International Journal of Academic Scientific Research
ISSN: 2272-6446 Volume 4, Issue 1 (February - March 2016), PP 20-30
www.ijasrjournal.org

Prevalence Of Hypertension Among Patients With Renal Failure Attending Renal dialysis Unit In King Fahad Hospital Almadina Almonwarra.2012

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Abstract

Background :*Because of the close relationship between renal failure, diabetes and high blood pressure have built our study*
Objectives :*To measure prevalence of hypertension among patients attending Renal Dialysis Unit in king Fahd hospital in Al-Madina AlMonwara , 2012*
Methods :*Cross The study population was the patient attended to the renal dialysis department at king fahad hospital with renal filure.80 patients were from all patients entered renal unit during the study period . questionnaires was used .*
Results:*Most of patient's ages that have renal failure are older than 50 years. And most of them suffer from the disease between the periods from one to five years. And 55 (62.8%) out of 25 renal failure patient were non employed .*
Conclusion : *the Prevalence of renal failure patients with hypertension is 29% and 9% with diabetic patients and 40 % in patient with both HTN and DM.*

INTRODUCTION

Renal failure is a medical condition in which the kidneys fail to adequately filter toxins and waste products from the blood. The two forms are acute (acute kidney injury) and chronic (chronic kidney disease);
CKD has numerous causes. The most common is diabetes mellitus. The second most common is long-standing, uncontrolled hypertension, or high blood pressure. Polycystic kidney disease is another well-known cause of CKD. The majority of people afflicted with polycystic kidney disease have a family history of the disease. Other genetic illnesses affect kidney function, as well.

Overuse of common drugs such as aspirin, ibuprofen, and acetaminophen (paracetamol) can also cause chronic kidney damage.[1]In Canada 1.9 to 2.3 million people have chronic kidney disease.[2]In the US, the Centers for Disease Control and Prevention found that CKD affected an estimated 16.8% of adults aged 20 years and older,

during 1999 to 2004.[3]UK estimates suggest that 8.8% of the population of Great Britain and Northern Ireland have symptomatic CKD.[4]

Chronic kidney disease (CKD) is a major concern in African Americans, mostly due to increased prevalence of hypertension. As an example, 37% of end-stage renal disease cases in African Americans can be attributed to high blood pressure, compared with 19% among caucasians.[5] Treatment efficacy also differs between racial groups.

Aim of study

1- To know what are the major causes of renal failure.
2- To increase our knowledge about the strong relation between renal failure and chronic diseases .
3- The increased number of mortality caused by renal failure .
4- To help the patients who are going to renal dialysis centers .
5- The high percentage of renal failure caused by chronic diseases .

Objectives :

General objectives :

To measure prevalence of hypertension among patients attending Renal Dialysis Unit in king Fahd hospital in Al-Madina AlMonwara , 2012

Specific objectives :

- To identify socio-demographic characteristics (age, sex, economical status, and family size) to the patients attending the study area .
- To identify awarness about dietary control in patients with renal failure in the study area.

Methodology :

This is descriptive cross sectional study

Study setting :

The study was conducted at the renal dialysis department of king fahad hospital in AL-Madinah al monawarah , kingdom of saudia Arabia .

Study design :

Cross sectional study , during the period between 15-11 -1433 H to 1-1-1434 H .

Target population and sample size and sampling technique :

The study population was the patient attended to the renal dialysis department at king fahad hospital with renal filure.Sample size : 80 patients were collected purposefully (non random sample) from all patients entered renal unit during the study period .

Definition of variables :

age, sex, socioeconomic status, marital status, family size, education, habits and chronic disease

Data collection tools :

Structured questionnaires were delivered personally , and filled by interview. Approximately 10-15 minutes were required to complete the questionnaires .

Statistical analysis :
A statistical analysis was performed using the statistical package for social sciences "SPSS" version 14 .

Ethical clearnce:
Permission was taken from hospital administration . informed consent was taken from patient before interview .

Study limitation :
We didn't get the permission to take sample from female department. Some of patients didn't give us the concent .

RESULTES

Social :

Table 1. Occupation of patients attending Renal Dialysis Unit in king Fahd hospital , Al-Madina AlMonwara , 2012

OCCUPATION	NUMBERS	Percent
empolyed	21	26.3
non empolyed	55	68.8
Student	4	5.0
Total	80	100.0

Most of patients were non empolyed in percentage of 68.8 %

Table2. Social state of patients attending Renal Dialysis Unit in king Fahd hospital in Al-Madina AlMonwara , 2012

Marital status	Number	Percent
marriage	60	75.0
non marriage	18	22.5
divorce	2	2.5
Total	80	100.0

social state of patients attending Renal Dialysis Unit in king Fahd hospital in Al-Madina AlMonwara , 2012 , was 75 % of patient married , and 22% of patient non married , and 2,5 %of patient divorce

.

Table 3. Number of family of patients attending Renal Dialysis Unit in king Fahd hospital in Al-Madina AlMonwara , 2012

Number of family	Number	Percent
1-5	30	37.5
6-12	41	51.3
>12	9	11.3
Total	80	100.0

Table 4. Onset of the disease of patients attending Renal Dialysis Unit in king Fahd hospital , Al-Madina AlMonwara , 2012

Onst of desease	Number	Percent
less than one year	11	13.8
from 1 year to 5 years	46	57.5
above 5 years	23	28.8
Total	80	100.0

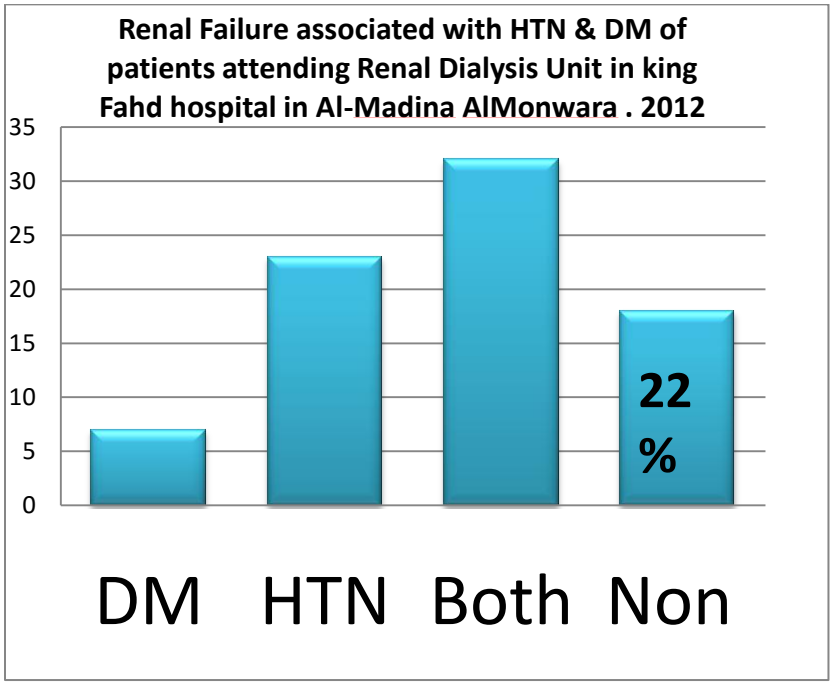
Most of the patient starting the renal dialsis from 1 to 5 years.

Table 5. Age of patient with renal failure attending Renal Dialysis Unit in king Fahd hospital , Al-Madina AlMonwara . 1412

AGE (YEARS)	Number	Percent of patient with renal failure
10 -- 20	4	3.8
21- 35	20	25
36 –50	14	17
OLDER than 50 years	42	53.8
Total	80	100

Table 6. Patient with several diseases

Chronic disease	Number	Percintage
Hypertensive	54	68.8 %
Diabetic	39	48.8
Diabetic & hypertensive	31	38.8



Most of the patients ages that have renal failure are older than 50 years .

Table 6. Study level of patients attending Renal Dialysis Unit in king Fahd hospital, Al-Madina AlMonwara , 2012

Study level	Frequency	Percent
illetrate	16	20.0
Educated	64	80.0
Total	80	100.0

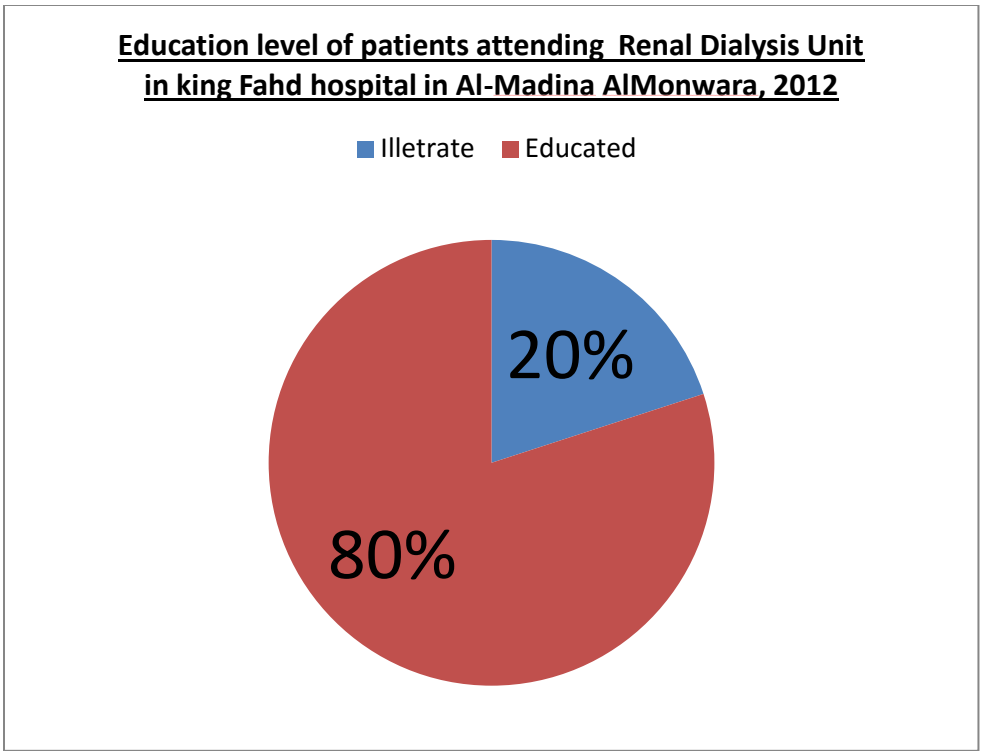
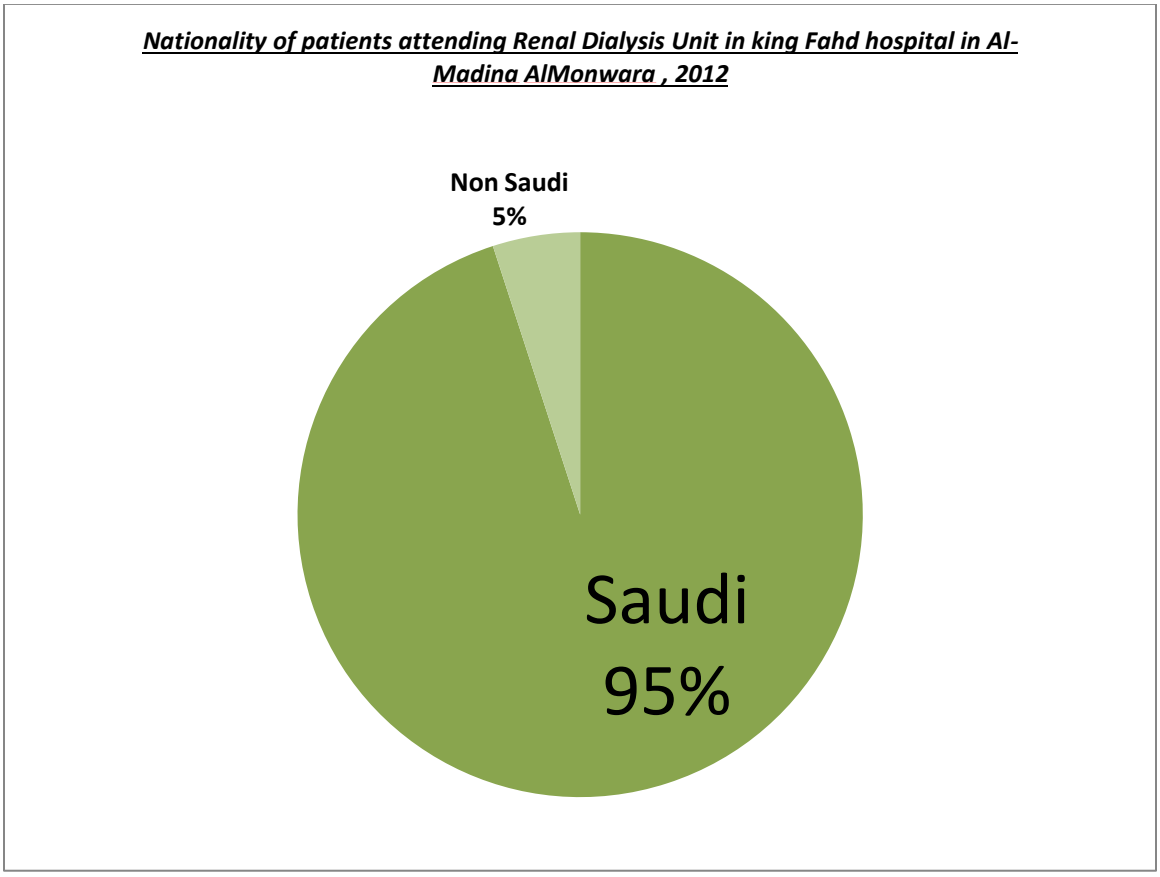


Table 7. Onset of the disease of patients attending Renal Dialysis Unit in king Fahd hospital , Al-Madina AlMonwara , 2012

Onset of the disease	Frequency	Percent
less than one year	11	13.8
from 1 year to 5 years	46	57.5
above 5 years	23	28.8
Total	80	100.0

Table 8. Nationality of patients attending Renal Dialysis Unit in king Fahd hospital , Al-Madina AlMonwara , 2012

Nationality	Number	Percent
Saudi	76	95
Non Saudi	4	5.0
Total	80	100.0



Nationality of patient with renal failure attending Renal Dialysis Unit in king Fahd hospital in Al-Madina AlMonwara . 1412 , were 95% Saudi and 5% non Saudi .

Economic:

Table 9. Housing sitution of the disease of patients attending Renal Dialysis Unit in king Fahd hospital ,Al-Madina AlMonwara , 2012

Housing situation	Number	Percent
owner	40	50.0
renter	38	47.5
other	2	2.5
Total	80	100.0

Table 10. Type of house of patients attending Renal Dialysis Unit in king Fahd hospital , Al-Madina AlMonwara , 2012

Type of house	Number	Percent
Traditional house	19	23.8
Apartment	55	68.8
Villa	6	7.5
Total	80	100.0

68.8 % of patient live in apartment ,and 23.8 of patient live in traditional house ,and 7.5 of patient live in villa

Table 11. Means of transport to king fahad hospital

Means	Number	Percent
Own car	60	75.0
Taxi	10	12.5
With others	5	6.3
Rent	5	6.3
Total	80	100.0

75 % of patient come to hospital by owner car , and 12.5 % come with taxi , and 6.3 with other , and 6.3 come by rent car .

Diet:

Table 12. Diet

Diet	Number	Percent
Yes	48	60.0
No	32	40.0
Total	80	100.0

60 % of patient have particular diet wheil 40% of patient don't have particular diet .

Analysis:

Table 13. Labaratory investigation analysis

Analysis	Number	Percent
Yes	73	91.3
No	3	3.8
Sometime	4	5.0
Total	80	100.0

91.3 of patient doing regular analysis ,while 3.8 % not doing ,and 5 % sometimes do and sometimes not do .

DISCUSSION

This is cross-sectional study done at renal unit at King Fahd hospital,Almadina almunawara from 8/10/2012 to 15/10/2012 .In order to asses prevalence of hypertension associated with renal failure.95 % of patient

of renal failure in our research was Saudi and 5% was non Saudi may be because the life style and diet habit differ in Saudi patients from non Saudi patients and most of the cases indicate how much the diet and life style can be a one of the most risk factors.

80 % of patients in our study were educated . And 20 % were illiterate. This will affect on patient's understanding to the Dr's instructions.68.8% were non employed and this could be because disease interfering with the occupations that could be difficult to patients .75 % of patients are married , and 22% of patients are non married, and 3 %of patients are divorced and that could be due to the effect of the disease. 50 % of patient have their own house, and 47.5 have rented house, and 2.5 of patient have other type of houses. So our patients are of low socioeconomic state.

The mean study subject was 49.6 years. Hypertensive patient with renal failure 29% , Diabetic patient with renal failure 9 % .Patients with renal failure have both HTN & DM in same time 40 % . 53.8% of patient are older than 50 years and 3.8 % for patient between ten to twenty years , and was 25 % for patient between 21 -35 years ,and 17 % for patient between 36 -50 years . It's high in elderly patient due to aging of kidneys.57.5 % of patient were affected from one year to five years ,and 28.8 % of patient were affected before five years , and 13.8 of patient were affected less than one year.

Most of the patient have the disease since 5 years which is long and costly for dialysis and they need to do a transplantation to make their life more comfortable.On the other hand there is no renal transplantation unit in Almadina and they need to travel and spend efforts and money and waiting for long time .

Conclusion and recommendation

We found the Percentage of renal failure patients with hypertension is 29% and 9% with diabetic patients and 40 % in patient with both HTN and DM.

- Hypertensive patient must monitor his case & avoid anything that aggravate his illness such as decreasing salt intake.
- Good management of diabetes such as diet plans , exercise and hypoglycemic drugs.
- Increase public renal dialyses centers in Almadina almunawara.
- Increase awareness of renal failure patient about their disease . with restriction of some kinds of food like potassium containing food , meat ,salts and soft drinks
- Establishments of renal transplantation centers in Almadinah Almunawara

Acknowledgement

We thanks our supervisor dr.kamal eldin (Community Medicine department, Taibah university, Almadinah almunawarah Saudi Arabia) for his cooperation and support in our research .And faculty of medicine in taiba university for supporting us in the research .Also we thanks dr.bader al-hameid the head of department in renal dialysis unit in king Fahad hospital for giving us the permission to fill the questioner from the patients and the staff of renal dialysis unite . We also thank our colleague Fahad Almarwani (Faculty of medicine, Taibah university, Almadinah Almunawarah, Saudi Arabia) for his assistant.

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