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ALDS IN INFANCY AND CHILDHOOD

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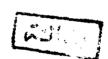
Submitted in Partial Fullfilment of The Masters Degree in Pediatrics



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بسم الله الرحمي الرحيم



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The Candidate

TO MY
FATHER, MOTHER
AND
MY WIFE

أعوذ بالله من الشيطان الرجيم

بسم الله الرحمن الرحيم الزاني فاجلدوا كل واحد منهما مائه جلده و لاتأخذكم بهما رأفه في دين الله إن كنتم تؤمنون بالله و اليوم الأخر و ليشهد عذابهما طائفه من المؤمنين

بسم الله الرحمن الرحيم قل للمؤمنين يغضوا من أبصارهم و يحفظوا فروجهم ذلك أزكى لهم أن الله خبير بما يصنعون

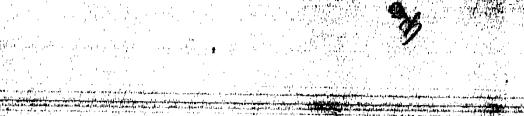
بسم الله الرحمن الرحيم ولوطا أتيناه حكما و علما و نجيناه من القرية التي كانت تعمل الخبائث أنهم كانوا قوم سوء فاسقين و أدخلناه في رحمتنا إنه من الصالحين (سوره الأنبياء.آيات، ١٥٤٧)

بسم الله الرحمن الرحيم ولوطا اذ قال لقومه إنكم لتأتون الغاحشة ماسبقكم بها من أحد من العالمين. ولوطا اذ قال لقومه إنكم لتأتون السبيل و تأتون في ناديكم المنكر فما كان جواب قومه الا أن قالوا ائتنا بعذاب الله إن كنت من الصادقين . قال رب انصرني على القوم المفسدين، و لما جاءت رسلنا ابراهيم بالبشرى قالوا إنا مهلكوا أهل هذه القريه إن أهلها كانوا ظالمين، قال إن فيها لوطا قالوا نحن أعلم بمن فيها لننجينه و أهله الا أمرأته كانت من الغابرين. و لما أن جاءت رسلنا لوطا سئ يهم و ضاق بهم ذرعا و قالوا لا تخف ولا تحزن إنا منجوك و أهلك الا امرأتك كانت من الغابرين . إنا منزلون على أهل هذه القرية رجزا من السماء بما كانوا يفسقون . ولقد تركنا منها آيه بينه لقوم يعقلون . اسوره العنكبوت الآيات ٢٨ حتى ٢٥)

صدق الله العظيم

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INTRODUCTION AND AIM OF THE ESSAY

AIDS, or Acquired immune deficiency syndrome, is a syndrome characterised by impairment of the body's ability to fight disease. This name appropriately defines the condition. It is acquired, that is not inherited or of genetic etiology but it is associated with the environment. Immune refers to the body's natural system of defense to combat disease, while deficiency indicates that the system is incomplete or lacking. A syndrome is a group of particular signs and symptoms that occur together and characterize a disorder (Victor Gong, 1985).

The aim of this essay is to provide a framework for approaching the aetiology, diagnosis, management and prevention of AIDS in infancy and childhood.

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HISTORICAL BACKGROUND AND EPIDEMIOLGICAL DATA

Although evidences suggest that the aquired immune deficiency syndrome (AIDS) has been occurring in the United States and other parts of the world such as Central Africa and the Caribbean since at least the 1970s, it was not until 1981, when the disease assumed epidemic proportions in the United States (WHO chronicle, 1985_b). The story started aggressively in that summer of 1981 by an epidemic of pneumocystis pneumonia (PCP) in previously healthy homosexual men, other opportunistic infections as Kaposi's sarcoma were also detected in many of these individuals. The first reported cases among infants and children in United States were at 1982 (Caroline, 1986).

According to the population reports, a brief history for AIDS starting from 1982 will be the following:-

- 1982 United States center for disease control (CDC) Established AIDS case definition.
 - Formal surveillance started in United States and France.
- 1982-83 AIDS was linked to blood transfusions, I.V drug use and congenital infection.

Paediatric AIDS started.

1983-84 - Identification of the virus aetiology in France and in the United States

O

- 1984 First studies indicate that AIDS is common among heterosexuals in Africa.
 - Researches Showed that AIDS' virus infects T-helper lymphocytes.
- 1985 Enzyme linked immune sorbent assay (ELISA) blood test was developed to detect antibodies to AIDS' virus, and screening of donated blood began.
 - AIDS' virus was isolated in brain cells and CSF.
 - First controlled clinical trials of drugs against the virus in United States.
- 1986 World health Assembly recommends global strategy for AIDS control.

(Population reports, 1986).

From 1981 till 1986 25.000 cases of AIDS have been identified in United States. During the same period, AIDS has become a global pandemic disease and appears to be spreading rapidly, with 31,646 cases identified and reported to the World Health Organization (WHO) at September, 1986. Cases have been reported in over than 70 countries including 22 in Europe, 33 in Americas, 10 in Africa, 2 in Oceania and 7 in Asia. Due to under reporting, these numbers do not reflect the true prevalence of AIDS. In addition it is estimated that several million people have been infected with AIDS but are still asymptomatic carriers (Thomas, 1986_a). As of December 1986, physicians and health departments in the United States had reported

27704 adult patients meeting the AIDS case definition for national reporting, 56% of them are now dead. During the last 3 months of 1986, an average of 58 AIDS case have been reported to the CDC daily. This compares with 35 cases reported during the same period in 1985, 20 case in 1984, and 10 cases in 1983 (CDC 1986).

Reporting for AIDS cases in pediatrics was a problem as the syndrome might be misdiagnosed with primary immunodeficiency syndromes. From October, 1982 to October, 1983, 56 child whose Illness met the center for disease control (CDC) definition of AIDS were reported (Pauline, et al. 1984). By October, 1985, there have been 204 cases of AIDS among the pediatric age group, which is about 1% of total number of cases reported in the United States (Committee on School health, 1986). As of December, 1986, number of reported cases among children only in the United States was 394, of these 61% are dead now, 88% of total number of cases in US were below five years, 55% are male (CDC, 1986).

The number of reported AIDS cases continues to increase. An analysis of past trend using empirical models projects a cumulative case total of 270,000 by 1991 (Morgan, 1986).

Present evidence suggest that the AIDS virus may be endemic in central Africa, and that epidemic of AIDS followed its clinical introduction into the homosexual population of urban America. Whilst this finding lends support to the endemic theory it has been suggested that in Africa, an insect vector might be involved. This would explain a close correlation

between the incidence of AIDS related disease and malaria (Bigger, 1985). Yet no evidence uptil now support that transmission can be made through insect bite (CDC, 1986).

ETIOLOGY