

The Sociological Impact of the Chronic Kidney Disease in the North Central Province (with Special reference to Padaviya Area)

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Abstract:

The kidney which heles as valuable to continue the body. It can be disease because of several reason. The chronic kidney disease can be divide mainly as two types. Such as Acute renal failure and chronic kidney disease. The reasons to affect for these two types. Sometime can be same and sometime it can be specific in Sri Lanka most of the people. Who live in dry zones and Agricultural zones. They are suffering from Chronic kidney disease. It happens because of the unknown reasons.

As the selected problem is kidney disease, how it affects for people's day to day life? How long the solution as to as? What are the social and cultural problem? Which occur because of the kidney disease? What are the economic problems which occur because of the kidney disease? The aim of this experiment is to identify the problems which people face in their day to day lives in padaviya area of Anuradhapura District. The study covers individual people using Unconditional sampling method/ convenient sampling method to obtain information form respondents through modified questionnaires and interviews. The SPSS statistics data analysis software was employed for to analyses the study.

The result indicate that people face for many problems on their day to day lives because of the chronic kidney disease in Padaviya area of Anuradhapura district. Some people who engaged with the agriculture and suffering from Unemployment. There are so many houses Widowed women. Spend lot of money for their treatments. Diminutive education of children and also problems occur about unmarried youngers. The kidney disease family face many economic and social problem.

Keywords: Chronic Kidney Disease, North-Central Province, Unknown an etiology, sociological Impact, Environment impact

Introduction:

An apparently new form of chronic kidney disease (CKD), mainly affecting rural and underprivileged paddy farmers, has been identified in the North Central dry zone of Sri Lanka. At present the cause remains controversial and subject to debate. The disease remains labelled as Chronic Kidney Disease of Uncertain aetiology (CKDu). CKD is recognized as the major public health problem in the North Central province of Sri Lanka. Since early 1990s, chronic kidney disease was reported among paddy farmers in the North Central Province of Sri Lanka. Since then it has spread to other agricultural communities in the dry zone. This has not been attributed to any of the known causes of CKD like diabetes, hypertension, glomerulonephritis etc. Thus, it was named as chronic kidney disease of unknown origin (CKDu), (Jayasumana,2016). Chronic kidney disease, also known as chronic renal failure, chronic renal disease, or chronic kidney failure, is much more widespread than people realize; it often goes undetected and undiagnosed until the disease is well advanced." The outbreak and prevalence of Chronic Kidney Disease with unknown etiology (CKDu) among people living in some areas confined to North Central Province (NCP), namely Dehiattakandiya, Girandurukotte, Kabithigollawa, Medawachchiya, Medirigiriya, Nikawewa and Padaviya in Sri Lanka" (Gunathilaka, et la.,2015). The Chronic Kidney Disease (CKDu), taking the lives of thousands in poor farming

communities in Sri Lanka, is commonly seen as a problem peculiar to the island's north central dry zone agricultural region.

Chronic kidney disease includes conditions that damage kidneys and decrease their ability to keep you healthy by doing the jobs listed. If kidney disease gets worse, wastes can build to high levels in your blood and make feel sick. You 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. Chronic kidney disease may be caused by diabetes, high blood pressure and other disorders. Early detection and treatment can often keep chronic 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.

There are two type of kidney Disease or renal Kidney Failure are,

1. Acute Failure
2. Chronic Kidney Disease Unknown atiology (CKDu)

Ministry of health defined CKDu as follows;

- "No past history or current treatment for diabetes mellitus or Chronic/severs hypertension, snake bite, urological disease of known etiology or glomerulonephritis.
- A 3-month average blood glucose level of <6.5%
- BP<160/100mm Hg untreated or <140/90mm Hg on up to tow antihypertensive agents"(Johnson.et al., 2012).

Some of the causes of both kidney diseases include some causes that are common to both types. According to, chronic kidney failure fever Glomerular Filtration Rate (GFR) of more than 60 ml/min Less than three months, if the disease is chronic kidney disease such as Long-term or chronic kidney

disease. It can't be restored to the original. Categories of kidney failures are Urinary Tract Infection, Nephritis, Chorionic nephritis, renal calculi, According to the literature review kidney disease and its function "Bladders calculi, renal cancers and Polycystic kidney disease. Kidneys are the main body organs related to the CKDu. Task of kidneys are balancing water level of the body, control blood pressure, excretion of organic matters in the body" (Subasinghe,2014).

Literature Review:

Bandarage A (2013): "Political Economy of Epidemic Kidney Disease in Sri Lanka" The prevailing bio-medical focus is on identifying one or more "environmental nephrotoxins." While delineating important controversies on the etiology of the disease, this article seeks to broaden the discourse on the hitherto neglected political economy of CKDu in Sri Lanka. In so doing, it seeks to bring together the bio-medical debate on the impact of widespread and unregulated use of agrochemicals on public health and kidney disease with broader global interdisciplinary perspectives on the industrialization of agriculture and the consolidation of food production by transnational agribusiness corporations. The article concludes pointing out environmentally sustainable and socially equitable development and organic agriculture as the long-term solutions to CKDu in Sri Lanka and elsewhere.

Subasinha W (2014): "Reasons and Social Effects of chronic Kidney Disease (CKD) patients in North Central Province Sri Lanka (With Special Reference to Padawiya area)" This study was mainly based on Research problem is "reasons and social impact of CKDu patients in North central province?" Survey was conducted to identify the research problem and data were collected using questionnaires, key informant interviews and focus group interviews. Research area was Padawiya in Padawiya Divisional secretariat. In developed countries, the most common causes of CKD are obesity, high blood pressure and diabetes. But in Sri Lankan context, there is a significant high rate

of kidney patients in north central province. Many researches were conducted to identify the causes and effects of the disease

Nisantha, B.M.N. (2014): "Influence of paddy farming Behavior on Human Health in Sri Lanka" This Research Based on the Paddy farming in Sri Lanka can be divided into different schemes according to the source of water available for farming. The influence of paddy farming behavior on human health varies within cultivation schemes.

Amaranayaka P W P, Obeyarathne F and Dissanayaka S N (2016): " Assessing Soci - Economic impact of the Chronic Kidney Disease on paddy Farming Community in Anuradhapura District ", The research is intended to have an impact on the kidney disease of the farmer community of Anuradhapura. At the time, he studied the social economic problems faced by the kidney disease of the Anuradhapura Government farmers.

Beng H, Methven S, Hair M D, Jardine A G, Macgregor M S, (2008) Socio-Economic statñ influences Chronic Kidney Disease prevalence in primary care; a community based cross – sectional analysis" This research has been spreading widely in Chronic Kidney Disease in the United States; For these reasons, medical reasons have been given to reveal reasons. In the study, 54 patients with 313 639 cases had already been tested, with a total of 54 patients being tested for GFR filter speed The socioeconomic conditions of these patients were carried out in rural patients and patients, and their gender and age such as this research has been conducted.

Research Methodology:

According objects of this Research are identified how effect the Kidney disease for the domestic economy and identify how update the solutions given them. How effect kidney disease for the Patients domestic economy is selected as a problem of this research and, how change the income source because of Patients situation. How deviation the patient's income after and before the disease.

How is the patient's expenses situation are taken as a questions? In this research under the random samplings method and compliance to the survey method, questionnaires and interviews are used as a data collecting methods.

"Patient being of the Anuradhapura and Polonnaruwa district in North Central Province are not in regular when increase the prevalence of the disease in Nikawewa, Madawachchiya, Medirigiriya, Kebithigollewa and Padaviya comparatively it decreases in Rajanganaya"(Wanigasooriya,2012).

Accordingly, this chronic kidney disease mostly prevalence in Medawachchiya, Kebithigollewa and Padaviya area in North Central Province meanwhile.

Results and discussion:

It is also important to identify the basic information of the Chronic Kidney Patient. Under this, the patient's age, sex, level of education, marital status, nature of job nature of the present job if the nature of the cost has changed before and after the disease, the patient's family income course, and the condition of the patient, the information on the housework of the patient's home, and the relationship between CKDu patient and home basic, patient's age, sex, marital status, level of education and income of the patient attention is directed.

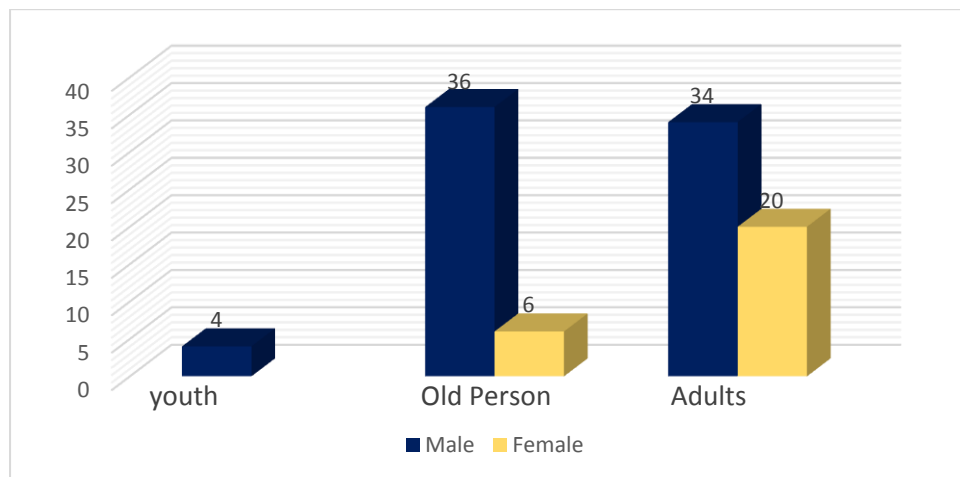
Table No 01 - Identifying the distribution of CKDu patients by age

Home basic	Frequencies	Percentage
Yong	2	4%
Adult	21	42%
Over 60 adults	27	54

Total number	50	100%
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Source: Field data, 2016.

Charts No 01 - Identification of the distribution of CKDu patients according to sex and age.



Source: Field data, 2016.

The detection of kidney disease indicates that the majority of the kidney patients are aged over 60 years old, which is 54% of the total number of kidney patients. Also, the age range from 35 to 60 years is 42%, and the youth is 4%. The spread of chronic kidney disease in terms of sex and age can be identified as follows. The influence of disease with age can be identified.

These columns indicate the distribution of Chronic Kidney Patients according to sex, or morality and age range. Accordingly, the young age range is between the ages of 20 - 35 years, the adult male is 35 - 60 years of age, the elderly women are 36% at the same age and the percentage of women aged 60 years of age 20% and 34% males respectively. This can be identified as a chronic kidney disease. That is, according to sex, men are affected by the disease in comparison to women, and men and women of 35 years of age are more likely to be infected with the disease.

“WHO report says that the disease is frequently starting at younger age group and commonly manifests in male farmers, typically between the ages of 40-60 Yrs. engaged in the agriculture, low

socio-economic class. the most affected patients belong to the 30-60 year age group" (Gunathilake S.K. samarthunga S.S. at.,al 2014:39) pointed out that farmers who have a high proportion of agricultural life-borne illness have been diagnosed with the disease, a disease common to the age group of 30 to 60, which is generally considered to be of lower socio-economic status.

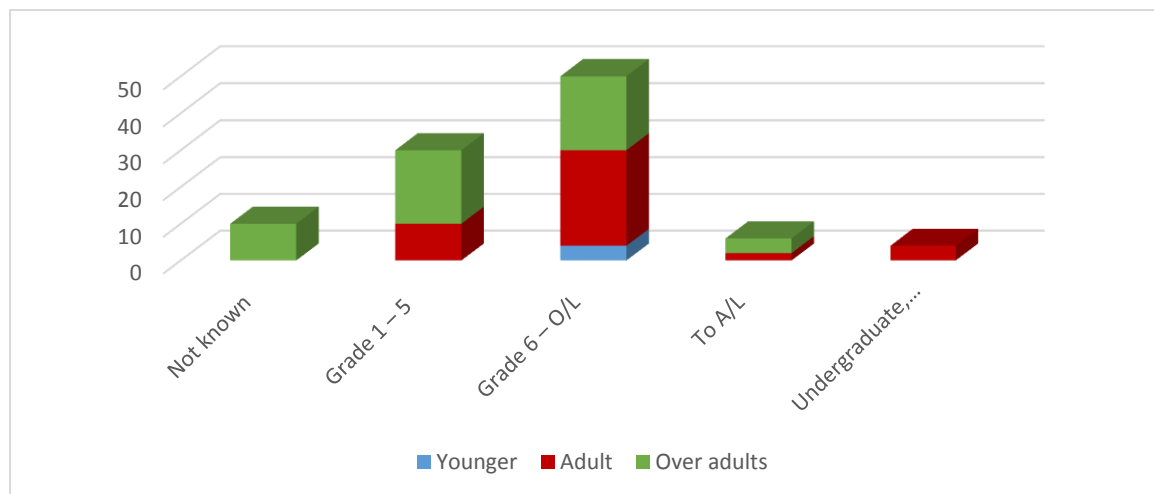
Table No 02 - Identifying the distribution of CKDu patients by level of education.

Level of education	Frequencies	Percentages	Real value	Cumulative frequencies
Not known	5	10	10	10
Grade 1 – 5	15	30	30	40
Grade 6 – O/L	25	50	50	90
To A/L	3	6	6	96
Undergraduate,	2	4	4	100
Graduate				
Total	50	100	100	

Source: Field data ,2016.

In identifying the level of education of the people living in the Padaviya divisional secretariat, the number of graduates is 0.016% and 0.81% for graduates, 13.44% have passed up to the GCE A / L examination, 28.08% have obtained their Grade to the GCE Advanced level, 31.08% 19.47%, those from grade1 to grade 5 who earn their education, and 6.32% of free education. (Resources section). However, the number of those who did not go to school is 10%, the number of those who have been educated is 30% from 30% and 6% from the 50% who sat for the undergraduate degree. Also, 6% of those who were enrolled for the A / L examination were mostly reported in the ninetieth, 4% of the graduates or undergraduates.

Charts No 02 - Identify how the level of education varies according to age



Source – Field data – 2016.

This graph shows the relationship between age and education. It was revealed that the progress of the group of people aged between 35-60 had been progressing well over the age of 60 years. In this text, differences in education can be identified with age. That is, when they are less inclined towards education, they also recognize the immaturity of agriculture.

Table No 03 - Identify the CKDu patients according to the nature of marriage.

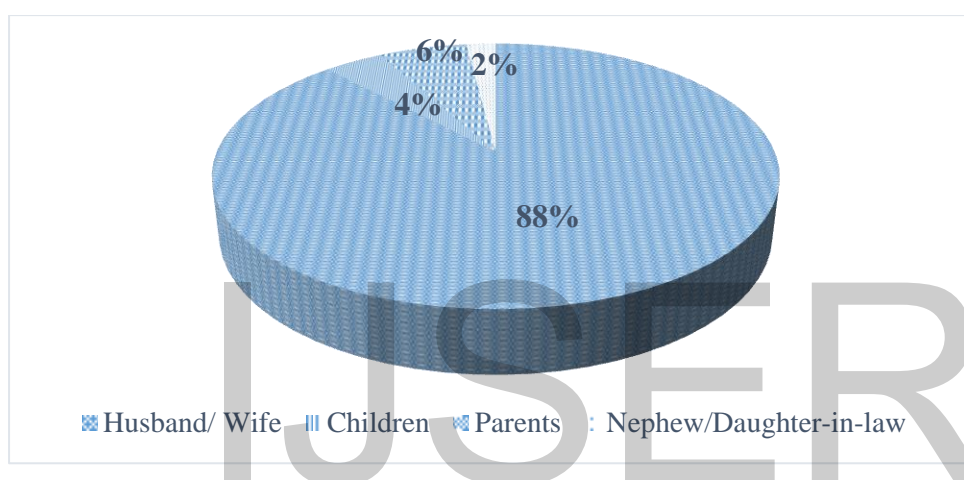
The nature of marriage	Frequencies	percentage
Married	37%	74%
Unmarried	4	8%
Widowed men	9	18%
Total	50	100%

Source: Field data ,2016.

According to this table, the social background of kidney patients can be identified, to some degree, by their married unmarried status. According to this analysis, the incidence is 74% of the total marital status. Further, 18% of the kidneys can be diagnosed as male and female. Also, about 8% of unmarried adults are affected by the disease.

It can also be understood as the effect of homeowners' effects chronic kidney disease and the nature of the relationship to the patient at home. Responsibilities of the house are dispersed by a certain order. An important place in an agricultural society will be given to a husband. Such as the father is the family nucleus or the backbone. Father's work does not work properly because father illnesses. Therefore, family life has a major impact.

Chart No. 3 Chronic kidney disease, Patients and The nature of the relationship between the household



Source: Field data,2016.

According to research Direct impact on family heads to break the family. According to this chart Ability to get a kidney disease on your wife or husband or it is known that the incidence of this disease in the household is 88%. Also, their child is 4% of the disease. As well as Son-in-law or daughter-in-law have this disease occurs percentage of 2% such as family head's Mother's or father's trend is 2%.

Before kidney disease the people in this rural area have been livelihood who are mostly farmers. The condition after the disease is very different. Presently men in the Rajarata area are at a higher risk of chronic kidney disease. Accordingly, they can identify how these patients are living their lives.

Table 01: Identifying employment status before and after chronic kidney disease

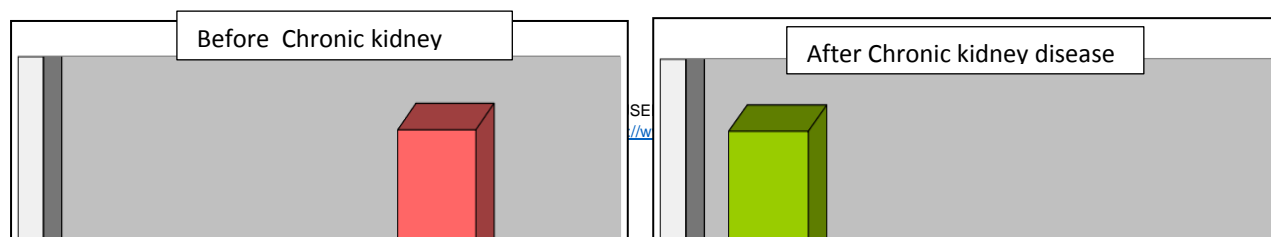
<i>Job Status</i>	<i>Frequencies the disease</i>	<i>Percentage</i>	<i>frequency of the disease</i>	<i>Percentage</i>
Cultivating his land	26	52%	4	8%
Security Section	1	2%	1	2%
Agricultural labor	1	2%	1	2%
Commerce	4	8%	2	4%
Government Services	14	4%	1	2%
Unemployment	4	32%	16	32%
Total	-	-	25	50%
	50	100%	100	100%

Source: Field data,2016.

This table can be identified most of the people on their own lands before chronic kidney disease they were cultivating and living. It is about 52% as a percentage. Also, 24% do not have a permanent job, that is "housewives" and as part of their homes. Such as 8% of agricultural workers, and government employees 8%, 4% engaged in commercial activities, 2% of pensioners and 2% of security personnel. Even though this is the case before the disease and different after the disease.

The above table shows how the job position changed after chronic kidney disease. According to the report, unemployment has grown by 50%. Currently there are unemployment at the same time, 8% remained agricultural workers and 52% of farmers who planted their own lands majority. As well as when the disease grows and just as a revenue gap in daily life breaks.

Graph 1: To identify the Chronic kidney disease before and after Monthly Income



Source: Field data,2016.

The family income is as follows before identifying the kidney disease. The income generation of less than <5000 is 14%. The number of people who earn a monthly income of Rs. 10000-20000 is 22%. The income earners range from 20000 to 30000 and account for 36% and 8% of the income is between 30000 – 40000.

And the income of these people after the chronic kidney disease has changed and it also lowers revenue. That is, earnings below Rs. 5000 are 54%. This is a 40% increase over the previous report. These data can be identified the high income group is relatively low compared to the previous year.

The change in jobs in the North Central Province directly affects the chronic kidney disease. Similarly, income sources will be broken. But of the state employees.

Case studies 1

Now, you can't get along with yourself. I can't do anything at all. My hand hurts. So how can I get the paddy field? I was not enough to eat and drink.

Source: Filed data, 2016.

The patient's statements are implanted, the economic impact. The peasantry representing the lower class are their own economies for the survival of the, not the economy. That is a farming community. But in this situation, the patient can be identified as a long term helpless.

Table 5: identify that how to get treatment for Chronic kidney disease in general

How to get treatment	percentage
Medication(tablets)	80%
Kidney transplant	4%
Peritoneal Dialysis	4%
Hemodialysis	12%
Total	100%

Source: Field data,2016.

It also appears in the table notes; kidney patients are at various erosions of their illness. Accordingly, various individuals receive various forms of treatment. Most government hospitals use it, most of the patients use tablet. It is an 80% identifying it. The kidney transplant must be taken tablet in monthly clinics. Kidney transplantation has also been about 4%.

Government hospitals or other medical centers accordingly to kidney disease situation, how often do the patients treat for the treatment? Attention was focused on this about. Treatment is for treatment at least eight times a month. In this situation, the patient can identify many problems in his daily life. He should go to the Padaviya base hospital or to the Anuradhapura teaching hospital for treatment. Form there you should arrive at the Anuradhapura teaching hospital at a distance of 100 kilometers. Accordingly, the difficulties encountered for treatment can be identified.

Graph 3: Recognition of frequent treatment of chronic kidney patients



Source: Field data, 2016.

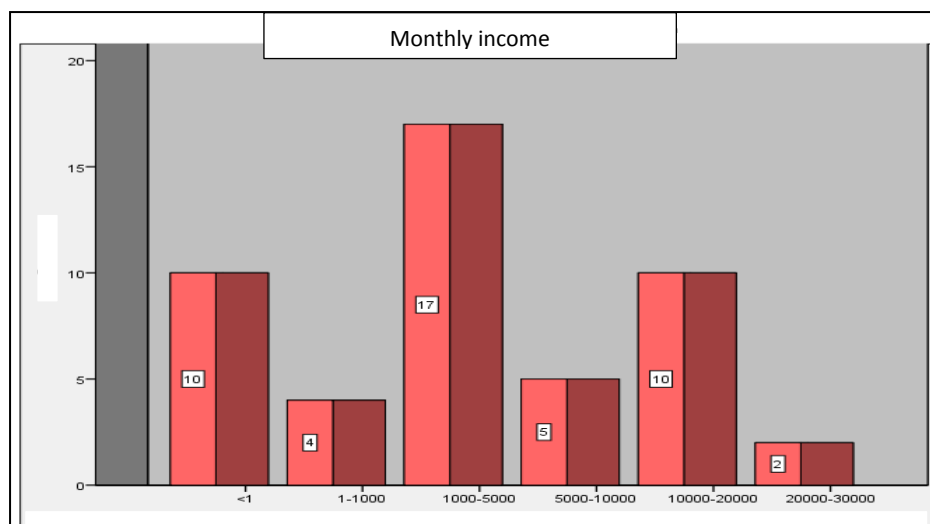
According to this bar chart the frequency of having treatments of patients can be identified. Accordingly, 80% can be identified only once, or only twice or three times get treatment. The other 20% treatments are in more frequent cases. Of these 6% is treated more than 12 times per month.

The income of kidney diseased families can be identified. There is a gap between the income and expenditure of the victim of kidney disease. That is the agricultural life of the diseased families has totally collapsed. Accordingly, a number of issues have arisen in the society, such as debt relief, unemployment and poverty.

Even though majority of the people in the area have made agricultural livelihoods. By now, away from agricultural life, public and private sector employment can be identified. However, the effect on the income of the victims' homes is of particular concern.

Kidney patients receive farmer's house income involved monthly income affects the economy. Farming had some sort of an impact their income has changed. By now, the income earned by farming had an impact. It is possible to identify situations such as the elevation of the paddy fields in the field itself.

Chart No 5: Monthly income form kidney patient's home



Source: Field data,2016.

The engagement of the farming community can be gradually reduced. It has a direct impact on the Chronic kidney disease. Therefore, 20% of kidney disease families get away from agriculture. Accordingly, the monthly income of the agriculture can be identified in a variety of ways.

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Conclusion:

The conclusion of this research was that the kidney disease not only affects the individual, but also aggravates the whole of society. The inquiry concluded that the Kidney Disease is not only for individuals, but for the entire social democrats. Prior to the kidney disease, the majority of farmers were agricultural farmers, while the rest were caretakers, pensioners and public servants, and although the number of other employed people is minimal. Accordingly, the main livelihood of the area was identified as agriculture.

When diagnosed with the disease, it is possible to identify most of the condition in which the disease can't produce any form of employment. It's just that most people get sick with this disease. A kidney transplant and a person who is suffering from dialysis is in a situation where there is insufficient physical strength to fulfill his own drinking needs. That is why they can identify their income path.

Patients can be further depleted under the high cost of treatment. The monthly income of the families of kidney patients can be detected in some way before and after kidney disease. That is, a relative decrease in the incidence of a certain type of illness. Therefore, as a relationship between pathways and after-sales of the disease, it can be identified as a decrease in comparison. It is possible to identify the relationship between the patient and the home-based relationships between the patient and the family head of the family. As a result of this, in the face of a fall illness, in the midst of this unfortunate illness, in the midst of a medical consultation, the immune system cannot prevent the daily life of the vagina and the poor culture in the households. In these situations, patients can be further helpless.

Most farmers earn agricultural income when identifying the income of families of kidney patients. By now, most patients are able to move away from the paddy cultivation and earn the same in the paddy fields and work to cover the family's cost in some way. Similarly, patients will have to obtain loans when they cannot afford the expenses of their patients. More people can be abducted with jewelry and paddy fields and can be identified in addition to the disease.

In addition, grants have been donated to the government based on certain social considerations, but it is insufficient. In identifying the nature of the disease, more than one person can be diagnosed in one household with this condition. Also, a large percentage of other kidney related diseases can be diagnosed with diabetes. High blood pressure can also be identified. It is therefore clear that patients are further helpless in the disease conditions that coincide with these diseases.

It was also revealed that most of the patients were being treated in the government hospital, which could be uncovered through the research. It is also possible that few kidney transplants have been treated and that the blood or leukemia detection rate is lower.

Most kidney patients can now be found hidden in it. Because of the social, social, cultural crisis, the disease has spread to the various places secretly. Because of these conditions, it is possible to

identify socially disruptive situations in parallel with the existing disease. This disease can also be attributed to some kind of socialization or marginalization.

The main problem facing the social, economic, cultural and social problems faced by kidney patients is that the physical damage to the kidneys is due to the severe impact on economic and living conditions. Patient illness is not only physically ill, it also weakens the person in every aspect. Not only the issue of the breakdown of income sources, but also other diseases such as diabetes, high blood pressure, poverty, and the education of children. Similarly, as a cultural issue, the problems that arise with marriage can be identified. Even though it was done in different places before the cultural expedition, it was specially considered to be a farming youth in Rajarata. Even if she is a girl, there is a risk situation. Cultural diversification for social development should take place. But under such circumstances, the village will have a cultural disturbance when it is not disposed of in a cultural setting. It also has a direct impact on the economy.

References:

Amaranayaka, P.W. P., Obeyarathne, F., and Dissanayaka, S.N., 2016. *Assessing Soci - Economic impact of the Chronic Kidney Disease on paddy Farming Community in Anuradhapura District.*

Bandarage, A. 2013. *Political Economy of Epidemic Kidney Disease in Sri Lanka.*

Jayasumana, C.S. 2016. *Wakugadu satana.* Nugegoda: sarasavi publication.

Jayasumana, M.A.C.S., Gunathilake, S., and Senanayaka, P. 2014. *Glyphosate, Hard water and Nephrotoxic Metals: Are They the culprits Behind the Epidemic of Chronic Kidney Disease of Unkonwn Etiology in Sri Lanka.*

Ievers, R. W. 1889. *Manual of the North Central Province.* Ceylon Government printer, Ceylon.

National kidney foundation. 2016 September 29. Retrieved from [http://www. Kidney .org / kidneydisease](http://www.Kidney.org/kidneydisease)

Nisantha,B.M.N.2014.*Influence of paddy farming Behavior on Human Health in Sri lanka*

Subasinghe,w.2014.*Reasons and social effects of Chronic Kidney Disease (CKD) patients in North central province Sri Lanka (With special reference to Padawiya area)* University of Kelaniya, Kelaniya

<http://clinic.h> World Health Organization .2015. Non communicable diseases progress monitor, WHO: Document Production Services, Geneva, Switzerland.

World Health Organization. 2015. Non Communicable Diseases Progress Monitor 2015.

cfi.in/kidney- Noble,A. Amerasinghe,P. Manthrithilake,H. and Arasalingam,S) .2016 September 29). Retrieved From

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