

## Literature Review

# Dealing with Loneliness in Hemodialysis Patients: How to Prevent the Detrimental Effects of Loneliness

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### Abstracts

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**Introduction:** Chronic Renal Failure (CRF) refers to advanced, irreversible, and progressive renal failure. Existing treatment for CRF patients includes hemodialysis (HD), peritoneal dialysis, and kidney transplantation. HD is the most common replacement therapy for kidney function. HD patients often experience severe psychological problems such as anxiety, depression, loneliness, and many difficulties related to stress and unhealthy coping mechanisms. To describe preventive actions against the detrimental effects of loneliness in HD patients. **Methods:** Literature review. **Results:** The feeling of loneliness is always annoying and unwanted. Loneliness may limit human development and interfere with normal functioning. It is associated with a sense of hopelessness, abandonment or boredom, reduced self-esteem, alienation, an external sense of control and aggression, depression, hostility, and even suicidal tendencies. Feelings of sadness, loneliness, and fatigue are significant factors in reducing patient treatment adherence and even lead to premature death. **Conclusions:** It is paramount to cope with disease-related stress and anxiety in healthy ways. Comprehensive psychosocial intervention in HD patients could bring positive impacts on mental well-being to strengthen their sense of self, overcome loneliness, connect with others, and create good resilience for having to live with their chronic illness.

**Keywords:** Loneliness, Hemodialysis, Psychosocial Intervention.

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## INTRODUCTION

Chronic Renal Failure (CRF) refers to advanced and irreversible progressive renal failure. Existing treatments for patients with CRF include hemodialysis (HD), peritoneal dialysis (Continuous Ambulatory Peritoneal Dialysis/CAPD), and kidney transplantation, among which HD is the most common replacement for kidney function [1].

The use of this method to patients, even though increasing life expectancy, exposes them to a wide range of physical, psychological, and mental disorders and behavioral changes such as anxiety, depression, loneliness, isolation and fatigue, and social and economic problems that affect their overall quality of life. On the other hand, HD patients are more vulnerable to being infected due to immunodeficiency compared to other people (the transmission of the COVID-19 virus is more severe in people with several diseases) [1-3].

Loneliness is a cognitive factor that affects health and well-being and has immediate and long-term consequences on individual mental health, especially in HD patients [1]. The feeling of loneliness is one of the psychological and social problems in HD patients to which less attention has been paid so far. Researchers believe that many factors, including depression and anxiety, poor family support, and poor physical function are associated with feelings of loneliness. Feelings of sadness and loneliness and the effects of fatigue are essential factors in reducing patients' adherence to treatment, increasing their medical problems endangering their health, and even leading to premature death [1].

Due to the severity of physical and psychological consequences of this problem among HD patients and the effect of psychological disorders such as depression, loneliness, and lifestyle in the onset of this problem and the necessity of serious attention to various low-risk and non-physical treatments, this study aim how to prevent the detrimental effects of loneliness [1]. In this regard, attention to

lifestyle changes and the treatment benefits is paramount.

## REVIEWS

### The Feeling of Loneliness in HD Patients

CRF is one of the major public health issues in the world. End Stage Renal Disease (ESRD) is a stage of CRF that results in mortality without Renal Replacement Therapy (RRT). RRT consists of dialysis and kidney transplants. There are two types of dialysis, namely peritoneal dialysis/CAPD and hemodialysis (HD) [4]. The most commonly used treatment for patients with ESRD is HD. Even though HD can increase patients' longevity, it is not a full substitute for kidney function. HD patients face a wide range of physical, psychological, and social problems [1].

The number of patients with CRF is doubled every 7 years and the number of patients who need HD is increased by 15% annually [1]. Moreover, some studies indicated that HD patients suffered from psychological issues, approximately 70.5% of them had low levels of depression and 64% reported low levels of anxiety. In addition to loneliness, feeling fatigued is among the other psychological traumas of HD patients. The prevalence of fatigue in patients undergoing HD varies from 60 to 97% [4].

Loneliness is an unpleasant emotional state in which a person feels apart from, yet in need of others – [5]. According to Valtorta and Hanratty [6]: loneliness is a subjective negative feeling associated with a perceived lack of a wider social network (social loneliness) or absence of a specific desired companion (emotional loneliness). Loneliness is different from solitude.

Loneliness and social isolation frequently co-occur and are all too common in older adults, but not equal to each other. As a generally accepted concept, loneliness is defined as the subjective feeling of being alone while social isolation describes an objective state of an individual's social environments and interactional patterns. Both of them can

exert a detrimental effect on health through shared and different pathways [7].

Solitude is described by researchers as an unavoidable necessary condition stemming from human nature. Other characteristics of loneliness include ambiguity, in-definiteness, and inexpressibility. It is universal and timeless, extremely individualized because it is experienced subjectively and very specifically, differently by each person [2].

According to Sullivan, 1953 [5] the roots of loneliness are based on an unpleasant childhood experience resulting in unfulfilled intimacy needs, for example, the loss of a parent through divorce or death. However, in adult life, situational stress such as chronic illness may combine with the early interpersonal experience to precipitate what Sullivan describes as feeling more terrible than anxiety. It has been suggested that loneliness has been associated with depression. A study by Kara and Mirici (2004) assessed the relationship between loneliness and depression in patients with Chronic Obstructive Pulmonary Disease (COPD) and their spouses and found that there was a positive association between loneliness and depression. Some studies have found an association between feelings of loneliness, emotional and psychological fatigue with lifestyles and self-care behaviors in people with a specific and chronic illness that can lead to premature death [5, 8-9].

Older adults are also more vulnerable to social isolation and loneliness as they are functionally very dependent on family members or support from community services [7].

### **Physical and Psychosocial Adverse Impacts**

Loneliness is associated with various physical and mental repercussions, including elevated systolic blood pressure and increased risk for heart disease. Both loneliness and social isolation have been associated with an increased risk of coronary artery disease-associated death, even in middle-aged adults without a prior history of myocardial infarction. One of the most common problems in

patients with ESRD under HD is sexual dysfunction [7].

Furthermore, research has shown that both loneliness and social isolation are independent risk factors for higher all-cause mortality and incident dementia [7]. Being lonely has several adverse impacts on mental health:

- Reduced time in bed spent asleep (7% reduced sleep efficiency) and increased wake time after that
- Increased depressive symptomatology
- Impaired functional status
- Vision deficits
- Negative change in the quality of one's life
- Risk of suicide (suicide attempts and completed suicide among older adults)
- Worsening cognition over time

For social isolation, the mechanism may be related to behavioral changes, including an unhealthy lifestyle such as smoking, alcohol consumption, lower physical activity, poor dietary choices, and noncompliance with medical prescriptions [7].

Patients undergoing HD, in addition to facing psychological changes, experience many behavioral changes including a lack of self-esteem, decreased self-confidence, anxiety, depression, isolation, and delusions. Self-esteem is the trust in the ability to think and deal with challenges correctly, have a happy life, and feel worthy and valuable. Since self-esteem is the most decisive factor in the process of psychological development as a person, as much as a person fails to acquire self-esteem, they suffer from anxiety, psychological distress, self-distrust, escaping the truth, a sense of inadequacy in life, social isolation, and loneliness [1]. The sense of loneliness is also considered to be a condition in which a person experiences a lack of communication with others and feels unfavorable, missing companions, the unpleasant and negative aspect of the lost relationships, and losing a qualitative level of relationship with others [1, 10].

Some researchers reported that uncertainty about the future is the most psychological

concern of people undergoing HD. According to Mishel's definition, uncertainty is the inability to determine the meaning of illness-related events and it occurs when the decision-maker is unable to assign definite values to the objects and events. Uncertainty is a significant source of stress in chronic disease and is viewed as a major feature of the illness experience. Uncertainty can be important and more worthy compared to other aspects of the elderly life (loneliness, despair, comorbidity of disease, disability, and mental and psychological problems). It is present in phases of diagnosis, treatment, and prognosis [11].

Nearly all patients with Chronic Kidney Disease (CKD) described experiences of depression and anxiety. They use the terms of depression as hopelessness, sadness, or lack of purpose and anxiety is most commonly manifested as fear and feeling scared, both about their health and also the impact of their health on those around them [12].

### **Preventing the Detrimental Effect of Loneliness**

The feeling of loneliness is always annoying and unwanted. Loneliness limits human development and interferes with normal functioning. It is associated with a sense of hopelessness, abandonment or boredom, reduced self-esteem, alienation, an external sense of control and aggression, depression, hostility, or even suicidal tendencies [2] and even lead to premature death [13].

Patients on HD should receive education, information, and psychological interventions to reduce some degree of loneliness. Early diagnosis of loneliness and the implementation of appropriate treatment may enhance the quality of life [14].

### **Tips for Preventing the Detrimental Effect of Loneliness**

There are ways to maintain feelings of being connected to others by organizing our activities every single day [1, 7]. Some tips are:

1. Keep connections:

a. Spend more time with your family. This is vitally helpful to depend against loneliness.

b. Maintain social connections with technology along with the telephone/smartphone or social media platforms. Conversations with the regular schedule online with family members or loved ones

2. Maintain basic needs and healthy activities:

a. Ensure basic needs are met (food, medication)

b. Structure every single day (television, youtube)

c. Maintain physical and mental activity

d. Pursue outdoor activities

3. Manage emotions and psychiatric symptoms:

a. Manage cognition, emotion and mood, positive thoughts, conscious breathing, meditation, and other relaxation techniques [13, 15, 19, 20].

b. Pay attention to psychiatric symptoms, anxiety, depression, and sleep disturbance are common, and medical assistance should always be thought of when necessary.

c. Take special care of older people with dementia and the caregivers

Social support has been reported to be one of the factors that might play an important role during ESRD and protect HD patients from depression. A prior study showed that social support was associated with quality of life in HD patients and also mentioned that social support increased adherence and reduced depression in HD patients. Peer support decreased anxiety, depression, and stress in HD patients as well. Along with social support, religion, and spiritual therapy also impacted individuals' lives and promoted their life quality [4, 12]. Existential consciousness group therapy (ECGT) on loneliness, fatigue, and lifestyle is effective in HD patients and caregivers [13, 16-18].

### **The Importance of Mental Resilience**

The concept of resilience explains the positive adaptation of a person despite adverse living conditions or trauma. Grotberg de-

scribes resilience as a “Universal ability that enables a person, group or community to prevent, minimize or overcome the harmful effects of the misfortune experienced” and Niejodek, I, H describes it as a permanent personality trait, characterized by the ability to recover from unpleasant and difficult situations and to adapt to constantly changing living conditions [2].

The assessment of resilience and loneliness was constructed by M.Rys, named Psychological Resilience Scale (PRS) and Me Among Others (MAT) to know the level of loneliness [2].

### CONCLUSION

HD is a stressful process that is associated with many different psychological problems and can lead to psychological disorders in patients. The feeling of loneliness is one of the psychological and social problems in HD patients to which less attention has been paid so far. Research has shown that both loneliness and social isolation are independent risk factors for higher all-cause mortality.

Patients on HD should receive education, information, and psychological interventions to reduce some degree of loneliness. Early diagnosis of loneliness and the implementation of appropriate treatment may enhance the quality of life.

Some tips for preventing the detrimental of loneliness:

- Keep Connections
- Maintain basic needs and healthy activities
- Manage emotional and psychiatric symptoms

Social support, religion, and spiritual therapy impacted individuals’ lives and promoted their life quality. ECGT is effective in HD patients and caregivers.

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Not declared.

### CONFLICT OF INTEREST

The authors have no conflict of interest.

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