

## **CHAPTER 7**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **7.1 INTRODUCTION**

This chapter contains a summary of the research and conclusions regarding the development and implementation of the BCIP with community health nurses. The purpose of this research was to equip community health nurses to function as transdisciplinary professionals by providing them with the skills (through multiskilling) to provide training to the primary caregivers of CSD's (training-the-trainer) at a PHC level. This is followed by a discussion of the clinical implications of the research. The research is also evaluated in terms of limitations and strengths. Finally, recommendations for further research are made.

#### **7.2 SUMMARY OF RESULTS AND CONCLUSIONS**

The purpose of this research was to develop and apply a protocol for training community health nurses who work in PHC settings to increase their knowledge and skills about beginning communication skills (i.e. informational and social communication functions using aided and unaided communication means, creating content for interaction by using ADL and fostering adult and peer communication partners). This protocol is intended to assist community health nurses when training primary caregivers of CSDs to facilitate interaction with their children. Data for the development of the BCIP were obtained through the use of questionnaires and focus groups with various stakeholders while data for the application of the BCIP were obtained through the use of questionnaires (to obtain information about knowledge), structured interviews during which nurses had to demonstrate their skills in the application of the BCIP, and a focus group during which the BCIP training was discussed. The BCIP training consisted of one week training with three

follow-up visits (two weeks, six weeks and five months post-training) during which time problem areas were identified and problems solved.

The BCIP was developed by consulting relevant literature, experts in the field as well as stakeholders in the Moretele Health District to ensure authenticity and cultural sensitivity. This ensured that the content was applicable to the context (e.g. not play-based but based on ADL), terminology used was familiar to participants (e.g. “*nurturance*” was replaced with “*care*”, “*tangible objects*” with “*real objects*” etc.), the communication means that were selected were appropriate (e.g. inclusion of a low cost digital speaker as well as manual signs and PCS that are relatively easy to reproduce), the communication functions that were selected were appropriate and viewed as important (e.g. establishing whether it was culturally appropriate for children in this area to initiate interaction) and also to determine if the communication temptations that were selected were easy to learn. In addition, the communication boards used in all three activities were translated into all 11 official languages. The languages that occurred most frequently in the particular environment were field tested on typically developing five and six-year olds. After the development of the BCIP a pilot study was conducted, revisions were made and the BCIP implemented.

Training as a whole contributed to a change in the community health nurses' behaviour - prior knowledge and applied knowledge (in terms of communication means, functions, partners, opportunities and general advice) increased statistically significantly at the 5% confidence level. Nurses were not only able to recognise different communication means, functions, partners and opportunities easier (as displayed in a higher frequency of these respective aspects) but they were also able to identify a wider range of aspects. This research also indicated that the nurses' skills in grading aspects according to representational levels, in using objects and photographs for communication, using communication boards, using manual signs and using the EasyTalk 4-Option digital speaker increased statistically significantly over the five months period. In addition, their dependence on prompts did not increase, while their confidence in demonstrating these skills increased.

This implies that the content and methodology of the training was successful in achieving the aims of the research, namely equipping community health nurses with the knowledge and skills to provide services to CSDs and their primary caregivers.

The changes related to the behaviours directly addressed in the training (namely knowledge and skills) increased significantly, while peripheral behaviours (namely attitudes, job satisfaction and type of service delivery provided) showed some form of improvement, but not significantly.

### **7.3 CLINICAL IMPLICATIONS**

The most important implication of this research is that a short training course (one week) with follows-ups can be used successfully in the in-service training of community health nurses. The other implications are as follows:

- The importance of case-orientated (problem-based) training confirmed the relevance of using adult training principles (e.g. an interactive approach that used

opportunities for role-play, group discussions, video observations and included creative repetition and revision) to facilitate the transfer of knowledge and skills.

- Follow-up visits formed a crucial part of the training to increase the relevance of the training principles in the particular settings where the respective nurses worked.
- Community health nurses can be effectively equipped with knowledge and skills to facilitate the communication training of CSDs and their primary caregivers.

## **EVALUATION OF THE RESEARCH**

- The BCIP is relevant in addressing the changes that were targeted in community health nurses, namely increasing their knowledge and skills related to the communication means, functions, opportunities and partners of CSDs.
- Knowledge and skills were mastered in the given timespan, namely a weeklong training with three follow-up visits.
- The research was conducted in a specific health district (Moretele), limiting the generalisation of findings.
- The participants were mostly older, experienced community health nurses. No nursing assistants were included. This limits the application of the findings to the total community health nursing profession.
- The sample (20 community health nurses) was selected by means of purposeful sampling (they were selected from a group of 74 who indicated that they were keen to receive this training). This implies that community health nurses were

already motivated when training commenced, with a possibility of skewing data to the positive side.

- A sleeping control group would have enhanced the reliability of the research findings. However, due to the way in which nurses interact with each other (in informal and structured ways) results could be contaminated.
- The research design included pre-training measurements, a weeklong training and three follow-up visits that were conducted in situ. In order to heighten the reliability and validity of the data, all structured interviews (Response Form I) were video recorded and rated by an independent rater.
- The measurement of certain constructs, e.g. job satisfaction and motivation was of limited use. In both instances the Hawthorne effect seemed to have prevailed, as scores were positive before training.

#### **7.4 RECOMMENDATIONS FOR FURTHER RESEARCH**

Recommendations for future research are follow:

- A comprehensive approach to PHC aims at equipping personnel (e.g. community health nurses in this research) with many different skills. This could lead to insecurity about their primary roles and responsibilities which, to a large extent could impact on job satisfaction and motivation. The relationship between multiskilling and job satisfaction, and between multiskilling and motivation to work with CSDs and their primary caregivers should be further investigated.
- In the present research nurses were mostly older and experienced resulting in greater maturity. They had therefore experienced a need for training in this regard in their workplace, providing them with the impetus to upgrade their knowledge

and skills. It would be interesting to apply the BCIP to a group of younger nurses with less experience and lower qualifications. Younger nurses with less experience might not have the same motivation to acquire these knowledge and skills.

- The focus of the present evaluation was based on an external evaluation by the researcher. This focus should be broadened to include more opportunities for self-evaluation. A self-evaluation after each of the research phases will promote a reflection on practice and will guide participants to keep track of their own development. It will also enhance their awareness of the elements of the BCIP and the skills required to provide services to CSDs and their primary caregivers. Self-assessment is also in line with using a problem-based approach as it advocates that participants should provide information about their ability to solve problems, to retrieve information, to find new solutions to problems and to be creative.
- A comparison between the present methodology that was followed (e.g. interactivity, a problem-based format, creative repetition and revision) and distance training will yield interesting results.
- The validity of the BCIP could be formally investigated.
- The hierarchical developmental levels of representation of different AAC means (e.g. objects, miniatures, photographs and line-drawings) could be further investigated to obtain a sound research base regarding the ease of acquisition of each of these means. In addition, the cultural impact on the ranking of these representational levels could also be further explored.
- In evaluating the training, 80% of the nurses commented that the presence of real cases would have further enhanced the quality of training. This aspect should be explored further and alternatives investigated. Nurses could possibly be exposed

to real cases on the fifth (and final) day of the formal training after having had ample opportunity for role-play. Another alternative would be to make it compulsory for nurses to have a CSD and primary caregiver available on the days of the follow-up visits to demonstrate their skills and for the trainer/researcher to assist with problem-solving certain aspects.

- Reduplication of the same training procedures using an independent trainer would be interesting in view of the Hawthorne effect demonstrated in some of the data.
- Conducting a follow-up visit one year post-training to determine the long term retention of knowledge and skills.
- Regarding further development of the BCIP, a screening tool, based on the BCIP principles, could be developed to facilitate the identification of children in need of BCIP intervention.

## **7.5 SUMMARY**

This chapter summarises the results of the research as described in Chapter 5 and discussed in Chapter 6. The implications of equipping community health nurses with the knowledge and skills to act as transdisciplinary professionals (through multiskilling) when delivering services to CSDs and their primary caregivers, are addressed. The clinical implications of the research were pointed out, which led to a critical evaluation. This, in turn, produced recommendations for future research.

In general this research attempted to describe multiskilling as an element of transdisciplinary training as embedded in PHC and necessitated by the diverse and complex needs of CSDs and their primary caregivers. In this process it answered some research questions, while at the same time creating some new questions from which to start future research.