

# Assessment of Risk Factors and Likelihood of Kidney Disease among General Patients

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**Abstract:** *The kidney disease includes conditions that damage kidneys and decrease their ability to keep healthy by doing the jobs distend. If kidney disease gets worse, waster can build to high levels in blood and make feel sick , may develop complications like high blood pressure, anemia (low blood count), weak bones, poor nutritional health and nerve damage . Also kidney disease increases risk of having heart and blood vessel disease. These problems may happen slowly over a long period of time. Kidney disease may caused by diabetes, high blood pressure and other disorders. Early detection and treatment can often keep kidney disease from getting worse. When kidney disease progresses it may eventually lead to kidney failure, which requires dialysis or a kidney transplant to maintain life. Developed countries worldwide treat over 100,000 individual's yearly as many as 25,000 new cases each year. In the U.S and Netherlands is estimated that 6.5-10% of general population suffer from some degree of kidney disease and are therefore at increased risk of preventable cardiovascular disease and renal failure.(National Kidney Foundation 2006)*

**Keywords:** Risk factors, likelihood of kidney disease, Socio demographic variables, checklist

## 1. Introduction

Kidney failure results when the kidneys cannot remove the body's metabolic wastes as perform their regulatory functions. The substances normally eliminated in the urine accumulate in the body fluids as a result of impaired renal excretion, affecting endocrine and metabolic functions as well as fluid, electrolytes and acid- base disturbances. Renal failure is a systemic disease and is a final common pathway of many different kidney and urinary tract. Each year, the number of deaths from irreversible renal failure increases. (USRDS, 2007)

The aim of the present study is, to assess the risk factors and likelihood of kidney disease among patients attending the general outpatient department at V.H.S hospital in Chennai . A multi-centre project in Jan 2008 to July 2010 was conducted to survey the risk factors for chronic kidney disease in Taiwan 4 hospitals equally participated in the program before starting the study, appropriate sample size estimation was calculated using (open EPI). The settings used were: a two sided test with a power of  $(1-\text{Beta})=0.95$  at a significance level of  $\text{Alpha}=0.05/14$  the ratio of controls to cases=1, the hypothetical proportion of controls with exposure=5 and the least extreme odds ratio to be detected=1.5. Based on these settings the study sample size required was at least 9104 subjects. To identify the specific risk factors in patients with hypertension/diabetes mellitus and to maintain the statistical power of the study, a higher number of patients with hypertension / diabetes mellitus were required participants without CKD from hypertension/ diabetes mellitus out patient and health centers from each hospital as the control group. The chronic kidney disease is an important public health issue because these parts have an increased risk of end stage of renal disease. Taiwan has a high prevalence of CKD and ESRD. These patients are at increased risk for cardiovascular events and progression to kidney failure. The benefits of screening at risk populations and estimating progression of CKD are well established. Therefore planning a specific population screening/ prevention strategy for people with HTN or DM

is a major public health challenge. To our knowledge there is no systematic evidence at present to confirm that a screening prevention strategy for the general population would apply to high risk groups.

## 2. Objectives

- 1) To assess the risk factors and likelihood of kidney disease among patients attending the general out patient department
- 2) To educate and create awareness regarding risk factors and likelihood of kidney disease.

## 3. Design

Non – Experimental Qualitative Research

## 4. Subjects

The samples were the patients who attended general OPD for the consultation.

## 5. Method

Non probability convenient sampling technique

## 6. Data Collection Tool

Check list to asses the risk factors and likelihood of the kidney disease

## 7. Data Analysis

The obtained data was analyzed using descriptive and inferential statistics and interpreted in terms of objectives and hypothesis of the study. The level of significance was set at 0.05 levels.

## 8. Result

The study was undertaken to assess the risk factors and likelihood of kidney disease among the patient attending general outpatient department at Chennai. According to Frequency and percentage distribution of the demographic variables of patients. The result Showed that (30.3%) majority of the patients were above 45 years of age, 60% of them were female and 26.7% of them had no formal education and primary school education. Showed that (30.3%) majority of the patients were above 45 years of age, 60% of them were female and 26.7% of them had no formal education and primary school education. majority 40% of the patients were suffering from Diabetes mellitus, 53.3% were from hypertension and 6.7% from other illness. 20% of them were aware of risk factors for renal disease was through health care professionals and also relatives/ friend friends. that majority (40%) of the patients had the habit of smoking and 36.7% of the patients had the habits of alcohol drinking . According to Frequency and percentage of the samples based on their responses to the items to assess the risk factors and likelihood of kidney disease the findings revealed that 60% of them stated never had fluid retention throughout the body, 66.6% of the patient answered skin color is not 'grayish', 56.6% stated had no past history of kidney disease, 73.3% of the people said have lower back pain, 56.6% of the patient said has no decreased urine output, 60% of the people stated had no mild to moderate infrequent urination, 53.3% of the people have increased urge to urinate (pressure of bladder), 63.3% of the people said had no foamy or bubbly urination, 66.6% answered has no increased urination at night, 60% of the people said have dribbling after urination. 56.6% of the people have itchy skin, 63.3% of the people answered that has no bruising easily, 66.6% of the people said that they have reduced skin elasticity, 73.3% of the people said they have have dryness of the skin 60% of them answered that has no muscle cramps and stiffness, 66.6% of the people have excessive thirst, 66.6% of the people has no high blood pressure, 50% of the people have mental confusion and/ or poor concentration and 56.6% of the people have decreased mobility . According to assess the association between the level of risk factors and likelihood with the demographic variables such as age, gender educational status, occupational status , marital status, type of family, monthly income, religion, smoking and alcohol revealed that there was no statistically significant association found between the risk factors and the demographic variables .

## 9. Conclusion

The study was conducted to assess the risk factors and likelihood of kidney disease among the patients attending general outpatient department. The findings revealed that 60% of sample had mild risk factor of kidney disease and 40% of the sample moderate risk factor. Thus the investigator was able to assess the overall risk factors of each samples and educated the patient regarding risk factors of kidney disease.

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