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"A STUDY TO ASSESS THE LEVEL OF BURDEN ON PROVIDING CARE WITH CHRONIC KIDNEY DISEASE PATIENTS AMONG NURSING OFFICER AT SMVMCH PUDUCHERRY".

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ABSTRACT

Chronic Kidney Disease (CKD) refers to an irreversible deterioration in renal function which classically develops over a period of years. Initially, kidney failure is manifested only as a biochemical abnormality. The main objective of the study was to the assess the level of burden on providing care with CKD patients among nursing officer. The study was quantitative research approach, Descriptive research design was adopted for the study. Among 30 Nursing officer were selected using convenient sampling technique. The study findings revealed that the percentage wise distribution of level of burden on providing care of CKD patients among nursing officer. The finding revealed that majority 22 (73.3%) of them had no to mild burden, 8 (26.7%) of them had a mild to moderate burden, and 0 (0%) of them had high burden. There was a significant and negative correlation between the total scores of care burden and quality of life ($r = -0.436$, $P < 0.001$). Hence it is highly significant. There is no significance association between religion, marital status, education qualification, year of experience, income in months, updating education regarding care of CKD patient and additional information on CKD with the level of burden on providing care with CKD patients among nursing officers

Key words: Chronic Kidney disease, Nursing Officer.

INTRODUCTION:

Chronic Kidney Disease (CKD) refers to an irreversible deterioration in renal function which classically develops over a period of years. Initially, kidney failure is manifested only as a biochemical abnormality. Eventually, loss of the excretory metabolic and endocrine functions of the kidney leads to the clinical symptoms and signs of renal failure, which are referred to as uraemia. CKD in type 2 diabetes is a subtle disease in its early phases, but when it becomes manifest, it is severe. However, access to care is considered insufficient until those at high risk of developing CKD are screened and case identification is established as a standard of care.

Nathan R. Hill et al. (2016) conducted a study on Global Prevalence of Chronic Kidney Disease. A systematic review and meta-analysis of observational studies estimating CKD prevalence in general populations was conducted through literature searches in 8 databases. We assessed pooled data using a random effects model. Of 5,842 potential articles, 100 studies of diverse quality were included, comprising 6,908,440 patients. CKD has a high global prevalence with a consistent estimated global CKD prevalence of between 11 to 13% with the majority stage 3. Future research should evaluate intervention strategies deliverable at scale to delay the progression of CKD and improve CVD outcome.

Oluseyi A Adejumo et al. (2019) conducted a study on Burden, psychological well-being and quality of life of caregivers of end stage renal disease patients. Anxiety was significantly higher in caregivers compared to control (31.6% vs 5.3%, p = 0.004). Also, depression was significantly higher in caregivers (31.6% vs 3.5%, p= <0.001). Twenty-eight (49.1%) of the caregivers had mild to moderate burden and 19 (33.3%) had a high burden. The mean Zarit burden score was higher in female caregivers compared to male caregivers (p = 0.09).

STATEMENT OF THE PROBLEM:

A study to assess the level of burden on providing care with chronic kidney disease patients among nursing officer at SMVMCH Puducherry.

OBJECTIVES:

1. To assess the level of burden on providing care with CKD patients among nursing officer.
2. To associate level on providing care with CKD patients among nursing officer with their selected demographic variables.

ASSUMPTION:

1. The Nursing officer will have a moderate level of burden on providing care with CKD patients

MATERIALS AND METHOD:

The design adopted was quantitative approach descriptive research design the setting of the study was at Sri Manakula vinayagar medical college and hospital the period of data collection was 4 weeks. The sample consists of 30 nursing officers working in SMVMCH, Puducherry by using Convenient sampling technique was used for the present study. Zarith burden of life instruments scale used to assess the burden level on providing care with CKD patients among nursing officer at SMVMCH Puducherry. The gathered data were analysed using descriptive and inferential statistics and interpretation were made based on the objectives and hypothesis of the study.

Section A: Demographic variables

The demographic variables consist of age in years, religion, educational status, year of experience, income in months, and source of information on CKD .

Section B: Zarith burden of life instruments scale

Zarith burden of life instruments scale used to assess the burden level on providing care with CKD patients among nursing officer at SMVMCH Puducherry.

Inclusion criteria

- Nursing officers who are working in SMVMCH, Puducherry.
- Nursing officers who are present during data collection.
- Nursing officers who are willing to participate in the study

Exclusion criteria

- Nursing officers who are not willing to participate in the study
- Nursing officers who are absent during data collection.
- Nurses exclude in administrative level

SETTING OF THE STUDY

The present study was conducted at Sri Manakula Vinayagar Medical College and Hospital. It is an ultra-modern, multi-specialty tertiary care hospital with medical research facilities. This

hospital is 100 meters away from SMVNC. The hospital is a 1050-bedmultispecialtyhospital. As a tertiary care hospital, the services are complemented by a day care centre, out- patient facilities, and an exclusive centre for health checkups. It includes in-patient department of the intensive care unit, critical care unit, respiratory intensive care unit, paediatric intensive care unit, neonatal intensive care unit, and surgical intensive care unit.

RESULTS:

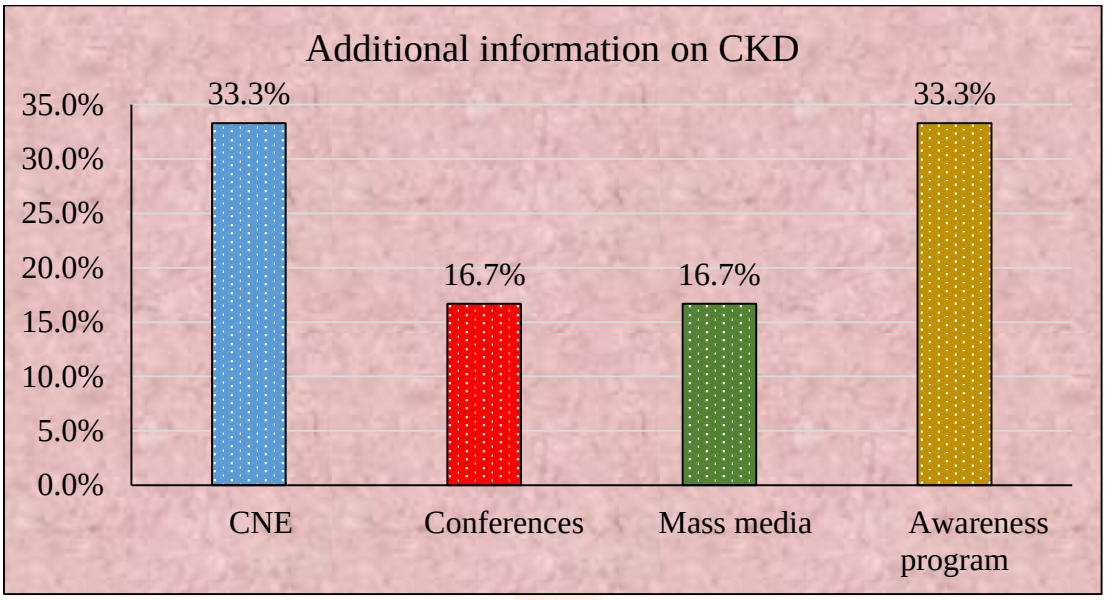
Description of demographic variables of nursing officer

N = 30

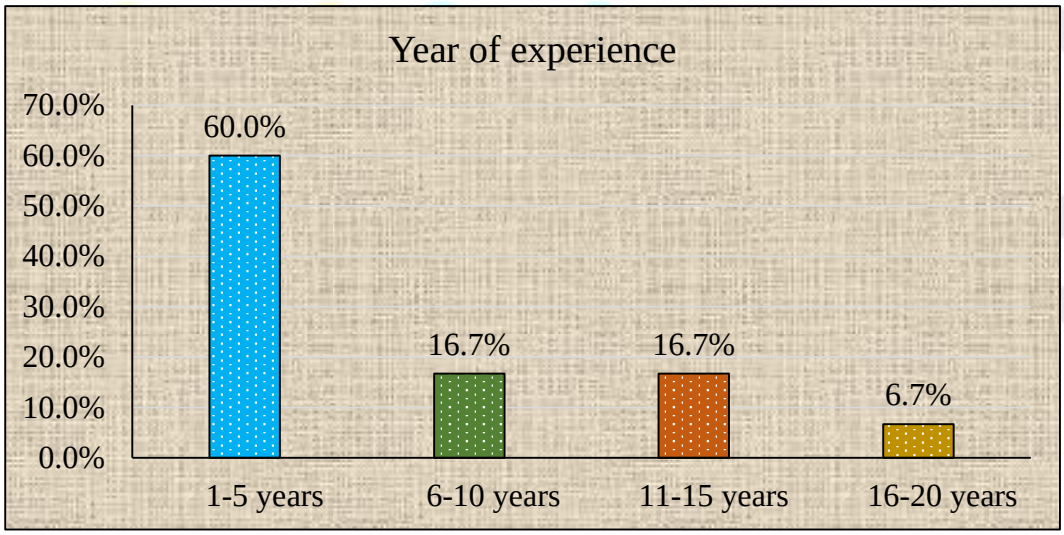
S.No	Demographic variables	Frequency	Percentage
1	**Age in years**		
	a) 21-25	8	26.7
	b) 26-30	12	40.0
	c) 31-35	8	26.7
	d) 36 and above	2	6.7
2.	**Religion**		
	a) Hindu	26	86.7
	b) Muslims	3	10.0
	c) Christian	1	3.3
	d) Others		
3.	**Marital status**		
	a) Married	20	66.7
	b) Unmarried	10	33.3
4.	**Education qualification**		
	a) General nursing and midwifery	2	6.7
	b) Post basic bachelor of nursing	4	13.3
	c) Bachelor of nursing	24	80.0

	d) Master of nursing	0	0.0

Table 4.1: The above table shows frequency and percentage-wise distribution of demographic variable of nursing officers. Regarding the age groups, the majority 12 (40%) were in the age group of 26-30 years, 8(26.7%) were above the age group of 31-35 years and 2(6.7%) were above the age group of above 36 years. In the aspect of religion, the data shows majority 26 (86.7%) were hindu and 3 (10%) were muslim and 1 (3.3%) were Christian. Regarding education qualification, 24 (80%) were completed bachelor of nursing, 4 (13.3%) were completed post basic bachelor of nursing. With regards to year of experience majority 18 (60%) were had 1-5 years of experience and 5 (16.7%) were had 11-15 years of experience.



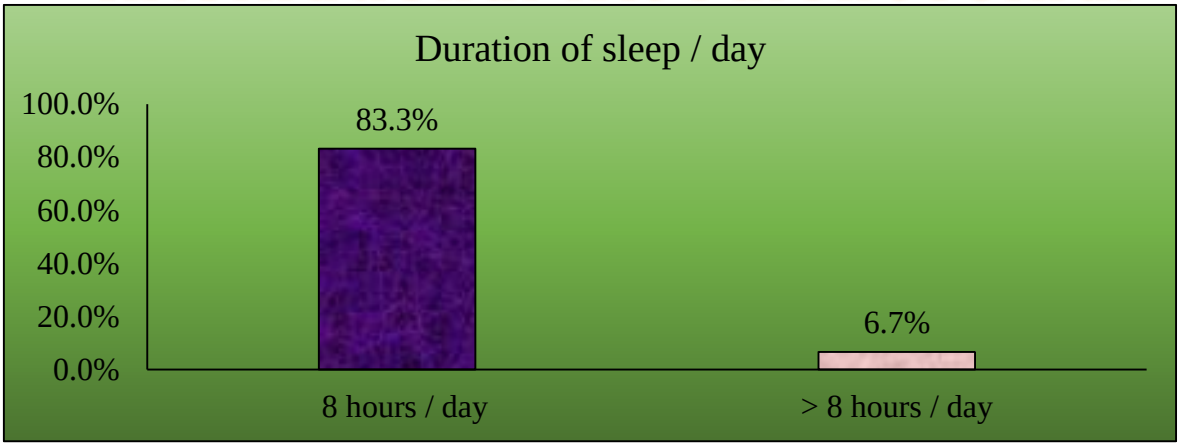
Additional information on CKD wise distribution of demographic variable of nursing officers



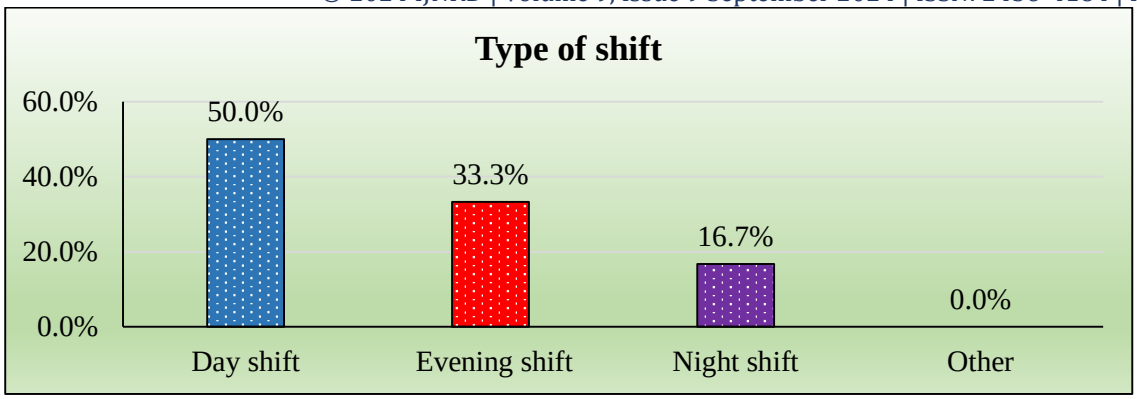
Year of experience wise distribution of demographic variable of nursing officers

SECTION B: Description of clinical variables of nursing officer N- 30

S.No	Demographic variables	Frequency	Percentage
1	**Duration of work per day**		
	a) 8 hours / day	28	93.3
	b) > 8 hours / day	2	6.7
2.	**Duration of sleep / day**		
	a) 8 hours / day	20	66.7
	b) > 8 hours / day	10	33.3
3.	**Stressful situation in work area**		
	a) Occasionally	25	83.3
	b) Frequently	1	3.3
	c) Daily	4	13.3
4.	**Over time hours**		
	a) Rarely	28	93.3
	b) Frequently	1	3.3
	c) Sometimes	1	3.3



Duration of sleep per day wise distribution of clinical variable of nursing officers



Type of shift wise distribution of clinical variable of nursing officers

SECTION C: Assessment of the level of burden on providing care with CKD patients among nursing officers

Table 4.3: Distribution of the level of burden on providing care with CKD patients among nursing officer

N = 30

S.NO	LEVEL OF BURDEN	FREQUENCY (N)	PERCENTAGE %
1.	No to Mild burden	22	73.3
2.	Mild to Moderate burden	8	26.7
3.	High burden	0	0.0

Table 4.3: The above table reveals the frequency and percentage-wise distribution of level of burden on providing care with CKD patients among nursing officer. The finding shows that, majority 22 (73.3%) of them had no to mild burden**,** 8 (26.7%) of them had a mild to moderate burden, and 0 (0%) of them had high burden.

SECTION D: Association of the level of burden on providing care with CKD patients among nursing officers with their selected demographic variables

Table 4.3: Association of the level of burden on providing care with CKD patients among nursing officers with their selected demographic variables

N = 30

S.No	Demographic variables	LEVEL OF BURDEN						X^2 value
		No to Mild		Mild to Moderate		High burden		
1	**Age in years**	**N**	**%**	**N**	**N**	**%**	**N**	$X^2 = 7.041$ p = 0.031 **(S)***
	a) 21-25	6	20.0	2	6.7	0	0	
	b) 26-30	10	33.3	2	6.7	0	0	
	c) 31-35	5	16.7	3	10.0	0	0	
	d) 36 and above	1	3.3	1	3.3	0	0	
2.	**Religion**							$X^2 = 2.041$ p = 0.231 (NS)
	a) Hindu	20	66.7	6	20.0	0	0	
	b) Muslims	1	3.3	2	6.7	0	0	
	c) Christian	1	3.3	0	0.0	0	0	
	d) Others	0	0.0	0	0.0	0	0	
3.	**Marital status**							$X^2 = 1.041$ p = 0.334 (NS)
	a) Married	16	53.3	4	13.3	0	0	
	b) Unmarried	6	20.0	4	13.3	0	0	

Table 4.4: The above table shows that there is significance association between the age and year of experience with the level of burden on providing care with CKD patients among nursing officers where 'p' value is < 0.05.

MAJOR FINDINGS OF THE STUDY:

Regarding the age groups, the majority 12 (40%) were in the age group of 26-30 years, 8(26.7%) were above the age group of 31-35 years and 2(6.7%) were above the age group of above 36 years. In the aspect of religion, the data shows majority 26 (86.7%) were hindu and 3 (10%) were muslim and 1 (3.3%) were Christian. Regarding education qualification, 24 (80%) were completed bachelor of nursing, 4 (13.3%) were completed post basic bachelor of nursing. With regards to year of experience majority 18 (60%) were

had 1-5 years of experience and 5 (16.7%) were had 11-15 years of experience. In the aspect of income in months majority, 26 (86.7%) were had income of Rs 10,000-20,000, 4 (13.3%) had income of Rs 20,001-30,000. With regards to update education regarding CKD patients majority, 22 (73.3%) were said yes and8 (26.7%) were said no. Regarding additional information on CKD, the data shows that the majority 10 (33.3%) were had information from CNE, awareness program and 5(16.7%) were had information from mass media and conference.

Regarding the duration of work per day, the majority 28 (93.3%) had 8 hours/day and 2 (6.7%) had >8 hours/day. In the aspect of duration of sleep/day, the data shows, the majority 20 (66.7%) had 8 hours/day and 10(33.3%) had >8 hours/day. Regarding frequency of stress in each shift 25 (83.3%) had occasionally and 4 (13.3%) had daily. With regards to additional hours of work majority, 28 (93.3%) had rarely 1 (3.3%) had frequently additional hours of work. In the aspect of duty period majority, 15 (50%) had day shift, 10 (33.3%) had evening shift and 5 (16.7%) had night shift.

CONCLUSION:

The present study assessed the level of burden on providing care with CKD patients among nursing officer at SMVMCH Puducherry. From the result of the study, it was concluded that there is mild burden level among nursing officers on providing care with CKD patients. The requires some interventions to improve that level of care among CKD patient and reduce the level of burden on providing care. The study findings concluded that there is a significance association between the level of burden on providing care with CKD patients with their selected demographic variables where 'p' value is < 0.05.

NURSING IMPLICATIONS:

The researcher has derived the following implications from the study results which adds greater value to the field of nursing service, nursing administration, nursing education, and nursing research.

NURSING EDUCATION

- Nurse educator should take the initiative to conduct education programme to enhance the quality of level of care with CKD patients.
- Student nurses can be educated in order to enhance their level of care with CKD patients. The nurse educator need to be equipped with adequate knowledge regarding CKD patients.

NURSING PRACTICE

- The study results may help the nursing personnel to understand factors influencing level of burden on providing care with CKD patients

NURSING RESEARH:

- Nursing research can be done to find out the various methods to improve the quality of care among the CKD patients.

RECOMMENDATIONS:

- Similar study can be conducted as comparative between male client and female client.
- Same study can be conducted with large samples to generalize the results of the study.
- Same study can be conducted among nursing students to understand factors influencing the level of burden on providing care with CKD patient.

JOURNAL REFERENCE:

1. Hill, Nathan R., et al. "Global Prevalence of Chronic Kidney Disease – A Systematic Review and Meta-Analysis." *PLOS ONE*, edited by Giuseppe Remuzzi, no. 7, Public Library of Science (PLoS), July 2016, p. e0158765. *Crossref*, doi:10.1371/journal.pone.0158765.

2. Shahinian, Vahakn B., et al. "Estimating Prevalence of CKD Stages 3-5 Using Health System Data." *American Journal of Kidney Diseases*, no. 6, Elsevier BV, June 2013, pp. 930–38. *Crossref*, doi:10.1053/j.ajkd.2013.01.018.

3. Brück, Katharina, et al. "CKD Prevalence Varies across the European General Population." *Journal of the American Society of Nephrology*, no. 7, Ovid Technologies (Wolters Kluwer Health), Dec. 2015, pp. 2135–47. *Crossref*, doi:10.1681/asn.2015050542.

4. Murphy, Daniel, et al. "Trends in Prevalence of Chronic Kidney Disease in the United States." *Annals of Internal Medicine*, no. 7, American College of Physicians, Aug. 2016, p. 473. *Crossref*, doi:10.7326/m16-0273.

5. Coresh, Josef. "Update on the Burden of CKD." *Journal of the American Society of Nephrology*, no. 4, Ovid Technologies (Wolters Kluwer Health), Mar. 2017, pp. 1020–22. *Crossref*, doi:10.1681/asn.2016121374.

6. Liyanage T, Toyama T, Hockham C, et al Prevalence of chronic kidney disease in Asia: a systematic review and analysis BMJ Global Health 2022;7:e007525.

7. Kausz, Annamaria T., and Andrew S. Levey. "The Care of Patients with Chronic Kidney Disease." *Journal of General Internal Medicine*, no. 8, Springer Science and Business Media LLC, Aug. 2002, pp. 659–63. *Crossref*, doi:10.1046/j.1525-1497.2002.20634.x.

8. Sathiyakala K. A Study to assess the level of knowledge regarding ethical sensitivity of patient care among nursing students. Indian Journal of Applied Research. 2023; 13(2): 52-53. DOI: 10.36106/ijar

NET REFERENCE

1. https://www.mdpi.com/2227-9032/9/9/1212
2. https://www.paho.org/en/topics/chronic-kidney-disease
3. https://en.wikipedia.org/wiki/Chronic_kidney_disease
4. https://www.openepi.com/SampleSize/SSPropor.html.
5. https://goodcalculators.com/sample-size-calculator/html