



Research Article

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Assessing Student Nurses Perceptions of Practical Education at the Nursing Institute in Kenitra Morocco: A Comparative Study

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Abstract

Practical education is one of the main components of nurse training. Assessing student nurses enables us to detect their perceptions of the style of practical education and its impact on practical learning. This diagnosis informs improvements in student nurses' practical learning. Student nurses' perceptions of the practical teaching method are essential as beneficiaries of this training and as partners in the training program. The aim of our study is to describe and analyze the views of student nurses on the parameters of practical education at the Kenitra nursing institute in Morocco. This study was carried out in accordance with the recommendations of Knox and Mogan's (1985) theoretical model of practical nursing education. The results detected reveal that the parameter of teaching ability is ranked first with a high rating (5.74±1.81), secondly, we find the parameter of nursing competence followed by interpersonal relationship and personality, the parameter of evaluation is underestimated by students with a very low rating (5.35±1.88). The Mann-Whitney test showed that there was a difference in perception of the practical teaching parameters between the two groups of students, but this was statistically insignificant, with p-values greater than 0.05. In order to achieve continuous improvement in the education of student nurses, further in-depth studies must be carried out to complete the diagnosis and plan actions for improvement, with the aim of producing qualified and competent nurses able to deal with the realities of the health system.

Keywords: Practical education, Practical teaching, Nursing, Vision, Evaluation, Student Perception

1. Introduction

Teaching in the field of health is very difficult compared with other areas of education, given the practical skills that every health professional needs to master. Practical nursing education is an essential part of the training process for student nurses. It is a complex process, as the student must firstly master theoretical knowledge and then transform it into practical skills such as psychomotor skills, professional attitudes and the logical reasoning needed in the daily work of a nurse (Akram and al., 2018).

This practical nursing education requires a number of learning methods in order to achieve these objectives, which are manifested in the acquisition of communication skills and positive relationships with patients and the care team in order to produce quality care and patient satisfaction. The student nurse must develop and maintain a respectful and open relationship with the practical teacher, who must keep the student motivated at all times and assess the student's satisfaction with the practical teaching method and his or her performance (Allen and al., 2012; Aziz and al., 2023).

The practical education of nursing care is one of the main axes in the training of student nurses. Its success indicates the quality of the teaching method, on the other hand several difficulties are found on the field of training which is manifested by the non-availability of teachers on the training sites to guide and supervise these student nurses which has a negative impact on the acquisition of skills. Some students have learning difficulties, difficulties in the student assessment and information exchange process due to the complexity of the training program, difficulties in providing varied practical learning activities, lack of educational and professional development opportunities. All of these factors had a negative impact on the perspectives and expectations of student nurses (Esmaeili and al., 2014; Ekstedt and al., 2019).

Several international studies have recognized the importance of carrying out specific research into the effectiveness of the practical nursing education method adopted by training institutes and the real needs for practical nursing education, taking account of the needs expressed by student nurses. The humanistic and holistic approach that must be adopted by our system of teaching and learning practice, gives priority to the opinions and preferences of students through the evaluation of practical education by student nurses (Bifttu and al., 2018; Elouakfaoui and al., 2022).

The parameters of practical education adopted by teachers such as the learning environment must be evaluated by student nurses, other characteristics must be evaluated such as the quality of explanations, sympathy, participation in learning, organization, equity, availability, humour, and skills and other specific characteristics (Kelly, 2007).

The students' view of the evaluation of practical education makes it possible to differentiate between the elements of practical teaching, between those that need to be improved and those that are of minor importance and others that have been well formulated and are of prime importance in the learning process. This diagnosis carried out by the students makes it possible to improve the training process by raising awareness of responsible for training at the nursing training institute level (Adibelli and al., 2018).

According to the theoretical model of Knox and Mogan in 1985, practical education is considered as a set of measures, operations and behaviours which aim to help students in the process of learning practical gestures. These researchers have developed a new model of practice education through extensive research of the literature, this model includes the main components of practice education for nursing students called the Nurse Clinical Teacher Effectiveness Inventory (NCTEI). Determining the characteristics of practical education and their different disciplines through the vision of student nurses has positive repercussions on the recommendations for quality practical education that responds to the real needs of student nurses, in order to have a qualified and competent health professional able to respond to the needs of the population (Knox and Mogan, 1985; Jamshidi and al., 2016).

The theoretical model of practical education developed by Knox and Mogan in 1985 is composed

of five main parameters of practical education: teaching ability, nursing competence, assessment, personality and interpersonal relationships. These parameters also determine the nature of the relationship between student and teacher and the effectiveness of the practical education process (Knox and Mogan, 1985).

The theoretical model (NCTEI) is a basic tool that is widely used to analyze the factors that facilitate the acquisition of skills in the practical teaching process, through the evaluation of actions by student nurses, the vision of teachers and the training managers. The diagnosis provided by this model is used to improve the quality of practical teaching by means of an in-depth evaluation of the most important elements in the training curriculum. The model is composed of 47 questions grouped into five specific parameters (Knox and Mogan, 1985).

Teaching pedagogy is defined as a mechanism for exchanging information, skills and behaviour. This knowledge is transmitted by several means, such as teacher involvement, reflective learning and the use of cognitive methods in the practical education of nursing students. Nursing teachers must have specific skills in transmitting practical and theoretical knowledge, creating a favorable climate for the exchange of information and professional friendship in order to prepare nurses who are competent and able to adapt to different working environments (Bvumbwe and al., 2018).

The assessment of student nurses as part of practical education is an essential element of nursing training. It is a tool for measuring the acquisition of practical skills, behavioral attitudes, critical thinking and communication skills, which are necessary for the provision of quality patient care. This is a method of providing feedback that the teacher has already transmitted to the nursing students through theoretical courses or practical simulations (Butler and al., 2011).

The process of evaluating practical education for student nurses is complex and depends on a number of factors: the quality and competence of the teachers in terms of their interpersonal skills and the method of transmitting knowledge and practical techniques, the motivation and discipline of the students, their critical thinking skills, the nature of their personality, the availability of practical learning tools such as simulation equipment and many other factors (Helminen and al., 2016).

The perception of nursing students on the parameters of practical nursing education has several advantages such as: it allows an improvement of the training program and the evaluation methods, through the diagnosis given by the students on the classification of the points, the well noted points must be kept and consolidated whereas the less noted elements must be corrected, improved and adapted with the student's context. This diagnosis makes it possible to detect pedagogical shortcomings on the part of teachers, which need to be corrected through ongoing training (Elouakfaoui and al., 2021; Aziz and al., 2023).

The aim of our study is to identify and analyze student nurses' views on the parameters of practical nursing education in the nursing training program at the Higher Institute of Nursing and Health Techniques in Kenitra, Morocco, and to detect the difference in significance of students' perceptions of the dimensions of practical education, in order to improve the practical learning process.

2. Methodology

2.1 Study design

Our cross-sectional study was carried out over a three-month period with the aim of evaluating nursing students' perceptions of the practical education parameters they received during their training at the Nursing Institute in Kenitra.

2.2 Study setting

The province of Kenitra is the capital of the Rabat-Salé-Kénitra region of Morocco, with an area of around 3052 km² limited by the province of Larache and Ouezzane to the north, the Atlantic Ocean

to the west, the provinces of Sidi Kacem and Sidi Slimane to the east and the prefecture of Salé and the province of Khemiset to the south. The Nursing Institute in Kenitra is responsible for the basic training of nursing students in several disciplines, the continuing education of health professionals, scientific and technological research promoting the development of the nursing profession. It plays an important role in improving the region's healthcare provision by training a large number of nurses each year. Our study is carried out in the context of improving the practical education of nursing students through an evaluation of this process by means of a questionnaire designed for students. This study will be carried out during the first semester of the 2022/2023 academic year.

2.3 Study population

Our study population consisted of second- and third-year nursing students from all disciplines at the Nursing Institute in Kenitra, with a total of 325 Nursing students.

2.4 Sampling method

In order to ensure that our sample was homogeneous and representative, with reliable results, no selection criteria were taken into consideration. All second- and third-year student nurses from all disciplines were recruited for the study, with a total of 325 student nurses. They were included in the survey because they had completed several practical placements in public hospitals and were in regular contact with their placement supervisors. First-year nursing students were excluded from our sample because they had not completed any practical placements at the time of the study.

2.5 Data collection instrument

The data collection instrument used was a questionnaire developed by the researchers Knox and Mogan (1987), which examines the problem of the effectiveness of practical nursing education. This questionnaire is composed of 47 questions grouped into five dimensions that include the parameters of practical nursing education, namely: practical teaching ability, nursing skills, evaluation, interpersonal relationships and personality. Our questionnaire was validated using Cronbach's alpha test with a value between 0.86 and 0.89 with $\alpha = 0.96$ for the entire scale. These values indicate that our questionnaire is homogeneous and valid in terms of measurement. The answer to each specific question in the questionnaire is given on a scale ranging from 1 to 10, and the student must give an average for each question that corresponds to his or her perception of the importance of this element in practical education.

2.6 Data collection method

A team of five permanent professors at the Nursing Institute of Kenitra was trained on the purpose of the study and the method to be used for data collection. They were recruited to collect information from the nursing student using the questionnaire. The data was collected over a period of 3 months between November 2022 and January 2023. The team makes the most of every contact with the nursing student, whether in theory classes or in the field, and gives the questionnaire to the students in good time for eventual completion, while answering the students' questions about the questionnaire to facilitate the response process.

2.7 Statistical analysis

The data collected by the survey team through the questionnaire were processed using SPSS version 20 software, and the non-parametric Mann Whitney test was used to detect differences between the two categories of nursing students with regard to practical education parameters. For the qualitative

variables, we produced descriptive statistics in the form of standard deviation and average frequency for all the parameters and questions in our questionnaire. After statistical analysis of the data, the results were interpreted to highlight recommendations for improving the process of practical education for students.

2.8 Ethical considerations

The ethics commission at the Nursing Institute in Kenitra and the provincial ethics commission authorized our study. The survey team was well trained in ethical procedures. The anonymity of the students surveyed was ensured, and the confidentiality and security of the data collected were guaranteed. The consent of all student nurses was sought and respected before the survey began.

3. Results

3.1 Personal characteristics of nursing students

The analysis of the personal characteristics of our sample of nursing students shows that the majority of our study population 78.15%, are female, while males represent only 21.84%. This may justify the fact that girls are more assiduous in their studies than boys. We note that the majority of students are young people 89.53% of students are under 30 years, while 10.46% are over 30 years. It should be noted that only 9.23% of students are married and they are girls, whereas 90.76% are single. 3.69% of students are foreigners who have come from African countries because of health partnerships between countries, while the majority 96.30% are Moroccans representing the different provinces of the Rabat-Salé-Kénitra Morocco region (table 1).

Table 1: Personal characteristics of nursing students surveyed

| Characteristics | Number | Percentage | |
|--------------------|----------------------------------|------------|--------|
| Age | Under 20 years | 45 | 13,84% |
| | Between 20 and 25 years | 160 | 49,23% |
| | Between 25 and 30 years | 86 | 26,46% |
| | More than 30 years | 34 | 10,46% |
| | Total | 325 | 100% |
| Gender | Male | 71 | 21,84% |
| | Female | 254 | 78,15% |
| | Total | 325 | 100% |
| Level of study | Second year of study | 173 | 53,23% |
| | Third year of study | 152 | 46,76% |
| | Total | 325 | 100% |
| Marital Status | Married | 30 | 9,23% |
| | Single | 295 | 90,76% |
| | Total | 325 | 100% |
| Nursing speciality | Midwife | 46 | 14,15% |
| | Emergency nurse | 49 | 15,07% |
| | Polyvalent nurse | 70 | 21,53% |
| | Psychiatric nurse | 54 | 16,61% |
| | Anesthesia and reanimation nurse | 61 | 18,76% |
| | Community health nurse | 45 | 13,84% |
| Total | 325 | 100% | |
| Home country | Morocco | 313 | 96,30% |
| | Other country | 12 | 3,69% |
| | Total | 325 | 100% |

3.2 Students vision of the practical teaching capacity parameter

Analysis of the results concerning the practical teaching parameter showed a positive reaction by student nurses with regard to the following questionnaire items: Demonstrates clinical procedures and techniques (5.99±1.86), Provides specific practice opportunity (5.98±1.75), Answers carefully and precisely to questions raised by students (5.95±1.82), Helps students organize their thoughts about patient problems (5.92±1.74), Remains accessible to students (5.89±1.81). These student perception results show that teachers are aware of the importance of practical education for students, which is reflected in positive attitudes towards these practical elements of the training of future nurses.

Concerning the elements of orientation of student nurses in their practical training and the aspect of love towards the teaching profession are underestimated by student nurses with inferior ratings; Guides students toward developing clinical skills (5.38±1.85), Enjoys teaching (5.31±1.72). These results can be explained by the fact that these teachers did not choose the teaching profession out of love, but because of life obligations, which has an impact on their orientation towards nursing students. and today's students have become more aware of teaching methods and are more exigent; this requirement is clearly apparent when the nursing students fill in the questionnaire. (table 2).

Table 2: Students' views on the practical teaching parameter

| Questionnaire Elements | Statistical Analysis | | Question Number |
|---|----------------------|---------|-----------------|
| | Standard Deviation | Average | |
| Explains clearly | 1,77 | 5,86 | 1 |
| Emphasizes what is important | 1,82 | 5,88 | 2 |
| Stimulates students' interest in the subject | 1,79 | 5,45 | 3 |
| Remains accessible to students | 1,87 | 5,79 | 4 |
| Demonstrates clinical procedures and techniques | 1,86 | 5,99 | 5 |
| Guides students toward developing clinical skills | 1,85 | 5,38 | 6 |
| Provides specific practice opportunity | 1,75 | 5,98 | 7 |
| Offers special help when difficulties arise | 1,87 | 5,91 | 8 |
| Is well prepared for teaching | 1,91 | 5,75 | 9 |
| Enjoys teaching | 1,72 | 5,31 | 10 |
| Encourage active participation during discussion | 1,83 | 5,69 | 11 |
| Gears instructions to students' level of readiness | 1,77 | 5,58 | 12 |
| Quickly grasps what students are asking or telling | 1,73 | 5,81 | 13 |
| Answers carefully and precisely to questions raised by students | 1,82 | 5,95 | 14 |
| Questions students to elicit underlying reasoning | 1,81 | 5,57 | 15 |
| Helps students organize their thoughts about patient problems | 1,74 | 5,92 | 16 |
| promotes student independence | 1,92 | 5,88 | 17 |

Concerning the parameter of nursing competence, nursing students prefer to have competent teachers in the field of nursing because they benefit from their knowledge and practical attitudes. In our survey, the students appreciate that these are the most important elements that should be present in the teachers' work, and they give them high ratings; Demonstrates a breadth of knowledge in nursing (5.88±1.75), Reveals broad reading in his/her area of interest (5.76±1.56), Directs students to useful literature in nursing (5.73±1.82), Demonstrates clinical skills judgment (5.63±1.71), takes responsibility of own actions (5.56±1.68). These results show that students prefer teachers who have a broad knowledge of nursing and who assume their responsibilities as well as practical skills, that the presence of these attitudes among teachers generates a favorable teaching environment and helps students to acquire new nursing techniques easily (table 3).

Table 3: Students' vision of the nursing competency parameter

| Questionnaire Elements | Statistical Analysis | | Question Number |
|---|----------------------|---------|-----------------|
| | Standard deviation | Average | |
| Demonstrates clinical skills judgment | 1,71 | 5,63 | 18 |
| Demonstrates communication skills | 1,64 | 5,58 | 19 |
| Reveals broad reading in his/her area of interest | 1,56 | 5,76 | 20 |
| Discusses current development in his/her field | 2,01 | 5,47 | 21 |
| Directs students to useful literature in nursing | 1,82 | 5,73 | 22 |
| Demonstrates a breadth of knowledge in nursing | 1,75 | 5,88 | 23 |
| Recognizes own limitations | 1,67 | 5, 52 | 24 |
| Takes responsibility of own actions | 1,68 | 5,56 | 25 |
| Is a good role model | 2,02 | 5,49 | 26 |

The results of the questionnaire show that student nurses prefer the following elements in the evaluation process in their practical training: students prefer to receive the following from teachers; Provides frequent feedback on students' performance (5.53±1.61), Communicates expectations of students(5.42±1.83), Gives students positive reinforcement for good contributions, observations, or performance(5.35±1.81). while students were not satisfied with the method of error correction (5.21±2.23), and the method of criticism they received in front of the other students (5.13±1.66). These were the most important elements appreciated by student nurses in the evaluation process in practical nursing education. Following discussions with the students on this parameter, the students stated that they preferred the assessment process to take place in good conditions, respecting their dignity and personalities and avoiding the authoritarian nature of the examiners. (Table 4).

Table 4: Student nurses' vision of the evaluation parameter

| Questionnaire Elements | Statistical Analysis | | Question Number |
|---|----------------------|---------|-----------------|
| | Standard deviation | Average | |
| Makes specific suggestions for improvement | 1,86 | 5,46 | 27 |
| Provides frequent feedback on students' performance | 1,61 | 5,53 | 28 |
| Identifies students' strengths and limitations objectively | 1,89 | 5,36 | 29 |
| Observes students' performance frequently | 2,21 | 5,41 | 30 |
| Communicates expectations of students | 1,83 | 5,42 | 31 |
| Gives students positive reinforcement for good contributions, observations, or performance. | 1,81 | 5,35 | 32 |
| Corrects students' mistakes without belittling them | 2,23 | 5,21 | 33 |
| Does not criticize students in front of others | 1,66 | 5,13 | 34 |

The results of the survey in relation to the parameter of interpersonal relationships revealed that student nurses give particular importance to the following questionnaire items, with more points than the other items: A climate of mutual respect (5.62±1.87), accessibility (5.59±1.74), empathy (5.48±2.04) and active listening (5.37±2.05). These results show the students' expectations concerning the relationship with the professors and the importance of a relationship of respect and empathy in the acquisition of nursing knowledge and skills (table 5).

Table 5: Student nurses' vision of interpersonal relationships

| Questionnaire Elements | Statistical Analysis | | Question Number |
|--|----------------------|---------|-----------------|
| | Standard Deviation | Average | |
| Provides support and encouragement to students | 2,07 | 5,26 | 35 |

| Questionnaire Elements | Statistical Analysis | | Question Number |
|--|----------------------|---------|-----------------|
| | Standard Deviation | Average | |
| Is approachable | 1,74 | 5,59 | 36 |
| Encourages a climate of mutual respect | 1,87 | 5,62 | 37 |
| listens attentively | 2,05 | 5,37 | 38 |
| Shows personal interest in students | 1,64 | 5,31 | 39 |
| Demonstrates empathy | 2,04 | 5,48 | 40 |

The nature of the teachers' personality has either a positive or negative impact on the learning of student nurses. The nursing profession requires a strong personality given the nature of the work and the frequent contact with patients and their environment. The degree of learning for nursing students increased when the teachers had a strong personality and self-confidence (5.69±1.42), with awareness of these responsibilities (5.47±1.92), and organization in practical and theoretical work (5.58±1.93). The elements least appreciated by the students were dynamism and energy (5.14±1.73) and a sense of humor (5.18±1.97). Following discussions with students, they expressed that teachers with strong personalities are more likeable by students because they master the teaching environment, which helps us to acquire practical skills easily and in good conditions (table 6).

Table 6: Nursing students' views on the personality parameter

| Questionnaire Elements | Statistical Analysis | | Question Number |
|-----------------------------------|----------------------|---------|-----------------|
| | Standard Deviation | Average | |
| Demonstrates enthusiasm | 1,88 | 5,30 | 41 |
| Is a Dynamic and energetic person | 1,73 | 5,14 | 42 |
| Self-confidence | 1,42 | 5,69 | 43 |
| Is self-critical | 1,92 | 5,47 | 44 |
| Is open-minded and non-judgmental | 1,99 | 5,23 | 45 |
| Has a good sense of humor | 1,97 | 5,18 | 46 |
| Appears organized | 1,93 | 5,58 | 47 |

3.3 Comparison of vision between students using the Mann-Whitney test

Table 7: Comparison of practical education parameters between the two categories of nursing students

| Level of study | Statistical Factors | Practical Education Parameters | | | | |
|-------------------------|---------------------|--------------------------------|----------------|------------|------------------------|-------------|
| | | Teaching Capacity | Nursing Skills | Assessment | Interpersonal Relation | Personality |
| Second Year of Study | Average | 5,54 | 5,51 | 5,46 | 5,20 | 5,37 |
| | Standard Deviation | 1,69 | 1,67 | 1,78 | 1,76 | 1,68 |
| | Number | 171 | 171 | 171 | 171 | 171 |
| | Sum | 486,65 | 475,33 | 442,12 | 464,00 | 458,76 |
| | Sum of Ranks | 6542,41 | 6623,15 | 6432,69 | 6538,46 | 6724,00 |
| | Average Ranking | 78,43 | 71,28 | 69,33 | 65,64 | 70,75 |
| Third Year of Study | Average | 5,85 | 5,82 | 5,56 | 5,34 | 5,28 |
| | Standard Deviation | 1,54 | 1,68 | 1,87 | 1,96 | 1,74 |
| | Number | 154 | 154 | 154 | 154 | 154 |
| | Sum | 375,25 | 366,58 | 357,19 | 347,31 | 338,65 |
| | Sum of Ranks | 5746,64 | 5072,34 | 5312,64 | 4905,86 | 4883,47 |
| | Average Ranking | 81,14 | 72,15 | 68,33 | 74,11 | 69,34 |
| Mann-Whitney U | 2336,000 | 2157,000 | 2268,000 | 2286,500 | 2384,500 | |
| Asymptotic Significance | 0,476 | 0,369 | 0,571 | 0,674 | 0,753 | |

Several comparison tests exist in the literature, but in our study, we preferred to use the non-parametric Mann Whitney test for two independent samples because it is more appropriate in the context of our study. This test is used to detect modalities of significance between the two groups of students in relation to the five practical teaching parameters, namely: Teaching ability, nursing competence, evaluation, interpersonal relationships and personality. The results obtained showed that there was no statistically significant difference between the two groups of students concerning the five practical teaching parameters with p-values greater than 0.05. This can be explained by the fact that the students in both groups are of the same mindset, working together on the placement sites and discussing the problems they have encountered, their perspectives, benefiting from the same quality of teaching with the same teachers and other factors justifying these results.

4. Discussion

Nursing is a noble profession all over the world, nurses provide more than 80% of the care for the population. So, the quality of training for student nurses has a direct impact on the quality of care and the public's satisfaction with the healthcare system in general. The aim of our study is to assess the views of nursing students on the parameters of practical teaching at the nursing training institute in Kenitra (Elouakfaoui and al., 2022).

The results obtained show that the students differ in the manner in which they rank the importance of the five practical teaching parameters, and also in the method of evaluating the teaching process. The comparison results showed that there was no statistically significant difference with p values greater than 0.05.

The practical teaching parameter considered by the students to be the most important was nursing competence with a score of (5.88 ± 1.75) several studies have found similar results such as: the study by Biffittu and al in 2018 and by Lovric and al in 2017, these surveys showed that the parameter of teaching ability is the most valued by students, with a higher score than the other parameters (Biffittu and al., 2018; Lovric and al., 2017). Another study carried out by Knox and Mogan in 1985 revealed that the same parameter was estimated more by second-year nursing students than third-year students (Knox and Mogan, 1985). On the contrary, other studies have found different results to ours, such as Hababeh's study in 2020, which found that the parameter of teaching ability carries a lower score and is underestimated by the first-year students (Hababeh and Lalithabai, 2020).

In our study, the ranking of practical teaching parameters according to the estimation of student nurses is as follows: nursing competence, personality, interpersonal relationships and finally evaluation. Several studies have found similar results such as Wang and al in 2017 this study showed that the parameter most rated and valued by students is the competence of nursing education (Wang and al., 2017). Salizar study in 2016 revealed that the nursing student's learning process is closely linked to the professors' competence in teaching nursing (Ludin and Fathullah, 2016). On the contrary, the study by Lovric and al. 2017 shows that this competence parameter is less noted and underestimated by nursing students in the first year of study (Lovrić and al., 2017).

The results of our study show a variation in the estimation of the practical teaching parameters by the students. According to the third-year students, the nursing competence parameter is more important than the personality parameter. while second-year students take a different view, prioritizing personality over nursing skills, but both groups of students agree that the parameter of teaching ability should be given the highest score because the impact of this parameter on the acquisition of knowledge and skills for students.

According to Lillekroken, the following parameters are the most noted and valued by nursing students: Answers carefully and precisely to questions raised by students, promotes student independence, self-confidence, being organized, Encourages active participation during discussion. Whereas the acquisition of practical skills is achieved when there is an empathetic relationship and favorable communication between healthcare staff, nursing students and nursing teachers, and When students can ask questions in order to acquire knowledge and teachers answer momentarily, ensuring

quick feedback (Havery, 2019; Lillekroken, 2019).

The following points are less important than the other elements according to the students' view: having a good sense of humor, showing enthusiasm, having an open mind, not being judgmental, not criticizing students in front of others, having clinical and judgmental skills.

Several researches have shown that aspects of assessment and personality are valued more by nursing students, but personality comes first according to students (Soriano and Aquino, 2017). According to Gangadharan students ranked these two parameters in third place with the same estimate and rating (Gangadharan and al., 2016). According to Bifftu's survey students value evaluation more than the two parameters of personality and feedback (Bifftu and al., 2018). According to Knox and Mogan, students ranked evaluation in first place with a high score, followed by personality (Knox and Mogan, 1985). These two parameters define the best practical teaching according to the vision of the students who rank them at the top of the list except for the first-year students who are not sufficiently experienced to be able to judge (Hababeh & Lalithabai, 2020).

This strong personality parameter must be present in every practical teacher, as it helps to create a favorable teaching climate that encourages students to acquire knowledge and skills, The teacher must always be smiling humanist with the patients, and help the students in the difficulties of placement, these attitudes of the teacher help the learning of the students leading to a future qualified and competent nurse able to work in care facilities (Parsh, 2009).

According to Havery, the practical evaluation of student nurses is an essential part of the training program, providing feedback on what the student has already acquired. This helps teachers target learning gaps and helps students to improve their nursing practice. (Havery, 2019). According to Chan students prefer to have focused and detailed feedback after the practical assessment process. to correct their problems and mistakes, in a supportive and respectful context and of constructive criticism between student and teacher (Chan and al., 2017).

According to Takashima's survey, the two student categories differ in their estimation of the evaluation parameter, since third-year students rank it first, whereas the personality aspect ranks them last. While the second year ranks it last, the learning context and regular monitoring plays an important role in practical education (Takashima and al., 2019).

According to studies by Fraser and Rademakers, this difference in estimation between the different parameters of practical teaching by student nurses in different countries can be explained by variation in socio-economic level, learning environment, materials used for practical learning such as simulation equipment, (Fraser and al., 2010; Rademakers and al., 2011). It may also be related to the teaching method used, the method of monitoring and assessing learning, several models of assessment can be applied such as structured practical examinations, in-patient assessment, portfolio assessment and self-assessment (Riklikiene and Nalivaikiene, 2013).

In our study we used the non-parametric Mann Whitney test to make a statistical comparison between the two categories of students (two independent samples). The results obtained show that the difference in vision between the two groups on the practical teaching parameters is not statistically significant, with p values greater than 0.05 for all the parameters. Several studies have carried out statistical comparisons but between students' and teachers' vision regarding the five parameters of practical teaching, such as studies by (Bifftu and al., 2018; Gangadharan and al., 2016; Hababeh and Lalithabai, 2020).

The results obtained in our study were able to detect several dysfunctions in the process of the practical education of the nursing students through the perception of the students on the parameters of the practical education by giving less notation for the elements which must be improved by the professors. In the context of this study and this diagnosis we were able to bring out several recommendations for the improvement of the practical education of the nursing students which is manifested by:

- Recommendations for teachers and managers:
 - Appropriate teaching: Ensure that students are well guided by experienced nurses or clinical instructors.

- Structured planning: Set up a well-structured practical training program covering a variety of clinical areas.
- Patient safety: Patient safety must be a top priority. Students must be trained to follow safety protocols.
- Clinical skills development: Provide opportunities for students to develop essential clinical skills.
- Communication and the patient-nurse relationship: Emphasise the importance of effective communication with patients and their families.
- Ethics and deontology: Integrate ethics and deontology training into the program to help students navigate the ethical dimensions and complex situations they may face.
- Continuing education: Encourage students to pursue their education throughout their career by encouraging participation in further education and professional development programs.
- Continuous assessment: Set up a continuous assessment system to monitor student progress and identify areas where they need improvement. Provide constructive feedback to help them improve.
- Exposure to patient diversity: Ensure that students have the opportunity to work with a variety of patients, including those from different ethnic backgrounds, cultures and age groups.
- Mentoring: Encourage students to seek out mentors within the nursing team, which can contribute to their professional development and direction in their nursing career.
- Open and transparent communication: Establish open communication with students. Encourage them to ask questions and share concerns.
- Proper orientation: When students begin their placement, ensure that they are provided with a thorough orientation to the health care facility's policies, safety procedures, and expectations for professional behavior.
- Recommendations for student nurses:
 - Commitment to learning: Be committed to your education.
 - Time management: Learn how to manage your time effectively.
 - Collaboration: Learn to work as part of a team. Collaboration is a crucial skill for nurses.
 - Patient-centred care: Always keep in mind that the patient is at the centre of your work.
 - Clinical skills: Focus on developing your clinical skills.
 - Professional ethics: Respect the ethical and deontological standards of the nursing profession.
 - Continuing education: Pursue your education beyond your initial training.
 - Stress management: Learn how to manage stress. Healthcare can be intense and emotionally demanding.
 - Critical Thinking: Develop your critical thinking skills.
 - Professional Commitment: Be committed to your profession and your community.

Our study involved an evaluation of students' perceptions of the parameters of practical teaching, and to complete it with a generalized vision we need to carry out another survey on the perception of these parameters by teachers and placement supervisors, and compare it with that of students in order to have an overall diagnosis, with solutions for improving the practical teaching of nursing students.

5. Conclusion

Our study was carried out to improve the training process for nursing students. it aims to know and compare nursing students' perceptions of the five practical teaching parameters. Concerning the ranking of these parameters according to the perception of the students during the study, we find firstly teaching ability, secondly nursing competence, followed by personality and interpersonal

relationships, while the evaluation parameter is rated less highly by the students and is placed last. The comparison between the two groups of students on the perception of the parameters showed a difference, but it was statistically insignificant.

This survey showed an overall view of how students perceive the parameters of practical teaching, and to complete this study, other surveys can be carried out, such as the perception of teachers and training managers, in order to complete the diagnosis and planning an improvement process with the aim of providing quality training for nursing students.

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