

Patients Awaiting Liver Transplants' Use of Mental Health Services

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Abstract

Prior to liver donation, psychopathology is frequently linked to worse transplant outcomes and health-related quality of life (HRQOL). Regardless of the severity and complications of the illness, low HRQOL among patients with ESLD is linked to higher mortality. It should come as no surprise that people with ESLD have higher than average rates of depressive disorders, with estimates as high as 64%. Depression raised the relative risk of post-transplant mortality by 65%, according to a meta-analysis of 20 trials (relative risk, 1.65; 95% CI = 1.34-2.05). During this uncertain waiting time, however, few studies have concentrated on assessing additional types of psychological distress. For instance, studies investigating anxiety and trauma symptoms among patients with ESLD are scarcer, despite reports of increased depression prevalence.

Keywords: Psychopathology • Post-transplant stress • Psychological distress • Anxiety

Introduction

Patients with end-stage liver disease (ESLD) awaiting transplant often face long wait times during which they experience not only deterioration in health, but also ongoing psychosocial stressors associated with chronic illness management. Currently, in the U.S., over 14,000 people are awaiting liver transplantation; every year, 6000 are transplanted and upward of 2000 of these individuals die or become too ill for transplant [1]. Patients with liver disease often have a history of psychiatric illness such as substance use disorder and depression. These individuals are inherently at risk for increasing psychological distress as they cope with the stresses of chronic illness and awaiting transplant. Thus, the importance of accurately identifying and intervening with these high-risk patients is vital to optimize quality of life and transplant outcomes over time.

Similarly, as in other illnesses, the fatigue associated with advanced disease can prevent individuals from engaging in regular activities, contributing to a lack of positive reinforcement in one's environment and leading to social withdrawal and disengagement. The impact of anxiety and trauma symptoms on physical health has been demonstrated in other seriously medically ill populations such as patients with cancer, heart failure, and end-stage renal disease (ESRD); these symptoms may first predispose, and second, worsen, health outcomes over time (e.g., adherence, inflammation, mortality). Moreover, a review of the literature does not reveal any formal assessment of patient-reported mental health service utilization or perceived barriers regarding access to psychological services. These gaps in the literature are salient among other transplant populations such as those with ESRD as well, but the present study focuses on those with ESLD as a starting point for future research.

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Literature Review

In light of these limitations, the current investigation sought first, to identify the prevalence of symptoms of psychological distress with the use of both a gold standard clinical assessment tool and self-report measures of depression, anxiety, and trauma and second, to conduct a needs assessment regarding patient-reported experiences with mental health service utilization and barriers to access. Relationships between the presence of a psychiatric disorder, clinically significant mood symptoms, HRQOL, and mental health treatment history were also explored to clarify the mental health service needs of this patient population [2,3]. We hypothesized that there would be a high prevalence of psychiatric disorders and psychological symptoms and that these symptoms would be associated with worse HRQOL. We also hypothesized that many participants would not be engaged in mental health treatment despite significant psychiatric symptoms.

Liver transplantation is the only therapeutic option to increase survival and improve quality of life in patients with chronically terminal liver disease. In the transplantation process, great advances in the medical and surgical fields have developed in recent years. However, psychological changes are underestimated in these patients despite psychiatric comorbidity being a factor that has an adverse effect on prognosis in any disease. There are more services with psychological protocols in various fields including oncology, dermatology, nephrology, pain research, and palliative treatment. Liver surgery is major in patients at risk and often causes more stress and anxiety than conventional surgery. Therefore, some authors have suggested that there are many frequent psychological complications associated with transplantation such as mood disorders, anxiety disorders, delirium, fantasies about the donor, dissatisfaction with body image, and other disorders including adaptive, somatoform, and eating disorders. However, despite scientific evidence, in daily clinical practice, these problems have not been taken into account, leading to important clinical implications. With the objective of qualitatively improving the transplantation process, it is of great interest to assess, diagnose, and treat psychological changes in patients on the liver transplantation waiting list. It will also be useful to be able to introduce an integrated program with specific clinical, scientific, and social objectives. The objectives of the present study were (a) to describe the establishment of the psychological care unit in a liver transplantation unit and to review its operation, and (b) to evaluate and diagnose psychological changes in patients on the liver transplantation waiting list [4].

Discussion

A loss of health can be seen as a crisis situation, with effects extending to the relatives of patients and affecting their quality of life. Studies have warned of the high incidence of mental disorders among caregivers of the chronically sick. Anxiety, mood swings, stress, a lack of preparation for coping with the demands of patients, and feelings of anger, fear, guilt, and loneliness are all common complaints among informal caregivers.

The burden on caregivers may be understood as the need for work and adjustment experienced by a family with a chronic patient as one of its members. Family burden is a multidimensional event that includes constant care for the patient, financial worries, and coping with the disruption of the family routine and changes in family member roles. Two types of burdens have been observed among informal caregivers: objective and subjective. To assess objective burden, practical issues and time spent in daily care for the patient are considered. Subjective burden, on the other hand, is associated with affective and emotional issues and the constraints, feelings of guilt, and worries associated with the well-being of the patient.

It is notable that the physical capacity of patients with chronic liver disease awaiting liver transplantation is, in most cases, particularly impaired. Apart from the negative consequences associated with the disease, patients have significant emotional suffering because of the uncertainties and fears related to the procedure. Additionally, losses in the functional capacity of patients may be a factor in the stress and burden of relatives and caregivers. The aim of this study was to evaluate the burden, stress, and psychosocial aspects of informal caregivers of patients awaiting liver transplantation.

After the advent of potent immunosuppressants, the number of solid organ transplants has increased substantially. The organs that are transplanted from one person to another include kidneys, liver, heart, lungs, and pancreas among others. The field of transplant medicine has emerged as a growing specialty and has seen many innovative procedures, surgical techniques, and improved aftercare measures. Encouraging results have been obtained, with better patient outcomes and longevity. Since the conduct of first successful liver transplant in 1967, the number of liver transplants has grown steadily over the decades. It is now being conducted all over the world in increasing counts. Although around 6000 liver transplants are conducted in the United States in a year, the number of cases requiring transplant on the waiting list are far more than the number of procedures done in a year. With the live donor liver transplantation, the numbers of liver transplantations conducted has increased significantly [5-7]. The procedure of liver transplantation is carried out by a team of experts and specialists, who endeavor to improve outcomes by playing a role before, during and after the surgery. The psychiatrist/mental health professional can have a very important role to play in such a team. There can be mental health issues that lead to the liver transplant in the first place, for example, liver damage due to alcohol dependence or a suicidal attempt in which person intentionally takes overdose of acetaminophen leading to hepatic failure. Once the decision for liver transplant is taken, waiting for transplant may lead to anxieties about survival and availability of the organ. Patients may be apprehensive about asking potential donors for help in case of live donor transplantation. The transplant procedure as well the conditions leading to it can be quite stressful for the patients and may have psychiatric and psychosocial implications. Post-transplant, patients require regular compliance to lifelong immunosuppressant and modification in lifestyle, including abstinence from alcohol [8]. All these factors challenge the coping of the patients, and increase the likelihood of emergence of psychological symptoms. The psychiatrist/mental health professional with expertise in dealing with such problems, would be placed at a unique position to contribute to enhanced patient care, and improved outcomes. This review provides a broad overview of the various psychiatric and psychosocial issues pertaining to liver transplantation.

Psychiatric disorders in pre-transplant phase

Patients with liver failure requiring liver transplantation can have various psychological and psychiatric problems. Timely identification and treatment of these can lead to improvement in condition of the patient, thereby optimizing

the pre-operative fitness. An important aspect of evaluation is the proper documentation of the same. It not only serves the purpose of record keeping, but helps in clearer decision-making regarding management of psychiatric condition and better communication with other members of the treatment team. It is in general suggested that treatment recommendations need to be made, taking into consideration all the pertinent aspects of a particular patient. The most commonly encountered psychological problems include alcohol use disorders, opioid use disorders, anxiety disorders and depressive disorders. Alcohol liver disease (ALD) is one of the commonest reasons for undergoing liver transplantation. In most of such cases of ALD, diagnosis of alcohol dependence is tenable [9]. Debate has continued as to whether and when ALD patients should be considered for transplantation. Some argue from a moralistic standpoint that since alcohol had been consumed by a person willfully leading to complications, so scarce grafts should not be expended on alcohol users. Others assert that there is no difference in survival of ALD transplant cases as compared to others, and a majority of patients with ALD do abstain from alcohol after transplantation. Hence these patients should be considered for transplantation. Currently most centers require some duration of abstinence from alcohol before consideration for transplantation. The requisite duration varies from center to center. It has been seen that longer abstinence prior to transplantation reduces the chances of relapse after the transplant. However, other studies have shown that early transplant, even during the acute alcoholic hepatitis phase, is also associated with greater survival benefit over 2 years. Interestingly, early transplantation has been found as a protective factor against relapse to alcohol when compared to cirrhotic patients on wait list. Thus, deserving ALD patients should be offered transplantation.

Psychiatric evaluation

Identification and management of psychiatric problems in the pre-transplant phase is very important because these have a bearing on the post-transplant outcome. It has been shown that quality of life of candidates waiting for liver transplant is also influenced by psychiatric disorders. In a study which evaluated the quality of life of pretransplant patients, it was seen that physical and mental wellbeing in liver transplant candidates were influenced far more by psychiatric factors such as depression and coping strategies than by clinical and sociodemographic factors. Hence, identification and management of psychiatric disorders is of paramount importance to improve the outcome of patients waiting for the transplant and also in the post-transplant phase. The protocol for assessment varies from center to center. It has been suggested that active psychiatric illness is a modifiable risk factor for poor outcome in transplant recipients. Hence a comprehensive assessment is necessary. A group of assessment measures encompassing a wide variety of functions can be utilized to obtain a comprehensive understanding of the patient [10]. The assessment protocol can use a structured diagnostic instrument for psychiatric diagnosis, instruments to assess depression, anxiety and delirium, a structured personality assessment, coping inventories, neuropsychological batteries, and others as deemed necessary. It has been seen that structured interviews lead to better accuracy of psychiatric diagnosis as compared to unstructured traditional diagnostic assessment. The presence of psychiatric disorders can be evaluated by the initial use of screening questionnaires followed by detailed psychiatric evaluation [11]. Various screening questionnaires include generic instruments like General Health Questionnaire (GHQ) or disorder specific questionnaires like Primary Care Evaluation of Mental Disorders (PRIME-MD)-Patient Health Questionnaire (PHQ). PRIME-MD PHQ is a self-report screening instrument which can be used to screen/diagnose common mental disorders. It includes 8 diagnostic categories, viz. major depressive disorder, panic disorder, other anxiety disorder, bulimia nervosa and other sub threshold disorders such as other depressive disorders, probable alcohol abuse or dependence, somatoform disorder and binge eating disorders. There is high degree of agreement on the presence of psychiatric illness as assessed by PHQ and physicians.

Conclusion

The numbers of liver transplantation bases has been steadily rising over time, and there is increasing emphasis on psychosocial assessment

in order to improve patient outcomes. Such an assessment should be multidimensional covering past and present psychiatric and substance use disorders, psychological strengths and weaknesses, ability to give informed consent, availability of financial and social supports, and so on. The aim of this assessment is a better understanding of the patient. The assessment of donors also needs to be emphasized. All the liver transplant units should have a psychiatrist/mental health professional as a part of the transplant team who should work with the patient, the donor and the family of both to address the psychiatric and psychosocial issues arising in the context of liver transplant.

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Conflict of Interest

There is no conflict of interest by authors.

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