



**Professional Development Opportunities and Nurse
Performance in Level 4 Public Hospitals in Uasin Gishu
County, Kenya**

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Professional Development Opportunities and Nurse Performance in Level 4 Public Hospitals in Uasin Gishu County, Kenya

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Abstract

Professional development is the key to maintaining nursing competence and supporting effective performance in the growingly complex hospital environment. The study focused on the correlation between professional development opportunities and level of nurse performance in the level four public hospitals of Uasin Gishu County, Kenya. Professional development opportunities were codified in terms of availability of training, access to continuing education, mentorship, equality in access to professional development activities and the alignment of professional development activities with professional performance. Nurse performance was measured in terms of efficiency, effectiveness, timeliness, responsiveness, achievement of expected targets and quality of care. This study used a positivist philosophy and explanatory cross sectional design. A sample of 157 respondents was selected from a target population of 258 respondents, which were purposively selected from fourteen Level 4 public hospitals. 145 questionnaires were returned, for a response rate of 92.4%. The descriptive statistics, Pearson correlation and simple linear regression analyses were used. Professional development opportunities ($M = 4.03$, $SD = 0.34$) and performance of nurses ($M = 4.02$, $SD = 0.35$) were found to be favourable. Professional development opportunities were positively and significantly correlated with nurse performance ($r = .624$, $p < .001$). The results of simple linear regression indicated that PD accounted for 38.9% of the variance in nurse performance ($R^2 = .389$, $B = .633$, $p < .001$), thus the null hypothesis was rejected. The study findings indicate that professional development in the form of structured and equitable opportunities is a key organizational context factor that is related to improved nurse performance. Continuing professional development, mentorship and equal access to learning opportunities should be ingrained in public hospitals as a standard practice and development activities should be linked with clinical and career needs.

Keywords: professional development opportunities, nurse performance, continuing professional development, mentorship, Level 4 public hospitals, Uasin Gishu County

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1.0 Introduction

Nurses are the largest occupational cohort in the world's health workforce and have been central to the continuity, safety and quality of health services (Griffiths & Dall'Ora, 2023). As of 2023, the world was home to around 29.8 million nurses (World Health Organization [WHO], 2025), up from 27.9 million in 2018 (WHO, 2025). While these figures have increased, there remain substantial regional disparities in the availability and distribution of nurses, with a higher proportion of nurses in countries with higher incomes (WHO, 2025). This inequity has highlighted the need for attention in policy to strengthen nursing workforce through nursing education, working conditions, career progression and nursing professional development. (WHO, 2026) Addressing these dimensions is crucial for strengthening the workforce capacity, access to essential health services, as well as for improving health systems resilience and effectiveness (WHO, 2025).

Professional development opportunities describe formal organisational opportunities for the nurses to develop, update and expand their knowledge, skills and professional competence to perform their role. These opportunities in nursing often encompass in-service training, continuing professional education, mentoring, opportunities for additional education and career advancement. Continuing professional development is not only relevant, but health technologies and treatment protocols are constantly changing, as are patient expectations for care. Thus, opportunities for the nurses to keep their knowledge up to date and enhance their practice skills throughout their working life are needed (Mlambo *et al.*, 2021; McKenna *et al.*, 2022). Hakvoort *et al.* (2022) also set that CPD is a life-long process by which nurses sustain their professional competence and improve their practice and advance their careers.

In health systems within a staffing crisis or where staffing is a challenge, the need for professional development is particularly apparent. According to a systematic review and meta-analysis of 2025, the pooled nurse retention was 53% and intention to stay was 57% in Sub Saharan Africa. The review found that strategies linked to enhanced nurse retention in the region include training, career/professional development, and supportive work environment and predictable HR management (Kiptulon *et al.*, 2025). While retention and performance are separate results, this evidence shows that professional growth opportunities are a significant aspect of the workplace environment in which nurses work and maintain their commitment to the care of others. The same finding was identified by Hakvoort *et al.* (2022) who concluded that the availability of resources, organizational support and opportunities for continued professional development affects nurses' professional development, satisfaction and retention.

Constraints on the health workforce in Kenya mirror the challenges faced in a devolved health system where county governments are expected to manage significant components of service delivery and health workforce. In 2021, the available health worker was estimated to have covered about 76.4% of the health worker needs across the occupations analysed leaving a gap of 59,966 health workers. The report highlighted trained health workers as important workforce priorities, both in terms of production and absorption and retention. It also emphasized the importance of

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building the health sector's workforce management and professional development (Ministry of Health, 2023). The Ministry of Health (2026), more recently, highlighted investment in the nursing education, Continuous Professional Development, technology, leadership and supportive working environment as being of importance in strengthening the nursing workforce in Kenya. The Nursing Council of Kenya (2025) has also called for the need to promote Continuous Professional Development (CPD) among nurses and midwives in Kenya.

Uasin Gishu County has also seen a substantial rise in the population, public health infrastructure, and hence the need to better utilize and develop the available health personnel. The Uasin Gishu County Statistical Abstract 2025 reflects the growth of the county health system, and offers an opportunity to consider the functioning of workforce practices within county public hospitals (County Government of Uasin Gishu, 2025). The public hospitals at Level 4 are especially significant due to their role in referral and in-patient services in this system. The job of nurses in these establishments is, therefore, complex, involving the ability to handle multiple responsibilities, the need to adapt to patient needs, and the need to seek further professional development. There is also evidence from the Kenyan context that suggests nurses' and midwives' knowledge and competencies need to be strengthened through continuous professional development to support clinical practice. (Odhiambo *et al.*, 2024)

Professional development can help to improve nurse performance on two interrelated fronts. First, training and continual education can reinforce the technical competence of the nurse and their clinical judgement and confidence in carrying out their duties. Second, mentoring and clear career pathways can help cement the message that work and development is valued in the organisation. The theoretical relationship between learning opportunities and clinical competence was reinforced by a systematic review of clinical nursing competence that found that education, training and professional development are among the factors influencing clinical competence (Almarwani & Alzahrani, 2023). Furthermore, Hagrass *et al.* (2023) found that an educational programme based on mentorship competencies effectively enhanced nurse mentors' competencies and performance, highlighting the importance of structured learning and mentorship in promoting professional performance. The study thus targeted specifically the professional development opportunities and nurse performance in Level 4 public hospitals of Uasin Gishu County, Kenya.

1.1 Statement of the Problem

Public hospitals depend substantially on nurses to deliver timely, effective and professionally competent healthcare, yet nursing practice takes place within persistent workforce, workload and retention pressures. In Sub Saharan Africa, limited opportunities for career and professional progression have been identified alongside poor working conditions and weak retention environments. This suggests that increasing the number of nurses alone may not adequately address the organizational conditions that influence how effectively nurses perform their responsibilities (Kiptulon *et al.*, 2025). Kenya's Health Labour Market Analysis similarly indicates that workforce shortages coexist with challenges relating to absorption, distribution, retention and continuing development of health professionals (Ministry of Health, 2023).

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Professional development is frequently promoted as an approach for maintaining professional competence and strengthening employee performance, but empirical evidence cannot automatically be transferred across contexts. International studies have examined relationships between career development, education, training and nurse performance, while other studies have concentrated on professional development needs, employee engagement or retention rather than direct measures of work performance (McKenna *et al.*, 2022; Roza *et al.*, 2022). This creates an outcome related evidence gap. Evidence demonstrating that professional development strengthens engagement or retention does not necessarily establish that it improves nurse performance.

Kenyan studies have also reported positive relationships between career development and employee outcomes within hospitals. However, much of the available evidence originates from national referral hospitals, Level 5 facilities or studies involving mixed groups of healthcare employees rather than nurses working in county managed Level 4 public hospitals. Njeri and Kepha (2021) examined employees at Aga Khan University Hospital, Gwadoya and Otsyulah (2023) focused on a Level 5 referral hospital, while Mashedi and Munene (2025) examined different medical practitioner cadres at Kenyatta National Hospital. Consequently, context specific evidence concerning the relationship between professional development opportunities and nurse performance in Level 4 public hospitals in Uasin Gishu County remained limited. The study addressed this gap by examining this relationship directly within the county public hospital setting.

1.2 Study Objective

The objective of the study was to determine the relationship between professional development opportunities and nurse performance in Level 4 public hospitals in Uasin Gishu County, Kenya.

1.3 Research Hypothesis

H01: Professional development opportunities have no statistically significant relationship with nurse performance in Level 4 public hospitals in Uasin Gishu County, Kenya.

2.0 Literature Review

2.1 Theoretical Review: Expectancy Theory

Expectancy Theory, advanced by Vroom (1964), explains work motivation through the interaction of expectancy, instrumentality and valence. Expectancy concerns an employee's belief that increased effort can result in effective performance, while instrumentality refers to the belief that performance will lead to valued organizational outcomes. Valence concerns the importance that an individual attaches to those outcomes. Motivation is therefore expected to be stronger when employees believe that they possess the capability to perform effectively, that their performance will produce meaningful outcomes and that those outcomes are personally valuable (Vroom, 1964; Van Eerde & Thierry, 1996).

Expectancy Theory provides a useful explanation for professional development because training, continuing education and mentorship can strengthen nurses' perceived capacity to perform demanding clinical responsibilities. When development opportunities improve knowledge, competence and confidence, they can strengthen expectancy by increasing nurses' belief that effort can be translated into successful task performance. Professional development may also possess instrumental value when nurses perceive learning opportunities as being connected to career growth, increased responsibility and professional recognition. In this way, professional development may influence both nurses' capabilities and their expectations concerning the outcomes associated with improved performance (Mlambo *et al.*, 2021).

The theory does not imply that the mere availability of training automatically improves employee performance. Development opportunities are more likely to support performance when they are relevant to actual work demands, accessible to employees and connected to capabilities that can be applied in practice. McKenna *et al.* (2022) demonstrated that professional development needs differ according to nurses' experience and work responsibilities. This indicates that development activities should respond to specific practice needs rather than being standardized without consideration of the work environment. Such an interpretation is consistent with Expectancy Theory because the motivational value of professional development depends partly on whether employees believe that the opportunity can improve their ability to perform effectively.

Expectancy Theory was therefore applied to explain the proposed relationship between professional development opportunities and nurse performance. The study expected structured access to training, continuing education and mentorship to be positively related to nurse performance because these practices may improve professional capability while reinforcing expectations of career and professional growth. The theory was applied as an explanatory lens rather than as evidence of causality. This application was appropriate because the cross sectional research design estimated statistical relationships between the study variables at one point in time rather than establishing experimental causal effects (Van Eerde & Thierry, 1996).

2.2 Empirical Review

Research on nursing professional development uses related concepts such as continuing professional development, career development, training and talent development. Mlambo *et al.* (2021), through a metasynthesis of nurses' continuing professional development, established that continuing learning is central to maintaining current nursing knowledge and professional skills. The study further showed that nurses' participation in continuing professional development is influenced by access, relevance and organizational support. These findings support the conceptualization of professional development as an organizational opportunity rather than solely as an individual employee responsibility.

Almarwani and Alzahrani (2023) systematically reviewed factors influencing the development of clinical nurses' competency and identified education and training, professional development, experience, clinical judgement, decision making and communication among the important factors.

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Their review associated professional development with the competencies required for safe and effective clinical practice, although it did not estimate a single direct effect on employee job performance. McKenna *et al.* (2022) similarly identified professional development needs among registered nurses and found that such needs varied according to professional experience. These findings reinforce the importance of ensuring that professional development opportunities respond to the actual demands and experiences of nursing practice.

Direct evidence relating professional development to performance has generally supported a positive relationship. Roza *et al.* (2022) examined 200 clinical nurses working in a regional general hospital in Indonesia and reported that career development had a direct positive effect on nurse performance. The study was relevant because it directly connected development opportunities to nursing performance rather than focusing solely on outcomes such as job satisfaction or employee retention. However, the institutional and national setting differed from county managed public hospitals in Kenya. This contextual difference limits the extent to which the findings can be directly generalized to nurses working in Level 4 public hospitals in Kenya.

Evidence from Africa further demonstrates that professional development practices operate within wider organizational and workforce conditions. Lerotholi and Bezuidenhout (2023) found that talent management practices were associated with work engagement among professional nurses working in public hospitals in South Africa. Van Biljoen Mokhotla and Makhene (2023) found that professional nurses at a regional hospital in Gauteng experienced barriers to career advancement associated with limited recognition of postgraduate qualifications, inadequate mentoring and weak succession planning. Although nurse performance was not the primary outcome in these studies, the findings demonstrate that professional growth opportunities, mentoring and career advancement structures constitute meaningful dimensions of nurses' organizational experiences.

Kenyan evidence also demonstrates the relevance of professional development, although the populations and outcomes examined vary across studies. Muchibi *et al.* (2022) reported that career development was positively related to employee engagement in the public health sector. Shikuku *et al.* (2022), in a study that included Uasin Gishu among five counties, showed that retention following emergency obstetric and newborn care training varied according to county and professional cadre. This finding demonstrated the importance of organizational deployment and retention arrangements following professional training. Although these studies establish the relevance of learning and career development within Kenya, they do not directly establish the relationship between professional development opportunities and nurse performance in Level 4 public hospitals.

Studies that measured employee performance more directly provide stronger comparative evidence for the present investigation. Njeri and Kepha (2021) found that career development had a positive and statistically significant effect on employee performance at Aga Khan University Hospital. Gwadoya and Otsyulah (2023) similarly reported a positive and statistically significant relationship between career development strategy and employee performance at Vihiga County

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Referral Hospital. More recently, Mashedi and Munene (2025) found a positive relationship between career development and the performance of medical practitioners at Kenyatta National Hospital. These studies provide evidence of a relationship between career development and employee performance within healthcare settings.

Despite this broad consistency, important empirical gaps remained. Several previous studies focused on mixed groups of healthcare employees, national referral hospitals or outcomes such as employee engagement, retention and professional development needs rather than direct nurse performance. Consequently, there was a contextual and outcome specific need to examine professional development opportunities among respondents in county managed Level 4 public hospitals and relate those opportunities directly to nurse performance. The present study addressed this gap by examining the relationship between professional development opportunities and nurse performance in Level 4 public hospitals in Uasin Gishu County.

3.0 Research Methodology

3.1 Research Philosophy and Design

The study adopted a positivist research philosophy because the two study constructs were measured using structured questionnaire items and the hypothesized relationship between them was tested statistically. An explanatory cross sectional research design was used to collect data during one defined period and examine the statistical relationship between professional development opportunities and nurse performance. The design was appropriate because the study examined naturally occurring organizational practices without manipulating the hospital work environment. Consequently, the resulting estimates were interpreted as statistical associations rather than experimental evidence of causation (Saunders *et al.*, 2019).

3.2 Target Population, Sample and Sampling Procedure

The target population comprised 258 respondents drawn from fourteen Level 4 public hospitals in Uasin Gishu County. The population consisted of 230 nurse practitioners, 14 hospital administrators and 14 human resource managers. Nurse practitioners constituted the largest group because nurse performance was the principal outcome of interest. Hospital administrators and human resource managers were also included because their organizational responsibilities provided relevant knowledge concerning professional development practices within the hospitals.

The minimum sample size was determined using Yamane's finite population formula at a 5% margin of error, producing a required sample of approximately 157 respondents. Stratified random sampling was used to ensure representation of the three respondent categories, with the sample allocated as 139 nurse practitioners, 9 hospital administrators and 9 human resource managers (Yamane, 1967).

Table 1:Target Population and Sample Distribution

Respondent category	Target population	Sample size
Hospital administrators	14	9
Human resource managers	14	9
Nurse practitioners	230	139
Total	258	157

Note. The sampling frame covered fourteen Level 4 public hospitals in Uasin Gishu County.

3.3 Research Instrument and Data Collection

Primary data were collected using a structured questionnaire. For the analysis reported in this paper, six items measured professional development opportunities and ten items measured nurse performance. The substantive items used a five point Likert type response format ranging from 1 for Strongly Disagree to 5 for Strongly Agree. Questionnaires were administered after the required institutional and regulatory approvals had been obtained, and completed instruments were checked for completeness before coding and analysis.

3.4 Operationalization of Variables

Professional development opportunities were operationalized through the availability of training, access to continuing education, mentorship, equitable access to development initiatives, alignment with professional growth and the perceived contribution of development activities to productivity. Nurse performance was operationalized through efficiency, workload management, effectiveness of care, adherence to professional standards, responsiveness, timeliness, contribution to service quality, achievement of performance targets, adaptability and performance under high workload conditions. Composite scores were generated from the relevant items for inferential analysis.

Table 2: Operationalization of Study Variables

Variable	Operational indicators	Measurement
Professional development opportunities	Training availability; continuing education; mentorship; equitable access; alignment with professional growth; perceived productivity benefit	Six item five point Likert type composite score
Nurse performance	Efficiency; workload management; care effectiveness; professional standards; responsiveness; timeliness; service quality; target achievement; adaptability; performance under workload	Ten item five point Likert type composite score

Note. Composite scores were treated as scale variables in the inferential analysis.

3.5 Data Analysis

Data were analyzed using descriptive and inferential statistics. Means and standard deviations summarized the two study constructs. Pearson product moment correlation assessed the direction, strength and statistical significance of the bivariate relationship between professional development opportunities and nurse performance, while simple linear regression estimated the extent to which professional development opportunities statistically predicted nurse performance. Statistical significance was evaluated at the 5% level. Because the design was cross sectional, the inferential estimates were interpreted as associations rather than evidence of temporal or causal effects.

3.6 Ethical Considerations

Research authorization was obtained from the National Commission for Science, Technology and Innovation together with permission from the Uasin Gishu County Government and participating hospital administrations. Participation was voluntary, respondents were informed of the academic purpose of the study, and questionnaires did not require direct personal identifiers. Completed instruments and electronic data were handled confidentially.

4.0 Findings and Discussion

4.1 Response Rate and Respondent Characteristics

A total of 157 questionnaires were administered and 145 usable questionnaires were returned, yielding a response rate of 92.4%. Of the 145 respondents, 129 (89.0%) were nurse practitioners, 8 (5.5%) were hospital administrators and 8 (5.5%) were human resource managers. Forty percent of respondents had between five and ten years of healthcare experience, 35.2% had less than five years and 24.8% had more than ten years. Half of the respondents (50.3%) had a bachelor's degree, while 24.8% held a certificate or diploma and 24.8% held a master's degree or higher. The profile therefore provided predominantly nursing based evidence while retaining limited administrative and human resource representation.

4.2 Descriptive Findings for Professional Development Opportunities

Respondents generally reported favourable professional development opportunities across the participating hospitals. Item means ranged from 4.00 to 4.05, with an aggregate mean of 4.03 and an aggregate standard deviation of 0.34. The highest mean scores related to access to continuing education and equitable access to development opportunities, while the mentorship item recorded the lowest mean at 4.00. The narrow range of standard deviations indicates relatively consistent perceptions across respondents.

Table 3: Descriptive Statistics for Professional Development Opportunities

Statement	Mean	SD
The hospital provides sufficient training programs to enhance professional skills.	4.01	0.31
Access to continuing education opportunities is readily available for staff development.	4.05	0.36

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Statement	Mean	SD
Mentorship programs support professional growth and performance improvement.	4.00	0.33
Mentorship initiatives align with personal and professional development goals.	4.03	0.34
Professional development programs are equitably accessible to nurses.	4.05	0.34
Participation in development initiatives improves job satisfaction and productivity.	4.03	0.35
Aggregate score	4.03	0.34

Note. N = 145. Response scale ranged from 1 = Strongly Disagree to 5 = Strongly Agree.

4.3 Descriptive Findings for Nurse Performance

Nurse performance was rated favourably, with item means ranging from 4.00 to 4.04 and an aggregate mean of 4.02 (SD = 0.35). Delivery of effective nursing care and prompt response to patient needs were the highest rated items, while meeting professional standards recorded the lowest mean. The findings reflect respondents' perceptions of nurse performance rather than independently verified patient outcomes or clinical audit indicators.

Table 4: Descriptive Statistics for Nurse Performance

Performance statement	Mean	SD
Complete assigned nursing duties efficiently within scheduled timeframes.	4.03	0.42
Manage workload effectively during duty hours.	4.01	0.36
Consistently deliver effective nursing care to patients.	4.04	0.41
Nursing interventions meet required professional standards.	4.00	0.44
Respond promptly to patient needs and requests.	4.04	0.29
Provide nursing services in a timely and organized manner.	4.01	0.31
Work contributes positively to overall service quality.	4.01	0.31
Consistently achieve expected performance targets.	4.01	0.34
Adapt efficiently to changing patient care demands.	4.01	0.32
Perform duties effectively under high workload conditions.	4.02	0.32
Aggregate score	4.02	0.35

Note. N = 145. Performance scores reflect respondent ratings of the measured nursing work behaviours.

4.4 Relationship Between Professional Development Opportunities and Nurse Performance

Pearson correlation analysis established a positive and statistically significant relationship between professional development opportunities and nurse performance, $r = .624$, $p < .001$. The null hypothesis was therefore rejected. The coefficient indicates that higher professional development scores were associated with higher nurse performance scores across the 145 valid cases.

Table 5: Pearson Correlation Results for Professional Development Opportunities and Nurse Performance

Statistic	Value
Pearson correlation, r	.624
Significance, p	$< .001$
Sample size, N	145
Hypothesis decision	Reject H_0

Note. $N = 145$. Statistical significance was evaluated at the 5% level.

4.5 Regression Analysis

A simple linear regression analysis was conducted to determine the extent to which professional development opportunities predicted nurse performance in Level 4 public hospitals in Uasin Gishu County, Kenya. Professional development opportunities constituted the predictor variable, while nurse performance constituted the dependent variable.

Table 6: Model Summary for Professional Development Opportunities and Nurse Performance

Model	R	R ²	Adjusted R ²	Standard Error of the Estimate
1	.624	.389	.385	.185

Note. Predictor: Professional Development Opportunities. Dependent variable: Nurse Performance.

Table 6 shows a positive relationship between professional development opportunities and nurse performance ($R = .624$). The coefficient of determination, $R^2 = .389$, indicates that professional development opportunities explained 38.9% of the observed variation in nurse performance among respondents in the selected Level 4 public hospitals. The adjusted R^2 of .385 was close to the unadjusted estimate, indicating little shrinkage in model fit. The remaining 61.1% of the variance was unexplained by this single predictor model.

Table 7: Analysis of Variance for the Regression Model

Source	Sum of Squares	df	Mean Square	F	p
Regression	3.129	1	3.129	91.103	< .001
Residual	4.911	143	.034		
Total	8.040	144			

Note. Dependent variable: Nurse Performance. Predictor: Professional Development Opportunities.

The analysis of variance presented in Table 7 showed that the regression model was statistically significant, $F(1, 143) = 91.103$, $p < .001$. Thus, professional development opportunities provided statistically significant explanatory information for nurse performance within the fitted simple linear regression model.

Table 8: Regression Coefficients for Professional Development Opportunities and Nurse Performance

Variable	B	SE	β	t	p
Constant	1.467	.268		5.476	< .001
Professional Development Opportunities	.633	.066	.624	9.545	< .001

Note. Dependent variable: Nurse Performance.

Table 8 shows that professional development opportunities were a positive and statistically significant predictor of nurse performance, $B = .633$, $SE = .066$, $\beta = .624$, $t = 9.545$, $p < .001$. The unstandardized coefficient indicates that a one unit increase in the professional development score was associated with an estimated 0.633 unit increase in the nurse performance score. The standardized coefficient ($\beta = .624$) indicates a positive predictive association between the two constructs.

The estimated regression equation was:

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$$\text{Nurse Performance} = 1.467 + 0.633(\text{Professional Development Opportunities})$$

The null hypothesis stated that professional development opportunities had no statistically significant relationship with nurse performance in Level 4 public hospitals in Uasin Gishu County, Kenya. Since $p < .001$, the null hypothesis was rejected. The study therefore established a statistically significant positive relationship between professional development opportunities and nurse performance.

4.6 Discussion of Findings

Simple linear regression indicated that professional development opportunities were a positive and statistically significant predictor of nurse performance in Level 4 public hospitals in Uasin Gishu County, $B = .633$, $p < .001$. Higher professional development scores were associated with higher nurse performance scores, and the model explained 38.9% of the observed variance in performance. This extends the correlational finding by quantifying the explanatory contribution of professional development within the fitted model, while the cross sectional design does not establish causality.

The findings support the argument that opportunities for continued learning can strengthen nurses' capacity to perform their professional responsibilities. Professional development exposes nurses to updated clinical knowledge, emerging healthcare procedures, new technologies and improved approaches to patient management. Hakvoort *et al.* (2022) demonstrated that organizational support, adequate resources, time allocation, role models and career stage influenced nurses' participation in continuing professional development. Their findings reinforce the present results by showing that professional growth is partly determined by organizational conditions that enable nurses to acquire and maintain competencies required for effective practice.

The results are also consistent with Roza *et al.* (2022), who established a positive relationship between career development and nurse performance among clinical nurses. Similarly, Setyanto *et al.* (2023) reported that education and training contributed significantly to nursing performance. These findings suggest that professional development may improve performance by increasing nurses' technical competence, confidence, adaptability and capacity to undertake increasingly complex clinical responsibilities. The significant coefficient obtained in the present study therefore provides further empirical evidence that structured professional development is positively associated with stronger nursing performance.

Within the Kenyan healthcare context, the findings correspond with Gwadoya and Otsyulah (2023), who found a positive relationship between career development strategies and employee performance in a county referral hospital. Mashedi and Munene (2025) similarly established that career development formed an important component of reward practices associated with employee performance within a Kenyan hospital setting. The current findings extend this evidence specifically to nurses working in Level 4 public hospitals in Uasin Gishu County, where professional development opportunities may be especially important because nurses routinely

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encounter changing patient needs, workload demands and evolving standards of healthcare delivery.

The findings further suggest that professional development should extend beyond occasional attendance at training programmes. Opportunities for continuing professional development, mentoring, structured learning, professional advancement and practical skills enhancement need to be embedded within hospital human resource systems. Van Biljoen Mokhotla and Makhene (2023) observed that inadequate mentoring, weak succession planning and limited recognition of additional qualifications could constrain professional progression among nurses. Consequently, the performance benefits associated with professional development are likely to be strengthened where hospitals provide accessible, relevant and systematically supported opportunities for nurses to translate acquired knowledge and competencies into workplace practice.

5.0 Conclusion

The study concludes that professional development opportunities were positively and statistically associated with nurse performance in Level 4 public hospitals in Uasin Gishu County, Kenya. In the simple regression model, professional development opportunities explained 38.9% of the observed variation in nurse performance, with a positive and statistically significant coefficient, $B = .633$, $\beta = .624$, $p < .001$. These results indicate that higher professional development scores were associated with higher nurse performance scores; they should not be interpreted as evidence of causality because the data were cross sectional.

The findings support sustained organizational attention to continuous professional learning, training, mentoring, skills enhancement and career growth. Professional development represents more than an employee benefit because it can strengthen competencies relevant to efficient, timely, effective and quality nursing services. Accordingly, county public hospitals should maintain structured and accessible development opportunities while monitoring whether participation is followed by measurable improvements in workplace practice.

6.0 Recommendations

Level 4 public hospital management in Uasin Gishu County should institutionalize structured professional development programmes for nurses rather than relying predominantly on irregular or externally initiated training opportunities. Hospital management should conduct periodic training needs assessments and use the results to develop professional development plans aligned with emerging clinical requirements, service delivery challenges, technological developments and individual competency gaps.

Hospital administrators and human resource managers should strengthen access to continuing professional development, mentorship, coaching, professional seminars, workshops and relevant further education. Clear and equitable criteria should be established for allocating development opportunities so that participation is based on professional requirements and demonstrated needs.

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Hospitals should also establish mechanisms through which nurses who acquire additional knowledge and skills can apply those competencies in their work responsibilities.

County health authorities should provide adequate budgetary and institutional support for continuous nursing development across Level 4 public hospitals. Professional development should be incorporated into human resource planning, performance management and workforce capacity building rather than being treated as an occasional activity. Management should additionally monitor the outcomes of professional development programmes by assessing changes in staff competencies and nursing performance after training.

Finally, future studies may examine other organizational and individual factors accounting for the remaining variation in nurse performance that was not explained by professional development opportunities. Longitudinal research could also establish how sustained participation in professional development programmes influences nurse performance over time.

References

- Almarwani, A. M., & Alzahrani, N. S. (2023). Factors affecting the development of clinical nurses' competency: A systematic review. *Nurse Education in Practice*, 73, 103826.
- County Government of Uasin Gishu. (2025). *Uasin Gishu County Statistical Abstract 2025*. County Government of Uasin Gishu.
- Gwadoya, W. K., & Otsyulah, J. (2023). The influence of career development strategy on employee performance of Level Five hospitals in Kenya: The case of Vihiga County Referral Hospital. *European Journal of Human Resource Management Studies*, 7(1), 212-224.
- Kiptulon, E. K., Elmadani, M., Onchuru, M. P., Szöllősi, A., Zrínyi, M., & Ujváriné Siket, A. (2025). Retaining nurses in Sub Saharan Africa: A systematic review and meta analysis. *International Journal of Nursing Sciences*, 12(3), 301-309.
- Lerotholi, M., & Bezuidenhout, A. (2023). Nursing profession in Africa: A study on work engagement and talent management practices in South Africa. *Public Health Challenges*, 2(2), e87.
- Mashedi, F. M., & Munene, L. (2025). Reward management practices and medical practitioners' performance in Kenyatta National Hospital, Nairobi City, Kenya. *The Strategic Journal of Business & Change Management*, 12(3), 628-649.
- McKenna, L., Sommers, C. L., Reisenhofer, S., Mambu, I. R., McCaughan, J., & Belihu, F. B. (2022). Professional development needs of registered nurses in Indonesia: A cross sectional study. *Nurse Education Today*, 119, 105543.
- Ministry of Health. (2023). *Health Labour Market Analysis for Kenya*. Ministry of Health, Kenya.
- Mlambo, M., Silén, C., & McGrath, C. (2021). Lifelong learning and nurses' continuing professional development, a metasynthesis of the literature. *BMC Nursing*, 20, 62.

<https://doi.org/10.53819/81018102t70118>

- Hagrass, H. M., Ibrahim, S. A. E. A., Anany, R. I. E. S., & El-Gazar, H. E. (2023). Effect of an educational program about mentorship competencies on nurse mentors' performance: A quasi-experimental study. *BMC Nursing*, 22, 429.
- Hakvoort, L., Dikken, J., Cramer-Kruit, J., Molendijk-van Nieuwenhuyzen, K., van der Schaaf, M., & Schuurmans, M. (2022). Factors that influence continuing professional development over a nursing career: A scoping review. *Nurse Education in Practice*, 65, 103481.
- Ministry of Health. (2026). *Kenya strengthens investment in nursing workforce to advance quality healthcare*. Government of Kenya.
- Nursing Council of Kenya. (2025). *A continuous professional development uptake model for nurses and midwives in Kenya* (Policy Brief No. 002/2025). Nursing Council of Kenya.
- Odhiambo, R. A., Marwa, I. N., & Gitonga, L. K. (2024). Effectiveness of training on uptake of continuous professional development among nurses and midwives in clinical practice: Meru County, Kenya. *International Journal of Professional Practice*, 12(5).
- World Health Organization. (2025). *State of the world's nursing 2025: Investing in education, jobs, leadership and service delivery*. World Health Organization.
- Muchibi, W. M., Mutua, S. M., & Juma, D. (2022). Influence of career development on employee engagement in the public health sector in Kenya. *International Academic Journal of Human Resource and Business Administration*, 4(1), 297-327.
- Griffiths, P., & Dall'Ora, C. (2023). Nurse staffing and patient safety in acute hospitals: Cassandra calls again? *BMJ Quality & Safety*, 32(5), 241–243.
- World Health Organization. (2026). *Nursing and midwifery*. World Health Organization.
- Njeri, W. J., & Kepha, O. (2021). Effect of career development on employee performance at the Aga Khan University Hospital. *Human Resource and Leadership*, 1(1), 17-24.
- Roza, N., Supriyati, Y., & Kadir. (2022). The effect of organizational culture, career development remuneration and job satisfaction on nurse performance in regional general hospital in Batam Embung Fatimah City. *International Journal of Human Capital Management*, 6(1), 38-53.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson.
- Shikuku, D. N., Nyaoke, I., Maina, O., Eyinda, M., Gichuru, S., Nyaga, L., Iman, F., Tallam, E., Wako, I., Bashir, I., Allott, H., & Ameh, C. (2022). The determinants of staff retention after Emergency Obstetrics and Newborn Care training in Kenya: A cross sectional study. *BMC Health Services Research*, 22, 872.
- Van Biljoen Mokhotla, C. L., & Makhene, A. (2023). Career advancement of professional nurses at a regional hospital in Gauteng. *Curationis*, 46(1), a2453.

<https://doi.org/10.53819/81018102t70118>

Van Eerde, W., & Thierry, H. (1996). Vroom's expectancy models and work related criteria: A meta analysis. *Journal of Applied Psychology*, 81(5), 575-586.

Vroom, V. H. (1964). *Work and motivation*. John Wiley & Sons.

Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper & Row.