



# Training and transfer of nursing knowledge at the University of Bamenda in Cameroon: A Chef's recipe for excellence

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## Abstract

Training and transfer of knowledge is a common phenomenon in apprenticeship professions. A problem could arise when the training does not encompass all the recipes. Transfer may be less effective where the recipes were not the same or may be incomplete. The relevance of this paper lies in the fact that exposure to all relevant recipes for training is a requirement for better transfer of nursing knowledge. The objectives were: to define a nurse, state the qualities of a good nurse, list what it takes to equip a good nurse, and to illustrate the outcomes of effective training and knowledge transfer through selected examples of successful nurses. Information was sought from personal experiences and some websites and peer-reviewed articles. It was observed that a nurse is one who has been trained and recognized in the country of training before there can be transfer of nursing knowledge. The roles and functions of nurses include technical and clinical judgement with strong ethical grounding. The recipe for training must include culture, weather, nutrients and ingredients. Examples of successful training and transfer of knowledge are outlined in the success stories of Terrence and Pride. The information can be used to inspire trainers on nursing knowledge transfer.

**Keywords:** nursing, training, knowledge transfer, Cameroon

## Résumé

**Formation et transfert des connaissances infirmières à l'Université de Bamenda au Cameroun : La recette d'un Chef pour l'excellence**

La formation et le transfert des connaissances sont des phénomènes courants dans les professions qui s'apprennent par l'apprentissage. Un problème peut survenir lorsque la formation ne couvre pas toutes les recettes. Le transfert peut être moins efficace lorsque les recettes ne sont pas les mêmes ou sont incomplètes. La pertinence de cet article réside dans le fait que l'exposition à toutes les recettes pertinentes pour la formation est une condition préalable à un meilleur transfert des connaissances infirmières. Les objectifs étaient les suivants : définir ce qu'est une infirmière, énoncer les qualités d'une bonne infirmière, énumérer les compétences requises pour être une bonne infirmière et décrire quelques exemples d'infirmières qui ont réussi grâce à une bonne formation et à un bon transfert de connaissances. Les informations ont été recueillies à partir d'expériences personnelles, de certains sites web et d'articles évalués par des pairs. Il a été observé qu'une infirmière est une personne qui a été formée et reconnue dans le pays où elle a suivi sa formation avant de pouvoir transférer ses connaissances en soins infirmiers. Les rôles et les fonctions des infirmières comprennent un jugement technique et clinique fondé sur des bases éthiques solides. La recette de la formation doit inclure la culture, le climat, les nutriments et les ingrédients. Des exemples de formation et de transfert de connaissances réussis sont présentés dans les réussites de Terrence et Pride. Ces informations peuvent être utilisées pour inspirer les formateurs en matière de transfert de connaissances infirmières.

**Mots clés:** soins infirmiers, formation, transfert de connaissances, Cameroun

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## 1 | INTRODUCTION

**N**ursing is an indispensable profession at the heart of healthcare systems worldwide, providing essential services that enhance health outcomes and sustain health equity. The process of nurturing and sustaining a competent nursing workforce hinges on effective training and knowledge transfer "[1,2]. Just as the culinary arts require precise recipes, tailored ingredients, and passionate chefs, nursing education demands thoughtfully designed curricula, skilled educators, and mentorship that adapts to local needs and global standards [3,4]. This commentary delves into the multifaceted process of nursing training, using culinary metaphors to illuminate the essential components of crafting competent, compassionate, and globally relevant nurses.

From a conventional perspective, a nurse is often defined simply as someone trained to care for the sick or injured, especially in a hospital setting[1]. This is the secular view, straightforward and grounded in the basic clinical roles we see nurses perform daily.

However, the professional and conceptual definition of a nurse goes deeper. A nurse is a highly trained and compassionate individual who provides holistic care to individuals, families, and communities. This care includes not just the treatment of illness, but also the promotion of health, the prevention of disease, and the support of patients in times of distress and recovery [1]. Nurses operate in multiple settings including hospitals, clinics, homes, schools, and even on battlefields. They offer physical, emotional, and psychological care, forming the backbone of most healthcare systems globally [5].

This paper was developed using a post-constructivist approach, with the overall goal of demonstrating how nursing knowledge is transferred through a carefully crafted "recipe" framework at The University of Bamenda [6]. The work was guided by four objectives: to define a nurse, to state the qualities of a good nurse, to list what it takes to equip a good nurse, and to illustrate the outcomes of effective training and knowledge transfer through selected examples of successful nurses.

In pursuing these objectives, the commentary

drew on both anecdotal knowledge from faculty experiences and literature-based evidence. Faculty reflections were particularly valuable in shaping the definition and professional identity of a nurse, while international frameworks such as those of the WHO and ICN provided additional conceptual grounding. Similarly, the qualities of a good nurse were explored through a blend of clinical teaching experience and peer-reviewed articles emphasizing technical skill, ethical grounding, and emotional intelligence.

The third objective; identifying what it takes to equip a good nurse, was addressed by presenting the curriculum and training approaches used at The University of Bamenda, including foundational sciences, clinical internships, simulation exercises, and complementary courses in leadership, research, and entrepreneurship. These were further supported by literature that justified the relevance of each "ingredient" in strengthening effective training and knowledge transfer. Finally, the fourth objective was addressed by documenting success stories of graduates who exemplify the outcomes of this educational model. These narratives were collected with the permission of the individuals concerned, and pseudonyms were used to ensure confidentiality.

### What does it take to be a good nurse?

Being a nurse is not just about knowledge. It is not merely about knowing how to take vital signs, administer injections, or dress wounds. A good nurse must embody a blend of technical skill, sharp clinical judgement, and strong ethical grounding [4,6]. But beyond these, a good nurse is also a person of deep empathy, patience, and resilience. Nurses must listen even when the words are unspoken, comfort even when there is no cure, and persist even when the situation is critical.

From the above, we can see that the nurse is a melting pot of knowledge, skills, morals, determination, empathy, passion, and so much more. The nurse is like a soup pot that receives various ingredients, seasons them through practice and perseverance, and ultimately produces something nourishing and life-saving.

### What does it take to make such an awesome human being called a nurse?

At the University of Bamenda, entrepreneurship

is considered a mindset, not just for those selling goods in the market or those running tech start-ups. This mindset sits at the core of all training delivered at the institution. One important group of professionals trained at this university are caterers and hotel managers. These people understand that a good meal is not just about food. It is about experience, nourishment, timing, and skill. This paper presents a carefully crafted recipe for making a good nurse.

Every good cook first picks a meal that is appropriate to the culture, the weather, and the nutrient needs of the people they are cooking for. One cannot serve cold salads in the rainy season of Bamenda and expect people to be satisfied. One cannot serve a Western diet in a rural African village and expect appreciation. One must know their people and their needs.

When the nursing programme at the University of Bamenda was started in 2011, maternal mortality was on the rise in Cameroon, estimated at 596 deaths per 100,000 live births [7]. Many more women were dying in labour, children were being orphaned at birth, and communities were losing pillars of strength. Therefore, it was thought wise to implement the WHO blended model of a double honours in Nursing and Midwifery for our degree programme [1]. This model emphasizes culturally responsive education that is adaptable to population needs. This model is not just about producing nurses. It is about producing professionals with the specific skills and mindset needed to tackle the unique health challenges facing our population.

Today, the University of Bamenda has trained over a thousand nurses and midwives, many of whom have chosen the path of midwifery and some even specialised in women's health and midwifery science. They now serve in hospitals, clinics, community health programs, and NGOs, contributing daily to safe pregnancy care, family planning, and improving overall maternal and child health. By 2020, Cameroon's maternal mortality ratio had reduced to approximately 467 deaths per 100,000 live births [7]. This was not by chance. It was by design, by foresight, by choosing the right meal for the needs of the country.

After deciding the meal one would like to cook, it is only wise to decide on which chefs and sous-chefs to bring into the kitchen. No chef works alone.

A kitchen requires steady hands, skilled hands, experienced hands. The nursing and midwifery faculty at The University of Bamenda is a selected cream of seasoned professionals in nursing and midwifery, who have prolific curriculum vitae filled with years of clinical care, leadership, and research excellence. They are not just lecturers. They are mentors, role models, and builders of future professionals.

While the number of permanent faculty is sufficient, the University's leadership has been intentional and strategic to identify and bring in additional nurse trainers as necessary. These professionals come in with passion and dedication, providing adequate teaching, mentoring, and research supervision to support students' holistic development.

### **How are good nurses equipped?**

The answer lies in the ingredients:

Every good meal has its main ingredients and then its garnishing. The main ingredients are what fill the pot. But the garnishing, that little sprinkle of 'jansang', the spray of curry powder on top, is what brings out the soul of the dish.

Every activity that must succeed must also be well planned. The nursing and midwifery department at The University of Bamenda has robust curricula that give strength to its programmes. For the double honours in nursing and midwifery, the curriculum that covers a wide spectrum, beginning with basic sciences like anatomy and physiology in the first year. These foundational courses help students understand the human body and its functions. In the second year, the focus shifts to medical and surgical nursing. Here, students dive deeper into disease processes, patient management, and clinical procedures. In the third year, they explore specialty care including pediatrics, mental health, and emergency response. The fourth year centres on maternal and child health, bringing together all the pieces into one final, holistic experience.

These are only the main ingredients. There is a lot of garnishing, courses that focus on morality, language power, entrepreneurship, leadership, discipline, and research. These subjects are not peripheral, they are central. They shape the students into leaders, innovators, and thinkers. The comprehensiveness of this curriculum makes

trainees ready for service in both the national and international markets even immediately after graduation, aligning with transformative education principles advocated by global nursing educators [3,4].

When one cooks a meal, they must pick the right complements to go with it. A pot of rice needs its stew. Eru needs its water fufu. The nursing and midwifery programmes at the University of Bamenda complement didactic teaching with copious amounts of tutorials, simulations, and internships in hospitals, health centres, and communities. These experiences take the theory from the classroom and anchor it in real life. They help to mold trainees, sharpen their practical skills, and ignite their compassion. Studies show that simulation enhances clinical decision-making, confidence, and preparedness [8]. Internships in hospitals and communities reinforce theory with practice.

Every good chef knows that different meals must be conserved and served under different conditions of temperature and texture. Some meals need to be served hot and fresh. Others, like 'eru' or 'nangtare', taste even better on the second day after a proper re-heat. This part of tempering the meal corresponds to "mentorship".

Mentorship in nursing can be understood in two ways. Conceptually, it is the process of nurturing, guiding, and supporting a less experienced individual by a more experienced one. It is a relationship built on trust, learning, and growth. Secularly, mentorship is a structured relationship in which a more knowledgeable professional offers direction, feedback, and encouragement to help another professional develop and excel. Mentorship, like the seasoning in a good recipe, brings out the full flavour of learning. Strong mentorship is linked to student satisfaction, retention, leadership development, and post-graduation success [9-12]. Structured mentorship helps learners explore career paths, develop research interests, and refine clinical skills [13,14]. While trainees are in training at The University of Bamenda, they are given opportunities to identify and demonstrate their areas of interest. Some are passionate about child health, others love research. Some discover their interest in mental health. The faculty are keen to identify these interests and help them develop through their seminar projects,

research projects, and internships. Faculty also identify practising professionals who can serve as mentors to students during training and even after graduation.

Opportunities are created such as conferences and workshops where students can learn content-specific knowledge about various domains of nursing and health care. There is a vibrant nursing students association, strongly supported by the administration, which organizes activities to build social skills and demonstrate professional knowledge through its conferences, field trips, and open-door days.

When Terrence [not real name] was in his undergraduate studies at our university, he was identified to have leadership potential. In his third year, he became the president of the nursing students' association. He organized several seminars and education campaigns on campus, covering topics such as hygiene, STI prevention, and mental health. Upon graduation, Terrence found a job as a tutor in one of the prominent nursing schools in Bamenda. He later returned to our school to undertake a Master's degree programme in Midwifery. While in his master's programme, his interest saw him attached to a faculty member whose research interest is in cervical cancer. Today, less than a year after graduation, Simon is coordinator of a young and fast-growing civil society organisation leading in awareness creation on early detection of cancers among children and adolescents in schools and churches around Bamenda. His work in this area has received international recognition and he now benefits from support and training from St Jude Children's Research Hospital in Tennessee, USA, the world's biggest health-related charity organisation. Pride [not real name] was a very active student leader and president of the UBa Nursing and Midwifery students' association. His time in undergraduate studies with us saw his leadership skills honed enough for him to become the 14th Mandela Rhodes scholarship awardee from Cameroon immediately upon graduation. He is now studying for a Master's degree in Public Health at the University of Cape Town with a research focus on gender-based violence and forensic nursing. The cases of Pride and Terrence show how leadership opportunities during training can catalyze lifelong contributions to public health[15].

chef is one that makes the most out of the ingredients they have at their disposal, minimizing waste and reducing our carbon footprint. Our programmes are tailored to groom professional nurses from all entry points. Over the years, we have learned that some of the best nurses are those who came into the profession out of love and passion, irrespective of their secondary or high school studies.

We offer Higher National Diploma [HND] programmes in Nursing and Midwifery and a one-year conversion degree course for HND holders. Monica [not real name] was employed as a housekeeper at a hospital near Bamenda at the age of 25. By the time she turned 29, her husband had died of cancer. She had spent three years caring for her husband and eventually developed an interest in nursing. This pushed her to take evening classes that helped her pass the Government Certificate of Education [GCE] Advanced Level. One of our nurse faculty members encouraged her to enroll in our HND programme. She successfully obtained her HND in three years and went on to complete a one-year conversion programme to qualify with a Bachelor's degree in Nursing. By providing alternate routes through HNDs and one-year conversion degrees, the university accommodates learners from diverse academic and socio-economic backgrounds [16]. This inclusive approach ensures that passion and commitment, not privilege, define the path to becoming a nurse.

We do not "serve" graduates without tasting the dish throughout cooking and at the pass: students are appraised formatively and summatively using a blend of methods that mirror real practice. Objective structured clinical examination [OSCEs] give us a consistent "spoon-taste" of core skills [assessment, communication, decision-making] [17]. During placements, clinical logbooks document cases, procedures, and reflections, showing progressive learning and skill acquisition. Competency is also judged through preceptor/ mentor appraisals [structured work - place feedback on professional behaviors, safety, and teamwork] " [18]. Students deliver seminar presentations and complete research projects with oral defenses, a longstanding summative gateway to practice readiness in undergraduate nursing [19]. Together, these ingredients align with international recommendations that emphasize competency-

based education, quality assurance, and evidence-informed assessment in nursing and midwifery programmes[1].

One cook cannot feed an entire city. According to the WHO and the ICN, the world needs an additional nine million nurses. No one institution, no matter how good they are, can contribute enough to meeting this need. That is why we have opened our doors to mentoring private institutions that train nurses. We vet their admission processes, curricula, teaching, and evaluation. This guarantees that many more nurses can be trained to similar qualities at the same time, multiplying impact. Collaboration with other institutions extends the university's influence. By mentoring private nursing institutions and evaluating their quality, the university ensures scalability without compromising standards [2].

Every good cook continues to improve on their recipes and publishes them for other cooks to use. The ICN, in its strategic directions for nursing and midwifery, is recommending specialized training in nursing. At the University of Bamenda, we have designed and implemented specialist courses in midwifery, medical surgical nursing, and mental health, with more to come in paediatrics and oncology. These are all meant to train nurses who are refined in knowledge and skills to handle the major health challenges facing the world today, particularly with the increased burden of chronic non-communicable diseases including road traffic accidents and mental health problems. The introduction of postgraduate specialist programmes in midwifery, medical-surgical nursing, and mental health addresses the need for expertise in managing chronic and emerging health issues [1]. These initiatives resonate with global strategies to improve nursing capacity and resilience.

Lastly, every passionate chef must think of the endurance of his recipes after he retires. Who will carry on the flavours? Who will improve the taste? Who will feed the next generation?

In 2023, we graduated our first batch of PhD's in nursing science. These are professionals who, we are sure, will be the next generation of excellence in nurse training and research in Cameroon and beyond. This marks a new era in Cameroon's nursing leadership as these scholars are well-positioned to contribute to health systems research, policy development, and academic excellence.

Our 'recipe' aligns with widely adopted trends in nurse education; competency-based curricula, simulation-enhanced skills acquisition, community-based placements, and structured mentorship, recommended by global authorities and reflected across many African training programmes, while remaining tailored to Cameroon's context [2022].

In our context, knowledge transfer is through structured curricula, skills checklists, and assessed competencies; and tacit, developed through mentorship, preceptorship, and reflective practice that help novices progress toward expertise [4]. The "ingredients" we describe function as channels of transfer: simulation with guided debrief consolidates clinical reasoning and communication in a safe environment [8]; hospital and community placements embed learning in authentic settings where preceptors model judgment and professional comportment [9,12,14,15]; and student seminars and research projects translate evidence into practice, reinforcing professional identity and scholarly skills. These ensuring that what is taught is internalised, enacted, and sustained across classroom, and clinical environments.

### Limitations

This is a post-constructivist commentary, not inclusive of a programme evaluation; evidence is single-site, intentionally illustrative including anecdotal success stories, and based on purposeful literature. We did not perform comparative benchmarking across schools or analyse cohort-level outcomes such as licensure, or employer surveys within this scope. These boundaries were deliberate to preserve the narrative aim of the commentary. A separate empirical study is being developed to evaluate challenges, effectiveness, and mitigation strategies systematically.

### 3 | CONCLUSION

Training nurses is not just a responsibility, it is a legacy. This commentary has demonstrated that nursing education, when likened to a chef's recipe, involves a harmonious blend of ingredients: foundational knowledge, real-world practice, emotional intelligence, structured mentorship, and sustainable leadership.

To meet the global shortfall of nine million nurses [2,5], countries must not only scale training efforts but also invest in high-quality, context-sensitive education systems that nurture the soul of nursing: compassion, competence, and care. At the University of Bamenda, this legacy continues, one pot, one meal, one life-saving nurse at a time.

## 2 | RECOMMENDATIONS

In light of the lessons learned and the vision for sustained excellence in nursing education and practice, we recommend the following:

1. The faculty should promote continuous lifelong learning through seminars for in-services colleagues so that nurses and midwives remain competent, adaptable, and prepared for emerging health challenges.
2. The staff should encourage self-employment and innovation among trainees upon graduation to foster independence and new contributions to healthcare delivery.
3. The faculty should strengthen interprofessional collaboration among nursing students and students of other departments, wherever it is accepted, recognising that teamwork across disciplines improves patient outcomes and enriches professional practice.
4. Graduates should maintain a consistent patient-centred focus, ensuring that care delivery, training, and innovation always prioritise the needs and dignity of those receiving care.
5. The department should foster academic symposia with other higher institutes to improve nursing and midwifery training through shared experiences, curriculum innovation, and faculty development✦

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