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**EVALUATING THE APPLICATION OF
A HEALTH PROMOTION APPROACH
TO IMPROVE THE ROLE OF PUBLIC HEALTH MIDWIVES
IN ADDRESSING DETERMINANTS OF CHILD DEVELOPMENT.**

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**A thesis submitted to the Faculty of Medicine in fulfillment of the
requirements for the degree of**

M.Phil.

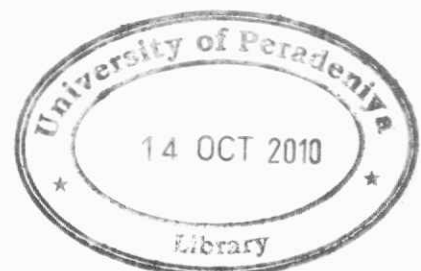
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ABSTRACT

Title: Evaluating the Application of Health Promotion Approach to Improve the Role of Public Health Midwives in Addressing Determinants of Child Development

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Objective

To plan, implement and evaluate a community based health promotion intervention to fulfil basic needs of child development through measures addressing their determinants.

Methodology

The study used a quasi-experimental model. The intervention group consisted of three PHMM areas in Doluwa MOH area and the comparison group consisted of three PHMM areas in Kurunduwatte MOH area, both of which are in Kandy district. The intervention was carried out over 12 months from July 2006.

Activities conducted in the intervention area had two components. The first component included interactive lecture-discussions conducted by the researcher during in-service training sessions, field visits and mutual (peer) assessments for the PHMM. In the second component, the PHMM in turn facilitated discussions with mothers' groups of their area jointly with the researcher. Content was based broadly on 'health promotion' principles.

After the initial training, the researcher visited the MOH office (Doluwa) on 'in-service' days once a month and conducted ten follow up training sessions. Each session lasted approximately 5 hours. Interactive lectures, group work and role plays were used during these sessions.

Following these there were a series of field-based training sessions through 18 supervised field visits. During each of these sessions, a group of PHMM including the PHM for the area visits households. She carries out interventions while others observe and assess the quality of the work she carries out. A group discussion of what they have learnt during the field visits was held at the end of each day.

In the second component, training of groups of mothers consisted of discussions and home visits with the trainee mothers. Eighteen discussions lasting for about 2 hours were carried out to train groups of mothers. Nine home visits with these mothers were also carried out. The researcher conducted the discussions and home visits jointly with the PHMM. The mothers so trained then worked as trainers to train other mothers of the area. After providing basic knowledge about determinants of child development and community based interventions to address these factors, they were given opportunities to work with the community.

Both quantitative and qualitative indicators were used to measure the effectiveness of the intervention. The pre-intervention assessment of mothers and PHMM were carried out in July 2006 and the post intervention assessment was carried out in July 2007. Data on quantitative indicators were collected in all three PHMM areas of both intervention and control areas. Qualitative data were collected only in the intervention area



Quantitative assessment was through,

1. Questionnaires assessing the PHMM for their understanding of factors affecting child development and wellbeing, their enthusiasm and the activities they carried out to improve child development and wellbeing.
2. Questionnaires assessing mothers for their understanding of child and community wellbeing and determinants of child wellbeing and the activities they carried out to improve child development and wellbeing.
3. Pre- and post- peer assessment results
4. Pre- and post- results emerging from analyzing Section B of the 'Child Health Development Record'.
5. Results emerging from analyzing monthly returns (H 524 and H 527) of the PHMM

Data collection was done by research assistants who were a group of Health Promotion undergraduates. They were specifically trained for this study in addition to the undergraduate training they had received on research methodology. The specific training included the following aspects on collecting data.

- Data collection and interviewing technique and measures to ensure validity
- Basis of health promotional initiatives
- Recognition of structural factors or determinants that influence well being and how to address them
- Development of sensitive process indicators and outcome indicators

The same group of research assistants was used for the pre assessment as well as for the post assessment. Data were analyzed by the same research assistants who were involved in data gathering.

Qualitative assessment was through the researcher's direct observations, peer assessments and in-depth interviews.

Results

As the intervention progressed, the MOH office staff showed increases in active participation and involvement in the sessions – and the environment in the office was reported to have improved. Percentage of staff members (other than health staff) described as satisfactory or more than satisfactory in their level of enthusiasm increased from 46% to 58%. Health field staff started to measure each other's performance in an open and friendly manner.

A significantly higher number of mothers (22%) reported that, in their subjective opinion, the PHMM showed more interest and enthusiasm compared to that reported before the intervention (7%) ($p < 0.01$; Chi square test). This was verified by the pre- and post-questionnaire for PHMM (72% vs. 52%), qualitative observations and the interviews conducted by the researcher.

Percentage of PHMM whose knowledge had significantly improved ranged from about 20% to 73% on the different components measured. Their skills and quality of work also showed an improvement compared to the level before the intervention.

Mothers showed improvement in knowledge of the needs for optimal child development and underlying determinants – in that more mothers scored above the cut off values for the questions testing various aspects of child well-being, range of needs and underlying determinants. This was corroborated by qualitative observation data.

Parental practice in addressing determinants that underlie optimal provision of children's needs had improved, as observed by the researcher during the field visits.

Although clearly improved provision of needs of children was observed by the end of the intervention period, this had been in operation for too short a time to lead to significant impact on most child growth and development indices. But some evidence of improvements were already reported – in children aged 6 to 9 months showing attainment of milestones earlier than both control and pre-intervention samples. This finding needs further corroboration.

Conclusions

The objective is to assess whether the role played by the Public Health Midwife in promoting optimal development of children can be improved through adding a 'health promotional' component. This includes improving the satisfaction of needs for optimal development by addressing the relevant determinants and assessing progress by families. Overall, there is evidence of improvement of the work of the midwife and encouraging the relevant changes among families.

There is clear evidence of improvement in the MOH office environment. There is also adequate evidence that knowledge, apparent interest and practice of the PHMM have improved. The PHMM are more skilled in effectively transmitting ideas about recognizing determinants of child wellbeing and encouraging families to address these.

One strategy to help families better supply the full range of needs for optimal development is to improve the practice of the PHM. This study demonstrated that the PHMM could learn and apply skills to help parents to assess progress in child wellbeing and development.