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Orginal Article

Assess The Knowledge Regarding care of patients diagnosed with Chronic Kidney Disease among Nursing Officers in Kolar

Suresha R.S.[1*], Dr. Zeanath Careina Joseph.[2], Vani R.[3]

[1*]Department of Medical Surgical Nursing, Sri Devaraj Urs College of Nursing, Kolar. Karnataka, India.

[2]Prof & HoD Dept. of Medical Surgical Nursing, SDUCON, CNO at RLJH & RC- SDUAHER Tamaka, Kolar, Karnataka, India.

[3]Assistant Professor,Dept of Community Health Nursing, SDUCON, SDUAHER, Tamaka, Kolar Karnataka, India.

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ABSTRACT

Introduction
Chronic Kidney disease is the most common disease affecting humans worldwide, it was identified by world health report 2020 as the third ranked factor for disabilityand it is one of the most important risk factors for hypertensive and Diabetes patients, which are the leading causeof death around the globe. Nurses are playing vital role in prevention of co morbidities in CKD patients. Based on the available literature and researchers experience a study undertaken to "A study to assess the Knowledge regarding care of patients diagnosed with Chronic Kidney Disease among Nursing officers working in R. L. Jalappa Hospital, Kolar". to determine the association between the knowledge with selected socio demographic variables. Methods and materials: A Descriptive surveyDesign was adopted by using purposive sampling technique. A total of 200 Nursing officers were included in the study. A Structured Knowledge Questionnaire was used to collect the data based on expert's validation and inclusion criteria of the study. Major findings: Based on the objectives of the study the overall knowledge level majority 38.6% of the sample belonged to the inadequate knowledge and 58.6% had moderate knowledge, and none of them belonged to adequate knowledge. Regarding area wise knowledge on general information mean knowledge score was 3.04 (SD+0.79), CKD diet and exercise mean score was 2.66 (SD+0.91) and CKD management mean score was 4.09(SD+ 1.37) and management of complications mean score was 1.03(SD+ 0.65). Finally, the researchers concluded that findings of the study clearly showed that there was inadequate knowledge on management of CKD among the nursing officers, thus, study recommended on creating awareness on care CKD management and good monitoring can prevent complications related to CKD management ultimately impact on the qualityoflife. There searcher recommends conducting the study in different setting and as one of the descriptive design was used to generalize the study findings. Conclusion: Finally, the researchers concluded the findings of the study clearly showed that there was Moderate Knowledge on CKD management among Nursing officers, thus study recommended to conduct seminar to the nursing officers on current practice to save the lives.

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Introduction

Health systems and polices have a critical role in determining the manner in which health services are delivered, utilized and affect health outcomes. A health system consists of all organizations, people and actions whose primary intent is to promote, restore or maintain health. This includes efforts to influence determinants of health as well as more direct health-improving activities. A health system is, therefore, more than the pyramid of publicly owned facilities that deliver personal health services[1].

Corresponding author:

***Suresha R. S.**
Department of Medical Surgical Nursing,
Sri Devaraj Urs College of Nursing, Kolar. Karnataka, India.
Email: sureshreddyrs05@gmail.com

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Non-communicable diseases (NCDs) encompass a vast group of diseases such as cardiovascular diseases, cancer, diabetes and chronic respiratory diseases. NCDs contribute to around 38 million (68%) of all the deaths globally and to about 5.87 million (60%) of all deaths in India. Preventive aspect of NCDs is strengthened under Comprehensive Primary Health Care through Ayushman Bharat Health Wellness Centre scheme, by promotion of wellness activities and targeted communication at the community level. Other initiatives for increasing public awareness about NCDs and for promotion of healthy lifestyle include observation of National & International Health Days and use of print, electronic and social media for continued community awareness [2]

Health system planning requires careful assessment of chronic kidney disease (CKD) epidemiology, but data for morbidity and mortality of this disease are scarce or non- existent in many countries by estimated the global, regional, and national burden of CKD as well as the burden of card io., vascular disease and go unattributable to Impaired kidney function, for the global burden of diseases, injuries, and risk factors. Globally, 1·2 million people died from CKD [3].

The Global all-age mortality rate from CKD increased 41·5% between 1990 and 2019, although the rewas no significant change in the age-

standardized mortality rate(2·8%,). In 2019, 697·5 million (95%) cases of all-stage CKD were recorded, for a global prevalence of 9·1%. The global all-age prevalence of CKD increased 29·3% since1990, whereas the age-standardized prevalence remained stable (3·5). CKD resulted in 35·8million DALYsin 2019, most of the burden of CKDwas concentrated in the three lowest quintiles of Socio-demographic Index (SDI). In several regions, particularly Oceania, sub-Saharan Africa, and Latin America, the burden of CKD was much higher than expected for the level of development, whereas the disease burden in western, eastern, and central sub-Saharan Africa, East Asia, south Asia, central and Eastern Europe, Australasia, and Western Europe was lower than expected. 1·4 million cardiovascular disease related deaths and 25·3 million cardio vascular disease DALYs were attributable to impaired kidney function [4].

A recent systematic review for Africa revealed a pooled prevalence of 10 in 1 among the population suffering from chronic kidney disease. The severity in sub-Saharan Africa seems to be higher as evidenced byan estimated pooled prevalence of more than 14%[5].

A study conducted in Nepal revealed 44% of nurses having low level of practice regarding patient's care during haemodialys is in Tanzania, 59.4% of nurse revealed knowledge of CKD with 72.4% not knowledgeable about nutrition of chronic kidney disease patients moreover, moderate knowledge to majority[70.6%], with only 17.6% good knowledge and 11.8% low knowledge was highlighted among nurses. A study conducted by among health care workers highlighted a significant association between agegroup (p=0.01), the studies reveal non-significant associations between knowledge and age(p=.31)as well as knowledge and years of nursing experience (p =.488) further more, identified a significant difference in knowledge between the groups,with primary care providers reporting more uncertainty about relative survival rates with conservative management compared with different patient groups of the afo rementioned studies, identified no relationship between knowledge and practice though it was on only considering patients on haemodialysis[6].

The knowledge and proper inpatient management of CKD for health care providers is crucial in reducing mortality and morbidity among CKD patients. mismanagement of CKD patients tend to increase mortality and morbidity, quick progression to end stage renal disease (ESRD),decreased quality of life, recurrent infections of patients with catheters who are on haemodialysis, malnutrition among CKD patients and fluid overload in Rwandan context, the management of CKD patients is done at tertiary hospitals and encompasses dialysis, medication compounded with dietary and fluid restriction. Hence, the present study is revealed on assessing knowledge related to CKD[7].

Population-based initiative for prevention, control and screening for common Non- Communicable Diseases (NCDs) i.e. diabetes, hypertension and common cancers has been rolled out in the country under NHM and also as apart of Comprehensive Primary Health Care. Under the initiative, persons more than 30 years of age are targeted for their screening for the common NCDs, in which there is focus on screening of breast cancer and cervical cancer among women. Screening of these common NCDs is an integral part of service delivery under Ayushman Bharat – Health and Wellness Centers. Chronic kidney disease is now known as a major medical problem worldwide[8].

ORGANIZATION OFF INDINGS

The analyzed data is organized and presented under the following sections based on objectives.

Section1:
Description off requency and percentage distribution of the Nursing officers according to the demographic variables.

Section2:

Deals with the pertaining to the first objective of the study, which is assess the level of knowledge regarding CKD management among Nursing officers by using Structured Knowledge Questionnaire.

- Overall level of knowledge.
- Area wise level of knowledge

Section3:

This section delas with the finding related to the second objective of the study regarding association between the knowledge with selected socio demographic variables of sample.

Section A: Socio Demographic Proforma

Table1: Distribution of baseline characteristics in terms of frequency and percentage N = 200

Sl.no	Sample characteristic	Frequency(f)	Percentage (%)
1	**Age(inYears)**		
	21-30	119	59.5%
	31-40	46	23%
	>40	35	17.5%
2	**Gender**		
	Male	137	68.50%
	Female	63	31.50%
3	**Educational status**		
	GNM	56	28%
	BSC(N)	70	35%
	PBBSC(N)	72	36%
	MSC(N)	2	1%
4	**Total year of experience**		
	<1 year	24	12%
	1-2 years	15	7.50%
	2-3years	26	13%
	>3years	135	67.50%
5	**Clinical**		
	EMD	30	15%
	Internal	50	25%
	Nephrology	21	10.50%
	Others	99	49.50%
6	**Under gone training**		
	Yes	58	29%
	No	142	71%
7	**how long**		
	< 1 year	99	49.50%
	2-5 years	48	24%
	6-10 years	22	11%
	>10 years	31	15.50%

Section II This Section deals with the data per taining to the first objective of the study.

Table2:-distribution of samples according too verall level of knowledge on CKD management among Nursing officers N = 200

Aspect	Knowledge scores	Score range	Frequency	Percentage
Knowledge Level	Inadequate knowledge	<50% (<21)	77	38.6%
	Moderately adequate knowledge	51-75% (22-31)	118	58.66%
	Adequate knowledge	>76% (32-42)	5	2.66%

Table3 Area distribution of Knowledge score of CKD management among Nursing officers N-200

SI. No	Variables	No. of items	Max. score	Range	Mean	SD	Mean%
1	General Informationon CKD	3	3	0-3	2.42	0.69	80.6%
2	Definition	13	13	2-11	8.69	3.89	64.53%
3	Causes	3	3	0-3	2.23	0.911	74.33%
4	Sings& symptoms	9	9	3-6	6.18	1.76	68.66%
5	Pathophysiology	8	8	1-7	5.24	1.54	58.93%
6	Management& complications	6	6	0-6	5.24	1.72	50.33%

Section: 3

Table 4: Association of knowledge scores of nursing officers with selected demographic variables N= 200

Sl. No	Variables	BelowMedian <50	Medianand above >50	Chi square	Df.	Pvalue (0.05)	Inference
1	**Age(inYears)**						
	21-30	58	61	X^2 1.2545	2	.53405	NS atp <.05
	31-40	26	20				
	>40	20	15				
2	**Gender**						
	Male	45	92	X^2 0.2578	1	611645	NS atp <.05
	Female	23	40				
3	**Educational status**						
	DIPLOMA/GNM	26	20	0.00081 (Fisher exact test)	3	-	NS atp <.05
	BSC	25	45				
	PBBSC	32	40				
	MSC	1	1				
4	**Totalyearof experience**						
	<1 year	24	20	X^2 8.037.	2	.01798	SS atp <.05
	1-3 years	19	22				
	>3years	80	35				
5	**Clinicalareaposted**						
	EMD	10	20	6.1185	3	.105986	NS atp <.05
	Internal	30	20				
	Nephrology	11	10				
	Others	44	55				
7	**How long you have worked in caring patients with CKD**						
	< 1 year	59	40	X^2 10.5916	3	.014152	SS at p<.05
	2-5 years	15	33				
	6-10 years	10	12				
	>10 years	15	16				

Note:- P<0.05, NS-Not significant, SS-statistically significant, df-degree of freedom, 1(3.38), df-2(5.99).

Table-04 shows the association of Knowledge regarding care Chronic Kidney Disease in association with selected socio-demographic data of nursing officers. There were seven selected variables which were tested with the level of knowledge.

With regard to age, there were three groups, 21-30 years, 31-40years and above 40years. The obtained =1.25 < 5.99 at P= 0.05. Indicates there was "no association" b/w knowledge score with age thus the stated assumption was accepted.

With regard to gender there were two groups, male and female. The obtained chi-square value = 0.25< (3.84) at level of 0.05. Instead there was "no significant association"b/wscoreonknowledger/tgender.Therefore the stated assumption was accepted.

Qualification of the nursing officers, there were four groups, GNM. B.SC(N), PB. B.Sc.(N) and M.Sc. (N). Here The obtained (fishers exact test value) 0.00081 <3.84 at level of 0.05. Proves "no association" between scores of knowledge with qualification of nursing officers, Hence, the stated assumption was accepted.

With regard to total year of experience, there were three groups less than one year, 1-3 years and>3years. The obtained (chi-square value) =8.03 > (7.82) at 0.05 point. Signifying there is a "significant association" between knowledge score with total year of experience of nursing officers hence, the stated assumption was rejected.

In relation to area of working there were four groups, EMD, Internal medicine, nephron wards and other wards. The obtained chi-square value =6.1185<7.89 at 0.05 level. This shows the no significant association between knowledge scores and area of working .for this reason accepted the stated assumption.

With regard to under gone trainingtwo groups were there, The obtained chi- square value was 0.49 < 3.84 at 0.05 level. Indicates "no significant association" with knowledge score and training programme. Thus the stated assumption was accepted.

With regard to experience of work in respective wards, there were four groups less than one year, 2-5 years 6-10 years and>10years. The obtained (chi-squarevalue) =10.59>(7.82)at0.05point.Signifying there is a"significant association" between knowledge score with total year of experience of nursing officers hence, stated assumption was rejected.

Conclusion

This present study focused on assess the knowledge regarding CKD management among Nursing officers undergoing training at RLJH&RC. Tamaka, Kolar,

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Nil

Conflicts of interest

Nil

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