

Assessment of attitude towards innovative approaches related to nursing care in intensive care units among staff nurses of P.B.M. Hospital, Bikaner

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Abstract

Back ground: Innovation is process of developing new approaches, technologies and ways of working. It can apply to tools and technologies and processes, or the way an organization or an individual behaves works or acts. Nursing care is changing in the face of technology, and innovation is the most important tool for improving the quality of care of community. Creativity and innovation are needed to continue the expression of genuine care and concern, not only through human contact, but also through the use of technology. Technology and its increased use in the healthcare field is constantly evolving and changing. The attitudes of the staff nurses can impact the successful use of that technology and thereby improve not only competency, but also job satisfaction, quality of nursing care. **Objectives:** 1. To assess the attitude towards innovative approaches related to nursing care in Intensive Care Unit (ICUs) among the staff nurses working in PBM hospital. 2. To associate the attitude towards innovative approaches among staff nurses with selected background variable. 3. To conduct the seminar on innovative approaches related to nursing care in ICUs. **Materials and Methods:** Using non experimental study with descriptive design data were collected from 100 staff nurses working in ICUs. Likert type scale was used to collect data on attitude and structured questionnaire for back ground variable. Analysis of data was done using descriptive and inferential statistics. **Results:** Analysis of data showed statistically significant association between attitude towards innovative approaches and professional education and participation in continuing education among nurses. Study findings depicts positive attitude of nurses towards innovation in nursing care, whereas nurses working in ICUs have limited access to innovative and evidence based information. **Conclusion:** The study concluded that the attitude of staff nurses towards innovation in nursing care need to be enhanced by conducting educational training program and seminar on innovation in nursing care. There must be adequate access to information on innovative and evidenced based practice in nursing care.

Keywords: Attitude, Innovative approaches, Evidenced based practice, Staff nurses, Nursing care, ICUs.

Introduction

Today the importance of scientific knowledge has been increasing and health care applications are changing rapidly. International Council of Nurses defines innovation as new approaches, technologies and ways of working development process. Innovation is vital in terms of improving the quality of nursing care. Nurses worldwide are engaged in innovative activities on a daily basis; activities motivated by the desire to improve the patient care outcomes and the need to reduce costs to health system. Many of these initiatives have resulted

in significant improvements in the health of patients, population and health systems. Nurses live in a world that is constantly changing to make a significant difference to the world's people. Within today's context of scarce resources, continuous change and expanding knowledge, innovation is truly expectation.

Nursing innovation is a fundamental source of progress for healthcare systems around the world. Nurses work in all settings with all types of patients, families, communities, healthcare personnel and personnel in other sectors. As such, nurses are critically positioned to provide creative and innovative solutions that make a

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real difference to the day to day lives of the patients, organizations, community and profession. The increasingly aging population, chronic treatment of acute illness depending on which treatment applications have changed the perspective on the quality of the patient's care and maintenance.

Innovation is the most important tool for improving the community's quality of life. It is therefore felt need to conduct the studies among staff nurses to assess the attitude towards innovative approaches in nursing care [1].

In clinical practice, technology has posed some barriers to frontline nurses in adopting telehealth, as seen in the slow implementation of telehealth in the United Kingdom. Telehealth has been defined as the remote exchange of data and information between patients and healthcare professionals to assist in diagnosis and management of health conditions [2].

Taylor and colleagues (2015) conducted a thematic analysis of qualitative interviews to identify barriers to the successful adoption of telehealth. Semi-structured interviews were conducted with 105 registered nurses located in four community clinics in the United Kingdom. Results of the study indicated that frontline staff acceptance of telehealth was fragile, uncertain, and was hindered by organizational, professional and technological barriers [3]. In this study, we aim to determine the attitude of staff nurses towards different aspects of innovation in practice of nursing care in ICUs.

Materials and Methods

This descriptive study carried out in selected ICUs of P.B.M. Hospital Bikaner with aim to assess the attitude of staff nurses towards innovative approaches and EBP in nursing care.

Sample: samples selected in study were 100 male and female staff nurses those working in ICUs of hospital. Selection of samples was done by simple random sampling those fulfills inclusion and exclusion criteria.

Inclusion criteria: Staff nurses those working ICUs and willing to participate in study.

Distribution of staff nurses in relation to their age group reveals that 16% nurses are in age group 20-29 years, 64% nurses in 40-49 years, and 1% staff nurses in above 50 year age group, 50% are male and 50% are female, in relation to their professional education describes that 61% staff nurses diploma level, 27% are Baccalaureate, 12% are P.B.B. Sc, participation in continuing education 31 % staff nurses participates regularly in continuing education programme and 69 % staff nurses does not. Distribution of staff nurses in relation to working hours per week shows that 4% nurses works <20 hrs, 29% nurses works 20-30 hrs, 63 % nurses works 30-40 hrs and 4% nurses works >40 hrs per week, in relation to

Data collection: Background data were collected from samples by structured questionnaire to collect information on age, sex, professional education, participation in continuing education, working hours per week, area of service and patient care age group.

Attitude towards innovation was assessed by 5 points likert type scale which consists of six component of attitude towards innovation ie.

Personal belief and Knowledge about Innovation and Evidenced based practice, Self efficacy in use of innovative approaches, Barriers to adopting innovation in practice, Personal use and understanding of clinical practice guidelines, Availability to access innovative and evidence based practice information, and attitude towards new practices. Total maximum score on tool was 225 with minimum 45.

A score of 45 shows strong negative attitude, 45 to 90 negative attitude, 90-135 neutral attitude, 135 to 180 positive attitude and score of 180 to 225 shows strong positive attitude towards innovation in nursing care.

Questionnaire was designed after review of the literature on attitude towards innovative approaches. Content validity of tool was obtained by experts in subjects and reliability of tool was satisfied by cronbach's alpha.

A pilot study was conducted on a group of 10% sample to test its clarity and feasibility. Difficult non relevant statement were then modified and replaced. Ethical considerations were followed throughout the study steps.

Statistical Analysis- The data was recorded into an Excel spread sheet after collection and was then analyzed using statistical software SPSS.

Descriptive statistics like frequency and percentage while continuous variable were reported using mean and standard deviation.

Association between the variable were reported using chi square test for categories variable and paret t test for continuous variable.

Results

Table-1: Distribution of samples according to their background variables (N=100).

		N	%
Age	20-29 yrs	16	16
	30-39 yrs	64	64
	40-49 yrs	19	19
	Above 50 yrs	1	1
Sex	Male	50	50
	Female	50	50
Education	Diploma	61	61
	Baccalaureate	27	27
	P.B.B.Sc. N	12	12
	Master degree	0	0
Participation in C.E.	Yes	31	31
	No	69	69
Work hours per week	< 20	4	4
	20-30	29	29
	30-40	63	63
	>40	4	4
Area of service	Orthopedic	19	19
	Neurological	27	27
	Cardiovascular	29	29
	Others	25	25
Patient care age group	Pediatric	24	24
	Adult	50	50
	Geriatric	25	25
	Others	1	1

area of service reveals that 19% nurses works in orthopedic, 27% nurses works in neurological, 29% nurses works in cardiovascular and 25% staff nurses works in other areas and in considering care of patient in different age group indicates that 24% nurses care to pediatric group, 50% nurses cares to adult group, 25% nurses cares to geriatric group and 1% nurses care to others.

Table-2: Over all Attitude score towards innovative approaches.

No	Attitude	Mean	Mean %	SD
1	Personal belief and Knowledge about Innovation and Evidenced based practice.	3.58	71.5	1.02
2	Self efficacy in use of innovative approaches	3.40	68	0.93
3	Barriers to adopting innovation in practice	3.03	60.6	0.76
4	Personal use and understanding of clinical practice guidelines.	3.26	65.3	0.91
5	Availability to access innovative and evidence based practice information	2.8	56	0.9
6	belief in new practices	3.83	76.6	.86

Table-3: Category of Attitude of staff nurses towards innovative approaches.

	Frequency	Percent
Neutral	31	31.0
Positive	58	58.0
Strong Positive	11	11.0
Total	100	100

The above table assesses the category wise attitude of nurses towards innovative approaches. 31 staff nurses have neutral attitude, 58 staff nurses have positive attitude and 11 staff nurses have strong positive attitude.

Table-4: Association of attitude towards innovative approaches among staff nurses with back ground variable.

S.N.	Back ground variable		Attitude			Value	Df.	
			Neutral	Positive	Strong Positive			
1	Age	20-29 yrs	2	10	4	8.140	6	12.6 NS
		30-39 yrs	22	35	7			
		40-49 yrs	7	12	0			
		Above 50 yrs	0	1	0			
2	Sex	Male	13	32	5	1.518	2	5.99 NS
		Female	18	26	6			
3	Professional Education	Diploma	29	32	0	40.075	4	9.49 S*
		Baccalaureate	2	15	10			
		P.B.B.Sc. N	0	11	1			
		Master degree	0	0	0			
4	Participation in Cont. Edu.	Yes	1	20	10	29.966	2	5.99 S*
		No	30	38	1			
5	Working Hrs. per week	< 20	2	1	1	8.496	6	12.6 NS
		20-30	4	20	5			
		30-40	23	35	5			
		>40	2	2	0			
6	Area of service	Orthopedic	5	11	3	1.648	6	12.6 NS
		Neurological	8	17	2			
		Cardiovascular	9	16	4			
		Others	9	14	2			
7	Patient care age group	Pediatric	9	14	1	10.191	6	12.6 NS
		Adult	15	30	5			
		Geriatric	7	14	4			
		Others	0	0	1			

Among the background variables of study participants, professional education and participation in continuing education were significantly associated with attitude towards innovative approaches in staff nurses.

Discussion

Although several studies has been conducted about innovation and EBP in nursing profession, but attitude of nurses working in ICUs towards innovation & EBP

have not been investigated. Thus the major emphasis in this study was on the attitude of staff nurses working in ICUs towards innovation and EBP in nursing care. This

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study was designed specifically to describe ICU nurse's attitude towards innovative approaches in nursing care. The results of study indicated that majority of staff nurses have positive attitude towards innovation and EBP followed by neutral and strong positive attitude towards innovation. These results were supported by previous studies describing attitude of nurses towards EBP [4].

Findings of study showed positive attitude among nurses towards self efficacy in use of innovative approaches among nurses. The result of current study in contrary with previous study is opposite as it showed unfavorable attitude with weak self efficacy in EBP. More studies are needed to explore the attitude [5].

Nurses showed neutral attitude in relation to barriers to adopting innovation in practice. The factors are lack of time, understanding of research, resources and judgment of quality research.

Similar factors identified by study conducted in Maldives which reported the non availability of relevant literature, insufficient time to implement innovation and permission from administration as barriers to adopting innovation [6,7].

This study finds a positive attitude towards personal use and understanding of clinical practice guideline, these results are supported by cross sectional survey conducted by Davis Quiros et al [8]. The present study revealed the limited availability to access innovative and EBP among nurses and the attitude is neutral, similar results reported by previous studies where researcher find inadequate utilization of research, and lack of resources as barrier in innovation [7,12].

Attitude towards new practices in nursing care is positive as majority of nurses believe in use of new communicative devices, use of electronic health record and practice of high fidelity simulator in nursing care. The results are supported by similar studies [9,10,11].

Result of the study showed, that majority of staff nurses of age group 30–49 years having positive attitude towards innovation. Fenzhou et al finds longer work experience and lighter work load facilitate professional attitude towards EBP [13].

Male nurses working in ICUs have more positive attitude compared to female nurses, similar results reported by Abu Ruz ME et al [4]. Considering professional education of nurses, baccalaureate

education showed strong positive attitude towards innovation, the similar results found in study conducted by Mathew K Kipturgo [9]. Continuing education has a main role in developing attitude of nurses as those participated in these programme showed strong positive attitude towards innovation and EBP.

Masoumehshohani finds the similar results and significant relationship between attitude and participation in training courses [14].

Providing research training opportunities and educational programme to nurses for health care organization seeking to promote EBP is a promising strategy reported by Agnes T Black et al [15]. Development of positive attitude towards innovation in nursing practice is important for professional growth as well as quality care. The key facilitating factors for EBP include support, encouragement and recognition by authorities.

Conclusion

This study revealed a positive attitude among staff nurses towards innovation in nursing care, professionally higher educated and participation in continuing education of staff nurses have positive attitude towards innovation in nursing care. There are barriers also hindering nurses from adopting EBP. availability to access innovative and evidence based practice. Gap between research and nursing practice need be minimized by continuing education; seminar and training on use of innovative approaches in nursing practice.

Coauthor's contribution: Yadav A helped in theoretical formalism, verified the analytical methods and supervised the findings of this work and contributed to discussion and final manuscript.

What does this study add to existing knowledge: This study conducted with aim to find nurses attitude towards innovation in nursing practice. Though many other studies has been conducted in nursing profession on perception and attitude, ICUs are special areas of care to patients with critical conditions and the practice in these settings are constantly changing with technical advancement. To adopt a change in practice need a positive attitude towards the change. This study has contributed in finding the attitude of ICU nurses towards innovation and EBP.

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References

1. Nurses leading care innovation. Geneva: International council of nurses. 2009
2. Sanders C¹, Rogers A, Bowen R, et al. Exploring barriers to participation and adoption of telehealth and telecare within the Whole System Demonstrator trial: a qualitative study. *BMC Health Serv Res.* 2012 Jul 26; 12: 220. doi: 10.1186/1472-6963-12-220.
3. Taylor J, Coates E, Brewster L, et al. Examining the use of telehealth in community nursing: identifying the factors affecting frontline staff acceptance and telehealth adoption. *J Adv Nurs.* 2015 Feb;71(2):326-37. doi: 10.1111/jan.12480. Epub 2014 Jul 29.
4. AbuRuz ME, Hayeah HA, Al-Dweik G, et al. Knowledge, Attitudes, and Practice about Evidence-Based Practice: A Jordanian Study. *HealthSci J.* 2017, 11: 2. DOI: 10.21767/1791-809X.1000489
5. Farokhzadian J, Nayeri ND, Borhani F, et al. Nurse leaders' Attitudes, Self-Efficacy and training Needs for Implementing Evidence-Based Practice: Is It Time for a Change toward Safe Care? *Br J Med Med Res.* 2015; 7(8): 662-671. Epub 2015 Mar 17.
6. FathimathShifaza, David Evans, and Helen Bradley. Nurses' Perceptions of Barriers and Facilitators to Implement EBP in the Maldives. *Hindawi Publishing Corporation Advances in Nursing Volume 2014*, <http://dx.doi.org/10.1155/2014/698604>
7. Magda M. Mohsen¹, NahlaAshour Safaan¹, Omayma M. Okby. Nurses' Perceptions and Barriers for Adoption of Evidence Based Practice in Primary Care: Bridging the Gap *American Journal of Nursing Research*, 2016, Vol. 4, No. 2, 25-33 <http://pubs.sciepub.com/ajnr/4/2/1DOI:10.12691/ajnr-4-2-1>
8. Quiros D, Lin S, Larson EL. Attitudes toward practice guidelines among intensive care unit personnel: a cross-sectional anonymous survey. *Heart Lung.* 2007 Jul-Aug; 36 (4):287-97. DOI:10.1016/j.hrtlng.2006.08.005
9. Kipturgo MK, Kivuti-Bitok LW, Karani AK, et al. Attitudes of nursing staff towards computerisation: a case of two hospitals in Nairobi, Kenya. *BMC Med Inform DecisMak.* 2014 Apr 29;14:35. doi: 10.1186/1472-6947-14-35.
10. Tubaishat A. An investigation into the attitudes of nursing students toward technology. *J Nurs Res.* 2014 Jun; 22 (2):119-25. doi: 10.1097/jnr.0000000000000029.
11. Chang-Chiao Hung et al., Effects of simulation-based learning on nursing student competences. *J Nurs Care* 2016, 5:4(Suppl) <http://dx.doi.org/10.4172/2167-1168.C1.020>
12. Ofi B, Sowunmi L, Edet D, et al. Professional nurses' opinion on research and research utilization for promoting quality nursing care in selected teaching hospitals in Nigeria. *Int J Nurs Pract.* 2008 Jun; 14(3):243-55. doi: 10.1111/j.1440-172X.2008.00684.x.
13. Fen Zhou, YufangHao, Hong Guo, Hongxia Liu. Attitude, Knowledge, and Practice on Evidence-Based Nursing among Registered Nurses in Traditional Chinese Medicine Hospitals: A Multiple Center Cross-Sectional Survey in China. *Evidence-Based Complementary and Alternative Medicine.* Volume 2016, Article ID 5478086, <http://dx.doi.org/10.1155/2016/5478086>
14. Masoumeh Shohani¹, Vahid Zamanzadeh. Nurses' Attitude towards Professionalization and Factors Influencing It. *Journal of Caring Sciences*, 2017, 6(4), 345-357 doi:10.15171/jcs.2017.033
15. Black AT, Balneaves LG, Garossino C, et al. Promoting evidence-based practice through a research training program for point-of-care clinicians. *J Nurs Adm.* 2015 Jan;45(1):14-20. doi: 10.1097/NNA.0000000000000151.

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