



MURRAY STATE
UNIVERSITY

Murray State's Digital Commons

Integrated Studies

Center for Adult and Regional Education

Spring 2017

Why is Communication a needed Prescription for prevention and post diagnosed minorities with Chronic Kidney Disease

Geraldine Dobbins

Murray State University, gmartin3@murraystate.edu

Follow this and additional works at: <https://digitalcommons.murraystate.edu/bis437>

Recommended Citation

Dobbins, Geraldine, "Why is Communication a needed Prescription for prevention and post diagnosed minorities with Chronic Kidney Disease" (2017). *Integrated Studies*. 42.

<https://digitalcommons.murraystate.edu/bis437/42>

This Thesis is brought to you for free and open access by the Center for Adult and Regional Education at Murray State's Digital Commons. It has been accepted for inclusion in Integrated Studies by an authorized administrator of Murray State's Digital Commons. For more information, please contact msu.digitalcommons@murraystate.edu.

Why Is Communication

A needed prescription for prevention and

Post diagnosed minorities with

Chronic Kidney Disease

Geraldine H. Dobbins

Murray State University

Professor Steve Cox

Abstract

The improper functioning of kidneys can lead to and possibly be diagnosed as Chronic Kidney Disease. My aim is to explore how the communication process affects the outcome of this disease in minorities. Information will be presented from various forms of research. This research will show the availability and accessibility of communication in areas with a higher number of at risk patients.

Communication is imperative for controlling, maintaining, diagnosing and living with Chronic Kidney Disease. Through scholarly based, peer reviewed materials we will determine the needs of communication within the family, community and health care fields. Suggestions will be made on effectively using communication processes.

Chronic Kidney Disease

I.	Introduction.....	5
II.	Literature Review.....	9
III.	DEFINITION OF CHRONIC KIDNEY DISEASE.....	9
	A. What is Glomerular Filtration Rate?	11
	B. How is CKD diagnosed?	12
	C. CKD precursors Causes and comorbidities.....	15
IV.	DEMOGRAPHICS OF THOSE AFFECTED.....	19
	A. Commonalities, Comorbidities and minorities with CKD.....	18
	B. Minorities with CKD.....	21
	C. Mortality rates	23
III.	MORTALITY AND MORBIDITY RATES	
	A. Mortality rates among minorities.....	24
IV.	TREATMENT OPTIONS AND MANAGEABILITY.....	25
	A. Diuretics and Thiazides.....	26
V.	COMMUNICATION PROCESSES	30
	A. Patient Provider.....	30
	i. How does Race affect Patient-provider communication.....	39

- ii. What is the patients’ communication role with Healthcare providers.....44
- iii. How should patients prepare for health care appointments.45
- B. Patient Family Communication.....46
 - i. Roles of Family Communication.....46
 - ii. Emotions, feelings, communication challenges with managing CKD.....48
 - iii. Families interpersonal, verbal, physical communication.....50
- C. Community Health Communication.....51
 - i. Communication within organizations52
 - ii. Community Health Projects.....53
 - iii. Blogs, websites and mass media54
- D. Are Patients effectively sharing communication.....56
- E. Patients as communication advocates.....56
- VI. Analysis.....58
- VII. Recommendations.....69
- VIII. Conclusion.....73
- IX. References.....77

Introduction

1 in 3 Americans are presently at risk of developing Chronic Kidney Disease (CKD). Without knowledge you could be that one. Knowledge can only be accessed through communication. However, communication can be obtained through many facets. My desire is to find how communication or the lack of, affects interventions and post diagnosed minorities with CKD.

Research shows that minorities are more commonly affected with (CKD). African Americans are at the highest risk of developing CKD. This population is almost four times as likely to develop CKD in comparison to non- whites. American Indians are almost twice as likely and Hispanics are 1.5 times. As there are many preexisting conditions that lead to the cause of CKD, communication demands a priority stance between patient, doctor, community and family.

Heart disease is a precursor to CKD and remains the leading cause of death in the US. Other health concerns such as diabetes, cardiovascular disease, hypertension and obesity are comorbidities and are instrumental in advancing the stages of kidney disease. As a minority this is particularly a source of discontentment. One has to wonder how many people of color are unaware of this pertinent information. One considers a few options: First option being is health care providers and communities doing their part in effectively communicating this information? Are patients aware of the commonalities associated with CKD? Are patients and families as receivers of this communication comprehending the seriousness of the comorbidities and disease itself? I want people of all color to understand and know the importance of communication as it pertains to one's health. Patients have to realize health officials or liaisons are not just promoting healthy living to inflict fear into their lives. One has to realize this is for one's well-being. My

husband is a Chronic Kidney disease patient and is in End Stage Renal Disease (ESRD) and this disease effects more than just him. It affects our whole family.

I believe when a patient is diagnosed with diabetes, cardiovascular disease, hypertension and or high cholesterol, effective interpersonal communication should be implemented informing patients, of the severity of these diseases. Patient-provider communication should be representation of more than just a professional office visit. Patients should feel the provider is genuinely concerned with their well-being. Providers must emphasize the dangers and risk associated with these health concerns. Further communications should be practiced in explaining the depth and risk of CKD. Communication windows and opportunities should be examined and implement prior to a diagnoses of kidney disease. This would include community involvement and mass media productions through health care outlets. These programs would promote healthier living options, healthier food choices and encourage exercise. These programs can be promoted by health care providers handing out pamphlets to patients after a diagnoses. Providers should suggest a patient watch an informative video on the disease, while still in the provider's office.

It is imperative to examine what role communication plays in these high at risk populations. There are questions needing to be examined. Such as is there a breakdown in communication between patient-providers and minority patients with CKD? Health care providers are the first source of actively communicating with patients post diagnosis. Providers must communicate the concerns and seriousness of CKD. Providers must create an environment that responds to the patients' need of actualization. Patients cannot be made to feel substandard based on providers' stereotypical behaviors. When these concerns are met a bidirectional mode

of communication will be implemented. This will encourage and possibly depict a slower progression of this disease.

When the community becomes involved through implementation of community activities, media or written paraphernalia. Awareness will spread leading to other attainable outlets for the CKD patient. As families are affected by diagnoses of CKD, they should be included in communication that involves all major decision making and education. Roles must be identified seeking ways to better communicate with persons, actively seeking prevention and those post diagnosed with CKD.

Medicare reportedly spends about \$41 billion per year on CKD one realizes this is a major contribution to the National deficit. It is my belief, if patients are better informed the gravity of cost will decrease dramatically. As patients are enlightened on prevention and maintenance of CKD, we will see a decrease in the number of persons affected. Each person has a role to play in communicating health concerns and solutions associated with CKD. I want to empower you with that knowledge. By examining community communication processes as well as patients' feedback and involvement, we will see how communication strategies will improve the outcome of patients affected with CKD. Thus answering the question, "Why Communication is a needed prescription for prevention and Post diagnosed minorities with Chronic Kidney Disease.

Communication A needed prescription

for prevention and post-diagnosed minorities' with CKD

Patients are diagnosed with Chronic Kidney Disease at an alarming rate. Studies show a substantial increase of the affected being minorities. Life altering treatment options are failing thus increasing the rate of mortality. While research and studies are done suggesting alternative methods of treatment the problem still persist. Is this in part due to a lack of communication between patients, health providers, family and community?

Literature Review

The first step in and presenting information, relevant to the causes and effects of persons, diagnosed with Chronic Kidney Disease, would be to insure a clear definition has ensued. As suggested by Razmaria, A.A. (2016), "It is estimated that 1 in 10 US adults has chronic kidney disease, and many who have the disease are not aware of it." This is staggering information in that CKD is linked with profound rates of morbidity and mortality. Balogun, Rahman and Balogun, (2013), define kidney disease as "kidney damage or glomerular filtration rate, (GFR) $<60\text{mL}/\text{min}/1.73\text{m}^2$ for a period of 3 months or more" (p. 4). Normal GFR ranges from 120 to $130\text{ml}/\text{min}/1.73\text{m}^2$ when ones levels are below $60\text{ml}/\text{min}/1.73\text{m}^2$ the patient's kidneys are functioning at less than 50%.

The kidney has many important functions. The normal kidney void of structural damage is in the shape of a bean. This bean shaped organ is the approximate size of ones fist in correlation to one's body size and is situated on each side of the spine, under the rib cage. One may perceive the purpose of kidneys is to only produce urine. However, the kidney has other functions.

According to Akinlolu, et.al: (2014).

The kidney is a major component of the urinary system, which maintains body homeostasis through filtration, active and passive absorption, and secretion. The final product of the filtration processes is urine which contains eliminated waste metabolic products. The kidneys are equally involved in the regulations of fluid and electrolyte balance, blood pressure and erythropoiesis. (p. 469).

In laymen's term the kidney receives unfiltered blood from the body that contains extra fluid and waste. When the blood reaches the kidney, it is then passed through nephrons or tiny filters into the glomerular. The glomerular located inside the kidney contains more filters and is where the extensive filtration process takes place. This process is key, as this is where all toxins and additional fluids are filtered and prevented from reentering the blood stream and body. After the blood is cleansed it is then returned to the body. As fluid and waste materials are filtered from the blood, the waste is then secreted from the body in the form of urine. Razmaria, (2016), analyzes "If these filters are damaged, they may become "leaky" and substances like proteins can seep from blood into urine" (p. 2248). With the onset of protein or any other unfiltered materials entering the blood stream, one is being positioned for CKD.

A healthy kidney creates red blood cells, maintains levels of potassium, sodium, calcium and phosphate. It regulates blood pressure and prevents fluid overload from waste and extra fluids in the body. When ones kidneys fail to maintain levels or produce red blood cells one is in renal distress. This can be caused by either structural or functional damage. Structural damage can be categorized as a form of physical damage such as a congenital defect or a damaged kidney caused by outside forces. Functional damage can be described by the kidneys failing to function properly due to illness or preexisting health conditions.

Chronic Kidney disease as described by, Black, Sharma, Scotland, McCullough, McGurn, Robertson, and Smith (2010) "is a long-term condition and has been described as the gradual loss of kidney function over time" (background section para. 1). The losses of kidney function are divided into 5 categories or stages. These stages are based on ones GFR. Stage 1- 3 are the most prominent stages, as this is the stage where one is able to slow progression of CKD and its comorbidities. There are ways of detaining or slowing the progression. This would include one to

immediately quit smoking, change alter or implement a healthy diet and include an exercise agenda. It is in this stage where, “Timely diagnosis and treatment of chronic kidney disease can delay disease progression and may decrease adverse cardiovascular outcomes” (Basile, 200, p. 500).

The slower progression is contingent upon receiving an early diagnoses and being compliant with treatment recommendations. When one is in stage 4, kidney functions are consistently declining. In this stage patients may still be able to slow the progression of the disease. As one enters the last stage; stage 5 one is preparing to live with the disease as the kidneys functions are well below the limits of viability. Basile (2007), determines “Stage 5 as a GFR less than 15 mL/min/1.73 m, and constitutes renal failure requiring RRT” (p. 500). Renal Retention Therapy or RRT is an alternative artificial method for the kidney filtration process.

What is GFR?

A healthy kidney is able to perform the filtration process without complication. However, when ones kidneys fail to maintain this process, alternate methods of filtration must be introduced. It has been established the body cannot maintain itself without natural or an artificial process for this elimination.

Glomerular Filtration Rate is a test that measures the functioning level of ones kidneys. These levels are determined by a blood test purposed to ascertain how well the glomeruli is filtering waste. There are other markers and test used to determine the viability of one’s kidney. Some Nephrologist chooses alternatives such as urine test and kidney imagining. Urine test are used to measure Albumin- creatinine as imaging is used to detect kidney abnormalities. However,

Levey, Coresh, Balk, Kausz, Levin, Steffes and Eknoyan (2003) suggest, “Glomerular filtration rate is the best measure of overall kidney function in health and disease” (p. 139).

In considering all test are not the same and each represents it's on set of variables and variations, one acknowledges this is true with GFR. As the normal GFR range is 120 to 130ML/min /per 1.73m² variations will appear based on age, gender and size. The normal range 120 to 130ML/min/per/1.73m² is based on adults, where as teenagers normal GFR typically is in the lower range. These dynamics are taken into consideration when determination of CKD is being reviewed.

How is CKD Diagnosed? CKD is an asymptomatic, slow progressing disease it often goes undiagnosed until it has reached its advanced stages. This possibly attributes to opinions that reflect, CKD as an “underdiagnosed and undertreated disease resulting in lost opportunities for prevention.” (Levey, et. al., 2003, p. 137).

CKD can be diagnosed with patients not showing any physical symptoms. A primary care physician or nephrologist can also diagnose with no known cause. However, there are blood and urine levels that are consistent in kidney damage. In the process of diagnosing CKD, urine and blood samples are administered and submitted to the lab. As an increased amount of protein in the urine is a primary marker, this will be one of the first pathologies requested. As the urine is being tested for above normal levels of protein, a test studying the ratio of Albumin-creatinine will be performed. This test will be done to determine if the ratio is disproportioned by a ratio of greater than 30. When ones level of Albumin-creatinine are unbalanced this is considered abnormal. At this point, physicians will order blood test to determine if abnormalities are present and ones GFR will be tested. As aforementioned, Levey et.al. (2003) suggest, “Glomerular filtration rate is the best measure of overall kidney function in health and disease” (p.139).

Seeing a primary care physician (PCP), managing comorbidities and getting an early referral to a Nephrologist is key in managing CKD. Early detections and treatment can slow the progression and prevent adverse outcomes. Determining the stage of one's CKD is the first plan of action in treatment after diagnosis. Acknowledging all patients are different, so are the diagnosis and treatment options. Levey et.al, (2003) suggest "The differential diagnosis of chronic kidney disease in a specific patient is based on the history, physical examination, and laboratory evaluation. The remainder of the evaluation for CKD is similar for most types of kidney disease" (p. 140).

Minutolo, Lapi, Chiadini, Simonetti, Bianchini, Peechioli, and DeNicola, (2014), performed a study called Risk of ESRD (End Stage Renal Disease) and Death in Patients with CKD not Referred to a Nephrologist. In this study he chose 30,326 patients who were not on dialysis. These patients were previously taken care of by their primary care physicians and had not yet been referred to a Nephrologist. This study used 6 stages of CKD, as opposed to the 5 discussed earlier. The study started at stage 1, with an addition of stages 3a and 3b. The study consisted of 64% of the participants being in stage 3. Patients in stages 3b-5 were at 4.5% and the remainders were stages 1-2. Minutolo, et.al. 2014 detailed information stating "In patients with CKD not referred to Nephrology risk of ESRD and mortality were higher in those with CKD stages 3b-5" (p. 1590). Of the 30,326 patients 6592 patients in stages 3a-5 died and 295 were eventually diagnosed with ESRD.

Primary care physicians diagnose CKD based on albumin- creatinine levels, protein in urine and blood levels. These physicians predictively tend to manage the comorbidities such as Cardio Vascular Disease (CVD), hypertension and diabetes and fail to refer patients with CKD to Nephrologist until the disease has progressed into later stages. In delayed referral to a

Nephrologist, patients are in a deficit for intervention and are facing alternatives treatment such as RRT.

Minutolo et.al, (2014).

Other than specific indications, such as AKI, persistent hyperkalemia, recurrent nephrolithiasis, and hereditary kidney disease, one indication shared by most guidelines is that patients with a severe stage of CKD (*i.e.*, eGFR<30 ml/min per 1.73 m² and/or albuminuria) should be referred to nephrologists, because they are at high risk for progression to ESRD. (p. 1593).

When diagnosed with CKD the strategies of stages 1 and 2 should be implemented. This course of treatment would be to manage the comorbidities and work on intervention to slow the progression of the disease. At stage 3 CKD patients should be under the care of a nephrologist. It is in stage 3 other complications should be monitored, such as “anemia, malnutrition, bone disease, neuropathy, and decreased quality of life” (Levey, et.al, 2003, p. 141). Stage 4 consist of an even greater decline in GFR. One’s Nephrologist may begin to prepare for kidney transplant. This should be done prior to GFR < 15mL/min per 1.73m² for this is Stage 5 and considered renal failure. With a stage 5 diagnosis one must prepare for RRT.

CKD pre cursor, the causes and comorbidities. In the previous section information was presented defining the kidney and the role of the kidney. The determination of GFR, what levels are considered normal and what levels represent concern were described. In discussing how CKD is diagnosed we defined GFR and how it is used to determine CKD. Looking deeper in to this disease it is time to explore the causes, comorbidities, and precursors associated with this disease.

Managing comorbidities is essential in slowing the progression of kidney disease. Diabetes, cardiovascular disease, obesity and hypertension are synonymous with CKD. Understanding the importance and the direct correlated association with minorities is profound. In this section we will explore the comorbidities, the number of minorities affected with them and diagnosed with CKD. We will look at morbidity and mortality rates of CKD in, “at risk” communities and examine the course of treatments.

Books, journals, reports, and studies have been written on the effects and management of CKD. As we have established, there are pre cursors and comorbidities associated with CKD. The top ranking of pre cursors and comorbidities include diseases that millions of persons worldwide are affected by. They include health challenges that rank as the leading cause of death in the United States and others that rank high in disability. These potential killers walk hand in hand with CKD and are considered the 4 major pre cursors, comorbidities and commonalties. These four diseases are cardiovascular disease (CVD), diabetes, hypertension, and obesity.

Brownson, Smith, Pratt, Mack, Jackson-Thompson, Dean, Dabney and Wilkerson (1996) state “Cardiovascular diseases remain the leading cause of death and disability in the United States” (p. 206). Persons outside of the medical field generally associate the term cardiovascular disease with heart attack or stroke. This is not totally a true statement. One who has CVD does not always have a Myocardial Infraction (MI), /heart attack or Transient Ischemic Attack (TIA)/

stroke. However, CVD is a disease that affects the heart and its blood vessels. Blood is carried to the heart via the blood vessels. An obstruction to the blood flowing to the heart causes an irregularity in the beat of the heart and in some cases can result in disease or problems with the heart or result in CVD. CVD is commonly associated with patients diagnosed with CKD. Basile, (2007), states “More patients with CKD die from cardiovascular complications than reach renal replacement therapy.” (p. 499). Basile did a report on Recognizing the Link between CKD and CVD (2007) in correlation to the early detection and intervention. She surmises the early detection of CKD has a positive outcome on both CKD and CVD. This appears to be the consensus of other outlets associated with CKD renal failure and ESRD. The Japanese Society of Nephrology state (2009) “A CKD patient is more likely to die possibly from CVD than from ESRD” (p. 206). They too suggest this is in part due to a delay in the diagnosis of CKD and the causes associated with CVD. As there are many reasons why these comorbidities seriously affect CKD it stands to reason each could be better controlled with earlier detection. Suckling and Gallagher (2012), summarized a review on diabetes, CKD and CVD to establish ways to improve mortalities and morbidities. After reviewing studies done in United Kingdom suggestions were made for health care providers to implement interventions to reduce risk by emphasizing the importance of life style changes. According to Suckling et.al., “Type II Diabetes Mellitus has risen and continues to rise relentlessly, with 171 million cases globally in 2000, estimated to rise to 366 million by 2030” (p. 5). Suckling and Gallagher (2012) further suggest “this figure could still be underestimated as other factors such as the growth in population and additional CKD comorbidities have not been taken into consideration” (p. 5).

Girman, Kou, Brodovicz, Alexander, O’Neill, Engel and Katz, (2011) concluded after a 4 year study that excluded ESRD patients and included Type II diabetic and non-diabetic patients.

“Between 2003 and 2007, acute renal failure incidence was 198 per 100 000 person-years in patients with Type 2 diabetes compared with 27 per 100 000 patient –years among patients without diabetes” (p. 614). Acknowledging patients with Type II Diabetes have an increased risk of developing CKD than patients without Type II Diabetes. As diabetic patients are at a high risk of developing CKD they are not alone as hypertension and diabetes are the most commonly associated with CKD out of the four comorbidities. Hypertension and CKD feed off each other if one is diagnosed with CKD it can lead to hypertension just as if one is diagnosed with hypertension it can lead to CKD. Hypertension is commonly called high blood pressure, and is diagnosed when ones blood pressures is 140/90 or higher. An average of every 1 in 3 Americans have hypertension estimating that approximately 70 million Americans are diagnosed and potentially a candidate for CKD.

As CVD, diabetes and hypertension are precursors to CKD there are others such as obesity. This is clearly stated by Sarathy, et al., (2016). “Obesity is closely linked to the development of hypertension, dyslipidemia and diabetes mellitus that together constitute the metabolic syndrome. Together, they are well established independent risk factors for cardiovascular disease (CVD) and chronic kidney disease (CKD)” (p. 1).

As health consciousness has become a way of life it has brought to the forefront the issue of obesity. Abrass, (2014), state “Obesity has become a national epidemic, with ~65% of Americans currently above ideal body weight” (p. 2768). One is considered obese when their body mass index or BMI is 30 or higher. Society more commonly acknowledges obesity as above median weight in the same height category. In determining obesity is a preventable epidemic linked to CKD. Statements made by Kovesdy, Furt and Zoccali must be considered.

Kovesdy, Furt, and Zoccali, (2017).

Numerous studies have shown an association between measures of obesity and both the development and the progression of CKD. In general, the associations between obesity and poorer renal outcomes persist even after adjustments for possible mediators of obesity's cardiovascular and metabolic effects, suggesting that obesity may affect kidney function through mechanisms in part unrelated to these complications. (p. 260).

According to Kovesdy, et al., (2016), it is yet to be determined the exact role obesity plays in CKD. However, it has been clearly associated with the effects of diabetes and hypertension. Which constitute a cocktail for CKD.

According to National Institute of Diabetes and Digestive and Kidney Diseases (which describes itself as part of the National Institutes of Health) “You can protect your kidneys by preventing or managing health conditions that cause kidney damage such as diabetes and high blood pressure” (2016). However, not all kidneys can be protected. As there are causes of CKD not associated with comorbidities. Other causes of CKD include inherited kidney disease, chronic obstruction of the bladder, birth deformities and medically induced disease.

Commonalities, Comorbidities and minorities with CKD. Sarathy, et al., (2016), embarked on a study comparing waist size, obesity and CKD. The purpose of the study was to determine if obesity and CKD were linked in younger, healthier minorities. The researchers solicited information from the participants over a 12 year period. The participants consisted of 6918 Non-Hispanic-Whites, Non- Hispanic Blacks and Mexican- Americans all participants were between the ages of 20-40. This information was obtained from NHANES. Sarathy, et al., (2016), explain “NHANES is a continuous cross-sectional, multi-stage stratified, clustered probability sample survey performed in 2 year cycles of participants that are nationally representative of the US non –institutionalized civilian population” (p. 2). The participants were

asked a series of questions pertaining to physical activities, smoking habits, and demographics. They were each given physicals with importance being on blood pressure and the presence of BP meds in one's system. This was done as a precautionary measure, as hypertension is a comorbidity of CKD. Each participant's waist circumference was noted. Guidelines for participants were any male waist had to be a min. of 102 cm, while females' waists were a min of 80cm. Sarathy et al., (2016) state "Waist circumference was measured just above the upper most lateral border of the right ilium, at the end of normal expiration in standing position, to the nearest 0.1cm with the tape snug but not compressing the skin" (p. 3). This was done to accurately depict the same measure for each participant.

In completion of the study abdominal obesity and CKD showed prevalence in participants' of the study. Sarathy, et al., (2016), state "In multivariable analysis, abdominal obesity in young adults remained significantly associated with increased levels and odds of CKD risk factors" (p. 5). Sarathy, et al., (2016), further determined through the process of this study "Young non-Hispanic blacks were more affected by abdominal obesity (45.2%) than Mexican – Americans (40.4%) and non – Hispanic whites (37.2%) "(p. 5). These figures justify the link of obesity and CKD in minorities. Not only are the above listed minorities affected with high rates of obesity but there are others such as Native Americans and Pacific Islanders.

In the examination of other commonalties and the effect they have on minorities and CKD, one is compelled to examine hypertension. In the article "Important causes of chronic kidney disease in South Africa," Moosa, Walt, Naicker, and Meyers, (2015), determine over a period of 7 years there was a 67% increase in mortality due to CKD. Moosa, et al., (2015), suggest the population most affected were young black males. Minorities rank high in most comorbidities. African Americans and non- Hispanic whites are equally affected with heart

disease but African American males are more likely to die from CVD. By far African Americans are diagnosed and treated with hypertension at a higher rate than other races. However, Mexican American men and women have reported high incidences as well. Minorities groups are not limited to Non – Hispanic whites and African Americans. Asian Americans, Mexican Americans, Native Hawaiian/Pacific Islanders, Native Americans/ Alaska Natives are included in these demographics. When taking into consideration minorities and the information projecting stroke as a potential life changer, and as a form of cardiovascular disease. One must consider Asian men as Asian men have a higher risk and rate of stroke in comparison to Caucasian males.

All of the above co-morbidities are directly linked to CKD, however, diabetes remains the number one overall cause of CKD. Diabetes as Gulli, Mallory, and Harmon, (2016) inform us “is the seventh leading cause of death in the United States” It is estimated nearly 30 million Americans are diagnosed with diabetes. Of these numbers, minorities are at a particularly high volume. The information obtained from various sources substantiates African Americans, Native Americans and Alaskan Natives at almost double the rate of diagnoses in comparison to Caucasians. Afkarian, Zelnick ,Hall ,Hagerty, Tuttle, Welss, and Boey, (2016) performed a detailed study characterizing diabetes over a period of 26 years the participants consisted of minorities and Caucasians. While trying to establish a pattern of the overall improved health Afkarian, et al., (2016), presented evidence showing “the fractions of adults with diabetes who self-identified as Mexican American was higher and self –reported non- Hispanic white ethnicity was lower during later survey years” (p. 603). Reports and studies are consistent in showing the affects diabetes has on minorities and CKD.

Minorities and CKD. Minorities have been documented in high cases of CVD, hypertension, obesity and diabetes. These diseases are precursors, commonalities and comorbidities in CKD. As these precursors develop what effects do they have on minorities and CKD?

Munter, Arhad, Morse, Pater, Manapatra, and Berson, (2009), compelled interested parties to explore a physical similarity existing in African American children. They began a study in 1973, which consisted of 28 children in a bi racial community. This study was centered in Bogalusa LA. Two races of children were included in the study. The races of the children in the study were black and white. The majority of the children were under 18 years of age, and were monitored and followed into adulthood. Each child prior to participation was given a physical assessment which included blood pressure. Of the 28 participants 63% were African American males and 37% Caucasian males. Intriguingly so results showed 15 participants developed ESRD, which is the end stage of CKD. Of those 15 participants that developed ESRD 7 of those were African American. The study further suggest as children African Americans had higher blood pressures and are more commonly affected by ESRD. Tareen, Zadshir, Martins, Pan, Nicholas, and Norris, (2015).

Tareen, N (2005)

End-stage renal disease (ESRD) is one of the most vivid examples of racial and ethnic disparities in health outcomes in the United States (Fig. 1) [1]. The incidence of ESRD is 4 times more common in African Americans than in their white counterparts, with an adjusted incidence of 988 per million in African Americans and 254 per million in whites [2]. For Hispanic and non-Hispanic whites, the incidence rates are 471 and 325 per million, respectively. (p. s137).

Tareen, Zadshir, Martins, Pan, Nicholas, and Norris, (2015), performed A Third National Health and Nutrition Examination Survey (NHANES III). Tareen et al., (2015) was done in 89 different locations, focusing on African American and Mexican Americans over the age of 60 and the amount of micro albuminuria and macro albuminuria that were present in their urine. This survey focused on socio-economic status, nutrition, education level and demographics. The surveyed persons were White, Black and Mexican American. The socio economic status were in accordance to the Federal Poverty level of “<200% vs >200%. Education level was measured by the surveyed person’s level of education. The two levels were less than high school or high school and above. Overall, the association of lower education levels and lower poverty levels showed an increase amount of micro and macro albuminuria in the urine. Blacks showed higher rates of micro and macro albuminuria in comparison to Mexican American and whites. This survey represents a correlation between lower education and income levels with ESRD and CKD. Although Blacks showed higher levels of micro and macro albuminuria educational and poverty levels were the catalyst. Those most affected with micro and macro albuminuria were from minority communities at and below the poverty level with education levels at high school or below high school level. Tareen et al., (2015) further acknowledge 67% of African American and 20% of Hispanics living in the United States, are in areas of urban poverty while only 12% of whites reside in those same areas; “this may contribute to the racial and ethnic disparities in CKD” (p. 139).

Minority races affected with CKD have been identified as African American, Mexican American and Native Americans. CKD is not only a health issue in the United States. Garcia-Garcia and Jha (2015), share information stating “CKD is being increasingly recognized as a global public health problem” and further state “There is compelling evidence that dis advantaged

communities , i.e., those from low-resource, racial and minority ethnic communities, suffer from marked increase in the burden of unrecognized and untreated CKD (p. 183). In Singapore where there are disparities in socioeconomic status the Malays and Indians have a higher rate of CKD in comparison to the Chinese. Canada shows a higher risk of CKD in the indigenous population as well as Australia. These numbers depict strongly not only do illness and diseases contribute to CKD but take into account the socioeconomic status of patients.

Mortality rates. Abrass, (2004), suggest “It is widely recognized that obesity contributes to morbidity and mortality from diabetes, heart disease, stroke, and some cancers, yet the important role that it plays in progression of kidney disease is rarely mentioned ” (p. 2768). Obesity is a precursor for CKD and has become a national epidemic. Abrass (2004) chooses to make the 65% of Americans that are overweight aware of the link between obesity, CKD and death. She does this by implementing facts associated with increases in CKD patients and obesity. She presents information that over the past 20 years an increase of patients diagnosed with CKD has double and estimates that over a half million more people will be diagnosed and will require dialysis. As CKD progresses so do the risk of mortality. Girman, et al., (2011) explain “The mortality rate among patients with acute renal failure is close to 50% “(p.614-621). These numbers are representative of a growing number of Americans facing increased odds of mortality. Girman’s (2011) study suggest patients with Type II diabetes are at a higher risk of developing CKD and the rate of mortality among this group has increased. He concludes communication among physicians should be heightened as to make them aware of the increase in number.

As explained by Doepem, Schroijs, Dekkers, Rotmans, Krediet, Boeschoten, and Dekker. (2014). A study done in the Netherlands focusing on 38 dialysis centers, with 394 patients was done to “predict 1-year mortality in diabetic dialysis patients.” The CKD/ ESRD

patients chosen from these facilities were followed or studied until they received either a transplant or died. Of the 394 patients in the study the results indicate 21% of those patients died. The primary focus of this study was mortality. Race was not a predictor. However, factors taken in to consideration did include smoking, gender and age. The mortality rates associated with CKD are an alarming realization. Black, et al., (2010), suggest “CKD appears to add significantly to the burden of cardiovascular disease and death and, for an important minority, can progress to kidney failure.” These researchers show the link between CVD and CKD and associate the high risk of mortality. Black et al., (2010) used electronic databases and reviewed the materials associated with his study. These reviews were done over a period of 18 years. At the completion of these reviews it was determined there were high numbers of mortality and mortality increased with each stage of CKD.

When one considers the high rate of mortality associated with CKD one can't help but wonder what the rates of mortality are in reference to minorities.

Mortality rates among minorities. The National Institute of Diabetes and Digestive and Kidney Diseases (which describes itself as part of the National Institutes of Health) states “African Americans, Hispanics and American Indians are at the highest risk of developing kidney failure. This risk is due in part to high rates of diabetes and high blood pressure in these communities” (2014). These groups of minorities suffer from increased risk of CKD as well as increased rates of diabetes and hypertension. When contemplating the causes of these increased rates one acknowledges other contributing factors such as education, socioeconomic status, and lifestyle. When determining risk factors for minorities diagnosed with CKD there are two ways to describe them, they are modifiable and non-modifiable. Non-modifiable risk factors are those which the patient has no means of control over such as age, race or family history. Modifiable

risk factors can be described as taking control, when one chooses to implement change that produces beneficial outcomes. Modifiable changes for CKD and its comorbidities include; As the National Institute of Diabetes Digestive and Kidney Disease, suggest Exercise (2015), but advise “when first starting an exercise program one should consult with a physician” and further suggest one aim for a goal of at least 30 minutes per day 3 times per week. One should immediately examine ones eating habits and focus on a diet filled with less sugars and carbs. Most importantly one should cease smoking as smoking is the number one cause of CVD, which is a commonality of CKD.

Treatment options and manageability.

Treatment options vary from patient to patient based upon the patients preferences. Harvey, Walsh, Jain, Bosch, Moreau, Garland and Brimble (2016), suggest “There are several modality choices for patients approaching end-stage renal disease; these include peritoneal dialysis (PD), a home therapy or hemodialysis (HD), which can either be done at home (HHD) or performed in a facility.” (Background section para.2). There are advantages and disadvantages to both treatment options. The researchers point to areas of both in comparing HD to PD, and suggest home dialysis/ PD presents advantages in that one is free from the confinement of the weekly set visits during the week, presenting opportunities to enjoy free time during the day and to schedule more meaningful activities such as vacations. Patient on facility based HD are faced with the task of finding a facility to accommodate them while on vacation. Whereas PD patients are able to take the treatment with them. Home-based dialysis has a reduced deficit of nearly \$20,000 per year in comparison to HD. Therefore, it seems one would naturally chose PD but there barriers and disadvantages to consider such as the burden this has on family members, the health care providers confidence and belief in the process being done properly, the patients

confidence in administering the treatment properly and the fear of a failed treatment from human or machine error. When HD is done in-patient researchers agree there are less worries. Before being treated with HD or PD as the literature suggest above the patient has gone through several stages and has used other forms of treatment.

Diuretics, Thiazides. Khan, Sariff, Adnan, Khan and Mallhi (2013), describe Chronic Kidney Disease as “a global health concern that substantially increases the risk of mortality and the use of specialized health care.” Khan et al., were researchers on a study of 312 CKD patients nondependent on dialysis. This study over a period of a year was to determine the use of diuretic and thiazides in the treatment on fluid overload on patients diagnosed with CKD and other comorbidities associated with CKD. Diuretics are medications prescribed by a physician to eliminate excess fluid from one’s body. Thiazides are normally use for reduction in blood pressure but can dual purposed as a diuretic. When patients are in the early stages of CKD diuretics are used to eliminate excess fluid. The fluids are eliminated through urine, but as the disease of CKD progress the kidney fail to produce urine and diuretics are no longer effective. I this particular study the diuretics were used to determine the effects on GFR.

In order to determine the outcome of the diuretics and thiazides patients with different levels of fluid were accessed. Of the 312 patients 64 of the patients were hypovolemic meaning they had low fluid levels, 113 patients were normal euvoletic meaning they had normal levels of fluid and the remaining 135 were stage 5 CKD patients with hypervolemic measurements. The results of the study as determined by Khan et al., (2013), were “ A total of 36 (11.5%) patients initiated renal replacement therapy (RRT) and need of RRT was more profound among diuretic users. Khan et al., further conclude “It is cautiously concluded that irrespective of fluid overload,

diuretic cause adverse renal outcomes.” When one is referred to RRT that is an indication of renal failure and the beginning of hemodialysis. Khan et al., reluctantly state “Despite promising role of diuretics to manage fluid overload among chronic kidney disease (CKD) patients, their use is associated with adverse renal outcomes.”

Internal Summary

The above was important in recognizing CKD as a global concern effecting “1 in 10 US adults” presenting more information that “many who have the disease are unaware of it” (Razmaria, 2016). One can actively have kidney disease with no symptoms as CKD is an asymptomatic slow progressing disease. Kidney disease is defined when kidney function is below 50%. Balogun et.al, (2013), defines kidney disease as “kidney damage or Glomerular filtration rate (GFR), 60ml/min./1.73m² for a period of 3 months or more “(p. 4).

The kidney has been described as a small bean shaped organ, positioned on each side of ones back, under the rib. It is the approximate size of ones’ fist in correlation to one’s body type. The small size of the kidney is moot in comparison to the functioning capabilities and importance of this organ. The kidneys serve as a filtering process for toxins and excess fluids from the body. This process is done by the unfiltered blood being received into the kidney. Once in the kidney it is then passed through nephrons or tiny filters in the Glomerular. Once the blood has reached the Glomerular the filtering process continues. The blood is then filtered of addition fluids, cleansed and sent back to the body. As the fluids and waste are purged from the blood it is later secreted from the body in the form of urine. (Razmaria, 2016) state and I paraphrase, “If any of the filters are damaged they may become leaky, and excrete protein or other substance into the body.” Protein or any other material the kidney is unable to filter sets one up for Kidney disease.

A properly functioning kidney creates red blood cells, maintains levels of potassium, sodium, calcium and phosphate. The kidney is instrumental in regulating blood pressure and preventing an excess of fluids and waste from entering the blood stream. When ones kidneys fail to maintain these functions, one is experiencing stage one of kidney disease.

There are 5 stages of CKD based on GFR. “Timely diagnosis and treatment of chronic kidney disease can delay disease progression and may decrease adverse cardiovascular outcomes” (Basile, 2007). In stages 1to3 the possibility of slowing the progression of the disease is greater than in later stages. Comorbidities such as diabetes, cardiovascular disease, and high blood pressure are monitored carefully. Modifiable changes are made in this stage starting with diet and exercise. It is in this stage where on should quit smoking. One acknowledges delay and progression is contingent upon being compliant, in recommendations set by nephrologist or primary care physicians. A stage 4 kidney functions are continuing to decline. As one enters into stage 5 an alternate form of filtration is being considered as the kidney is no longer viable. It is in this stage patients prepare for RRT.

GFR is a blood test that determines how well the glomeruli is filtering, which determines the level of kidney function. There are alternative ways to ascertain the results, blood, urine and imaging. However, the recommend test is GFR. Early detection and early referral to a Nephrologist is essential in the management of CKD. Primary care physician manage comorbidities. Nephrologist, manage stages and work on interventions to slow progression. When CKD patients are referred to a Nephrologist, after prolonged periods under the care of a PCP, Minutolo et.al. (2014), suggest patients have progressed past intervention and are “high risk of ESRD” (p. 1590).

It is important to manage and control comorbidities, commonalities, and precursors. It is determined diabetes is the leading cause of CKD while the comorbidities and commonalities are CVD, hypertension and obesity. Not only is CKD prevalent among minorities diagnosed with these comorbidities, CKD statically affects individuals with lower levels of education and socioeconomic standing. This is not only a cause of concern in the United States it is also rampant in other countries and ingenious populations.

Morbidity and mortality rates have continued to increase with mortality rates being as high as 50% in 2012. With staggering mortality figures, the focus changes to treatment options. The medications used to treat CKD pre hemodialysis are often medicines used to treat the symptoms of the comorbidities. Diuretics are used to treat edema which is describes as fluid overload or swelling and can be prescribed to patients with hypertension. Thiazides are drugs that have dual indications. A dual indication means it can be used for more than one illness. Thiazides are also used as a diuretic and in the control of hypertension. When CKD advances into ESRD the process of dialysis is implemented. Hemodialysis often referred to as dialysis a means of removing toxins and excess water from the body through a blood cleaning process. Peritoneal dialysis a process where the toxins are removed through a filter and water placed in the stomach area.

Now we look at ways to better communicate. These communication processes begin with evaluating the patient provider process. An evaluation of how effectively health care providers are communicating and how well the patient as the receiver understands. A closer look will be taken to establish what areas of communication are in need of adjustments. We will now look at how minorities are affected with the present communication processes, and look at communication within the family unit of patients with CKD. Upon the completion of the

communication processes for patient- provider and patient-family. An examination of community process will be examined.

Communication Processes

CKD has been defined. The commonalities, comorbidities and shared treatment options have been discussed. We will now explore how the communication process affects the minority patient during prevention and post diagnosis. This section will explain the patient-provider relationship as seen through the eyes of the patient and it will show how patients view this communication process. Patients will view communication with their providers as either a negative or a positive interaction. While exploring these relationships, literature will show how race affects the communication dynamics between patient and provider.

CKD is a life changer, not only affecting the patient but the entire family nucleus. The importance of open communication between family members and patient will be explored. A closer look will be taken, focusing on the challenges families face when communication is distorted or omitted. These challenges will be evaluated from the communication process as seen from the viewpoints of patient and the provider. The exploration and effect of community involvement including, social media and other communication outlets will be examined and the affects community involvement has on the progression or slowing down CKD. In conclusion, the effectiveness of these communications processes and the patients' responsibility in all of them will be outlined.

Patient-Provider Communication. Communication between health care providers and patients must not be underestimated. This interaction can be viewed as vital prerequisite, for a

successful relationship. It can create a win- win or a situation of a lose-lose. Communication as a prescription may be conducive to a positive outcome for both patient and provider.

Providers share a role in effectively communicating and must be conscious to the needs of their patients. As described by researchers in the study, factors associated with patients' perceptions of health care providers' communication behavior.

Finney, Augustoson, and Wanke (2006) shared the following:

Three important communication goals have been identified for physicians to accomplish using interactions with their patients: establish a good interpersonal relationship, facilitate information exchange, and facilitate patient involvement in decision making. These goals characterize a group of communication behaviors often referred to as patient-centered communication. Patient-centered communication aims to promote empathy, shared understandings, and mutual decision making in patient-provider encounters. (p. 136).

Patient centered communication suggest health care providers (Finney, et.al, 2006), “establish a good interpersonal relationship” (p. 136) between patients. The information provided by (Finney, et al., 2006) suggest this is done by health care providers communicating a concern for patients and communicating an environment that is trusting. This study further recognizes that patients should feel a degree of comfort promoting conversation and security in asking questions. Therefore it seems, as a patient, one should never feel a provider is indifferent or charismatic of their needs. When one experiences communication that transmits a lack of empathy, one may become introverted and cease to communicate with the provider. If effective interpersonal communication ceases there is a likeness of patients having questions that will be unanswered.

When patients are less informed and lacking knowledge, this could result in a higher risk of decline and sub sufficient health outcomes.

Providers can encourage and facilitate “information exchange” by insuring the patients’ needs and feedback are a vital part of the process. Overall the assumption from the above statement leaves one to assume, it is imperative to promote a sense of understanding and empathy by listening to the patients’ causes, concerns and their story. When questions are asked providers should provide information and feedback. This information must be communicated in a manner that, insures the patient understands the feedback. A bi directional communication process should be a considered form of patient provider exchange. As healthcare providers should not dictate communication, the patient should not as well. Communication between patient and provider should be a fluid process. These conversations should and can be controlled by either participant. However, this process can be flawed by simple perception. Finney, et al, (2006) suggest “physicians often underestimate patients’ desire for information and overestimate their own ability to convey information” (p.136). The patient’s perception in this communication process may be to listen and not comment. As earlier discussed education may represent a distortion of communication and contribute to a patients feeling of inequality or feeling subordinated. This however, does not communicate one is not interested in their health. Alexander, Hearld, Mittler and Harvey (2012), established four roles to empower patients.

“1) quality of the interpersonal exchange between the patient and physician, (2) fair and respectful treatment of the patient by physicians, (3) involvement of the patient in treatment goal setting, and (4) frequency of physician communication with the patient outside of the office visit. (p.202).

In telephonic interviews of chronically ill patients a survey was done to solicit information concerning patient and physician communication practices. Socioeconomic status, education, and race were factors in analyzing participants and results. The results astoundingly suggest physicians who listen and satisfy the needs of patients will have higher levels of communication from patients opposed to patient where there are lower levels of interaction from their Health care provider. When patients are treated fairly, free of stereotypes and racial bias as with goal setting and frequent communication from health care providers, communication is increased and active participation is implemented in ones care from the patient.

Bear and Stockie, (2014), Share that, “evidence exist that, currently, the care of patients with advanced CKD and ESRD is not fully patient-centered or supportive of patient engagement” (intro section para. 1). Bear and Stockie as researchers and Nephrologist attribute this to a disproportionate level of power physicians’ display or evoke among patients. This dis proportion of power attributes to a breakdown in communication. When referenced by researchers this leads to biased decision making. Bear and Stockie acknowledge specialty physicians perceive themselves as experts in the field and inadvertently forget the patient is being introduced to a disease that is life altering causing the patient to be afraid and anxious leading to a lack of question and feedback ultimately leading to poor health outcomes

Aelbrecht et al., (2015) share:

This social variance in doctor–patient communication seems to indicate that there is inequity in communication in health care. For example, doctors might be less informative with less educated and lower income patients, because they assume that these patients are

not particularly interested in learning about their health or do not understand this information (p. 874).

Taking this approach may create a barrier that contributes to a lack of patient-provider decision making. When patients are diagnosed with CKD there are many decisions that must be made. The onset of decision making begins at time of diagnoses. During this time one must determine what course of treatment is best suited for the CKD patient and family. Other important decisions include end-of-life care. Song, Donovan, Piraino, Choi, Bernardini, Verosky and Ward, (2010), suggest “patients with CKD are likely to experience sudden decline or complications that leave their responsible surrogate decision makers unprepared for treatment decisions” (p. 65). Song, et al., further suggest after prompting and the completion of an educational intervention for patients with CKD that “end-of-life” decision making may be particularly difficult. (Song et al., 2010) justify this in stating “these patients and their health care providers may lack a shared understanding of the meaning of illness or death” (p. 66). When communication between patient and provider is so conceivable broken the physician may inadvertently be put in the position of decision making.

Patient providers may help patients be more at ease by encouraging patients to be prepared for their next visit to the Nephrologist. Lederer, Fischer, Gordon, Wadhwa, Popli and Gordon, (2016) asked patients diagnosed with CKD, current kidney transplant patients, and patients on the kidney register to participate in a 2 part cross-sectional study. This study called “Question Prompt Sheet” consisted of 85 patients who were seeing nephrologist at the VA. Patients were chosen by race and ethnicity with an oversampling of African Americans and Hispanics. This racial group of participants represent patients who are most affected with CKD. The participants

were divided into groups based on the progression and stage of CKD. Phase one of the project was structured around open end questions pertaining to the needs of the patients. The questions were based on what the surveyors considered important to CKD patients such as prevention, causes, comorbidities, management and self-care management. In phase 2, the surveyors and interviewers selected a different set of participants from the 85. This group of participants were asked to rate the importance of the first set of question on a scale of 1-5 with 5 being the highest. At the end of the study it was determined the needs of patients were not being satisfied. The area's most deficient for patients included treatment options. Patients shared a consensus in desiring to have treatment options explained earlier in the disease. These patients were concerned with dialysis and kidney transplant.

Lederer et al., (2016) communicate patients' comments post- CKD diagnosis:

“The moment they tell you what it [CKD] is! As soon as you see the kidney doctor! Ignorance is the worst. Tell me what can happen: ‘you have kidney disease. Down the road, you may need dialysis – there’s hemodialysis, peritoneal dialysis, or may not need it at all’”. (ID#6013, Kidney transplant recipient)

“This coming Monday! I have an appointment with my doctor. I’d want to know about this stuff now. I mean learning that I was a diabetic was ‘life changing’. I want to know about it early because it might change my life”. (ID#4014, CKD-4)

These comments clearly represent concerns not voiced to providers. More importantly, patients were concerned with comorbidities linked to CKD. These concerns were conveyed during the study:

Lederer, et al., (2016), “I did want to know how my diabetes affected my kidneys. I still don’t understand that. They just keep telling me that it was the diabetes but I don’t get how”. (ID#3007, CKD-3)

“I didn’t think the kidneys affected other parts of my body. I do want to know this”.

(ID#4014, CKD-4) “Why kidneys cause bone disease – makes no sense to the lay person”.

(ID#5018, CKD-5)

These unanswered questions present barriers to effective communication. In order to strengthen these barriers between health care providers and patients Bhutani, Bhutani and Kumar, (2013) suggest attention be focused on “Two important barriers of patient-centered approach, communication skills and cultural competence of the treating doctor” (p. 187). To reiterate the importance of patient-centered communication Bhutani et.al, (2013), agree responsibility of the health care provide is to ensure patients feel emotionally supported by their provider. This will encourage participation and a willingness for patients to ask and answer questions.

Bhutani, et al., (2013) surmise “Interviewing the patient in detail followed by psychosocial motivation can result into better compliance and improved satisfaction level amongst patients” (p. 187). Bhutani, et al., also suggest physicians motivate patients by asking open-ended questions. Open ended questions, give patients an opportunity to interact and share their opinions on their treatment, progress and concerns. This process is called a “Motivational Interview.” Motivational interview is elegantly describe by Resnicow, Davis and Rollinick (2006). “As an egalitarian, empathetic “way of being” that manifests through specific techniques and strategies, such as reflective listening, shared decision making, and agenda setting” (p. 2024). Motivational interviewing is used as a tool to promote change in patients by showing empathy

and encouraging patients to facilitate those changes while not being judgmental or condescending. It further encourages reflective listening. A process of communication that encourages repeating what has been said and intentionally leaving a blank so that the person conveying the idea will fill in the blank reiterating what they have just said. When health care providers incorporate open-end questions and reflective listening it provides opportunity for better health care outcome

Bhutani, et al.: in concern for patients, “An old saying quotes, “*Salus populi suprema lex esto*”, i.e., Let the welfare of the people be the supreme law” (2013, p. 187). With that particular quote in mind, it is essential for providers to be sensitive to cultural differences. On a daily basis health care providers are faced with patients of different ethnicities and cultures. Health care providers must take under consideration when communicating, societies are heterogeneous. With this as a factor providers can determine communication will be effected by language barriers, perception and culture. These factors are important as this alone can distort the intended purpose of a communicated statement between provider and patient. Bhutani, et.al, (2013), seem to feel it is time for health care providers to disassociate with the rhetoric of rules and regulations by encouraging providers to communicate with patients. Bhutani et al., (2013), encourage providers to listen to patients and break the barriers of communication and strongly suggest providers try looking at the patient’s illness “through the patient’s eyes” (p. 187).

Lederer, Fischer, Gordon, Wadhwa, Popli, and Gordon, (2015), in the study Barriers to effective communication between veterans with chronic kidney disease and their healthcare providers state “Many patients with chronic kidney disease (CKD) have insufficient knowledge about CKD. Which is associated with poorer health outcome” (p. 766). Further stating “Effective patient-provider communication can improve CKD patients’ knowledge” (p. 766). This statement

represents a communication deficiency between health care providers and patients diagnosed with CKD.

Lederer, et al., (2015) performed a study of 32 patients recruited from the VA nephrology clinic. Patients were asked to address any concerns they might have about CKD. This was done in an attempt to determine the barriers or deficits in the patient- provider communication process. Lederer, et al, acknowledge the importance of questions and answers for the patient diagnosed with CKD. As CKD is complicated and the management of co morbidities and medication regimens can present challenges. On completion of the telephonic interview, patient's responses identified four barriers to effective communication. Those four barriers per Lederer, et al., (2015). Were "patients perceived their role as a "listener." This perception would lead the patient to sit lethargically through the visit and be void of little knowledge when leaving the providers office. Patients recognized another barrier as having limited knowledge about CKD. This represents a grave concern as without knowledge one is unable to properly control CKD. Patients failed to understand the providers' explanation. This lack of communication has been perceived by physicians as a lack of concern about ones illness. But in fact represents a lack of communication between patient and provider. Patients tend to be confused with terms health care providers use. Thus not representing what Schell and Arnold (2012) describe as "good communication, the ability to effectively assess patient's understanding, elicit care values, and preferences; and give information in a way that is understood and encourages participation" (p.613).

When acknowledging there may be barriers to effectively communicating one must evaluate what those barriers may be. While taking into consideration, patients come from

various backgrounds, one understands there are many communication dynamics providers must consider when interacting with patients. Some common barriers are age, mental awareness, health conditions, demographics and language. Each of these dynamics can affect the way a patient recognizes and understands the communication process from the provider.

How does race affect patient-provider communication? “Of all of the forms of inequality, injustice in health is the most shocking and inhumane”. Martin Luther King Jr. (Cited by Garcia-Garcia, and Jha, 2015, p.183). It has been acknowledged by Clemans-Cope and Kenney (2007), “Individuals with limited English proficiency and linguistic minorities (that is, those whose first language is Spanish or some language other than English) are at greater risk of communication problems with health providers” (p. 207). This information presents the complexity of patients receiving appropriate health care. As physicians struggle to maintain cultural competence, considerations should be made on how to communicate with the population that uses English as a secondary language. Minorities are most affected with CKD and lean toward poorer health consequences based on their racial and socioeconomic status. However, this study suggests communication between health care providers and the Spanish-speaking community presents an extensive problem. These problems result in compromised health for children as well as adults. In this linguistic study representing the minority population of Spanish-speaking communities, the authors compel the readers to acknowledge Spanish speakers as the largest linguistic minorities. But when asked about concerns or questions in a provider’s office The Spanish speaking communities are least likely to respond with questions. Clemmons-Cope et al., (2007) suggest trends in healthcare present barriers, such as there being limited Spanish speaking health care personnel. An additional concern included lack of interpreters and insurance. Lower-income Spanish speaking parents were chosen to participate in this survey.

There were four groups of children chosen for the survey: White non-Latino, Black, Latino and other non-Latino, all with poverty levels ranging from 50% of the Federal poverty level to 199%. The participants also consisted of patients with insurance covered by public assistance. They were asked questions based on visits to health care providers, communication and the effects it had on their understanding and perception of care. The results showed participants who were not born in the United States and who chose to be interviewed in Spanish had more problems in comparison to other low-income participants. Reportedly, an estimated 40% of Spanish-speaking Latinos felt providers never listened to them, while others felt they listened but never listened attentively.

The consensus of scholars reflect an existence of “racial/ethnic health disparities in health care in the United States” as conveyed by Johnson, Roter, Neil, Powe, and Cooper (2004 p. 2085). Johnson et al., performed a research study centered on the communication interaction between African American patients and doctors, set out to determine the extent of racial disparities. The eligibility of patients was determined by race with, patients being eligible if they identified by being either black or white. Audio tapes were placed in the exam rooms with patient and providers’ knowledge. Both patient and provider were explained the purpose of the recordings, which was to learn how “patients and doctors communicate” (Johnson et al., 2004., p. 2085). There were three areas of the visit being evaluated: Visit duration, speech speed, and physician verbal dominance. Visit duration included the total amount of time the patient spent with the doctor while speech speed as suggested by the researchers determined the amount of complete statements from provider and patient per minute divided by the total interaction time. Physician verbal dominance, which researchers referred to as patient-centered orientation is the second part of the valuations. This determined how many doctor vs. patient statements were

made during the visit. The last variable was the emotional tone of the physician patient-centeredness score. Johnson, et al., (2004), describes the following:

The physician patient-centeredness score was calculated by dividing the total amount of socio-emotional talk and questions asked by the patient by all the biomedical elements of talk during the course of a medical visit. Socio-emotional talk included all partnership building, emotional, and psychosocial elements of exchange (i.e., physician open-ended questions and psychosocial information and counseling and relationship building, positive talk, negative talk, and social talk by physicians and patients), while biomedical talk reflected the task-oriented elements of the exchange (i.e., physician and patient talk aimed at conveying biomedical information and counseling, statements of orientation, and physician closed-ended questions). (p. 2085).

The literatures suggest vast differences in the communication style between white and black patients. Physicians dominated communication between African Americans and were less emotionally involved, showing less of a patient-centered approach than with white patients. It constitutes a rational decision from information presented to conclude the communication dynamics is greatly affected by race.

A dynamic statement that challenges one to examine health care and cultural differences was provided by Ryder, Yarnold, and Prideaux , (2011) and states “Health care in the twenty-first century is delivered within a context of increasing ethnic diversity, but diversity cannot be divorced from inequities in access to health” (p. 781). In the commentary written by Ryder, et al. (2011) recommendations are made suggesting health care providers cannot make limitations and decisions on the preconceived notions of what minorities are doing. The suggestions is made,

health care providers examine what the dominant culture is not doing. Important parts of the dominant culture communication process are learned behaviors. And in order to improve the communication process the dominant culture may have to unlearn that which has been taught. Ryder, et al. (2011) suggest “Unlearning pre-conceptions may be just as important as learning new knowledge” (p. 781). This literature commentary suggest health care providers practice “cultural safety” which entails an examination of one’s self and communication practices as opposed to cultural competence which requires knowledge of health care disparities, attitude toward the minority patient and the skill to understand the difference in cultures. Seeleman, Selleger, Essink-Bot, and Bonke, (2011), via email and mail sent out surveys for recommendations on how to communicate with minority patients. After receiving feedback Seeleman et al, (2011) recommend “all students must be taught communication with ethnic minority students” and further suggest that “awareness of cultural and personal biases should be stimulated” (p. 816). Therefore, it seems effectively communicating requires more than one will find by reading a book or by a set of skills practiced during an internship. Seeleman, et al, (2011), suggest interpersonal communication in class is the suggested means of cultural competence and safety. Let’s Get Serious about Racial and Ethnic Disparities Powe, (2008), in an article written for Journal American Society of Nephrology aggressively share the disparities among black and white patients with ESRD. Powe, suggest 33% of patients waiting for kidney transplant are black with blacks making up 13% of the general populous. He further recognizes white patients normal wait time for a kidney is 2 years in comparison to blacks, Asians or Hispanics being 30% longer. Powe, notes that minorities’ progress faster from CKD to ESRD as opposed to white and suggest physicians become accountable for the healthcare they provide. Powe (2008), takes a look farther into these disparities and suggest through a model, depicting barriers that providers are

contributing to these disparities by their “attitudes and bias, lack of interpersonal skills, communication, decision making style, and patient centered care”(p. 1273). This information is representative of the data obtained in the previous study showing how interpersonal communications affect minorities.

Discrimination and disparities in health care are well documented among the minority communities of African Americans, Latinos and Native Americans but little has been researched or documented on the minority population of the Asian American community. Nadimpalli and Hutchinson (2012) probe into the effects poor communication, discrimination and health disparities on the Asian community. Nadimpalli et al. (2012) explain “The purpose of this integrative review was to summarize the current literature examining discrimination and the mental and physical health of Asian Americans.” Over an extended period, quantitative studies were completed, the results acknowledge patient care providers recognize discrimination and the association it has between stress, hypertension, cardiovascular disease, diabetes and obesity all which are comorbidities of CKD. Therefore, it seems patient provider communication may play an important role in reducing the progression of CKD. Asian Americans were asked to rate their overall health experience as minorities in a National Survey done by Ngo- Metzger, Lefedza and Phillips, (2004). This survey consisted of phone interviews with non-Hispanic whites and non-Hispanic Asian Americans. The participants were asked about their last visit to a health care provider. Ngo-Metzger et al., (2004). “Respondents were asked how much they understood of what the doctor said to them, and whether they had questions about their care or treatment that they wanted to discuss but did not” (p.112). The same questions were asked concerning the amount of time, the show of respect and the involvement of the decision making process. The trend of ineffective communication between patient and provider, as presented in this survey

suggest broken communication is prevalent. Asian American patients responded to these questions showing a need of better communication skill from the providers. Most patients were not satisfied with their health care. In following the trend of other minorities Asian Americans felt health care providers did not spend enough time with them during visits, showed a lack of respect and did not include them in the decision making process.

Patients' communication role: Decision making is an important part of communication for patients diagnosed with CKD. The information obtained from numerous sources suggests this could be a harrowing task for patients due to the unequal perception of power. Power is established once communication begins. Patients have the opportunity to set claim and take the power role just as health care providers do. Researchers suggest patients have become accustomed and accepting of the power differential between patients and their health care providers. This power differential is perceived through status and knowledge. Charles, Whelan and Gafni, (1999), acknowledge and state this “is expressed and reinforced through the traditional, passive patient role and the dominant, paternalistic physician role enacted during a medical encounter” (p. 781).

To change these power and communication role (BMJ, 2004) state a new term was introduced by “the chief medical officer for England and has been picked up and used very widely” (p. 723). Fox (2005) shared the concept from the English officer called “Expert Patient” this process can be described as a communication process where chronically ill patients become better informed/educated on their illness and communicate the information with other patients experiencing the same illness. Fox (2005), share 7 characteristics of the expert patient.

Patient is reluctant to identify themselves as an expert, identifies the complexity of the illness, is confident in what works for them, can reason and interpret cues, has a sophisticated body awareness, understands chronic illness is integral but not the most important part of life, feel they can control disease and are unrestricted, and have a systematic decision making and problem solving process. (p. 26).

Expert patients are not experts in the medical field or their chronic illness. They must at all times maintain the roles as patient, keeping in mind chronic illnesses are long term and sometime terminal. Acknowledging the complexity and seriousness of chronic illness such as CKD, the literature suggest, being more informed and communicating with accredited knowledge earns the respect of the attending health care provider.

While actively participating in communication one must understand the health care teams consist of many interties. The most important of those interties are foremost the patient and the health care provider. The patient has to be informed and ready to participate in all decision processes. Researchers have established higher incidents of CKD in the African American population, but find end of life decision making is lacking in comparison to the rate of those affected. Song, et al., (2010) suggest end-of-life communication “may be difficult because they mistrust the health care system and patients and their health care provider may lack a shared understanding of the meaning of illness or death” (p. 66). When patients become engaged in effective communication with health care provides the barriers will become less effective.

The patient in preparation for an appointment. The communication between patients diagnosed with CKD and health care providers will be extensive and sometimes complicated. Effectively communicating is the responsibility of the patient and well as the provider. NephCure

which presents itself as a nonprofit organization in the study and funding of kidney disease suggest prior to one's nephrologist appointment a list of questions and concerns should be prepared. NephCure suggest the following questions. This list can be compiled from the onset of the last visit to the minute of the current appointment and may include questions such as: What is kidney disease? How did I get it? Did I cause this? What are my prognoses? What are my treatment options? There are no questions the patient should not feel comfortable in asking. Successful and effective communication between patient and provider creates a bidirectional mode. National Institute of Diabetes and Digestive and Kidney Disease suggest and I paraphrase. If barriers in communication are present such as language, age or knowledge one should appoint a liaison as an accompaniment to the visit. This person can be utilized in deciphering any signals of distorted communication as well as ask questions, take notes and relay feedback. Participating in one's health discussions may prevent CKD or drastically slow progression of the disease.

Patient-family communication.

All information presented above reflects the communication processes between patient and provider. Chronic illnesses requires more than patient provider communication, it requires family communication. The communication process between minority families and patients can be instrumental in the health care and well-being of patients. Rosse, Suurmond, Wagner, Bruijne and Essink-Bot, (2016) set out to examine the role families play in ethnic minority patients. The research was done in 4 ethnic diverse hospitals. The participants consisted of 20 patients chosen upon admission that appeared to have a good support system from their families. Upon admission and during hospital stay patient and families were monitored. Rosse, et al., (2016) presents barriers that may contribute to ineffective communication process. Of the barriers Rosse, et al,

suggest “A hospital admission can be a potential high-risk situation for a patient of ethnic minority origin, if care provision is insufficiently diversity sensitive.” (Introduction section para, 3.). This information suggest when patients are admitted into the hospital with languages that are different form the host hospital there can be as stated by Rosse, et al. (2016) “a delay in diagnosis or misinterpretation of medical advice.” (Introduction section para. 3).

Roles of Family Communication: This study focused on the role the family takes when a patient is admitted into the hospital. These roles include social support, interpreter, patient and care provider. Social support from the family includes being there for patient to have someone to communicate with and someone there to help retain and understand information. The role of the interpreter was simply to clarify any distorted communication or to assist in removing barriers. However, the information did reflect health care providers as being glad family members were there to interpret and the family at times felt anxiety for not being present when health care providers were in the room. The researchers expressed two downfalls in having family members as the communicator. The first concern was health care providers didn’t feel the need to provide a professional interpreter. Secondly doctors’ feared family may have intentionally miscommunicated what the provider said to the patient and may have made treatment decisions for the patient based on what the family member wanted. From the information earlier presented in this study it seems, these barriers for minorities, may be caused by lack of diversity in the hospital settings or caused by a lack of understanding between health care providers and patients. When Rosse et al., (2016) suggest the family take the role of the patient they are referring to the lack of communication between patient and family.

Rosse, et al., (2016)

When only relatives and not the patient himself, have the knowledge of the disease and treatment the patient becomes dependent on those close family members. A risky situation might arise when relatives are not around and when healthcare providers are not aware of this 'replacement'. (p.5).

Further suggesting family members should practice better communication between the patient and themselves. As when communication is broken there can be serious outcome for patients.

Emotions, Feeling and Challenges: Communication between family and patient is a vital process for patients diagnosed with CKD. DaVita, a dialysis treatment center share information on emotions and ways of effectively communication between patient and families. DaVita suggest many patients and families when diagnosed with CKD are unaware of the psychological affect the disease presents. Therefore, they suggest examining these four emotions in an effort to manage these feeling. These emotions are “fear and anxiety, denial, anger and feeling down” DaVita further suggest when one is diagnoses with CKD it is not uncommon to have feelings of fear and anxiety. One’s life has been changed. Realities and feelings of anxiety can be generated from uncertainty in what the future holds ranging from treatment options to the ability to sustain ones family financially. Denial is common in that one chooses not to accept the changes in their lives. It is not uncommon to experience anger and simultaneously feel degrees of hopelessness. DaVita suggest “talking to someone about your emotions is essential.”

Zalai, and Novakis, (2008) state “Depressive disorders have been shown to be present in 20% to 40% of the population receiving renal-replacement therapy, and this figure may be even higher in the pre-dialysis CKD population” (p.173). Zalai and Novakis, (2008) presented information on CKD and depression. In this study psychological factors, diagnostic criteria, screening tools, prevention and treatment of depression were identified. Depression is common in patients diagnosed with CKD. Depression in CKD patients can be triggered by social or psychological effects. The combination of the two triggers can be identified as psychosocial factors. These factors may include unemployment, loss of income, change of lifestyles, adjustment to dialysis treatment and regiment. Although many patients with CKD are diagnosed with depression it is sometimes hard to differentiate as both share common symptoms. Zalai and Novakis, (2008) share the overlapping symptoms as “fatigue, insomnia, chronic pain, anoxera, or weight gain, decreased libido and cognitive problems” (p. 175), and further suggest treatment options to include psychotherapy and or medication treatment. Psychotherapy would demonstrate communication with health care providers which should or could be started at early diagnoses as suggested by Zalai and Novakis. Consequently another study was done by Zalai, Szeifert and Novakis, (2012) to represent depression in patients with CKD. Zalai, et al., (2012) describe depression as “a mood disorder characterized by low mood and /or anhedonia (the loss of pleasurable everyday activities such as hobbies, sex, or work)’ (p. 428). In this particular study the co-morbidities of CKD were introduced as predictors of depression. When patients are first diagnosed with CKD anxiety may set in as patients who perceived themselves as healthy have now been diagnosed with life altering chronic illness. The anxiety of treatment and what the future holds is now affecting activities of daily living. Patients perceive dialysis treatment as a deterrent interfering with the ability to maintain gainful employment. When patients are first

diagnosed with CKD communication plays an important role Valdez, R, (2007) suggest “the amount of stress with vary form one kind patient to another” but one has to find ways of managing that stress Valdez (2007) suggest “talking to someone”. This can be a friend, family or another dialysis patient by communication is important and establish. Patients are in need of social support as well as psychological interaction and family communication is paramount.

Families’ Interpersonal verbal, physical communication between patients. Open communication between patients diagnosed with CKD and family members is essential for successful physical outcomes and emotional stability within the family circle. CKD changes lives and the roles patient and family member play in the family circle. Niccum, (2002) in the article communicating as couple describes how to adjust to those changes and how to effectively communicate as a couple. Niccum, (2002) state “When chronic illness strikes an individual their partners and other family members often change their roles and responsibilities to help the affected person.” Roles may become reversed as the healthy partner may start doing household chores or yard duties. Niccum (2002) suggest communication is key when assessing when to and how to do make these transitions. She further suggest a communication process to aid in the communicating the changes. Niccum states (2002) “To being working on a constructive solution, both partner and patient must be honest with themselves about what they feel and what their concerns are.” She suggest setting up a one hour meeting to share concerns. During the one hour meeting each member is allowed to speak for an un- interrupted 5 minutes and then the other is allowed a 2-3 minute response. At the end of sharing information the couple will spend 10 minutes reviewing what was said and deciding what areas to work on. To successfully incorporate this process one must practice good listening skills, refrain from interruption, stay focused and most importantly be honest.

Family members as care givers often suffer with depression Setters, (2002) state “Other non-involved family members, friends and acquaintances might wonder why you would be a risk for major depression when, as noted previously, you are not the one who is ill.” However, family members more importantly spouse and partners are coping with life changes as well as the CKD patient. These changes may include loss of income, loss of emotional support, lack of affection and physical exhaustion. Setter (2002) suggest caregivers “take care of themselves” as well as practice good communication habits as effectively communicating releases pressure. Setter suggest expressing ones emotions to someone you feel comfortable with and if there is now one she suggest utilizing the social worker at the dialysis clinic.

Community Heath Communications.

Community health projects and campaigns may be of assistance in bringing awareness to individuals in “at risk” environments. These campaigns have the ability to direct and share information. This information shared may otherwise be unattainable to persons ineffectively communicating with healthcare providers. Stephens, Rimal, and Flora (2004), eloquently state in the peer reviewed journal *Expanding the Reach of Health Campaigns: Community Organizations as Meta-Channels for Dissemination of Health Information,* “Health campaigns cannot succeed in changing individuals’ behavior without widespread exposure to campaign messages” (p. 97). These messages explain health campaigns. However, the focus has been mono vision. Health campaigns have focused on either mass media or the primary focus has been interpersonal. Researchers are convinced health campaigns would be more effective if they were to conceptualize on both focuses.

Communication within organizations: Stephens et al., (2004) set out to explore the effectiveness of community organizations as a viable means of disseminating health information. Stephens et al., (2004) used the Social Capital concept (SC). Stephens et al., (2004) described Social Capital (cited in Putman, 2000, p.19) as “Connections among individuals’ social networks and the norms of reciprocity and trustworthiness that arise from them” (p. 19). This concept was utilized for the purpose of understanding how social networks and communities work together. The ultimate end and satisfaction of the SC as a health campaign was to change behavior. Each participant was encouraged to complete a questionnaire, evolved around their communication activities, attitudes, knowledge and behaviors. Questions were proposed about social organizations they were members of how often they read newspapers or watched television. To see the effect SC had on health behaviors, the patients were asked to identify how often, they read or watched Doctors columns, articles on health or looked at recipes. Stephens et al., (2004), indicate “enlisting the support of community organizations can expand the reach and effectiveness of health promotion activities” (p. 109).

In campaigns affiliated with health, social support is a relevant process. Social support and communication from health campaigns and media outlets encourage behavioral changes. Patients whose lives are being affected by CKD or any of the commonalities are in constant need of behavior change and active open communication as they confront the physical and psychological changes in their lives. Pearce and Smith (2003), define Social Capital as “The features of social organization, such as civic participation, norms of reciprocity, and trust in others that facilitate cooperation for mutual benefit (p. 125). Trust is viewed as an emotional and psychological venture, suggesting it is important for patients with CKD to trust the campaigns and media sources being presented. However, it seems, not all patients are trusting. Pearce and Smith,

(2003) discuss and earlier made point that patients are concerned with the income inequality in health care media campaigns. These factors such as lack of trust contribute to barriers with communication and low involvement in patient participation.

Community Health Projects: Brownson et al., (1996) did a risk reduction, community based, study called the Boot Heel Project. This project was done and performed in Southeast Missouri. The area of the state in which the campaign took place is called the Bootheel. The Bootheel consist of five counties. These counties per Brownson et al., (1996) are Dunklin, New Madrid, Stoddard, Mississippi, and Scott. Brownson et al., (1996) states “Except for Kansas City and St. Louis the Bootheel has the largest Black population in Missouri.”(p. 206). This medically underserved rural area is characterized by high rate of poverty and low educational levels.” (p. 206). The proposal of this study with a high African American populist, lower incomes and medically underserved residents was to educate the community on the prevention and maintenance of cardiovascular disease.

The Bootheel project was objectively done to study community involvement and the effect it has on patients diagnosed with CD. As a part of this community based campaign Brownson et al., (1996) went directly to African American community leaders and made a request for their input and participation on the project. Pastors from local churches were asked to participate by encouraging their congregations to incorporate healthier eating habits. The city developed programs and activities that included walking trails and exercise events. The schools in the area prompted students by encouraging them to create posters depicting healthier lifestyles. Local newspapers became involved by sharing a weekly column on how to prevent CD. Brownson, et al., (1996) state, “ The coalitions in all six counties developed clubs, aerobic exercise classes,

heart healthy cooking demonstrations , community blood pressure and cholesterol screenings, and cardiovascular disease education programs” (p. 207). The Bootheel project implemented two risk surveys to monitor progress of the study. There were 87 questions concerning demographics and modifiable risk. As earlier discussed there are 2 types of risk factors modifiable and non-modifiable. The modifiable risk factors for this survey included smokers, patients with little or no physical activities, patients who over indulged in fruits and vegetables and patients considered over weight. The second survey consisted of the same questions but included if patients were aware of the Bootheel project or any educational materials that were available. An additional survey was named the Behavioral risk survey. This survey included questions on how the patient planned to incorporate change in their lives. The results were somewhat disappointing in that the community was given an opportunity through all forms of communication to improve the comorbidities of CKD. Of the counties included in the project there were no significant changes in physical activity or smoking patterns.

Blogs, websites and Mass Media: Blogs, mass media and internet web sites have proven to be a popular source of cyber communication for patients with CKD. Machanda, and Bid, (2011) state “In the past few years, many Internet and Nephrology resources have been posted on the web, Including medical journals, medical associations, clinical trial registries and medical guidelines” (p. 1). Machanda and Bid (2011), set out to share the many sources and sites available to patients and providers interested in the transfer of knowledge communicated through these web sites. They further acknowledge over 300 million webpages are available. Of which all of the pages are not reliable sources. And state “The WWW is now considered a key source of health information; but the quality and utility of this information has been challenged.” (p. 4). Therefore suggesting one should consider the source in which one chooses as reliable information. Blogs are written by

persons familiar with ones circumstances or one sharing an opinion on a topic matter. Often this information is more user friendly, with language that is easily understood and empathy for the person relating to the information in the blog. Howbeit informative validation and accuracy of materials provided often times are not substantiated. When reading blogs on must keep in mind the materials contain a biased opinion. Machanda and Bid (2011), acknowledge there are linguistic barriers when accessing information on CKD. These linguistic or communication barriers may recreate themselves in poor communication with other interested parties on the web.

Harvey, et al., (2016), set out to determine if the use of on line communication such as web sites and blogs increased the use of in home therapies for patients just diagnosed with CKD and starting the first round of dialysis. Harvey, et al., (2016) chose two hundred and sixty-four CKD patients who were preparing for dialysis and who had received modality education. Patients who had not started dialysis were asked to participate in an on line study to see if patients would chose to initiate PD or dialysis done at home. Some patients were requested to visit a secured website educating them on the in home process of dialysis while others were educated the traditional way with tech and therapist explaining the home system. While online information proved to be beneficial in communicating extensive amounts of information more patients opted for HD or a facility based treatment.

In the study by Khan, et al., (2013), in the journal article Chronic Kidney Disease, Fluid Overload and Diuretics: A Complicated triangle (Introduction section, paragraph 1), Chronic kidney disease is described as “a global health concern that substantially increases the risk of mortality and the use of specialized health care.” With CKD being a major concern that has no geographical boundaries, reevaluating the sources in which communication and knowledge about CKD is delivered should be considered.. One wants to assure and assume the forms of mass

communication are effective. CKD and communication cross many cultural boundaries, each attempt at communication must search beyond the intimate confines. As there are many outlets for sharing information one must consider what ones particular needs are.

The aforementioned material suggest there are stresses in coping and living with CKD. These stresses contribute to increase hospital stays and ultimately the quality of one's life. Muhammad, Allan, Ali, Bonacina and Adams (2014), collectively wrote a paper describing the initiative between patients with CKD and caregivers to develop an on-line support group. (2014). (p. 216). Using the Renal Patient Support Group (RPSG) on Facebook as a focus point Muhammad et al., describe how this volunteer Facebook group started publically communicating with three individuals in 2009 and has increased to over 5000 as of 2014. The purpose of the group was to offer support to fellow patients with CKD and now encompasses "active researchers" (Muhammad et al., 2014, p. 217).

Muhammad et al., explain (2014) "The RPSG offer online peer support globally, with members in both a sharing and a caring role." And further share the "RPSG has also organized online learning education seminars inviting health professionals and renal academics to contribute to World Kidney Day" (p. 217). Therefore suggesting the importance of World Kidney Day as an opportunity for wide spread communication to for persons affected with CKD.

Patients as community advocates: Those affected with CKD as patient or caregiver have choices to make in how to communicate and educate the public or others with CKD. Researchers have shown as patients or caregivers of patients with CKD, this is a community that advocated interpersonal communication. Muhammad et al., (2014), state the developers of RPSG "aimed to empower people accessing specialist renal services to be active in their local

Kidney Patient Associations” (p. 217). To encourage all forms of communication in addition to the Facebook page, RPSG established blogs and supported other organizations such as “Renal Patient View, The National Kidney Federation, Kidney.org and academics in higher education” (p.217). Researchers suggest these advocates of CKD are empowering patients with interpersonal communication options, powerful information, and to assist in decision making process.

Analysis

This research has set out to answer the question: Why is communication the needed prescription for intervention and post diagnosed minorities with CKD? This research information and examination of communication process have without a doubt proven communication is indeed a needed prescription for minorities affected with CKD.

It has been established CKD is a life altering disease that affects 1 in 10 adults. Black et al., state CKD “is a long-term condition and has been described as the gradual loss of kidney function over time” (2010). There are 5 stages of CKD. When a patient is in stages 1-3 this is when communication plays an important role in slowing the progression of CKD and its comorbidities. Basile, 2007 suggest at this stage “Timely diagnosis and treatment of chronic kidney disease can delay disease progress and my decrease adverse cardiovascular outcomes.” In stage 4 there are more declines in kidney functions but patients may still be able to slow progression. It is in stage 5 when the kidney has as Basile, determines “a GFR less than 15mL/min/1.73m and constitutes renal failure requiring RRT.” This research and information therefore suggest with better communication practices between patient, health care providers, and community patients with CKD could very well manage the disease in its early stages and slow the progression to ESRD.

Institute for Work and Health, (2015) describe disease progression in 3 stages: Primary stage is described as the stage where prevention is the primary focus. In CKD this is when health care providers, provide patients with knowledge. This is done by communicating the comorbidities and commonalties’ associated with CKD. Health care providers are aware of as Nichloas, et al., (2005) share “The disproportionately high rate of ESRD among racial/ethnic

minorities in the United States” (p. s78) and further understand the causes that contribute to those disproportioned numbers as diabetes, hypertension and CVD. Suckling, et al., (2012) express “The Triad of cardiovascular disease, diabetes and CKD are responsible for a vast burden of disease” (p.4). These researchers suggest CKD, DM and CVD are linked to other risk factors and commonalties such as obesity. Kovesdy, et al., (2017) have determined obesity as a risk factor for CKD and uses obesity as a major impact of CKD along with diabetes and hypertension. Suckling et al., state “However, these commonalties and interactions remain underappreciated by care providers, and as a result, these conditions are frequently managed in silos and opportunities to deliver best care may be missed” (p. 4). This information at best indicates the link between the four major commonalties of CKD and subsequently shows health care providers are not looking into the comorbidities as a catalyst to CKD but are looking at each disease separately. These commonalties should be referenced and from the onset of each information should be communicated with patients explaining the high risk of CKD. Basile, (2007) establish “data indicate that early recognition and management of CKD can have a significant positive impact on disease outcome” (p. 499). Therefore, suggesting health care providers are neglecting the opportunity to share and effectively communicate, the risk associated with these fore mentioned commonalties. Thus suggesting in early stages and as a result of failed communication patients particularly minorities diagnosed with DM, obesity hypertension, or CVD are at high risk of CKD.

When patients progress to the Secondary stage of disease ones aim is to reduce the impact of disease that has already occurred. This is done by detecting and treating the disease before it progress to a more invasive level. In this stage of CKD health care professionals should encourage patients to participate in programs. The implementation of these programs is “to return

people to their original health and function to prevent long-term problems.” (Institute for work and health, 2015). Earlier research indicates when patients are diagnosed with CKD there is no returning to their original health. Researcher suggest one must work on interventions to slow the progression of the disease and participate in programs to communicate practices that encourage healthier living. Early communication practices result in better management of commonalities and comorbidities. The literature from this research strongly suggest patients be referred from their primary care physician to a nephrologist as soon as CKD is detected. Minutolo et al., (2014), state “In patients with CKD not referred to Nephrology risks of ESRD and mortality were higher in those with CKD stages 3b-5” (p.1590). This information suggest health care providers, should re-evaluate practices for effectively communicating the need for a specialty physician. As procrastination or delay in referring one to a nephrologist, one enters closer to the final stage of CKD. The last stage is called tertiary stage. It is in this stage when patients are learning to live with their diagnoses. At Work (2015) describes tertiary stage as:

“Tertiary prevention which aims to soften the impact of an ongoing illness or injury that has lasting effects. This is done by helping people manage long-term, often-complex health problems and injuries (e.g. chronic diseases, permanent impairments) in order to improve as much as possible their ability to function, their quality of life and their life expectancy”.

CKD is an asymptomatic slow progressing, “under diagnosed and under treated disease resulting in lost opportunities for prevention.” (Levey, et al., 2003, p. 137). Levey et al., show opportunities presented in earlier stages for communication about commonalties and CKD cannot be overlooked. Suggesting, when patient providers procrastinate on referrals to Nephrologist there are no positive options left for the patient. According to Cottrell, Grivan, McKenzie and Seabert

(2015) “It is the level that health education specialist work to retain, re-educate and rehabilitate the individual who has already incurred disability, impairment or dependency” (p.19). Suggesting it is in this level of CKD health specialist are called in help patients adjust to a new way of life.

Patient providers may be unaware of how communication can affect the outcome of CKD. The information from the literature presented shows at any time during the diagnosis process effectively communicating with one’s patient may have encouraged different outcomes. Effectively communicating with patients diagnosed with CKD suggest, as Finney, et al., (2006), state providers should encourage and “facilitate patient involvement” (p. 136). The initial patient provider visit is a preferred places to innate this involvement. Patients should be encouraged to participate and ask questions. This encouragement if needed should come from the physician. Alexander, et al., (2015) share “patients traditionally assume a passive role toward physicians and their own care” (p. 1201). This is not a complacent role that patients decided was good fit for him/her. Nor is it a role that communicates patients are not concerned with their health as some healthcare providers have suggested. It is a pre conceived notion based on an in effective communication process implemented by physicians that has become a social norm. As shown in the literature review by Aelbrecht et al., (2015). There is inequality in doctor-patient communication based on education, and socio economic status, Aelbrecht et al., (2015) “doctors might be less informative with less educated and lower income patients” (p. 874). And further suggest this reasoning; “Because they feel patients are not interested or do not understand this information” (p. 874). When physicians assume communication has not effectively been established, and a lack of knowledge is evident, it is then time for the provider to implement what Finney et al., call “information exchange” (p.136). This process facilitates the use of communication insuring the needs of the patient have been meet. It is at this time the provider

should ask open end questions and respond accordingly leaving no doubt or room for speculation. It therefore seems it is the responsibility of the health care provider to insure the patient has full knowledge of his/her diagnosis. To reiterate what Finney et al. (2006) have stated, Alexander et.al, (2012), established four roles to empower patients.

“1) quality of the interpersonal exchange between the patient and physician, (2) fair and respectful treatment of the patient by physicians, (3) involvement of the patient in treatment goal setting, and (4) frequency of physician communication with the patient outside of the office visit.

Just as with Finney et al., (2006), Alexander promotes a process of communication that incorporates open communication between patient and provider. Alexander suggests establishing, good interpersonal communication as a tool for better healthcare. He acknowledges the need for patients to be respected. When providers stereotype and prejudge patients based on race, ethnicity, education or socioeconomic status it facilitates a lack of understanding which leads to broken communication and fractured health care practices. If the patient is unfamiliar with CKD, and is displaying a conservative behavior, there are greater chances of an unsuccessful treatment plan. Patients may fail to ask questions as they are not informed on what to ask.

Effective interpersonal communication involves speaking at an educational level that is equivalent to the knowledge of one's patient. Speaking in lengthy medical terms may have the same effect as speaking in overly simplistic forms. One's patient may interpret this form of communication as overly analytical or interpret minimal linguistics communication as demeaning. Should, this occur the outcome could be patients left with a lack of knowledge. One may detour from a treatment plan due to a lack of understanding. As was shown in the literature review Bear

and Stockie, (2014), state, “evidence exist that, currently, the care of patients with advanced CKD and ESRD is not fully patient-centered or supportive of patient engagement” (page not found). These finding once again suggest health care providers are not sensitive to the interpersonal communication needs of their patients. Bear and Stockie, (2014) suggest there is an uneven balance of power that has been distributed by communication asserted by physicians who discriminate against patients who are not like them.

Bear and Stockie, (2014) just as Finney et al., (2006), and Alexander et al., (2012) all agree this poor communication attributes to “poor decision making”. Bear and Stockie acknowledge Specialty physicians perceive themselves as experts in the field. When health care providers create barriers to effective communication this creates a disproportioned power unit. This unit favors the physician and creates power distance that disadvantages the patient. As the literature review suggest this contributes to patients being less involved in the decision making process. Finney, et al., (2012) suggest “Patient-centered communication aims to promote mutual decision making in patient-provider encounters” (p. 136). Mutual decision making insures an effective communication process which is essential in providing proper treatment for patient diagnosed with CKD. Alexander, et al., (2012) suggest one promote “involvement of the patient in treatment goal setting” (p. 1205). As the literature review suggests treatment options vary. Health care providers must communicate the different options and aid in making these life altering decisions with patients. The decision making progress is an important aspect of communication with patients diagnosed with CKD.

The literature review based on a project by Lederer et al., (2016) suggest patients are dissatisfied with the communication between patient and provider. This study recorded patient –

physician interaction as “you have kidney disease, down the road you may need dialysis- or may not at all” (p. 769). Lederer et al., (2016) suggest physician can help patients be more at ease, thus generating more responses, and question answer activity. Bhutani, et al., (2013) suggest physicians incorporate “Motivational interviewing” (p. 187), while Resnicow et al., (2006) describe Motivational interviewing “As an egalitarian, empathetic “way of being” that manifests through specific techniques and stratifies, such as reflective listening, shared decision making and agenda setting” (p. 2024). This is a process that allows the provider to ask an open ended question and the patient to answer. If the answer is lacking in details or not answered to the satisfaction of the provider, the provider is then given the opportunity to expound upon or reiterate what the patient has said. When given information that suggest health care provider are complacent in fostering a commutative environment that is conducive to a positive, informative experience. It reinforces “Communication as a need prescription for prevention and post diagnosis of minority patients diagnosed with CKD.”

The previous trends suggest there are disparities in communication between patient and providers and establish the disparities are more prevalent among minorities. Jha (2015) state “There is compelling evidence that disadvantaged communities , i.e., those from low-resource, racial and minority ethnic communities, suffer from marked increase in the burden of unrecognized and untreated CKD (p. 183). Clemans-Cope and Kenney (2007), state “Individuals with limited English proficiency and linguistic minorities (that is, those whose first language is Spanish or some language other than English) are at greater risk of communication problems with health providers” (p. 207). The literature presented above show the disparities in communication and suggest patient providers are failing to maintain a successful cultural competence. Information further suggest, in order for health care providers to maintain a successful

communitive environment with minority patients providers must follow the communication goals referenced by Finney et al., (2006) “ establish a good interpersonal relationship, facilitate information exchange, and facilitate patient involvement in decision making” (p. 136). It seems researcher feel in order for these goals to be effective patient-providers must insure patients of all demographics feel a sense of comfort while communicating. This information suggest patient and health care providers are missing a critical opportunity to establish communication as a prerequisite for a successful relationship with minorities and post diagnosed patients with CKD. Providers can encourage these feelings by showing empathy and concern for patients regardless of race ethnic background or any other demographics. If language is a barrier health providers may wisely provide a translator for the appointment. Facilitating information exchange promotes healthier outcome for patients. This is done according to information obtained from research by encouraging patients to ask questions Finney et al., suggest “physicians often underestimate patients desire for information and overestimate their own ability to convey information” (136). While patient providers interpret this communication as non interest, information from researched materials depict this action as the patients perceived role as being a listener.

While patients are assuming the role as listeners and not actively communicating in the decision-making process health providers are assuming and taking on the role as decision maker. This extreme shift of power as show in the literature by Bear and Stockie, (2014) allows patient providers to control treatment options. This lack of communication may lead to unwanted and unwarranted treatments or processes. The findings of earlier research leads me to believe these decisions should be informed and made between patient, family and health care provider. It has been established CKD patients’ share an amplitude of commonalities of which many are life threatening. Thus, assuring the need for patients to be involved in the decision making process.

Song et al., (2010) inform us “patients with CKD are likely to experience sudden decline or complications that leave their responsible surrogate decision makers unprepared for treatment decisions” (p. 65). This reiterates the need for effective interpersonal communication between patient, patient providers and family. Aelbrecht et al., (2015) state “doctors might be less informative with less educated and lower income patients because they assume that these patients are not particularly interested in learning about their health or do not understand this information” (p. 874). This statement was proven to be unsubstantiated in the “Question prompt sheet” formatted in the study by Lederer et al., (2016). Findings from this particular study show patient needs are not being satisfied. Patients desire to have treatment options explained earlier in the disease process and express a need to have the link between comorbidities and CKD explained to them. Once again this depicts lack of effective or good communication presented or perceived by the physician or patient-provider. Schell and Arnold (2012) describe “good communication, the ability to effectively assess patient’s understanding, elicit care values, and preference; and give information in a way that is understood and encourages participation” (p. 613). As this statement could stand alone it is reasonable to assume patient provider relationships have need for improvement for intervention and minorities diagnosed with CKD.

Providers are not the sole purpose of distorted and ineffective communication. Patients play a role in health care and communication with providers. As aforementioned patients perceive the roles as listeners, accept the submissive role and relinquish power to physicians. This can be changed by incorporating the concept Fox (2015) describes as an “Expert patient” and describes the characteristics as:

Patient is reluctant to identify themselves as an expert, identifies the complexity of the illness, is confident in what works for them, can reason and interpret cues, has a sophisticated body awareness, understands chronic illness is integral but not the most important part of life, feel they can control disease and are unrestricted, and have a systematic decision making and problem solving process. (p. 26).

As the patient displays these 7 characteristics the research suggest this promotes effective communication. In concurrence with the above statement NephCure suggest the patient be prepared for each medical appointment by preparing a list of questions for the physician, writing down any changes in health, taking notes during appointment and consider taking a family member or close friend.

Taking a family member to medical appointments constitutes the importance of a good communication process between family and patient. Song et al., (201) suggest patients with CKD may spontaneously become critically ill; and further suggest this may leave family in a difficult decision making position. Whereas Rosse et al., (2016) suggest “When only relatives and not the patient himself, have the knowledge of the disease and treatment the patient become dependent on those close family members” (p. 5). Rosse et al., (2016) further suggest if relatives are not around when physicians or other patient-providers come to access patients it could become an ineffective communication process.

CKD affects millions of people worldwide with it being a multi-million dollar expense to medicare. With this in mind one must consider what other interties of communication are succeeding or failing. Health campaigns, community projects, social, mass media, blogs and websites play important roles in effectively communicating with minority patients’ intervention

and diagnoses of CKD. Stephens et al., (2004) state Health campaigns cannot succeed in changing individuals' behavior without widespread exposure to campaign messages" (p. 97). Brownson et al., (1996) performed a community based risk reduction study based on minorities the study presented above show out of the 6 surveys some reported as having positive outcomes Brownson et al., state " Blacks in the Bootheel showed improvement"(p.209). Machanda and Bid, (2011) acknowledge over 300 million web pages are available and state " The WWW is now considered a key source of health information" (p. 4). Muhammad et al., (2014) used a volunteer Facebook online support group to determine patient and caregiver imitative and state. "The purpose of this group was to offer support to fellow patients with CKD" (p. 217). Therefore it seems the use of social media, community health campaigns, mass media, blogs and websites play an important role in effectively communicating with patients affected with CKD

Recommendations

As the wife of a CKD, ESRD patient I am certain communication is the key to better outcomes for minority patients diagnosed with CKD. In order to provide better outlets of communication this process must start with the health care providers. More importantly the changes in communication must start with the Primary Care Physician (PCP). The information above suggest minority patients are not referred to Nephrologist in a timely manner and further suggest the delay in referral contributes to more patients with ESRD. Patients under the care of a PCP are often being treated for comorbidities and commonalities such as diabetes, hypertension and CVD. Which are prevalent in minority patients. While these diseases are synonymous to CKD my opinions based on information from the above resources require me to believe; PCPs' fail to communicate the severity of these diseases in correlation to CKD? I consider from past experience health care providers enter into a room with limited expectations and proceed to give "their spill" this communication is granted due to pre conceived notions of one's ethnicity or race. But by engaging and being prepared for office visits this requires the health care provider to reevaluate his/her communication skills. Initially as presented in the research providers present very little information. Communication at times may be limited and provide little information but as the patient one must be prepared for office visits by preparing a list of questions and concerns, engaging in conversation and asking questions. The poor communication process often shown by health care providers may be void of information and conversation and at times does display a lack of support as well as empathy. In order for patients to receive better communication health providers must be held accountable by the patient. Patients must insist on the prescription of communication and not accept the minute doses of information that does not suggest or began to express the severity or complexity of CKD.

I hold patient-providers partially responsible for initiating and encouraging patients to communicate openly and to ensure patients are relaxed and can ask questions. In order to improve communication I recommend health providers unlearn what they perceive to be true regarding minorities. Providers have to eliminate the barriers of effectively communicating with minorities by disposing of their pre conceived notions. Providers should periodically be required to participate in cultural training programs. This training would consist of hands on racial diversity training with races from all social and economic backgrounds. This process would include non-English speaking patients from Asian, Arabic and Mexican descents. Patient-providers have to unlearn old practices of communication. I recommend sensitivity training to project healthier and warmer attitudes from physicians. This would include training from how to enter a patient's room, to how to engage effectively communicating with CKD patients. As CKD is a debilitating disease that robs one of health, pride and self-worth providers must be conscious and sensitive to these feelings. Sensitivity training would reduce the perception patient-providers have of the patients' not being interested in their health and help encourage providers to assist patients in the role of decision making. Providers must show patient care by showing concern empathy and by promoting an environment that encourages communication.

Early referral to Nephrologists can save lives I would recommend health care providers go over lab result with patients when diagnosed with a comorbidities and explain in detail how DM, CVD, hypertension and obesity are linked to CKD. Following the explanation I suggest providers share a film reiterating what was just discussed.

Improving communication and outcomes not only rest upon the PCP it is the patients responsibility as well. Patients are responsible for their own health. Communicating effectively

in ones circle of support is essential for better health outcomes. As the patient-provider is at times oblivious to the emotional and psychological needs of the patient the patient if mentally able has to communicate those needs. My recommendations to improve patient-provider communication are the basics. But I would first like to look over some methods not shown in the literature review. I suggest patients speak with the first contact person about concerns of feeling alienated on decision making processes. This would hopefully be communicated to the patient-provider and one would see different outcomes. In preparing for office visits I suggest patients prepare a list of questions and concerns for the doctor to answer. The patients' health is the primary concern and there is no question that deserves not to be answered. Although some patients may be reluctant to confront or challenge a physician I would recommend stopping the physician at any point there was an unclear statement made. I recommend asking to have that explained in "laymen's term". More importantly I recommend patients follow the treatment plan prescribed by the patient provider being non complaint causes on additional stress on the body and increases the decline of one's illness. Patients have a world of information before them in any language. I recommend patients obtain information about CKD from any of the many sources available on line or in health care offices. Patients must take advantage of websites, blogs and patient support systems. These are advantage systems as they offer personal and professional peer support. These support systems will be empathic and give support but will also provide needed information.

When presented with communication barriers of any kind patients should bring a family member or a friend to the visit. If language is a barrier I recommend asking the patient-provider to furnish an interpreter. Disparities, discrimination or any other word that depicts unfair, unequal treatment of services to persons based on racial, social, or economic status should not be tolerated or even perceived in a health care setting. As Dr. Martin Luther King, (1966) stated, "Of all the

forms of inequality, injustice in health care is the most shocking and inhumane.” - in a speech to the medical committee. However, by implementing the above recommendations this can be changed.

Conclusion

When patients are treated fairly, free of stereotypes and racial bias as with goal setting and frequent communication from health care providers, communication is increased and active participation is implemented in ones care from the patient. To reiterate why communication is a need prescription for prevention and post diagnosed patient with CKD it is important for one to understand the materials presented in this research as a tool for changing broken communication processes.

The literature review shows how the lack of communication adversely affects minorities' prevention and treatment post diagnosed with CKD. It examines the problem of broken communication processes between patients, patient-providers, families and community. At first glance the problem could easily be identified as patient provider communication but the communication problems persist further than that just providers. However, patient-providers do share in the role as study after study has revealed the insecurities of patients while in interaction with providers. Patients have described feeling as if the provider had no concern or empathy to their failing health. Research has shown patients feel as the provider has already made decisions for them leaving them out of the decision making process and others shared feelings of being confused and questions not being answered when they leave the providers office. The perception of communication from the same patient-provider encounter suggest from the provider that patients are not interested or do not understand what is being said. This is an important aspect of the communication process as the discovery has identified a two-fold problem. The attitude of the provider and submissiveness of the patient. Studies show providers enter into communication

with preconceived notions of patients based on socioeconomic status, educational levels and demographics.

Studies show DM, CVD, hypertension and obesity are comorbidities to CKD. The problem shows increased rates among minorities. In identifying the causes of these increased numbers the analysis points to broken communication. Research shows when patients are diagnosed with CKD providers tend to treat the disease individually. Providers are aware of the commonalities and co-morbidities but consistently fail to effectively communicate the link to patients. Studies further convey providers prolong the distance between a referral to a Nephrologist thus increasing the chances of ESRD. The breakdown in communication not only exist between patient providers but persist among family and community. The importance of family and communication reached beyond the medical aspect and establishes itself in the psychological and emotional realms. Setter (2002) and Niccum (2002) agree depression is common in patients and families of CKD. Numerous studies have shown the link between depression and patients diagnosed with CKD as well as family members and or caregivers of patients with CKD. These studies have also suggested along with depression other emotions such as anxiety and fear, denial and anger have been found to associates. The problem suggest as the stress of the disease and as roles shift in the family unit so do feelings and desires. The stress creates boundaries in communication. The impact of depression and stress as suggested by researchers affect CKD adversely. Researchers suggest families look to clinics for counseling. As counseling gives the CKD patient the opportunity to express the overwhelming feelings of hopelessness and despair and gives the family and or care giver the break from responsibility and the opportunity to express feelings of being overwhelmed. This is done in a safe environment where feelings can be shared freely. Studies show a commonly suggested place to share feeling

and communicate anxieties would be ones dialysis center. This as a resource for emotional support that is aware of the complications and emotional support needed. More than one study has suggested families call meetings and engage in round table discussion. Depicting communication within the family to be a needed prescription.

The evidence shown in materials related to family involvement suggest families be sensitive to the needs of the patient and offer support in the communication process. But studies warn against taking on the communication role as patient. When family members move into the active role as communicator studies show they sometimes don't communicate with the patient about decisions and diagnosis. Taking over this role creates problems and presents a breakdown in communication. This frayed communication can be bad for the patient as when family members aren't present and an emergency arises the patient is not prepared and may not be adequately prepared for decision making.

The problem of community involvement can be resolved as has been proven. Community campaigns although successful have to be followed up with messages to the community or they fail. Studies show community involvement such as campaigns, neighborhood functions, church functions and school activities help promote and communicate positive information to at risk communities about CKD and its co-morbidities. While implementing these campaigns one has to ensure the community and patients affected with CKD are reaping a benefit. To rectify this dilemma it has been suggested to offer healthy meals at community functions to promote healthy eating, or implement walking trails. One must ensure the community and the people in need feel the reciprocity. Multiple studies suggest at community events it is helpful to promote more than one disease. Joint programs have proven to be more effective in that the focus groups are

discussing multiple risk factors and the control of these factors. These forums can be held in at risk communities 'with at risk patients, this promotes the effectiveness of communication. And demonstrates the need for communication as a needed prescription for prevention and post diagnosed patients with CKD.

The analysis shows the effectiveness of communication. Through research analyzing and comparing results. I have shown the effects of health care providers, patients and their families openly and effectively communicating and the expectation of positive outcomes such as better patient care and improvement in patient-family and patient-provider outcomes. The disparities have been shown by representing the short comings and downfalls of communication that were not effective. We have reviewed and shown "Why communication is a needed prescription for intervention and post diagnosed minorities with CKD.

References

- Abrass, K.C. (2004). Overview: Obesity: What does it have to do with kidney disease? *Journal of the American Society of Nephrology*, 15(11), 2768-2772.
[https://doi:10.1097/01.ASN.0000141963.04540.3E](https://doi.org/10.1097/01.ASN.0000141963.04540.3E)
- Aelbrecht, K., Rimondini, M., Bensing, J., Moretti, F., Williams, S., Mazzi, M....Deveugele, M.
(2015). Quality of doctor-patient communication through the eyes of the patient: Variation according to the patient's educational level. *Advance in Health Science Education* 20, 873-884. Retrieved from DOI 10.1007/s10459-014-9569-6
- Afkarian M., Zelnick L. R., Hall Y.N., Hagerty, P.J., Tuttle, k., Welss, N.S., & Boey, I.H.
(2016). Clinical manifestations of kidney disease among US adults with diabetes. *Journal of the American Medical Association*, 316(6), 602–610.
- Akinlolu, A. A., Ghazali, O. K., Ameen, O. M., Oyebanji, S. C., Omotoso, G. O. & Enaibe, B. U.
(2014). Moringa oleifera impairs the morphology and functions of the kidney in adult Wistar rats. *Int. Journal of Morphology*, 32(2), 469-474.
- Alexander, J. A., Hearld, L.R., Mittler, J.N., & Harvey, J. (2012). *Health Services Research*, 47(3), 1201-1223.
- Balogun, E.M., Balogun R.A., Rahman, A., & Seki, A. (2013) *Chronic kidney disease: New York: Nova Biomedical.*
- Basile, J. N. (2007). Recognizing the link between ckd and cvd in the primary care setting:

Accurate and early diagnosis for timely and appropriate intervention. *Southern Medical Journal*, 100(5), 499-505.

Bear, A.R., and Stockie, S., (2014) Patient engagement and patient-centered care in the Management of advanced chronic kidney disease and chronic kidney failure. *Canadian Journal of Kidney Health and Disease* 1(24) doi.[10.1186/s40697-014-0024-7](https://doi.org/10.1186/s40697-014-0024-7)

Bhutani, J., Bhutani, S., Kumar, J. (2013). Achieving *patient care*: Communication and cultural competence. *Indian Journal of Endocrinology and Metabolism* 17(1), 187.

Black, C., Sharma P., Scotland, G., McCullough, K., McGurn, D., Robertson, L., . . . Smith, C. (2010). Early referral strategies for management of people with markers of renal disease: A systematic review of the evidence of clinical effectiveness, cost-effectiveness and economic analysis. *Health Technology Assess*, 14(21), 1-184. Retrieved from doi.[10.3310/hta14210](https://doi.org/10.3310/hta14210)

BMJ. (2004). Expert patient-dream or nightmare? 328, 723-724.
<https://doi.org/10.1136/bmj.328.7442.723>

Brownson, R.C., Dabney S., Dean, C.G., Mack, N.E., Pratt, M., Smith, C. A. . . . Wilkerson, J.C. (1996). Preventing cardiovascular disease through community-based risk reduction: The Bootheel heart health project. *American Journal of Public Health*, 86(2), 206-213.

Charles, C., Whelan, T., and Gafni, A. (1999). What do we mean by Partnership in making decision about treatment? *British Medical Journal* (319) 780-782.
doi.[10.1136/bmj391.7212.780](https://doi.org/10.1136/bmj391.7212.780)

Clemans-Cope, L., Kenney, G. (2007). Low income parents reports of communication problems

- with health care providers: Effects of language and insurance. *Public Health Reports* 122(2), 206-216. Retrieved from <http://www.jstor.org/stable/20057116>
- Cottrell, R.R., Girvan, J.T., McKenzie, J.F. (2015). Principles/foundations of health promotion and education 6th edition. NY. N., Pearson
- DaVita Dialysis, www.davita.com
- Diepen, M.V., Schroijen, M.A., Dekkers, O.M., Rotmans, J.I., Lredoeot, RT. ... Dekker, F. W. Predicting mortality in patients with diabetes starting dialysis. (2014). *PLOS One*, 9(3) Retrieved from <http://dpo10.1371journal.pone.089744>
- Finney Rutten, L.J., Augustoson, E., & Wanke, K., (2006) Factors associated with patients' perceptions of health care providers' communication behavior. *Journal of Health Communication*, 11(1), 135-146.
- Fox, J. (2005). The role of the patient expert patient in the management of chronic illness. *British Journal of Nursing*, 14(1), 25-28.
- Garcia-Garcia, G., Jha, V. (2015). Chronic kidney disease in disadvantaged populations. *Pediatric Nephrology*, 30(5), 183-187.
- Girman, C.J., Kou, T.D., Brodovicz, K., Alexander, C.M., O'Neil, E.A., Engel, S.... D.E., Katz, L. (2011). Risk of acute renal failure in patients with type 2 diabetes mellitus. *Diabetic Medicine*, 29(5), 614-621.
- Gulli, L. F., Mallory, N., Harmon, A. (2016)). Minority health. In *The Gale Encyclopedia of Children's Health*. (Vol. 4). Farmington Hills, MI. Infancy through adolescence.
- Harvey, A., Walsh, M., Jain, A.K., Bosch, E., Moreau, C., Garland, J., & Brimble, K.S. (2016).

- The wished trial: implementation of an interactive health communication application for patients with chronic kidney disease. *Canadian Journal of Kidney Health and Disease*, 3(29). Retrieved from: doi: 10.1186/s40697-016-0120-y
- Institute for Work and Health. (2015). What do researchers mean. *At Work*, (2015). 80.
- Japanese Society of Nephrology, (2009). Ckd and cvd: Cardio renal association. *Clinic Exp Nephrology*, 13: 205-206. doi.10.1007/s10157-009-0137-y
- Johnson, R.L., Roter, D., Powe, N.R., & Cooper, L.A (2004). Patient race/ethnicity and quality of patient-physician communication during medical visits. *American Journal of Public Health* 94(12), 2084-2090.
- Khan, Y.H., Sariff, A., Adnan, A.S., Khan, A.H., Mallhi, T.H., & Joles, J.A. (2016). Chronic kidney disease, fluid overload and diuretics: A complicated triangle. *PLOS One*, 11(7).
<http://dx.doi.org/10.1371/journal.pone.0159335>
- Kovesdy, C.P., Furth, S., Zoccali, C. (2017). Obesity and kidney disease: Hidden consequences of the epidemic. *Kidney International*, 91(2), 260-262.
<http://dx.doi.org/101016/i.kint.2016.10.019>
- Lederer, S., Fischer, M.J., Gordon, H.S., Wadhwa, A., Popli, S., & Gordon, E.J. (2015). Barriers to effective communication between veterans with chronic kidney disease and their healthcare providers: *Clinical Kidney Journal*, 8(6), 766-771.
<https://doi.org/10.1093/ckj/sfv079>

- Lederer, S., Fischer, M.J., Gordon, H.S., Wadhwa, A., Popli, S., & Gordon m E.J. (2016). A question prompt sheet for adult patients with chronic kidney disease: *BMC Nephrology* 17(155). DOI 10.1186/s12882-016-0362-z
- Levey, A. S., Coresh, J., Balk, E., Kausz, A.T., Levin, A., Steffes, M. W. ... Eknoyan, G. (2003). National kidney foundation practice guidelines for chronic kidney disease: Evaluation, classification, and stratification: *Annals of Internal Medicine*, 139(2), 137-149.
- Machanda P.K., & Bid, H.K. E-Nephrology (2011). *Indian Journal of Nephrology*, 21(1), 1-5.
- Minutolo, R., Lapi, F., Chiodini, P. Simonetti, M., Bianchini, E., Peechioli, S.... De Nicola, L. (2014). Risk of esrd and death in patients with ckd not referred to a nephrologist: A7-year prospective study: *Clinical Journal American Social Nephrology*, 9(9), 1586-1593. doi:10.2215/CJN.10481013
- Moosa, M. R., Walt, I., Naicker, S., & Meyers, A. M. (2015). Important causes of chronic kidney disease in south Africa. *Southern African Medical Journal* 105(4).
- Munter, P., Arhad, A., Morse, S.S., Pater, D.A., Manapatra, P.D., Resin, E., ...Berenson, G.S. (2009). End stage renal disease in young black males in black-white population: Longitudinal analysis of the bogalusa heart study. *BioMed Central*, (10)40. Retrieved from <http://doi:10.1186/1471-2369-10-40>
- Muhammad S., Allan M., Ali F., Bonacina M., Adams M. (2014). The renal patient support group: Supporting patients with chronic kidney disease through social media. *Journal of Renal Care* 40(3), 216–218.
- Nadimpalli, S.B., and Hutchinson, K. (2012). An integrative review of relationships between

Discrimination and Asian American health. *Journal of Nursing Scholarship*, 44(2), 127-135. doi.10.1111/j.1547-5069.2012.01448.x

NephCure Kidney International www. Nephcurekidneynetwork.org

Ngo-Metzger, Q., Legedza, A.T.R., &Phillips, R.S. (2004). Asian americans' reports of their health care experiences. *Journal of General Internal Medicine*, 19(21), 111-119.

Niccum, K. (2002) Communicating as a couple. *The Renal Network*. Retrieved from: kidney patient news.org

Nicholas, S.B., Tareen, N., Zadshir, A., Martins, D., Pan, D., & Norris K.C. (2005). Management of early chronic kidney disease in indigenous populations and ethnic minorities. *Kidney International*,68(2), S78-S87.

Pearce, N., and Smith, G. D., (2003). Is social capital the key to inequalities in health? *American Journal of Public Health* 93(1), 122-129.

Powe, N.R., (2008). Let's get serious about racial and ethnic disparities. *Journal of the American Society of Nephrology*, 19, 1271-1275 doi.10.1681/ASN.2008040358

Razmaria, A.A., (2016). Chronic kidney disease. *Journal of American Medical Association*, 315(20), 2248. Retrieved from <http://jamanetwork.com/pdfaccess.ashx?url=/data/journals/jama/935309>

Resnicow K, Davis R, Rollinick D. (2006) Motivational interviewing for pediatric obesity: Conceptual issues and evidence reviews. *Journal American Dietetic Association*. 106(12), 2024-2033. Retrieved from <http://doi.org/10.1016/j.jada.2006.09.019>

Rosse, F., Suurmond, J., Wagner, C., Bruijne, M., & Essink-Bot M. (2016). Role of relatives

- of ethnic minority patients in patient *safety* in hospital care: A qualitative study. *British Medical Journal* 6. Retrieved from doi.101136/bmjopen-2015-009052.
- Ryder C., Yarnold, D., and Prideaux, D. (2011) Learning *and* unlearning: Is communication with minority patients about self or others? *Medical Teacher*, 33, 781-782. Retrieved from doi.10.3109/0141159x2011.609251
- Sarathy, H., Henriquez, G., Abramowitz, M. K., Kramer, H., Rosas, S.E., Johns, T., ... Melamed, K., (2016). Abdominal Obesity, Race and Chronic Kidney Disease in Young Adults: Results from NHANES 1999-2010. *PLoS ONE*, 11(5), 1-14
doi:10.1371/journal.pone.0153588
- Schell, J.O., Arnold, R.M. (2012) Nephro talk: Communication tools to enhance patient-centered-care. *Seminars in Dialysis*, 25(6), 611-616 doi:10.1111/sdi.12017
- Seeleman, C., Sellegger, V., Essink-Bot, M., & Bonke, B. (2011) Teaching communication with ethnic minority patients. *Medical Teacher* 33, 814-819.
- Setters, F. (2002). I'm not the patient! So why do I feel so bad. Retrieved from kidneypatientnews.org
- Song, M., Donovan, H.S., Piraino, B.M., Choi, J., Bernardini, J., Verosky, D. ... Ward, S., (2010). Effects of an intervention to improve communication about end-of-life care among african americans with chronic kidney disease. *Journal Applied Nursing Research* 23, 65-72. Retrieved from doi:10.1016/j.apnr.2008.05.002

- Stephens, K.K., Rimal, R.N., & Flora, J.A. (2004). Expanding the reach of health campaigns: Community organizations as meta-channels for the dissemination of health information. *Journal of Health Communication, (9)*1, 97-111. doi: 10.1080/10810730490271557
- Suckling, R. & Gallagher, H. (2012). Chronic kidney disease, diabetes mellitus and cardiovascular disease: Risk and commonalities. *Journal of Renal Care, 38*: 4-11. doi:10.1111/1.1755-6686.2012.00274.x
- Tareen, N., Zadshir, A., Martins, D., Pan, D., Nicholas, S., & Norris, K. (2015). Chronic kidney disease in african american and mexican populations. *Kidney International, (68)*, S137-S140. Retrieved from <http://dx.doi.org/10.1111/j.1523-1755.2004.09723x>
- Valdez, R. (2010). Managing stress: What kidney patients, family members and caregivers need to know. *Kidney Times* Retrieved from Kidneynews.org
- Zalai, D., and Novakis, M. (2008). Depressive disorders in patients with chronic kidney disease. *Seminars in Dialysis, ()*,
- Zalai, D., Szeifert, L., Novakis, M. (2012). Psychological distress and depression in patients with chronic kidney disease. *Seminars in Dialysis, 25*(4), 428-438.
- National Institute of Diabetes and Digestive and Kidney Diseases www.niddk.nih.gov