

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

In this chapter, conclusions drawn from the study are provided. Implications for nursing practices and nursing education are addressed and recommendations for future research are offered. Finally, the limitations of the study are presented.

#### **Conclusions**

This study was designed to develop a breastfeeding support program for preterm infants at BMA Medical College and Vajira Hospital based on a participatory approach. The participants were nurses who were working in the premature infant unit of BMA Medical College and Vajira Hospital during the study period. The number of nurses who joined the project from the start to the end was 14. Three methods were used to conduct the investigation in this study to permit a triangulation approach. There were group meetings, participant observation, and keeping of a research diary. The total period of data collection from June 2003 to January 2004. Sixteen meetings were held during the research process to discuss, monitor and reflect the progress of the research. Three phases of the procedure for data collection were as follow: 1) the preparation phase; 2) the implementation phase; and 3) the evaluation phase. Data analysis was divided into two parts as follows: Quantitative data were analyzed by descriptive statistics which were all used to describe the demographic data of the

participants and the prevalence of breastfeeding in the study. The data gathered from group meetings and a research diary were analyzed by content analysis.

The findings of the research for developing the breastfeeding support program for preterm infants portrays corresponding to the research questions as follows:

### **The breastfeeding problems among preterm infants at BMA Medical College and Vajira Hospital**

Breastfeeding problems among preterm infants at BMA Medical College and Vajira Hospital perceived by the participants stemmed from three categories: maternal, infant, and health care provider and hospital practice related factors. The problems related to mothers according to the participants' point of view could be divided into groups as follows: sociodemographic characteristics, mothers with stress, lack of knowledge and skills of breastfeeding, negative attitudes in breastfeeding, unprepared mothers, mothers' health problems, lack of bonding between mothers and infants, lack of husband's support, and inconvenience. The Infant problems related to preterm physiology and nipple confusion. The health care provider and hospital practice related issues included health care providers, bad relationship between mothers and nurses, and lack of breastfeeding support equipment and facilities. Health care providers were cited by the participants as one of the causes of breastfeeding problems among preterm infants. The participants focused on the part of nurses only and gave opinions that the problems could stem from nurses' lack of knowledge and skills of breastfeeding, nurses' stress, and lack of coordination between related units.

### **The breastfeeding support program for preterm infants enhancing practical nursing practice at BMA Medical College and Vajira Hospital**

The breastfeeding support program for preterm infants was mainly developed based on the problems stated earlier. It was composed of two parts: 1) the main program and 2) the strategies for practice and resources. The primary aims of the main program were to serve the mothers and infants needs, and provide continuous care for them within four phases: 1) mother's preparation for breastfeeding; 2) feeding by other methods; 3) natural breastfeeding; and 4) infants' discharge. Beside the main program, strategies for practice and resources were incorporated in order to facilitate the program. They were composed of five parts: 1) techniques of encouraging and attracting mothers to breastfeed; 2) preparing the personnel's readiness; 3) supporting breastfeeding in proactive way and coordinating with related units; 4) breastfeeding assessment and record form; and 5) resources.

#### **Process of developing the BS program**

There are three phases in participatory action research for developing the BS program for preterm infants: preparation, implementation, and evaluation. In the preparation phase the hospital administration and staff are contacted, the study is agreed upon, and a preliminary survey is conducted. From this survey the perceived problems are initially identified and the need for improvement recognised. The implementation phase is where the real work gets done. The participants were asked the question: "What are the breastfeeding problems and their causes among preterm infants at Preterm Infant Unit?" Here the above mentioned problems were identified and a repetitive cycle of planning, acting, observing and reflecting was begun. This

research went through four cycles. As the cycles progressed, some problems were solved and others arose or resisted easy fixes.

### **Outcomes of implementing the breastfeeding support program for preterm infants**

Overall the breast feeding situation in PU improved markedly, bottle feeding decreased, and the breastfeeding period was extended from 9:00-21:00 to 24 hours a day. Yet perhaps more importantly, the PU changed. Whereas in the past, while nurses accepted the value of breastfeeding, they didn't have the knowledge, skills, or confidence to properly support it. After this study, breastfeeding awareness, knowledge, skill and confidence all improved. Educational media and support facilities as well improved. Nurses were talking more openly and discussing their ideas about breastfeeding. Formula distribution was discontinued. The PU acquired a reputation for good nurse-mother relations, and cooperation from different related units improved.

### **Implications**

The findings of this study suggest the following implications for nursing practice, nursing education, and nursing research.

#### **Implications for nursing practice**

1. The results of this study are offered the breastfeeding support program for preterm infants in the PU of Bangkok Metropolitan Administration Medical College and Vajira Hospital which support and facilitate the Ten Steps to Successful Breastfeeding. It also provides detailed of practice which are applicable to the specific environment in the PU.

2. This study shows that PAR is an effective method to improve nursing practice to meet hospital policy. Having nurses actively participate throughout the process improved their practice.

3. The work on breastfeeding promotion especially at BMA Medical College and Vajira Hospital should be done by a collaboration in the form of a committee represented by relevant ones including the hospital executives, ANC nurses, labour/delivery nurses, postpartum nurses, neonatal unit nurses, preterm unit nurses, NICU nurses, nursery nurses, obstetricians and pediatricians as well as mothers, their husbands or close relatives in order to see the problems and causes of breastfeeding and try to seek the solutions.

4. Nurses should encourage mothers to stay with their babies 24 hours a day; this should not be applied only for mothers who have term infants but also for those who have preterm infants. To achieve this, the hospital should provide rooms and facilities for mothers to stay overnight at the hospital in order to be close to their newborns 24 hours.

5. There should be a follow-up of mothers who have premature delivery regarding breastfeeding. This could be acted in the form of a committee set up to closely monitor every preterm infant in the hospital. Another way is to make a report of PU to assess the performance of encouraging breastfeeding and the trend of problems found in mothers of preterm infants. To assist the follow-up, the referral system should be applied by sending the cases to Bangkok public health centers that are located around Bangkok.

6. Nurses should be given training courses of breastfeeding, focusing on practice. This would promote them to have good attitudes, knowledge and skills of

breastfeeding, enabling and assuring them to help mothers to breastfeed their preterm infants so that all nurses can act as the consultant and assistant of mothers to breastfeed.

7. The hospital executives should support the breastfeeding program by arranging personnel, facilities and essential tools set for applying the policy into reality.

#### **Implications for nursing education**

Specialized nursing programs in breastfeeding area should be developed within masters' programs in nursing or others as postlicensure formal certificate programs to prepare nurse specialists.

#### **Recommendations for Further Research**

Based on the findings from this study, the following recommendations are offered for further research.

1. The research process should be established to bring together a number of multiple disciplines involved in the care and management of preterm infants. It is recommended to establish other action research that is full participation and involvement of the ones most affected by the issues. This closure provided an opportunity for various groups to meet across traditional boundaries and exchange valuable experiences and information. The important element here was to involve the major stakeholders in a commitment of effecting future changes.

2. Further quantitative research is required to establish the extent to which factors influence to prevent and reverse intention to breastfeed among mothers of



preterm infants and to determine the degree to which these factors vary cross-culturally.

### **Limitations of the Study**

In spite of action research's flexibility, there are limitations to this study as follows:

1. This study was conducted at BMA Medical College and Vajira Hospital that may not be replicable and generalizable elsewhere. Therefore, the findings should be applied with caution in settings that do not have these characteristics.

2. In this study, most of the information was obtained from the perspectives of the participants. Most probably, the participants would assess themselves or situation differently from the mothers' evaluation. This study faced limitations inherent in bias. However, triangulation is designed to constrain these biases.