CHAPTER 1

INTRODUCTION

Background and Significance of the Problem

Over the past 20 years, the number of hospitalized children has increased markedly all over the world, especially in developing countries (Hill, 1989, cited in Thakker, Sheldon, Long & MacFaul, 1994). In the United States, about 26 out of every 1,000 school-age children (or one million of this age group population) are hospitalized annually (Behrman, 1996). Admissions to hospitals are associated with psychological damage as evident by "psychological upset" (McClowry & Mcleod, 1990). Psychological upset is a series of negative psychological responses including fear, crying, whining, clinging, eating too much or not enough, withdrawal, depression, sleeping problems (such as nightmares or an inability to sleep), aggression, regression, tics, enuresis, or fecal soiling (McClowry & McLeod, 1990). Obviously, fear of the medical experience, namely 'medical fear', is a psychological upset which is very common among hospitalized children (Broome, Hellier, Wilson, Dale, & Glanville, 1988).

Medical fear can make it extremely distressing for children to cope effectively with medical experiences because it might undermine their cooperation with medical regimes, affect their adjustment and reactions to illness and hospitalization, and affect their coping with pain (Aho & Erickson, 1985; Broome, 1986; Broome, Bates, Lillis, & McGahee, 1990; Graham & Conley, 1971; Johnson, Kirchoff, & Endress, 1975). Scholars and clinicians have further suggested other important sequelae of medical fear, such as a deepening of the child's psychotrauma to hospitalization, obstructing their path to recovery, delaying normal growth and development, and destroying their enjoyment of life (Astin, 1977; Dong, Yang, & Ollendick, 1994; Sime, 1976).

The medical fear of school-age children is colored by their developmental stage. According to Piaget (cited in Shaffer, 1985), concrete operation dominates school-age children. When they are acquiring understanding to medical experiences, they appear to misunderstand something and apply fantasies to figure out their own explanation (Wong & Wilson, 1995). As a result, these misunderstandings and fantasies would intensify their medical fear (Poster, 1983). According to Erickson (cited in Staffer, 1985), school-age children are in a period of industry versus inferiority. They need to accomplish the mission to achieve social and academic skills to establish their industry. Fear of these developmental

challenges (e.g. fear of missing school) may be common during their hospitalization (Wong & Wilson, 1995). Thus, studying medical fear of school-age children might be interesting.

There are approximately 0.15 billion school-age children in China (Cheng, 1995). This figure also represents a large number of children who are occupying hospital beds. It is reported that about 1,200 school-age children were admitted to the seven hospitals located in Changsha city in 1995 (Report of Changsha Health Bureau, 1995). Six hundred out of these 1,200 children were in the affiliated first, second, and third hospitals of Hunan Medical University (Report of Changsha Health Bureau, 1995). In the researcher's experience, the Chinese children may develop some medical fear during their hospitalization due to personal or environmental factors. Nurses who work closely with them should consider their psychological assessment and seek appropriate nursing interventions.

In response to the recognition of the crucial role of medical fear among hospitalized children, an increasing amount of research attention has been given to the subject in other countries. Despite many studies focused on the interventions of medical fear (Brennan, 1994; Johnson, Kirchoff, & Endress, 1975; McFarland & Stanton, 1991; Rae, Worchel, Upchurch, Sanner & Daniel, 1989; Roberts, Wurtele, Boone, Ginther, & Elkins, 1981; Visintainer & Wolfer, 1975; Wolfer &

Visintainer, 1975), little is known about specific factors influencing medical fear (Hart & Bossert, 1994). Thus, it is difficult for nurses to identify children who are most likely to experience high medical fear and to provide scientifically individualized and/or preventive interventions for them.

In nursing literature, some studies consider the factors associated with medical fear among children including the child's age, sex, type of illness and living area of the family. Fear is expected to change with age (Miller, 1979). Two studies found that age was associated with medical fear (Aho & Erickson, 1985; Dolgin, Phipps, Harow, & Zeltzer, 1990), but in other studies, the variation of medical fear along with age was not documented (Broome & Hellier, 1987; Hart & Bossert, 1994). Several studies demonstrated that girls tend to express more medical fear than boys (Astin & Erickson, 1985; Broome & Hellier, 1987; Dolgin, Phipps, Harow, & Zeltzer, 1990). However, one study indicated that there was no difference in the report of medical fear between girls and boys (Hart & Bossert, 1994). The type of illness has also been considered as a variable that affects child's reaction to hospitalization (Poster, 1983). Acute and chronic illnesses represent two opposite kinds of illness. They may conceal different psychological impact and the resulted medical fear on children. But in Hart and Bossert's study (1994), type of illness (acute and chronic) was not significantly related to

child's medical fear. Living area, (urban or rural), is also a determining factor of the child's medical fear (Miller, 1979). However, Strickland, Leeper, Jessee, and Hudson (1987) revealed that there was no significant difference in reporting medical fear between rural and urban children during hospitalization. In conclusion, according to these previous studies, it is rather difficult to ensure whether indicated factors are certainly related to medical fear or not.

This study will give insight to the amount of medical fear and its associated factors among hospitalized Chinese school-age children. It is hoped that the knowledge gained will assist nurses in identifying the children who will experience high medical fear in order to be more able to provide appropriate nursing interventions.

Objectives of the Study

1. To describe the amount of medical fear among hospitalized Chinese school-age children.
2. To determine whether medical fear of hospitalized Chinese school-age children could be predicted by selected factors including child's age, sex, type of illness, and living area of the family.

Hypothesis

Medical fear of hospitalized Chinese school-age children could be predicted by selected factors including child's age, sex, type of illness, and living area of the family.

Assumptions

1. Medical fear of school-age children can be exhibited through self-report.
2. Hospitalization is a fear-provoking experience to children.

Scope of the Study

This study was undertaken among hospitalized school-age children admitted to the three affiliated hospitals of Hunan Medial University in Changsha city, Hunan province, China.

Definition of Terms

Medical Fear Fear arising from any experience that involves medical personnel or procedures involved in the process of evaluation or modifying health status in health care settings. In this study, medical fear was assessed using the modified version of

	Child's Medical Fear scale (CMFs) developed by Broome (1992) which consists of four subscales; environmental, procedural, intrapersonal and interpersonal fear.
Hospitalized School-Age Children	Children aged from six to 12 years who are admitted to the hospitals.
Type of Illness	The acute or chronic illness from which the child suffers.
Acute Illness	Unhealthy physical conditions with sudden onset which can be diagnosed and cured within 3 months.
Chronic Illness	Unhealthy physical conditions that occur and require diagnostic and therapeutic measures continuously and usually longer than 3 months.
Living Area of the Family	Permanent residential place of the children family in either rural or urban area.