

## Non-formal CNE Program Barriers to Participation: A Comparative Study among Hospital Nurses of two Provinces in Pakistan

Zafar Iqbal Channa<sup>1\*</sup> Asia Nazir<sup>2</sup> and Waqas Latif<sup>3</sup>

<sup>1</sup>Dy. Chief Nursing Superintendent, IH, Pakistan Institute of Medical Sciences, Islamabad

<sup>2</sup>Nursing Instructor, College of Nursing, Pakistan Institute of Medical Sciences, Islamabad

<sup>3</sup>Biostatistician & Data Analyst, University of Health Sciences Lahore

### \*Corresponding author

Zafar Iqbal Channa, Dy. Chief Nursing Superintendent, IH, Pakistan Institute of Medical Sciences, Islamabad, Tel: +92 334 9098509; Email: zafariqbalchanna@gmail.com

Submitted: 15 Feb 2018; Accepted: 22 Feb 2018; Published: 28 Feb 2018

### Abstract

Rapid scientific and technological discoveries have increased demands of specialized nursing care. Because knowledge and skills can be replaced by engaging nurses in a set amount of continuing nursing education (CNE) program activities. Literature suggested that degree or license is not the end point of education after basic nursing study. Apparently, basic nursing education for practice becomes obsolete within five to ten years of graduation. This obsolescence can lead to the poor performance of nurses in clinical practice. Therefore, a comparative study was designed to investigate and compare most influential and predicting barriers to participation among hospital nurses of two provinces in Pakistan. This was a cross sectional analytical study in which convenience sampling approach was used to collect data of three hundred (n=300) nurses through "Barriers to Participation Questionnaire" (BPQ). Quantitatively, result interpretation was set as "the lower the mean score in each type of barrier, higher the barrier was measured due to reverse Likert scale rating. Generally, administrative barrier was found higher and most prevalent barrier, work-related barrier was more predictive and financial barriers as predicting barrier as compare to family and personal barrier. Data also revealed that Punjab nurses have greater administrative with mean score of  $2.16 \pm 0.87$  and work-related barriers with mean score of  $2.43 \pm 0.81$  than the nurses from Sindh province with mean score of  $2.26 \pm 0.75$  and  $2.81 \pm 0.90$ . Regarding financial barrier, both provinces nurses have equal level barriers than the family and personal barriers among nurses of two provinces. To keep nurses connected with advanced knowledge in rapidly changing health care environment, more opportunities for non-formal CNE programs should be provided for employed nurses both in and outside of the organization.

**Keywords:** Non-formal CNE, barriers to participation, administrative barriers, financial barriers, work-related barriers

### Introduction

#### Background information

Rapid scientific and technological discoveries have proved that increased demands of more specialized nursing knowledge, skills and practices is indispensable for efficient and effective quality care standards [1]. Literature suggested that degree or license is not the end point of education for employed nurses [2]. It is because within five to ten years after graduation, knowledge and skills of practice become obsolete for clinical application [3, 13]. This obsolescence can lead to the poor performance of nurses that could help to increase client disability; continued illness and even deaths [4].

It is reported in studies that due to improper medical care and attention, medical errors are increased and more than 1,700 patients died along with 9,500 injured annually (Erich Shefler, 2004) [5].

According to World Health Organization (WHO, 2005) and Institute of Medicine (IoM, 1999) studies suggested that 75% frequently preventable health care errors occurred in which 44000 to 98000 people died annually in U.S hospitals due to insufficient allocation of human resources, inadequate trainings and improper distribution of resources [6, 7]. This causes increasing cost of care which is almost double, increased hospital length stay and decreased client care acuity [5]. Department of Health and Human Services (DHHS) and the Agency for Healthcare Research and Quality (AHRQ) conducted several studies, focused on nurses' role in patient safety and quality care. Studies propagated that if proper continuing education and further trainings opportunities provided to the nurses which would ultimately be beneficial for safe patient care [8].

It was found through studies that despite available opportunities, most of the nurses are unable to participate and do not get advantages of continuing education opportunities [9]. They become reluctant to participate with varying reasons and impediments [10]. Therefore,

the study was designed to investigate and compare barriers that hinder nurses of two provincial hospitals towards participation in non-formal CNE programs.

### Literature Review

Concept of continuing education (CE) is emergent in both academic and daily practice [11]. Literature suggested that continuing medical education (CME) and continuing nursing education (CNE) is recognized worldwide by all health professionals [12]. Nurses are strongly encouraged to participate in CNE activities as a means of ensuring high quality care [13]. According to Aiga Hirotsugu (2005), CNE is a planned educational and experiential learning, acquired after basic nursing studies, either from school, college or university [14]. These CNE programs are discussed in three modes including as formal CNE programs based on school, college or university which confer diploma or degree [15]. Non-formal CNE programs, consisted of workshops, short courses, conferences, symposiums etc and certificates of attendance or participation is awarded to all attended nurses. Non-formal CNE is the core program for nurses to enhance their current clinical practice information. Informal CNE is the third type of program which allowed nurses to be self-directed learners through research-based activities, browsing articles on net, reading research journals, and using e-sources for publication of research papers [16, 17].

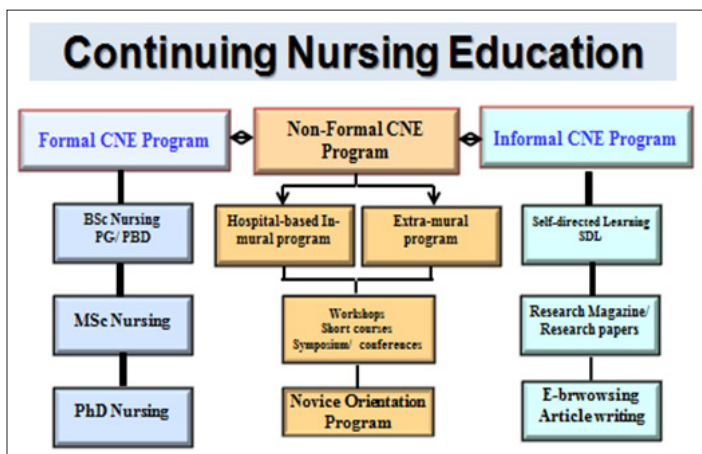


Figure 1.1: Types of Continuing Nursing Education

It is fact due to rapid technological invasion, people become technosophisticated. Their needs and demands do not remain the same with passage of time. This also propagated for medical professionals and nurses are at the forefront. After 5 to 10 years of education, knowledge and practice become outdated. This may change the expectations of medical professionals and nurses particularly [5, 13].

Expectations are based on changing world's demands and trends. As the trends change so as the expectations. Therefore, nurses thought of change in career prospective due to stagnancy in updated practice. They initial want to give boost to career which brings changes into high proficient patients care, high-ranked nursing job, socio-economic status, professional recognition and social prestige [18]. Meeting these expectations, nurses need to revolve around access of all forms CNE opportunities. In this way, many obstacles may change into facilitation in future expectations of employed nurses. Therefore, nursing administration and health care authorities must understand the need and scope of CNE opportunities and barriers that nurses perceived to undertake non-formal CNE courses [16,

18]. If this facility is provided them, they may be able to explore new ways of transformation of knowledge and skills to respond positively to safeguard the clients' lives [2, 4].

### Material & methods

The study was carried out as partial fulfillment of Master in Nursing Sciences program at the University of Health Sciences Lahore. The data collected from predetermined setting hospitals of two provinces (Sindh and Punjab) in Pakistan after formal approval of ERC (Ethical Review Committee) of the university.

Through descriptive cross sectional study, comparison of two provinces hospitals were made where selection was made on inclusion and exclusion criteria.

Data was collected through convenience sampling technique. A barrier to Participation Questionnaire (BPQ) was used as data tool and this was modified from "Deterrents to Participation Scale (DPS)" by Scanlan & Darkenwald (1984) [19]. BPQ was divided into two sections. Section-A, consisted of demographical variables including participant's name, age, sex, marital status, number of children, types of general education, type of professional education, working designation, type/ nature of job, type of organization, duty shift, area of practice, year-wise CNE activities attended, and type of CNE course last attended. Section-B based on five barriers and their item statements [18].

Pilot testing of the tool was made over thirty nurses to check internal validity and reliability by using Cronbach's alpha Findings revealed as Cronbach's  $\alpha = 0.861$  which was good. Contents and language used in questionnaire were quite clear and easily understandable to the participants. No further changes or remarks left on questionnaire by each participant when it was repeated to other participants but showed the same results [20].

### Results

Data were analyzed in both descriptive and inferential statistical methods by using Statistical Package for the Social Sciences (SPSS) version 20.0.

A data of total three hundred (n=300) of study subjects, response rate remained 100% because of convenience sampling and every participant was repeatedly contacted. The proportion of males only 7% and female were 93%. In comparison of both provinces, 25% (21) were males and 75% (63) were females in Sindh province and in Punjab province, only 100% (216) were females because induction of male nurses for employment is very low and during data collection, no male nurse was encountered to participate in study. The age of participants ranged from 18-59 years with a mean of  $31.36 \pm 8.42$  years. Regarding marital status of Sindh province, 69% (58) were married, 31% (26) were found unmarried. In Punjab province, 40.7% (88) were married couples, 58.8% (127) were unmarried and only 0.5% (1) divorced.

In comparison of socioeconomic status, majority of nurses in Punjab province belonged to middle class (214) as compare to Sindh province (84) and only two nurses belonged to upper class family in Punjab province. Regarding general qualification, majority of nurses belonged to Punjab province, were matriculated as compare to Sindh province (46.3% and 22.6%). As professional qualification, majority of Punjab nurses (75.5%) had Diploma in Nursing along

with Midwifery or specialized diploma, and many of them (10.2%) had Diploma in Nursing with Midwifery or specialization along with PG diplomas. But in Sindh province, majority (46.4%) had Diploma in Nursing with Midwifery or specialization along with PG diplomas as compare to Punjab nurses.

In analysis of working designation, majority of nurses were staff nurses in Punjab province as compare to Sindh province (90.7% and 54.8%). In converse to Punjab, majority of Sindh province nurses (17.9% and 15.5%) were clinical and nursing instructors. Subsequently, types/ nature of job and duty shifts, results showed that majority of Punjab nurses had permanent jobs as compare to Sindh province nurses (49.1%). Regarding non formal CNE activities, results showed that nurses from Punjab had higher level of participation (108 nurses) in workshops as compare to sindh (52 nurses).

Interpretation of barriers statements were based on Likert Scale key which was reversely used in the tool. Tool started as Strongly Agree, ranked No. 1 despite of No. 5, and so on to Strongly Disagree, ranked No. 5 despite of No. 1. Therefore, results will be read as lower the mean score in all barriers, higher or extreme the barriers will be counted and vice versa as higher the mean scores in all barriers, lower or no barriers will be counted.

Quantitatively, table 1.1 and 1.2 showed that administrative, work-related and financial barriers were generally found higher and most prevalent and predicting barriers with the mean score of  $2.19 \pm 0.83$ ,  $2.53 \pm 0.85$  and  $3.14 \pm 0.84$  which were generally lower than the personal and family barriers.

**Table 1.1. Barriers with overall mean score**

| Barriers   | Personal Barrier Mean $\pm$ SD | Financial Barrier Mean $\pm$ SD | Administrative Barrier Mean $\pm$ SD | Family Barrier Mean $\pm$ SD | Work-related Barrier Mean $\pm$ SD | p-Value |
|------------|--------------------------------|---------------------------------|--------------------------------------|------------------------------|------------------------------------|---------|
| Mean score | 3.42 $\pm$ 0.71                | 3.14 $\pm$ 0.84                 | 2.19 $\pm$ 0.83                      | 3.42 $\pm$ 0.83              | 2.53 $\pm$ 0.85                    | 0.000   |

**Table 1.2: Barriers ranking as per raked scale**

| Rank Scale                          | Barriers               | Overall mean score (as per ranked scale) |
|-------------------------------------|------------------------|--|
| 1 SA= Extreme Barrier existed       | Administrative Barrier | 2.19*                                    |
| 2 A= Moderate Barrier existed       | Work-related Barrier   | 2.53*                                    |
| 3 SE= Either barrier existed or not | Financial Barrier      | 3.14*                                    |
| 4 DA= Somewhat Barrier existed      | Family Barrier         | 3.42                                     |
| 5 SDA= No Barrier existed           | Personal Barrier       | 3.42                                     |

\*Lower the mean score, higher the barrier is measured

Table 1.3 showed that there was significant difference in both provinces nurses. Data revealed that although the administrative barrier was high among nurses but no significant difference was found between Punjab and Sindh provinces. Similarly, both provinces nurses have equal level of financial barrier. Work-related barriers followed by personal and family barriers in nurses from Sindh province were significantly high as compared to Punjab province.

**Table 1.3. Punjab-Sindh province barriers comparisons**

| Barriers               | Province | N   | Mean | Std. Deviation | p-value |
|------------------------|----------|-----|------|----------------|---------|
| Personal Barrier       | Punjab   | 216 | 3.47 | 0.73           | 0.058** |
|                        | Sindh    | 84  | 3.30 | 0.68           |         |
| Financial Barrier      | Punjab   | 216 | 3.14 | 0.84           | 0.967   |
|                        | Sindh    | 84  | 3.15 | 0.85           |         |
| Administrative Barrier | Punjab   | 216 | 2.16 | 0.87           | 0.343   |
|                        | Sindh    | 84  | 2.26 | 0.75           |         |
| Family Barrier         | Punjab   | 216 | 3.48 | 0.86           | 0.070** |
|                        | Sindh    | 84  | 3.28 | 0.76           |         |
| Work Related Barrier   | Punjab   | 216 | 2.43 | 0.81           | 0.001*  |
|                        | Sindh    | 84  | 2.81 | 0.90           |         |

\*Significant at 5% level of significance

\*\*Significant at 10% level of significance

---

## Discussion

In light of study results, three barriers were found in which administrative barrier came up most prevalent barrier, work-related as more predictive and financial barrier as predicting barrier than the personal and family barrier. These results were congruent with other studies [12, 21-23]. Studies suggested that administrative favoritism based on personal relations or personal preferences which create big hindrance to nurses' participation in non-formal CNE activities. It is a subjective matter by means of giving extra or undue favor to an individual of any course, leave, scholarship, official protocol and financial benefits in an organization. This can be the barriers for others to access the opportunities. Work-related barriers and nursing shortage impede nurses' participation and has become a global issue. Nurses are encountered many problems in accessing non-formal CNE opportunities as results indicated [24].

During data collection, nurses shared their gut feelings about administrative favoritism and said, "Yes...administration always send their favorite persons for training and course repeatedly...!" Another opinion was, "Umm...When we apply for training or any course, even our documents and papers knowingly misplaced and at the end, new persons go for training because administration nominate names only favorite persons...!". Many nurses also complained that no notification and support from administration and subjectively viewed as "Ummm...administration doesn't circulate proper information of the course or workshop and do not circulate information at mean time or circulate in days where closing date is near to finish... Nick of time, some favorite persons nominated for training" and even said "Hmmm...nursing administration does not support and reluctant about training...and whenever any nurse get enrolled in the course by any means... they resist to sanction leave or even not approving leave without pay for attending the course and...sometime... create hurdles at every level that unable to go for the course or training". Some of nurses burnt out, "...our senior nurses do not want to send nurses for further trainings or workshops because they have threat that in future they may be promoted on higher posts or may be replace us...and may be old senior nurses have no knowledge about CNE programs so how they can send us".

In light of above nurses' arguments, nursing and medical administration may be passive and do not wish to capacity building for nurses towards new and transformed CNE opportunities. It is fact in real practice, administration always admire the services of this profession but less intent for progression of this profession [25]. These sorts of ambiguities create frustration among nurses who wanted to refresh their obsolete knowledge to prove better patient care and wish to develop future plans for professional development and career progression [24].

## Conclusion

Participation in non-formal CNE program is prime important for nurses to keep abreast with advanced knowledge in changing health care environment. Findings revealed that both provinces nurses have impediments in accessing of non-formal CNE opportunities and these barriers were prevalent in primitive studies regarding nurses' participation in Pakistan. Administrative barriers, work-related barriers and financial barriers were found most prevalent, predictive and predicting barriers towards nurses' participation in non-formal CNE programs which includes workshops, short course, trainings, conferences, seminars and symposiums etc. Data of inter provincial hospitals comparisons Punjab hospitals nurses

have greater administrative and work-related barriers than the nurses from Sindh province hospitals. Regarding financial barrier, both provinces nurses have equal level barriers than the family and personal barriers among nurses of two provinces. Due to extended scope of CNE opportunities, barriers exist around the practice but need is to define and deal with this issue at local management level. Regulatory, licensure and advisory body of nursing with line ministry of health have greater role in addressing CNE programs opportunities. Many countries made this program as mandatory for re-licensure of the registration, recertification of short courses rather than make it voluntary programs. In Pakistan, such activities are under carpets with no extended scope in all provinces. Therefore, paper explores the investigated barriers and compared with nurses working in two provincial hospitals. Results also were disseminated to the local bodies of nursing for developing CNE system and use it as a process of re-certification and re-licensure of registration.

## Acknowledgement

Proudly feel immense pleasure to express my sincere gratitude to my research supervisor **Late Dr. Anwar Aziz**, Principal, Shifa College of Nursing Islamabad. She remained a source of inspiration, motivation and icon for me in developed nursing education and clinical research. Her persistence and emotional support made me alert and time to time motivation to complete thesis and research article.

I am thankful to **Sir Wakas Latif** Biostatistician who every time remained ready to help me. His professional attitude never let me down to quit from thesis and research article writing but emotionally supported in passing out and publishing it.

In all entire struggle and success, I would be nothing if my "**Mother and Father**" knowingly or unknowingly felt pain and grudges during my stay at university. Their constant prayers and emotional support made me able to achieve present status.

Special gratitude and regards for my wife **Asia Nazir** and little daughter **Aroosh Fatimah** for her cute smile and her soft and tender touch to write this article.

## References

1. Bahn D (2006) Orientation of nurses towards formal and informal learning: motives and perceptions. *Nurse Educ Today* 27: 723-730.
2. Luk A, editor. Continuing Nursing Education (CNE) Credit System [Monograph on the internet]. Alice Ho Miu Ling Nethersole Hospital; 1997 [cited 2010 April 02]. Available at: <http://www.hksne.org.hk/newsletter/200102-04.htm>
3. Patricia A. Mc Partland, editor. MANDATORY CONTINUING EDUCATION: DOES IT REALLY PROTECT SOCIETY FROM INCOMPETENT HEALTH PROFESSIONALS? [Monograph on the internet]. Michigan. Academy for the Study of the Psychoanalytic Arts; 2004 [cited Updated 2012 August 17]. Available at: <http://www.academyprojects.org/mcpartland.htm>
4. Pena YF, Castillo MA, editors. Factors Influencing Nursing Staff members' participation in Continuing Education [monograph on the Internet]. *Rev Latino-am Enfermagem*. 2006 [cited 2009 Oct 12]. Available at: [www.scielo.br/pdf/rlae/v14n3/v14n3a02.pdf](http://www.scielo.br/pdf/rlae/v14n3/v14n3a02.pdf)
5. Linkroll.com [Homepage on the Internet]. Link Blogging Service. [Updated 2004-2010; cited 2010 Feb 8]. Available from: <http://www.linkroll.com/Personal-Injury-Legal--337540-Hospital-And-Nursing-Errors.html>

6. World Health Organization [Homepage on the Internet]. Egypt: Regional Technical paper. Regional strategy for enhancing patient safety; WHO EM/RC52/4-2005 [updated 2005; cited 2010 Feb 8]. Office for the Eastern Mediterranean; Available from: <http://gis.emro.who.int/HealthSystemObservatory/PDF/TechnicalandDiscussionPapers/Regional%20strategy%20for%20enhancing%20patient%20safety.pdf>
7. Poillon F. editor. To Err is Human: Building a safer health system [Monograph on the Internet]. Institute of Medicine: National Academy of Services; 2000 [2010 Feb 8]. Available from: [www.providersedge.com/.../To\\_Err\\_Is\\_Human-Building\\_a\\_Safer\\_Health\\_System-Report-Brief.pdf](http://www.providersedge.com/.../To_Err_Is_Human-Building_a_Safer_Health_System-Report-Brief.pdf)
8. National Academies Press [Homepage on the Internet]. Washington DC: Keeping Patients Safe: Transforming the Work Environment of Nurses (2004) Nursing: Inseparably Linked to Patient Safety [updated 2012; cited 2012 May 12]. Board on Health Care Services (HCS) Institute of Medicine (IOM); Available from: [http://www.nap.edu/openbook.php?record\\_id=10851&page=23](http://www.nap.edu/openbook.php?record_id=10851&page=23)
9. Griscti O, Jacono J (2006) Effectiveness of continuing education programmes in nursing: literature review. *J. Adv Nurs* 4: 449-456.
10. Malhotra NK, Shapero M (2007) Factor Structure of Deterrents to Adult Participation in Higher Education. *J. Coll. T & L* 4: 2.
11. Hegney D, Tuckett A, Parker D, Rober E (2009) Access to and support for continuing professional education amongst Queensland nurses: 2004 and 2007. *Nurse Educ Today* 30:142-149.
12. Wessels SB (2005) The Deterrents to CPE Effectiveness in the Accounting Profession: A Factor Analytic study. *J Buss Econ Res* 3: 57-66.
13. Muthu DKS, Chan CM. editors. Perception of registered nurses on implementation of mandatory continuing professional education for re-licensure in pediatric institute. 2008: Proceedings of the 8th annual SEAAIR Conference: 2008 Nov 4-6; Indonesia. Surabaya; 2008. p. 12-20
14. Gallagher L (2007) Continuing Education in nursing: A concept analysis. *Nurse Educ Today* 466: 473-427.
15. Continuing Medical Education [Homepage on the Internet]. Maryland: The Association; 2002 [updated 2010; cited 2010 Feb 8]. CME Outfitters; [about 2 screens]. Available at: <http://www.cmeoutfitters.com/faculty/regulatory/ANA%20CNE%20Guidelines.pdf>
16. Aiga H (2006) Reasons for participation in and needs for continuing professional education among health workers in Ghana. *Health Pol* 77: 290-303.
17. Fiona T (2008) Cardiac nurses' views of continuing professional education. *European J. of Cardiovascular Nurs* 7: 59-66.
18. Lydia RE. Perception of registered nurses with regard to formal continuing education. 2007. Master Thesis. Available from: [uir.unisa.ac.za/bitstream/10500/572/1/dissertation.pdf](http://uir.unisa.ac.za/bitstream/10500/572/1/dissertation.pdf)
19. Scanlan, CS. & Darkenwald GG (1984) Identifying deterrents to participation in continuing education. *Adult Educ Quarterly* 34:155-166.
20. Gliem A.J., Gliem, R.R. Editors. (2003) Calculating, Interpreting, and reporting Cronbach's alpha Reliability Coefficient for Likert-Type Scales. [Database on internet]. Midwest Research to practice Conference in Adult, Continuing and Community Education. Available from: <https://scholarworks.iupui.edu/bitstream/handle/1805/344/Gliem%20&%20..?sequence=1>
21. Manning CK, Vickery CE (2000) Disengagement and work constraints are deterrents to participation in continuing professional education among registered dietitians. *J Am Diet Assoc* 12: 1540-1542.
22. Muhammed M, Ahmad F (2009) Barriers to continuing education among working Muslim's women in Government and Semi-government Organizations in Malaysia. *J Muslim Minor Aff* 29: 3.
23. Malhotra NK, Shapero M (2007) Factor Structure of Deterrents to Adult Participation in Higher Education. *J. Coll. T & L* 4: 2.
24. Pascale Carayon; Ayse P. Gurses- Chapter 30-Nursing Workload and Patient Safety-A Human Factors Engineering Perspective. [Online]. <http://www.ncbi.nlm.nih.gov/books/NBK2657/>
25. Nursing Times.net. Workloads a global problem [Monograph on Internet]. England [updated 2009 Jul 14; cited 2010 June 13]. Available from: <http://www.nursingtimes.net/whats-new-in-nursing/acute-care/nursing-workloads-a-global-problem/5003802.article>

**Copyright:** ©2018 Zafar Iqbal Channa, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.