



Difficulties in Developing the Diagnostic Competence of Nursing Students At My Youssef Hospital in Casablanca: Descriptive Study

Brahim Darraj¹, Bouchra Gourja^{1,2}, Abderrazak Faiq¹, El Mostafa Tace¹, SaidBelaaouad¹

¹Hassan II University of Casablanca, Ben M'SikFaculty of Sciences, Laboratory of PhysicalChemistry of Materials LPCM, P. B. 7955. Bd. Driss El Harti, Casablanca, Morocco.

Abstract

This descriptive research aims atidentifying the difficulties encountered by nursing students in the development of nursing diagnostic skills. The data collection was carried out using a direct questionnaire with 62 students in My Youssef's hospital in Casablanca. The results of the study list a set of failures related to the training of nurses. This training focuses mainly on the acquisition of knowledge; it is not aimed to the development of the real skill.

Keywords: nursing diagnosis; skill; nurse training; failures; knowledge.

Introduction:

In Morocco, after the reform of paramedical studies and their adaptation to the B.A-Master-PhD system Decree No. 2.13.658 of September 30, 2013], the reform of the state diploma of nursing becomes a major subject for the State. In fact, the Ministry of Health has organized several trainings, for the benefit of the trainers of the Higher Institutes of Nursing and Health ProfessionsHINHP], focused on "the competency-based approach"CBA], In order to accompany this change. In this regard, we mention the training conducted by the Spanish expert Mazarrasa2014[1], for upgrading this system to permanent HINHP teachers, this same expert has developed a methodological guide in CBA: methodological document on the competency-based approach and its application to nursing and health technical training programs. Other trainings are organized as part of Moroccan-Belgian and Moroccan-Canadian cooperation.

A study led by Georges Pedarribes and Gwenaël2014[2], on the analysis of the actual practices of nurses in a typical situation of clinical evaluation and production of a diagnosis during the reception of a patient in hospitalization. This analysis focused particularly on the cognitive processes that organize the actual practices of nurses.

After several interviews of self-confrontations favoring the expectations of the schemes mobilized by an expert nurse and a novice nurse, when receiving a patient in day hospitalization for a colonoscopy. The authors noted that the novice nurse remained focused primarily on a productive activity the laying of the venous route] because he/she did not master it enough. The competence related to this activity was under construction. On the contrary, for the expert nurse, this productive activity was more internalized, which allowed him/her to focus on the immediate situation and thus expand his/her field of vision and anticipation on the clinical and social but also psychological. His/her attention was therefore more focused on the characteristics of the patient and the effects of his/her actions.

In Morocco, Professor Harouchi 2010 [3] points out that: "In the field of health, the best example is that of a health science student who can recite the signs of an illness and cannot solve the problem

_

²Regional Center for Education and Training Casablanca Anfa Bd BirAnzarane Casablanca, Morocco.

^{*}Email: br.darraj@gmail.com

when facing a patient. It seems that this phenomenon spares no level of education nor any of the systems centered on the pedagogy of content ".

Florence 1999[4] also points out that, in the best of cases, young people are "learned" when they leave school. They are not necessarily competent. In other words, many have not learned to mobilize their knowledge outside exam situations, what some call dead knowledge or inert knowledge.

As a nurse at the My Youssef hospital in Casablanca, I am challenged by several observations made during the practical training of nursing students in hospitals, including the lack of training in relation to the nursing diagnosis. In this regard, we will try to conduct a study that aims at identifying the difficulties encountered by future nurses during the evaluation of a clinical situation and the establishing of a diagnosis in the nursing field.

The research question is as follows: "What are the difficulties related to the appropriation of this skill among nursing students?"

Theoretical framework

The teaching of nursing cares in Morocco

According to articles 119-120-121[of the HINHP internal law 5], the teaching staff consists of: teacher-researchers; permanent teachers among the employees of the governmental authority in charge of health and temporary teachers.

The teaching staff of the institute provides theoretical and practical instruction and supervises students at the level of training courses in relation to their area of expertise and experience. They assess students' knowledge, skills and attitudes. They participate in the direction and appreciation of the research carried out by students.

According to this same regulation, the education provided in the HINHP includes a set of modules, consisting semesters, which can be taught in the form of theoretical courses and / or practical work and / or tutorials, either field work or project, or an internship.

The internships take place on a full-time or part-time basis in public health facilities or in any other qualified structure offering students learning opportunities.

During the courses attend; students are supervised by the Institute's teaching staff and / or health professionals practicing at the level of the training sites.

The nursing profession: an alternating training

Nursing education includes clinical rotations that provide the future nurse with the opportunity to develop skills with hospitalized patients who are receiving nursing care.

These internships also allow the trainee nurse to demonstrate that he / she possesses the skills required to be able to practice the profession.

According to Carper 2015[6], currently, the different approaches according to whether we are in a training institute or health institution, and the impression of a cleavage between theory and practice, develop a controversy around which it seems important and necessary to problematize. In other words, how to articulate the knowledge and skills required by the profession.

For Gallas 2018[7]: "alternation refers to the coming and going of a future professional between two places of training, on the one hand an initial training institute, on the other hand, one or more places of training".

He also adds, that there does not exist in the initial training institute, an explicit and coherent conception of the articulation practical theory and the process of construction of professional skills, the alternation can remain an empty device of meaning.

From several exchanges with students and new graduates, Belpaume 2009[8] notes that the care approach is experienced as a school exercise that does not correspond to the reality of nursing practice. Students do not perceive the reasoning that leads nurses to perform the care. They do not have access to senses of care. For them, nurses do not do care and do not do nursing diagnoses.

These diagnoses respond to a need of the nursing profession to acquire more autonomy, recognition, quality of care for the neat person. They are complementary to the medical diagnosis and do not substitute them, unlike this one, they are centered on the person and not on the pathology.

The competency-based approach and vocational training. In vocational training, the competency-based approach reflects a paradigm shift; it marks the transition from a logic of investment to a logic of results, materialized by the learning outcomes, ie the

skills that future graduates will have to acquire Lavoie and Benoit,2016[9]. However, in training programs based on traditional pedagogies focused on the transmission of knowledge, memorizing knowledge becomes the primary concern of the learner. This one does not reason anymore in terms of capacities but in terms of knowledge and examination. The learner does not learn to train but for the exam.

The competency-based approach therefore seeks to address the limitations and inadequacies of knowledge-based pedagogy, to achieve the level of skill integration and transfer. Mooi, 2017[10] Teaching is not defined only by content, but by a list of skills that learners must acquire and the goals they must achieve. In this sense, Perrenoud 2008[11]emphasizes that skills are constructed by confrontation of complex situations. In a skills-based approach, evaluation poses considerable challenges. The demonstration of each skill is a complex phenomenon that must be viewed through several dimensions.

Nursing diagnosis: first step in the nursing approach

The North American Association of Nursing Diagnostics NAAND] endorsed the following definition of nursing diagnosis: "Nursing diagnosis is a clinical judgment that a nurse makes about the reactions of a person, family, or community to a current or potential health problem or a biological process. The diagnosis serves as the basis for selecting nursing interventions to achieve the outcomes that are the responsibility of the nurse. "HerdmanandShigemi, 2017[12].

For Gordon and al. 1994[13], nurses' reasoning is a form of clinical judgment that is developed in six stages: patient encounter, collection of clinical information, formulation of diagnostic hypotheses, search for additional information to confirm or invalidate the hypotheses, and finally, the diagnostic decision and the intervention plan.

This first step in the nursing approach is to collect data systematically to determine a person's current and past health status, and to assess past and present coping strategies. The nurse can collect data in five ways Carpenito, 2016 [14]: interview, physical examination, observation, reading of files and consulting co-workers.

In this regard, the nurse collects, interprets, aggregates and analyzes data. To achieve this complex cognitive operation, he/she must acquire good theoretical and practical knowledge and benefit from the experience of his/her colleagues. The collected data are clues that allow the nurse to formulate a hypothesis of the nursing diagnosis or problem to be treated collaboratively, then to validate this hypothesis.

The nurse should approach this first step of the nursing approach with caution if he/she wants to avoid making assumptions or misinterpretations. If he/she does not assess well the situation of a person, he/she will not formulate the correct diagnoses and will not be able to intervene effectively. The patient will suffer, the quality of care will suffer and the efforts of caregivers will be mobilized in vain.

Methodology:

This descriptive exploratory research took place in the context of the practicum of nursing hospital at My Youssef hospital in Casablanca between April 17 and May 8, 2017.

The data collection was spread over a three-week period using a self-administered questionnaire paper] validated by resource persons. It included the following: training difficulties, difficulties with nursing diagnosis, and the relationship between nursing diagnosis and quality of care. In addition, to identifying data that reflected age and sex.

The questionnaire was constructed in accordance with the purpose and the research question and with reference to the frame of reference delimiting and guiding the formulation of the questions.

This questionnaire was conducted by 64 nursing students from HINHP in the Casablanca region, with three-year nursing program. The selection of students was done according to two criteria:

- 1- Be enrolled in semester 4.
- 2- Belong to the option: polyvalent nurse.

To analyze the data, it was processed using the IBM SPSS software, which allowed to express the frequencies expressed in percentage] obtained for each question.

Results:

Profile and age of the participants in the study:

The descriptive analysis of the data collected indicates that 56.3%) of the 64 respondents are female and 43.8% are male. The vast majority 89.1%] of respondents 57 people) are between the ages of 20 and 30, so only 10.9% or 7 people are between 30 and 40 years old.

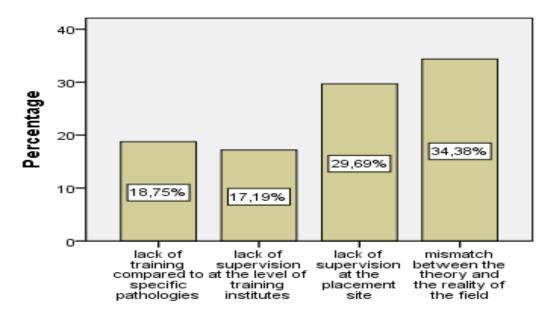


Figure 1-Difficulties related to training

The mismatch between the theory and the reality of the field represents the great difficulty declared by 34.38% of the people surveyed; 29.69% of the respondents stated that they had a lack of supervision at the placement site; 18.75% see that the difficulties encountered are related to a lack of training compared to specific pathologies and finally 17,19% say that the difficulties encountered are related to a lack of supervision at the level of training institutes.

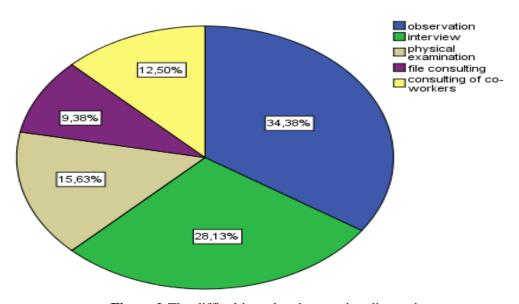


Figure 2-The difficulties related to nursing diagnosis

4.38% of the people surveyed find difficulties related to the control of the observation, 28.13% find difficulties related to the management of the interview with the patients, 15.63% find difficulties related to physical examination, 12.50% find it difficult to consult co-workers and 9.38% find it difficult to obtain information by reading medical files.

Table 1-The relationship between nursing diagnosis and quality of care

| | Frequency | Percentage |
|-------|-----------|------------|
| yes | 52 | 81,2 |
| no | 12 | 18,8 |
| Total | 64 | 100,0 |

Out of a total of 64 people, 52 people think that the quality of care depends on an assessment made by the nurse] of the patient's health situation, against 12 people.

Discussion of results:

According to this study, the current training of nurses fails to provide students with essential skills such as "assessing a clinical situation and establishing a diagnosis in the nursing field".

Difficulties related to training:

Among the various difficulties encountered by nursing students at the end of this study] in relation to this competence, we find: the lack of training in relation to specific pathologies, the lack of supervision at the level of training institutes, the lack of supervision at the level of the places of training and the mismatch between the theory and the reality of the field.

Thus, skills are defined but left out or lost in the choice of methods and the development of teaching strategies. This results in a breakdown of coherence between goals and means that seriously affect the quality of training. The same mistake lies in relegating professional skills development to training courses that are not supervised, without objectives, or to a "nebula called practical training" Perrenoud, 2018[15].

Perrenoud 1999 [16]also adds that, at the evaluation stage, the most caricatural error lies in implementing a logic of competencies while retaining the type of traditional evaluation. "If what is formally evaluated does not value skills, neither students nor even teachers will develop skills. If the evaluation does not move, the rest will not move". Hence the need to train competent teachers to ensure the supervision and ongoing evaluation of practical training.

These few examples show how "a pedagogical approach risks to be discredited not because of its intrinsic defects, but because of the way in which it is more or less well used by educational leaders who are at least well trained for pedagogical tasks "Guilbert, 1998[17].

The competency-based approach is therefore not a mere fashion and cannot be reduced to the definition of skills alone. It is a contract between all the main partners of the educational system: teachers, learners, and institutes. And like any contract, it only has value if it is scrupulously respected by all parts. Indeed, the didactic contract clarifies the rules governing the relations between the teachers and the learners and relates to 3 points:

The skills to be reached at the end of a learning period;

The means available to students to achieve the objectives of the training and develop skills: methods, teaching strategies, supports and educational resources;

The rules of the evaluation which will rigorously control the achievement of objectives and skills previously set.

This contract reassures students and promotes their autonomy.

Moreover, such a contract is conceivable only if the teachers are trained and accompanied to fulfill their mission because the pedagogy of skills requires new professional skills to teach.

The evaluation of learning is unquestionably a key element of any training program. This is a complex process closely related to the intentions of the training. The assessment must reflect the degree to which the trainees respond to these intentions or expectations. In addition to knowledge, skills and attitudes, it is necessary to aim higher and check the ability of individuals to use this knowledge and skills and to demonstrate these attitudes in a variety of contexts. Scallon, 2007[18].

Scallon also adds that the competency-based approach imposes new challenges on evaluating actions for those who have to intervene in a program of study, it is not only a question of focusing on the skills to be acquired for the sole purpose of attesting or certifying them: the monitoring of the progress of each student is equally essential and depends on the mastery of various observation and diagnostic procedures.

Difficulties related to the diagnosis of nursing:

At the end of this study, five major difficulties related to the nursing diagnosis were raised by the nursing students, namely: the management of the interview with the patients, the physical examination, the observation, the reading of the files and the difficulties related to it, to the consulting of co-workers.

These difficulties related to the control of the nursing diagnosis can be explained by the lack of experience in the analysis of data collected from patients hospitalized in the hospital on the one hand and on the other hand by the lack of knowledge of the tools of the nursing diagnosis.

Thus, Norman, 2006 [19] postulates that for a student who has acquired relevant knowledge through his/her training, the confrontation of clinical situation can prove difficult because it requires a reorganization of his/her knowledge in order to be able to use them in real context.

In this regard, Boshuizen 1996[20], evoking this moment of transition between theoretical learning and confrontation of clinical reality, postulates a kind of crisis and discontinuity in the process of development of clinical reasoning, leading students he does not hesitate to name "the loss of their innocence".

Finally, it should be noted that nursing education is a training that alternates between theoretical courses and practical internships that have a preponderant place to build the skills of students. The alternation is considered as a training system, draws its primary justification from the fact that it allows to learn what is not taught at school and which constitutes the essence of the competence: the knowledge of the experience. Hence the need to give more importance to coaching at the level of places of training.

Limitations of the study:

The results of this study can in no way be generalized to the population of the study, their scope is limited to field investigations only. The purpose of this research was to provide insights for future research that touches on other areas of nursing education and with more participants.

Ethical considerations

The study was conducted after the approval of the director of My Youssef Hospital in Casablanca. The participants' consent was also obtained. They were reassured that their answers would remain confidential and their identity would not be revealed in research reports and publications.

Conclusion

This study showed the existence of a gap between the objectives of nursing education aimed at learning nursing diagnoses and the implementation of this approach in nursing services.

In conclusion, the role of the teacher is very important to help the learner develop transfers. Indeed, professional learning situations require starting from what is known to solve a new and complex problem.

This requires the use of strategies that support and promote such transfers, such as:

- The reflexive practice from which the student takes his/her own action, and mental functioning for the subject of observation and analysis.
- The exchange of representations and practices: any confrontation between representations and practices promotes awareness.

The use of questioning strategies by the clinical trainers: the use of high level questioning by the trainers during the internship, develop the competence of reflection and the decision-making at the learner.

Finally, the competency-based approach is not only about focusing on the skills that a teaching must develop by drawing up a catalog or a reference system for skills. Once the skills are defined, the two essential questions about the approach are: how to develop them and how to evaluate them?

Moreover, an analysis of the roles of nursing educators seems important to us, to understand how they accompany students in theoretical training in nursing as well as in clinical training. How do they promote the development of skills through their teaching methods?

Declaration of interest

"No conflict of interest"

Références

- **1.** Mazarrasa L. **2014**. Approche par Compétences et son application aux programmes de formation des professions infirmières et techniques de santé. 2014. Document inédit.
- **2.** Georges P. and Gwenaël L. **2014**. L'analyse des compétences infirmières lors d'une situation d'évaluation clinique et de diagnostic. Santé publique. En ligne. 2014 décembre cité le 21 Mars 2019); **26**: 627-637. DOI 10.3917/spub.145.0627.
- **3.** Harouchi A., rédacteur. Pour un enseignement efficace, l'approche par compétences. Guide à l'usage des enseignants et des formateurs. Rabat : éditions le Fennec ; 2010.53-71.
- **4.** Florence A., Cécile B. and Danan JL. **2019**. Compétences attendues de l'infirmière de pratique avancée en France : recommandations d'experts à partir d'une étude Delphi modifiée. Revue francophone internationale de recherche infirmière En ligne. 2018 mars (cité le 05 Mars 2019); **4** (1): 5-19. Disponible à partir de: Doi : 10.1016/j.refiri.2017.11.003.
- 5. Ministère de la santé du Maroc. Règlement intérieur des Instituts Supérieurs des Professions Infirmières et des Techniques de Santé. [Enligne]. 2015. [cité le 25 avril 2017]. Disponible à partir de http://ispits.sante.gov.ma/pages/Detail_TexteR.aspx.
- **6.** Carper BA. Les principaux modes de savoir en soins infirmiers. Revue francophone internationale de recherche infirmière]En ligne]. 2015 Septembre]cité le 21 Décembre 2018]; **1**(3): 179-184. Disponible à partir de: Doi: 10.1016/j.refiri.2015.09.001.
- 7. Gallas S. Perception de l'étudiant infirmier sur sa formation dans le domaine du savoir être. Revue francophone internationale de recherche infirmière]En ligne]. 2018 mars]cité le 03 février 2019]; 4(1): 56-63. Disponible à partir de: Doi : 10.1016/j.refiri.2017.11.004.
- 8. Belpaume, C. Accompagner l'apprentissage du raisonnement clinique en soins infirmiers, Recherche en soins infirmières.]En ligne]. 2009 Décembre]cité le 15 Décembre 2017]; 4(99):43-74. Disponible à partir de: https://doi.org/10.3917/rsi.099.0043.
- **9.** Lavoie AM, Benoit M. Les dimensions physiques et psychosociales des diagnostics infirmiers auprès des personnes âgées atteintes de déficits cognitifs : une étude mixte. Revue francophone internationale de recherche infirmière]En ligne]. 2016 sept]cité le 28 janvier 2019]; **2**(3): 137-145. Disponible à partir de: Doi : 10.1016/j.refiri.2016.06.002.
- **10.** Mooi Standing, editor. Clinicaljudgement and decisionmaking in nursing. 3rd ed. Los Angeles : Sage/Learning Matters ; 2017. 238 p.
- **11.** Perrenoud P. **2008**. éditeur. Construire des compétences dès l'école. 5 èmeéd. Paris : ESF ; 2008. 125 p.
- **12.** Herdman TH. And Shigemi K. **2017**. editors. Nursing diagnoses 2018-2020: definitions and classification. 11th ed. New York: Thieme Medical; 2017. 512 p.
- **13.** Gordon M., Murphy C., Candee, D. and Hiltunen E. **1994**. Clinicaljudgment: An integrated model. Advances in Nursing Science Internet. 1994 Jun (cited 2018 Feb 23); **16**(4): 55-70. Available
 - from:https://journals.lww.com/advancesinnursingscience/abstract/1994/06000/clinical_judgment_an_integrated_model.7.aspx#print-article-link.
- **14.** Carpenito LJ. **2016**. editor. Nursing diagnosis: application to clinical practice. 15th ed. Philadelphia: Lippincott Williams & Wilkins; 2016. 1156p.
- **15.** Perrenoud P. **2018**. éditeur. Dix nouvelles compétences pour enseigner: Invitation au voyage. Paris : ESF ; 2018. 192 p.
- **16.** Perrenoud, P. Construire des compétences, tout un programme. Vie pédagogique(En ligne). 1999 Mar)cité le 22 Fév 2019; 112 :16-20. Disponible à partir de: http://collections.banq.qc.ca/ark:/52327/bs22606.
- **17.** Guilbert J.J. **2018**. Guide pédagogique pour les personnels de santé En ligne. 1998 cité le 07 Jui 2018 ;35 6e éd. rev. et complétée. Genève : OMS. No. 35 : 392 p. Disponible à partir de http://www.who.int/iris/handle/10665/42119.

- **18.** Scallon G. **2007**. L'évaluation des apprentissages dans une approche par compétences. 2ème éd. Bruxelles : De Boeck. 2007. 346 p.
- **19.** Norman, G. **2006**. Building on experience the development of clinical reasoning. New england journal of medicine Internet.2006 Nov cited 2019 Jan 13; 355: 2251-2252. Available from: DOI: 10.1056/NEJMe068134.
- **20.** Boshuizen HPA. **1996**. The shock of practice: the effects on clinical reasoning, Annual meeting of the american educational research association, New York, April 8-14, 1996, 1-17.