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Research Paper

"A Study to Assess the Knowledge Regarding Nurse Practitioner Midwifery Among Nursing Officers At SMVMCH, Puducherry".

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Abstract:
Aim of the study*:-a study to assess the knowledge regarding nurse practitioner midwifery among nursing officers at smvmch, puducherry.*
objectives of the study*:- 1.To assess the level of knowledge regarding nurse practitioner midwifery among nursing officers at SMVMCH, Puducherry.2.Association between the knowledge on nurse practitioner midwifery among nursing officers with their selected demographic variables.*
Methodology*:-A Quantitative approach was used and Descriptive design was adopted for this study, the population is all nursing officers. Sample consists of all nursing officers working in SMVMCH, Puducherry. The sample size consists of 100 nursing officers at SMVMCH. Convenience sampling techniques was used in this study. Setting of the study at Sri Manakula Vinayagar Medical College and Hospital, Puducherry.*
Result*:-Majority of nursing officers 50(50%) had moderate level of knowledge and 44(44%) had inadequate level of knowledge and 6(6%) had adequate level of knowledge. based on the objectives of the study using the descriptive and inferential statistics.*

I. INTRODUCTION

Nurse Practitioner Midwifery is an advanced practice nursing speciality that focuses on providing comprehensive, patient-centered care to women throughout the continuum of pregnancy, labor, childbirth, and the postpartum period. Nurse practitioners in midwifery are registered nurses who have received specialized education and training in midwifery care, which enables them to perform a wide range of responsibilities, including conducting normal deliveries, managing prenatal and postnatal care, offering family planning counseling, and recognizing complications that require referral to a physician or specialist.

Nurse practitioner midwives are equipped to handle low-risk pregnancies and provide education to women on matters such as nutrition, exercise, and breastfeeding, as well as emotional support during the perinatal period. The role of nurse practitioner midwives is especially critical in countries like India, where there is a shortage of obstetricians and gynecologists, particularly in rural and underserved areas.

However, nursing officers to be effective in their roles, they must possess a thorough understanding of the principles and practices of midwifery. This includes knowledge of prenatal assessments, recognizing and managing complications during labor, postnatal care, and educating patients about family planning and newborn care. Unfortunately, while nursing officers are integral to maternal health care, there is often a lack of formalized training in midwifery for many nurses in India, which can lead to gaps in their knowledge and practice.

NEED FOR THE STUDY:

Globally, there is growing recognition of the pivotal role that Nurse Practitioner Midwives (NPMs) play in enhancing maternal and newborn health outcomes. A significant study conducted in the United States by the American College of Nurse- Midwives (2018) revealed that midwife-led care models are associated with remarkable improvements in maternal outcomes. The study showed a 33% reduction in cesarean section rates and a 15% increase in natural birthing outcomes, particularly in underserved and rural populations. These findings underline the cost-effectiveness and safety of utilizing NPMs as frontline maternal healthcare providers.

STATEMENT OF THE PROBLEM:

"A STUDY TO ASSESS THE KNOWLEDGE REGARDING NURSE PRACTITIONER MIDWIFERY AMONG NURSING OFFICERS AT SMVMCH, PUDUCHERRY".

OBJECTIVES:

- To assess the level of knowledge regarding nurse practitioner midwifery among nursing officers at SMVMCH, Puducherry.
- Association between the knowledge on nurse practitioner midwifery among nursing officers with their selected demographic variables.

OPERATIONAL DEFINITIONS:

Assess: In this study, it refers to assess the knowledge regarding nurse practitioner midwifery among nursing officers.

Knowledge: In this study, it refers to the degree to which the individuals are aware of nurse practitioner midwifery.

Nurse practitioner midwifery: It refers to an advanced practice registered nurse who provides comprehensive, holistic care to the women throughout their lifespan, with the special focus on reproductive health, pregnancy, children, postpartum period.

Nursing officers: It refers to a registered nurse who hold a managerial or leadership position within a health care facility.

ASSUMPTION:

- The nursing officers may have knowledge on nurse practitioner midwifery.

DELIMITATION:

- The study is limited to nursing officers who were working in SMVMCH, Puducherry.
- The study is limited to all nursing officers.

RESEARCH APPROACH:

Research approach is most significant part of any research. The appropriate choice of the research approach depends upon the purpose of the research study which has been undertaken.

A Quantitative research approach was selected for this study.

RESEARCH DESIGN:

The research overall plan for obtaining answers to the research question or for testing the research hypothesis is referred to as the research design. The essential question that the research design is concerned with how the study subjects will be brought into the research and how they will be employed within the research design.

A Descriptive research design was adopted for this study.

POPULATION:

Population is refers to number of the people who meet the criteria that research has established to the study.

The target population is all nursing officers.

SAMPLE:

Sample is a selected proportion of the defined population. It is a subset of population.

In this present study, sample consists of all nursing officers working in SMVMCH, Puducherry.

SAMPLE SIZE:

Sample size is the number of subjects involved in the study. The sample size consists of 100 nursing officers at SMVMCH.

SAMPLING TECHNIQUE:

Sample technique is defined as the process pf selecting a group of people or the other elements with which conduct a study.

Convenience sampling techniques was used in this study.

SETTING OF THE STUDY:

The study was connected at Sri Manakula Vinayagar Medical College and Hospital, Puducherry. It comprises of 1.5 km from Sri Manakula Vinayagar Nursing College and it takes 10 minutes to go and conduct the research.

CRITERIA FOR SAMPLE SELECTION:

Inclusion criteria:

- Nursing officers working in SMVMCH.
- Both male and female.

Exclusion criteria:

- Nursing officers who are not willing to participate in this study.
- Nursing officers who are not available at the time of data collection.

SELECTION AND DEVELOPMENT OF TOOL:

SECTION A:

It consists of socio demographic variables such as age, gender, educational qualification, designation, year of experience, residency, previous knowledge, sources of information regarding nurse practitioner midwifery.

SECTION B:

By using self-structured questionnaire to assess the knowledge regarding Nurse Practitioner Midwifery among nursing officers. The scoring are one mark for correct answer and zero mark for wrong answer.

TABLE 1: SCORING INTERPRETATION

LEVEL OF KNOWLEDGE	SCOREING
Inadequate	60 – 65%
Moderate	70 – 75%
Adequate	80 – above

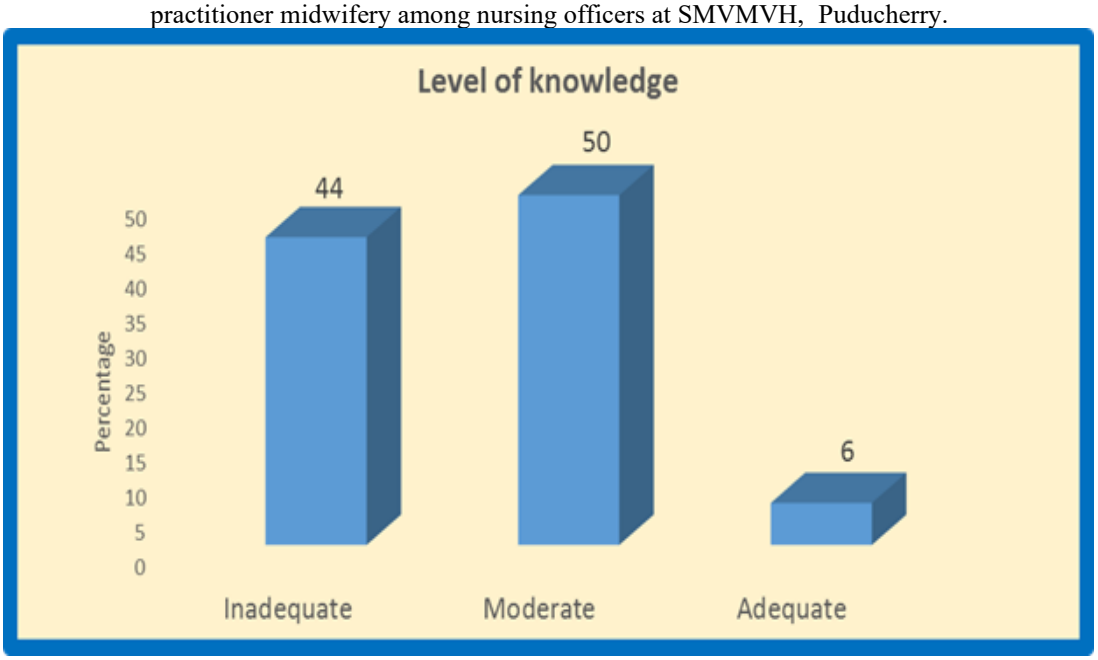
DATA ANALYSIS

Frequency and percentage wise distribution of level of knowledge regarding nurse practitioner midwifery among nursing officers. (N=100)

Level of knowledge	Score	
	f	%
Inadequate	44	44
Moderate	50	50
Adequate	6	6
Total	100	100

Table 1: depecits that level of knowledge on nurse practitioner midwifery among nursing officers. Majority of nursing officers 50(50%) had moderately level of knowledge and 44(44%) had inadequate level of knowledge and 6(6%) had adequate level of knowledge.

Fig 1: Bar diagram representing the Percentage Wise Distribution of level of knowledge regarding nurse practitioner midwifery among nursing officers at SMVMVH, Puducherry.



DATA COLLECTION PROCEDURE:
The formal permission obtained from the concerned authorities**.** The nursing officers were selected by using convenience sampling technique. The researchers introduce himself and explain about the purposes of study to nursing officers. The researcher obtained the consent from nursing officers. The data will be collected by self-structured questionnaire. The research was selected 100 nursing officers.

PLAN FOR DATA ANALYSIS:
The data collected from the nursing officers was planned to analyzed, based on the objectives of the study using the descriptive and inferential statistics. Data was prepared with response given by the subjects.
Mean and standard deviation regarding level of knowledge regarding nurse practitioner midwifery among nursing officers. (N=100)

Overall	**Max score**	**Mean**	**SD**	**Mean%**
Level of the Knowledge	25	13.3	3.85	53.5

Table 15, show that mean and standard deviation of level of knowledge on nurse practitioner midwifery among nursing officers is (13.3±3.85). The mean % level of knowledge is 53.5%.

ASSOCIATE BETWEEN THE LEVEL OF KNOWLEDGE ON NURSE PRACTITIONER MIDWIFERY AMONG NURSING OFFICERS WITH THEIR SELECTED DEMOGRAPHIC VARIABLES. (N=100)

Table 16: Association between level of knowledge with their selected demographic variables.

S. No.	**Demographic variables**	**Inadequate**		**Moderate**		**Adequate**		**X^2 value**	**p value**
		f	**%**	**f**	**%**	**f**	**%**		
1	Age in years								
	20-25 years	24	24	6	6	5	5	2.41	0.661
	26-30 years	16	16	18	18	1	1	(df=4)	NS
	31-35 years	4	4	6	6	0	0		
	Above 36 years	0	0	0	0	0	0		
2	Gender								
	Male	6	6	8	8	1	10	0.116	0.943
	Female	38	38	42	45	5	5	(df=2)	NS
	Others	0	0	0	0	0	0		
	Prefer not to say	0	0	0	0	0	0		
3	Residency								
	Rural	18	18	22	22	3	3	3.45	0.751
	Urban	24	24	24	24	3	3	(df=6)	NS
	Semi-rural	1	1	4	4	0	0		
	Semi-urban	1	1	0	0	0	0		
4	Educational qualification								
	Diploma in nursing	8	8	6	6	1	1	1.09	0.896
	B.Sc.	35	35	42	42	5	5	(df=4)	NS
	M.Sc.	1	1	2	2	0	0		
	Others	0	0	0	0	0	0		
5	Years of experience								
	<1 year	14	14	22	22	3	3	9.12	0.166
	1-3 years	25	25	15	15	3	3	(df=2)	NS
	4-6 years	3	3	9	9	0	0		
	More than 7 years	2	2	4	4	0	0		

6	Designation								
	Staff nurse	40	40	47	47	6	6	3.02	0.806
	Nurse supervisor	3	3	2	2	0	0	(df=6)	NS
	Nurse manager	1	1	0	0	0	0		
	Nurse educator	0	0	1	1	0	0		
7	Previous experience								
	Yes, as a midwife	9	9	8	8	0	0		
	Yes, as a nurse in maternity care	13	13	18	18	2	2	5.93	0.430
	No, but I have received training in midwifery	17	17	21	21	2	2	(df=6)	NS
	No, I have no experience in midwifery	5	5	3	3	2	2		
8	Undergone any training in nurse practitioner midwifery								
	Yes	30	30	30	30	1	1	10.69	0.030
	No	9	9	17	17	5	5	(df=4)	S
	I am not sure	5	5	3	3	0	0		
9	Ward are you currently working in								
	Obstetrics and Gynecology	15	15	16	16	0	0	20.62	0.002
	General medicine/surgery	22	22	25	25	1	1	(df=6)	NS
	Emergency department	1	1	4	4	3	3		
	Others(please specify)	6	6	5	5	2	2		
10	Previous experience with nurse practitioner midwifery								
	Very familiar	4	4	10	10	0	0	7.444	0.282
	Somewhat familiar	34	34	29	29	4	4	(df=6)	NS
	Not familiar at all	6	6	9	9	2	2		
11	Attended any workshops, seminars, or conferences								
	Yes, regularly	11	11	11	11	2	2	6.63	0.156
	Yes, occasionally	30	30	36	36	2	2	(df=4)	NS
	No, never	3	3	3	3	2	2		
12	Sources of information								
	Media	8	8	9	9	2	2	4.96	0.548
	TV	1	1	4	4	0	0	(df=6)	NS
	Newspaper	3	3	7	7	0	0		
	Internet	32	32	30	30	4	4		

Table 16 : depicts that the demographic variables of undergone any training in nurse practitioner midwifery had shown statistically significant associated with the level of knowledge regarding nurse practitioner midwifery among nursing officers with chi- square value of (X^2=10.69, df=4) atp=0.030 level. Theother demographic variables had not shown statistically significant association with the level of knowledge regarding nurse practitioner midwifery among nursing officers respectively.

II. DISCUSSION

The present study was conducted to assess the knowledge regarding nurse practitioner midwifery among nursing officers at SMVMCH, Puducherry. The Descriptive research design was adopted for this study. Convenience sampling technique was used for this study. The data was collected from 100 nursing officers by using self-structured questionnaire. The questionnaire consists of two parts, demographic data and knowledge

questionnaire on nurse practitioner midwifery.

OBJECTIVES:

- To assess the level of knowledge regarding nurse practitioner midwifery among nursing officers at SMVMCH, Puducherry.
- Association between the level of knowledge on nurse practitioner midwifery among nursing officers with their selected demographic variables.

The first objective of the study to assess the level of knowledge regarding nurse practitioner midwifery among nursing officers at SMVMCH, Puducherry.

In this study, frequency and percentage wise distribution of level of knowledge on nurse practitioner midwifery among nursing officers. Majority of nursing officers 50(50%) had moderately level of knowledge and 44(44%) had inadequate level of knowledge and 6(6%) had adequate level of knowledge. The mean and standard deviation of level of knowledge on nurse practitioner midwifery among nursing officers is (13.3±3.85).

Walker D., & Walker K. (2019) conducted a qualitative study exploring the experiences and perceptions of nursing officers working alongside nurse practitioner midwives in a hospital setting. The findings revealed that while nursing officers recognized the importance of midwifery care, there was a lack of clarity regarding the distinct roles and responsibilities of nurse practitioner midwifery compared to traditional nursing roles. This ambiguity underscored the need for educational initiatives to enhance understanding and collaboration among healthcare professionals.

SUMMARY:

The present study was conducted to assess the knowledge regarding nurse practitioner midwifery among nursing officers at SMVMCH, Puducherry. The Descriptive research design was adopted for this study. Convenience sampling technique was used in this study. The data was collected from 100 nursing officers by using self-structured questionnaire. The questionnaire consists of two parts, demographic data and knowledge questionnaire on nurse practitioner midwifery.

MAJOR FINDING OF THE STUDY:

Frequency and percentage wise distribution of demographic variables among nursing officers. Out of the 100 nursing officers, Majority 55(55%) in the age group of 20-25 years. Majority of nursing officers were female 85(85%). Majority were from urban residency 51(51%). Majority were in B.Sc. in nursing educational qualification 82(82%). Majority of nursing officers were 1-3 years of experience 43(43%).

Majority of nursing officers with staff nurse designation93(93%). Majority of nursing officers were40(40%) of No, but I have received training in midwifery in previous experience. Majority of nurse officers 61(61%) with Yes, undergone any training in nurse practitioner midwifery. Majority of nursing officers were currently working in general medicine/surgery 48(48%). Majority of nursing officers were somewhat familiar with previous experience with nurse practitioner midwifery 67(67%). Majority of nursing officers were occasionally attended workshops, seminars, or conferences. Majority sources of information is Internet 66(66%).

Frequency and percentage wise distribution of level of knowledge on nurse practitioner midwifery among nursing officers. Majority of nursing officers 50(50%) had moderately level of knowledge and 44(44%) had inadequate level of knowledge and 6(6%) had adequate level of knowledge. The mean and standard deviation of level of knowledge on nurse practitioner midwifery among nursing officers is (13.3±3.85) and the mean% is 53.5%.

The demographic variables of undergone any training in nurse practitioner midwifery had shown statistically significant associated with the level of knowledge regarding nurse practitioner midwifery among nursing officers with chi-square value of (X^2=10.69, df=4) at p=0.030 level.

The other demographic variables had not shown statistically association with the level of knowledge regarding nurse practitioner midwifery among nursing officers respectively.

IMPLICATIONS OF NURSING RESEARCH:

The study had implicated for nursing practice, nursing education, nursing administration and research.

NURSING PRACTICE:

The study findings help the nursing officers to know the importance of nurse practitioner midwifery.

This study motivates the nurse to practice the nurse practitioner midwifery.

NURSING EDUCATION:
The obstetrics and gynecology nursing and nursing foundation curriculum needs to strengthened to enable the nursing students to know about nurse practitioner midwifery.
The nursing students need to organize a in-service education programmed to nurses, students and also for the para-medical workers.

NURSING ADMINISTRATION:
The nursing administration should take on active role in organizing mass media communication regarding nurse practitioner midwifery among nursing officers.
The nurse administrator plays a vital role for ongoing educational program to promote the awareness in regarding nurse practitioner midwifery among nursing officers should be in hands of people.

NURSING RESEARCH:
The findings of the study helps the professional nurses and student to develop by provide a base.
The findings of the study helps the student nurse to develop in career profession.

LIMITATIONS:
The study is limited to nursing officers at SMVMCH, Puducherry. Those who are willing to participate in the study.

III. RECOMMENDATIONS:

Based on the findings of the present study the following recommendations have been made:

- Similar study can be conducted in other parts of country with large samples.
- The study can be replicated with large sample for better generalization
- The study can be implemented at various states of India.
- The same study conducted in different settings.

The second objective of the study is associate between the level of knowledge on nurse practitioner midwifery among nursing officers with their selected demographic variables.
In this study, the demographic variables of undergone any training in nurse practitioner midwifery had shown statistically significant associated with the level of knowledge regarding nurse practitioner midwifery among nursing officers with chi- square value of (X^2=10.69, df=4) at p=0.030 level. The other demographic variables had not shown statistically association with the level of knowledge regarding nurse practitioner midwifery among nursing officers respectively.
Mukhopadhyay D. et al.(2020) stated that impact of nurse-led care models in midwifery practices on patient outcomes and healthcare utilization. The study highlighted that nurse practitioner midwifery played a significant role in improving access to maternal healthcare services, reducing healthcare costs, and enhancing patient satisfaction . However, it was noted that a lack of comprehensive understanding among nursing officers regarding the scope of nurse practitioner midwifery practices hindered the optimal utilization pf these resources.

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