WAYS PARENTS HELP THEIR PRESCHOOL CHILDREN WITH ASTHMA

by

CAROL MITCHELL

B.N., University of Manitoba, 1972

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING in THE FACULTY OF GRADUATE STUDIES School of Nursing

We accept this thesis as conforming to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

July 1982

© Carol Mitchell, 1982
In presenting this thesis in partial fulfillment of the requirements for an advanced degree at The University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the Head of my Department or by his/her representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

School of Nursing

The University of British Columbia
2075 Wesbrook Place
Vancouver, British Columbia
Canada
V6T 1W5

Date: September 1, 1982
Abstract

This study describes ways that parents attempt to help their preschool children with asthma meet their basic human needs. Information about such parental guidance is lacking in the literature and yet parents need assistance from health professionals about how to accomplish the task of rearing their chronically ill children. Ten couples with asthmatic preschool children from the Lower Mainland region of British Columbia were identified and interviewed in their homes. The couples were asked about the actions they took to help their preschool children with asthma meet their basic human needs and the ways they perceived asthma and its treatment affecting their efforts to help these children. An Interview Guide was developed based on the University of British Columbia's Model for Nursing. It is a model with a basic human needs and systems theory framework. All interviews with the couples were audiotaped and later analyzed for content of their communications. The analysis revealed 17 specific helpful actions common to all of the couples, and additional emotions, decisions, and physical efforts to normalize their asthmatic children's and family's daily lives. It was concluded that the couples in this study assumed the responsibilities of helping their preschool children, sick or well, meet their needs to grow and develop according to parental tasks. The intensity of the helping behaviours tended to increase during the children's asthmatic attacks. There are implications for health professionals for developing programs to assist parents to acquire the knowledge, skills and attitudes to facilitate the growth and development of their children with a chronic disease such as asthma.
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I</strong></td>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Background of the Study</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Statement of the Problem</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Purpose of the Study</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Definitions of Terms</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Approach to the Problem</td>
<td>7</td>
</tr>
<tr>
<td><strong>II</strong></td>
<td>Theoretical Framework and Review of the Related Literature</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Tasks of Parenthood</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Tasks of Parents Rearing Preschool Children</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Tasks of Parents Caring for Chronically Ill Children</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Child's Basic Human Needs: A Framework to Guide the Research</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Review of the Related Research</td>
<td>13</td>
</tr>
<tr>
<td><strong>III</strong></td>
<td>Research Design and Methods</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Overview of the Research Plan</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Description of the Sample</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Interview Guide</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Procedure for Collecting the Data</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Procedure for Analyzing the Data</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Ethical Considerations Encountered in the Research</td>
<td>30</td>
</tr>
</tbody>
</table>
Chapter

IV Presentation of the Findings

Description of the Sample

The couples

The preschool children with asthma

The Help Provided by the Couples

Need: to breathe

Need: to eat and drink

Need: to eliminate waste products

Need: to have a balance between rest and activity

Need: to feel safe and secure

Need: to feel loved

Need: to feel sensory satisfaction

Need: to have a sense of accomplishment

Need: to develop self-respect

The Impact of Asthma and Its Treatment

V Discussion of the Findings

Tasks of Parents Rearing Preschool Children with Asthma and Nursing Implications

VI Recommendations and Summary

Recommendations for Nursing Practice

Recommendations for Nursing Research

Summary

References

Additional References
## Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Selected Assumptions from The UBC Model of Nursing.</td>
<td>70</td>
</tr>
<tr>
<td>B</td>
<td>Developmental Tasks of Preschool Children</td>
<td>73</td>
</tr>
<tr>
<td>C</td>
<td>Interview Guide</td>
<td>77</td>
</tr>
<tr>
<td>D</td>
<td>Letter to the Physicians</td>
<td>82</td>
</tr>
<tr>
<td>E</td>
<td>Written consent from the Physicians</td>
<td>83</td>
</tr>
<tr>
<td>F</td>
<td>Letter to the Parents</td>
<td>84</td>
</tr>
<tr>
<td>G</td>
<td>Interview Procedure</td>
<td>86</td>
</tr>
<tr>
<td>H</td>
<td>Consent from the Parents</td>
<td>88</td>
</tr>
<tr>
<td>I</td>
<td>Certificate of Approval for Research Involving Human Subjects</td>
<td>89</td>
</tr>
</tbody>
</table>
## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The UBC Model for Nursing: Subsystems and the Corresponding Needs</td>
<td>6</td>
</tr>
<tr>
<td>2.</td>
<td>Demographic Data of Couples of Preschool Children with Asthma</td>
<td>34</td>
</tr>
<tr>
<td>3.</td>
<td>Demographic Data Describing the Preschool Children with Asthma</td>
<td>36</td>
</tr>
<tr>
<td>4.</td>
<td>The Couples' Helping Behaviours</td>
<td>38</td>
</tr>
</tbody>
</table>
CHAPTER I

Introduction

Background of the Study

In Western society, parents assume the major responsibility for giving their children, sick or well, support, guidance, and care until they reach maturity (Duvall, 1977, p. 26; Hymovich, 1976, p. 11; Le Masters, 1977, p. 6). This responsibility has a significant impact on parents of sick children. Parents who rear children with chronic diseases such as asthma have a multitude of complex and difficult tasks to perform. Furthermore, parents frequently change their way of living to accommodate the needs of the asthmatic child and experience feelings of guilt, grief, and anxiety because of the effects of the illness (Crummette, 1979, p. 23; Kapotes, 1977, pp. 7-8). Some mothers of asthmatic children have referred to the tasks of parenthood as being burdensome and demanding (Crummette, 1979, p. 25; Reddihough, Landau, Jones, & Rickards, 1978, p. 324). Despite the effects of illness, parents maintain the major responsibility for child rearing in our society. Obviously parents must alter their ways to support, guide, and care for ill children.

There is a lack of information about parents' behaviours which help children with asthma meet their needs to grow and develop. Such a description of parents' behaviours could be useful for nurses in planning care. Such information is an adjunct for setting appropriate and realistic goals (Neuman, 1974, p. 107; The University of British Columbia Model for Nursing, 1980, p. 2). It was therefore decided to design a descriptive study with the intention of adding to a knowledge base about the
parents' behaviours which were perceived as helpful to their asthmatic children. The results of this study would seem to contribute to information useful for nurses in planning care for children with asthma and their families.

In this chapter, the significance of the problem, the problem statement, purpose of the study, definitions of the concepts, and approach to the research will be presented with the meaning and importance of childhood asthma as a chronic disease being discussed first.

Childhood asthma is a significant problem affecting the health of children of all ages (Bronheim, 1978, p. 310; Guenter, 1979, p. 3). Asthma is a disease manifested by hyperresponsive bronchi which results in airway obstruction. As a result, the asthmatic child may cough, wheeze, and be short of breath (Bronheim, 1978, p. 317). The condition varies in each child from the occasional episodic attack to persistent symptoms of asthma (Gregg, 1977, p. 240; Kuzemko, 1976, p. 1; Tse, 1979, p. 7). Some children experience symptoms of asthma only once or twice a year; other children may suffer from asthma every day. Asthma is thought to be one of the major chronic respiratory diseases of childhood. It is estimated that the disease affects 5% to 10% of all children living in the Western countries of the world (Pless & Douglas, 1971, p. 405; Tonkin, 1979, p. 83). Of these children, 80% show symptoms of asthma before they reach 5 years of age (Godfrey, 1977, pp. 324-325; Gordis, 1973, p. 27; Keslin, 1979, p. 83). Approximately 70% of asthmatic children are asymptomatic by 10 years and 90% of asthmatic children have no clinical symptoms by the time they are adolescent (Gold, 1976,
From this data, it is apparent that asthma is a common childhood disease affecting all age groups of children, but there is a tendency for more preschool children to be symptomatic. It was therefore decided to focus on the parents of preschool children.

Rearing preschool children can be a difficult task for parents and it is even more difficult when these children have a chronic disease like asthma (Travis, 1976, p. 175). Preschool children are preconceptual and emotionally immature. Thoughts of preschool children are characterized as intuitive, magical and egocentric (Lovell, 1971, pp. 20-22; Piaget, 1972, p. 123). To these young children, medical treatment may not be a logical course of action to help them breathe. However, the parents can reason with this age group to assist them in understanding how to become well (Nelms & Mullins, 1982, p. 724). Sick children may feel that they are responsible for their illness and either feel guilty or that they are being punished for certain misdeeds (Nelms & Mullins, 1982, p. 724). Frequently, preschool children are unable to verbalize their guilt or completely understand what is happening to themselves. Increased anxiety results, altering the children's response to their illness and treatments. This is further exaggerated if the parents are anxious because children recognize their parents' concerns (Nelms & Mullins, 1982, p. 724). A normal response to illness in any child may result in regression of their behaviour (Nelms & Mullins, 1982, p. 724). In a chronic illness like asthma, children may experience exacerbations of their illness and regress during these times. Appropriate parental approaches to assist their children...
during such times are essential to prevent the children from deriving secondary gains from being ill and becoming overly dependent (Mattsson, 1975, p. 80; Nelms & Mullins, 1982, p. 724). In summary, it is comprehensible that parents may experience the rearing of preschool children with asthma as a complex and difficult task.

Statement of the Problem

This study was designed to investigate the ways parents help their preschool children with asthma meet their basic human needs; and how asthma and its treatment affects the help the parents provide their children. The problem was approached by answering the following research questions:

1. What are the parents' perceptions of the ways they help preschool children with asthma meet their basic human needs?

2. What are the parents' perceptions of the ways asthma and its treatment affects their efforts to provide care to their children with asthma?

Purpose of the Study

Nurses and other health professionals play a valuable role in assisting parents to care for their chronically ill children (Hymovich, 1976, p. 13; Sperling, 1978, p. 6). They require knowledge and understanding about specific phenomena prior to planning effective and appropriate interventions (Gordon & Sweeney, 1979, p. 1). A review of the literature revealed a paucity of information describing what parents do to help their preschool children with asthma. This investigator identified only short testimonials indicating the impact of asthma and its treatment on the parents' efforts to help the asthmatic preschool
children meet their basic human needs. Thus, systematic ways of obtaining relevant data seemed to be requisite, and a descriptive study was done as a beginning step toward the development of a knowledge base in clinical nursing. Descriptive research is conducted for the purpose of evolving theories (Notter, 1974, p. 20). In this type of research, observations are made and they are analyzed for the intention of developing hypotheses to be tested in further studies. The purpose of this study was to provide a description of the parents' actions directed toward helping the preschool children with asthma meet their basic human needs with the objective of adding to information which is useful to nurses.

Definitions of Terms

The concepts for this study were derived from developmental, nursing, and medical theories. To facilitate an explicit and clear understanding of the study the following terms were defined: parents, helpful actions, basic human needs, asthma and its treatment.

Parents in this study were defined as a couple, a mother and father of a preschool asthmatic child. The couple represents a unit in relation to the children in a family (Anthony, 1979, p. 78; Benedek, 1970, p. 110). In this study, the helpful actions were the behaviours a couple reported that they performed to nurture the preschool child with asthma to meet their basic human needs. The helpful actions directed by the parents are aimed toward achieving developmental tasks of both the parents and children (Brammer, 1979, p. 5; Hymovich & Chamberlain, 1980, pp. 22-23). The child's basic human needs were defined as the fundamental requirements for survival and growth of his/her behavioural
system (Campbell, Cruise, & Murakami, 1976, p. 8). According to the University of British Columbia (UBC) Model for Nursing, man is conceptualized as a behavioural system composed of nine subsystems each of which represent a basic human need. The assumptions about nursing are contained in Appendix A (p. 70). The nine subsystems and corresponding needs are listed in Table 1.

Table 1

The UBC Model for Nursing: Subsystems and The Corresponding Needs

<table>
<thead>
<tr>
<th>Subsystem</th>
<th>Need</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reparative</td>
<td>For balance between production utilization of energy.</td>
</tr>
<tr>
<td>2. Excretory</td>
<td>For the collection and removal of accumulated wastes.</td>
</tr>
<tr>
<td>3. Achieving</td>
<td>For mastery.</td>
</tr>
<tr>
<td>4. Ingestive</td>
<td>For intake of flood and fluid; nourishment.</td>
</tr>
<tr>
<td>5. Protective</td>
<td>For safety and security.</td>
</tr>
<tr>
<td>6. Affective</td>
<td>For love, belongingness and dependence.</td>
</tr>
<tr>
<td>7. Satiative</td>
<td>For stimulation of the system's senses.</td>
</tr>
<tr>
<td>8. Ego-Valuative</td>
<td>For respect of self by self.</td>
</tr>
<tr>
<td>9. Respiratory</td>
<td>For intake of oxygen.</td>
</tr>
</tbody>
</table>

For the purpose of this study the preschool child was conceptualized as a behavioural system as defined by the UBC Model for Nursing.

The meaning of the term asthma was interpreted two different
ways in the study. For the purposes of obtaining subjects for the study the investigator used a definition understood by medical practitioners in their clinical work. Asthma in children was defined as a "condition of altered dynamic state of respiratory passages due to the action of diverse stimuli resulting in airways obstruction of varying degree and duration, and reversible partially or completely spontaneously or under treatment" (Kuzemko, 1976, p. 1). On the other hand, the parents seemed to interpret asthma in terms of their child's symptoms and behavioural reactions to the disease. The parents' definition of asthma will be discussed in greater depth in the analysis chapter of this report.

The term treatment was defined as the prescribed actions which the physician or other health care worker had directed the couple to take to prevent or control the child's asthmatic attacks. Clinically, asthma can often be successfully treated to prevent and control the attacks. Parents are given the responsibility to provide the prescribed treatments for their children. Therapy for children with asthma may be complex and consist of a combination of one or more of the following: medications, environmental control, diet and fluid therapy, exercises, chest therapy, and psychotherapy (Green & Haggerty, 1977, pp. 333-338; Keens, 1979, pp. 510-523; Knapp & Wells, 1978, p. 115; Landau, 1979, pp. 584-586).

These five definitions were used to provide a clear description of what was to be studied.

Approach to the Problem

Descriptive research in nursing is done for many reasons
such as to explore topics, develop new knowledge, or generate hypotheses for future studies (Brink & Wood, 1978, p. 79; Isaac & Michael, 1979, p. 18; Notter, 1974, p. 20). Data were gathered from the subjects using a semi-structured interview guide. This method was intended to obtain guided but free and abundant responses from the parents who were interviewed. The UBC Model for Nursing was used to develop the interview guide as well as the categories for analyzing the data obtained from the content of the interviews with the parents. The results of the research were therefore a description of the parents' action directed toward helping their preschool children with asthma and a summary of the impact of asthma and its treatment on the parents' efforts to help their preschool asthmatic children.

In the subsequent chapters of this research report the following will be included: the theoretical basis for the study, a review of the related literature, a description of the research design and procedure, a summary of the analyses of the data and results, and finally, a discussion of the results, implications for nursing, and recommendations for future research related to the study.
CHAPTER II
Theoretical Framework and Review of the Related Literature

The theoretical basis for the study and a critique of the related research will be discussed in this chapter. The theoretical foundation for this research was derived from a review of the nursing and health-related literature and the investigator's observations of parents rearing chronically ill children. Current developmental theory purports that parents perform tasks to assist their children, sick or well, to meet needs for optimal growth and development (Duvall, 1977, p. 26; Havighurst, 1972, p. 77; Pringle, 1974, p. 59). The parents' efforts to help their children are thought to be influenced by numerous individual and environmental factors (Hymovich & Chamberlain, 1980, pp. 29-67). The factors of a chronic illness and its treatment can alter the parents' child-rearing practices (Burton, 1975, p. 85; Hymovich & Chamberlain, 1980, p. 39; Mattsson, 1975, p. 82). These theoretical statements are supported by the investigator's clinical observations while working with families rearing chronically ill children. It was noticed that parents performed the tasks of parenthood and additional tasks that involved specialized care that related to the child's disease and its treatment. Some parents found the tasks of helping their chronically ill children burdensome, and others indicated that their activities resulted in new learning and a feeling of pride and satisfaction (Burton, 1975, pp. 65 & 69; Crummette, 1979, p. 27). These findings in the literature and observations from the clinical area provided support for the development of this descriptive study.
The following discussion will present a theory of parenthood, the developmental tasks of parents rearing preschool children with a chronic illness, and the framework using the UBC Model for Nursing.

**Tasks of Parenthood**

Parenthood is generally acknowledged as a major phase of life with the principal goal of parents being to prepare their children to become wholesome, adult members of society (Anthony & Benedek, 1970, p. 95; Camilleri & Glenn, 1978, p. 237). This theory of parenthood will be presented in relation to developmental tasks. A developmental task is a "task which arises at or about a certain period in the life of an individual" (Duvall, 1977, p. 177; Havighurst, 1972, p. 2).

Parents have several tasks to accomplish during the child-rearing years of adulthood. Erickson (1963) describes the stage of parenthood as "generativity," that is, the parents' task is to guide the next generation (pp. 266-268). Benedek (1970) states the "tasks of parents consists of care, training and enculturation of the society's values and norms" (p. 95). Havighurst (1972) emphasizes that rearing children is the greatest responsibility of an adult during the years of parenthood. To perform this responsibility parents learn to help children meet their physical and emotional needs (p. 77). Parents learn how to deal with their children and adapt their schedules to the requirements of growing children. Havighurst (1972) adds that the parents' feelings about their children are a reflection on their peace of mind and life adjustment (p. 77). Theoretically, if parents successfully achieve their developmental tasks, they experience
satisfaction, approval, and success with later tasks; whereas, if the parents fail to achieve their tasks, unhappiness, disapproval by society, and difficulty with later developmental tasks results (Duvall, 1977, p. 177). Duvall has described developmental tasks for all parents in society. These tasks are not meant to be all-inclusive or universally applicable. In fact, the parents' tasks are thought to differ from one generation to another and from one subculture to another in our society. The developmental tasks of parenthood include: (a) assisting their children to become autonomous, and to have initiative and a positive self-image, (b) establishing affectional bonds between the parents and their children, (c) helping children adjust to the expectations of others and to conform to the demands of the culture, and (d) establishing healthful routines of eating, resting, playing, and working with children within the limits of the parents' expectations (Duvall, 1977, pp. 169-175).

In summary, the theorists indicate that parenthood involves major responsibilities which include helping children meet their physical, psychological, and social needs. If parents could fulfill their functions, children would grow in productive and healthy ways (Wandersman, Poppen, & Ricks, 1976, p. 10).

**Tasks of Parents Rearing Preschool Children**

Parents rearing preschool children may concentrate on certain tasks (Appendix B, p. 73). During the preschool years, children are developing autonomy, and parents are faced with learning how to accept these changes. As a consequence, the parents may lose some control over their child's behaviours while maintaining necessary limits (Hymovich & Chamberlain, 1980,
One of parents' major tasks is to learn how to separate from their preschool child (Hymovich, 1979, p. 86). Other tasks these parents assume may include: (a) setting behavioural guidelines for their children to follow, (b) reinforcing the children's appropriate behaviours, (c) listening and responding to their children's efforts to communicate, (d) providing opportunities for the children to discover, share, and to be independent, (e) providing affection, (f) providing their children with opportunities to make decisions, (g) allowing their children to express their emotions in healthy ways, (h) protecting their children from potential harm, (i) teaching their children about specific life events, such as hospitalization (Duvall, 1977, pp. 258-268; Hymovich & Chamberlain, 1980, pp. 266-269). It is apparent that parents of preschool children perform certain tasks that are specific to their children's level of maturity.

Tasks of Parents Caring for Chronically Ill Children

Child-rearing behaviours of parents are changed when their children have chronic illnesses (Magrab & Calcagno, 1978, p. 4). A chronic illness refers to a disorder with a protracted course which can be fatal, progressive, or associated with a relatively normal life span despite impaired physical and/or mental functioning. Such diseases frequently show periods of acute illness exacerbations requiring medical attention (Travis, 1976, p. 11).

When a child develops a chronic illness, such as asthma, Hymovich (1976) purports that parents have additional tasks to perform. These tasks involve the parents' being able to: (a) understand and manage their children's illness, (b) assist their children to understand and cope with the illness, and (c) help
their ill children maintain a healthy state and their integrity (Hymovich, 1976, p. 11). The literature seems to support that parents have additional tasks to perform when their child has a chronic illness like asthma.

**Child's Basic Human Needs: A Framework to Guide the Research**

As stated previously the basic function of parents in society is to meet the growth and developmental needs of their children. The aim of this research was to describe the ways parents help preschool children with asthma meet their needs to grow and develop; therefore, the investigator selected the UBC Model for Nursing, a conceptual framework which describes basic human needs.

This model was selected for this study for two reasons. First, the UBC Model for Nursing was thought to be an appropriate conceptual model because its assumptions are derived from general systems and learning theory and it allows for integration of developmental concepts and considerations of forces which affect the chronically ill child. Second, the UBC Model for Nursing provided the necessary direction for the research. It specified a definition of basic human needs, gave guidance to the development of the Interview Guide and for the categories for the analysis of the data. From the review of the literature, the UBC Model for Nursing appeared to be an appropriate conceptual framework to guide the inquiry about the ways parents helped their preschool children with asthma.

**Review of the Related Research**

In the following presentation of research about parents and their children with asthma, the investigator will discuss the
results of studies which indicated that the majority of parents and their asthmatic children are normal individuals with the added factors of the children having a chronic disease; and that parents are concerned about their children's illness and provide additional help for the children which is related to their disease and its treatment.

Norrish, Tooley, and Godfrey (1977) studied 63 school-aged children with asthma who were attending a hospital centered clinic. The researchers used reliable clinical, physiological, and psychological tests. The asthmatic children in this study were compared to non-asthmatic children in the same region. The goal of their study was to clarify the relationship between emotional deviance and the severity of the child's asthma (p. 912). The results indicated that emotional deviance of children with asthma is no more than in normal children (Norrish, Tooley, & Godfrey, 1977, p. 916). For the purpose of this study it was considered that the majority of asthmatic children are mentally healthy.

Parents, particularly mothers, have been a centre of research studies in childhood asthma. Chong, in a literature review of research from 1937 to 1963, described parental attitudes in families with asthmatic children. He reported that unsatisfactory parental attitudes, especially the mother's, are found to be very important in the causation and precipitation of a child's asthmatic attacks (Chong, 1977, p. 78). This statement and others like it have been questioned. Byrne and Murrell (1977) studied the maternal influence on children with asthma. They compared 65 mothers of school-aged asthmatic children to
100 mothers of normal children of the same age using a self-
description questionnaire (Semantic Differential Scale). The
instrument measured the mother's anxiety and over-protective
maternal behaviour. This study did not find that mothers of
asthmatic children were anxiety prone but that they possessed
characteristics of overconcern. It was suggested that a cyclical
relationship is set up in which the mother's behaviour in
response to her child's asthma attack further exacerbates rather
than ameliorates the illness. This study was an examination of
what the parents did to ameliorate their child's asthmatic attack
and whether the action could be judged as being effective or
ineffective.

From the review of the literature, three studies were found
which provided information about the help parents reported they
gave asthmatic children and the impact of asthma and its treat­
ment on the parents' efforts to care for their child.

In one study, 41 asthmatic children, ages nine to eleven
years and their parents were surveyed by Reddihough, Landau,
Jones and Rickards (1977). The major goal of their research was
to study the understanding and concerns parents and their school-
aged children had about asthma and its treatment. Thirty-six
mothers, two couples, one father, and 42 children with moderate
to severe asthma were interviewed. They were asked open-ended
and closed questions about asthma, its treatment, and their feel­
ings about how asthma affected their family. Parents reported
that they felt guilty about having children with asthma, and wor­
rried about their children during an asthmatic attack. Another
common concern of parents was whether the children's medications
were going to be effective during their asthmatic attacks. Several mothers expressed a need to be close to their children in case they had an attack. Some parents were reluctant to leave their children in the care of someone else. Most of the mothers believed their children's asthma was under control but they still limited their children's activities to prevent further attacks. The mothers in this study controlled the children's medications and made decisions whether their children with asthma should attend school. In fact, the mothers stated that they had the major responsibility for helping their asthmatic children (pp. 296-297).

In the second study, Crummette (1979) studied 30 mothers of school-aged children with asthma while they attended a pediatric allergy clinic. Crummette interviewed each mother once using open-ended questions focusing on the mothers' concerns regarding their children's asthma and the mothers' perceptions of how their children's asthma affected their lives. From an analysis of the interview data Crummette derived five categories of child care. The mothers described their actions as: (a) controlling their children's environment, (b) caring for their children's nutritional needs, (c) ensuring their children got the required sleep, (d) controlling their children's activities, and (e) managing their children's medical regime. In fact, the mothers altered their usual patterns of mothering to care for the asthmatic children's special needs. For example, they would prevent their children's asthma attacks by limiting their activities or controlling their environment. In addition, the mothers found it difficult to help the children
become independent, but did teach them how to care for themselves. Another difficulty the mothers expressed was setting limits for the asthmatic children. They believed the children would become frustrated which would precipitate asthma attacks. To resolve this problem, the mothers set limits for their children first, and then treated their children's asthmatic attack (pp. 24-25).

In the third study, Travis (1976) interviewed nine couples of preschool children with asthma in their homes using an unstructured format. This approach furnished a copious amount of information. Travis noted that the parents: (a) stayed with the children throughout the night to comfort them if they were experiencing symptoms of asthma, (b) gave the children prescribed medications, (c) controlled the children's environment, (d) offered the children a cup of warm tea or water when they had an asthma attack, (e) changed the children's dietary habits as it was required, (f) limited the children's activities to prevent another asthma attack, and (g) took the children to the hospital's emergency services when the children needed further help to breathe (pp. 175-176). It was apparent that these parents concentrated their efforts to help the children meet their needs.

There appears to be some weaknesses in these three studies which were considered by the writer. The samples in the studies were small and not representative of parents rearing asthmatic children. In the Crummette (1979) and Reddihough et al (1977) studies, the majority of parents interviewed were mothers of school-aged asthmatic children. In addition, both of these
studies tended toward biased samples. Crummette (1979) inter-
viewed lower socioeconomic, black women in Richmond, Virginia,
and Reddihough et al (1977) interviewed only parents and their
asthmatic children who were attending a clinic in the Royal
Children's Hospital in Melbourne, Australia. Specific cultural
and social factors characteristic of these samples may have
biased the results of these two studies. The researchers used
convenience rather than random samples of parents of asthmatic
children. The responses of the parents in the studies of
Crummette (1979) and Reddihough et al (1977) may have been
influenced by the families' purpose of visiting the clinic and
the strangeness and tone of the medical clinic environment.

There was a lack of involvement of the fathers in both of
these studies. Recent research indicates that fathers see
themselves as active participants in the daily routine of care
for their children with chronic illnesses (McKeever, 1981,
p. 124). The importance of involving both parents in research
about the tasks of parenthood is supported in theory. According
to Benedek, the parents represent a system in relation to the
children in the family. The parents are viewed as a goal
directed unit made up of two interdependent and interacting
parts (1970, p. 110). Other theorists support this, such as
Anthony (1979) who reports that the functions of mothers and
fathers are not clearly demarcated and today parents share the
child-rearing responsibilities (p. 78). According to Le Masters
(1977), parents cooperate as a team to provide care for their
children (p. 60). Barsch and Voysey, separately, found that
parents of handicapped and ill children tried to fulfill the
responsibilities of care and control of children and maintain a fair distribution of the help and resources within the family (Barsch, 1968, p. 311; Voysey, 1975, p. 139).

It should be noted that these studies did not use a developmental approach. However, the researchers did identify parents of a specific age group of children to interview; for example, Crummette (1979) and Reddihough et al. (1977) interviewed parents of school-aged children and Travis (1976) interviewed parents of preschool children. The developmental stages of children affect their parents' responsibilities and tasks; therefore, the ages of the children constitute an essential consideration when studying parental tasks.

From the literature review and its analysis, the investigator found insufficient valid and reliable data for use in the nursing care of families of asthmatic preschool children. Therefore, a descriptive study was done with an aim to improve the quality of the research available, and add to the knowledge about chronically ill children using a developmental and nursing approach.

The next chapter describes the research method used to study the parents' perceptions of their behaviours to help their preschool children with asthma meet their needs to grow and develop.
CHAPTER III
Research Design and Methods

The evidence from the review of the literature and clinical experience as presented in Chapter II indicated that a descriptive study about the behaviours of parents in relation to their preschool children with asthma was timely and necessary. The content of this chapter will focus on the research plan including the methods used to acquire and analyze the data secured from the interviews between the investigator and the parents of asthmatic preschool children. Initially, an overview of the research plan will be presented, followed by a description of the sample, the Interview Guide, and the interview procedure. Lastly, the method used to analyze the data and the ethical considerations involved in this study will be summarized.

Overview of the Research Plan

This descriptive study provided detailed accounts of 10 couples' behaviours including their efforts to help their preschool children. Descriptive research is aimed at obtaining complete and accurate information about the group being studied (Selltiz, Wrightsman, & Cook, 1976, pp. 102-103).

One of the ways to gather data in a descriptive study is to interview subjects (Notter, 1974, p. 20). In this study, ten couples of preschool asthmatic children were chosen as the subjects. Support for this decision was provided from both theory and research as discussed in Chapter II. It was assumed that the couples' reports about their behaviours in relation to helping their children were honest and precise (Hymovich, 1979, p. 284). Barnard and Douglas, in a review of the literature,
reported: "Parents are, in many instances, quite accurate in their perceptions" (1974, p. 8). Coombs and Snygg (1949) stated that people do not behave according to the facts as others see them, but they behave in keeping with the way they see the facts (1949, p. 17). Furthermore, Burton (1975) found in her research that parents were eager to discuss what they did with their chronically ill children. Therefore, the investigator planned to interview parents and ask them about their behaviours.

The Interview Guide, (Appendix C, p. 77), developed by the investigator from the UBC Model for Nursing, was used for the purpose of collecting the data. The analysis of the couples' interactions reflected their helping behaviours in relation to their asthmatic children. The data were then sorted in accordance with basic human needs as provided by the framework offered by the UBC Model for Nursing. In the following sections of this chapter, a detailed account of the research procedure will be described.

Description of the Sample

The following discussion presents the description of the sample of 10 couples, the criteria for their selection, and the procedure for contacting them for the research project. A cross-section of couples who were currently rearing preschool children with asthma was desired for a representative sample (Notter, 1974, p. 76). Two pediatric allergists in Vancouver, British Columbia were approached to provide the names of parents who met the criteria. The investigator interviewed the allergists and discussed the following: (a) purpose of the study and its significance to nursing, (b) criteria for selecting the subjects
for the study, (c) content of the Interview Guide, and (d) procedure for obtaining the names, addresses, and telephone numbers for the possible subjects.

A letter was left with the allergists for further reference which outlined the purposes of the study and the method of data collection (Appendix D, p. 82). After the verbal agreement was made with the allergists, they signed a consent indicating their agreement that the investigator obtain the parents' names through their offices (Appendix E, p. 83).

Six couples were obtained by this method. The other four couples were referred by one of the pediatric allergists from his medical clinic. Thus, a convenience sample of couples was obtained rather than the preferred method of random sampling. A convenience sample is a nonprobability sample that happens to be available at the time for participation in the study, and is not representative of the population (Brink & Wood, 1978, p. 97). As this was a descriptive study which was aimed at gathering more details about parents' perceptions rather than proving or disproving a given hypothesis, this limitation was not a major concern. In fact, Phillips stated: "If the definition of the problem emphasized the context of discovery, a superior strategy (to random sample) for a given problem might be to secure detailed data on a nonprobability sample" (Phillips, 1971, p. 95).

A set of five criteria was used to select the names of the couples from the list of referrals supplied by the allergists. This method ensured a sample of parents which would be able to provide the data required and limited the intervening variables
which may have confounded the data. The following criteria and rationale were used to select the couples:

1. The ages of the preschool children with asthma ranged from three to five years of age. By definition, preschool children range from two and half years to five years of age (Duvall, 1977, p. 249).

2. The children had no other illnesses and they had been diagnosed by their physician as having moderate to severe asthma for at least one year. Asthmatic children with other chronic illnesses such as epilepsy or cystic fibrosis would tend to confound the data and clear distinctions about how the parents helped their asthmatic children would be embroiled with factors concerning the other diseases. It takes time for parents to become accustomed to their children's illnesses and treatments; therefore, the investigator set the criteria of at least one year from the time the children were diagnosed as having asthma until the date of selection (Carlson, 1978, p. 88; Smith, 1981, p. 17).

3. The parents both agreed to participate in the study. This study involved the couple as the sample because of the research and theoretical support for including both the mother and the father as a unit (Anthony, 1979, p. 78; Benedek, 1970, p. 110; McKeever, 1981, p. 124).

4. The couple and their preschool children with asthma lived in the same house in the area of the Lower Mainland of British Columbia. The couples were interviewed in their homes, rather than in a clinic or hospital in an attempt to have a relaxed environment, and to facilitate the couples' responses
during the interview. Kornhauser and Sheatsley report that the ideal setting for interviewing is a "permissive situation in which the respondents are encouraged to voice their frank opinions" (1976, p. 564).

5. The study was limited to couples who understood and spoke English.

After ten couples' names were obtained, the couples were contacted about their participation in the project by letter (Appendix F, p. 84). After seven days it was anticipated that the couples had received the letter and the investigator talked with them by telephone to ask for their decision to volunteer and to set a date for the interview. All ten couples willingly volunteered to participate in the study.

**Interview Guide**

The interview is an appropriate way to collect data for descriptive studies and to obtain data about perceptions of individuals (Brink & Wood, 1978, p. 106). In the following discussion, the development of the Interview Guide and its features will be described. The features of an ideal measuring instrument include: (a) its relevance to the concepts being described, (b) its sensitivity, that is, that it makes distinctions fine enough for the purposes it is to serve, (c) its validity or ability to measure what it was intended to measure, and (d) its reliability or repeatability (Selltiz, Wrightsman, & Cook, 1976, pp. 160-163; Williamson, 1981, pp. 154-160).

The Interview Guide, a semi-structured questionnaire, was developed primarily because there was not an applicable alternative available for this particular research. The UBC Model for
Nursing was an appropriate framework to use to develop the Guide because it provided an approach to the individual's basic human needs and it allowed integration of developmental theory (Riehl & Roy, 1974, p. 26). The development of the Interview Guide followed standard procedures (Notter, 1974, pp. 66-67). Its items were derived from the literature, the UBC Model for Nursing, and the researcher's experience working with preschool children and their families with asthma, and in consultation with two nursing researchers (Arkinstall, 1977, pp. 8-9; Campbell, Cruise, & Murakami, 1976, p. 8; Campbell, 1980; Duvall, 1977, pp. 249-258 and 264-268; Hymovich, 1976, pp. 11-13; Perry, 1980; Soothill, 1979, pp. 385-389). All items for the Guide were intended to be consistent with preschool children's developmental needs and asthmatic conditions. Following development, the Guide was pretested. Two couples of preschool children with asthma volunteered to be interviewed. As a result, two questions were added. One question asked for the couples' definition of asthma and the second asked for specific efforts made by parents to protect their children from infections. Both of these suggestions from parents were thought to be significant to the study because the items elicited relevant information and therefore they were included in the Interview Guide. The Guide reflected the problem statements and included questions designed to obtain information about: (a) demographic and relevant data concerning the parents' responsibilities, (b) the children's asthma, (c) the help parents provided their preschool children with asthma, and (d) the impact of asthma and its treatment on the parents' efforts to help their preschool children.
Three types of validity were considered in relation to this instrument's usage. First, construct validity was examined. This refers to the soundness of concepts and theory underlying the Interview Guide (Williamson, 1981, p. 163). The instrument was based on theories related to childhood asthma, growth and development, and nursing which were described in Chapter II.

The second form of validity addressed was face validity which refers to the pertinence of the data collection guide to the variables being investigated (Brink & Wood, 1978, p. 120; Notter, 1974, p. 74). The Interview Guide used in this study was developed particularly for this research project, and therefore, it was applicable for obtaining data about the parents' perceptions of how they helped their preschool children with asthma meet their needs. In addition, face validity of the Guide was enhanced by the pretest results and the willingness of the couples to respond during the interviews.

The third type of validity, content validity, which addresses the degree to which the content of a data collection device was representative of what is known about the topic (Notter, 1974, p. 140). In this study, as previously referred to in this chapter, the items contained in the Interview Guide were developed from a wide range of relevant theories. Consultation about the validity of the items was obtained from nursing consultants and parents of preschool children with asthma. In addition, the UBC Model for Nursing provided a comprehensive framework for the Interview Guide. The Guide's items represented a wide range of theory encompassing preschool children with asthma.
Reliability relates to the concepts of consistency and repeatability (Notter, 1974, p. 75; Williamson, 1981, p. 164). The Interview Guide items were reliable in that all couples consistently responded to the interviewer's questions appropriately and descriptively. The interview procedure was made reliable in the following ways: the investigator (a) interviewed the parents according to a planned and consistent procedure, (b) used the same Interview Guide throughout the interviews, (c) conducted all of the interviews, facilitating the consistency of the interviewing techniques (Williamson, 1981, pp. 154-160). In addition, to address the reliability of the investigator's placement of the content of the interviews, two nursing researchers experienced in this method of analysis randomly selected segments of the audiotaped interviews with the couples and compared their independent placement of the interview content to the transcribed data prepared by the investigator. The results of the nursing consultants' categorization of the data was consistent with that of the investigator. This method is recognized as an acceptable way to address reliability of the placement of data (Notter, 1974, p. 6). The specific method used to interview the couples and obtain the data is described in the Interview Procedure (Appendix G, p. 86), and in the following discussion.

Procedure for Collecting the Data

The procedure which directed the interviews was consistent and it seemed to be effective and efficient. A written consent (Appendix H, p. 88) was reviewed with each of the couples prior to beginning data collection and was signed by both the father
and the mother. During the interviews both parents were present and freely participated in the discussion. The investigator, who was experienced in the skill of interviewing, directed all of the interviews. Each interview took approximately sixty minutes to complete. At the termination of the interviews, the investigator thanked the parents for their participation and provided the names of resources and information the couples requested.

In summary, the investigator interviewed ten couples of preschool children with asthma in their home using a Guide which helped to collect in-depth descriptions of the parents' perceptions of how they helped their asthmatic children.

**Procedure for Analyzing the Data**

In this section, the criteria and technique used to analyze the data obtained from the investigator's interviews with the couples will be described. The main technique used to analyze the interviews was content analysis. This method can be applied to any problem where the content of communication serves as a basis of inference (Holsti, 1969, p. 2). For example, the help parents stated they provided their preschool children was the semantic content selected for analysis and the basis for inferences. The investigator used basic human needs and tasks of parenthood as a classification framework to sort the statements of the couples' perceptions of their "help." This is an acceptable procedure according to Brink and Wood:

If a study has a conceptual or theoretical framework, the researcher can set up classifications or categories in advance, simplifying somewhat, the process of content analysis. (Brink & Wood, 1978, p. 146).
From the audiotaped interviews, the investigator transcribed each couples' verbatim expressions of help into the appropriate category. Each category represented one of the child's basic human needs.

To guide the investigator in the placement of the interview data, the investigator used the definitions of the basic human needs as provided by the UBC Model for Nursing (Table 1, p. 6). The application of the UBC Model for Nursing as a framework to organize the data imposed some restraints due to the fact that the framework was based on "system theory." By definition, each of the nine needs are represented by a subsystem which is interacting and interdependent with every other subsystem (Campbell, Cruise, & Murakami, 1976, p. 6). It was thought, therefore, that the categories of needs would not meet the criterion of being mutually exclusive. Mutual exclusiveness stipulates that no content datum can be placed in more than one single category (Holsti, 1969, p. 99). To approach this problem, the investigator grouped the common responses as presented by the couples under each "need" category. The couples identified what they did to help their children and then gave specific examples of their behaviours. Grouping this content within each "appropriate need" category appeared to partially meet the criterion of mutual exclusiveness.

Sorting the couples' responses according to the preschool children's basic human needs reflected the research question. As a result of the analyses, a description evolved including the parents' perceptions of (a) the ways they helped preschool children with asthma meet their human needs, and (b) how asthma
and its treatment affected the help the parents provided their preschool asthmatic children.

To summarize, the content analyses of the interviews with ten couples of preschool children with asthma from the Lower Mainland of British Columbia were guided by the UBC Model for Nursing, a basic human needs framework. Both the Interview Guide and the categorization of the data were developed from this nursing framework.

**Ethical Considerations Encountered in the Research**

In this study, certain ethical issues were considered. An approval was secured from The University of British Columbia Screening Committee for Research and Other Studies Involving Human Subjects: Behavioural Science (Appendix I, p. 89). The following discussions will present the ethical issues and the ways the investigator approached them.

Obtaining the couples' informed consents regarding their participation in the research was one of the issues the investigator considered. Each couple was informed about the study by a letter and one week was allowed for them to make a decision about participating in the study. At that time, the couples were telephoned and asked if they had decided to participate in the study. This telephone contact with the couples provided an opportunity for further clarification about the study and to set the time and date for the interview and a verbal consent. In addition to this, at each interview the investigator read the contents of the written consent to the couples prior to their signing of it (Appendix H, p. 88). The contents of the verbal and written consents were consistent, and contained the purpose
and possible benefits of the completed research. In the explanation to the couples the extent of their involvement was clearly specified. They were informed that they would be audiotaped during the interview and told about the exact use during, and disposition after, of the audiotapes following the completion of the study. The couples were also informed that they could withdraw from the study at any time without jeopardizing the medical care of their children. The investigator felt confident that the couples in this study were adequately informed about their involvement in the study.

Another ethical issue the investigator considered was that of providing the couples with privacy. In this study, there were three major threats to the families' privacy (The Canadian Council, 1977, p. 15). One of these threats was the use of a tape recorder. However, the investigator made explicit that the use of the information was for research only and their privacy was protected by keeping the taped interviews confidential and the couples' names anonymous. The couples were assured that at the completion of the study all the audiotaped and written data would be either erased or destroyed. Interviews in their homes were the second potential threat to the couples' privacy (The Canadian Council, 1977, p. 14). This intent was presented in their initial letter, but all the couples willingly consented to be interviewed in their homes at a time convenient to their family. The third threat to the couples' privacy was the disclosure of the ways they helped their children. The investigator provided sufficient opportunity for the couples to consider this threat and an option to withdraw from the study.
at any time. Furthermore, couples were asked open-ended questions which allowed the parents to answer the questions as they chose.

Another ethical issue considered was the protection of the couples' confidentiality and anonymity. The investigator's intent to protect the couples was made explicit in both the initial letter to the couples and in the verbal explanation prior to the couples signing of the written consents. It was clearly explained that the audiotapes were identified only by number, and that names would not be associated with the recorded information. In addition, the couples were assured that in addition to herself only the investigator's Thesis Committee (two faculty members) would have access to the tapes.

In summary, the ethical issues were systematically approached to protect the subjects. The issues were that of an informed consent, privacy and confidentiality and anonymity.

This research project was accomplished by audiotaping interviews with ten couples with asthmatic preschool children. The data from the interviews were categorized according to basic human needs. Within each need, the content of the couples' statements of the way they helped the asthmatic preschool children were analyzed. The investigator ensured that the parents were ethically protected throughout the study. In the next chapter the findings derived from the interviews with the couples will be presented.
CHAPTER IV

Presentation of the Findings

In this chapter, the relevant findings obtained from the interviews with 10 couples of preschool children with asthma will be summarized. First, a description of the sample will be presented which includes information about both the couples and their preschool children with asthma. Descriptive statistics were used to summarize this data. Second, the content of the interviews will be described according to the ways the parents stated they helped preschool children with asthma meet their basic human needs. The couples' verbatim responses were categorized according to the nine basic human needs specified by the UBC Model for Nursing. Finally, an account of the impact of the preschool children's asthma and treatment on the couples' efforts to provide care will be summarized.

Description of the Sample

This section describes the pertinent data obtained from the interviews of 10 couples of preschool children with asthma. All the couples interviewed met the criteria specified in Chapter III (pp. 23-24) and they willingly participated in the study.

The couples. Relevant data describing the couples who participated in the study are presented in the following discussion and summarized in Table 2 (p. 34). The demographic data were obtained at the beginning of each interview and recorded.

Each couple was subdivided into a mother and a father for purposes of describing their ages, educational backgrounds, and occupations. They ranged from 28 to 41 years of age with a mean
Table 2
Demographic Data of Couples of Preschool Children with Asthma

<table>
<thead>
<tr>
<th>Number assigned to the couple</th>
<th>Ages</th>
<th>Education&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Occupation&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother</td>
<td>Father</td>
<td>Mother</td>
</tr>
<tr>
<td>1</td>
<td>30</td>
<td>34</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>37</td>
<td>41</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>35</td>
<td>37</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>30</td>
<td>33</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>34</td>
<td>40</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>34</td>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>37</td>
<td>31</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>32</td>
<td>33</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>33</td>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>28</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>Mean</td>
<td>33</td>
<td>35.5</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Education

1. Grade XII Graduate
2. Community College Graduate
3. University Graduate
4. Other (apprenticeship)

<sup>b</sup>Occupation

1. Professional (nurse, teacher, professor)
2. Technical (hairdresser, secretary)
3. Business
4. Homemaker
age of 33 years for the mothers and 35.5 for the fathers. All of the parents interviewed had completed Grade XII and 13 out of the 20 mothers and fathers had obtained educational levels beyond this level. Six mothers and seven fathers were graduates from a community college or a university. With regard to the couples' occupations in four cases both parents were employed full time; and, in six cases, only the fathers were employed. It was noticed that in one of the couple's situation the mother was employed part-time. Six mothers and none of the fathers reported that they were homemakers. All of the other couples were involved in professional, technical and business occupations.

The preschool children with asthma. Significant data portraying the 10 couples' preschool children are summarized in the following description and in Table 3 (p. 36). The children's ages ranged from 3 to 5 years and their mean age was 4.2 years. There were more boys than girls (2.3 to 1) with asthma in this study. The average size of the families was two children per family, and in six families the children with asthma were the first-born. In one family, the child with asthma was a dizygotic twin. On average the couples had two children per family, with the eldest child having asthma.
Table 3
Demographic Data Describing the Preschool Children with Asthma

<table>
<thead>
<tr>
<th>Number assigned to the couple</th>
<th>Child's age (years)</th>
<th>Sex</th>
<th>Position in the family</th>
<th>Number of children in the family</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>M</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>M</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>M</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>F</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>M</td>
<td>1 (Twin)</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>M</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>M</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>F</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>F</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>M</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

N = 10  Mean = 4.2  Ratio 2.3:1  Mean = 2.1

The Help Provided by the Couples

In the following description, the couples' verbatim communications of the ways they perceived themselves to be helpful to the preschool children with asthma will be presented. The couples reported ways they helped (helping behaviours) their asthmatic preschool children on a daily basis and during the children's acute asthmatic attacks. Abundant data were obtained from the couples' free and open responses to the investigator's questions. The audiotapes of the interviews were transcribed, categorized,
and validated as outlined in Chapter III. A summary of the couples' reported helping behaviours are made explicit in Table 4 (p. 38) and the detailed analysis of the interviews follows.

The couples' helping behaviours are described under each of the child's basic human needs.

Need: to breathe. The 10 couples reported that they helped their preschool children with asthma breathe in two major ways: they provided their children with treatments, and managed to control the factors that triggered their children's asthma.

Treatment was defined in Chapter I as prescribed actions a physician or other health care professional have directed parents to take to prevent or control the child's asthmatic attacks. The couples reported that they provided two treatments to help their children breathe.

Firstly, they administered medications. That is, all couples stated that they gave their children prescribed medications such as bronchodilators, orally, via an inhaler or subcutaneous injections. Seven couples gave their children medications on a daily basis. Three other couples gave their children the bronchodilators when they felt their children required the drug to help them breathe. Some sample statements made by the parents were: "We give him medications every day to control the coughing and the wheezing," "As soon as she starts wheezing we give her Somophyllin and Alupent," or "J. gets his medications before we go to grandmother's house where there are animals." When the couples thought the medications they gave their children were not effective, they took their children for further help and consulted a physician.
Table 4
The Couples’ Helping Behaviours

<table>
<thead>
<tr>
<th>Child's need</th>
<th>Couples' helping behaviours</th>
<th>Daily</th>
<th>During an asthmatic attack</th>
</tr>
</thead>
<tbody>
<tr>
<td>To breathe</td>
<td>1. Provides treatment such as:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1 administers medications</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>1.2 performs chest therapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Controls factors triggering asthmatic attacks including:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.1 environmental allergens</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>2.2 emotional states</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>2.3 exercise</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>2.4 respiratory infections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To eat and drink</td>
<td>1. Prepares nutritious meals and snacks</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Urges adequate intake of food and fluids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To eliminate waste products</td>
<td>1. Provides assistance to practise:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1 cleanliness •</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>1.2 toilet habits</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>To have a balance between rest and activity</td>
<td>1. Enforces rest/sleep routines</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>2. Promotes activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To be safe and secure</td>
<td>1. Prepares child for separation and strange experiences</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>2. Supervises daily activities</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>To feel loved</td>
<td>1. Expresses reciprocal affection</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>To have sensory satisfaction</td>
<td>1. Provides opportunities for sensory satisfaction</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>2. Interacts with the child</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>To have a sense of accomplishment</td>
<td>1. Teaches the child in relation to:</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>1.1 breathing easier</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2 performing activities of daily living</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.3 practising safety rules</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Provides opportunities to make decisions</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>To develop self-respect</td>
<td>1. Praises</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>2. Shows consideration</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Sets limits</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

Note. "x" refers to a general consensus of the couples' responses.
In addition, all couples performed chest therapies; that is, they performed those acts prescribed by a health professional which promote drainage of bronchial secretions and easier respirations. These were done during and after their children's asthmatic attacks. Some stated examples of therapy included: "I put his body over my knee upside down and pat his back over his lungs," or "We ask her to take deep breaths," or "We prop him up on pillows."

Secondly, the couples performed acts which controlled environmental allergens, emotional states, exercise, and respiratory infections, all examples of factors which precipitated or aggravated their children's asthmatic condition. The couples tried to prevent their children's exposure to allergens that triggered an asthma attack. For example, they practised dust avoidance procedures such as frequent washing of their children's bedroom walls, floor, and accessories. Some parents told of purchasing electronic air cleaners, and water beds for the children to help control their exposure to dust. One couple stated: "We put in an electronic air cleaner, and had our furnace's air ducts cleaned. . . . The bedroom gets washed down once a day."

In addition, some parents prevented their children from inhaling allergens such as pollens and animal dander. One mother voiced this statement: "We avoid things such as cats, dogs, and horses because she is allergic to them." Another father recalled how they avoided walking through the tall grasses and weeds in the summer. One couple of a small boy spoke about certain critical ingredients in foods which resulted in their child experiencing a severe asthmatic attack: "We are very strict about his
diet, and in fact we select his food carefully and prepare most of his food." The couples tried to limit the cigarette smoking in their homes to prevent the child from having an asthmatic attack; only two fathers stated they smoked at home but not in the same room as their asthmatic children. All of the couples reported that they allowed smoking in their homes; however, they added that it was an "infrequent" occurrence.

Four couples described how they would try to calm their children to prevent them from having an asthma attack. One couple said that they gave their child a "warm bath," and another couple sang and talked quietly to their child.

Seven couples described how active play and exercise triggered their children's asthmatic attacks. These couples tried to prevent their children from wheezing by having their children do sedentary activities, and restricting them from active play with other children. Some examples were: "We read to her," or "He plays with the record player," or "We keep him indoors to play quietly and without his friends."

Six couples discussed their methods of preventing respiratory infections because they felt their children's asthmatic attacks were triggered by a "cold." These couples recounted that they avoided others who had "colds," dressed their children warmly on cool days, and practised cleanliness routines.

Need: to eat and drink. The couples interviewed described two ways they helped their preschool children with asthma meet their need for nutrition and fluid balance. The parents reported that they prepared their children's food and urged their children to ingest adequate amounts of food and fluids.
All the parents emphasized that their families ate "good" foods. Some couples avoided prepared or convenience foods and made their children's meals from basic ingredients. For example, one of the mothers stated: "We make all his food and adjust his diet due to his allergies." Most of the couples had meals prepared at regular times; they reported: "We have three meals a day." When their children were ill with asthma, the parents did not prepare them meals as they normally would but encouraged their children to drink fluids.

Six of the couples stated that they encouraged their children to eat their meals and drink fluids. All ten of the parents enticed their children to drink more fluids during the children's asthmatic attacks. A common comment was: "We persuade him to drink lots of fluids when he's sick with asthma." In fact, two couples with 3-year-old children stated that they did not wean their children from bottles because they wanted to ensure the children drank an adequate amount of fluids. Two parents who were worried that their children were not ingesting sufficient nutrients supplemented their diets with vitamin and mineral preparations.

Need: to eliminate waste products. The couples helped their children eliminate waste products from their bodies by assisting them to practise hygiene and toilet habits. The parents guided their children to bathe, wash their hands, and brush their teeth. Eight of the couples reported that their children performed most of these hygienic practices with minimal supervision. One couple felt the medication their child ingested daily to provide bronchodilation contained a sweetener which
contributed to tooth decay; therefore, they encouraged her to brush her teeth after taking the drug. All of the couples stated that they provided their children with more assistance when they were ill with asthma.

The couples assisted their children with their toilet habits since all of the children had developed daytime toilet habits. Only three children had not developed full control at night and the parents encouraged their children to become continent by reminding the child to go to the toilet, withholding fluids after dinner, and establishing a reward system for continence.

Need: to have a balance between rest and activity. The couples reported they they enforced a routine of rest and sleep and promoted activities to help their preschool children with asthma develop normally. Six couples told about their efforts to enforce rest and sleep patterns with their children to prevent them from becoming fatigued. One couple described the routine with their 3-year-old child: "We put him down for a nap daily and into bed regularly at 7:30 or so." Whenever the preschool children were ill with asthma the parents tried to alleviate their children's distress before settling them for the night.

All of the couples reported that they promoted their children's participation in physical activities. Such activities included organized recreational programs and play with the family members and the children's friends. Some examples were swimming, dancing, gymnastics, soccer, and skating. Nine couples spoke about having walks in parks, boating, and allowing their children to play freely outdoors with their friends and siblings. However,
the parents restricted their children's activities when they began developing asthmatic symptoms. One couple stated: "When J. is wheezy we limit him and make him rest. Sometimes we sit down with him and do a puzzle."

Need: to feel safe and secure. All of the couples helped their children feel safe and secure by such things as preparing them for future events and supervising their activities. The couples told their children about potential separations from their families and experiences they had not encountered before. For example, the parents told their children when they were leaving them, and where they were going. In addition, the couples emphasized that they would only leave their children with competent substitute caretakers such as some close relatives or a nurse. Three couples reported that they informed their children about experiences involving medical appointments, hospitalizations, and educational encounters. In two cases, the parents stayed with their children until they became adjusted to a new situation, such as play-school or hospitalization.

Eight couples reported feeling that they had to oversee their children's activities to protect them from being exposed to dangers to and triggers for their children's asthma attacks. Some of the couples' comments included: "We do not leave him; we take him with us," and, "When he wheezes we don't leave his side." All of the couples protected their children from other dangers such as roads and traffic and taught them safety rules. The couples told and demonstrated to their children about safety around the home and outdoors. Ten of the couples stated they mainly taught their children about traffic safety: "We talk to
Some couples felt that their children now only required reminding about safety rules. One parent expressed a concern about teaching her child about taking medications safely.

Need: to feel loved. To help their children feel loved, the couples said they expressed affection for them and provided their children with special attention when they were ill with asthma. All of the couples reported that when they sensed their children needed attention and loving they responded to their children with affection. The parents demonstrate their affection in a variety of ways: "We give her a lot of cuddling," or "As we walk along we hold his hand," or "We like just being near him," or "We speak kindly to her," or "He sits on my knee a lot." All of the couples spoke of increasing the amount of affection when their children became ill with asthma. For example, one couple stated that their child spent most of his time with them when he was wheezing. He would be cuddled in their bed at night or be rocked to sleep on a parent's knee.

Need: to feel sensory satisfaction. All of the couples perceived that they helped their children meet their needs for sensory satisfaction by interacting with their children and providing opportunities for them to use their senses. All of the couples spent time talking or playing to enhance sensory stimulation with their children. Some parents read to their children and others played music. One couple went for walks with their child to point out the different colours and sounds in the environment. Nine of the couples commented that they spent time talking with their children and answering their questions. All
of the couples promoted opportunities for their children to use their senses by the provision of materials and resources for them such as books, record players, paper, crayons, and other appropriate play equipment. Eight of the couples stated they were cautious not to expose their children to potential triggers of their children's asthma when they selected play materials. Six couples arranged for their children to attend a special activity such as "play-school" or "music lessons" to facilitate the children's development. Since certain factors in the alternate environments could potentially trigger the children's asthma, the parents stated that they would give the children their medications before such events to prevent the children from having asthmatic attacks. For example, "We give him his medications before he goes on a walk or attends play-school."

**Need: to have a sense of accomplishment.** The parents taught their children how to perform certain actions to help them feel a sense of accomplishment. All of the couples taught their children either to breathe easier, perform activities of daily living, or to practise safety rules. Three of the parents reported that their children had developed sufficient skills in some of these areas to be independent and were allowed to make decisions for themselves.

The parents told or showed their children to breathe slower, to relax, to avoid specific allergens, and to take their medications correctly as prescribed. All of the couples instructed their children to perform activities such as bathing, washing their hands and face, dressing, eating, and performing simple household duties such as drying dishes or washing their own
bedroom furniture. Three children had learned these tasks and required only a reminder from their parents.

Need: to develop self-respect. All the couples praised, considered, and set limits for their children to help them develop self-respect. All of the couples stated that they praised their children frequently for doing tasks for others. One couple told how they gave approval according to the specific thing their child did; for example, they gave specific rewards that the child selected. Four of the couples expressed how they provided respect and consideration for their children as an individual. For example, the parents allowed their children to select their play, clothing, and tell about their experiences and feelings. Two of the couples discussed how they listened to their children tell about their hospital experiences.

To help their children understand parental expectations, three couples stated that they set and maintained limits for their children. These limits included a wide range of behaviours from avoidance of known allergens to table manners. Couples described how they managed their children's behaviours such as talking with their child, or threatening the child if they did not comply. If the children violated the limits the parents stated they would resort to screaming, ignoring, isolating, orspanking their children. In addition to the couples' description of their own behaviours of helping their preschool children meet their basic human needs, they reported additional tasks to care for their asthmatic children.

The Impact of Asthma and Its Treatment

The couples reported three ways that asthma and its treat-
ment affected their efforts to provide care for their asthmatic children. The parents' efforts were affected by additional decisions that had to be made regarding their children's health needs, extra physical demands required to care for children with asthma, and emotional upheavals especially during the children's asthmatic attacks.

The children's asthmatic attacks imposed medical treatments, clinic and hospital visits, costs for drugs, environmental control aids, and behavioural restrictions that limited the asthmatic children. Eight couples who had been caring for their asthmatic children during their attacks at night reported experiencing fatigue and worry. They cared for their asthmatic children at home until the children did not respond to the medical treatment, and then they resorted to hospitalization. In two cases, the couples continued caring for their asthmatic children in the hospital. They reported that this disrupted their family routines. In fact, the couples defined asthma as a breathing problem which affected their families' and children's lives. All of the couples emphasized that they attempted to "normalize" their family life by performing additional tasks to care for their preschool children with asthma.

Five of the couples expressed feeling "scared," "panicky," and "sad" whenever their children had an asthma attack. They were concerned that their children would not be able to breathe and eventually choke to death. This data supports the findings reported in previous studies cited in Chapter II. The couples' descriptions indicated that they performed additional physical
tasks and made decisions in efforts to normalize their families' lives, and experienced emotional upheavals in relation to their children's asthma and its treatment.

This chapter has presented the data from interviews with 10 couples of preschool children with asthma. The couples described 17 ways of helping their preschool children with asthma to meet their basic human needs. The couples revealed that the help they provided the asthmatic children were affected by emotional upheavals, physical demands, and decisions in caring for their children. In the next chapter, these findings will be discussed in relation to their significance to the selected theoretical framework and nursing care.
CHAPTER V

Discussion of the Findings

The primary purpose of this study was to provide a description of parents' actions directed toward helping preschool children with asthma meet their basic human needs, with an objective of adding to knowledge which is useful to nurses.

The findings of the study presented in the last chapter appears to support the theoretical position that parents assist their children, sick or well, to meet needs for optimal growth and development (Havighurst, 1972, p. 77; Horowitz, Hughes, & Perdue, 1982, p. 79; Pringle, 1974, p. 59). In this chapter, the major findings of the study and the implications for nursing will be discussed in relation to the developmental tasks of parents rearing preschool children with asthma, as previously outlined in Chapter II.

Tasks of Parents Rearing Preschool Children with Asthma and Nursing Implications

According to developmental and nursing theorists, parents rearing preschool children have several tasks to assume (Duvall, 1977, pp. 258-268; Hymovich & Chamberlain, 1980, pp. 266-269). These include tasks required for the care of preschool children plus additional ones essential for the care of children with chronic diseases such as asthma. The discussion of the findings will relate to the tasks as presented in Chapter II.

One of the major tasks undertaken by parents rearing preschool children is to assist their children in developing autonomy and independence. To help preschool children develop autonomy, the parents learn to separate from their children, teach
them to make decisions and thus lose some control over them (Duvall, 1977, p. 255; Hymovich and Chamberlain, 1980, p. 266).
Like most parents, the couples in this study reported that they encouraged their children to become independent and develop a sense of accomplishment, particularly in developing habits of toileting, cleanliness, bedtime routines, safety, and dressing appropriately. All of the parents encouraged their children to make some decisions about their daily care particularly in dressing, going to the bathroom, selecting play activities, and choosing certain foods. The couples tended to use methods of teaching, reminding, and providing opportunities for the children to become autonomous. However, when the children had asthmatic attacks, the couples allowed more dependency, did more for their children, centered their attention on the ill children, and stayed with their children during the attack. Even after the asthma attacks, the couples were reluctant to leave their children with others unless they had trained substitutes. Thus, the frequency and duration of the childrens' asthmatic attacks could potentially affect the couples' ability to promote their preschool childrens' development of autonomy and achievement of the couples' own developmental tasks. Parents who assume this overly protective pattern may have a deleterious impact on the behaviour of their asthmatic children. Psychological studies indicate that asthmatic children may become fearful, regressed, rebellious, physically inactive, or lack self-confidence in relation to the parents' protective behaviours (Mattsson, 1975, p. 82). As a result, it is necessary to identify the asthmatic child and parents at risk for untoward developmental problems. The health
care approach includes early diagnosis, effective treatment, regular follow-up, and educational and supportive programs to promote growth and development of preschool children who have asthma. This approach requires the expertise of the health team members such as nurses, nutritionists, pharmacists, physicians, physiotherapists, and psychologists (Dolovich and Hargreave, 1981, p. 1038; Dyer, 1977, p. 20; Mattsson, 1975, p. 87). Nurses participate as collaborate members of the health team providing teaching, and counselling to the parents of preschool asthmatic children. The outcome of the team's efforts are to reduce the risk of overprotection of preschool asthmatic children and to facilitate their growth and development.

The couples in this study set limits for their preschool children concerning safety, behaviours involving daily routines, and interactions with others. However, when the children were ill with asthma the couples' efforts to set limits seemed inconsistent. According to certain authors, limits must be consistent for successful behavioural compliances (Hersey & Blanchard, 1978, p. 70; Horowitz, Hughes, and Perdue, 1982, p. 92). In this study, parents set additional limits to prevent the children from having asthmatic attacks, by restricting activities. Yet, overly rigorous limit setting may thwart the child and create negative self-esteem and resistance to authority (Hersey & Blanchard, 1978, p. 94; Horowitz, Hughes, and Perdue, 1982, p. 93). Therefore, parents of preschool asthmatic children, whether the children are ill or well, may need guidance regarding consistent and appropriate limit setting. Nurses may encounter asthmatic children in clinical settings or the community with such behaviours.
Appropriate parental education and counselling are two possible ways to intervene (Hymovich, 1976, p. 11).

The couples stated they praised or rewarded their children daily for performing or behaving appropriately in their daily lives. One couple used behavioural modification techniques to train the child to control his bed-wetting behaviour. Praising their children was the most commonly used technique by the couples in this study. This approach is consistent with that attributed to educated, middle-class parents (Bronfenbrenner, 1966, p. 362). In this study the couples described the use of punishments such as threats, screaming, ignoring, isolating, and spanking their children when they misbehaved. Punishment or negative reinforcement is intended to decrease or eradicate behaviour that is undesirable or dangerous. However, Horowitz, Hughes and Perdue indicate that coercive power of parents and threats of punishment rather than rewards may produce additional childhood dependency, lack of initiative, and resentment of the children toward their parents. Effective discipline is most likely achieved when parents use rewards, punishment, and ignoring approaches in appropriate situations. Successful outcomes from disciplinary situations are likely to increase the childrens' sense of self worth and maturity (1982, p. 131 and 196). It is apparent the couples in this study used each of the approaches to manage the behaviour of their preschool children. This information appears to be valuable for nurses caring for families with asthmatic children. It appears that information about the parents' expectations of their childrens' behaviour and ways the parents achieve the acceptable behaviour be considered in the nursing
history. Appropriate nursing interventions may include specific parental counselling and teaching, depending upon the observed children's behaviours and data obtained in the nursing history.

The couples stated that they provided affection to their children in a variety of ways such as hugging, holding hands, or smiling. Sharing of affection is an important aspect of the parent-child relationships (Duvall, 1977, pp. 164-175). Sears, Macoby, and Levin (1957) reported that parents who used praise often were warm and affectionate with their children and their children tended to become self-reliant, content, and relatively free from problem behaviours. However, in this study when the preschool children had an asthmatic attack the parents stated they increased the amount of affection and attention their children received. In general, it is normal for parents to comfort their children when they are ill but chronically ill children having recurrent asthmatic attacks become the focus in the family for attention and affection. The pattern recurs each time a child develops asthma (Norrish, Tooley, & Godfrey, 1977, p. 917). If this pattern continues, eventually the children with asthma may develop behavioural problems and disruptions in family life ensue (Minuchen, Baker, Rosman, Liebman, Milman, & Todd, 1975, p. 1033). Identifying affectional relationships within families with preschool children with recurring asthma appears to be a significant nursing intervention. Early identification of affectional problems within the family with appropriate therapy may prevent disruptions in family life (Minuchen, Baker, Rosman, Liebman, Milman, & Todd, 1975, p. 1038).

The couples listened and responded to their children's
efforts to communicate. The children would seek affection, sensory satisfaction, achievement, activity, rest, or food. Couples also listened to their children's respirations or for a cough which was a signal for the parent to provide special care or treat their children who may be having an asthmatic attack. This finding supports the observation noted by Travis (1976) that parents listened carefully for their asthmatic children's breathing before planning their approaches to care for their children. This data reflects the couples in this study learned to listen to the preschool children's signal of wheezing or coughing to determine their children's need to breathe. Since some preschool children are preverbal, this seems to be an appropriate way for parents to identify their children's ability to meet this need. These observations appear to support the importance of nurses to include in the nursing history ways preschool children communicate their needs, particularly about their symptoms. Furthermore, parents frequently are a valuable resource for this information.

The couples in this study facilitated the emotional expressions of their children by taking time to listen to their children during quiet or meal times during the day or after their children had a stressful experience such as hospitalization. In addition, the couples prepared their children for life events such as separations and hospitalizations by talking with their children, telling stories, and through play activities. This is particularly significant to preschool children since they have limited emotional coping abilities and an unpredictable, arbitrary view of the world which perpetuates an atmosphere of
anxiety surrounding their illness and medical procedures. It is necessary for the parents to be supportive, understanding, and loving, yet be able to bolster the child's sense of mastery and arrange for compensatory experiences (Sperling, 1978, p. 58). For example, some couples would plan special experiences for their children to compensate from being isolated due to illness or environmental restrictions. Other couples taught their children how to gain mastery by coping with the symptoms of asthma by taking the correct medications, relaxing, and resting. This information seems to support that parents require knowledge and skills concerning childrens' growth and development, childhood asthma and its treatment, and coping with chronic illnesses. Nurses may consider these as content areas for a program for parents of preschool asthmatic children.

In this study the couples assisted their children to understand and cope with their illness. They taught their children about asthma and its treatment. They tried to help their children relax and stay calm by such methods as singing to their children or telling their children stories. Relaxation and breathing exercises assist children to stay calm during an asthmatic attack and use their chest muscles effectively (Keens, 1979, pp. 520-521). One couple used another chest therapy described as posturizing and pummelling, which is used if clearing of the airways of mucus is required (Arkinstall, 1976, pp. 6-7; Tse, 1979, pp. 7-10). All of the couples in this study administered medications (bronchodilators) to their children as prescribed. Medication therapy is considered the major treatment for children with asthma including drugs which are used to prevent and control
asthmatic attacks (Arkinstall, 1980, pp. 8-9; Tse, 1979, pp. 7-10). It is thought that recurring attacks of asthma in childhood may be a result of inadequate drug therapy (Norrish, Tooley, and Godfrey, 1977, p. 917). Parents require understanding and skills concerning the individualized therapeutic regime and ways to assist their preschool children to follow the regime to prevent recurring asthmatic attacks. Nurses may include items in a nursing history to identify the ways parents specifically help their children cope. Nursing interventions include parent education, counselling, and appropriate referrals to other health team members for comprehensive care.

The couples reported the importance of protecting their children from harm by teaching them about environmental dangers and observing and supervising their children's behaviour. They role-modelled appropriate behaviours and repeatedly discussed safety precautions in the home and on the roads with their children. One couple voiced their concerns about the safety of the medications (bronchodilators) for their asthmatic child. This concern of parents has been reported in other studies which were cited in Chapter II. It is an important finding and it may suggest that parents require additional knowledge about the childrens' therapies such as the medications. Therefore, it appears that nurses ought to include accident prevention and medication education in programs for parents of preschool asthmatic children.

The couples in this study were particularly concerned about the health and integrity of their asthmatic children; for example, they carefully prepared nutritious foods for their children and
encouraged them to eat it. Furthermore, they made special efforts to protect their children from "colds" which frequently triggered their children's asthmatic attacks. These findings support Burton's (1975) observations about parents rearing children with another chronic disease, cystic fibrosis. She found some of the parents actively performed preventive health measures. It was felt that the parents' involvement in the care of their children mobilized their hope, decreased feelings of guilt, and increased their self-esteem. These findings are relevant to nurses. They have the opportunity to actively support parents through hospital and community programs.

In summary, the findings in this study were descriptive of parents' actions which were directed toward helping their preschool children with asthma grow and develop. The couples reported how they helped their preschool children become autonomous, have initiative, and a positive self-image. They described how they assisted their children to feel loved and conform to the demands of society. Furthermore, the couples helped their children develop healthful routines such as eating, resting, and playing. The findings of this study indicated that the couples in this study not only performed parental tasks to rear preschool children as defined by Duvall (1977), but assumed additional tasks as described by Hymovich (1976) associated with their children's chronic disease. These additional tasks included prevention of the asthmatic attacks, administration of treatments when the children required the therapy, and teaching their children about their disease and
its treatment. The preschool children's asthmatic attacks appeared to influence these parents to: (a) enhance their affectional responses with their ill children, (b) withdraw from limit-setting, (c) restrict the activity for their children, (d) encourage a fluid diet, and (e) perform therapies to help their children breathe.

The information acquired in this study appears to be significant for nurses caring for families with preschool asthmatic children. It was suggested that the knowledge be used in nursing assessments and interventions with such families rearing chronically ill children.

The use of the developmental approach and UBC Model for Nursing seemed to be an appropriate way to guide this research because the couples described their helpful actions related to their preschool children's basic human needs and abundant data resulted which appears to have enhanced nursing knowledge. Furthermore, the findings support the previous research results by Crummette (1979), Reddihough et al (1977), and Travis, (1976).

In this chapter, the significant findings of the study were discussed as well as the implications of the findings for nursing. The next chapter will provide recommendations derived from the study and a summary of the research.
CHAPTER VI

Recommendations and Summary

This chapter will present recommendations for nursing and further research. A summary of the study will conclude this research report.

Recommendations for Nursing Practice

1. One of the tasks of the parents rearing chronically ill children is to understand and manage their children's illness; therefore, the parents require the necessary knowledge, skills and attitudes to perform the tasks adequately. Consequently, it is recommended that nurses participate with a health team in providing valid and current educational programs, appropriate counselling, and resources for parents of preschool children with asthma about growth and development, the disease, and its treatment.

2. Parents rearing children with chronic illnesses like asthma are eager to share their concerns, and knowledge with others like nurses. This data seems to be valuable in providing insight into the dynamics of families and their ability to cope with their children's asthma. The parents have additional tasks to perform which involve the knowledge and skills of health professionals. Thus, it is recommended that nurses facilitate the development of parent-support groups which would have the potential of promoting ways that they could cooperatively help each other in the care of their children with asthma.

3. The Interview Guide used in this study provided abundant and useful information for nurses and other professionals about the ways parents helped their preschool children with
asthma grow and develop. Therefore, it is recommended that the
Interview Guide be adapted and used as an assessment guide for
parents of preschool asthmatic children.

Recommendations for Nursing Research

1. The subjects in this study were not a representative
sample of parents of preschool children with asthma. However,
this study and the others cited in Chapter II have provided
valuable and useful information about families of asthmatic
children. Thus it is recommended that further research be
implemented which would use a larger, representative sample.

2. The Interview Guide in a semi-structured form did pro-
vide a way to gather abundant relevant data which was descriptive
of the parent's perceptions of their behaviours. Applications
of the Interview Guide in other research would enhance its valid-
ation and reliability. Therefore, it is recommended that the
Interview Guide be refined and modified for use in further des-
crptive studies. Modifications of the Guide are suggested for
use with parents of other age groups of children such as adoles-
cents, and health problems such as cystic fibrosis.

Summary

Parents assume the major responsibility for providing care
for their children, sick or well, until they reach maturity.
This study was developed to provide information for nurses about
parents' behaviours which help children with asthma meet their
needs to grow and develop. The research problem was addressed
by asking two questions:

1. What are the parents' perceptions of the ways they help
preschool children with asthma meet their basic human needs?
2. What are the parents' perceptions of the ways asthma and its treatment affects their efforts to provide care to their children with asthma?

The approach to the research questions was to interview 10 couples of preschool children with asthma using a semi-structured Interview Guide developed from the UBC Model for Nursing. The parents' names were obtained through pediatric allergist clinics and following an ethical protocol the parents were contacted to participate in the research. Ten willing parents were interviewed while being audiotaped. The content of the interviews were analyzed and the parents' helping behaviours were categorized according to basic human needs. The findings were discussed in relation to developmental tasks of parents rearing preschool children with a chronic disease of asthma. From the findings, the 10 couples described 17 helping behaviours that were intended to assist preschool children with asthma meet their needs to grow and develop. The couples reported that the children's asthma and its treatment significantly affected the help they provided their children in three ways: emotional, physical, and intellectual. Nurses, therefore, are encouraged to teach, counsel and support parents in their efforts to help their children with asthma to grow and develop.
References


Tse, K. Advances in the treatment of asthma: What can we expect in the next few years. Your Health, Spring 1979, 7-11.


Additional References


Blair, H. Natural history of childhood asthma: 20 year follow-up. Archives Diseases of Children, August 1977, 52 (8), 613-619.


Pare, P. Asthma: A multifactorial disease. Your Health, Spring 1979, 3-5.


The UBC Model for Nursing is based on theory and assumptions. The assumptions which are particularly relevant to this study include those relating to man, man as a behavioural system, and nursing.

Assumptions about Man

1. Man has basic human needs which he experiences as tensions.
2. Man constantly strives to satisfy each basic human need by using a range of coping behaviours.
3. Man constantly seeks harmony and balance as he strives to satisfy multiple and co-existing needs.
4. Man’s coping behaviours are organized into repetitive, predictable patterns which become his characteristic way of meeting his needs.
5. Development of man’s coping behaviours is dependent upon his growth, maturation, and life experience.
6. When man encounters a critical period in his life cycle, his repertoire of coping behaviours may not allow him to satisfy one or more of his needs.
7. When coping behaviours do not permit satisfaction of basic human needs man experiences a threat to his survival or growth.

Assumptions about Man as a Behavioural System

1. Man may be viewed as a behavioural system made up of nine subsystems.
2. Each subsystem is responsible for the satisfaction of one basic human need.

3. Each subsystem may be viewed as a life space.

4. The structure of each subsystem consists of two parts:
   a) an inner-personal region representing a basic human need and abilities to meet that need,
   b) a psychological environment representing the need-satisfying goal and the forces influencing its attainment.

5. The function of each subsystem is to achieve its specific goal through the following behavioural process:
   a) perception of the need to be met by the subsystem,
   b) recognition of need, goal, abilities and forces,
   c) planning (selecting possible alternatives) to achieve the goal,
   d) action directed toward goal achievement.

6. Each subsystem is interacting and interdependent with every other subsystem.

7. The subsystems are in a balanced relationship with each other and the system is in a balanced relationship with its environment. (Behavioural system balance).

8. Behavioural system balance (steady state) is maintained by feedback mechanisms operating within the system and between the system and the environment.

9. Each subsystem has the potential to develop abilities.

10. The behavioural system has the potential for growth through the orderly progression of maturation within each subsystem.
11. The behavioural system is constantly experiencing tensions arising from internal and external sources.

12. The behavioural system uses tension-reducing responses to make both internal adjustments and adaptations to the environment.

13. Maturation influences the tension-reducing responses used at any given time.

14. When tension-reducing responses are inadequate to maintain behavioural system balance, imbalance results.

Beliefs about Nursing and its Practice

1. Nursing is a member of the team of health professions whose ultimate goal is the optimal health of man.

2. Nursing's unique function is to nurture man during critical periods of his life cycle so that he may develop and utilize a range of coping behaviours which permit him to satisfy his basic human needs and thereby move toward optimal health.

3. The nurturing of man during the critical periods of his life cycle makes a significant difference to the way he copes with these periods.

Reference

Campbell, M., Cruise, M., and Murakami, R. A model for nursing: University of British Columbia School of Nursing, Nursing Papers, 1976, 8, 5-6.
APPENDIX B

Developmental Tasks of Preschool Children

1. Settling into healthy daily routines of rest and activity:
   Going to bed and getting his needed rest without a struggle
   Taking his nap or rest, and learning to relax when he is weary
   Enjoying active play in a variety of situations and places
   Becoming increasingly flexible and able to accept changes

2. Mastering good eating habits:
   Becoming adequate in the use of the customary utensils for eating
   Accepting new flavors and textures in foods with interest
   Enjoying his food with lessening incidents of spilling, messing, and toying
   Learning the social as well as the sensual pleasures of eating

3. Mastering the basics of toilet training:
   Growing in his ability to indicate his needs for elimination
   Cooperating comfortably in the toilet training program
   Finding satisfaction in behaving appropriately as to time, place, and ways of toileting expected of boys/girls of his age
   Becoming flexible in his ability to use the variety of resources, places, and personnel available to him

4. Developing the physical skills appropriate to his stage of motor development:
   Learning to climb, balance, run, skip, push, pull, throw, and catch in whole-body use of large muscle systems
   Developing manual skills for buttoning, zipping, cutting, drawing, coloring, modeling, and manipulating small objects deftly
Becoming increasingly independent in his ability to handle himself effectively in a variety of physical situations

5. Becoming a participating member of his family:
Assuming responsibilities within the family happily and effectively
Learning to give and receive affection and gifts freely within the family
Identifying with parent of the same sex
Developing ability to share his parents with another child and with others generally
Recognizing his family's ways as compared with those of his friends and neighbors

6. Beginning to master his impulses and to conform to others' expectations:
Outgrowing the impulsive, urgent outbursts of infancy
Learning to share, take turns, hold his own, and enjoy the companionship of other children—and at times to play happily alone
Developing the sympathetic, cooperative ways with others that ensure his inclusion in groups
Learning appropriate behaviour for situations in which he finds himself (times and places for noise, quiet, messing, nudity, etc.)

7. Developing healthy emotional expressions for a wide variety of experiences:
Learning to play out his feelings, frustrations, needs, and experiences
Learning to postpone and to wait for satisfactions
Expressing momentary hostility and making up readily afterwards
Refining generalized joy or pain into discriminating expressions of pleasure, eagerness, tenderness, affection, sympathy, fear, anxiety, remorse, sorrow, etc.

8. Learning to communicate effectively with an increasing number of others:
Developing the vocabulary and ability to talk about a rapidly growing number of things, feelings, experiences, impressions, and curiosities
Learning to listen, take in, follow directions, increase his attention span, and respond intellectually to situations and to others
Acquiring the social skills needed to get over feelings of shyness, self-consciousness, and awkwardness, and to participate with other people comfortably

9. Developing the ability to handle potentially dangerous situations:
Learning to respect the dangers in fire, traffic, high places, bathing areas, poisons, animals, and many other potential hazards
Learning to handle himself effectively without undue fear in situations calling for caution and safety precautions (crossing streets, greeting strange dogs, responding to a stranger's offer of a ride, etc.)
Becoming willing to accept help in situations that are beyond him without undue dependence or too impulsive independence

10. Learning to be an autonomous person with initiative and a conscience of his own:
Becoming increasingly responsible for making decisions in ways appropriate to his readiness
Taking initiative for projecting himself into situations with innovations, experiments, trials, and original achievements
Internalizing the expectations and demands of his family and culture groups in his developing conscience
Becoming reasonably self-sufficient in a variety of situations—in accordance with his own makeup and stage of development

11. Laying foundations for understanding the meanings of life:
Beginning to understand the origins of life and how the two sexes differ; and to be aware of his or her gender
Trying to understand the nature of the physical world—what things are, how they work and why, and what they mean to him
Accepting the religious faith of his parents and learning about the nature of God and about the spiritual nature of life.

Reference
APPENDIX C

Interview Guide: How Parents Help The Preschool Children with Asthma Meet Their Needs

Date:__________________  Code Number:__________________

A. Demographic Data. Ask the parents for the following information:

1. What is the preschool child's age? ____ and sex? ____
2. How many children are there in the family? ____
3. Where does the asthmatic child come among the children in the family? 1st, 2nd, 3rd, 4th, etc. ____
4. How many other children in the family have asthma? ____
5. What are the parents' ages?
   a) Mother's age ____
   b) Father's age ____
6. How much formal education have the parents had?
   (Mark "M" for mother, and "F" for father)
   a) _______ less than 8th grade
   b) _______ 8-10th grade
   c) _______ 11-12th grade
   d) _______ community college or technical school education
   e) _______ university degree
   f) _______ other
7. What is the father's occupation? ______________________
8. What is the mother's occupation? ______________________
9. How many hours are spent by the parents with the asthmatic preschool child per day?
   Father _______________; Mother _______________.
10. How much time does the asthmatic child spend in other situations? ___________ hours per day.

11. Where does the asthmatic preschool child spend most of his/her time? ______________

12. Who takes the responsibility for helping the asthmatic preschool child?
   ___ a) the mother takes the predominant role
   ___ b) the father takes the predominant role
   ___ c) the role is shared by both the father and the mother
   ___ d) other caretakers

13. Do the parents smoke?
   a) Father: Yes _____, No _____. If yes, how much? _____, and do you smoke at home? ____ Yes, ____ No.
   b) Mother: Yes _____, No _____. If yes, how much? _____, and do you smoke at home? ____ Yes, ____ No.
   c) Do you permit others to smoke in your home? Yes _____, No _____. If yes, how much? _____ and when? ________.

14. What does the word asthma mean to the parents? __________

15. What was the last time the child had an asthmatic attack? __________

16. What medical treatment is prescribed for the child? ________
17. How often do the parents take the asthmatic child to the doctor for medical help regarding his/her asthma? 

_______ times per month

B. Interview Questions

1. What do parents do to assist their child to breathe?
   a) What help do you provide your child to prevent him/her from wheezing?
   b) When your child wheezes, what help do you provide to help your child breathe easier?

2. What do parents do to help their child eat and drink nourishing and adequate food and fluids?
   a) What do you do to help your child to eat and drink nourishing food and fluids?
   b) What impact does asthma and its treatment have on your efforts to help meet your child's need to eat and drink nourishing food and fluids?

3. What do parents do to help their child eliminate the waste products from his/her body?
   a) What do you do to help your child develop toilet habits?
   b) What do you do to help your child wash and bathe?
   c) What do you do to help your child care for his/her teeth?
   d) What impact does asthma and its treatment have on your efforts to help your child eliminate the waste products from his/her body?

4. What do parents do to help their child to have a balance between rest and activity?
a) What do you do to help your child rest and sleep?
b) What do you do to help your child get the exercise he/she needs or wants?
c) What impact does asthma and its treatment have on your efforts to help your child meet his/her needs for rest and activity?

5. What do parents do to help their child protect himself/herself?
   a) What do you do to help your child avoid being hurt or injured?
   b) What do you do to help your child understand he/she has done something wrong?
   c) What do you do to help your child feel secure?
   d) What do you do to help your child avoid infections?
   e) What do you do to plan for your absence from home?
   f) What do you do to plan for your child's absence from home?
   g) What impact does asthma and its treatment have on your efforts to help protect your child from:
      i) emotional stress and/or
      ii) physical stress?

6. What do parents do to help their child feel loved?
   a) What do you do to help your child feel loved?
   b) What impact does asthma and its treatment have on your efforts to help your child feel loved?

7. What do parents do to help their child have sensory satisfaction?
What do you do to encourage your child to use his/her senses?

What do you do to help your child experience sufficient stimulation?

What impact does asthma and its treatment have on your efforts to help your child feel sensory satisfaction?

What do parents do to help their child have a sense of accomplishment?

What do you do to encourage your child to do tasks according to the level of his/her ability?

What do you do to encourage your child to do activities independently?

What do you do to help your child make decisions according to his/her level of ability?

What impact does asthma and its treatment have on efforts to help your child feel a sense of accomplishment?

What do parents do to help their child develop respect for himself/herself?

What do you do to help your child feel "good" about himself/herself?

What do you do to help your child receive respect from others?

What do you do to help your child learn about being a boy/girl?

What do you respond to your child when he/she completes a task?

What impact does asthma and its treatment have on your efforts to help your child feel self respect?
Dear

As a Master's Student in Nursing at the University of British Columbia, I need to complete a research project, to fulfill the requirements of the degree. The research project I am interested in pursuing is designed to answer the following questions:

1. What actions do parents take to help their child with asthma meet his/her basic human needs?

   2. In what way do parents perceive asthma and its treatment affecting their efforts to help their child meet his/her basic human needs?

To obtain data to answer these questions, I plan to interview the parents of preschool children. Since many asthmatic children have allergies, I thought you might be able to help me find possible volunteers for the study. Would it be possible for you to provide me with names of parents of preschool children with asthma? You may be assured their names will be kept confidential. The list will be used only by me, and will be destroyed after the study is completed.

I believe that a better understanding of the parents' helping behaviours should result in improved nursing care.

I trust you will be able to help me in getting subjects for my research.

Sincerely yours,

Carol Mitchell, B.N.
APPENDIX E

Written Consent from the Physicians


I grant Carol Mitchell permission to obtain the following information from my office:

1. the names of parents with preschool children with asthma.
2. the addresses of the parents.
3. the telephone numbers of the parents.

FROM: ____________________________

DATE: ____________________________
Dear

I am a graduate student in the School of Nursing of the University of British Columbia, studying the ways in which parents help their children with asthma grow and develop.

Dr. has suggested that you may be interested in participating in this study.

The purpose of this study is to learn the ways in which parents help their child with asthma meet his/her basic human needs; and how asthma and its treatment affect the help parents give their child. The results of the study will benefit health care professionals by providing information for use in counselling and educational programs. Your participation would involve an interview with both of you present. It will take me approximately sixty minutes to conduct the interview. If it is convenient for you, we could meet in your home.

The interview will be recorded on an audiotape. The tape will be identified by a number, and your names will not be associated with the recorded information. Only I and my Thesis Committee (two faculty members) will have access to the tapes. At the end of the study, the tapes will be erased.
You would be free to withdraw from the study at any time without jeopardizing the medical care of your child.

In one week, after you have had time to talk this over, I will call you for your decision about participating in the study. If you are willing to be interviewed we can arrange for a time to meet.

Thank you for considering this request.

Sincerely,

Carol Mitchell, B.N.
APPENDIX G

Interview Procedure

Read the following instructions before conducting the interview:

1. Assign the Demographic Data sheet and audiotapes a code number and fill in the date.

2. Establish a rapport with the parents and explain your role as an interviewer.

3. Review the contents of the consent form with the parents and obtain the parents' permission to be interviewed.

4. Ask the parents to respond to the questions as honestly and completely as possible.

5. Tell the parents there are two parts to the interview:
   a) The first part of the interview is to obtain facts about the child and the parents.
   b) The second part of the interview is to obtain the parents' descriptions of what they do to help their child with asthma and to obtain their opinions of how asthma and its treatment affect the way they help their child.

6. Ask the parents the questions on the Demographic Data form.

7. Begin the discussion by asking the parents to think about what they do to help their child on a daily basis. State: "During the day you do many things to help your child. I would like you to tell me in as much detail as possible what you do to help your child meet his/her needs to grow and develop. Explain how your child's asthma and its treatment affect your efforts to
help your child meet his/her needs. For example, how do you help your child in the morning?"

8. Use the Interview Guide questions whenever necessary to direct the interview.

9. Start the audiotape.

10. Terminate the interview with the parents.
APPENDIX H

Consent from the Parents

Consent for Participation of Parents in the Study:
"What Parents Do to Help their Preschool Child with Asthma Meet His/Her Basic Human Needs."

We understand that the purpose of this study is to describe what parents do to help their preschool child with asthma grow and develop.

We agree to participate in the study by being interviewed by the researcher about the topic for approximately sixty minutes.

We agree to having the interview recorded on an audiotape.

We agree to permit Carol Mitchell to use the information we provide, whether it be written or on the tape in a study for a graduate thesis in Nursing at the University of British Columbia. It is our understanding that the information will be useful to the work of health professionals.

We understand that we can withdraw from the study at any time or refuse to answer questions, without jeopardizing the treatment of our child.

Date: __________________________

Signature of the Parents: __________________________ and __________________________.