



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم



شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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التوثيق الإلكتروني والميكروفيلم

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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Assessment of the Quality of Life in Patients with Multiple Sclerosis

Thesis

*Submitted for partial fulfillment of master's degree in
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالَ

سَبَّحَانَكَ لَا إِلَهَ إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْعَظِيمُ

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List of Abbreviations

| Abb. | Full term |
|---------------|---|
| Ab..... | Antibodies |
| ADL | Activities of daily living |
| AE | Adverse effects |
| ALC..... | Absolute lymphocyte count |
| ARR | Annualized relapse rate |
| BMI..... | Body mass index |
| BVL..... | Brain volume loss |
| CBT..... | Cognitive behavioral therapy |
| CIS..... | Clinically isolated syndrome |
| CNS | Central nervous system |
| COP | Coping |
| CRH | Corticotrophin-releasing hormone |
| CSI..... | Caregiver Strain Index |
| DMDs..... | Disease modified drugs |
| DMF | Dimethyl fumarate |
| EAE | Experimental autoimmune encephalomyelitis |
| EDSS | Expanded Disability Status Scale |
| e-Health..... | Electronic health |
| GA..... | Glatiramer acetate |
| GAD | Generalized Anxiety Disorder |
| HAQUAMS..... | Hamburg Quality of Life Questionnaire in MS |
| HCPs..... | Health care professionals |
| HLA | Human leukocyte antigen |
| HRQoL..... | Health-related quality of life |
| IFNs..... | Interferons |
| JCV | John Cunningham polyomavirus |
| LUTS | Lower urinary tract symptoms |
| MDR | Multidisciplinary rehabilitation |
| MHC | Major histocompatibility complex |

List of Abbreviations Cont...

| Abb. | Full term |
|------------|--|
| MS..... | Multiple sclerosis |
| NEDA | No evidence of disease activity |
| OCD | Obsessive-Compulsive Disorder |
| ON | Optic neuritis |
| OPC | Oligodendrocyte precursor cells |
| OT | Occupational therapy |
| PFMT..... | Pelvic floor muscle training |
| PML..... | Progressive multifocal leukoencephalopathy |
| PPMS..... | Primary-progressive multiple sclerosis |
| PWB..... | Psychological well-being |
| QoL | Quality of life |
| REJ | Rejection |
| REM..... | Rapid eye movement |
| RFA..... | Relationships with family |
| RFR..... | Relationships with friends |
| RHCS..... | Relationships with healthcare system |
| RIS..... | Radiological isolated syndrome |
| RLS | Restless legs syndrome |
| RR..... | Relapsing remitting |
| RRMS | Relapsing-remitting multiple sclerosis |
| SPMS..... | Secondary-progressive multiple sclerosis |
| SSL | Sentimental and sexual life |
| SSN..... | Social support network |
| SSRIs..... | Selective serotonin reuptake inhibitors |
| SYMP..... | Symptoms |
| UI..... | Urinary incontinence |
| WBC | White blood cell |

INTRODUCTION

Multiple sclerosis (MS) is a chronic demyelinating autoimmune disorder affecting the central nervous system (CNS) and targets the myelin sheaths around nerves leading to inflammation, myelin loss, and axonal destruction (*Koutsouraki et al., 2010*).

MS affects the physical, psychological and social function of patients. These disturbances have a negative impact in the daily life activities and the quality of life of patients (*Costa et al., 2017*).

The impact of MS is often profound. In coping with their disease, individuals with MS may face many challenges, including changes in physical ability, cognition, employment status, and effects on their mental health and well-being (*Kantor et al., 2018*).

A diagnosis of MS is life-altering. Because the course of MS is heterogeneous, patients may face uncertainty in terms of long-term physical and cognitive challenges, potential loss of employment, and the risk of social isolation (*Kantor et al., 2018*).

Based on the immune basis of MS, different kinds of drugs are used to suppress the disease. The number of disease modifying drugs (DMDs) available for the treatment of MS has increased considerably in recent years. Each of these drugs has

its own efficacy and indication of usage. However, new treatments also come with new safety concerns and monitoring requirements with which physicians must familiarize themselves (*Jongen et al., 2017*).

AIM OF THE WORK

This study helps to assess the quality of life of MS patients to identify the impact of MS on different aspects of personal and social life of a group of Egyptian MS patients, and how future studies may help directing them to different coping and adapting strategies. And also to assess patient's treatment needs to add recommendations, aiming to improve the quality of life.

Chapter 1

MULTIPLE SCLEROSIS

History and demography:

MS is a chronic neurodegenerative disease that affects the CNS; it is initially inflammatory and demyelinating, with a variable neurodegenerative component (*Ton et al., 2017*).

MS was first defined and termed in 1868 by a French neurologist, Jean Martin Charcot (1825–93). He delivered a series of major lectures, establishing MS as a novel disease of the nervous system (*Zalc, 2018*).

It is noted that MS epidemiology has changed in important ways over the past several decades. Thus, the incidence of MS is increasing, especially in women. A switch in the latitude gradient for MS incidence has been reported. Because MS genetics seems unlikely to have shifted in so short an interval, these observations presumably relate to a change in the environmental determinants of MS (*Orton et al., 2006*).

Some environmental changes are known to be taking place (e.g., increasing atmospheric concentrations of CO₂, CH₄, and other pollutants; increasing global temperatures; a depletion of stratospheric ozone; a greater dietary consumption of trans-fats, etc.). One recent change is that people are