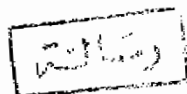
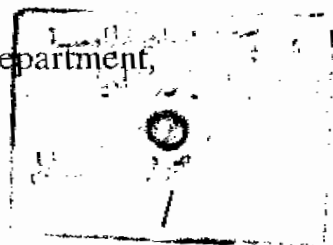


***Physical Growth and Intellectual Abilities
of Cardiac Children***

Thesis



Submitted for Partial Fulfillment of the Requirements for
Ph.D. Degree in
Childhood Studies from the Medical Department,
Ain - Shams University



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To My Beloved Family

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**INTRODUCTION
AND AIM OF WORK**

INTRODUCTION AND AIM OF WORK

Chronic illness and congenital malformations may cause growth retardation. Approximately 8 in every 1000 livebirths will have some form of congenital heart disease (Gersony, 1992).

Children with mild congenital cardiac abnormalities tend to grow normally. Those with more severe malformations frequently have evidence of serious growth abnormality. Growth retardation is most severe among those with large left to right shunts causing heart failure. Cyanosis tends to produce a rather parallel retardation of both height and weight while heart failure tends to cause a great retardation of weight than height (Rosenthal, 1993).

Rheumatic fever is the most frequent cause of heart disease in the 5 to 13 years old group, causing 25% to 40% of all hospital admissions in developing countries. The estimated prevalence in 1986 of chronic rheumatic heart disease is 7 per 1000 persons of all ages (Hurst, 1990).

In Egypt, rheumatic heart disease is still the predominant form of heart disease in children (El-Sherief, 1978) with a prevalence of 3.6-3.9 per thousand (Tawfique et al., 1988 and Mahfouz et al., 1989). It was reported that the maximum age incidence was between 4 and 12 years in the majority of cases (Kassem et al., 1982).

Chronic illness significantly affects the child developmental process in ways that may contribute to behavioural problems. Children with long term handicapping conditions appear to be at greater risk of behavioural problems than healthy children (Smith and Van Tassel, 1982).

Children with severe and chronic cardiac abnormalities are more likely to be absent from school for long periods of time and this might affect their educational achievement and might show in their scores on intelligence tests.

Statement of the problem:

The problem of the present study can be stated in the form of the following questions:

- 1- Does the suffering heart affect the physical growth of the child?
- 2- Does the suffering heart affect the intelligence of the child?
- 3- Does the suffering heart affect the educational achievement of the child?
- 4- Does the suffering heart affect the behaviour of the child?
- 5- Does the diet intake differ in cardiac from those normal children?

Hypothesis:

- 1- There is a significant difference between cardiac and normal children in their physical growth
- 2- There is a significant difference between cardiac and normal children in their intelligence

- 3- There is a significant difference between cardiac and normal children in their educational achievement
- 4- There is a difference between cardiac and normal children in their behavioural abnormality
- 5- There is a difference between cardiac and normal children in their dietary intake

Aim of the Study:

The present study has the following main aims:

- Assessment of physical growth of children with cardiac lesion both congenital and rheumatic
- Assessment of the intelligence of those children
- Assessment of their educational achievement
- Assessment of some behavioural disorders
- Assessment of their dietary pattern