



A Study To Assess Barriers And Facilitators Of Nurses In Continuing Nursing Educational Programme Among Staff Nurses In Selected Hospitals Of Bhopal, Madhya Pradesh.

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Abstract: Continuing Nursing Education (CNE) is a fundamental component of professional development that enhances nurses' clinical competence and ensures the delivery of safe, evidence-based patient care. Despite its recognized importance, participation in continuing education programs among nurses remains inconsistent due to various influencing factors. The present study aimed to assess the barriers and facilitators affecting nurses' participation in continuing nursing education programs in selected hospitals of Bhopal, Madhya Pradesh. A quantitative non-experimental descriptive research design was adopted. A total of 100 staff nurses were selected using a non-probability purposive sampling technique from both government and private hospitals. Data were collected using a structured questionnaire comprising demographic variables, perceived barriers, and facilitating factors related to continuing nursing education. The tool was validated by experts, and reliability was established prior to data collection. Data were analyzed using descriptive and inferential statistics, including frequency, percentage, and chi-square test. The findings revealed that major barriers to participation included excessive workload, time constraints, staff shortage, and limited organizational support. Conversely, key facilitating factors included self-motivation, career advancement, enhancement of professional competence, and institutional encouragement. A statistically significant association was observed between selected demographic variables and participation in continuing nursing education. The study concludes that both individual and organizational factors significantly influence nurses' engagement in continuing education. Addressing structural barriers and strengthening institutional support mechanisms can improve participation and promote a culture of lifelong learning in the nursing profession.

Index Terms - Continuing Nursing Education, Barriers, Facilitators, Staff Nurses, Professional Competence, Organizational Factors

Introduction

Continuing Nursing Education (CNE) constitutes a fundamental component of professional development, enabling nurses to sustain and advance their knowledge, clinical skills, and professional competence within an increasingly complex healthcare environment. In the context of rapid advancements in medical science, technology, and evidence-based practice, continuous learning has become indispensable for ensuring the delivery of safe, effective, and high-quality patient care.

Nurses represent a critical segment of the healthcare workforce, with responsibilities that extend beyond direct patient care to include clinical decision-making, patient education, and the implementation of evidence-based interventions. The quality of healthcare delivery is therefore intrinsically linked to the level of competence, knowledge, and adaptability demonstrated by nursing professionals. Recognizing this, both

national and international regulatory bodies, including the World Health Organization and the Indian Nursing Council, underscore the necessity of continuing education as a mechanism for maintaining professional standards and improving healthcare outcomes.

Despite its acknowledged importance, participation in continuing nursing education programmes among nurses remains suboptimal. A range of interrelated factors contributes to this phenomenon, with organizational constraints emerging as particularly significant. Excessive workload, time limitations, staff shortages, financial constraints, and insufficient institutional support collectively act as substantial barriers, limiting nurses' capacity to engage in continuing education activities.

Conversely, several facilitating factors have been identified that promote participation in continuing nursing education. These include intrinsic motivation, aspirations for career advancement, the pursuit of enhanced professional competence, and supportive organizational environments. Institutional encouragement, availability of flexible learning opportunities, and access to educational resources further contribute to increased engagement in continuing education programmes.

A comprehensive understanding of both the barriers and facilitators influencing participation in continuing nursing education is essential for the development of effective strategies aimed at fostering lifelong learning among nurses. In this context, the present study was undertaken to assess the barriers and facilitators affecting participation in continuing nursing education among staff nurses in selected hospitals of Bhopal, Madhya Pradesh.

Review of Literature

A review of existing literature provides a critical foundation for understanding the significance of continuing nursing education and the factors influencing nurses' participation in such programmes. Previous studies have consistently emphasized the role of continuing education in enhancing professional competence, improving clinical performance, and ensuring quality patient care.

Several studies have reported that nurses generally possess a positive attitude toward continuing professional development; however, their participation is often limited by multiple constraints. Subba and Poudyal (2023) conducted a descriptive cross-sectional study among nurses and reported that although a majority demonstrated adequate knowledge and positive attitudes toward continuing professional development, participation was significantly hindered by staff shortages, lack of organizational support, and limited availability of educational programmes. Similarly, Madalla and Chiejina (2023) identified inappropriate scheduling and lack of relevance of programme content as major barriers affecting nurses' participation in continuing education activities.

Organizational and work-related factors have been consistently identified as the most significant barriers. Shinde and Potdar (2015) reported that administrative issues, including strict attendance requirements, inadequate communication, and inconvenient scheduling, were the predominant barriers to participation. Likewise, Shehata and Fakhry (2022) found that workload, staffing patterns, and work schedules significantly restricted nurses' ability to engage in continuing education programmes. These findings are further supported by Hegney et al. (2010), who highlighted financial constraints, lack of employer support, and limited access to educational opportunities as key challenges faced by nurses.

In addition to barriers, several studies have explored factors that facilitate participation in continuing nursing education. Shahhosseini and Hamzehgardeshi (2015) reported that motivation to update knowledge and improve professional competence were the most influential facilitating factors. Similarly, Osei et al. (2019) demonstrated a positive association between continuing professional development and job performance, indicating that engagement in educational activities contributes to improved clinical outcomes.

Furthermore, evidence suggests that demographic and organizational variables play a significant role in influencing participation in continuing education. Factors such as age, work experience, workplace setting, and previous exposure to educational programmes have been shown to affect both motivation and accessibility. These findings highlight the need for a comprehensive assessment of both barriers and facilitators within specific healthcare contexts.

Overall, the existing literature indicates that while nurses recognize the importance of continuing nursing education, participation is influenced by a complex interplay of individual, interpersonal, and organizational factors. This underscores the necessity of identifying context-specific barriers and facilitators, thereby providing a rationale for the present study conducted among staff nurses in selected hospitals of Bhopal, Madhya Pradesh.

Research Methodology

The present study adopted a quantitative, non-experimental descriptive research design to assess the barriers and facilitators influencing nurses' participation in continuing nursing education programmes. The study was conducted among staff nurses working in selected government and private hospitals of Bhopal, Madhya Pradesh.

A sample of 100 nurses was selected using a non-probability purposive sampling technique. Data were collected using a structured self-administered questionnaire comprising demographic variables, barriers, and facilitators related to continuing nursing education. The tool was validated by experts, and reliability was established prior to data collection.

Data collection was carried out after obtaining necessary permissions and informed consent from participants, ensuring confidentiality throughout the study.

The collected data were analyzed using descriptive and inferential statistics. Frequency and percentage were used for data summarization, and the chi-square test was applied to determine the association between selected variables. A significance level of 0.05 was considered for statistical analysis.

3.1 Population and Sample

The population of the present study comprised staff nurses working in selected government and private hospitals of Bhopal, Madhya Pradesh. A sample of 100 staff nurses was selected from these hospitals using a non-probability purposive sampling technique based on predefined eligibility criteria and willingness of the participants to take part in the study.

3.2 Data and Sources of Data

Data for the present study were collected using a structured self-administered questionnaire developed by the investigators to assess the barriers and facilitators of nurses in continuing nursing education. The instrument consisted of three sections: the first section included demographic variables such as age, gender, professional qualification, work experience, workplace, and previous exposure to continuing nursing education programmes; the second section comprised items related to barriers affecting participation in continuing nursing education; and the third section included items assessing facilitators that promote participation, using a structured response format.

The content validity of the tool was established through evaluation by a panel of experts to ensure relevance, clarity, and adequacy of the items. The reliability of the instrument was determined prior to the main study using appropriate statistical methods, indicating that the tool was reliable for data collection.

3.3 Theoretical Framework

A theoretical framework provides a structured approach for understanding the relationships among variables and guides the overall research process. In the present study, the conceptual basis is derived from the Fishbone (Ishikawa) model, which is widely used to identify and categorize factors influencing a particular outcome.

The Fishbone model is a cause-and-effect analysis tool that systematically organizes various contributing factors into meaningful categories. In this study, the central focus is nurses' participation in continuing nursing education, which is influenced by multiple interacting factors.

These factors are broadly categorized into three domains. Personal factors include individual characteristics such as motivation, time management, career goals, and personal responsibilities. Interpersonal factors involve the influence of colleagues, supervisors, and family support, which may either encourage or hinder participation in continuing education. Structural or organizational factors include workload, duty schedules, staffing patterns, financial support, institutional policies, and accessibility of continuing education programmes.

The Fishbone model provides a comprehensive framework for identifying both barriers and facilitators affecting participation in continuing nursing education. It enables systematic analysis of the underlying causes influencing nurses' engagement in educational programmes and supports the interpretation of study findings.

3.4 Statistical Tools and Data Analysis

The collected data were organized, tabulated, and analyzed using appropriate descriptive and inferential statistical methods. Descriptive statistics, including frequency and percentage, were used to summarize the demographic variables, barriers, and facilitators of continuing nursing education.

Inferential statistics, particularly the chi-square test, were applied to determine the association between selected demographic variables and the levels of barriers and facilitators. A level of significance of 0.05 was considered for statistical testing.

Section A: frequency and percentage distribution of selected demographic variables of nurses

Table 4.1: frequency and percentage distribution of selected demographic variables of nurses (n = 100)

Variable	Category	Frequency (f)	Percentage (%)
Age (years)	20–25	27	27%
	26–30	35	35%
	31–35	23	23%
	≥36	15	15%
Gender	Male	23	23%
	Female	77	77%
Professional Qualification	Diploma	35	35%
	B.Sc Nursing	58	58%
	Master's	5	5%
	PhD	2	2%
Years of Experience	<5 years	40	40%
	5–10 years	40	40%
	11–15 years	15	15%
	>15 years	5	5%
Workplace	Private	50	50%
	Government	50	50%
Marital Status	Single	53	53%
	Married	47	47%
	Divorced/Widow	0	0%
Previous CNE Attendance	Yes	84	84%
	No	16	16%
Frequency of Participation	Once a year	50	50%
	Every 2–3 years	16	16%
	Rarely	34	34%
Preferred Mode of CNE	In-person workshops	39	39%
	Online courses	33	33%
	Hybrid	7	7%
	Other	21	21%

The table shows the frequency and percentage distribution of selected demographic variables of nurses. The majority of nurses (35%) were in the age group of 26–30 years, and most participants were female (77%). Regarding professional qualification, the majority (58%) held a Bachelor of Science in Nursing. In terms of experience, 40% of nurses had less than 5 years and another 40% had 5–10 years of experience. The sample was equally distributed between private and government hospitals (50% each). More than half of the participants (53%) were single, and a large proportion (84%) had previously attended continuing nursing education programmes. Regarding participation, 50% attended once a year, and the most preferred mode of learning was in-person workshops (39%), followed by online courses (33%).

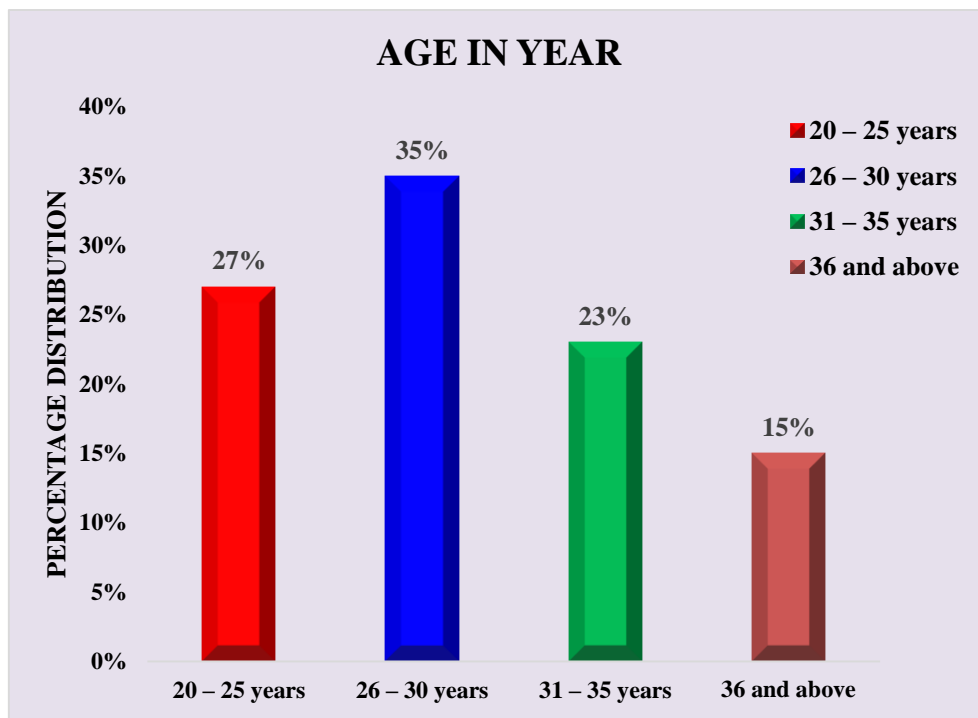


Figure 4.1: Bar diagram showing percentage distribution of age of nurses

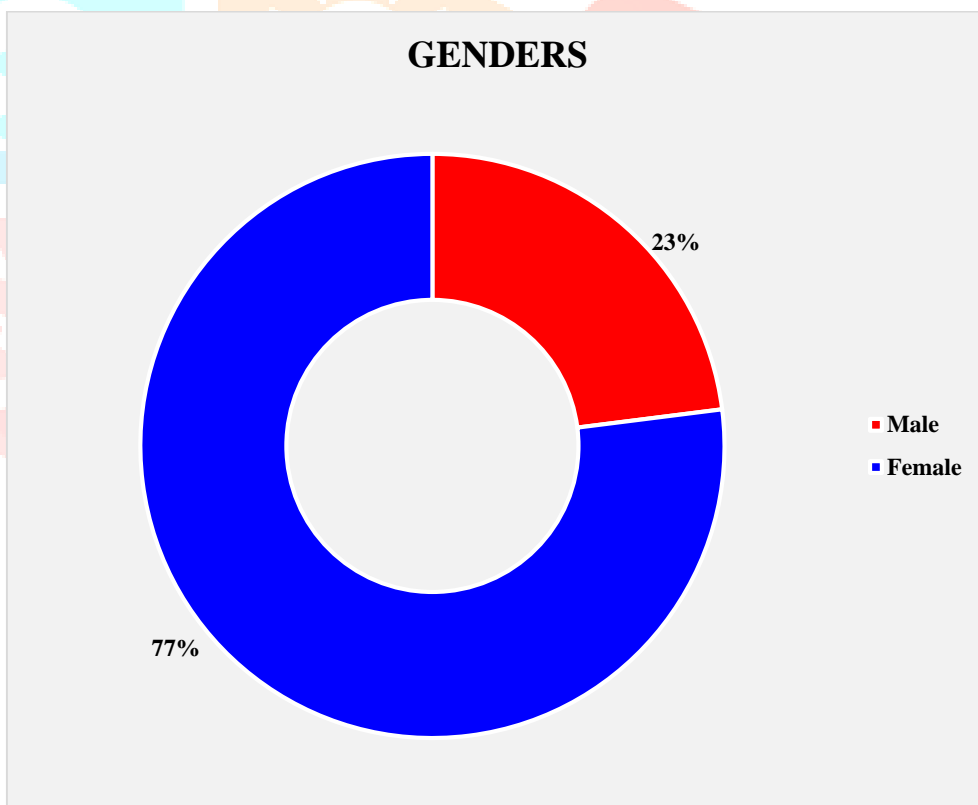


Figure 4.2: Bar diagram showing percentage distribution of gender

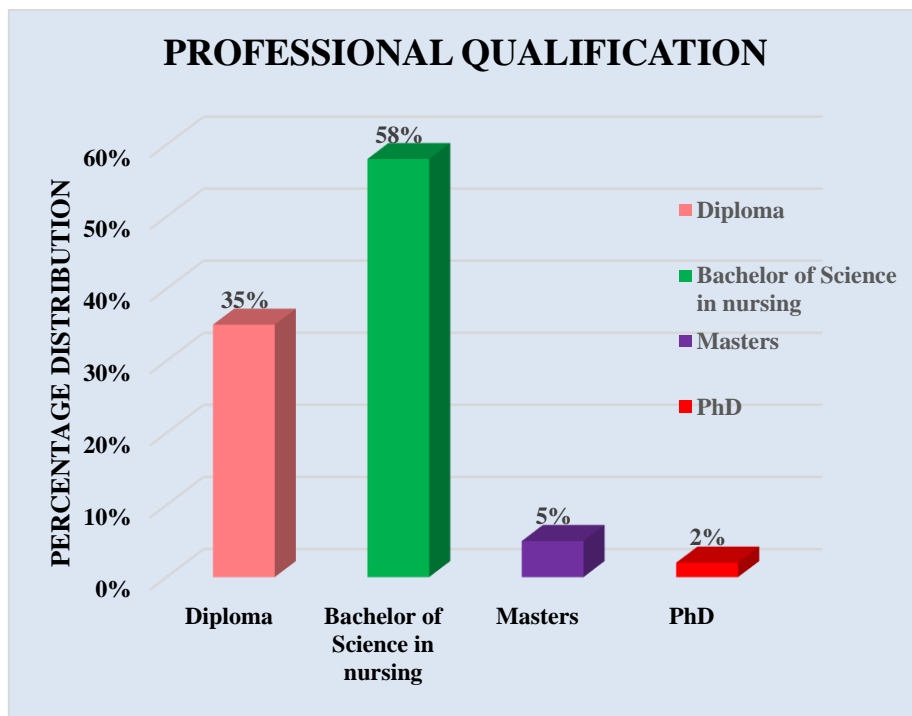


Figure 4.3: Bar diagram showing distribution of professional qualification

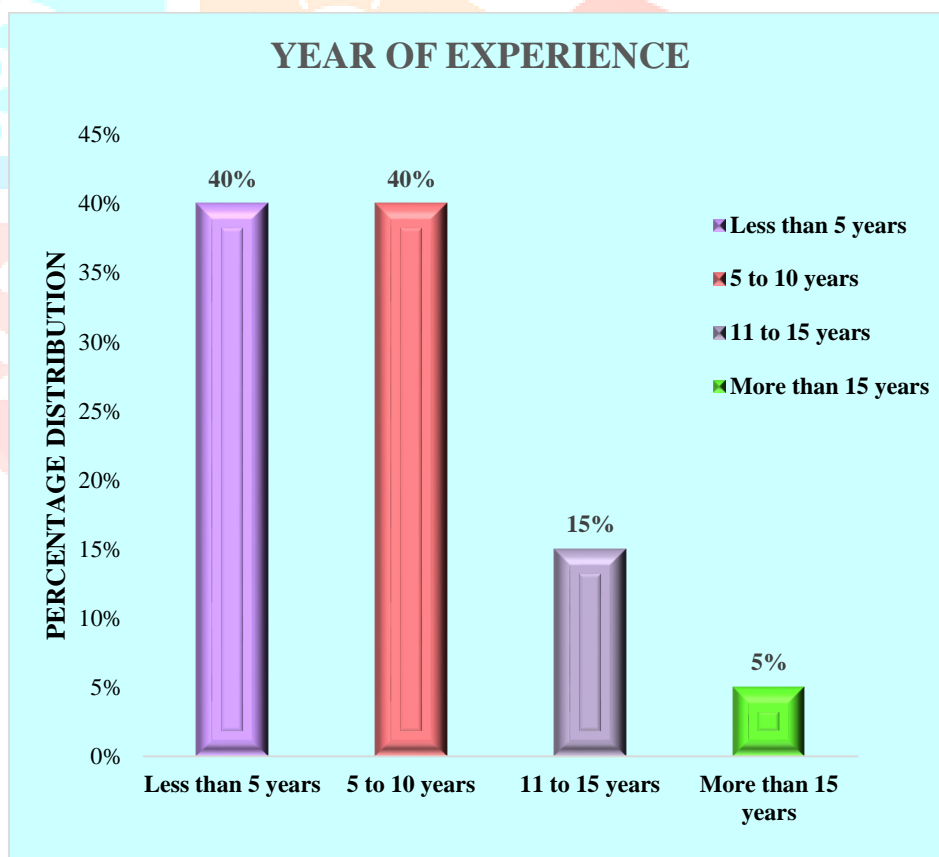


Figure 4.4: Bar diagram showing distribution of years of experience

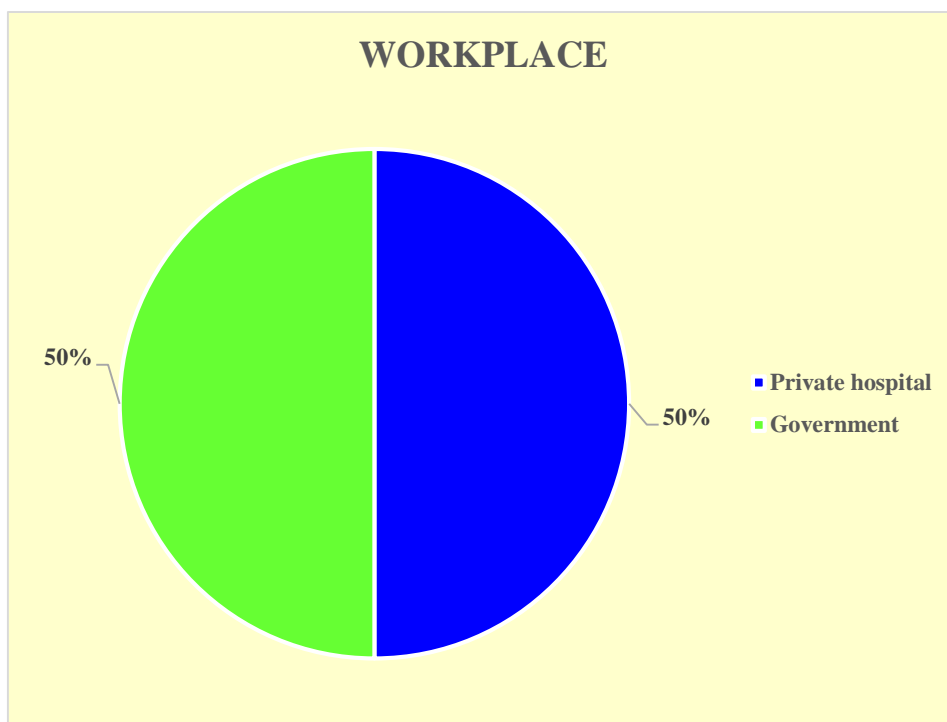


Figure 4.5: Bar diagram showing distribution of workplace

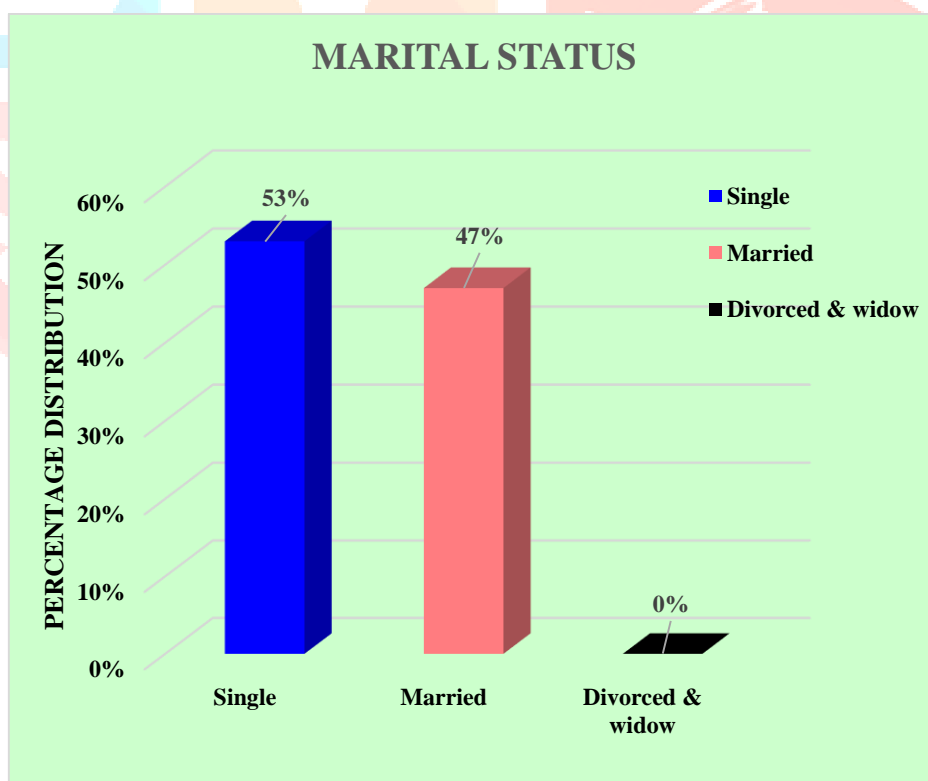


Figure 4.6: Bar diagram showing distribution of marital status

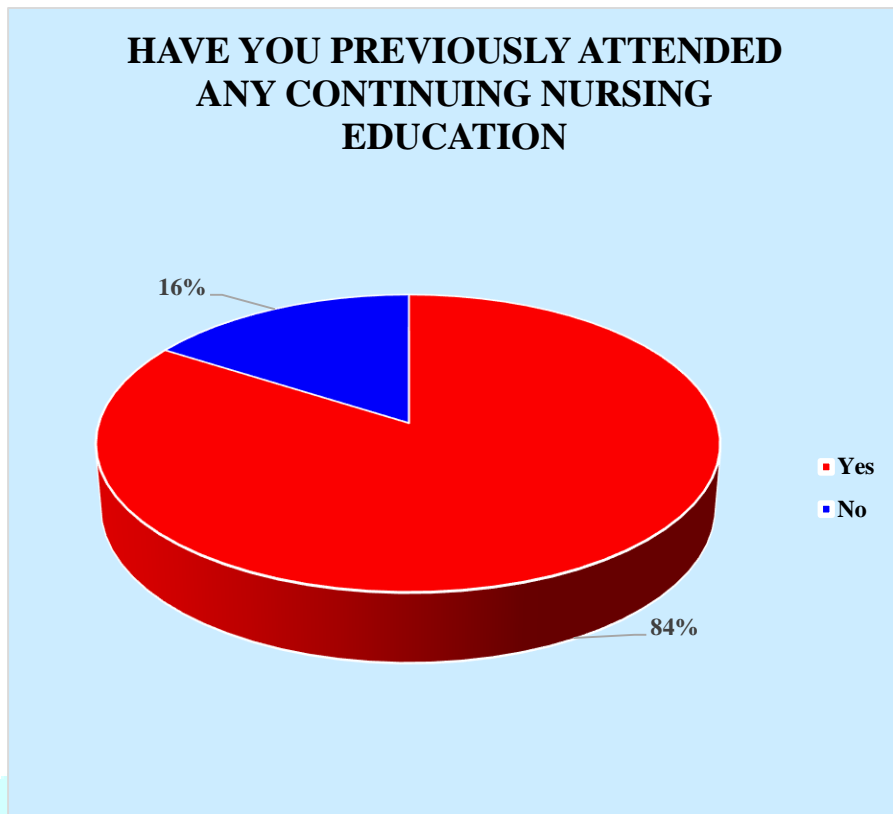


Figure 4.7: Bar diagram showing previous CNE attendance

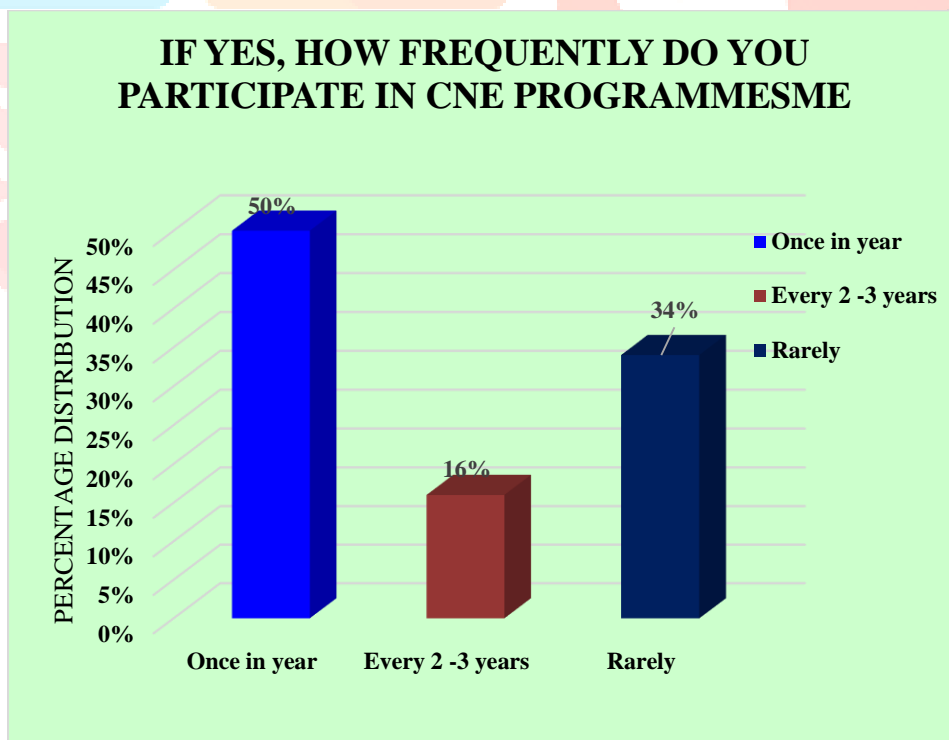


Figure 4.8: Bar diagram showing frequency of participation in CNE

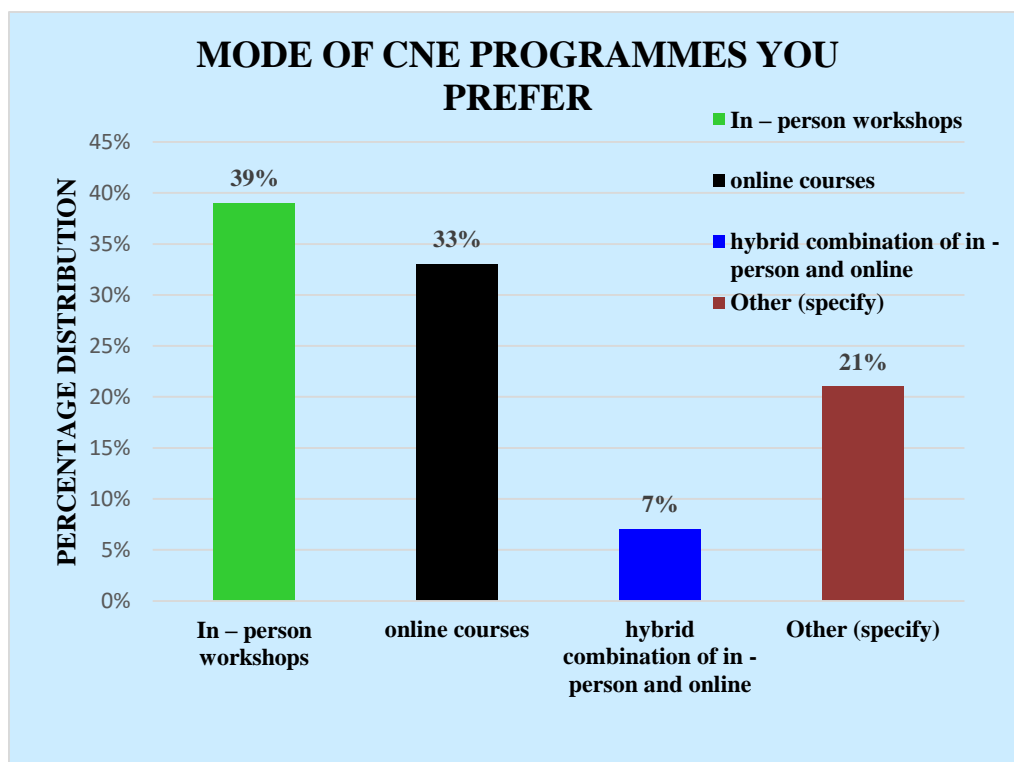


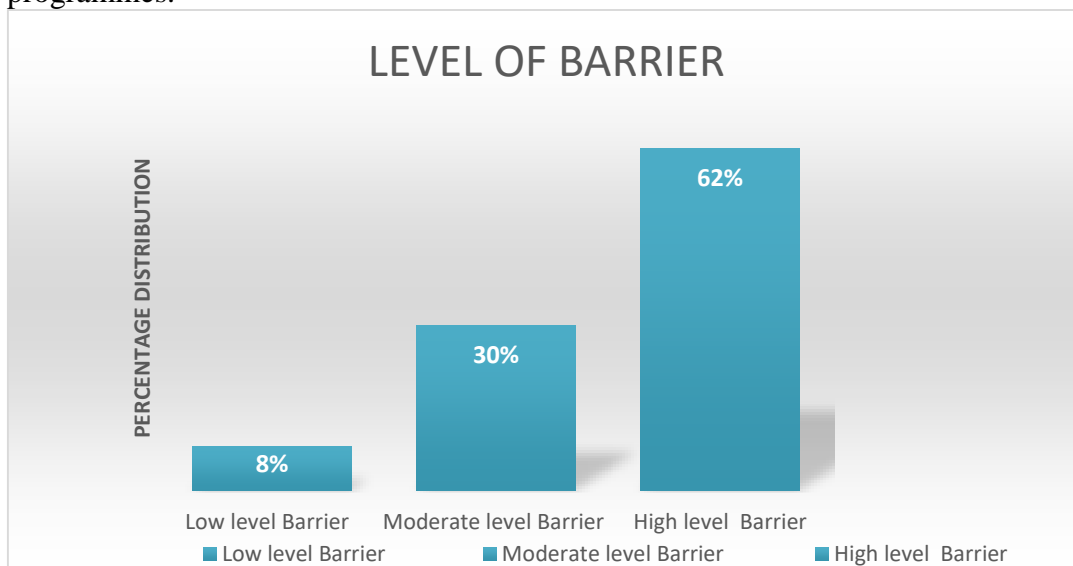
Figure 4.9: Bar diagram showing preferred mode of CNE programme.

SECTION B: LEVEL OF BARRIERS

Table 4.2: Frequency and Percentage Distribution of Levels of Barriers in Continuing Nursing Education (N = 100)

Level of Barriers	Frequency (f)	Percentage (%)
Low	8	8%
Moderate	30	30%
High	62	62%
Total	100	100%

The table shows that the majority of nurses (62%) experienced a high level of barriers in continuing nursing education, while 30% reported a moderate level of barriers and only 8% experienced low barriers. This indicates that significant challenges exist for most nurses in participating in continuing nursing education programmes.



The bar diagram shows that the highest proportion of nurses (62%) experienced high barriers, followed by 30% with moderate barriers, and only 8% with low barriers.

Table 4.2(a): Personal Barriers**Table 4.2(a): Frequency and Percentage Distribution of Personal Barriers of Nurses in Continuing Nursing Education (N = 100)**

Personal Barriers	Frequency (f)	Percentage (%)
Time constraints	6	21.4%
Domestic responsibilities	6	21.4%
Emotional stress	2	7.2%
Poor physical health	4	14.3%
Lack of self-motivation for CNE participation	10	35.7%
Total	28	100%

The table shows that lack of self-motivation (35.7%) was the most common personal barrier among nurses, followed by time constraints and domestic responsibilities (21.4% each). Emotional stress and poor physical health were less frequently reported.

Table 4.2(b): Interpersonal Barriers**Table 4.2(b): Frequency and Percentage Distribution of Interpersonal Barriers of Nurses in Continuing Nursing Education (N = 100)**

Interpersonal Barriers	Frequency (f)	Percentage (%)
Lack of co-worker's support	26	46.4%
Negative experience with previous CNE programme	14	25%
Lack of family support	10	17.9%
Poor interaction with CNE programme staff	6	10.7%
Total	56	100%

The table indicates that lack of co-workers' support (46.4%) was the major interpersonal barrier, followed by negative experiences with previous programmes (25%). Lack of family support and poor interaction with programme staff were less frequently reported.

Table 4.2(c): Structural Barriers**Table 4.2(c): Frequency and Percentage Distribution of Structural Barriers of Nurses in Continuing Nursing Education (N = 100)**

Structural Barriers	Frequency (f)	Percentage (%)
Work commitment	3	18.7%
Cost of courses	0	0%
Geographic distance	0	0%
Poor scheduling of CE programme	2	12.5%
Lack of organizational support	1	6.2%
Lack of information about provided CE programme	2	12.5%
Lack of accessibility to provided CE programme	2	12.5%
Lack of supervisor support	1	6.3%
Lack of relevant CE programme	3	18.8%
Poor quality of provided CE programme	2	12.5%
Total	16	100%

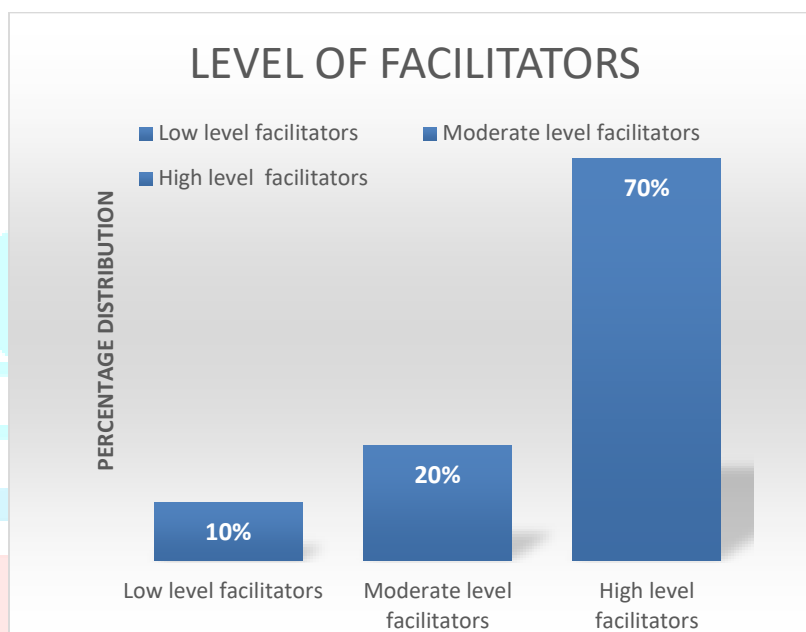
The table shows that work commitment (18.7%) and lack of relevant continuing education programmes (18.8%) were the most commonly reported structural barriers. Other factors such as poor scheduling, lack of information, and accessibility issues also contributed to barriers, while cost and geographic distance were not reported as barriers.

SECTION C: LEVEL OF FACILITATORS

Table 4.3: Frequency and Percentage Distribution of Levels of Facilitators in Continuing Nursing Education (N = 100)

Level of Facilitators	Frequency (f)	Percentage (%)
Low	10	10%
Moderate	20	20%
High	70	70%
Total	100	100%

The table shows that the majority of nurses (70%) perceived a high level of facilitators for participation in continuing nursing education, while 20% reported a moderate level and only 10% reported a low level of facilitators. This indicates that most nurses recognize positive factors that encourage their participation in continuing nursing education programmes.



The bar diagram shows that the highest proportion of nurses (70%) perceived high facilitators, followed by 20% with moderate facilitators and 10% with low facilitators.

Table 4.3(a): Personal Facilitators

Table 4.3(a): Frequency and Percentage Distribution of Personal Facilitators of Nurses in Continuing Nursing Education (N = 100)

Personal Facilitators	Frequency (f)	Percentage (%)
Self-motivation to enhance skills	22	40.0%
Desire for career progression	23	41.8%
Increased confidence in clinical decision making	10	18.2%
Total	55	100%

The table shows that desire for career progression (41.8%) and self-motivation (40.0%) were the major personal facilitators influencing participation in continuing nursing education. Increased confidence in clinical decision-making was reported by a smaller proportion (18.2%) of nurses.

Table 4.3(b): Interpersonal Facilitators**Table 4.3(b): Frequency and Percentage Distribution of Interpersonal Facilitators of Nurses in Continuing Nursing Education (N = 100)**

Interpersonal Facilitators	Frequency (f)	Percentage (%)
Support from colleagues	4	11.4%
Encouragement from family members	11	31.4%
Positive previous experience with CNE programme	8	22.9%
Mentorship and guidance from senior nurses	12	34.3%
Total	35	100%

The table indicates that mentorship and guidance from senior nurses (34.3%) and encouragement from family members (31.4%) were the most common interpersonal facilitators. Positive previous experience and support from colleagues were reported less frequently.

Table 4.3(c): Structural Facilitators**Table 4.3(c): Frequency and Percentage Distribution of Structural Facilitators of Nurses in Continuing Nursing Education (N = 100)**

Structural Facilitators	Frequency (f)	Percentage (%)
Employer-sponsored CNE programmes	2	20.0%
Availability of financial assistance	0	0%
Flexible scheduling of CNE	3	30.0%
Accessible online learning options	1	10.0%
High quality, well-structured CNE programmes	4	40.0%
Total	10	100%

The table shows that high-quality and well-structured programmes (40.0%) and flexible scheduling (30.0%) were the most important structural facilitators. Employer-sponsored programmes were reported by a smaller proportion, while financial assistance was not reported as a facilitating factor.

SECTION D: ASSOCIATION**Table 4.4: Association between Level of Barriers and Selected Demographic Variables (N = 100)**

Demographic Variable	χ^2 Value	df	Table Value	Result
Age	33.15	6	12.59	Significant*
Gender	4.84	2	5.99	Not Significant
Professional Qualification	11.08	6	12.59	Not Significant
Years of Experience	5.90	6	12.59	Not Significant
Workplace	0.70	2	5.99	Not Significant
Marital Status	1.42	4	9.49	Not Significant
Previous CNE Attendance	3.07	2	5.99	Not Significant
Frequency of Participation	15.72	4	9.49	Significant*
Preferred Mode of CNE	12.10	6	12.59	Not Significant

*** Significant at 0.05 level**

The table shows that there was a statistically significant association between the level of barriers and selected demographic variables such as age ($\chi^2 = 33.15$, $p < 0.05$) and frequency of participation in continuing nursing education programmes ($\chi^2 = 15.72$, $p < 0.05$). However, no significant association was found with gender, professional qualification, years of experience, workplace, marital status, previous CNE attendance, or preferred mode of continuing nursing education ($p > 0.05$).

SECTION E: ASSOCIATION (FACILITATORS)**Table 4.5: Association between Level of Facilitators and Selected Demographic Variables (N = 100)**

Demographic Variable	χ^2 Value	df	Table Value	Result
Age	8.18	6	12.59	Not Significant
Gender	4.06	2	5.99	Not Significant
Professional Qualification	19.76	6	12.59	Significant*
Years of Experience	12.98	6	12.59	Significant*
Workplace	2.40	2	5.99	Not Significant
Marital Status	0.81	4	9.49	Not Significant
Previous CNE Attendance	12.65	2	5.99	Significant*
Frequency of Participation	8.45	4	9.49	Not Significant
Preferred Mode of CNE	21.34	6	12.59	Significant*

* Significant at 0.05 level

The table shows that there was a statistically significant association between the level of facilitators and selected demographic variables such as professional qualification ($\chi^2 = 19.76$, $p < 0.05$), years of experience ($\chi^2 = 12.98$, $p < 0.05$), previous CNE attendance ($\chi^2 = 12.65$, $p < 0.05$), and preferred mode of continuing nursing education ($\chi^2 = 21.34$, $p < 0.05$). However, no significant association was found with age, gender, workplace, marital status, or frequency of participation ($p > 0.05$).

Overall Findings

The findings of the study indicate that a majority of nurses experienced a high level of barriers in continuing nursing education, primarily due to workload, time constraints, and organizational factors. At the same time, a high level of facilitators was observed, with motivation, career advancement, and institutional support playing a significant role in encouraging participation.

Statistical analysis revealed that age and frequency of participation were significantly associated with the level of barriers, while professional qualification, years of experience, previous CNE attendance, and preferred mode of learning were significantly associated with the level of facilitators. These findings highlight the combined influence of individual and organizational factors on nurses' participation in continuing nursing education.

Discussion

The present study was conducted to assess the barriers and facilitators influencing nurses' participation in continuing nursing education programmes. The findings of the study revealed that a majority of nurses experienced a high level of barriers, with workload, time constraints, and lack of organizational support emerging as the most significant factors. These findings are consistent with previous studies, which have identified organizational and work-related constraints as the primary challenges limiting nurses' participation in continuing education programmes.

The analysis of personal barriers indicated that lack of self-motivation, time constraints, and domestic responsibilities were the major factors affecting participation. Similar findings have been reported in earlier studies, where personal commitments and lack of motivation were identified as key deterrents to continuing professional development. Interpersonal barriers, particularly lack of support from co-workers and negative experiences with previous educational programmes, also contributed to reduced participation. This aligns with existing literature emphasizing the importance of supportive professional environments in promoting continuing education.

Structural barriers were found to play a dominant role, with factors such as work commitments, lack of relevant programmes, and limited accessibility significantly affecting participation. These findings are in agreement with studies that highlight institutional and systemic challenges as major barriers to continuing nursing education.

On the other hand, the study revealed that a majority of nurses perceived a high level of facilitators. Personal facilitators such as desire for career progression and self-motivation were identified as strong motivating factors. Interpersonal facilitators, including mentorship and encouragement from family members, further supported participation. Structural facilitators, particularly availability of well-structured

programmes and flexible scheduling, also contributed positively. These findings are consistent with previous research indicating that both intrinsic motivation and organizational support play a crucial role in enhancing participation in continuing education.

The study also found statistically significant associations between selected demographic variables and levels of barriers and facilitators. Age and frequency of participation were significantly associated with barriers, while professional qualification, years of experience, previous continuing nursing education attendance, and preferred mode of learning were significantly associated with facilitators. These findings suggest that both individual characteristics and organizational factors influence participation in continuing nursing education.

Overall, the findings of the study highlight that while nurses recognize the importance of continuing nursing education, their participation is influenced by a combination of personal, interpersonal, and structural factors. Addressing these barriers and strengthening facilitating factors is essential for improving participation and promoting lifelong learning among nurses.

Conclusion

The present study concludes that nurses face significant barriers in participating in continuing nursing education, primarily related to workload, time constraints, and organizational factors. At the same time, facilitators such as self-motivation, career advancement, and institutional support play a crucial role in encouraging participation.

The findings highlight that both individual and organizational factors influence engagement in continuing nursing education. Addressing these barriers and strengthening facilitating factors can enhance nurses' participation in educational programmes, thereby improving professional competence and the quality of patient care.

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REFERENCES

- [1] Basavanthappa, B. T. 2009. *Essentials of Nursing Research*. 1st ed. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd.
- [2] Madalla, J., Chiejina, N. E. 2023. Assessment of continuing education programme among practicing nurses in Bauchi State. *African Journal of Health, Nursing and Midwifery*. 6(2):123-138.
- [3] Macaden, L., Washington, M. 2017. Continuing professional development: Needs, facilitators, and barriers of registered nurses in India in rural and remote settings. *Nurse Education Today*. 49:45-50.
- [4] Shahhosseini, Z., Hamzehgardeshi, Z. 2015. The Facilitators and Barriers to Nurses' Participation in Continuing Education Programs: A Mixed Method Explanatory Sequential Study. *Global Journal of Health Science*. 7(3):184-193.
- [5] Shehata, D. M., Fakhry, S. F., Abdelghaafar, G. 2022. Factors Influencing Staff Nurses' Participation in Continuing Professional Development Programs. *Egyptian Journal of Health Care*. 13(3):912-922.
- [6] Shinde, M., Potdar, N. 2015. Barriers to participation in continuing nursing education programmes among registered nurses in Maharashtra. *International Journal of Scientific Research*. 4(7):1773-1776.
- [7] Subba, H. K., Poudyal, S., Subba, R., Rai, G. D. 2023. Awareness, Attitude, Facilitators, and Barriers of Continuing Professional Development among Nurses Working in Tertiary Care Hospitals of Chitwan. *Journal of College of Medical Sciences-Nepal*. 19(2):210-218.
- [8] Yee, B.-L., Tan, W.-L., Nachiappen, S. 2022. Factors affecting participation of registered nurses in continuing nursing education among selected private hospital in Penang, Malaysia. *The Malaysian Journal of Nursing*. 14(2):82-89.
- [9] Eslamian, J., Moeini, M., Soleimani, M. 2015. Challenges in nursing continuing education: A qualitative study. *Iranian Journal of Nursing and Midwifery Research*. 20(3):378-386.

- [10] Muliira, J. K., Etyang, C., Muliira, R. S., Kizza, I. B. 2012. Nurses' orientation toward lifelong learning: A case study of Uganda's national hospital. *The Journal of Continuing Education in Nursing*. 43(2):90-96.
- [11] Baloyi, O. B., Jarvis, M. A. 2020. Continuing professional development status in the World Health Organisation, Afro-region member states. *International Journal of Africa Nursing Sciences*. 13:100258.
- [12] Sajjadnia, Z., Sadeghi, A., Kavosi, Z., Zamani, M., Ravangard, R. 2015. Factors affecting the nurse's motivation for participating in the in-service training courses: A case study. *Journal of Health Management Informatics*. 2(1):21-26.
- [13] Gould, D., Drey, N., Berridge, E.-J. 2007. Nurses' experiences of continuing professional development. *Nurse Education Today*. 27(6):602-609.
- [14] Hegney, D., Tuckett, A., Parker, D., Eley, R. 2010. Access to and support for continuing professional education amongst Queensland nurses: 2004 and 2007. *Nurse Education Today*. 30(2):142-149.
- [15] Penz, K., D'Arcy, C., Stewart, N., Kosteniuk, J., Morgan, D., Smith, B. 2007. Barriers to participation in continuing education activities among rural and remote nurses. *The Journal of Continuing Education in Nursing*. 38(2):58-66.
- [16] Osei, S. A., Boahemaa, A. F., Peparah, W. K., Marfo-Kusi, A. A., Pinamang, B. N. 2019. Continuous professional development on job performance of registered nurses in Ghana. *Abstract Proceedings International Scholars Conference*. 7(1):116-128.
- [17] Mamba, W. M., Dluclu, M. S. 2025. Exploring barriers to continuing nursing education among nurses: A descriptive qualitative study. *Integrative Journal of Nursing and Medicine*. 6(1):1-7.
- [18] Macaden, L., Washington, M., Smith, A., Thooya, V., Selvam, S. P., George, N., et al. 2017. Continuing professional development: Needs, facilitators, and barriers of registered nurses in India in rural and remote settings—Findings from a cross-sectional survey. *Open Journal of Nursing*. 7:930-948.
- [19] Newaka, E., Pretorius, L., Josua, L. M. 2022. Re-thinking factors influencing registered nurses' compliance to continuing professional development requirements at a selected hospital in Oshana Region, Namibia. *Creative Education*. 13:3889-3903.

