The Experiences of Families to Care the Children with Asthma during the Developmental Transition: A Mixed Method

Li-Chi Chiang
Professor, School of Nursing, National Defense Medical Center

Background:
Family life transitions of family with chronic ill children affect children’s health and family function can be significant human experiences. In order to design the developmental-appropriate transition care, it is crucial essential to explore the predictors that influence the successful family life transition among families rearing children with asthma and their effects hold the potential for multidimensional health implications.

Purposes:
To explore the experience of families having children with asthma to transfer the responsibilities of asthma self-management during the development transition period.

Longitudinal explore the predictors of parents’ asthma management efficacy and parent-child interaction and children’s asthma-related quality of life (ARQOL), asthma symptoms, pulmonary function for one year that children with chronic illness across the life transition—from dependent to lead them independent; to design a developmental-appropriate transitional care for the family and children for the benefit of successfully transition were a major challenge for advanced pediatric practice nurses.

Methods:
- Fifty-seven school-age children with asthma in the elementary school were be recruited by purposive sampling from three pediatric asthma clinics in Taipei.
- The structure questionnaires including the asthma management efficacy and children’s ARQOL, asthma signs/symptoms, lung function were repeated measured for 6-10 months after the child entering the elementary school accordingly.
- Based on the findings of the first stage, the research team will design a developmental-appropriate transitional care (DATC).

Results
Subjects:
There are fifty-seven children with asthma and their parents dyad completed the written inform consent, 31 of them are boy, and 26 are girls. The data of pre-test was collected from the children before entering the elementary school. The in-depth interview was conducted with the children and parent together. The questionnaires also are completed by children and their parents. The asthma situations of half of the children are in good and very good situation. Only 20% children with asthma self-perceived the health status was good or very good.
Mostly the age of parents is around 30-40 years old, then 41-48 years old. The significant caregiver was mother (51, 89.5%). All of them reported they are in married status. Mostly, the family income are around 60000-59999 NT.

The transition impact for the parents
In order to examine the differences from the pre-school transit to school-age in parents' brief symptoms, asthma self-management, the mastery of stress, and the family function...as well as the children’s self-perceived quality of life on asthma (ARQOL), pulmonary function. The paired t-test was used to examine the differences pre and post-schooling. There are no significant differences of the brief symptoms (BSI), Asthma self-management (ASM), Mastery of stress (MSS) of mother to care the children with asthma transit from pre-school to school-age. Moreover, the family function has significantly improved after entering the elementary school. Especially, the relationship between family and family member, the mean score of FFFS was increased from 13.6.54 to 141.46 (t=1.111, p=0.024).

The transition impact of ARQOL for the children with asthma
The total score of ARQOL that reported from children with asthma was not significant differences of children when across the developmental transition from pre-school age to school—age. However, the physical disturbances from asthma signs/symptoms has little decreased from 12.28 to 10.95 (p=0.085).

The correlation between family function, self-management and mastery of stress and ARQOL
- The results showed that the better the total score of family function (FFFS), the better the children’s physical disturbance of asthma signs/symptoms (r=0.293 (p=0.027).
- The subscale of FFFS, the relationship between family and society has the positive relationship with the ARQOL, including all of the five sub-domain of ARQOL.
- Brief symptoms inventory (BSI) has negative relationship with the ARQOL, in four domains of ARQOL beside the restriction of social life.

Design the developmental-appropriate transitional care (DATC)
Based on the previous studies, we design the developmental-appropriate transitional care (DATC) model for children with asthma. The teaching material, teaching strategies, and the detail content of dialogues were prepared for the group discussion. The main theme of the DATC will be “I am growing up” v.s. I will let go with “love”. The purposes of group will be “Parent Transfer the responsibilities with asthma management to child”, with three objectives:
1. Help members perceived cooperation of asthma management between parents and child
2. Help members perceived difficulties with transition between parents and child
3. Help members build up good asthma management and transition.