



بسم الله الرحمن الرحيم

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تم رفع هذه الرسالة بواسطة / مني مغربي أحمد

بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى

مسئولية عن محتوى هذه الرسالة.

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Diagnostic Delay in Pediatric Cancer; Causes and Effect on Survival Rates

Thesis

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Pediatrics*

By

Doha Salama Hassan Hussein

M.B.B.Ch., Faculty of Medicine, Ain Shams University (2016)

Under supervision of

Prof. Safinaz Adel Elhabashy

Professor of Pediatrics

Faculty of Medicine - Ain Shams University

Dr. Heba Gomaa Abd Elraheem

Assistant Professor of Pediatrics

Faculty of Medicine - Ain Shams University

Dr. Maha Magdy Wahdan

Lecturer of Community, Environmental, and Occupational Medicine

Faculty of Medicine - Ain Shams University

*Faculty of Medicine
Ain Shams University
2022*

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالَ نَارُ ابْنِ حَنَانٍ لَا حَوْلَ لَنَا إِلَّا بِاللَّهِ
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Faculty Mission

The Faculty of Medicine of Ain Shams University prepares a trained doctor with competitive skill at the local and regional level, capable of teaching, learning and training for life and is committed to standards of medical service and professional ethics, and the college supports the continuous development of programs, courses and scientific research while keen to expand applied scientific research and health care programs to serve the needs of society and develop the environment.

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List of Abbreviations

Abb.	Full term
AFP.....	Alpha-fetoprotein
ALK.....	Anaplastic lymphoma kinase
ALL.....	Acute lymphoblastic leukemia
AML.....	Acute myelogenous leukemia
CBL syndrome ...	Casitas B-lineage lymphoma syndrome
CI.....	Confidence interval
CML.....	Chronic myelogenous leukemia
CMV.....	Cytomegalovirus
CNS.....	Central nervous system
COVID-19.....	Coronavirus 19 disease
CPS.....	Cancer predisposition syndromes
CSF.....	Cerebral spinal fluid
CT.....	Computed tomography
DNA.....	Deoxyribonucleic acid
EBV.....	Epstein-Barr virus
FMASU.....	Faculty of Medicine, Ain Shams University
FWA.....	Federal wide assurance
GLOW.....	Global developmental-delay lung cysts over growth-Wilms tumor
HCG.....	Human chorionic gonadotropin
HHV8.....	Human Herpesvirus-8
HIC.....	High-income countries
HIV.....	Human immunodeficiency virus
HVA.....	Homovanillic Acid
IARC.....	International Agency for Research on Cancer
IQR.....	Interquartile range
LIC.....	Low-income countries.
LMICs.....	Low- and middle-income countries
LT.....	Lag Time

List of Abbreviations Cont...

Abb.	Full term
MDS.....	Myelodysplastic Syndrome
MIBG	Metaiodobenzylguanidine
MRI.....	Magnetic resonance imaging
NHL.....	Non-Hodgkin lymphoma
OR.....	Odds ratio
PAHOU	Pediatric and Adolescent Hematology /Oncology Unit
PAX5.....	Paired Box 5
PET.....	Positron emission tomography
PTPN11	Protein Tyrosine PhosphataseNonReceptor Type 11
Registry NIC	Northern Ireland Cancer Registry
RMS	Rhabdomyosarcoma
rob	Robertsonian Translocation
SARS-CoV-2	Severe acute respiratory syndrome coronavirus 2
SD	Standard deviation
SEER	Surveillance, Epidemiology, and End Results
SPSS	Statistical Package for the Social Sciences
TD	Total time to diagnosis
TDD	Time to definitive diagnosis
TP	Parent time
TR	Time to referral
U.S	United States
US.....	Ultrasound
UV.....	Ultraviolet
VMA	Vanillylmandelic Acid.
WHO.....	World Health Organization

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Protocol

Diagnostic Delay in Pediatric Cancer; Causes and Effect on Survival Rates

Postgraduate Student: **Doha Salama Hassan
Hussein.**

Degree: M.B.B.Ch., Faculty of Medicine, Ain shams university
(2016)

Director: Safinaz Adel Elhabashy

Academic Position: Professor

Department: Pediatrics

Co- Director: Heba Gomaa Abd Elraheem

Academic Position: Lecturer

Department: Pediatrics

Co- Director: Maha Magdy Wahdan

Academic Position: Lecturer

Department: Community, environmental,
and occupational medicine department

Faculty of Medicine

Ain Shams University

2020

What is Already Known on this Subject? And What does this Study Add?

In low and middle-income countries, advanced disease at presentation due to delayed diagnosis of cancer in children is common. Shorter lag times are associated with longer survival in patients with Wilms' tumor, and soft tissue sarcomas. However, there are limited studies regarding the determinants of delayed diagnosis.

Understanding the potential factors influencing the delayed diagnosis of cancer is needed to fill in the existing gap in knowledge and develop practical strategies to address the delay in cancer diagnosis among the pediatric population.

A study examining the delays in childhood cancer diagnosis in Egypt would be particularly important because of the wide prevalence of poverty, and cultural differences between people.

1. Introduction and Review

According to the 2016 estimates of the International Agency for Research on Cancer (IARC), 300,000 new cases of cancer in children less than 19 years are diagnosed in the world every year. Of these, 80% live in low and middle-income countries. Cancer is responsible for an estimated 80,000 cancer-related childhood deaths per year worldwide, with the largest share in developing countries (*Njuguna et al., 2016; Chukwu et al., 2011*).

Early diagnosis of childhood cancer as possible is crucial to reduce mortality. Children with cancer have improved response to treatment compared to those who are older, but childhood cancer progresses faster in the absence of treatment in any age group (*Stefan and Siemonsma, 2011*).

The delays in cancer diagnosis may be related to the parents, the health personnel or the health system. Health care providers are expected to make the diagnosis of cancer as early as possible, but most cancer symptoms are vague and nonspecific making it difficult to detect early (*Green et al., 2015*).

Knowing the different levels of delay is the first step to improve the care, most of the studies addressing delay were done in high-income