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An Assessment of the Impact of Faculty Development Programs on Nursing Education

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Abstract: Faculty development is essential for improving teaching quality, curriculum effectiveness, and professional competence in nursing education, particularly in contexts facing workforce shortages, limited training opportunities, and resource constraints. This study aimed to assess the role of faculty development programs in enhancing nursing education in Nepal. A quantitative cross-sectional study was conducted among 422 bachelor-level nursing educators from purposively selected nursing colleges in Kathmandu Valley, Nepal, using a structured self-administered questionnaire. Participants were selected through simple random sampling of educators. Data were collected via Kobo Toolbox and analyzed using SPSS with descriptive statistics, chi-square tests, and logistic regression, with statistical significance set at $p < 0.05$. Findings showed that faculty development programs (FDPs) in nursing education were predominantly offered by private institutions (98.8%). Educators widely adopted learner-centered strategies, particularly community-based clinical practice (mean = 8.00) and simulation (mean = 7.63). FDPs significantly enhanced professional growth, especially leadership (mean = 8.14), mentoring (mean = 8.13), and clinical supervision (mean = 7.68). Strong positive correlations were found between FDPs and teaching strategies, curriculum development, leadership, and graduate attributes ($r = 0.83–0.93$, $p < 0.01$). Therefore, faculty development programs are essential for improving teaching quality and professional capacity in nursing education in Nepal. Sustained, contextually relevant FDPs are needed to strengthen faculty capacity and educational outcomes.

Keywords: Clinical practice; Curriculum; Effectiveness; Professional growth; Teaching quality.

Declaration: There is no conflict of Interest, and the research was conducted by adhering to all research ethics.[1]

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Introduction

Faculty development is increasingly recognized as a key driver of institutional growth and educational reform, particularly within higher education. Well-designed faculty development initiatives strengthen educators' pedagogical competence, foster reflective teaching practices, and support curriculum improvement, ultimately enhancing student learning outcomes (Steinert, 2020). To function effectively beyond their subject expertise, faculty members must continuously develop their teaching skills and professional attitudes using evidence-based approaches to teaching and learning (Frenk et al., 2022). Contemporary faculty development focuses on improving knowledge of instructional strategies, curriculum planning, and learner assessment while creating opportunities for critical reflection and professional growth (Munna & Kalam, 2021). In the context of nursing education, this process is especially vital, as nurse educators are central to preparing future nurses to respond to complex and evolving healthcare challenges through innovative and student-centered teaching practices (Gcawu & van Rooyen, 2022).

However, nursing education in Nepal is confronted with multiple structural and professional challenges, including poor instructional quality, heavy workloads, and limited in-service training opportunities, shortages of qualified educators, low wages, job insecurity, and workforce migration resulting in brain drain. Additional pressures arising from globalization and privatization have further strained nursing institutions, while inadequate human resources continue to restrict the provision of quality technical training in both public and private sectors (Shrestha et al., 2020). These persistent issues point to significant gaps in faculty preparation and ongoing professional support within the nursing education system. In this context, systematic faculty development programs may serve as a critical strategy for strengthening teaching capacity and improving educational quality. Therefore, this study aims to assess the role of faculty development programs in enhancing nursing education in Nepal.

Methodology

This study adopted a quantitative cross-sectional design to examine the role of faculty development programs in nursing education in Nepal. The study was conducted in selected nursing colleges within Kathmandu Valley and involved nursing educators teaching at the bachelor level. Data were collected using a structured, self-administered questionnaire. Nursing institutions were selected purposively, followed by simple random sampling of participants. A total sample size of 422 nursing educators was calculated using Cochran's formula, including a 10% allowance for non-response. Data were collected using Kobo Toolbox and analyzed using SPSS through descriptive statistics, chi-square tests, and logistic regression, with statistical significance set at $p < 0.05$. Ethical approval was obtained from relevant institutions, informed consent was secured from all participants, and confidentiality was strictly maintained. The study acknowledges limitations related to its cross-sectional design, reliance on self-reported data, and limited generalizability beyond Kathmandu Valley.

Result and Discussion

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Table 1 Socio-demographic characteristics of the respondents

Demographic Variables		Frequency (N)	Percent (%)
Age	20-30	23	5.5
	31-40	142	33.6
	41-50	201	47.6
	51-60	56	13.3
Gender	Female	422	100
Education	Graduate	126	29.9
	Post Graduate	293	69.4
	Ph.D.	3	0.7
Academic rank	Tutor	53	12.6
	Senior Tutor	136	32.2
	Assistant Professor	204	48.3
	Associate Professor	22	5.2
	Professor	7	1.7
Teaching activities	Tutorial	83	19.7
	Lecture	325	77.0
	Clinical	14	3.3
Employment status	Full-Time	384	91.0
	Part-time	38	9.0
Monthly income	Less than 20 Thousand	34	8.1
	20-50 Thousand	342	81.0
	50 Thousand-1 Lakhs	46	10.9
Teaching experience	Less than 5 years	38	9.0
	5-10 years	101	23.9
	11-15 years	74	17.5
	Above 15 years	209	49.5

Table 1 summarizes the demographic profile of the participants. Most respondents were aged 41–50 years (47.6%), followed by 31–40 years (33.6%). All participants were female. The majority held postgraduate qualifications (69.4%), and nearly half were Assistant Professors (48.3%). Teaching activities were mainly lecture-based (77%), and most participants were employed full-time (91%). The largest proportion earned a monthly income of 20–50 thousand (81%). Nearly half had more than 15 years of teaching experience (49.5%), indicating a highly experienced academic workforce

Table 2 Types and duration of faculty development programs in nursing education

General Information of Faculty Development Program (FDP)	Frequency (N)	Percent (%)

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Type of institution	Government	5	1.2
	Private	417	98.8
Faculty affiliation	PCL Nursing	339	80.3
	PBN/BSC. Nursing	82	19.4
	Masters in Nursing	1	0.2
Minimum qualification required to be a teaching staff member in the faculty	Graduate	236	55.9
	Post Graduate	185	43.8
	Ph.D.	1	0.2
Supervisors of students in the clinical/hospital/community setting	Faculty teaching staff	415	98.3
	Hospital staff	7	1.7
Minimum qualification required to supervise students in the clinical setting	Graduate	263	62.3
	Post Graduate	159	37.7
Percentage of the faculty dedicated to clinical teaching in a clinical setting	<10%	8	1.9
	10-30%	89	21.1
	30-60%	246	58.3
	60-90%	79	18.7

Table 2 shows that most faculty development programs are conducted in private institutions (98.8%), with faculty mainly affiliated with PCL Nursing programs. Most educators hold graduate (55.9%) or postgraduate (43.8%) qualifications, indicating a predominance of mid-level academic credentials. Clinical supervision is largely faculty-led (98.3%), with minimal involvement from hospital staff. The minimum qualification for supervision is primarily a graduate degree, and most faculty spend 30–60% of their time in clinical teaching. Overall, the findings highlight strong faculty involvement in clinical supervision despite limited higher-level qualifications.

Table 2 Teaching strategies used by nursing educators

Variables		3	4	5	6	7	8	9	10	Mean	S.D.
Self-directed learning	N	26	22	85	80	94	40	39	36	6.54	1.865
	%	6.2	5.2	20.1	19.0	22.3	9.5	9.2	8.5		
E-learning and/or new technologies	N	7	16	71	93	89	65	51	30	6.87	1.664
	%	1.7	3.8	16.8	22.0	21.1	15.4	12.1	7.1		
Supportive learning environment for students	N	8	20	53	60	112	60	68	41	7.14	1.738
	%	1.9	4.7	12.6	14.2	26.5	14.2	16.1	9.7		
Active, participatory learning methods (eg. discussions, games, role plays)	N	3	11	40	69	93	79	93	34	7.41	1.588
	%	0.7	2.6	9.5	16.4	22.0	18.7	22.0	8.1		
	N	1	5	46	63	76	91	73	67	7.63	1.637

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Variables		3	4	5	6	7	8	9	10	Mean	S.D.
Learning through simulation (eg Resusci Annie)	%	0.2	1.2	10.9	14.9	18.0	21.6	17.3	15.9		
Collaborative, team-based learning (eg. group work, study teams)	N		14	31	73	80	97	72	55	7.54	1.601
	%		3.3	7.3	17.3	19.0	23.0	17.1	13.0		
Inter-professional collaborative Learning with students from different faculties/schools.	N	6	11	44	60	96	70	70	65	7.47	1.738
	%	1.4	2.6	10.4	14.2	22.7	16.6	16.6	15.4		
Teaching and learning techniques based on recent research findings	N	3	19	38	53	45	65	90	109	7.89	1.887
	%	0.7	4.5	9.0	12.6	10.7	15.4	21.3	25.8		
Lectures - face to face	N	10	1	39	46	65	56	110	95	7.93	1.793
	%	2.4	0.2	9.2	10.9	15.4	13.3	26.1	22.5		
Case-studies or case-based methods	N	23	25	45	33	51	62	76	107	7.58	2.176
	%	5.5	5.9	10.7	7.8	12.1	14.7	18.0	25.4		
Clinical reasoning methods	N	2	21	80	67	74	65	86	27	7.05	1.729
	%	0.5	5.0	19.0	15.9	17.5	15.4	20.4	6.4		
Clinical learning laboratories	N	14	19	51	58	75	66	66	73	7.34	1.946
	%	3.3	4.5	12.1	13.7	17.8	15.6	15.6	17.3		
Clinical rotations in clinical settings	N	18	17	32	71	73	82	82	47	7.31	1.845
	%	4.3	4.0	7.6	16.8	17.3	19.4	19.4	11.1		
Clinical public health practice in community settings	N	12	17	23	42	47	63	106	112	8.00	1.918
	%	2.8	4.0	5.5	10.0	11.1	14.9	25.1	26.5		

Note: 1 - Never, 2 - Very rarely, 3 - Rarely, 4 - Occasionally, 5 - Sometimes, 6 - Often, 7 - Frequently, 8 - Very frequently, 9 - Almost always, 10 – Always

Table 3 Potential benefits of faculty development programs on the professional growth of nursing educators

Variables		2	3	4	5	6	7	8	9	10	Mean	S.D.
Developing skills in school	N		26	24	81	70	84	57	39	41	6.64	1.922
	%		6.2	5.7	19.2	16.6	19.9	13.5	9.2	9.7		

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Variables		2	3	4	5	6	7	8	9	10	Mean	S.D.
administration, budgetary preparation, overall management												
Developing and writing curricula	N			24	67	76	85	79	55	36	7.04	1.676
	%			5.7	15.9	18.0	20.1	18.7	13.0	8.5		
Understanding copyright issues and implications for online learning	N		2	15	35	83	96	82	74	35	7.31	1.574
	%		0.5	3.6	8.3	19.7	22.7	19.4	17.5	8.3		
Team teaching	N		2	12	39	86	92	78	75	38	7.32	1.586
	%		0.5	2.8	9.2	20.4	21.8	18.5	17.8	9.0		
Running group learning activities[2]—role p	N		9	13	43	55	99	84	86	33	7.33	1.665
	%		2.1	3.1	10.2	13.0	23.5	19.9	20.4	7.8		
Promoting and supporting student learning, inquiry and research.	N		5	15	51	77	77	83	47	67	7.32	1.776
	%		1.2	3.6	12.1	18.2	18.2	19.7	11.1	15.9		
Remaining clinically current	N			5	51	81	72	54	88	71	7.58	1.711
	%			1.2	12.1	19.2	17.1	12.8	20.9	16.8		
Demonstrating and facilitating clinical skills	N			5	65	72	88	50	91	51	7.40	1.676
	%			1.2	15.4	17.1	20.9	11.8	21.6	12.1		
Selecting and preparing of clinical instructors/preceptor	N			11	45	86	62	65	104	49	7.50	1.675
	%			2.6	10.7	20.4	14.7	15.4	24.6	11.6		
Coordinating and reporting clinical practice	N		5	9	51	38	83	69	104	63	7.66	1.737
	%		1.2	2.1	12.1	9.0	19.7	16.4	24.6	14.9		
Conducting clinical sessions, monitoring student progress	N		1	15	38	63	51	101	86	67	7.68	1.702
	%		0.2	3.6	9.0	14.9	12.1	23.9	20.4	15.9		
	N			8	57	58	65	96	98	40	7.51	1.613

[2] Note on Activities: Role plays, case studies, brainstorming sessions, discussions, concept mapping, clinical simulations

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Variables		2	3	4	5	6	7	8	9	10	Mean	S.D.
Designing valid, reliable and effective assessments	%			1.9	13.5	13.7	15.4	22.7	23.2	9.5		
Developing simulated practical examinations, scoring, and applying results to improve performance	N			11	53	72	78	79	99	30	7.37	1.594
	%			2.6	12.6	17.1	18.5	18.7	23.5	7.1		
Using technology to enhance learning, including preparing and using audiovisual materials	N			4	52	94	81	54	70	67	7.44	1.684
	%			0.9	12.3	22.3	19.2	12.8	16.6	15.9		
Promoting ethical, professional standards in students	N		3	1	59	65	79	66	80	69	7.56	1.712
	%		0.7	0.2	14.0	15.4	18.7	15.6	19.0	16.4		
Developing teaching portfolios	N			14	36	65	67	75	104	61	7.68	1.674
	%			3.3	8.5	15.4	15.9	17.8	24.6	14.5		
Understanding student learning styles and tailoring teaching methods	N			11	68	41	67	78	74	83	7.63	1.802
	%			2.6	16.1	9.7	15.9	18.5	17.5	19.7		
Writing grant proposals	N			1	49	61	59	61	105	86	7.87	1.690
	%			0.2	11.6	14.5	14.0	14.5	24.9	20.4		
Mentoring for new faculty staff	N			10	26	55	41	80	95	115	8.13	1.690
	%			2.4	6.2	13.0	9.7	19.0	22.5	27.3		
Monitoring, evaluating and revising educational curricula,	N	7	18	8	107	73	103	36	30	40	6.52	1.859
	%	1.7	4.3	1.9	25.4	17.3	24.4	8.5	7.1	9.5		

Variables		2	3	4	5	6	7	8	9	10	Mean	S.D.
teaching/learning programs												
Addressing staff shortages	N		10	38	33	74	76	87	71	33	7.08	1.806
	%		2.4	9.0	7.8	17.5	18.0	20.6	16.8	7.8		
Getting and keeping accreditation	N		5	8	58	43	64	56	116	72	7.71	1.811
	%		1.2	1.9	13.7	10.2	15.2	13.3	27.5	17.1		
Developing leadership skills	N		7	16	21	55	34	59	95	135	8.14	1.888
	%		1.7	3.8	5.0	13.0	8.1	14.0	22.5	32.0		

Note: 1 - Never, 2 - Very rarely, 3 - Rarely, 4 - Occasionally, 5 - Sometimes, 6 - Often, 7 - Frequently, 8 - Very frequently, 9 - Almost always, 10 – Always

Table 5 Correlation among faculty development programs and teaching strategies

Correlations							
Variables		Graduate Attributes	Program Outcomes	Curriculum Creation	Educational Leadership	Professional Practice	Teaching Strategies
Graduate Attributes	r	1	.832**	.878**	.882**	.886**	.891**
	p		0.0001	0.0001	0.0001	0.0001	0.0001
Program Outcomes	r	.832**	1	.834**	.844**	.839**	.837**
	p	0.0001		0.0001	0.0001	0.0001	0.0001
Curriculum Creation	r	.878**	.834**	1	.891**	.911**	.893**
	p	0.0001	0.0001		0.0001	0.0001	0.0001
Educational Leadership	r	.882**	.844**	.891**	1	.901**	.931**
	p	0.0001	0.0001	0.0001		0.0001	0.0001
Professional Practice	r	.886**	.839**	.911**	.901**	1	.908**
	p	0.0001	0.0001	0.0001	0.0001		0.0001
Teaching Strategies	r	.891**	.837**	.893**	.931**	.908**	1
	p	0.0001	0.0001	0.0001	0.0001	0.0001	
**. Correlation is significant at the 0.01 level (2-tailed).							

Discussion

The participants' demographic profile shows both convergence and divergence with existing literature. The predominantly female sample reflects disciplines such as education and health sciences, where women are more represented, although women globally account for only 40–55% of academic staff and remain underrepresented in senior ranks (Li et al., 2021; OECD, 2025). The concentration of participants aged 31–50 years aligns with broader trends indicating the dominance of mid-career academics (OECD, 2025). Likewise, the high levels of postgraduate qualifications and teaching experience are consistent with

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evidence that academic roles typically require advanced education and accumulate over time (Silaji & Mohammad, 2025).

The teaching strategies indicate a blend of learner-centered and traditional approaches consistent with nursing education literature. The use of self-directed learning, e-learning, and supportive learning environments aligns with evidence supporting blended methods for enhancing learner autonomy and engagement (Du et al., 2022). Active strategies such as discussion, simulation, role play, and collaborative learning are well established in improving critical thinking and clinical competence, while interactive and mixed lecture formats are shown to be more effective than lectures alone (Afrasiabifar & Asadolah, 2019; Zarifsanaiey et al., 2016). Overall, the findings reflect growing adoption of evidence-based, integrated teaching approaches in nursing education.

The findings indicate that Faculty Development Programs (FDPs) have a substantial positive impact on the professional development of nursing educators, consistent with existing literature. FDPs were perceived to enhance administrative, curriculum development, and student-centered teaching skills, reflecting evidence that structured professional development improves teaching competence and educational planning (Guraya & Chen, 2019). Improvements in collaboration, leadership, research skills, assessment design, mentoring, and ethical practice align with studies showing that FDPs foster innovation, scholarly engagement, and leadership capacity among faculty. Additionally, gains in clinical competence and supervision mirror literature emphasizing the role of FDPs in maintaining clinical relevance and improving clinical teaching quality (Minouei et al., 2025).

The strong positive correlations suggest that Faculty Development Programs (FDPs) are closely linked to improvements in teaching strategies, graduate attributes, curriculum development, leadership, and professional practice. This aligns with evidence that FDPs enhance teaching effectiveness, leadership capacity, and curriculum design across health professions education (Cotta et al., 2024; Kohan et al., 2023). Studies in nursing and allied health education similarly show that FDP participation strengthens pedagogical and clinical competencies, reinforcing the interconnected nature of faculty development and educational quality observed in this study (Adicheril, 2024; Afrasiabifar & Asadolah, 2019).

Conclusion

The study demonstrates that faculty development programs (FDPs) play a vital role in enhancing nursing education in Nepal. FDPs contribute to improved teaching strategies, curriculum development, leadership, professional growth, and clinical competence among nursing educators. The positive association between FDP participation and the adoption of innovative, learner-centered teaching approaches highlights their impact on educational quality and graduate outcomes. Strengthening and sustaining contextually relevant FDPs is essential for advancing faculty capacity and supporting the continued development of nursing education in Nepal. Overall, sustained investment in accessible, flexible, and institutionally supported FDPs alongside opportunities for advanced qualifications and holistic curriculum design is essential to strengthen faculty capacity and improve nursing education outcomes in Nepal.

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