

ORIGINAL

## Factors Associated with Participation in Continuing Education Activities among Hospital Nurses in Buenos Aires, Argentina

### Factores asociados a la participación en actividades de capacitación continua en enfermeras hospitalarias de Buenos Aires, Argentina

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#### ABSTRACT

**Objective:** identify the factors associated with participation in continuing education activities among nursing staff in the general hospital service of a private health institution in Buenos Aires, Argentina.

**Method:** this was a descriptive, cross-sectional, quantitative study. An abbreviated version of the Reasons for Participation in Continuing Education Scale was administered. The Infostat program was used for data analysis.

**Results:** a total of 96 nursing workers participated. Of those, 62,5 % were between 31 and 50 years old, 91,6 % were women, 46,9 % were single, 62,5 % had children, and 78,1 % were heads of household. Labor characterization showed that 38,54 % had an undergraduate degree, 48,96 % had ten or more years of work experience, 39,58 % worked weekends and holidays, and 19,79 % had more than one job. The reasons related to keeping updated on new advances in nursing and improving economic income were evaluated the best and worst, respectively. Respondents who were single showed a greater willingness to participate in continuing education activities.

**Conclusions:** overall, the perception of reasons to participate in continuing education was positive. However, organizational support to encourage nursing staff to continue training needs improvement.

**Keywords:** Nursing; Continuing Education; Continuing Nursing Education; Nursing Education Research; Working Conditions.

#### RESUMEN

**Objetivo:** identificar los factores asociados con la participación en actividades de educación continua del personal de enfermería del servicio de internación general de una institución de salud privada de la Ciudad de Buenos Aires, Argentina.

**Método:** estudio descriptivo, transversal y cuantitativo. Se implementó una versión abreviada de la Escala de Razones de Participación en Educación Continua. Se utilizó el programa Infostat para el análisis de los datos.

**Resultados:** participaron 96 trabajadores de Enfermería. El 62,50 % tenían edades entre los 31 y 50 años, el 91,67 % fueron mujeres, el 46,88 % de estado civil soltero, 62,50 % tenían hijos y 78,13 % eran cabeza de familia. Al realizar la caracterización laboral se encontró que el 38,54 % tenían formación de pregrado, el 48,96 % tenían diez o más años de antigüedad laboral, 39,58 % trabajaban en el turno de fines de semana y feriados, y el 19,79 % tiene más de un empleo. Las razones relacionadas con la necesidad de mantener actualizado sobre los nuevos avances en la enfermería y la posibilidad de mejorar los ingresos económicos

fueron las razones mejor y peor evaluadas del constructo. Los encuestados de estado civil soltero mostraron una mejor disposición para participar en actividades de capacitación continua.

**Conclusiones:** la percepción global de razones para participar en capacitación continua fue positiva, sin embargo, se amerita de mejorar el apoyo organizacional para incentivar al personal de enfermería a continuar formándose.

**Palabras clave:** Enfermería; Educación Continua; Educación Continua en Enfermería; Investigación en Educación en Enfermería; Condiciones de Trabajo.

## INTRODUCTION

Continuing Education in Nursing (CEN) is an essential component of professional nursing practice, ensuring that this group of professionals maintains their competence and remains at the forefront of technical and scientific advances in healthcare.<sup>(1)</sup> CEN encompasses various learning formats, including courses, workshops, seminars, and even training in postgraduate programs, all aimed at improving the knowledge and skills of nursing staff.

The relevance of CNE lies in its significant impact on healthcare outcomes. However, it has also been shown to increase job satisfaction and provide opportunities for professional advancement, making it a fundamental aspect of the discipline.<sup>(2)</sup>

Historically, CCE dates back to the fundamental principles established by pioneers of the profession, such as Florence Nightingale, who emphasized the need for ongoing training for nurses. As the discipline has evolved, it has adapted to new technologies, and with this, the professional needs of nursing staff have grown. For this reason, this paradigm of continuing education is considered vital both for personal development and for addressing and meeting the needs and complexities of modern healthcare, where evidence-based practice and professional competence are paramount.

Despite the above, CCE faces several challenges, including economic barriers (cost of activities), time constraints, and cultural barriers, which affect their intention to participate. These limitations are exacerbated in low- and middle-income countries where low salaries and professional recognition and a shortage of resources and personnel complicate access to educational opportunities.<sup>(4,5)</sup>

A recent literature review analyzing 60 articles on barriers and motivations for CE reported that these differed according to the experience level (recently graduated staff, experienced nursing staff, and experienced staff intending to perform advanced functions). Thus, newly graduated professionals experienced difficulties integrating into nursing teams and performing their duties; more experienced staff reported contextual barriers linked to a lack of support structures and inaccessibility to CME resources (lack of time and support from managers); and finally, staff wishing to perform advanced functions experienced confusion when deciding which activities to participate in, taking into account the value placed on direct patient care and the lack of clarity about the value of new nursing roles.<sup>(6)</sup>

Addressing these challenges is crucial to ensuring that nursing staff can participate in continuing education processes and provide the best possible quality of care to their patients.

As healthcare continues to grow in knowledge of diseases, drugs, devices, and treatments, so will the need for CME. In the future, CCE programs will likely emphasize technological integration, interdisciplinary care, specialized training, and evidence-based practice, marking a need and an opportunity for workplaces and training institutions. This evolution reflects a growing recognition that CCE is not simply a requirement for the renewal of knowledge and the integration of new care processes but a fundamental aspect of professional growth and excellence in nursing care.

Therefore, this study aims to identify the factors associated with participation in continuing education activities among nursing staff in the general inpatient service of a private health institution in the city of Buenos Aires, Argentina.

## METHOD

An observational, descriptive, cross-sectional study with a quantitative approach was conducted. The population consisted of 108 nursing workers who performed their duties within the general inpatient service of a private health institution in Buenos Aires, Argentina, during the second half of 2023. Ninety-six professionals participated in the study and agreed to respond to the instrument voluntarily. The sampling method used was non-probabilistic census sampling.

The study included workers of any gender, with a minimum of six months' seniority, who were employed as permanent staff in the general inpatient service and who agreed to participate voluntarily by signing the informed consent form. Management personnel and temporary staff or interns were excluded from the study.

The data collection instrument was the abbreviated Professional Reasons for Participation Scale (PRS) version. The abbreviated PRS consists of twelve items/statements that are answered on a five-point Likert scale: Strongly agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly disagree (SD). The responses were converted into scores such that the higher the value, the better the perception of the reason for participating in CEE. In turn, the questions are grouped into four dimensions: Professional improvement and development (3 items), Professional service (2 items), Learning and interaction among colleagues (2 items), and Personal benefits and job security (5 items). Eleven additional questions were included to characterize the sociodemographic and occupational characteristics of the respondents.

An online form was created for data collection on the Google Forms platform. The instrument was sent to nurses who agreed to participate and signed the informed consent form via email and instant messaging applications such as WhatsApp.

The data obtained were exported to a Microsoft Excel database and analyzed using the Infostat program. Absolute and relative frequencies were calculated for categorical variables, and the mean and standard deviation were calculated for quantitative variables.

Regarding ethical considerations, the study is considered low risk given its observational and anonymous nature. Digital informed consent was implemented, participation was voluntary, and anonymity was ensured in data collection and handling.<sup>(7)</sup>

## RESULTS

Ninety-six nursing staff members from the general inpatient service participated. Of these, 62,50 % were between the ages of 31 and 50, 91,67 % were women, 46,88 % were single, 62,50 % had children, and 78,13 % were heads of households (table 1).

<b>Variable</b>	<b>f</b>	<b>%</b>
Age		
20-30 years old	19	19,79
31-50 years old	60	62,50
51-60 years old	14	14,58
61 years old or older	3	3,13
Gender		
Male	7	7,29
Female	88	91,67
Not reported	1	1,04
Marital status		
Single	45	46,88
Common-law/Married	43	44,79
Divorced or Widowed	8	8,33
Children		
Yes	60	62,50
No	36	37,50
Family breadwinner?		
Yes	75	78,13
No	21	21,88
Total	96	100,00

**Note:** \*SaDoFe=Saturday, Sunday, and holiday shifts

When conducting the job characterization, it was found that 38,54 % had undergraduate training (Nursing Technician), and only 12,50 % had postgraduate training. Likewise, 48,96 % had 10 or more years of work experience, 39,58 % worked weekends and holidays (SaDoFe), and only 19,79 % had more than one job (table 2). It was found that 47,92 % of respondents had received financial incentives from their institution to participate in continuing education activities, and 88,54 % had participated in internal training activities at their institution.

When analyzing the reasons for participating in continuing education activities in nursing, it was found that the statement "Continuing education will help me stay up to date on new advances in nursing" in the Professional Improvement and Development dimension was the highest rated ( $\bar{x}=4,83$ ;  $SD=0,45$ ;  $Me=5,00$ ), with 85,42 % of respondents stating that they "Strongly agree." Meanwhile, the statement "Continuing education

will allow me to increase the likelihood of financial gain” in the Personal Benefits and Job Security dimension was the lowest rated ( $\bar{x}=3,35$ ;  $SD=1,39$ ;  $Me=3,00$ ), with 25,00 % of respondents stating that they ‘Disagree’ or “Strongly disagree.” Overall, the perception of the reasons for participating in CEE activities was positive among 88,33 % of respondents (table 3).

Table 2. Job characteristics of the sample		
Variable	f	%
Level of education		
Nursing technician	37	38,54
Bachelor's degree in Nursing	47	48,96
Bachelor's degree in Nursing with postgraduate studies	12	12,50
Work experience		
6 months to 1 year	5	5,21
1-5 years	21	21,88
6-10 years	23	23,96
10 years or more	47	48,96
Work shift		
Morning	15	15,63
Afternoon	20	20,83
Night	15	15,63
Sat-Sun-Holidays*	38	39,58
Multiple jobs		
Yes	19	19,79
No	77	80,21
Total	96	100,00
Note: *SaDoFe=Saturday, Sunday, and holiday shifts		

When conducting the inferential analysis, it was found that single respondents had a better overall perception of the reasons for participating in ECE ( $p=0,048$ ). No relationship was identified between the variables analyzed and the other sociodemographic and occupational characteristics.

Table 3. Reasons for participating in continuing education activities					
Item	TA	DA	I	ED	TD
The knowledge/skills gained during CPE will help me better address the demands of my nursing activities.	68 (70,83 %)	25 (26,04 %)	3 (3,12 %)	0 (0,00 %)	0 (0,00 %)
CPD will help me keep up to date with new developments in nursing.	82 (85,42 %)	13 (13,54 %)	0 (0,00 %)	1 (1,04 %)	0 (0,00 %)
CPD activities will help maintain the quality of care in my nursing service.	77 (80,21 %)	17 (17,71 %)	0 (0,00 %)	2 (2,08 %)	0 (0,00 %)
CPD will help me identify my patients' needs more accurately.	70 (72,92 %)	22 (22,92 %)	0 (0,00 %)	4 (4,16 %)	0 (0,00 %)
CPD will help improve customer service.	59 (61,46 %)	27 (28,13 %)	1 (1,04 %)	9 (9,37 %)	0 (0,00 %)
CPD will enable me to better relate my ideas to those of my colleagues in the professional setting.	53 (55,21 %)	37 (38,54 %)	2 (2,08 %)	4 (4,16 %)	0 (0,00 %)
CPD will allow me to discuss issues with my colleagues.	61 (63,54 %)	29 (30,21 %)	1 (1,04 %)	5 (5,20 %)	0 (0,00 %)
CPD activities will increase the possibility of improving my professional development.	76 (79,17 %)	18 (18,75 %)	0 (0,00 %)	2 (2,08 %)	0 (0,00 %)
CPD will increase the likelihood of professional advancement.	65 (67,71 %)	4 (4,17 %)	13 (13,54 %)	5 (5,21 %)	9 (9,38 %)
CPD will increase the likelihood of financial gain.	29 (30,21 %)	14 (14,58 %)	29 (30,21 %)	10 (10,42 %)	14 (14,58 %)
CPD will change the emphasis of my current nursing responsibilities.	35 (36,46 %)	19 (19,79 %)	28 (29,17 %)	6 (6,25 %)	8 (8,33 %)
CPD could help me develop leadership skills for the profession.	47 (48,96 %)	18 (18,75 %)	16 (16,67 %)	6 (6,25 %)	9 (9,38 %)

## DISCUSSION

CEE offers numerous advantages that significantly improve both nursing practice and patient care.

Participation in continuing education not only keeps nurses up to date with the latest advances in healthcare but also improves critical thinking and problem-solving skills, which ultimately contributes to better patient outcomes (shorter recovery times, lower incidence of adverse effects, and shorter hospital stays) and increased job satisfaction.<sup>(8,9)</sup>

When analyzing the sociodemographic profile of the respondents, it was found that they were primarily women, people with partners over the age of 30, with children, and who reported being the breadwinners of their families. These factors have often been described in the literature as barriers to participation in CME activities, marking a profile that includes the convergence of work, social, and economic responsibilities, the need to invest their free time in activities that allow them to improve their income, or to spend that time with their loved ones. These data are consistent with the literature.

The present study found a positive perception of the reasons for participating in continuing education activities. This finding is consistent with various studies, which report that nurses identify the usefulness of participating in these activities, relating it to improved productivity, better job performance, and a better perception of self-efficacy in caring for their patients.<sup>(10,11,12)</sup>

The reason that most influences the intention to participate in continuing education activities is financial. Respondents reported that participation might not affect their income level. This finding is consistent with the findings of Rios & Mosca<sup>(9)</sup>, who conducted a study in Buenos Aires, Argentina, and found a low rating of the reasons for participating in CEE regarding personal benefits and job security. Other studies identified that monthly income or the possibility that training could increase is a determining factor in participation in CEE activities.<sup>(5,13)</sup>

Although other studies have reported a relationship between gender, job title, seniority, and desire for improvement and participation in CEE activities, no such relationships were identified in the present study.

A relationship was found between single marital status and a better perception of the reasons for participating in ECE activities. This may be related to a lower family responsibility burden and greater availability of time to devote to training without sacrificing time with loved ones.

The rise of digital technology has led to a significant increase in online continuing education programs. These programs allow nurses to complete their training at their own pace, adapting to varying schedules and locations. Time flexibility and the wide availability of free resources make digital resources the preferred choice for healthcare professionals, including nurses, and a valuable strategy for institutions to provide training to their employees. Likewise, in-service training is also widely recommended in the literature, as it does not require time outside of work to be spent on training.<sup>(14,15)</sup>

The degree of participation, resource preferences, and barriers and facilitators to participating in ECE should be analyzed for future studies. This could lead to recommendations for maximizing professionals' interest and involvement in these activities and improving their performance and job satisfaction.

## CONCLUSIONS

The study concludes that there is a positive perception of the reasons for participating in continuing education activities in nursing. However, the possibility of improving income through these activities was the reason for the most negative perception. Single respondents showed a better perception of the reasons for participating in continuing education activities in nursing.

## REFERENCES

1. Marqués Andrés S. Formación continuada: herramienta para la capacitación. *Enferm Glob*. 2011;10(21). Disponible en: [http://scielo.isciii.es/scielo.php?script=sci\\_arttext&pid=S1695-61412011000100020&lng=es](http://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S1695-61412011000100020&lng=es)
2. Mlambo M, Silén C, McGrath C. Lifelong learning and nurses' continuing professional development, a metasynthesis of the literature. *BMC Nurs*. 2021;20,62. <https://doi.org/10.1186/s12912-021-00579-2>
3. Stein AM. History of Continuing Nursing Education in the United States. *The Journal of Continuing Education in Nursing*. 2013;29(6):245-252. doi:10.3928/0022-0124-19981101-04
4. Bindon SL. Professional Development Strategies to Enhance Nurses' Knowledge and Maintain Safe Practice. *AORN Journal*. 2017;106(2):99-110. <https://doi.org/10.1016/j.aorn.2017.06.002>
5. Coventry TH, Maslin-Prothero SE, Smith G. Organizational impact of nurse supply and workload on nurses continuing professional development opportunities: an integrative review. *J Adv Nurs*. 2015;71(12):2715-2727. <https://doi.org/10.1111/jan.12724>
6. Hakvoort L, Dikken J, Cramer-Kruit J, Nieuwenhuyzen KM, van der Schaaf M, Schuurmans M. Factors that influence continuing professional development over a nursing career: A scoping review. *Nurse Educ Pract*. <https://doi.org/10.56294/nds2026302>



2022;65:103481. <https://doi.org/10.1016/j.nepr.2022.103481>

7. Canova-Barrios C. Aspectos éticos en la publicación de manuscritos científicos: Una revisión de literatura. Salud, Ciencia y Tecnología. 2022;2:81. <https://doi.org/10.56294/saludcyt202281>

8. Jarelnape AA, Taha Ali Z, Fadlala AA, Sagiron EI, Osman AM, Abdelazeem E, et al. The Influence of Nursing Interventions on Patient Outcomes: A Systematic Review. Saudi J Health Syst Res. 2024;4(1):1-7. <https://doi.org/10.1159/000534482>

9. Ríos NB, Mosca AM. Influencia de factores personales, profesionales y motivacionales en la participación de enfermeros en educación continua. Salud, Ciencia y Tecnología. 2022;2:93. <https://doi.org/10.56294/saludcyt202293>

10. Tsigirigi A, León-Mantero C, Jiménez-Fanjul N. Motivación para la educación continua en enfermería. Edu Med. 2024;25(2):100877. <https://doi.org/10.1016/j.edumed.2023.100877>

11. Lera M, Taxtsoglou K, Iliadis C, Frantzana A, Kourkouta L. Nurses' Attitudes Toward Lifelong Learning via New Technologies. Asian Pac Isl Nurs J. 2020;5(2):89-102. <https://doi.org/10.31372/20200502.1088>

12. Govranos M, Newton JM. Exploring ward nurses' perceptions of continuing education in clinical settings. Nurse Educ Today. 2014;34(4):655-660. <https://doi.org/10.1016/j.nedt.2013.07.003>

13. Flores Peña Y, Alonso Castillo M. Factores que influyen en la participación del personal de enfermería en la educación continua. Rev Latino-am Enfermagem. 2006;14(3). <https://www.scielo.br/j/rlae/a/MDz45jg9FgwvzF9LftZ8Btv/?format=pdf&lang=es>

14. Muñoz Castro FJ, Valverde-Gamero E, Herrera-Usagre M. Variables predictoras de la satisfacción de los profesionales de la salud con la educación continua: un estudio transversal. Rev Latino-Am Enfermagem. 2020;28:e3315. <https://doi.org/10.1590/1518-8345.3637.3315>

15. Beckett H. Effect of e-learning on nurses' continuing professional development. Nurs Manag (Harrow). 2020;27(2):16-22. <https://doi.org/10.7748/nm.2020.e1899>

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## CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

## AUTHOR CONTRIBUTIONS

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