income generating occupation (Table 5.1). Majority of the husbands of the married FCHVs were educated at schools (76.9%) and all (100.0%) of them engaged in income generating occupation (Table 5.4). Majority of the FCHVs were married at the age of less than 20 years (78.6%). They had 2.8 children on average and more than one-third (35.7%) of their youngest children were under the age of 5 years. Half of the married FCHVs were using a method of contraception (Table 5.3).

Pre-intervention findings indicated a lack of awareness among FCHVs regarding the different aspects of contraceptives including how the different contraceptives act in the body and what precautions can increase their effectiveness. They were not providing the contraceptive services through door-to-door visits as expected of them. They focussed their contraceptive services mainly to women who voluntarily came to them for the service and they visited the community only on rare occasions. Although the majority of the FCHVs distributed condom packets, none of them had distributed refill oral contraceptive pills. Lack of awareness and confidence and motivation were the common reasons given by FCHVs for not carrying out their job responsibilities fully.

Intervention findings from FCHVs indicated that the participatory approach used in the model facilitated them to learn from one another's experiences, to increase their awareness, competence and confidence in the provision of contraceptive services and to get to know each other and develop cohesion among them. The story-telling-with-scenarios activity was successful in increasing their understanding about the problem of high fertility. Their ability to analyze a problem in terms of causes, consequences and solutions increased. The group sessions with CMWRAs helped FCHVs to know the CMWRAs better and to develop the feeling of their belonging to CMWRAs. Group sessions also facilitated them in educating CMWRAs about the causes and consequences of high fertility and the possible solutions. It also saved their time needed to visit the community to meet the individual women. FCHVs considered peer reinforcement as an easily accessible and feasible source of support and feedback in developing their competence and confidence in carrying out their job responsibilities.

Intervention findings revealed that empowerment education increased the ability of FCHVs to identify the stakeholders and take their assistance in the study. These included mobilization of contraceptive user-women in educating and clarifying the doubts of contraceptive non-user CMWRAs regarding the use of contraception. Similarly FCHVs were able to approach the village health worker to educate the fathers of under five children on contraception and contraceptive methods.

Intervention findings also revealed that empowerment of FCHVs alone would not be enough to produce the desirable change in their service performance. In other words, along with empowerment education, manipulation of the FCHVs' working environment such as the reduction of the misconception and resistance of the health facility staff towards FCHVs and helping them to become more supportive to FCHVs was found essential to facilitate them to work. Similarly helping community to reduce their misconception towards FCHVs and to become more receptive to FCHVs' service was found essential. In addition, the availability of other materials such as the basic medicines, contraceptive supplies and teaching aids was also found to facilitate FCHVs' ability to perform their job better after the intervention.

In regards to services provided by FCHVs, one important thing to be understood is that they carried out their volunteer services not as routine activities but as spare-time activities. Comparison of the FP activities performed by FCHVs before and after the intervention revealed a considerable change in their service pattern following the intervention. For example, none of the FCHVs conducted a formal group discussion with the women in the community prior to intervention and after the intervention each FCHV conducted on an average six group discussion sessions with women in six months time. This difference was highly significant at .05 level of significance. Likewise the average number of women receiving FP consultation from FCHVs and number of women referred for contraception increased significantly from 2.3 to 15.1 and 1.9 to 7.9 respectively in the 6 months time before and after the intervention. The average number of women receiving refill pill packets and condom packets increased significantly from 0 to 0.8 and 1.2 to 3.5 respectively in the 6 months time before and after the intervention. Consequently, the average number of contraceptive-user women followed up also increased considerably after the intervention (Table 5.6). FCHVs also started using the screening chart for helping women to decide to use an appropriate contraceptive method.

Influence of FCHVs' selected socio-economic factors like age and educational status on their FP related activities were analyzed. The findings revealed that in all activities except in pill packet distribution, younger FCHVs (aged under 30 years)

performed significantly better than the older FCHVs (aged 30 years and above), (Table 5.7). Similarly, FCHVs with formal school-education performed significantly better than the FCHVs with informal education in all FP activities except in the follow up services (Table 5.8).

The 241 CMWRAs on whom the impact of the empowerment of FCHVs was assessed, were non-pregnant and non-users of contraceptive at the beginning of the study. The baseline findings on the socio-economic and fertility status of CMWRAs revealed that a majority of them belonged to young adult age group of 20 to 39 years (92.5%). Majority of the CMWRAs belonged to Tamang/Lama/Gurung/Magar ethnicity (93.4%) and to the single-family system (65.1%). Only 8.7% of them could read and write and most of them had no income generating occupation (91.3%). Almost half of the CMWRAs' husbands were literate (48.5%) with all (100.0%) engaged in income generating occupation. Majority of the CMWRAs (74.7%) resided at a walking distance of one hour or more from the health service facility. Majority of the CMWRAs were married at a younger age of less than 20 years (78.4%) and about 60% of them had conceived before they reached the age of 20 years. Although they had desired to have 2.4 children on average, they had 4.3 childbirths with 3.8 children survived indicating that 1.4 of the survived children on average were unintended. Almost twothird (65.6%) of them had children under the age of 5 years. Little more than one-forth (28.2%) of them had used a contraceptive in the past and all of the previous users had used hormonal contraceptive. Almost half of them (47.1%) had relied on the decisions made by their husbands, relatives or friends for using the contraceptive (Table 5.13). Undesirable effects (such as bleeding, obesity, giddiness and weight loss) were the main reasons for the discontinuation among the past-users while the fear of side effect and unawareness were the common reasons for current non-use among the sample CMWRAs (Table 5.11).

The empowerment education of FCHVs had a positive impact both on the frequency and the nature of consultation that the CMWRAs received from FCHVs. After the intervention the number of CMWRAs who consulted FCHVs for contraceptive service increased to 94.9% from that of 7.1% before the intervention. The

duration of their consultation also increased from that of always less than half-an-hour to more than half-an-hour in 38.3% of the consultations. The scope of consultation also widened. Prior to the intervention, the CMWRAs consulted FCHVs mainly for child limiting methods but after the intervention their consultation for child spacing methods and for side effects increased. Although the purpose of consultation was the same before as well as after the intervention, more CMWRAs received the desired information after the intervention (75.3%) than before the intervention (52.6%), (Table 5.17). In regards to satisfaction with the contraceptive services received from FCHVs, an increased proportion of CMWRAs expressed that FCHVs were accessible, they were given adequate time for consultation, they felt free to express their problems and they received adequate information after the intervention (Table 5.18).

Findings also revealed that the CMWRAs' knowledge, attitude and practice of contraception increased considerably following the intervention. CMWRAs who could name at least one contraceptive, increased significantly after the intervention (p=0.001). Similarly the specific knowledge and attitude scores of CMWRAs regarding contraception also increased significantly following the intervention. (p=0.001 for both). The satisfaction with the contraceptive use was also high as 80% of the contraceptive-user CMWRAs were willing to continue the method and 77.5% expressed their willingness to recommend the method to others (Table 5.19). PHCC record review also revealed a considerable increase in new acceptors of contraceptive (Table 5.20 and 5.21)

6.2 Discussion of the Study

The study revealed empowerment education using participatory approach to be a suitable method to empower FCHVs in increasing their awareness, competence and confidence to assist CMWRAs in increasing their contraceptive acceptance. The study also found that the use of visual aids or diagrams were beneficial in stimulating participation and discussion among low-literacy participants. The literature also support in the use of participatory methods. RamaRao and Mohanam (2003) reviewed the different interventions and found that interventions having greater client-provider interaction show the greatest impact on the clients' satisfaction, increased knowledge

and more effective and longer continuation of contraceptive (RamaRao and Mohanam, 2003).

While the formal classroom sessions increased the awareness of FCHVs, the provision of support and reinforcement by the superiors and peers at the work setting enabled them in developing their competence and confidence in repeating the new skills. Such findings have also been reported by Kim et al. (2000) in Indonesia that without reinforcement in the real world the newly learned skills tend to erase out over time. Nepalese culture, which believes on the hierarchal system, favors support and guidance from the superiors, which is often unavailable and unpractical at the community level. In such situation peer support and feedback is a feasible and useful alternative. Peers can help to learn from each other and strengthen their skills in a nonthreatening environment. The experience from this study has shown that to make peer feedback system effective, the peers need to be clear of what skills they need to observe. For this, the use of simple and clear-cut assessment criteria agreed upon by the group is essential. Periodic meetings on review of the progress of activities among the FCHVs were beneficial. The review meetings served not only as a forum for discussing their achievements and problems, but also as a motivational force to carry out their activities.

The study also indicated that along with the empowerment education, change in the social and environmental conditions that hinder FCHVs in their work is essential to activate them. Raeburn and Rootman (1998) and Stein (1997) have given similar observations.

The study shows that empowerment leads to action. Raising awareness, competence and confidence of the FCHVs has improved their FP role performance considerably following the intervention. Participatory approach used in the intervention seemed to be successful in building a feeling of ownership and accountability among FCHVs towards their respective communities in providing FP services. For instance, the frequency of their group sessions with CMWRAs increased; they provided FP consultation to CMWRAs more frequently and for longer duration; they started

distributing refill-pills and more CMWRAs received the desired information from FCHVs. Other empowerment studies have also reported successful changes in the participants. The empowerment training of homeless pregnant women for example had resulted in improved birth outcome in San Francisco (Ovrebo et al., 1994). Similarly, empowerment education of local women in Nepal by using participatory action research had produced successful outcome in community development activities (Purdey et al., 1994).

Study also confirmed that empowerment by bringing awareness and confidence among the participants, increase their abilities to identify and mobilize the stakeholders in meeting the needs of the community. As an example, FCHVs in this study used contraceptive user-women to clarify the doubts and queries of contraceptive non-user women and approached a male health worker, the village health worker (VHW) to provide FP education to men from their respective communities.

The intervention has also produced a considerable impact in the awareness and practice of contraception among CMWRAs There was a significant increase in the number of CMWRAs knowing a method of contraception. Contraceptive usage was increased at a much higher rate than that of the estimated current national contraceptive prevalence rate of 34.5% (DHS, 2000). Similar findings have been reported in a traditional African societal setting where a project using volunteers and traditional leaders helped to increase the knowledge and use of a contraceptive method and reduced the TFR by one birth within a time-period of 3 years (Debpuur et al, 2002).

Following the intervention, an increased proportion of CMWRAs started using temporary methods as against the average contraceptive use pattern in the country in which the permanent methods predominate the temporary methods by 2 fold (Pradhan et al., 1997). Among the various temporary contraceptive methods, the depo provera was the most commonly used method in this group of CMWRAs. In Kenya, also it was observed that injectable contraceptive was the predominantly used method among the rural women who are uneducated and whose husband disapproves of FP (Magadi and Curtis, 2003) Following the intervention, the use of temporary (condom) and permanent

(vasectomy) methods also increased among men. This could be probably because the use of participatory approach with the CMWRAs increased their ability to communicate with their husbands about contraception and enabled them to make a joint decision with them to use a method. Increased participation of men in using contraceptives may partly be due to family planning education that they received from the village health worker, since, in some cases, the husbands were reluctant to listen to their wives.

The study was able to modify the participants' myths about contraception and contraceptive. However, an effective step to change their preference for the male children could not be taken. The predominance of patriarchal system, physical-labor demanding occupation, social system of son inheriting the parental property and cultural system of marrying off the daughter in another family while the son bringing a daughter-in-law in the family as prevalent in the country, makes it difficult to change the people's attitude towards daughter. Studies done in rural Vietnam and Rural Egypt also reported similar findings where despite the decline in fertility, the preference for son remained high over the years with the significant positive effect on the contraceptive use of having one or more sons, which remained constant (Blanger, 2002; Yount, Langsten and Hill, 2000).

In regards to the limitations of the study, the study used one group before-during-and-after design with no control group, therefore the possible effect of maturation of the subjects on the outcome could not be eliminated. However, it was considered that the effect of testing in CMWRAs would be minimal on their post-test result because of the long gap between the two tests. Furthermore, no new FP intervention or events except the ongoing FP information dissemination through media (i.e. Radio, TV) was known to occur in Kakani VDC during the study period, which could influence the result.

At the time of six months post-intervention follow-up about half (53.9%) of the CMWRAs were using a method of contraception. For the remaining CMWRAs it would have been interesting to learn why they did not use a contraceptive. However,

the study failed to ascertain the reasons for non-use of contraceptive. The possible reasons could be many. Some of these are because CMWRAs had menopause, they became pregnant, or their husband was away or dead or they could not be motivated or they were still ignorant about contraception.

Based on the above discussion it is concluded that the empowerment training of FCHVs using participatory action research and peer reinforcement is effective in facilitating the work of the FCHVs in terms of increase in use of contraceptive by the women of Kakani VDC of Nuwakot district in Nepal provided that the barriers are removed from the environment and the necessary support is given to the FCHVs.

6.3 Recommendations

The findings of the study have implications for the planners and implementers of family planning programs that aim at reducing fertility and promoting the health of mothers and children by finding ways of empowering women with culturally acceptable knowledge to control and regulate their fertility. The study also has implications for the trainers of the grass-root health volunteers who aim at bringing a sustainable change in the performance of the volunteers by raising their awareness about family planning and building their confidence through locally feasible peer reinforcement mechanism. The study has the following recommendations for making the FCHV program effective in promoting maternal health and the health of the under five children through improved family planning services.

- 1. This empowerment model may be replicated in other similar rural settings in Nepal using a larger area to increase its applicability
- 2. In order to promote the acceptance of FCHVs by the community a) the community should be involved in the selection of FCHV b) awareness-raising programs should be initiated to inform the community about the FCHV program c) FCHV training program should be reviewed to make it more relevant to the needs of the community and d) in addition to peer feedback system, a mechanism of occasional follow-up and supervision from the super-ordinates such as a village health worker should be made

- available to motivate them to keep continuing their work and this would be possible when the VHW is a local resident.
- 3. The use of men-to-men and women-to women approach should be considered in family planning services particularly in rural areas to increase clients' access to contraceptive information and service.