

**RESEARCH ARTICLE****Evaluation of Nursing Training at the National Medical and Health Institute of Benin in 2020**

Djaboutou Kafuyemon Ismanth<sup>1\*</sup>, Fah Lauris<sup>1,2</sup>, Otti André<sup>1</sup>, Ahounou A.<sup>1</sup>, Zannou D.M. <sup>1</sup>, Assogba Phénix<sup>2</sup>, Fabiyi Kafayath<sup>2</sup>, Dougnon Victorien<sup>2</sup>

<sup>1</sup>Department of Continuing Education, National Medical and Health Institute, University of Abomey-Calavi, Benin

<sup>2</sup>Research Unit in Applied Microbiology and Pharmacology of Natural Substances, University of Abomey-Calavi, Benin

\*Corresponding Author: djaboutou1@gmail.com

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**Abstract**

*The evaluation of INMeS nursing training is essential to ensure that the institution meets the high training standards necessary to improve public health in Benin. This study evaluates the teaching provided at the Institute National Medico Sanitaire (INMeS) of Benin in 2020. A mixed methods design (quantitative and qualitative) combining three data collection techniques was used: interviews, observations and exploration of documents (training curriculum and textbooks from the six semesters of the 2019-2020 training cycle). The interviews concerned teachers (N = 11) and clinical supervisors (N = 32). The observations concerned the students' internship locations, practical work rooms and INMeS courses. These interviews and observations were guided by a semi-structured tool comprising six themes: knowledge, research, methods, critical analysis and evidence, nursing practice, communication/collaboration, Leadership and professionalism. Nursing education content is limited to the Virginia Henderson model. The care process is taught based on the treatment protocols of the programs established mainly by the Ministry of Health. There is little nursing theoretical content, no theories, and no nursing concepts. Professionalism focuses on the vision of a role of assistance and substitution for doctors. There are no rooms for students to share practical case experiences. The nursing training cycle lasts six semesters with 180 credits, of which 73 (40.6%) are allocated to nursing units. 85 (47.2%) are medical units and 22 (12.2%) are attributed to fundamental knowledge. The results highlighted that the teaching content provided at INMeS in 2020 is focused almost 50% on a medical perspective. The teaching units provided should integrate a nursing vision to improve the quality of training.*

**Keywords-** Benin, Curriculum, Health, Nursing, Training

**INTRODUCTION**

To effectively address today's significant public health challenges, including quality of care and patient safety, it is essential to strengthen the skills of nurses through training. Nursing education is crucial in Benin's health system, where nurses often provide primary care, manage chronic diseases, and respond to

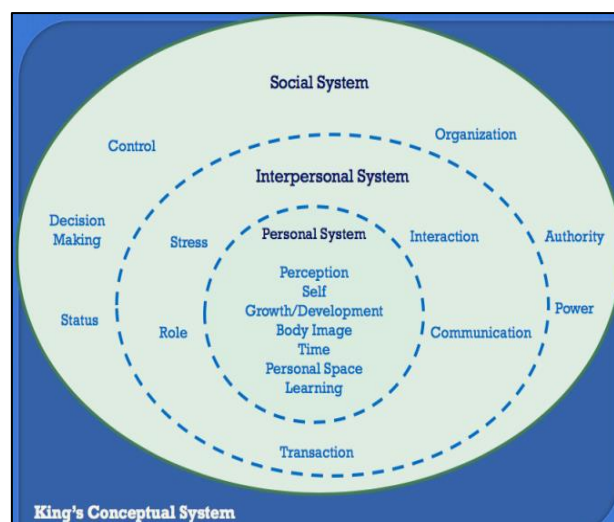
emergencies (1). Indeed, the nurse is central to the health system and is pivotal in patient care, health promotion, and disease prevention (1). He is trained to practice the profession competently and comply with safety and ethical standards as part of the continuum of care and in health and illness situations at all stages of a client/patient's life (CASN /ACESI, 2015). He thus develops clinical judgment, which allows

him to deal with situations ranging from simple and classic to the most usual or ordinary in nursing care. To contribute with other health professionals to the maintenance and restoration of the health of the individual in interaction with their environment, as well as to the prevention of diseases and the provision of palliative care, nurses assess the state health, develop and implement a nursing care and treatment plan (2). They also provide the necessary care and treatment, both nursing and medical (1).

In this perspective, Henderson's nursing model (1977), which influences the vision of nursing care in West Africa, places the nurse's intervention when the individual requires assistance and help to meet basic needs. According to Henderson (1977), the nurse's role consists of intervening in various ways (supplementing, replacing, etc.) until the person can become independent again in meeting their needs. He must, therefore, acquire knowledge of biology, physiology, psychology and sociology to understand the person's shortcomings (2, 3). Thus, the quality of their training is decisive in ensuring adequate care adapted to the population's needs.

Like other French-speaking African countries, Benin has initiated a reform of its nursing training system based on the Competency-Based Approach (CPA) (4). Indeed, nurses play a fundamental role in providing primary health care, managing

chronic diseases and responding to health emergencies (3). Their presence is particularly crucial in rural and underserved areas, where they are often the only health professionals available (INMeS, 2018b; Ofofu, 2007). Thus, the quality of nursing education is a determining factor in ensuring efficient, equitable, high-quality health care. The National Medico Sanitaire Institute (INMeS) of Benin is a flagship institution that trains health professionals. Since its inception, INMeS' mission has been to provide high-quality health sciences education, emphasizing nursing education. The institute offers various academic and practical programs designed to prepare students to meet the health needs of the Beninese population and international professional requirements. Its reputation is based on the excellence of its teaching, the competence of its academic staff and the relevance of its training programs. Given the complexity of the nurse's roles and functions, they must have an adequate general and scientific culture. Although Henderson is well known in Africa, we propose to add King's vision. According to King, nursing is a process of actions, reactions and interactions. During care interactions, the nurse and client share their perceptions of the situation, communicate to identify specific problems and goals, explore ways to achieve them, and agree on solutions (Fig. 1).



*Figure 1: Diagram of King's conceptual system (1968).*

Nurses develop through a training program that helps them develop clinical judgment, enabling them to manage simple situations where intervention methods are generally well-known and can be learned. Therefore, this study aims to examine the medical model's influence on nurses' training.

## METHODS

To achieve the objectives of the present study, a mixed methodological approach combining quantitative and qualitative methods was used. These involve interviews, observations and exploration of documents (training curriculum and textbooks from the six semesters of the 2019-2020 training cycle). The interviews concerned permanent teachers (N = 11) and clinical supervisors from urban and rural areas (N = 32). The observations were made at the students' internship locations, practical work rooms and INMeS course rooms. These interviews and observations were guided by a semi-structured tool comprising six themes: knowledge, research, methods, critical analysis and evidence, nursing practice, communication/collaboration, Leadership and professionalism.

The interview guide for permanent teachers and clinical supervisors asked questions about the theoretical and practical content of the baccalaureate-level nurse training program at INMeS, their teaching, and the tools available to them to facilitate student practice. As for the observation grid, a sheet that considered the environmental theme allowed us to observe the conditions in which learning occurs and the available learning tools. Thus, direct observation preceded the interviews, and each observation period lasted 45 to 60 minutes. Compared to the observation grid for practice environments, we have identified five components: care equipment, room, client circuit in the hospital environment, biomedical waste management and risk management. Within each component are

elements observed for each of them. Documentary research made it possible to collect data about the program in the following documents: the INMeS training offer (2018 version) and the textbooks for the current school year.

## RESULTS

The study sample consisted of 12 permanent teachers; 11 (91.6%) participated in an interview, and one was absent during the survey. Of the eleven permanent teachers present, two have a PhD. in public health (18.2%). The other nine have either a master's degree or master's training in different fields (two have a master's degree in health promotion, three in health sciences, one in public health, one in reproductive health, one in anaesthesia -resuscitation and one in childcare). Of the 11 permanent teachers, (06) six women, or 54.5% (four midwives and two nurses), and five men, all nurses. Eight (08) among the eleven (11) teachers had 7 years of seniority, while the other three had more than 10 years. Their ages were between 44 and 51 years old.

Regarding clinical supervisors, out of 49, 32 (65%) participated in the survey. Among these 32 supervisors, 19 are women (59.4%), including 9 midwives and 10 nurses, while 13 are male. The total number of nurses is equal to 23. No midwife has bachelor's level training (equivalent to a bachelor's degree in Canada). Among the 23 nurses, 14 (61%) are certified nurses (equivalent to college level in Quebec), and they are primarily responsible for maternity wards in health centres in rural areas. Among the nine other remaining nurses, five have the same level of training as midwives, i.e. the equivalent of a diploma from the old INMES (non-university), and four have a license (one in anaesthesia-resuscitation, one in childcare, one in ophthalmology and one in support of the surgeon). All clinical supervisors had at least 3 years of seniority in their position. Their ages were between 27 and 56 years old.

So, the results of the interviews focused on the six themes. Theme 1, which talks about knowledge, made it possible to collect data on the body of knowledge in the current primary training curriculum and those taught there. Thus, the essential element identified at this level is Virginia Henderson's model, which focuses on the 14 fundamental needs around which nursing care is taught. Nursing knowledge is not limited only to the Virginia Henderson model, and we see that the content of the current program is limited. The data gathered in theme 2, that of research, methods, critical analysis and evidence, made it possible to identify their presence in the training curriculum and the different elements of knowledge they contain. Thus, for this second theme, all results suggest that the basics are taught (identification of the research subject and steps of the research protocol). Compared to teachers, they do not conduct research because they perceive that the conditions are unsuitable: no laboratory, weak Internet connection, no databases and

an almost non-existent library. All these factors do not help them to keep abreast of the development of nursing discipline and the advancement of nursing knowledge. As for theme 3, that of nursing practice, it made it possible to link the elements of knowledge and provide care while basing it on the knowledge specific to the nursing discipline. Data from Theme 4 on Communication/Collaboration and Theme 6 on Leadership (i.e., coordinating and influencing change) helped document the connection between teachers and clinical supervisors. The data from theme 5 on professionalism facilitated the collection of information on the standards of nursing practice in Benin.

The data collected during the interviews show that permanent teachers only teach nursing techniques, and the only conceptual model taught is that of Virginia Henderson. In addition, this information made it possible to understand the non-existence of the Order of Nurses in Benin.

**Table 1:** Observation results of rooms in urban internship locations

Components	Existing elements	Missing elements
Care equipment	Carts, treatment tables, safety boxes, trash cans, technical and medical equipment (treatment boxes, gloves, antiseptics, etc.)	
Rooms	Client hospitalization rooms, treatment rooms, clinical supervisors' duty rooms, medical student and intern duty rooms, professors' offices	Staff rooms for nurses, for students
Customer circuit in the hospital environment	Existence of an entrance/exit Existence of indicative arrows towards the services	
Biomedical waste management	Colored bins for waste sorting, incinerator	

Table 1 indicates that there are no meeting rooms for clinical supervisors. This state of affairs needs to improve nursing students' learning in their professional practice. To do this, the sharing of practical case experiences by students is not done.

### Teaching Units Identified During the Analysis of the Existing Training Offer

Semesters 1 and 2 constitute the 1st year of basic training; the lessons concerning

nursing care by permanent teachers present the 14 fundamental care according to Virginia Henderson and the theoretical courses on nursing care in four areas (medicine, surgery, paediatrics and maternity). Nursing techniques in these four areas are accompanied by practical work to allow students to do their clinical immersion internship in different departments of the internship environments. Thus, to supervise and evaluate the nursing practice by students, the clinical supervisors take care of

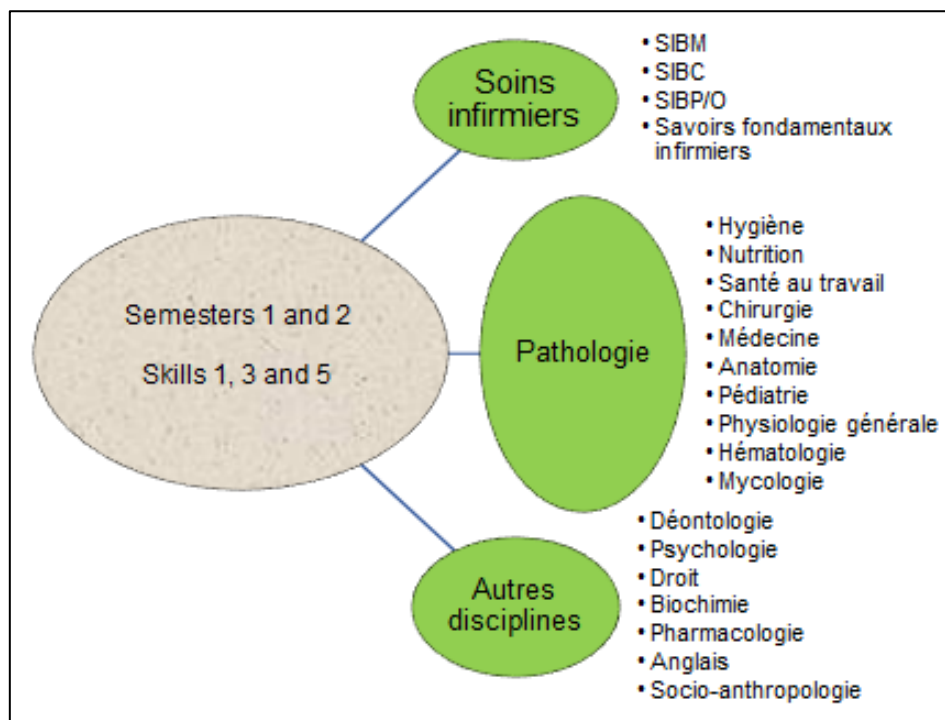
it from the start of their clinical internship in different internship environments. From all of the above, out of the 60 credits of the 1st year of training, nursing uses 23 credits, including 17 for theoretical courses and practical work, including evaluation hours and 6 credits for immersion internships in clinical placement environment services.

In the 2nd year of training, with the 60 credits allocated, the nursing field uses 25 credits (theoretical courses, clinical practices, evaluations), and the remaining 35 credits offer content from other disciplines (medical specialties, social sciences and others). The teaching units for nursing care consist of theoretical courses on nursing techniques and some specialties (intramuscular injection technique, venous injection, techniques for different types of

dressings) and teaching units for clinical placements in urban and rural settings.

During the 3rd year of training, 25 credits out of the 60 are occupied by teaching nursing content (consisting of clinical internships from the two internship environments). The remaining 35 are allocated to medical specialties (psychiatry, geriatrics, gastroenterology, endocrinology, dermatology, ophthalmology, ENT, stomatology, operating room, emergency medicine and palliative care). The training cycle for nurses lasts 3 years (six semesters) with a total number of 180 credits, of which 73 (40.6%) are allocated to nursing units, 85 (47.2%) are medical units, and 22 (12.2%) are assigned to fundamental knowledge.

Results of the analysis of 1st, 2nd and 3rd year textbooks (Fig. 2).

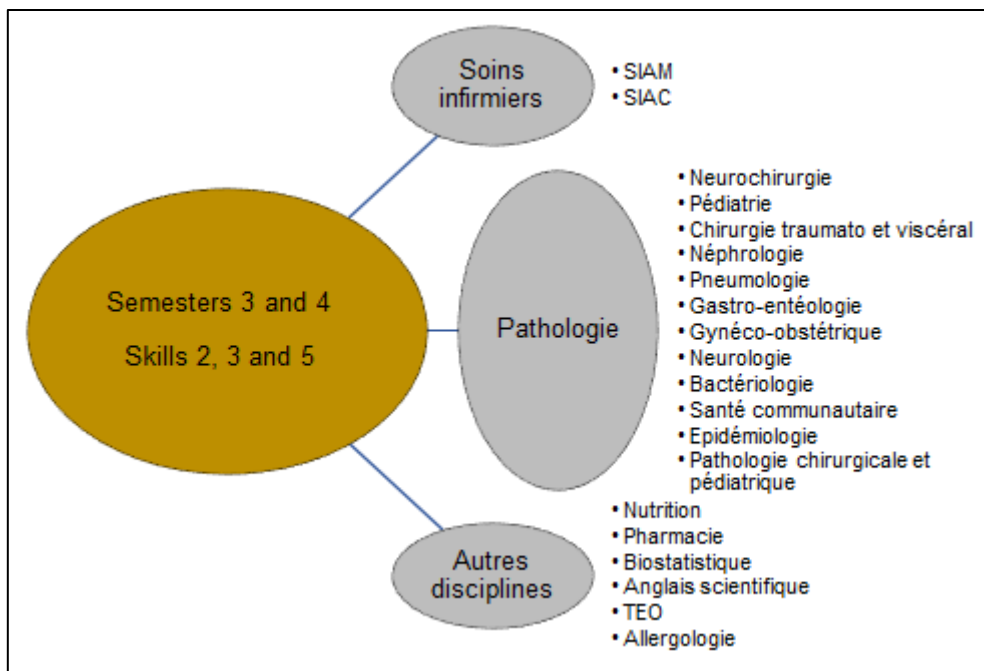


Legend: SIBM = basic medical nursing; SIBC = basic surgical nursing; SIBP/O = basic pediatric/obstetric nursing

**Figure 2:** Courses recorded in the textbook in semesters 1 and 2.

In the 1st year of training, the teaching of nursing elements is based instead on primary nursing care (which is only the teaching of nursing techniques), fundamental knowledge of the nurse

(empirical knowledge, knowledge personal, ethical knowledge and aesthetic knowledge) of medical pathologies and teachings from other disciplines (Fig. 3).

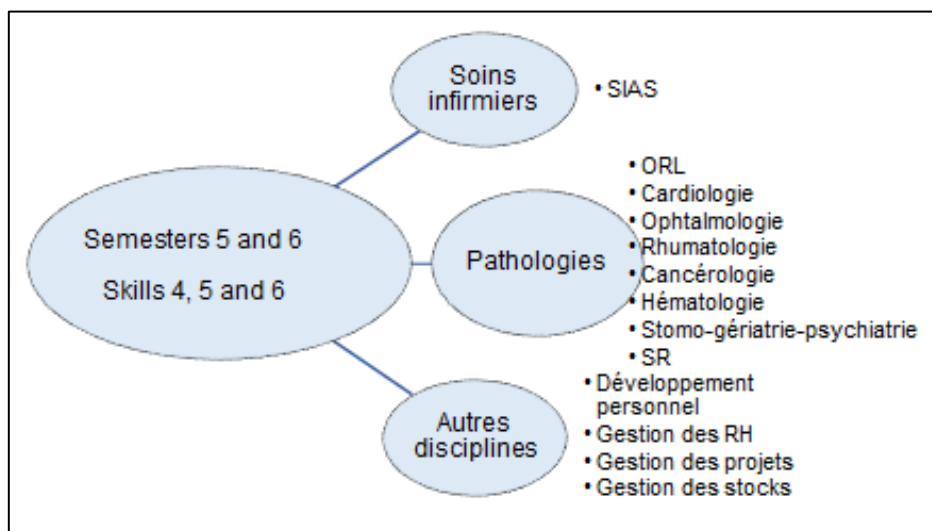


Legend: SIAM = advanced nursing care in medicine; SIAC = surgical advanced nursing care; TEO = oral expression technique

Figure 3: Courses recorded in the textbook in semesters 3 and 4.

In the 2nd year, the emphasis is on medical pathologies, teaching in-depth nursing care in medicine and surgery and courses in other disciplines.

In the 3rd year, lessons are instead based on medical specialities and other disciplines (Fig. 4).



Legend: SIAS = Specialized in-depth nursing care, SR = Reproductive health

Figure 4: Courses recorded in the textbooks of semesters 5 and 6.

### DISCUSSION

The evolution of nursing training updates the training of future nurses and the quality of care to be offered to the

population. To achieve this, training must focus on specific nursing expertise and continuous improvement in the quality of care. Analysis of the current program offered by INMeS reveals a tendency to

orient training towards assistance and substitution for medicine rather than promoting nursing as an autonomous discipline equipped with specific knowledge and skills and an essential scientific basis for actual nursing practice. The results of this study show that the program corresponds to this vision of the nursing role. In Benin, nurses currently play a leading role in communities. Hospitals and universities not only use nursing techniques but also make medical prescriptions. In rural areas, they are responsible for medical consultations, diagnosis and administration of nursing care (4). As a result, their role is often seen as supporting medicine rather than directly serving the population.

Scientific and technological progress and the new reforms initiated by the Beninese government in the health sector invite nurses to play an enhanced role within the community and at the hospital level. In other words, the change in the work environment of nurses and the health needs of the population requires new roles for nurses to provide care adapted to emerging diseases. Creating and decentralization hospitals raise new challenges for the nursing profession, such as giving each zone hospital qualified personnel, as many general practitioners, specialist doctors, and nurses as midwives. Thus, each professional will be invited to play a role specific to their expertise. In this context, the role of nurses will have to change and focus on their role (nursing consultation, provision of nursing care from a nursing perspective) instead of the role of replacing doctors that we were used to asking of them in these situations (5).

The presence of general practitioners and specialists in area hospitals means they can now provide medical care to these patients. This new organization will be able to provide nursing care in the community for patients requiring primary and secondary health care as well as more advanced nursing care (4). Study results reveal that future nurses must be able to provide

holistic, integrative, and collaborative care in a dynamic healthcare system (6). Also, nurses believe that with the LMD system and the increase in the level of nursing training in Benin, it is essential that they have specific knowledge of their discipline to be able to play their roles.

## CONCLUSION

In Benin, the first orientations of university training enabled INMeS to move from secondary to higher education. This training, which now extends over three cycles, involves acquiring more knowledge and guarantees the acquisition of the clinical skills necessary for nursing practice capable of responding to a greater diversity of needs and care situations. Such training makes it possible to consider independent practice based on acquiring more solid analysis skills to arrive at relevant clinical conclusions.

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