

# **Health-Related Quality of Life Issues for Patients Undergoing Liver Transplantation**

## ***Thesis***

Submitted for Partial Fulfillment of the  
Requirement of Master Degree in Nursing Science  
***(Medical- Surgical Nursing)***

***By***

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## Abstract

Liver transplantation is perceived as the only effective treatment for patients with end-stage liver diseases and is considered as a procedure not only to save life, but also to improve the quality of life. The health related quality of life (HRQOL) is an important part of assessing recipient's outcomes after liver transplantation. **Aim:** This study aimed to assess HRQOL issues experienced by patients and factors affecting HRQOL before and after liver transplantation. **Design:** A descriptive exploratory design was followed to conduct this study. **Setting:** At Ain Shams Center of Organ Transplantation in Ain Shams Specialized Hospital. **Sample:** A purposive sample of 30 adult patients who are admitted for liver transplantation. **Three tools** were used: Patient structured interview questionnaire to assess patient's characteristics, Short Form SF 36 questionnaire, and Euro QOL questionnaire. **Results:** The highest score in HRQOL before liver transplantation was for emotional wellbeing dimension; while at one month and three months after liver transplantation, it was for role limitation due to emotional health dimension. Meanwhile, the least score before, one and three months after liver transplantation was role limitation due to physical health dimension. **Conclusion:** HRQOL for patients with liver transplant was better one and three months after liver transplantation. The study concluded that age was affecting all dimensions of HRQOL, while working status, monthly income, educational level, disease severity, and disease duration are factors that affected some dimensions of HRQOL. **Recommendations:** Improving patient's quality of life should be the main objective for nurses during their care of a liver transplant patient. Further studies are needed to evaluate long term HRQOL after liver transplantation, six months or years post-transplant.

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**Key words:** Liver transplantation, health related quality of life, SF 36, EURO QOL

## CONTENTS

| <b>Title</b>                                     | <b>Page</b> |
|--------------------------------------------------|-------------|
| <b>Introduction &amp; Aim of the Study .....</b> | <b>1</b>    |
| <b>Review of Literature .....</b>                | <b>5</b>    |
| <b>Subjects &amp; Methods .....</b>              | <b>31</b>   |
| <b>Results .....</b>                             | <b>37</b>   |
| <b>Discussion .....</b>                          | <b>58</b>   |
| <b>Conclusion .....</b>                          | <b>70</b>   |
| <b>Recommendations .....</b>                     | <b>71</b>   |
| <b>Summary .....</b>                             | <b>72</b>   |
| <b>References .....</b>                          | <b>76</b>   |
| <b>Appendices .....</b>                          |             |
| <b>Arabic Summary.....</b>                       |             |

## LIST OF TABLES

| <b>Table</b> | <b>Title</b>                                                                                | <b>Page</b> |
|--------------|---------------------------------------------------------------------------------------------|-------------|
| <b>1</b>     | Selected socio-demographic characteristics of the study patients.....                       | <b>38</b>   |
| <b>2</b>     | Medical characteristics of the study patients .....                                         | <b>39</b>   |
| <b>3</b>     | Medical diagnosis of the study patients .....                                               | <b>40</b>   |
| <b>4</b>     | SF-36 and EQOL- 5D measures in the study patients ...                                       | <b>41</b>   |
| <b>5</b>     | Relation between gender and HRQOL scores before liver transplant.....                       | <b>43</b>   |
| <b>6</b>     | Relation between gender and HRQOL scores three months post liver transplant .....           | <b>44</b>   |
| <b>7</b>     | Correlation coefficient between age and different aspects of the SF36.....                  | <b>45</b>   |
| <b>8</b>     | Relation between diagnosis and HRQOL scores before liver transplant.....                    | <b>46</b>   |
| <b>9</b>     | Relation between diagnosis and HRQOL scores three months post liver transplant.....         | <b>47</b>   |
| <b>10</b>    | Relation between working status and HRQOL scores before liver transplant.....               | <b>48</b>   |
| <b>11</b>    | Relation between working status and HRQOL scores three months post liver transplant         | <b>49</b>   |
| <b>12</b>    | Relation between monthly income and HRQOL scores before liver transplant .....              | <b>50</b>   |
| <b>13</b>    | Relation between monthly income and HRQOL scores three months post liver transplant.....    | <b>51</b>   |
| <b>14</b>    | Relation between educational level and HRQOL scores before liver transplant .....           | <b>52</b>   |
| <b>15</b>    | Relation between educational level and HRQOL scores three months post liver transplant..... | <b>53</b>   |
| <b>16</b>    | Relation between disease severity and HRQOL scores before liver transplant .....            | <b>54</b>   |
| <b>17</b>    | Relation between disease severity and HRQOL scores three months post liver transplant ..... | <b>55</b>   |

| <b>Table</b> | <b>Title</b>                                                                                | <b>Page</b> |
|--------------|---------------------------------------------------------------------------------------------|-------------|
| <b>18</b>    | Relation between disease duration and HRQOL scores before liver transplant .....            | <b>56</b>   |
| <b>19</b>    | Relation between disease duration and HRQOL scores three months post liver transplant ..... | <b>57</b>   |

## LIST OF FIGURES

| <b>Figure</b>                   | <b>Title</b>                                                                                                    | <b>Page</b> |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------|
| <b>In Review of Literature:</b> |                                                                                                                 |             |
| <b>1</b>                        | Liver transplantation; (A) before, diseased liver; (B) after, donor liver in place .....                        | <b>5</b>    |
| <b>In Results:</b>              |                                                                                                                 |             |
| <b>1</b>                        | SF-36 and VAS measures in the study groups before, one month and three months after liver transplantation ..... | <b>42</b>   |
| <b>2</b>                        | EQ- 5D measures in the study patients .....                                                                     | <b>42</b>   |

## LISTS OF APPENDICES

| <b>Appendix</b> | <b>Title</b>                                                       |
|-----------------|--------------------------------------------------------------------|
| <b>I</b>        | A structured interview Sheet .....                                 |
| <b>II</b>       | Short Form- 36 (SF-36) Questionnaire .....                         |
| <b>III</b>      | Euro Quality of life - 5 Dimensions (EQ-5D)<br>Questionnaire ..... |
| <b>IV</b>       | Protocol.....                                                      |

## **LIST OF ABBREVIATIONS**

- AIH : Autoimmune Hepatitis
- ALT : Alanine amino Transferase
- AST : Aspartate amino Transferase
- CIT : Cold Ischemia Time
- CMV : Cytomegalovirus
- CNI : Calcineurin Inhibitor
- CTP : Child-Turcotte-Pugh
- DM : Diabetes Mellitus
- EASL : European Association for the Study of the Liver
- ESLD : End Stage Liver Disease
- EQ-5D : Euro Quality of life- 5 Dimensions
- HBV : Hepatitis B Virus
- HBIg : Hepatitis B Immune globulin
- HCC : Hepato Cellular Carcinoma
- HCV : Hepatitis C Virus
- HIV : Human Immunodeficiency Virus
- HRQOL : Health-Related Quality of Life
- INR : International Normalizing Ratio
- IPGF : Initial Poor Graft Function
- LDLT : Living Donor Liver Transplantation
- LT : Liver Transplantation
- MELD : Model for End-Stage Liver Disease
- OLT : Orthotopic Liver Transplantation
- PBC : Primary Biliary Cirrhosis
- PELD : Pediatric End-stage Liver Disease
- PGNF : Primary Graft Non-Function
- PSC : Primary Sclerosing Cholangitis
- PVT : Portal Vein Thrombosis.

- QOL : Quality of Life
- SF : Short Form
- UNOS : United Network for Organ Sharing
- VAP : Ventilator-Associated Pneumonia
- VAS : Visual Analogue Scale
- WHO : World Health Organization



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# INTRODUCTION & AIM OF THE STUDY

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## INTRODUCTION

Liver transplantation (LT) is the procedure of choice for a wide range of diseases that result in acute or chronic end-stage liver disease. It may also be considered as treatment for a limited number of carefully selected patients who have liver tumors resectable only by total hepatectomy that have not metastasized outside the liver (**Barker, Heidi, James, & Markmann, 2008**). It is perceived as the only effective treatment for them and is considered as a procedure not only to save lives, but also to improve the quality of life (**Luo et al., 2012**).

Viral hepatitis is the most significant public health problem facing Egypt today. Hepatitis C Virus (HCV) prevalence rates in the general population are estimated at between 10-15% (**Ministry of Health and Population, 2008**). It is considered the main cause of liver cirrhosis and liver cancer in Egypt (**El Wakil, 2006**). This has led to increasing numbers of patients who are in desperate need of liver transplantation (**El-Gazzaz, & El-Elemi, 2010**).

To date, cadaveric liver transplantation is not legal in Egypt, so introducing living-donor liver transplantation has seemed to be the only logical choice to save many patients (**El-Meteini, Khalaf, & El-Sefi, 2005**). In January, 2010, the number of living donor liver transplants performed topped out to more than one thousand procedures done in 11 centers. The case number 1000 has been done in the National Liver Institute in Menoufeyia (**Abdeldayem, 2010**).

According to statistical record of Ain Shams Specialized Hospital, the number of patients having liver transplantation between 2008 until

December 2011 was 98 patients (**Center of Information System, Ain Shams Specialized Hospital, 2012**).

Health related quality of life (HRQOL) is a quantitative estimation of a patient's self-assessment of his/her physical, functional, social and psychological dimensions of life (**Ayoub, Saab, Bownik, Younossi, & Durazo, 2011**). Increasing emphasis has been placed on assessment of the impact of liver transplantation on recipients HRQOL and functional status (**Pinson et al., 2008**).

Measurement of HRQOL can provide a more complete estimate of the overall health of liver transplant candidates and recipients. Previous research has demonstrated that functional performance and physical HRQOL improve after liver transplantation to levels close to those of the general population (**Russell, Feurer, Wisawatapnimit, Salomon, & Pinson, 2008**).

Traditionally, the goal was to increase the length of patients' life after LT by increasing survival rates and preventing postoperative complications. Now clinicians have become more focused on improving the quality of that life. They have the opportunity to focus on patients' postoperative priorities, which are to return closely to the quality of life and to participate in life activities that they most enjoyed before (**Bownik, & Saab, 2009**).

In general, there are four main benefits of HRQOL assessments in health care: treatment comparisons, evaluating the burden of the disease in terms of HRQOL, health economics evaluations to determine the best use of health care resources, and treatment choices in individual patient care (**McGee, 2004**).