JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

EFFECTIVENESS OF A UNANI REGIMEN IN THE TREATMENT OF CHRONIC RENAL FAILURE- A CASE REPORT

Ifra Abdul Qaiyyum[1], Bhoraniya Abdullah[1], Mohammad Zubair [2]

1 Research Scholar in National Research Institute of Unani medicine for skin disorders.
2 Reader in Department of Moalajat (Medicine) at Mohammadia tibbiya college wo assayer hospital.

ABSTRACT:

Case: Chronic Kidney Disease (CKD) or Chronic Renal Failure (CRF) is one of the highly mortality rate diseases all over the world due to excessive use of conventional medicine like NSAIDS and anti-tubercular drugs with unknown etiology. In conventional system of medicine treatment is Renal Replacement Therapy (RRT) consist of dialysis and kidney transplantation which was unsatisfactory and too costly. We report that a case of CKD controlled by traditional medicine. The patient was 71 years old man had low urine output since 5 month. He was diagnosed with Chronic Kidney Disease. Patient was not satisfied with conventional treatment then he come to National Research Institute of Unani Medicine for Skin Disorders (NRIUM-SD), Hyderabad.

Outcome: The present case of CKD totally treated with Unani medicines such as Jawarish-e-zaroni sada, Sharbat-e-bazoori moatadil are the compound drugs taken for 3 month there is remarkable result was achieved because of their active constituents.

Conclusion: Jawarish-e-zaroni sada, Sharbat-e-bazoori moatadil were effective Unani medicine for treatment of CKD.

***Key words*:** Chronic Kidney Disease, Hypertension, NSAIDS, Renal Replacement Therapy, Unani system of Medicine.

Introduction:

In Unani system of Medicine, kidney is one of the vital organ which excrete out waste product of the body through urination and maintain body health. Chronic Kidney Disease (CKD) is also known as Chronic Renal Failure (CRF) is a developing kidney disease with decrease renal function having unknown etiology. It is always associated with hypertension, Diabetes mellitus. It is one of the major medical, economic, and social problem. CKD creates financial burden on patients, their families as well as on government of the country and also associated with more systemic diseases like hypertension, diabetes mellitus, cardiovascular disease (CVD) and chronic liver diseases.[1,2] CKD nowadays, is a spreading as well as increasing all over the world. In India death rate of CKD in 1990 was 3.78 million on the basis of progression of CKD expect that it will be 7.63 million in 2020.[3] In U.S 10% population suffering from CKD and also becoming 8th leading cause of death.[4, 5] worldwide prevalence of CRF is 8- 16% in 2013 and In India prevalence of CKD is 7852/ million.[6, 7] In Unani system of medicine (USM) kidney is one of the important organs of the body. It plays an important role in urine formation and excrete out most of the waste product from the body. Nowadays excessive use of NSAIDS and anti-tubercular, antibiotics, chemotherapeutic drug damage the kidneys and causing CKD (CRF).[8] When GFR less than 60ml/minute/1.73 m^2 over 3 month is called as CKD.[9] In majority of population develop sign and symptoms in advance stages. When treatment in conventional medicine is Renal Replacement Therapy (RRT), it consist of dialysis and kidney transplantation.a[2] CKD is identified on the basis of blood analysis like

creatinine level which is the end product of muscle metabolism. Higher level of creatinine indicate lower GFR (Glomerular Filtration Rate) that means decrease kidney function.[1] These treatments are very costly and unaffordable hence, this management is also not satisfactory. In developing the cause of death is unavailability of RRT and too costly treatment. [2,3,6] The CKD patients are increasing day by day in which 77% patients on dialysis and 23% RRT and they increase 7% every year they are very risky for systemic diseases.[3] There is not only need for some effective treatment but also which has lower cost. So the main aim of traditional medicines to preserve, support and give passive therapy to CKD patient. Another aim is to treat patients of CKD and also delaying of RRT. Medicinal plants have different active constituent in their different part. According to WHO world population give preference to traditional medicine for their primary health care need.[10]

Patient information and clinical finding:

A retired male patient of 71 years old person visited the National Research Institute of Unani Medicine for Skin Disorders (NRIUM-SD), Hyderabad in outpatient department, with complaints of facial puffiness, severe leg pain, joint pain, swelling over the joint and leg, loss of appetite, disturbed sleep, breathlessness, difficulty in walking and reduced urine output from last 5 month or more. Patient was well before 5 month, then he complains of sudden onset of high grade fever with muscle and joint pain, swelling over the joint and all over the body, difficult in walking, gradually decreases of appetite, disturbed sleep, breathless on walking and gradually decreases urine out. With these entire complaint Patient went to allopathic doctors in Hyderabad (IRIS hospital), on the basis of patient's condition doctor suggested hemodialysis, but patient wasn't satisfied. After that the patient came with all his investigations to NRIUM-SD for traditional Unani treatment.

ON EXAMINATION:

A 71year old man was 172 cm tall with weight 54 kg so BMI is 18.5 kg/m^2. The heart rate was 86/min while B.P was 130/78 mm Hg with 98.6 temperature, respiratory rate was 18/min. The cardiovascular, respiratory, abdomen and nervous system were normal. The thyroid gland and lymph nodes were not palpable, pallor present, jaundice and cyanosis were absent. He was married man taking mixed diet but his intake reduced during last days of the illness, hence bowel not clear with also reduced frequency, quantity of micturition and sleep was disturbed. He has habit of pan chewing with zarda every day. He chewed 5-6 pan in a day. Patient was hypertensive since 12 years taking TELMA 40 mg (OD) at night. The family history was negative. On Systemic examination patient was well oriented to person, place and time with intact higher mental function (memory, speech & intelligence). All Cranial nerve from 1 to 12th were normal in their function. Motor system was normal with muscle power 5/5 and muscle tone normal. Superficial sensory reflexes (touch, pain, temp, pressure) and deep were Normal. Cardiovascular system (CVS) was normal on inspection. Apex beat is palpable at 5th ICS with no any abnormalities. On auscultation S1-S2 heard, no any added sound and no murmur was found. Respiratory system was normal chest was B/L symmetry with normal movement with no any scar and tenderness, with normal resonating note and Air entry bilaterally equal (AEBE). Abdomen was scaphoid in shape; umbilicus is normal, no any scar mark or venous engorgement. On percussion Dullness was found over the abdomen and no fluid trill and shifting dullness. Bowel sound was 5-7t/minute.

Table 1 | Investigation:

S.NO	Investigation	Before Treatment	After Treatment
1.	**Haemogram**		
	Hb%	11 gm/dl	13.8 gm%/dl
2.	**TLC**		
	RBC	4.0 million/ cumm	4.7 million/cumm
	WBC	4400 WNL	3500 /cumm
	Platelets	1.89 lakh/ cumm	1.1 lakh/cumm
3.	**DLC**		
	Neutrophil	45%	54%
	Lymphocyte	50%	43%
	Eosinophil	3%	2%
	Monocyte	2%	1%

	Basophil	00	00
4.	**ESR**		
	1st hour	12 mm	24 mm
	2nd hour	24 mm	46 mm
5.	HbA1c	5.6%	-
6.	**LFT**		
	S. Bil	0.5	0.75
	SGOT	21	20
	SGPT	17	15
	ALK.P	59	49
7.	**KFT**		
	Blood Urea Nitrogen	205	33
	Serum Creatinine	2.0 mg/dl	0.9 mg/dl
8.	**Urine: R & M**	Normal	Normal
	Reaction	Acidic	Acidic
	Albumin	++	Nil
	Sugar	Nil	Nil
	Pus cell	0-5/ HPF	2-3/ HPF
	RBCs	0-2/ HPF	Nil
	Epithelial	Nil	Nil
9.	**Lipid profile**		
	Serum cholesterol	260 mg/dl	202 mg/dl
	Serum triglyceride	148 mg/dl	101 mg/dl
	HDL cholesterol	52 mg/dl	50 mg/dl
	LDL cholesterol	179 mg/dl	132 mg/dl
	VDRL cholesterol	29 mg/dl	20 mg/dl
10.	**USG OF ABDOMEN**	Grade -II renal parenchymal disease, Mild ascites, Cystitis	All organ of abdomen are normal in echo texture.

Diagnosis:

After examination and review of all the reports of patient done in allopathic hospital of Hyderabad. All routine blood investigation and USG was done. On the basis of investigations and USG report diagnosed CKD or GRADE II-III RENAL PARENCHYMAL DISEASE with mild ascites, cystitis and on clinical presentation confirmed that it is the case of CKD. His family member wanted to go with allopathic treatment but patient doesn't wanted so.

Medication: Oral medication was prescribed which is indicated in CKD in Unani system of medicine. They were compound medicine their main content were indicated for chronic renal disease.

Dietary restrictions: Patient was advised to restrict Beef, Meet, chicken, oily, spicy, fried food. He was also advised take atleast 1-2 liter water per day. Avoid weight lifting more than 5kg and excessive walking.

Table 2 | Constituents of Jawarish-e-zaroni sada: 5-10 gm BID. [11, 12]

S. NO	Name	Botanical name	Quantity
1	Tukhm-e-Gazr	*Daucus carota* Linn. (seeds)	30 gm
2	Tukhme Karafs	*Apium graveolens* Linn. (seeds)	30 gm
3	Magz-e-Tukhme kharbuza	*Cucumis melo* Linn. (pulp of seeds)	30 gm
4	Zafran	*Crocus sativa* Linn.	10 gm
5	Post-e-Bikh-i-Karafs	*Apium graveolens* Linn. (Bark)	30 gm
6	Aaqarqarha	*Anacylus pyrethrum* DC.	10 gm

7	Oodh-Hindi	*Aquilaria agallocha*	30 gm
8	Tukhm-e-Aspand	*Pegnum hermala* Linn	30 gm
9	Filfiya Siyah	*Piper nigrum* Linn.	30 gm
10	Badiyan	*Foeniculum vulgare* Mill.	30 gm
11	Bisbasa	*Myristica fragrans* Houtt.	10 gm
12	Darchini	*Cinnamomum zeylanicum* Blume.	10 gm
13	Mastagi	*Pistacia lentiscus* Linn.	10 gm
14	Nankhwah	*Trachyspermum ammi* Linn.	30 gm
15	Qand	*Sugar*	1 gm
16	Qaranful	*Syzygium aromaticm*	30 gm

Table 3 | Constituents of Sharbat-e-bazoori moatadil: 25-50 ml.[11, 12]

S. NO	Name	Botanical name	Quantity
1	Bikh -e-kasni	Cichorium intibus. (root)	100 gm
2	Bikh-e-Badiyan	Foeniculum vulgare Mill. (root)	50 gm
3	Tukhme-kharbuza	Cucumis melo Linn. (pulp of seeds)	50 gm
4	Tukhm-e-kasni	Cichorium intibus. (seeds)	50 gm
5	Tukhm-e-khayarza	Cucumis sativus Linn. (seeds)	50 gm
6	Tukhm-e-khiyar	Cucumis sativus Linn. (seeds)	50 gm
7	Khar-e-khasak khurd	Tribulus terrestris Linn.	50 gm
8	Qand	Sugar	500 gm
9	Water	Water	As per need

Response of treatment: The treatment response was assessed on the basis of clinical symptoms after a course of medicines of 10 days and significant improvement was found in associated symptoms.

❖ ***First follow up:*** After 10 day's patient came with reduced symptoms of 20%. The improvement is as follows,

- Reduction in facial and pedal edema
- Reduction in disturbed sleep
- Increase appetite
- Reduction in breathlessness
- Reduced joint pain and swelling over the joint
- Increase walking capacity

On the basis of improvement in the disease condition same medicine was continues for 20 day. Which were available in NRIUM-SD.

❖ ***Second follow up:*** After 20 days it was found that there was 50% improvement in clinical symptoms.

- Reduction in facial and pedal edema
- Reduction in disturbed sleep
- Increase appetite
- Reduction in breathlessness
- Reduced joint pain and swelling over the joint
- Increase walking capacity
- Improvement of health of patient

Relevant investigation:

Lipid profile: RFT:

Cholesterol: 207 Creatinine: 1.8

Triglyceride: 102 Blood urea: 225

HDL Cholesterol: 46

LDL Cholesterol: 141

LDL/HDL Ratio: 3.0

- ***Third follow up:*** After 20 days there was 75% improvement in clinical symptoms, according to the patient as well as the report conveyed so.
- Reduction in facial and pedal edema
- Reduction in disturbed sleep.
- Increase appetite
- Reduction in breathlessness
- Reduced joint pain and swelling over the joint
- Increase walking capacity
- Improvement of health of patient
- ***Last follow up:*** After 20 days there was remarkable improvement in clinical condition of patient.
- Reduction in facial and pedal edema
- Reduction in disturbed sleep
- Increase appetite
- Reduction in breathlessness
- Reduced joint pain and swelling over the joint
- Increase walking capacity
- Improvement of health of patient

Blood analysis:

Hb: 13.8gm%/dl

RBC: 4.7 million / cumm

WBC: 3500

Platelets: 1.1 Lakhs/ cumm

Lipid profile:

Cholesterol: 202

Triglyceride: 101

HDL Cholesterol: 50

LDL Cholesterol: 132

LDL/HDL Ratio: 2.6

RFT:

Creatinine: 0.9

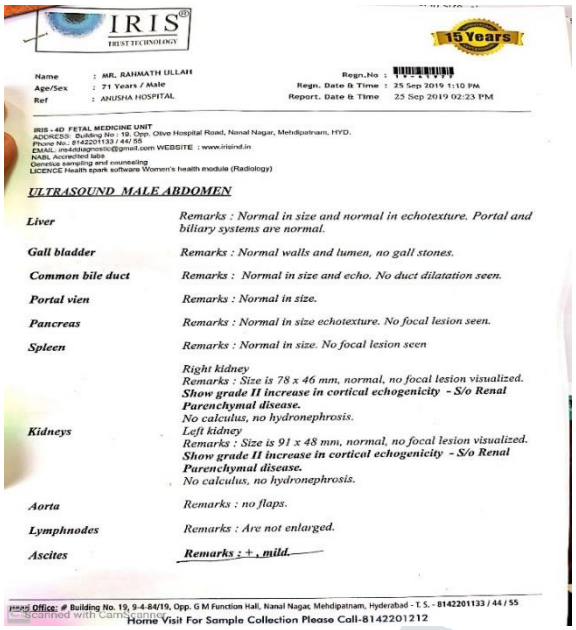
Blood urea: 33

Relevant investigation: ***1st USG*****:** liver, Gallbladder, Pancreas and Spleen are normal in size and echotexture. ***Kidneys: Right Kidney***: Show grade II increase in cortical echogenicity- S/o Renal Parenchymal disease. ***Left Kidney*****:** Show grade II increase in cortical echogenicity- S/o Renal Parenchymal disease.

Ascites: + Mild

Urinary Bladder: free floating echoes noted PVR= 45 cc.

Impression and comments: Renal Parenchymal Disease**,** Mild Ascites and Cystitis



IRIS
TRUST TECHNOLOGY
15 Years

Name : MR. RAHMATH ULLAH
Age/Sex : 71 Years / Male
Ref : ANUSHA HOSPITAL
Regn.No :
Regn. Date & Time : 25 Sep 2019 1:10 PM
Report. Date & Time : 25 Sep 2019 02:23 PM

IRIS - 4D FETAL MEDICINE UNIT
ADDRESS: Building No : 19, Opp. Olive Hospital Road, Nanal Nagar, Mehdipatnam, HYD.
Phone No.: 8142201133 / 44 / 55
EMAIL: iris4ddiagnostic@gmail.com WEBSITE : www.irisind.in
NABL Accredited labs
Genetics sampling and counseling
LICENCE Health spark software Women's health module (Radiology)

ULTRASOUND MALE ABDOMEN

Liver	Remarks : Normal in size and normal in echotexture. Portal and biliary systems are normal.
Gall bladder	Remarks : Normal walls and lumen, no gall stones.
Common bile duct	Remarks : Normal in size and echo. No duct dilatation seen.
Portal vien	Remarks : Normal in size.
Pancreas	Remarks : Normal in size echotexture. No focal lesion seen.
Spleen	Remarks : Normal in size. No focal lesion seen
Kidneys	Right kidney Remarks : Size is 78 x 46 mm, normal, no focal lesion visualized. Show grade II increase in cortical echogenicity - S/o Renal Parenchymal disease. No calculus, no hydronephrosis. Left kidney Remarks : Size is 91 x 48 mm, normal, no focal lesion visualized. Show grade II increase in cortical echogenicity - S/o Renal Parenchymal disease. No calculus, no hydronephrosis.
Aorta	Remarks : no flaps.
Lymphnodes	Remarks : Are not enlarged.
Ascites	Remarks : +, mild.

Scanned with CamScanner
Home Visit For Sample Collection Please Call-8142201212

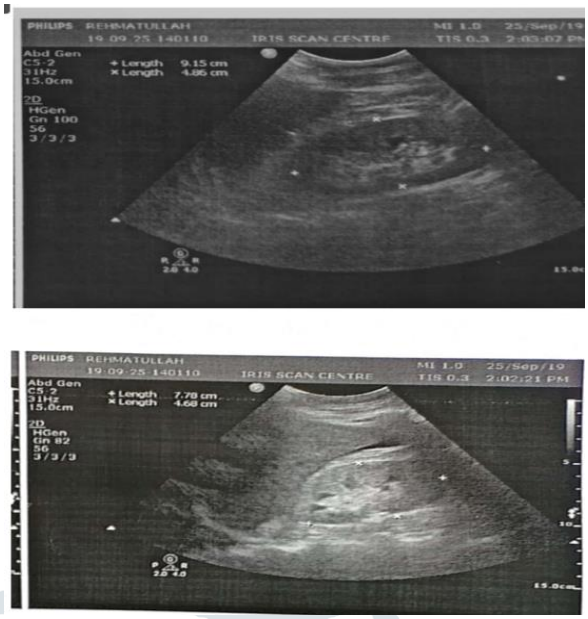


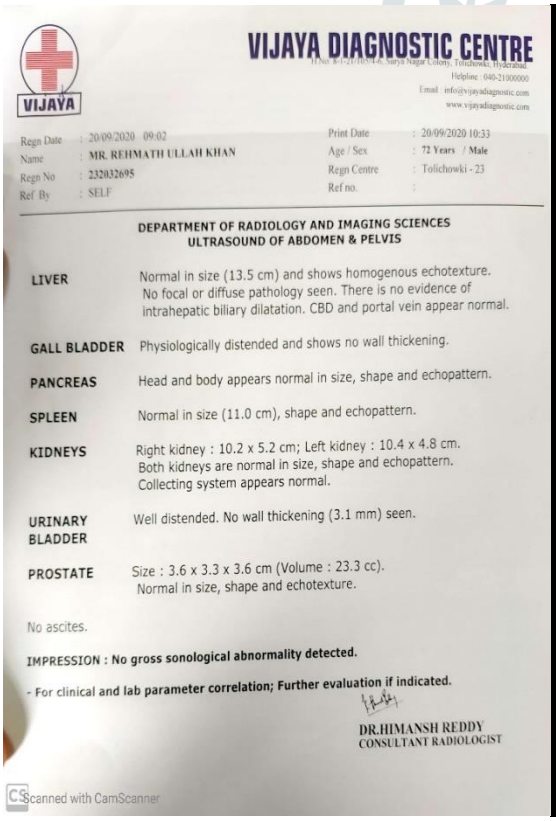
Figure 1 | (before treatment) **Figure 1| (before treatment)**

***2nd USG*:** liver, Gallbladder, Pancreas and Spleen are normal in size and echo texture.

Kidneys: Right Kidney Measured: 10.1 X 5.2 cm. **Left Kidney:** 10.4 X 4.8 cm both kidneys are normal in size, shape and echo texture.

Urinary Bladder: well distended with increased wall thickness 3.1 mm.

Prostate: Normal in size and contour: 3.6 X 3.3 X 3.6 mm, Volume: 23 cc.



VIJAYA DIAGNOSTIC CENTRE
VIJAYA

Regn Date : 20/09/2020 09:02
Name : MR. REHMATH ULLAH KHAN
Regn No : 232032695
Ref By : SELF
Print Date : 20/09/2020 10:33
Age / Sex : 72 Years / Male
Regn Centre : Tolichowki - 23
Ref no. :

DEPARTMENT OF RADIOLOGY AND IMAGING SCIENCES
ULTRASOUND OF ABDOMEN & PELVIS

LIVER	Normal in size (13.5 cm) and shows homogenous echotexture. No focal or diffuse pathology seen. There is no evidence of intrahepatic biliary dilatation. CBD and portal vein appear normal.
GALL BLADDER	Physiologically distended and shows no wall thickening.
PANCREAS	Head and body appears normal in size, shape and echopattern.
SPLEEN	Normal in size (11.0 cm), shape and echopattern.
KIDNEYS	Right kidney : 10.2 x 5.2 cm; Left kidney : 10.4 x 4.8 cm. Both kidneys are normal in size, shape and echopattern. Collecting system appears normal.
URINARY BLADDER	Well distended. No wall thickening (3.1 mm) seen.
PROSTATE	Size : 3.6 x 3.3 x 3.6 cm (Volume : 23.3 cc). Normal in size, shape and echotexture.

No ascites.

IMPRESSION : No gross sonological abnormality detected.

- For clinical and lab parameter correlation; Further evaluation if indicated.

DR.HIMANSH REDDY
CONSULTANT RADIOLOGIST

Scanned with CamScanner

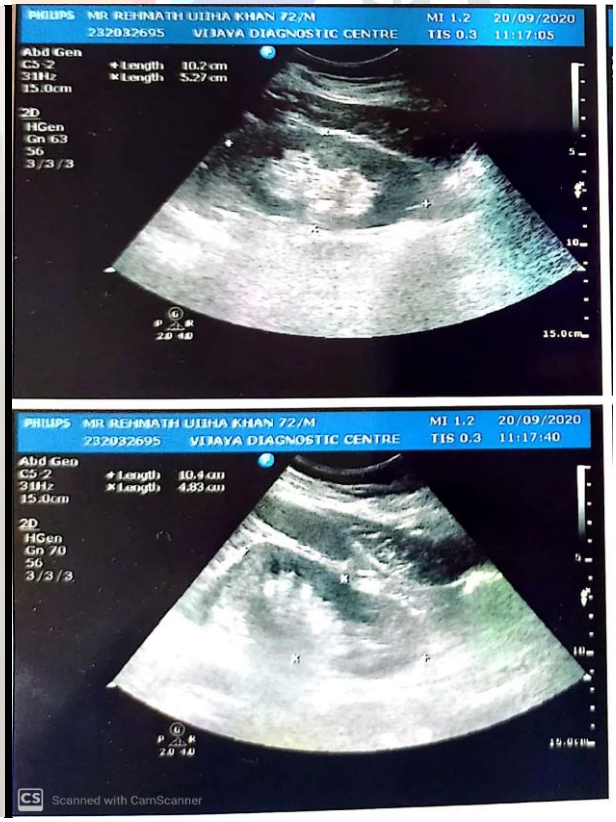


Figure 2 | (after treatment 6 month later) **Figure 2 | (after treatment 6 month later)**

Discussion:

Unani system of medicine is capable to treat many disease of different system of human body. Also having best diagnostic tool to find out disease causing factors and risk factors. But in CKD patient's conventional system of medicine is not beneficial because of too costly treatment that is RRT and hemodialysis. In this case report, we observed that the Unani formulations (JZS and SBM) were effective and safe in management of CKD. Which not only gives supportive treatment but also delays hemodialysis. In this case report patient was unsatisfied by modern treatment and we observed that the given Unani formulations showed significant reduction in the sr. creatinine, blood urea, lipid profile, ascites, cystitis and improvement in Haemogram level. This is due to Jawarish-e-zaroni sada, Sharbat-e-bazoori moatadil showed Nephroprotective and diuretic properties mentioned in Unani classical literature.

Conclusion:

Effectively these Unani drugs have capacity to normalize associated clinical symptoms and laboratorial parameters pertaining to CKD patients. It provides lead for further research based on scientific parameters.

Acknowledgment:

The authors would like to thanks Prof. Munawwar Husain Kazmi, Director of NRIUM-SD, Hyderabad.

Conflict of Interest:

This must made in practice to do large number of sample size with same treatment.

Reference:

1. Dwivedi D, Pandey AK. Management of Chronic Kidney Disease Through Ayurveda : a Case Management of Chronic Kidney Disease Through Ayurveda : a Case Study. 2017;(January).
2. Siddiqui MS, Saeed A, Nawaz A, Naveed S, Usmanghani K. The effects of new polyherbal Unani formulation AJMAL06 on serum creatinine level in chronic renal failure. Pak. J. Pharm. Sci. 2016 Mar 1; **29**(2):657-61.
3. Agarwal SK, Srivastava RK. Chronic kidney disease in India: challenges and solutions. Nephron clinical practice. 2009; **111**(3):c197-203.
4. Nugent RA, Fathima SF, Feigl AB, Chyung D. The burden of chronic kidney disease on developing nations: a 21st century challenge in global health. Nephron Clinical Practice. 2011; **118** (3):c269-77.
5. Sievert DM, Ricks P, Edwards JR, Schneider A, Patel J, Srinivasan A, Kallen A, Limbago B, Fridkin S. Antimicrobial-resistant pathogens associated with healthcare-associated infections: summary of data reported to the National Healthcare Safety Network at the Centers for Disease Control and Prevention, 2009–2010. Infection control and hospital epidemiology. 2013 Jan 1; **34** (1):1-4.
6. Md Alam A, Quamri MA, Siddiqui MA, Hai U, Sofi G. Nephroprotective effect and unani medicine: A review. J Nephrol Ther. 2016; **6** (236):2161-0959.
7. Jha V, Garcia-Garcia G, Iseki K, Li Z, Naicker S, Plattner B, Saran R, Wang AY, Yang CW. Chronic kidney disease: global dimension and perspectives. The Lancet. 2013 Jul 20; **382** (9888):260-72.
8. Hoitsma AJ, Wetzels JF, Koene RA. Drug-induced nephrotoxicity. Drug safety. 1991: 1; **6**(2):131-47.
9. Quigley R. Chronic kidney disease: highlights for the general pediatrician. International journal of pediatrics. 2012:1-5.
10. Ramya S. Ethnomedicinal perspectives of botanicals used by Malayali Tribes in Vattal Hills of Dharmapuri (TN), India. Ethnobotanical Leaflets. 2008; (1):139.
11. Anonymous, National Formulary of Unani Medicine, (Ministry of health and Family Welfare, New Delhi), 1993; 177, 335.
12. CCRUM, National Formulary of Unani Medicine, New Delhi: Deparment of AYUSH, Ministry of health and Family Welfare,Gorvernment of India. 1993. **2**(1). 145-56.