

**Faculty of Postgraduate Childhood Studies** 

**Medical Studies Department for Children** 

## A Study of Health-Related Quality of Life in Children with Juvenile Idiopathic Arthritis and its Relation to Disease Prognoses

## Thesis

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### **List of Abbreviations**

# Abbr. Full-term

**ACR** : American College of Rheumatology

**ANA** : Antinuclear Antibodies

**CBC** : Complete Blood Count

**CRP** : C- Reactive Protein

**ESR** : Erythrocyte Sedimentation Rate

**GCS** : Generic Core Scales

**HLA**: Human Leukocyte Antigen

**HRQOL** : Health Related Quality Of Life

JIA : Juvenile Idiopathic Arthritis

**JRA** : Juvenile Rheumatoid Arthritis

NS : Non-Significant

**NSAID** : Non-Steroidal Anti-Inflammatory Drugs

Pl : Platelets

**QOL** : Quality of Life

**RBCS**: Red Blood Cells

S : Significant

**SES** : Socioeconomic state

SPSS : Statistical Package for Social Science

**WBCS**: White Blood Cells

**WHO** : World Health Organization

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#### **Abstract**

Juvenile Idiopathic Arthritis (JIA) is one of the most common rheumatic disease of children and a major cause of chronic physical disability. Juvenile Idiopathic Arthritis (JIA) is not a single disease. It Is a group of diseases of unknown etiology, which are manifested by chronic joint inflammation. It is characterized by an idiopathic synovitis of the peripheral joints, associated with soft tissue swelling and effusion. The aim of this study was to: Assess the health related -Quality of life (HRQOL) in children with Juvenile Idiopathic arthritis. Detect the relationship between treatment satisfaction and maintenance of positive physical and psychosocial well-being. Subject& methods: 50 patient with JIA non complicated cases, 50 patient with JIA complicated cases and 50 apparently healthy control matched with age and sex matched children of the same social background by using Health Related Quality Of Life (HRQOL) questionnaire - Peds QL. version 3.o arthritis module, (8-12) years and children (12-18) years children Questionnaire and parent-proxy Questionnaire include many items to measure the score physical, emotional, social, school and well being Results: Health Related Quality Of Life (HRQOL) of the patients varied according to the type and duration of the disease. According to child problems there was higher statistically significant rate with pain, daily activities and side effect of medications with poly and systemic type and less significant with feeling and school and according to parent problems show higher statistically significant with poor and moderate score in physical and social problems. Statistically difference between cases and control according to father education and occupation and no statistically significant difference between cases and control as regard mother occupation P>0.05. the frequency of JIA more in the female patient than male (3:1) and the pauciarticular type was most common type. Positive strong correlation and statistically significant between age and duration of the disease P<0.001. Also show systemic corticosteroid were (65.7%) highest frequency in polyarticular type. Lower quality of life of children with JIA and there parents than control. Conclusion: Children with more symptoms, polyarticular of JIA are poorer quality of life than oligoarticular. Early diagnoses and effective therapy of JIA have good prognoses and less complications. Quality of life in children with JIA depends on disease subtype and outcome. As the child's QOL decreases parental stress increases.

**Key words:** (JIA) Juvenile Idiopathic Arthritis –(HRQOL) health related quality of life.

### Introduction

uvenile Idiopathic Arthritis (JIA) is one of the most common rheumatic disease of children and a major cause of chronic physical disability.

Juvenile Idiopathic Arthritis (JIA) is not a single disease, It Is a group of diseases of unknown etiology, which are manifested by chronic joint inflammation.

It is characterized by an idiopathic synovitis of the peripheral joints, associated with soft tissue swelling and effusion (**Rohr et al., 2008 and Goldzweig et al., 2011**). The American college of Rheumatology criteria classify it as a category of diseases with three principle types of onset oligoarthritis, polyarthritis, and systemic onset disease.

Juvenile idiopathic arthritis (JIA), previously called juvenile chronic arthritis or juvenile rheumatoid arthritis Is, not a disease but an exclusion diagnosis that includes all forms of chronic and unknown origin with onset -before 16 years of age (Adams and Lehman, 2005 and Hahn and Kim, 2010).

A serious problem in Juvenile Idiopathic Arthritis Is skeletal growth JIA encompresses a number of different articular inflammatory diseases with distinct methods of presentation, clinical signs, and symptoms, and In some cases, genetic background. They all share the occurrence of chronic inflammation within synovial joints in children below 16 years of age and for at least 6 weeks (**Dannecker and Quartier, 2009**). Juvenile Idiopathic Arthritis (JIA) arises before 16 years of age and last for more than 6 months disability, osteopenia and great risk of developing factors.

The damage of the cartilaginous tissue is often irreversible and responsible for much of the morbidity (Mine et al., 2006) (Grom et al., 2015) Juvenile idiopathic arthritis Is the most common chronic rheumatic illness in children with a significant cause of both short and long term disabilities. In addition, premature mortality may occur from side effects of therapeutic regimens (Rohr et al., 2008 and Goldzweig et al., 20011).

The WHO described Quality of life as the individuals perception of their position in life, in the context of culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.

Quality of Life is multidimensional. It include social, physical, emotional and school functioning of the child (Bradlyn et al., 1996; American College of Rheumatology 2007).