



# Demographic and Quality of life models application to high grade Non Hodgkin lymphoma patients in the COVID era

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## Background

Reviewing the few available databases and the papers published about cancer incidence and prevalence in Egypt has declared the top cancers ranking in the nation, astonishingly Non-Hodgkin lymphoma (NHL) has occupied a very advanced placed compared to the Western countries with a higher incidence rates in Lower Egypt compared to Upper Egypt. Considering the established relation between NHL, hepatitis C infection and low socio-economic standards, this disease requires further studying not only on the clinical scale but also in a pathologic and molecular depth using advanced techniques in order to understand the mechanisms through which this disease is progressing.

## Objective

The main objective of the study is to assess the effect of various demographic factors on high grade NHL patients' outcomes and quality of life.

The main outcomes measure here is to correlate the different demographic variables to the treatment outcomes and the QOL.

## Design

This prospective observational study started in January 2020 and is still going on.

## PATIENTS

The study participants are all high grade NHL patients who were diagnosed based on tissue biopsy histopathology and immunohistochemical examination. All the patients signed a written consent to participate in the study and agreed that we apply the demographic and quality of life (QOL) models to them .

## METHODS

The demographic and FACT-QOL models were applied on the patients who were receiving their active treatment in our center.

The demographic data included the patients' living conditions and socioeconomic status. The educational level of the patients and their families were also considered.

FACT-QOL model was applied to the patients while receiving their active treatment with its emotional, physical, social and functional domains.

The data were obtained using Redcap® database then they were statistically analyzed using SPSS ® statistical package.

## RESULTS

Among the studied patients there was no correlation between the residence (rural, urban or suburban) and QOL (p value 0.9). Those who had family primary care giver (91.2%) showed better adherence to therapy (p value < 0.01). Interestingly the driving distance from our center significantly affected the patient adherence to treatment and scheduled visit dates (p value < 0.01). Despite there were 32% rate of illiteracy among patients, this didn't affect the quality of care or outcome. Of the included patients 67% reported emotional and physical stress higher prior to starting chemotherapy than after starting therapy(p value < 0.01).

The socioeconomic status and the living standards affected significantly to the time to start therapy being shortest with patients of higher socioeconomic class (p value < 0.01). Regarding the stress of acquiring infection in during delivering care, 71% of patients reported their concern and this reflected itself on the loss of adherence to therapy seen in 28% of patients (p value < 0.01). Factors that were found affecting the response to therapy were, age and socioeconomic status (p value < 0.01).

## Discussion

Demographic factors play an important role in determining the quality of care and QOL our patients have, this was further augmented by the current COVID conditions.

## References

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