ABSTRACT: In this brief review we found 6 studies on illness perception of hemodialysis patient. From all 3 studies effect of illness perception intervention on adherence to treatment in hemodialysis patient, and 2 ones were effect of self regulation intervention on clinical outcomes and quality of life, from which only one study compared the illness perception in hemodialysis and peritoneal dialysis. The findings show different results in studies of the effects of the disease on patients’ lives is perceived. We suggest additional studies on effectiveness of illness perception in physical disorders like kidney diseases and dialysis.

Keywords: illness perception, hemodialysis, renal failure, intervention.

INTRODUCTION

End-stage renal disease (ESRD) is the term used when renal replacement therapy is required because the kidneys cease to function permanently, in most cases as a consequence of another underlying physical disorder (e.g., diabetic nephropathy, hypertensive nephrosclerosis). End Stage Renal Disease patients are treated by dialysis for providing their health (Young et al, 1996). Dialysis is an artificial way of filtering blood with the aim of removing toxins and excess fluids from the blood. In hemodialysis (HD) the blood is purified by an external artificial kidney machine (Hakim et al, 1996). Prevalence of chronic renal failure in the world is 242 cases per one million people that about 8% are added to this number annually (Heidarzadeh et al, 2010). According to the reports of research center for kidney patients and kidney transplant in Iran in 2007, about 29 thousand people suffered from chronic renal failure in the country that among this number 14 thousand were treated by hemodialysis (Aghighi et al, 2009). Chronic renal failure is among chronic diseases that people due to disease and its long-term treatment always play role of a patient in their life. These patients face with many challenges in order to treatment (Kaptein et al, 2003).

An important task for psychological research in health is to understand the factors that influence a health behavior for the management of illness and to identify appropriate targets for intervention. One of the effective models for perceiving the role of cognitive factors in health consistency behaviors and disease outcomes is Self-Regulation Model (SRM) (Petrie et al, 2007). The CSM hypothesizes that individuals create mental representations of their illness based on the concrete and abstract sources of information available to them in order to make sense of and manage the problem (Christensen et al, 1996). Self-regulation behavioral model emphasizes on the importance of behaviors related to adhering treatment. According to this model, people play a dynamic and active role in their disease perception and at the time of facing disease threat, they are always looking for returning to their last equilibrium. So a person who has positive perceptions of his/her disease is able to perceive and analyze other signs and dimensions of the disease correctly and realistically that these perceptions can be effective on behaviors related to health (Takaki et al, 2003). The cognitive representation of the illness consists of five main domains: identity (the name and symptoms that the patient identifies as part of the illness), the cause of the illness, the timeline for the illness (how long the patient thinks it will last), the amount of control the patient perceives they have over the illness, and the perceived consequences of the illness on the patient’s life (Moss-Morris et al, 2002). Later research has added illness coherence (how well the patient feels they understand the illness), perceptions of treatment control (how much treatment can help to control the illness), and the emotional representation (how much patients are emotionally affected by the illness), to assessments of illness perceptions (Broadbent et al, 2006).

In recent years, many studies investigating hemodialysis patients’ illness beliefs or perceptions have been based on Leventhal’s self-regulatory model (Hagger et al, 2003). This study aimed to review studies on illness perceptions in dialysis patients was conducted.
METHOD

We looked for scientific papers on illness perception in hemodialysis patients through past 10 years (2002 to 2012). Searching Pub Med, Google scholar and Medline libraries we found 6 studies.

RESULT

Based on the year of publication we describe the studies as follow

Christensen et al (2002) conducted a study to examine the efficacy of illness perception intervention designed to increase adherence to fluid-intake restrictions among hemodialysis patients. Adherence to fluid restrictions was defined using interdialytic weight gain (IDWG). The Group × Time interaction was significant, indicating that patients in the 2 groups exhibited a differential pattern of change in fluid-intake adherence across the 8-week follow-up period. The observed group differences were, in part, due to a trend toward increasingly better adherence in the intervention group and poorer adherence in the control group across the follow-up period (Christensen et al, 2002).

In 2002, Timmers and colleagues studied 133 patients on hemodialysis have been done explored illness perceptions of end stage renal disease (ESRD) patients on both hemodialysis (HD) and peritoneal dialysis (PD) treatment, and their associations with quality of life. Leventhal's self-regulation model (SRM) was used as a theoretical framework. Compared to HD patients, PD patients experienced more personal control and had a better understanding of the illness. Perception of more symptoms, more consequences and lower personal control were associated with lower well-being. The concept of illness perceptions is useful in understanding the impact of ESRD and of dialysis treatment on quality of life. Result showed that Interventions aimed at providing more knowledge about ESRD and dialysis, and provision of skills to coping with the illness and its consequences may improve quality of life in dialysis patients (Timmers et al, 2002).

Covic and colleagues (2004) demonstrates important relationships between illness representations and QOL in end-stage renal disease patients treated by HD (Covic et al, 2004).

Arnold et al (2008) in their study entitled: “Predicting Fluid Adherence in Hemodialysis Patients via the Illness Perception Questionnaire –Revised” assessed the illness perception in 116 hemodialysis patients. The results of this study suggested that patient illness perceptions as measured by the Illness Perception Questionnaire did not predict adherence to fluid restrictions. Gender was the only identified variable as being a significant predictor of fluid adherence in this hemodialysis patient population. A sample of patients was recruited from three hemodialysis centers in the Los Angeles area and 116 participants completed the Illness Perception Questionnaire – Revised. Fluid adherence was measured by the Interdialytic Weight Gain (IWG) (Arnold et al, 2008).

Chilcot et al (2009) conducted a study to examine relationship between illness representations and fluid nonadherence among hemodialysis patients. Illness perceptions were assessed [Revised Illness Perception Questionnaire (IPQ-R)] in 99 HD patients. Clinical parameters were collected and averaged over a 3-month period prior to and including the month of IPQ-R assessment. Fluid nonadherence was defined using interdialytic weight gain (IDWG) and dry weight (ideal weight). Nonadherent patients had timeline perceptions significantly lower than those of adherent patients. Result of this research showed that illness representations appear to predict fluid nonadherence among HD patients. Extending the CSM to investigate specific perceptions surrounding treatment behaviors may be useful and merits attention in this setting (Chilcot et al, 2009).

Another study by Kim and colleagues (2010) conducted on 151 hemodialysis patients suggest that illness perceptions did not independently predict any clinical outcomes in patients on maintenance HD. This study was conducted to examine illness perceptions and treatment adherence rates in patients on maintenance HD, and to determine if illness perceptions and adherence behaviors influence clinical outcomes (Kim et al, 2010).

DISCUSSION AND CONCLUSION

Research based on the common-sense model of illness [5] has shown that the way patients make sense of their disease can strongly influence their trajectory of recovery. In their studies, patients respond to symptoms and signs of illness by forming cognitive and emotional representations of the threat, which guide coping responses.

REFERENCES


