

# Risk for Multiple Sclerosis Disease for Adult Women under 60 years old and Related to Quality of Life in Neurosciences Center at AL-Najaf City

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## Abstract

**Background:** Multiplied sclerosis (MS) is a chronically neurodegeneration disease it involves both males and females, the illness impacts female 2 to 3 times more than male. It is a progressive neurological condition that impacts quality of life of individuals in physical, psychological, social rates. It primarily impacts young adults with maximum potential hinders the execution of their initiatives and causes doubt regarding their future. Multiple sclerosis displays a many of clinical manifestations it have negative impact on patients and caregivers' health related QOL.

**Objective :** to assess (QOL) of female patients suffered from (MS) disease under 60 years of age, identification risk for multiple sclerosis disease on patients women under age 60 years and related (MS) to quality of life and found out an association between demographic characteristic with quality of life.

**Methodology:** Descriptive research is done in neurosciences department for the period from 24th September 2019 to 28th July 2020. The validity and the questionnaire accuracy is measured by (14) experts from various areas of expertise for review the instrument of the study, the reliability through utilizing the Alpha Cranach's procedure for reviewing the instrument. A non-probability purposive sample of 82 women were suffered from multiple sclerosis constituted in the study. Following reliability also validity assessment data were being gathered by using the constructed questionnaire, an interview technique was used by the researcher to gather data.

**Result:** The finding of this study showed that importance of the study sample were approximately 75 participants who enrolled study when were age grouped range from (20-29) yrs. and comprised about (34.7) of the entrants. Education level for these patients were college graduated with maximum rate higher percentages from others level of education in the same study with percentages (57.3). The result exhibited about 44.0 how were moderately socioeconomic status amongst the study results, most of the study sample were urban residents, it constituted 94.7% ,with high rate percentage among married women The study concludes that the women with multiple sclerosis under 60 years old have (56%) of impairment in their (QOL). Recommendations of the study frequent assessment of (QOL) for adult female suffered from multiple sclerosis disease, education programs for assessing and managing depression ,detecting and rehabilitation cognitive dysfunction programs, fatigue assessment and management program ,mass media should provide health education and information about the therapeutic management of disease and it is dangerous on the patients.

## 1. Introduction

Multiple sclerosis (MS) is most prominent and dangerous disease with adverse impact on the brain and spinal cord in important system (nervous system). On the report of (WHO) in (2008) or thereabouts 2-2.5 million person suffered a long time from progressive disease through live whereas registered worldwide. Approximately 20000 MS patients died worldwide in 2012 compared to 12000 died in 1990. MS starts attacking people from age 20–50 years old and the records showed that female assaults were double that of males [1]. Frequently affecting young adults aged 30 years, the incidence of multiple sclerosis (MS) ranges twice as much in women relative to men in different geographical regions. Iraq as a part of the Middle East region was considered a region of medium risk of MS. Recent epidemiological studies have shown that the Arab Gulf region has a high prevalence [2]. suffered patients change their entire behavioral system after multiple sclerosis (MS) diagnosis and their behavior modifiable

both independently and within the family. They are trying to adjust to an unprecedented environment result in change quality of life. Study of quality of life consider necessary in order to identify modern approaches for healthiness and wellbeing promotion. Several reports correlated with relationships between multiplied sclerosis and quality of life which suggested highly significance of disease and the quality of life. multiple sclerosis capable to high rate of adverse effect on quality of life as barrier to ability individual activity, follow recreational functions and conducting daily activities along time. While various finding reported quality of life [3]. Quality of life (QOL) has been intensively researched as a an expected outcomes in multiple sclerosis (MS) prior studies evaluation quality of life of disease patients in numerous of somatic clinical manifestations, movement, feeling and public interchangeable. Patients with MS score QOL below the overall population and also below individuals have sever disease such as epilepsy and or/ DM [4]. Multiple sclerosis (MS) key cause is unclear but several researchers have said MS is both autoimmune and hereditary.

Some factors contribute to MS such as Genetic factor: women are twice and thrice more likely to experience illness as well as history of the family ,Environmental factor: rural communities are much less common and lower income and Immunological conditions: Irregular immunity -medicated responsiveness attacks the myelinated fibers so deteriorates it [Abbas et al. \[5\]](#). Multiple sclerotic disease effect on vital body functioning that have direct effect on activity daily living ,there for patient with (MS) suffering from many signs and symptoms, About 75–90 percent of individuals report fatigue and higher than 50 percent of patients describe fatigue as one of their worst problems. Tiredness may have a negative effect on a variety of issues including their quality of life and jobs or with standing its frequency fatigue remains elusive in MS partially due to the complexity of contributing factors and lack of established biological markers. Possible fatigue contributing factors in multiple sclerosis( MS) include lesion location, failure of nerve fiber conduction, sleep disturbances, physical weakness, comorbidity, causes of pathogenicity [\[6\]](#). Depression reported also high significant with disease process, in people with multiple sclerosis( MS) was reported as majority with fifty percent in contrast to 10 to 15 percent in the total individual. However MS patients are negatively influenced by depression in many domains .Depression is well known as one of the key to detect (QOL) in MS patients and by itself and particularly when combined with anxiety it also raises the risk of suicidality in this patient depression and decreases adherence to disease- therapies. Around 40–60 percent of multiple sclerosis (MS) patients are effected by cognitive disorder. This can start immediately during early stages of the illness and affects many aspects of human being such as the job prospects, behavior patterns, and (QOL) of a patient. The frequent indicators of work-related problems have been defined as cognitive deficiencies impacting fields such as memory , attention and slow processing of information [\[7\]](#). The economic cost associated with disability is considerable, the costs increase by 3 to 4 fold or more by increasing the severity disease ,in Europe countries for patients with MS when compared with patients at lower disease severity (EDSS <4.0), and that lead to substantially harmful effect on the (QOL) with the advancing disease stages. Early uses of MS disease treatment drugs that slowdown the progression of disease will avoiding or delaying the severity of MS disease and deterioration, that provide chance for patients to delay the disability dependability stages and that will help them, their family, and society.

## 2. Methodology

Descriptive study is done in neurosciences department for the period from 24th September 2019 to 28th July 2020. The validity and the questionnaire accuracy is measured by [Kooshiar et al. \[8\]](#) experts from various areas of expertise for review the instrument of the study, the reliability through utilizing the Alpha Cranach's procedure for reviewing the instrument. A non-probability purposive sample of 82 women were suffered from multiple sclerosis constituted in the study. Following reliability also validity assessment data were being gathered by using the constructed questionnaire, an interview technique was used by the researcher to gather data the assessment tool is composed by investigator to estimate the (QOL) of adult female had multiple sclerotic less than 60 years of age. The final study instrumental composed of parts: Part I: Demographic characteristics: A demographic data paper composed of [Abbas et al. \[5\]](#) variables, which included age,

Socioeconomic-status, education-status, live sitting, marital status, occupational status. Part II: Clinical Dat. Part III: This part of the questionnaire is composed of [Macías Islas et al. \[7\]](#) items included general health domain composed of variables , physical health domain consist of (four) items. emotional health domain consist of items , social health domain consist of [Abbas et al. \[5\]](#) items ,daily activities domains consist of items, cognitive function domain consist of [Karatepe et al. \[4\]](#) items, depression domains consist of [Karatepe et al. \[4\]](#) items, fatigue domains consist of [Ysrraelit et al. \[3\]](#) items, pain domain consist of [Ysrraelit et al. \[3\]](#) items.

## 3. Study Results

No.	Age	N	%
1.	20-29 years old	26	34.7
2.	30-39 years old	24	32.0
3.	40-49 years old	19	25.3
4.	50 and older	6	8.0
Total		75	100
Mean+ SD.=			
No.	Levels of Education	N	%
1	Able to Read and Write	2	2.7
2	Primary school graduated	4	5.3
3	intermediate school graduated	7	9.3
4	Preparatory School Graduate	6	8.0
5	Institute graduated	10	13.3
6	College graduate	43	57.3
7	Post Graduate	3	4.0
Total		75	100.0
No.	Socioeconomic Status	N	%
1	Sufficient	23	30.7
2	Sufficient to some extent	33	44.0
3	Insufficient	19	25.3
Total		75	100.0
No.	Marital Status	N	%
1	Single	19	25.3
2	Married	49	65.3
3	Divorced	3	4.0
4	Widowed	2	2.7
5	Separated	2	2.7
Total		75	100.0
No.	Occupation	N	%
1	Student	5	6.7
2	Housewife	35	46.7
3	Retired	11	14.7
4	Employee	22	29.3
5	Private Worker	2	2.7
Total		75	100.0

In above table clarify finding of the demographical characteristics as frequencies and percentage. Approximately more than (75%) participants were shared to the study with age grouped (20-29) yrs. and comprise (34.7%) from participant's. So as to apparent finding with collage level higher than 50% of the participant's. It compromised (57.3%) of all population .The result showed approximately (44.0) have moderately socioeconomic status. The finding exposed with highly rate among married adult women (65.3%). Female patient's housewife with highly rate (46.7%) from all participant's.

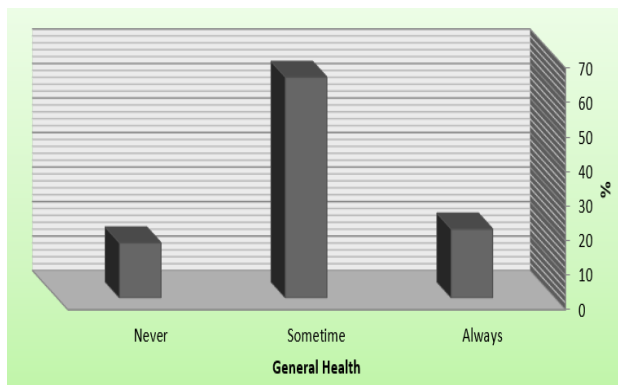


Figure 1: Overall assessment of General Health

In the light of statistically cut off point, figure show the majority (64%) of women were partially of their general health at mean +SD. = 1.96+ 0.603

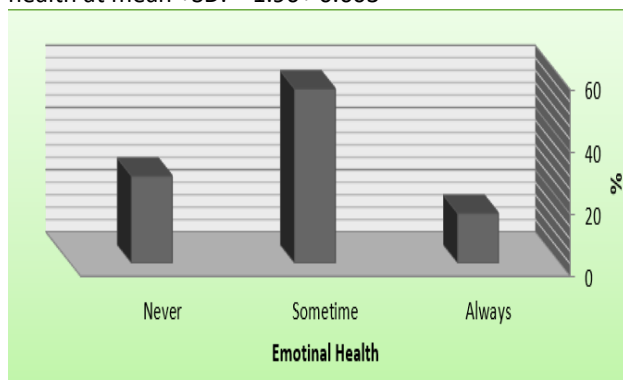


Figure 2: Overall assessment of Emotional Health

In the light of statistically cut off point, this figure describe the majority (56%) of women were partially have problem in their emotional health at mean +SD. = 2.12+ 0.657.

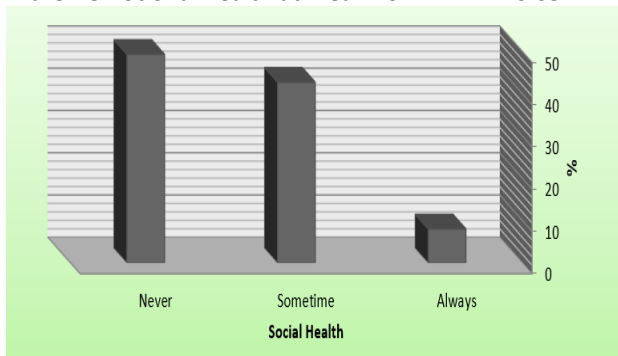


Figure 3: Overall assessment of Social Health

In the light of statistical cut off point, this figure describe the majority of (49.3%) of women were never have problem in their social health at mean +SD. = 2.41+ 0.639.

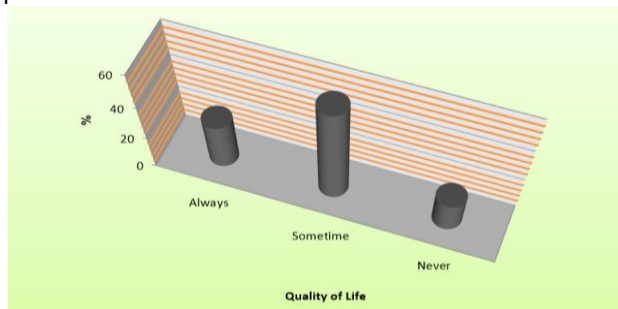


Figure 4: Overall assessment (QOL) for Women with Multiplied Sclerotic disease.

MS is one from the common neurologic chronic disease that affect young patients from both genders and produce effect on patient physical, cognitive, psychological wellbeing [9]. According to table (4.1) that showed distribution of the multiple sclerotic patients women by their demographical characteristics approximately (75) subject who enrolled in study, the highest percent of them (34.7%) with age grouped were (20-29) years old, as well as the highest percent of participants (94.7%) were lived in urban areas, about (65.3%) of women were married. This result agree with found most of study participant age between 20 and 31 years ,urban areas residing (63.0%), married (72.2%). The results of research show that majority of women are educated about (57.3%) who are college graduated the result come with Farran et al. [10] found the majority of participant(45.4%) attended university education .Regarding occupation the result show that majority of women were house wife's consist about(46.7%) of participants and this agree with Kooshari et al. [8] found most of participant( 75.7%) housewife. Whereas we discussed (figure1) that

Showed overall assessment of general health is fair(64%), these finding corresponding with Ysraelit et al. [3] when most subjects about (55.0) from 103 participant's women with fatigue as a limited to (ADLs).Underlying cause for this complaint unclear with age between (40-50) years .The finding in (figure2) clearly showed that about 56%of participant have problem in emotional health Alshubaili et al. [11] mentioned that women suffered from (MS) appear to had lack emotional experiences especially in comparison to a healthy people. Zwibel et al. [12] Multiple sclerosis (MS) affect emotional health MS progression can cause emotional change common emotion include grief, sadness .worry, fear, irritability. Besides other prevalent manifestations that are associated with mood involve irritability (35 percent), anxiety occur in (40 percent) of patients, hallucinations (10 percent) and apathy (20 percent). Lesion incidence and brain atrophy are correlated with euphoria sclerotic, disinhibiting, and pathological cries and laughter. These disorders in neuropsychology predict low quality of life. Patient experience variety of emotional symptoms as result from the chronic effect of the disease including grief, worry, fear. Sadness .depressed mood, anxiety, all emotional symptoms effect patient life and their families and this effect patient quality of life (Researcher point of view). According to (figure 3) that showed of Women Quality of Life Related to Social Health finding show that about 49.3% not have problem in their social health, and about 40% have problem in social health regarding relationship with family and friends. Regarding social relationship this result come with Bass et al. [13] who found that most participant report negative change regard relationship with family15.9% and friend 25.1%. The effect of multiple sclerosis (MS) diagnosis on family daily lives for women is significant. The review uncovered that after determined to have multiple sclerosis (MS), practically more than two-fifths (41%) of women with MS had isolated or separated from their partners these women most by far (88%) revealed that MS had played a factor in their relationship change. The more common incidence of depression

#### 4. Discussion

places extra burden on female relapse.

This problem may be as a result of multiple sclerosis effect on personal relationship in many ways such as pain and fatigue act as barrier to develop connection with other people including friend family partner and work colleague's on the other hand the depression stress and anxiety have negative impact on relationships by closing the lines of communication Researcher point of view. According to (figure 4): shows that overall assessment of quality of life is fair(56%) these finding agree with Self-Report study in U.S.A were find relation between low quality of life elderly age with highly rated of participants (56%) also Mousai et al. [14] the action and entrance subjects in their various life aspects is effected significantly by multiple sclerosis(MS) manifestation.

## 5. Conclusion

The finding confirms that (QOL) of women with multiples sclerosis under 60 years old is partially impaired. The emotional state of women under the age of 60 was from the major problem that affect quality of life. Approximately less than half of the participants have social health problems in their relationship with family and friends.

Recommendation: for Ministry of Higher Education and Scientific Research Frequent studies on assessment of quality of life for women who have multiple sclerosis to recognize disease impact of on all aspects of patients life. Future nursing research must be addressed specific factors like the effect of pain and depression on the daily life of female have (MS). and Recommendations for Ministry of Health: Mass media should be utilized to provide health education, information about the treatment of multiple sclerosis disease and its effect on patient life, Provide multiple sclerosis wellness and rehabilitation program in neuroscience centers with trained staff for offering training, educational session and exercise classes and Health education programs for women with multiple sclerosis about assessing and managing depression because it affects adversely on these segments of patients in the community ,Providing both detection and rehabilitation cognitive dysfunction programs for these women ,program to address and reduce fatigue effect on patient quality of life.

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