

# Sources of funding out of pocket expenditure among end stage renal disease patients attending a Tertiary care hospital of India

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## Abstract

*Chronic kidney disease (CKD) is a worldwide public health problem, both for the number of patients and the cost of treatment involved. A retrospective study of 2 years was conducted among CKD Stage-V (End stage renal disease) patients admitted in nephrology wards, those undergoing dialysis and kidney transplantation in SKIMS between 1st October 2015 and 30st September 2017. In our study, most of the patients had more than one source of funding the expenditure on treatment of ESRD. 70.0% (n=140) patients had taken borrowings from friends/relatives, 62.50% (n=125) patients had sold their assets, 51.00% (n=105) had used their savings. Only 2.0% (n=4) had some form of health insurance. 25.0% (n=50) patients had received financial assistance from government schemes*

*Key words: End stage renal disease, Health, distress, Financing, Expenditure, Out of pocket*

**Conflict of interest: None**

**Source of funding : None**

**Ethical Clearance : Taken**

## Introduction

Chronic kidney disease (CKD) is a worldwide public health problem, both for the number of patients and the cost of treatment involved. In India, it is reported that the progression of CKD to End stage renal disease (ESRD) is rapid due to the factors such as lack of medical facilities, poor control of risk factors and delayed referral to nephrologists (1).

The prevalence of CKD and ESRD are estimated at 7852 and 1870 per million respectively (2, 3). In India the number of deaths due to ESRD was 3.78 million in 1990 (40.4% of all death) and is expected to increase up to 7.73 million in 2020 (66.7% of all death) (4).

It is estimated that only 10-20% of ESRD patients in India continue long term renal replacement therapy (RRT). It is estimated in India in 1 year, there are 3,500 new renal transplant + 3,000 new continuous ambulatory peritoneal dialysis (CAPD) initiation + 15,000 new maintenance hemodialysis (MHD) patients (5).

Limited resources for health care and lack of protection against catastrophic health spending have led to over-reliance on Out of pocket (OOP) health expenditure in India (6). This in turn results in exposure to high financial risk, which pushes patients and their families into catastrophic poverty following diagnosis of life consuming diseases like cancer & ESRD(7).

With this background, the present study was undertaken with the idea to understand the sources of funding out of pocket expenditure among ESRD patients.

### **Aims and Objectives**

To identify sources of funding out of pocket expenditure among ESRD patients at SKIMS.

### **Material and Methods**

#### **Study Design and Duration**

A retrospective study of 2 years was conducted among CKD Stage-V (End stage renal disease) patients admitted in nephrology wards, those undergoing dialysis and kidney transplantation in SKIMS between 1st October 2015 and 30st September 2017.

#### **Sampling**

Using simple random sampling, 20% of the patients admitted in nephrology wards, those undergoing dialysis and kidney transplantation in SKIMS.

#### **Study Tool**

After obtaining the list of patients admitted in nephrology wards, those undergoing dialysis and kidney transplantation in SKIMS, the patients were contacted, consent taken from them after explaining the scope and purpose of study and were subjected to a questionnaire which was pretested by conducting a pilot study. The response rate was 86%. Sources of funding of out of pocket expenditure was studied.

#### **Exclusion Criteria:**

Those patients who refuse to participate in the study were excluded from the study

#### **Statistical Analysis:**

Data was analyzed with the help of SPSS software (version 23.0). All the categorical data was shown in the form of frequency and percentages & continuous data was shown in the form of averages and standard deviations.

### **Results**

#### **A total of 200 patients were studied.**

In our study, most of the patients had more than one source of funding the expenditure on treatment of ESRD. 70.0% (n=140) patients had taken borrowings from friends/relatives, 62.50% (n=125) patients had sold their assets, 51.00% (n=105) had used their savings. Only 2.0% (n=4) had some form of health insurance. 25.0% (n=50) patients had received financial assistance from government schemes

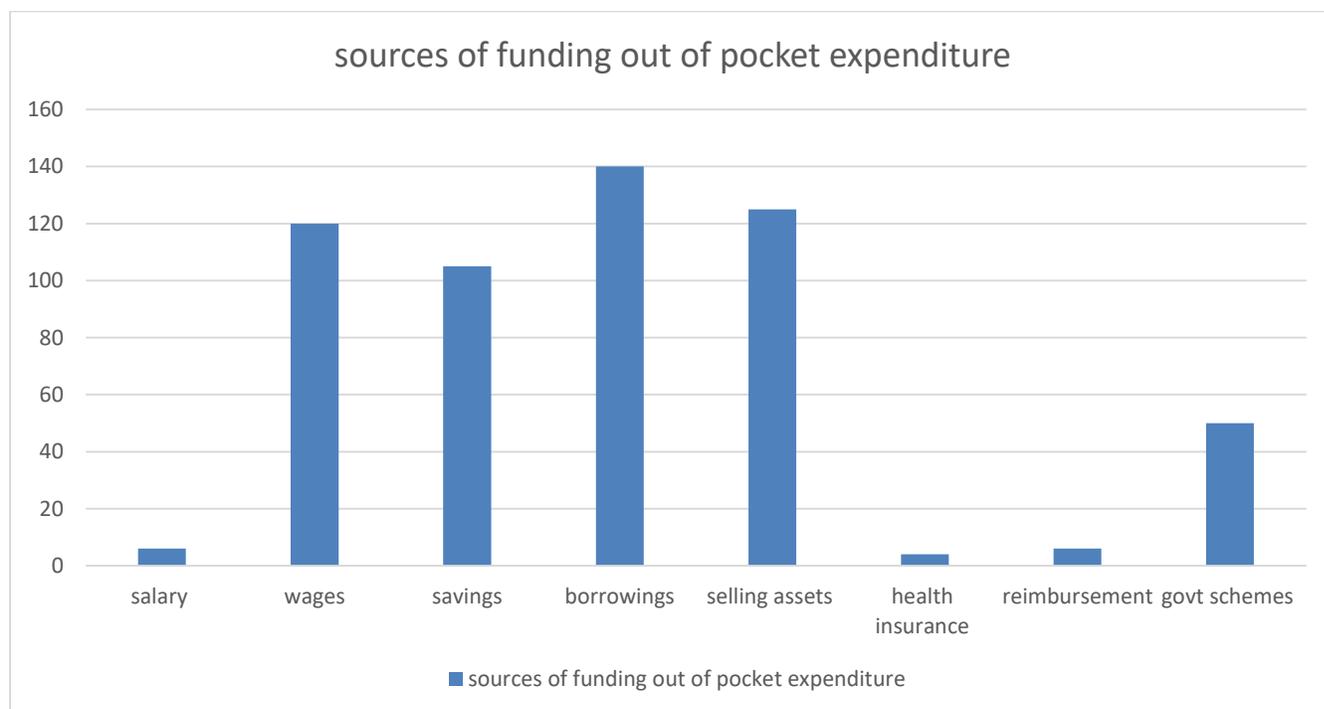


Figure 1: Showing different sources of funding the expenditure on treatment by ESRD patients.

## Discussion

Health care delivery in India is going through a process of transition, more so the tertiary specialty care of chronic diseases like diabetes, hypertension, cardiac diseases, kidney or liver failure, mental illness and cancer. Patients, more commonly those from the lower economic strata, have difficulty in availing the health care services because of the costs involved in diagnostic and curative procedures. Even in public hospitals where the cost of care is low, patient had to bear several direct and indirect costs, commonly referred to as out-of-pocket expenditure (OOPE), which impoverish them further. As a result, patients with life threatening diseases requiring tertiary care often go untreated even if they are aware of the availability of high quality services. It can also lead to delay in diagnostic and curative procedures and even causing deaths of several thousands of poor patients. This issue has been a concern for nation's health policy, which should address the cost, quality and accessibility of health care (8).

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The study by Gunjeet Kaur et al reported that 63% patients used borrowings from friends/relatives and 30% patients sold assets to fund the out of pocket expenditure (9) Raja Ramachandran et al also observed that selling property was the major coping mechanism for out of pocket expenditure (10).

## Conclusion

Chronic kidney disease (CKD) is a worldwide public health problem, both for the number of patients and the cost of treatment involved. In our study, most of the patients had more than one source of funding the expenditure on treatment of ESRD. 70.0% (n=140) patients had taken borrowings from friends/relatives, 62.50% (n=125) patients had sold their assets, 51.00% (n=105) had used their savings. Only 2.0% (n=4) had some form of health insurance. 25.0% (n=50) patients had received financial assistance from government schemes.

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