

1 **Effectiveness of workshop on knowledge regarding expanded and extended role of a Nurse among**
2 **B.Sc nursing students.**

3
4 **Abstract**

5 **Introduction:** Professional nurses undertake multiple roles concurrently with an intention to provide holistic care to
6 clients with various problems in different health care settings. With rapid advances in technology nurses extend their
7 role in bridging the gap between the public and health care providers enabling them for easy accessibility, continuity
8 and in co-ordination of care.

9 **Aim:** The aim of the study is to assess the knowledge regarding expanded and extended role of a Nurse among B.Sc
10 Nursing students.

11 **Materials and methods:** A quasi-experimental study was conducted to assess the knowledge regarding expanded
12 and extended role of a Nurse among B.Sc Nursing students. Pre experimental; one group pre-test post-test design
13 was adopted. A sample of 88 B.Sc Nursing students was selected by using purposive sampling technique. Based on
14 the knowledge of nursing students a workshop has been conducted and its effectiveness was determined by using the
15 same pretest questionnaire.

16 **Results:** The basic knowledge on expanded and extended role of a Nurse among B.Sc Nursing students was
17 insufficient. In pre-test majority; 82% had inadequate knowledge & 18% had moderately adequate knowledge
18 whereas none of the students had adequate knowledge on expanded and extended role of a nurse. In post-test; 94%
19 had adequate knowledge and 6% had moderately adequate knowledge. The effectiveness of workshop was
20 determined by using paired t-test which is significant that $p < 0.05$ level of significance.

21 **Conclusion:** The basic knowledge on expanded and extended role of a nurse among B.Sc Nursing students was
22 insufficient. The workshop enables the nurses to move beyond traditional bed side care with advanced knowledge &
23 skills in carrying out tasks not included in their normal training for registration.

24 **Key words:** Expanded role, Extended role, Nursing students, Nurses.

25 **Introduction**

26 Nursing education plays a pivotal role in improving knowledge, skills and in prompt decision making
27 among nursing professionals. Professional nurses undertake multiple roles concurrently with an intention to provide
28 holistic care to clients with various problems in different health care settings. With rapid advances in technology
29 nurses extend their role in bridging the gap between the public and health care providers enabling them for easy
30 accessibility, continuity and in co-ordination of care¹.

31 Nurses are the frontline health providers from diagnosis to rehabilitation in meeting the healthcare needs of
32 the public both in hospital and in community setting. Expanded role of a nurse, increases the autonomy and
33 responsibility in providing promotive, preventive and curative care².

34 With the advances in nursing education, the responsibility of nurses in health care sector has been
35 increased. Rapid progression in nursing education is evidenced by shifting toward simulation-based training; skill
36 based training and introduction of robotic tools. This enables nurses in enhancing their ability in rendering efficient,
37 technology-driven and compassionate care. The nurses expanded their role by demonstrating adaptability and
38 responsiveness to emerging changes and the health requirements of the community. To adopt these rapid advances
39 there exists a need for expansion of nurses' authority, enabling them to fully demonstrate their skills, enhance the
40 quality of care they deliver and increase accountability^{3,4}.

41 In the health care delivery system, revolutionary changes are going on due to development of
42 multidisciplinary team approach to meet the changing health care needs of the society. Nurses are the largest group

43 among health care group requires preparing themselves to work in various setting as an autonomous, independent,
44 and cost-effective practitioner and increase the coverage of underserved population by extending and expanding
45 their role. Hence, the provision of appropriate education to the nurses is very much necessary⁵.

46 Nurses play a critical role in achieving health goals; they ensure the continuum of care by providing
47 comprehensive and integrated care 24×7. They are the largest work force and it is essential to invest to take care of
48 the shortage of nurses as it is a global crisis. India and other low- and middle-income countries have been struggling
49 with this ubiquitous issue of nursing shortage for decades, preventing them from meeting their national health
50 targets, with the majority of states failing to meet the World Health Organization standard of 4 nurses/1000
51 population. Since the nursing shortage is multifaceted, effective interventions necessitate a more in-depth
52 comprehension of the issue⁶.

53 Fournier C; Blanchet A et al; (2021); conducted a study on” Understanding the expanded nursing role in
54 indigenous communities: A qualitative study. The study aims to provide an in-depth understanding of the expanded
55 nursing role in remote aboriginal communities, its dynamics and the main barriers to its full expansion. The
56 researcher conducted 49 in-depth interviews with nurses and key informants and more than 14 days of observation:
57 two days of pre-departure training and 12 days in dispensaries and a hospital in Hudson Bay, Canada. The findings
58 reveals that four sub-roles within the nurses’ expanded role: administrative, nursing, medical and community sub-
59 roles. This typology allowed them to document the evolving and dynamic nature of the role as well as the individual,
60 organizational and community barriers that limit its expansion⁷.

61 Kornelia B, Nathalie I etal (2020); conducted a study on “Registered nurses in expanded roles improve care
62 in nursing homes: Swiss perspective based on the modified Delphi method”. The aim is to define both competencies
63 and envisaged outcomes for registered nurses in expanded. An extensive review of literature and case studies were
64 analyzed to identify possible competencies and outcomes for registered nurses in expanded roles. A group of multi-
65 professional stakeholders conducted a two-round rating process and an in-person panel discussion. Two rounds
66 generated 190 competencies and 72 outcomes relevant to registered nurses in expanded roles. The expanded role of
67 a registered nurses identified are support of care teams and development of nursing care protocol at nursing homes.

68 Specific employment positions as clinical nurse specialist, nurse practitioner, certified nurse midwife, nurse
69 anaesthetist, nurse administrator, nurse researcher extended their role and responsibility with a greater concern for
70 enrichment.

71 The researcher aims to enable the nursing students in determining the scope of nursing profession in the
72 rapidly changing society before they graduate. Health is the fundamental right of every citizen nurses at the front
73 line contributes in bringing significant difference by extended their role.

74 **Objectives**

- 75 1. To assess the knowledge regarding expanded and extended role of a nurse among B.Sc Nursing students.
- 76 2. To determine the effectiveness of workshop on knowledge regarding expanded and extended role of a nurse
77 among B.Sc Nursing students.
- 78 3. To associate the post- test knowledge score regarding expanded and extended role of a nurse among B.Sc
79 Nursing students with their selected demographic variables.

80 **Hypothesis:**

81 H1: There will be a significant difference between pre-test and post-test score regarding expanded and extended role
82 of a nurse among B.Sc Nursing students

83 H2: There will be a significant association between the post test knowledge score regarding expanded and extended
84 role of a nurse among B.Sc Nursing students with their selected demographic variables.

85 **Methodology**

86 **Research Approach:** The effectiveness of workshop on expanded and extended role of a nurse among nursing
87 students was determined by using quantitative research approach.

88 **Research design:** By using Pre-experimental; one group pre-test post-test design the effectiveness of
89 workshop on knowledge regarding expanded and extended role of a nurse among B.Sc Nursing students was
90 determined.

91 **Sampling technique and sample size:** 88 third year B.Sc Nursing students were selected by using purposive
92 sampling technique.

93 **Criteria for Sample selection:**

94 **Inclusion criteria:**

- 95 • B.Sc Nursing students of selected nursing colleges.
- 96 • Students studying in 3rd year B.Sc Nursing were included.
- 97 • Students who are willing to participate in the study.

98 **Exclusion criteria:**

- 99 • 1st year, 2nd year and 4th year Students were excluded from the study.
- 100 • Students who are not willing to participate were excluded.

101 **Validity and reliability:**

102 The validity was tool was obtained from experts in the field of nursing. The reliability of the tool was
103 determined by using split half method. The reliability of the tool was 0.97, highly reliable.

104 **Tool:** A structured questionnaire was used to assess the knowledge of nursing students on expanded and
105 extended role of a nurse.

106 The structured questionnaire consists of two sections. Section-I consists of demographic variables
107 which includes age, gender, religion, mother tongue, type of family and family income. Section –II consists of
108 35 questions related to various aspects of expanded and extended role of a nurse.

109 **Data analysis:** Data was analyzed by using descriptive and inferential statistics. Descriptive statistics of
110 frequency and percentage was used to analyze the demographic variables and inferential statistics of chi-
111 square is used to analyze the association between demographic variables and knowledge of nursing students.
112 Paired t-test is used to assess the effectiveness of workshop in improving the knowledge of nursing students on
113 extended and expanded role of a nurse.

114

115

116 **Results**

117 **Table 1: Frequency and percentage distribution of demographic variables**

S.No	Demographic Variables	Frequency	Percentage
1	Age in years		

	a) 17-19	5	6
	b) 20-22	79	90
	c) 23-24	4	4
2	Gender		
	a) Male	22	25
	b) Female	66	75
3	Religion		
	a) Hindu	48	54
	b) Christian	35	40
	c) Muslim	5	6
4	Mother tongue		
	a) Telugu		
	b) Malayalam	49	56
	c) Others	34	38
		5	6
5	Type of family		
	a) Nuclear family	76	86
	b) Joint family	12	14
6	Monthly family income(Rs.)		
	a) <20,000	35	40
	b) 20,000-30,000	33	38
	c) >30,000	20	22

118
119 Table-1 shows the frequency and percentage distribution of demographic variables of nursing students.
120 Majority of nursing students 79(90%) were aged between 20-22 years, 5(6%) were aged between 17-19 years and
121 4(4%) were aged between 23-24 years. With respect to gender 66(75%) were females and remaining 22(25%) were
122 males. In considering the religion; 48(54%) were Hindus, 35(40%) were Christians, 5(6%) were Muslims. Majority
123 49(56%) speak Telugu, 34(38%) speak Malayalam and 5(6%) speak other languages. 76(86%) belong to nuclear
124 family and 12(14%) belong to joint family. Majority 35(40%) has a monthly family income less than Rs.20,000.
125 33(38%) has a monthly family income of Rs.20,000-Rs.30,000 and 20(22%) had a family income of more than
126 Rs.30,000.

127 Figure-1 presents the level of knowledge of nursing students on expanded and extended role of a nurse. In
128 Pre-test; out of 88 students majority 72(82%) had inadequate knowledge and 16(18%) had moderately adequate
129 knowledge. Whereas in Post-test Majority 83(94%) had adequate knowledge and 5(6%) had moderately adequate
130 knowledge and none of the students had inadequate knowledge which shows the effectiveness of workshop. The
131 hypotheses which states that there will be significant change in pre-test and post-test level of knowledge on
132 expanded and extended role of a nurse was accepted.

133

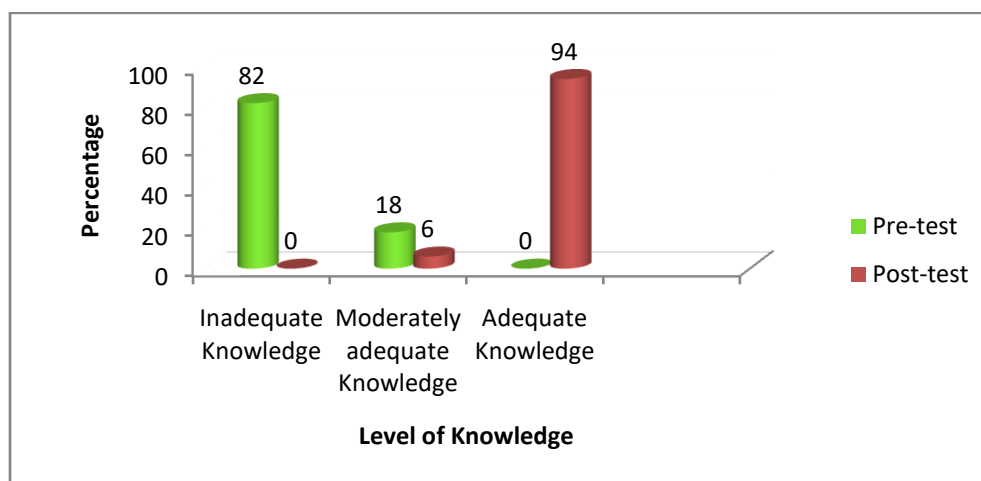


Figure-1 Level of knowledge on expanded and extended role of a nurse

Table-2: Distribution of mean, standard deviation and paired t-test score

	Mean	Standard deviation	Paired t-test
Pre-test	10	4.6	34.1
Post-test	30.4	3.2	

Table-2 shows the mean, standard deviation and paired t-test value which states that the mean pre-test knowledge was 10 and standard deviation 4.6 whereas in post-test the mean knowledge was 30.4 and standard deviation 3.2. The significant difference in pre-test and post-test knowledge was computed and the t value is 34.1 is highly significant at 0.05 level of significance.

The present study was supported by a study conducted by Shiv Mudgal aimed to assess the learning needs of Nursing students and effectiveness of workshop on knowledge regarding extended and expanded role of nurses in selected nursing students of Udaipur. A quasi experimental pre-test post-test research design was used. Out of 120 nursing students; 60 were included in experimental and 60 in control group. The data was collected by structured knowledge questionnaire. The study results revealed that the level of knowledge of nursing students who attended to workshop was significantly higher than those who didn't attend the workshop. The study concluded that workshop was an effective method to improve the knowledge on extended and expanded role of a nurse.

Table-3: Association between post-test level of knowledge and demographic variables

S.No	Demographic variables	Inadequate Knowledge		Moderately adequate knowledge		Adequate knowledge		Df	χ^2
		n	%	n	%	n	%		
1	Age in Years							4	0.45 NS
	a. 17-19	0	0	0	0	5	6		
	b. 20-22	0	0	5	6	74	84		
	c. 23-24	0	0	0	0	4	4		
2	Gender							2	0.05
	a. Male	0	0	1	1	21	24		

	b. Female	0	0	4	5	62	70		NS
3	Religion								
	a. Hindu	0	0	5	6	43	49	6	
	b. Christian	0	0	0	0	35	39		4.41
	c. Muslim	0	0	0	0	5	6		NS
4	Mother tongue								
	a. Telugu	0	0	4	5	45	51		1.29
	b. Malayalam	0	0	1	1	33	37	4	NS
	c. Others	0	0	0	0	5	6		
5	Type of family								
	a. Nuclear family	0	0	3	4	73	83	4	7.4
	b. Joint family	0	0	2	2	10	11		NS
6	Monthly Family income								
	a. Rs.<20,000	0	0	4	5	31	35		3.67
	b. Rs.20,000-30,000	0	0	1	1	32	36	4	NS
	c. Rs.>30,000	0	0	0	0	20	23		

152

153 **Level of Significance**

154 NS-Not Significant

155 Table-3 shows the association between post-test level of knowledge with selected demographic variables. None of
 156 the variables has a significant association with post-test level of knowledge which shows that irrespective of which
 157 workshop was proven to be effective in improving the knowledge of nursing students on expanded and extended
 158 role of a nurse. Hence the hypotheses there will a significant association between post-test level of knowledge and
 159 demographic variables were rejected. The study was supported by Shiv Kumar Mudgal(2018) who determined the
 160 effectiveness of workshop on expanded and extended role of a nurse in selected nursing institutions. He stated that
 161 workshop was effective in improving the knowledge irrespective of the variables⁵.

162 **Recommendation:**

- 163 1. The study can be replicated on a large sample size.
- 164 2. Comparative study can be done between B.Sc Nursing & GNM Students.
- 165 3. Similar study can be conducted on the nursing officer to disseminate the information on expanded & extended
 166 roles

167 **Conclusion:**

168 In conclusion; awareness has to be created to all the nursing students to know the scope of nursing beyond
 169 the hospital and community settings. Gaining knowledge enables the student nurses to plan their carrier in their area
 170 of interest upon their course completion.

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