# Quality of Life among Donors after Liver Transplantation

## Thesis

Submitted in Partial Fulfillment of Master Degree in "Community Health Nursing"

# By

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#### List of Abbreviations

**A2ALL**: Adult to Adult Living Liver.

**BMI** : Body Mass Index

**BP** : Bodily Pain

**CNS** : Central Nerves System

**CT** : Computed Tomography

**DDLT** : Deceased Donor Liver Transplantation

**ERCP**: Endoscopic Retrograde Cholangio

Pancreatography

**ESLD**: End Stage Liver Disease

**GH**: General health

**HCC**: Hepato Cellular Carcinoma

**HCV**: Hepatitis C Virus

**HRQOL:** Health Related Quality Of Life

IC : Infection ControlICU : Intensive Care Unit

**IVC** : Inferior Vena Cava

**LDLT**: Living Donor Liver Transplantation

**LDALT**: Living Donor Adult Liver Transplantation

**LLD** : Living Liver Donation

LT : Liver Transplantation

MCS : Mental Composite Score

MH : Mental Health

**MRI** : Magnetic Resonance Integrity

**PCS**: Physical Composite Score

**PF**: Physical Functioning

PLT : Platelet

**POCs**: Post Operative Complications.

**QOL** : Quality Of Life **RE** : Role-Emotional

### List of Abbreviations (Cont)

**RP** : Role-Physical

SD : Stander DeviationSF : Social Functioning

**SF-36** : Short Form 36

**SFSG** : Small for Size Syndrome Graft

US : United StateUK : United Kingdom

VT : Vitality

**WBC**: Wight Blood Cells

WHOQOL-BREF: World Health Organization Quality of

Life – BREF

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#### **Abstract**

#### Quality of Life among Donors after Liver Transplantation

By Hend Adel Ibrahim

Supervised by: Dr. Sabah Abdel Mobdy Radwan, Dr. Mohamed Ismail Seleem, Dr. Wafaa Khalil Ibrahim

Liver transplantation (LT) has been widely accepted as the standard treatment for patients with end-stage liver disease and unrespectable hepatocellular carcinoma (HCC). The aim of this study was to assess quality of life among donors after liver transplantation. Research design: Descriptive analytical design. Technical design: Setting: The present study was conducted at outpatient clinic of post liver transplant follow up department in National Hepatology and Tropical Medicine Research Institute. Sampling: The subject of this study includes 37 donors, their age ranged between 18 -45 years. Tools: for data collection divided into: 1st tool: An interviewing questionnaire which includes: Part I: Socio-demographic characteristics of the living donors, Part II: Donors' knowledge related to living liver donation, Part III: a) The SF-36 quality of life scale for living donors, b) Life style assessment.2<sup>nd</sup>Tool:Medical record of donors:a)Physical examination, b) Current medical history, c) Follow up compliance. **Result:** The most of living donor had satisfactory knowledge regarding living liver donation, the most of donors' had compliance to follow up, more than two thirds were suffered from wound seroma post liver transplantation, and a majority of them complain from nausea, vomiting and respiratory problem. More than two thirds of living donor had good total quality of life and a majority of them had unhealthy life style. Conclusion: There were no significant statistically relation between socio-demographic characteristics of the living donors and their compliance to follow up. There were no significant statistically relation between total donor's quality of life and their total knowledge regarding liver transplantation. Recommendation: The study recommended carry out discharge plan contain health education for living donors regarding complication post-operative, follow-up schedule and healthy life style behavior.

- Key words: liver transplantation, donor's Quality of life.
- Master's Thesis, Community Health Nursing, Ain Shams University.

#### Introduction

Liver transplantation is considered as a viable treatment option for patients with acute liver failure and end stage liver disease. In liver cirrhosis, transplantation is generally considered when a patient has suffered from either a complication of portal hypertension or a manifestation of compromised hepatic synthetic function (Steinman, et al., 2011). In accordance toBlack, et al. (2009) Liver transplantation is indicated in the conditions of irreversible advanced chronic liver disease, fulminate hepatic failure, metabolic liver disease, and some hepatic malignancies. Liver transplantation procedure involves total removal of the diseased liver and its replacement with a healthy liver in the same anatomic location.

The several advantages like reduction of pretransplantation waiting time and a similar overall graft and recipient survival rate compared with Deceased Donor Liver Transplantation (DDLT) promote the development of Living-Donor Liver Transplantation (LDLT) performed all around the world (Cheah, et al., 2013).

Despite these benefits for the recipients, LDLT donors achieve no medical benefits and are exposed to the risk of complications, and even death. Therefore, the potential effects of LDLT on donor safety, donor recovery, and postdonation psychological impairment are essential to be better understood(Lauterio, et al., 2013). Some donors may suffer from psychiatric problems though most of them believe that they had benefited from the donation experience (Ishizaki, et al., 2012).

In according to Omar, et al. (2015) there are few studies that investigated the Quality Of Life (QOL) in Egyptian liver donors in the post-donation specifically studies focusing on psychiatric and psychosocial sequels in the post-transplant period, which represent main and important aspects of one's QOL. Assessing the change in quality of life before and after the transplant is complicated by the fact that shifts in expectation and priorities may change how a survivor evaluates his/her quality of life. Also, deterioration in health or sexual functioning may be counterbalanced by strengthened social bonds or enhanced spirituality (Umberto, et al., 2011).

Taking to consideration the known physical hazards of donor partial hepatectomy and the impact of work and family disruption as a result of donation (**Intaraprasong, et al., 2010**) one could appreciate the fact that symptoms or post-donation medical and psychiatric complications that affect the donor's QOL are especially important to record and

understand as they may outweigh the benefits of performing liver transplantation (Salah, et al., 2012).

The appropriate involvement of family and companions in the learning process can help ease anxiety and improve the relationship with the client's health status. Thus, highlight the nurse as a key element of the multi-disciplinary team, directly and actively involved with the client preparation, ensuring that the guidelines on treatment, testing and service routines were made clearly, through talks and consultation nursing, respecting the culture and the intellectual level of each client and family (Ohler and Cupples, 2013).

In the community, nurses also promote support and education with a view to organ donation. These professionals should deliver evidence-based care in all phases of the transplantation process, considering the enhancement of individual health, functional skills and quality of life at all ages. Evidence-based care is aimed at integrating research into transplant nurses' clinical practice; so as to deeper explore knowledge to improve professional practice, contributing to the quality of care delivery (White-Williams, 2011).

#### Significance of the study:

In Egypt, there is the problem of endemic hepatitis C with a prevalence of 14.7% according to national studies (El-Zanaty & Way, 2009). Also, Yosry, et al. (2009) showed that hepatitis C-related End stage liver disease (ESLD) is the main indication for liver transplantation and represents89.8% of the cases in Egypt at the same time, a deceased-donor liver transplantation program is still a waited for legal reasons; thus, living-donor liver transplantation (LDLT) is the only hope for patients with ESLD or hepatocellular carcinoma in the presence of cirrhosis. In January, 2010, the number of LDLT procedures performed in Egypt topped out to more than one thousand procedures, done in 11 centers. The case number 1000 had been performed at the National Liver Institute in Menoufeyia (El-Meteini M et al., 2010)

### Aim of the study

This study aims to assess quality of life among donors after liver transplantation, through:

- **1-** Assessing donors' knowledge regarding liver transplantation.
- **2-** Assessing donors' quality of life after liver transplantation.
- **3-** Determining donors' compliance to follow up after liver transplantation.

#### **Research questions:**

- **1-** Is there relation between socio-demographic characteristics of donors and their compliance to follow up?
- **2-** Is there relation between donors' quality of life and knowledge regarding liver transplantation?
- **3-** How would be the donor quality of life after liver transplantation?