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Lessons learned from adapting the nursing practicum during the Covid-19 pandemic: a qualitative study

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Abstract

Background At the end of internships, students do not feel fully qualified to work as nurses due to a lack of confidence. However, during the COVID-19 pandemic, students worked as healthcare aide providing basic health assistance under the supervision of a nurse. This study aimed to explore the learning experiences of fourth-year nursing students who worked under healthcare aide contracts during the COVID-19 pandemic, and how these experiences enabled an effective transition to professional nursing roles.

Method An exploratory qualitative study using a qualitative content analysis of reflective texts was undertaken. Seventeen fourth-year nursing students (2020-21), who had completed just over 50% of their on-site practicum and had worked as healthcare aides since the second wave of the pandemic, participated. Reflective texts written by students about their experience were collected via email. A qualitative content analysis was used with multiple rounds of coding to ensure consistency and reliability. The COREQ reporting guidelines were used.

Findings Two main themes appeared: (1) meaningful learning: learning more, deeper, and faster than in internships, and (2) being “almost nurses”. Students reported instances where they felt a significant increase in their clinical decision-making skills due to real-time feedback from mentors.

Conclusions These findings suggest that integrating more responsibility and team-based learning experiences into nursing practicums could accelerate competency development.

Keywords COVID-19, Learning, Nursing education research, Qualitative research

Background

During the COVID-19 pandemic, various strategies were proposed at the national and international levels to counteract the shortage of human resources and improve the availability of healthcare staff. Hospitals implemented isolation measures and restrictions on the circulation of people, leading to the cancellation and postponement of clinical placements [1, 2]. As a result, universities were forced to replace these practices with other types of training, such as reducing the number of direct patient care practice hours and offering alternative clinical experiences by increasing the use of simulation-based

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training with mannequins [3, 4] or online practicums (nursing teachers developed clinical cases and instructional films and used synchronous online communication tools) [5]. It is also worth mentioning that the number of mandatory clinical practice hours required of students to become certified varies across countries. For example, in one state within the United States, students must complete 120 h, while in European countries, they must perform a minimum of 2,300 practice hours of direct patient care over three to four years of training, as is the case in Spain [3].

In Spain, nursing students complete clinical practice hours involving direct patient care throughout the four years of compulsory training in both public and private healthcare centers under formal training agreements. These placements are unpaid, and students do not receive any financial compensation. (Table 1).

The European Credit Transfer and Accumulation System (ECTS) is a standardized framework used across the European Higher Education Area to measure student workload and learning outcomes. One ECTS credit represents roughly 25–30 h of work. The system facilitates the accumulation and transfer of credits between institutions, ensuring transparency and recognition of studies [6].

In Spain, special measures—such as the regulation of a voluntary modality of the Healthcare Aid contract—were issued to strengthen the National Healthcare System in response to the growing demand for health care. Healthcare Aid contracts allowed final-year nursing students to be recruited and contracted by hospitals as healthcare staff, working under the supervision of a registered nurse (RN) and receiving a salary similar to that of a new graduate [2]. The first Healthcare Aid contracts were implemented in April 2020 and reinstated in October 2020 during the second wave. Within this context, nursing students supported basic patient care, COVID-19 care pathways, public health activities—including contact tracing, health education, and vaccination campaigns—and assisted with organizational tasks [7]. When

the health emergency proposal was put forward during the first wave, fourth-year students were just about to finish their university training and had completed most of the practicum clinical rotations under the usual conditions of expert supervision [8]. In the second wave, the graduating students who participated in this study were just starting a practicum of 21 ECTS. Compared to students from the previous year, they had completed little more than 45 of the 81 compulsory ECTS. Students who chose not to take the Healthcare Aid contract were offered the possibility of completing clinical case studies instead. The Healthcare Aid contract was reintroduced during the third wave (December 7, 2020, to March 14, 2021) and again throughout the fourth wave (March 15 to June 19) [7]. The strong demand for nursing professionals led to the hiring of students who voluntarily accepted the Healthcare Aid contract across all hospital services, including specialized units (ICU, emergency rooms.), under the supervision of a registered nurse (RN). Due to the gravity of the situation, students eventually assumed roles comparable to those of regular staff, fully integrating into the healthcare teams [2]. Patient safety was ensured, as nursing students acquire these competencies both theoretically and practically during their initial clinical placements in the second year.

The Spanish government decided to validate and officially recognize Healthcare Aid contracts as professional practice by the universities. This measure was implemented to exempt students from completing pending clinical placements after the COVID-19 pandemic, thereby avoiding delays in their integration into the healthcare system as fully qualified nursing graduates.

Literature review

The evidence shows that, during the COVID-19 pandemic, students experienced negative feelings such as fear and uncertainty, yet felt compelled to help and considered the situation as an exceptional opportunity for personal and professional growth [9, 10]. Students were aware that they were immersed in a changing clinical environment at the organizational and procedural level, where they faced caring for patients during a public health emergency for which they did not have adequate training or supervision. However, this challenging situation did not prevent them from growing into their professional identity, and they quickly transitioned to the role of professional nurses [10].

Before the pandemic, students experienced internships as an opportunity to transition towards their clinical skills, from the abstract to the concrete. Although they acknowledged an evolution over successive periods of practice and greater preparation, they did not feel fully qualified to work as RNs due to a lack of confidence and expressed concern about the possibility of harming their

Table 1 Distribution of compulsory clinical practice courses in the Nursing Degree

Year	Practicum	Number of ECTS*	Hours
FIRST	-	-	-
SECOND	Practicum I	12	300
	Practicum II	9	225
THIRD	Practicum III	12	300
	Practicum IV	12	300
	Practicum V	15	375
FOURTH	Practicum VI	21	525
	Practicum concentration	12	300
TOTAL		93 (81 + 12)	2325

*ECTS: European Credits Transfer System

patients [11]. During internships, students frequently hesitate to ask questions for fear of being reprimanded. They may also experience confusion regarding the varying responsibilities among nursing staff and often report feeling overlooked or dismissed by senior nurses [12]. When newly graduated nurses transition from academic settings to professional practice, they often experience stress due to different individual and organizational factors. This process of adjusting to the realities of working life, both professionally and personally, is referred to as “transition shock” [13].

During the transition process, newly graduated nurses often feel overwhelmed for various reasons—including gaps in clinical knowledge—and express a desire for greater support through standardized transition programs [14]. Concerns related to the transition from student to professional nurse are reflected in the various interventions designed to facilitate this process. However, most of these initiatives primarily focused on developing technical skills and lack an in-depth conceptual analysis of the nature of the transition [15]. This is also evident in the highly variable content and duration of transition programs [16].

At the end of October 2020, during the second wave of the pandemic, most of the nursing students at our university took up a Healthcare Aid contract in a doubly exceptional context: that of the ongoing pandemic and having completed less than 50% their internship hours.

The literature [13, 14] shows that, during Healthcare Aid, these students made a fast transition to the role of nurses, but it remains unexplored what fundamental conditions and learning experiences facilitated the effectiveness of this transition, having completed only half of their practicum hours.

Methods

This study aimed to explore the learning experiences of fourth-year nursing students who worked under Healthcare Aid contracts during the COVID-19 pandemic, and how these experiences enabled an effective transition to professional nursing roles. We conducted an exploratory qualitative study using qualitative content analysis [17] of reflective texts written by nursing students about their experience as healthcare aids. The content analysis approach enabled us to examine both the manifest content and the latent, interpretive dimensions of students' learning experiences during Healthcare Aid contract, which facilitated their effective transition into roles as professional nursing during the COVID-19 pandemic [17]. This research adheres to the Consolidated Criteria for Reporting Qualitative Research (COREQ) [see Supplementary material file 1].

The study was undertaken at the Nursing Department of the Autonomous University of Barcelona. The

54 fourth-year students of the Degree in Nursing of the academic year 2020-21 enrolled in the elective course ‘Nursing and Medical Anthropology’ were invited to participate. An email was sent via Moodle inviting students, with the writing script attached. Students were also provided an email address to which they could send their reflective text if they decided to participate. That email address belongs to a collaborating researcher who did not participate in the data analysis or know the students. When an e-mail was received, the attached description was anonymized and transferred to a folder shared with the other researchers. The only inclusion criterion was to have worked in Healthcare Aid since the second wave of COVID-19 in Barcelona (Spain) (as offered by health institutions at the end of October 2020). We used convenience sampling due to the exploratory nature of the study and ease of access for students.

All students who agreed to participate sent in their reflective texts. No request was made to delete a text, so there was no attrition in this cohort.

Data collection based on students' reflective text was conducted at the height of the third wave of the pandemic. A series of grouped open-ended questions that the participants were required to respond to was designed [see Supplementary material file 2]. These grouped questions aimed to facilitate the writing exercise and explore the transformative experience of healthcare aide. The notion of “transformative experience” was defined as a lived experience that challenged your life, transforming you as a nursing student, a human being, or both. The grouped questions were structured into three major areas: the starting point, the process, and the outcome, to allow students to share the specific conditions and types of learning experiences that were transformative, challenging, and significant in their internships. Each of these themes contained several questions intended to guide/assist in shaping the reflective response. For example, for the starting point there were questions such as: *How would you describe the impact of working as part in Healthcare Aid on your life (student/personal life)? If you identify several situations, choose the one that has impacted you the most as a nursing student. Describe the nuances and ideas leading to constructing the meaning and significance of this challenge in your life* [see Supplementary material file 2]. A pilot study was not conducted. However, two students and an expert patient in narratives reviewed this script to assess its comprehension and adequacy. The expert patient had previously participated in the nursing degree program as a storyteller, sharing her illness narrative [18, 19]. The student suggested some changes to the wording to improve comprehensibility, while the expert patient suggested grouping questions into three major areas to facilitate reflection within an orderly timeframe –the starting point, the process, and

the outcome. The reflective texts were collected in March 2021 via email. Seventeen (56%) of the total number of students in the course who worked in Healthcare Aid participated.

The university ethics committee approved this study (CEEAH 5216). The leading researcher was the coordinator of the elective course “Nursing and Medical Anthropology”. The study was clearly explained, and personal goals and reasons for conducting the research were discussed. Students were informed that they could withdraw at any time without explanation or academic consequences. All students provided written informed consent via email upon acceptance of participation.

All qualitative data were managed using Atlas-ti software and analyzed using qualitative content analysis [17]. In the first step, two women (AA and MF-C), experts in qualitative research, both PhD working as associate professors, read and reread the reflective texts. In the second step, the meaning units of each reflective writing were identified and coded. AA coded the first eight texts, which were then discussed with the MF-C until a consensus was reached. After that, the remaining texts were coded by AA based on previously shared criteria. In the third step, the codes were grouped into categories according to conceptual similarities and differences. In the fourth step, AA and MF-C worked together to compare categories by identifying latent content and presenting the main issues [see Table 2]. Unclear cases in each step were discussed on how to apply the grouping of coding or categories.

The coding process and the findings were revised with the rest of the research team. Saturation was reached with the first 14 reflective texts, at which point these categories seemed saturated in terms of their properties and dimensions [20]. But all 17 reflective texts were analyzed to ensure that no new data emerged and to include the perspectives of all those who decided to participate.

We followed Lincoln and Guba's framework [21] to ensure the scientific rigor of the research. To reinforce study credibility, the final findings were forwarded to two students for respondent validation to comment on the research findings and themes [22]. To strengthen confirmability, two researchers who are experts in qualitative methods discussed the coding process and the findings until consensus was reached. Conclusions were also discussed with a researcher not participating in the interviews or the analysis. To reduce any potential confirmation bias arising from the comments of researchers, the findings were also discussed with a nursing professional who worked during COVID-19. Quotations and analyses from the participants that illustrate the main issues give coherence to the conclusions. We maintained a constant review and a detailed description of how data were gathered, analyzed, and interpreted. As for

transferability, we provided a detailed description of contextual factors and participants to allow comparison and possible transfer to other contexts.

Findings

Seventeen students, aged 21 to 35 years, participated in this study [Supplementary material file 3]. Five categories emerged from the analysis and were grouped into two main themes. The first theme, “Meaningful learning: learning more, deeper, and faster than in internships,” encompasses the following three categories: emotions experienced, assuming responsibility for care, and team-based learning. The second theme, “Being ‘almost’ nurses,” encompasses the following two categories: advancing as a professional and professional recognition by others (Table 2).

Meaningful learning: learning more, deeper and faster than in internships

This topic encompasses how the students' healthcare aide experience during the COVID-19 pandemic helped build a more meaningful learning process than that achieved through internships.

Emotions experienced

This category includes the emotions experienced by the students when they joined as healthcare aides.

The findings showed that students were immediately aware of the risk of personal exposure and were more conscious of the gravity of the situation due to working on the front line in a high-risk environment and assuming professional responsibilities.

I felt vulnerable at first, despite the protection provided by the PPE. I had never used such equipment before, and I knew that any silly mistake, such as forgetting a part of the PPE, removing it wrongly, or forgetting to wash my hands, was enough to get infected (...) that was when I started to become aware of how easy it is to get this disease. E2.

They also showed how hard the emotional impact was, much more so than imagined.

It has been tough for me, very hard. Even if you are told about it, you can never really know what it feels like to enter a COVID service for the first time. (...) My mind kept telling me, 'It's like going down to hell.' E4.

Feeling suffocated and overwhelmed: Some students reported experiencing these feelings. Facing a situation like this involves dealing with and managing emotions constantly.

Table 2 Overview of the coding process

Themes	Categories	Subcategories	Codes
Meaningful learning: learning more, deeper, and faster than in internships	Emotions experienced		<ul style="list-style-type: none"> - Becoming aware of risk - Feeling overwhelmed - Feeling suffocated - Uncertainty - Insecurity - Nervousness - Anxiety - Crying - Fear - Positive aspects of the experience
		Assuming responsibility for care	<ul style="list-style-type: none"> - Assuming responsibility - Change in role - Need to learn - Initiative to learn - More learning - Faster learning
	Team-based Learning	Accompanied learning	<ul style="list-style-type: none"> - Sense of normality - Continuity of Practicum experience and learning - Positive lived experience - Non-accompanied learning - Lack of preparation - Negative lived experience
		Feeling like part of the team	<ul style="list-style-type: none"> - Support - Approachability - Feeling accompanied - Self-confidence - Team's human aspect - Affectionate relationships - Being taken into account - Feeling like part of it
Being “almost nurses”	Advancing as a professional		<ul style="list-style-type: none"> - Professional progress - Trust - Completing the caring tasks - Assuming professional responsibility - Professional challenge - Change of mentality - Feeling like a nurse
	Professional recognition by others		<ul style="list-style-type: none"> - Professional recognition - Recognition of expertise and competence - Self-confidence - Reliability - Positive self-assessment

Uncertainty, insecurity, nervousness and anxiety: The uncertainty of not knowing the service or services where they were going to work, the professional team, or the work dynamics, and their insecurity as students, were commonly reported during the first days. This created a state of nervousness and anxiety.

The first day I had to show up, I was a bundle of nerves, as I didn't know where I would be assigned, what I would have to do, what my colleagues would be like... E1.

Fear was constant and became a predominant emotion in certain situations. Students were afraid of the unknown,

of facing new situations, of infecting family members, of the situation in general.

I remember the fear and uncertainty when I put on my protective equipment and entered the “dirty zone” for the first time. E11.

The fear and uncertainty about infecting all my loved ones is a burden that I constantly carry. E2.

Despite their fears, they decided to go forward with the Healthcare Aid and stick with it.

Managing that mix of emotions, in which fear predominated over all others, was not easy, but I decided to continue. E4.

The initial fear was modulated depending on the situation. When the students felt more exposed, such as when they were no longer supervised by a nurse but instead accompanied by other student assistants, fear became the predominant emotion.

After three weeks, the supervisor informed us that we would no longer be accompanied by a nurse but by another healthcare aid. On hearing those words, the only emotion I felt was fear. Everything was icy; none of us said a word. We were in shock. E3.

Nevertheless, among the mixed emotions experienced, some students also expressed positive emotions despite feeling they had nearly reached their limit and highlighted the positive aspects of the experience.

I have to say that the first night I came home, I was in tears. It was as if the monitors were still buzzing in my room, but after that, everything started to become incredible [very positive]. E5.

Assuming responsibility for care

This category includes changes students perceived in their learning process as a result of assuming responsibility for care during the health care contract.

Compared to the practicum, during the Healthcare Aid contract, greater and faster learning emerged as a positive result. One essential factor behind this was the care responsibility assumed by students in this situation. In terms of learning, most students valued the experience positively, despite the challenges and complex situations they faced.

My nurse decided to grant me greater autonomy in techniques, judgment, and patient care, always under her supervision. This helped me notice and consider factors that you may not think of as a student. I think one reason for this is that you feel like more responsibility falls on you. E16.

Assuming care responsibility during the Healthcare Aid contract, compared to the practicums, changed students' perspective and behavior. Students felt that the responsibility falls mainly on the tutoring nurse during the curricular practicum, making them feel very confident. As students, they received instructions and guidelines for action, and this positions them as observers in more complex situations, protected from responsibilities. Feeling they were the primary person responsible for a

patient's care, as they did during the Healthcare Aid contract, changed how they faced the situation.

In the beginning, you're a student receiving guidelines you must follow (as in the practicum). The nurse has the last say, so you're never "exposed" to a situation you don't dominate yet. When you begin signing your name, the patients depend on you, and you're alone in the situation; everything changes. E4.

The change in role from student to professional, with the ensuing burden of responsibility, fostered the need to increase knowledge, ensured patients' safety and one's own, and took the initiative for their learning. This change was a turning point compared to practicum learning.

(...) no practicum can compare to the learning I've acquired over these months. The feeling of not having a nurse checking everything behind me forced me to work harder, go over everything I did one thousand times, verify medication, techniques, theory... E6.

Team-based learning

This category includes students' learning experiences primarily based on teamwork.

Accompanied learning This subcategory includes students' assessments of their learning process, depending on whether they felt accompanied or not.

The findings showed that accompanied learning, whether acquired during joint work with a peer or work supervised by a nurse, changed how students experienced the situation, making it more positive in terms of learning.

I was assigned a mentor nurse, María, with whom I worked side by side (...). María became an example of the nurse I aspired to be. (...) After a few weeks of working hand in hand with her, I gained autonomy, but in an exciting way: it was never imposed on me but allowed me to want it, something that I panicked about before the healthcare aid experience. E5.

Being under the supervision of a professional and remaining in a familiar facility helped students feel a certain sense of normality as they perceived a continuity of their practicum experience and learning, thus increasing their confidence. However, a lack of accompaniment and supervision, even when staying in the same facility, led students to assess the situation in a negative, threatening way, as they were aware of their lack of preparation and responsibility and the professional implications of this.

Once hired, I continued in the same department where I had started my Practicum and was also accompanied by the same nurse. In the beginning, I did not notice significant changes, as we followed the same dynamics as when I was “just a student.” But as I perceived that I was doing more things alone, without the nurse’s supervision, I felt insecure. (...) I was constantly afraid of doing something wrong and turning it into a big mistake, and I think that worked against me. E15.

The thought of potential harm to patients, especially critical patients, made students reflect and think that they were not prepared to assume such responsibility.

I often thought about the dangers of this situation because we are dealing with people’s lives at the end of the day. In my case, most of the patients were stable, but for some of my colleagues in critical care facilities, I dare not imagine. In the end, we are taking on a responsibility that I do not think is ours. E6.

Feeling like part of the team This subcategory includes what students reported about feeling like part of the work team.

Although how the situation was experienced, the responsibility assumed, and the lessons learned depended on whether the learning experience was accompanied, feeling like part of the team was another essential and outstanding component of the learning experience. The team was supportive of activities, but this support was essential in the emotional sense.

For the most part, I have been very fortunate to have wonderful colleagues, nurses, assistants, orderlies, and doctors who supported me whenever I asked for help. I have always had someone by my side to whom I could ask questions; I have always felt very supported. And that, on an emotional level, was essential. E8.

The approachability of most team members in responding to any doubt or request for help from the students made them feel accompanied, thus favoring self-confidence.

At no time have I felt alone since other professionals were always around with much more experience than us and were willing to help. E8.

The human aspect of the team was highlighted as a positive element distinct from other professional qualities. The affectionate relationships established among team members were a source of personal and professional support throughout the challenging situation.

Support and affection among team members are very important. For example, it can help us overcome the loss of a patient or give us the strength to continue after a tough shift. E7.

Being taken into account by the team and feeling part of it contributed to the students feeling acknowledged and valued, thus increasing their motivation to learn.

The responsibility of being a member of the team and not just a student made me try harder in everything I did because I felt great responsibility, and they were putting their trust in me. E7.

Being ‘almost nurses’

This theme encompasses how the students’ perception of advancing as professionals and the recognition of this by others made them feel almost like nurses.

Advancing as a professional

This category includes aspects of the experience that led students to perceive significant professional progress.

Students perceived enormous professional growth as a result of this experience. It represented a before and after on a professional and personal level, which many students did not distinguish between.

Having the experience of working in a pandemic has been a form of personal and professional growth that I believe I could not have achieved if I had been doing the Practicum. E1.

Students made a distinction between learning and practical experience. On the one hand, they talk about the learning they have acquired, which they consider linked to their role as students. On the other hand, they talk about their professional experience, which they attribute to their role as healthcare aide. The combination of both findings materialized in the enormous self-perceived professional progress.

I was able to continue learning as a student, and, at the same time, I gained experience as a professional. It has been a continuous lesson in new ways of working and new ways of organizing myself at the same time. E1.

Showing the capacity to perform with a certain degree of normality during a work shift, fulfilling and completing care tasks, and assuming professional responsibility without problems arising from a lack of experience represented for the students the achievement of a significant professional challenge.

When, little by little, you start to get the work done on your own (...) when the end of the shift comes, and you transfer the information to the computer, you realize that you have succeeded and that you have carried it out naturally and calmly. E4.

Some students experienced such a big change that they even feel like nurses, despite recognizing their training and experiential limitations. They reflected this when referring to themselves as nurses and not as students or future professionals.

I do not know when my mentality changed, but I am no longer the same nurse since then. My way of evaluating the patient, planning and performing care, managing my emotions, and interacting with my colleagues has changed. E3.

In other cases, the experience reinforced their choice of nursing as the profession they wanted to pursue.

On a professional level, I am growing a lot despite everything, and now more than ever, I am clear that this is the profession I want to pursue. I am grateful for being happy working in what I love most: nursing. E6.

Professional recognition by others

This category captures students' perceptions of professional recognition from others.

Feeling appreciated and receiving professional recognition from others helped students validate the professional change they underwent. The fact that the nurses took their opinions into account or that the patients they cared for acknowledged their expertise and competence allowed them to become aware of their transformation. Thus, their self-confidence and trust were boosted, promoting a positive self-assessment of their professional skills.

I remember being asked, 'What would you do?' at times when the nurses were unsure about what interventions to perform. I really felt they valued my opinion and my judgment. (...) I told a patient that I was doing healthcare aid, and he said, 'You seem like you've been doing it your whole life.' That's when I realized I was on the right track, that the transformation was becoming apparent. E2.

Discussion

The main findings of this study show that students working in Healthcare Aid during the COVID-19 pandemic perceived greater and faster learning than during an internship. Assuming responsibility for care (feeling they

were the primary person responsible for a patient's care fostered the need to increase knowledge), accompanied learning, and feeling like part of the team were essential factors. Furthermore, the students felt almost like nurses, perceiving significant professional growth from the experience and being professionally recognized by others.

Meaningful learning: learning more, deeper and faster than in internships

The findings of this study indicate that although the students experienced adverse emotional reactions during the Healthcare Aid contract, the learning process was faster than in traditional clinical internships. This is because their role shifted from observer to actor (accompanied by an expert nurse), reducing the time required to learn clinical competencies.

While accompanied learning may appear similar to traditional supervision, the findings suggest that it provides a more empowering relational learning experience. The integration of more responsibility and team-based learning were key to this transformation and a catalyst for meaningful learning. Students working in Healthcare Aid during the COVID-19 pandemic have shown the great importance of these actions for the acquisition of significant learning in students, compared to the number of practice hours carried out. In Europe, 2,300 h must be completed according to regulations [6]. However, interns continue to complain about the same lack of learning and the same fears [4]. There is literature that supports this accelerated learning process, referring to it as "learning on the go" or as an "opportunity to gain real clinical experience and confidence" [23]. Students learned on their own—without sufficient supervision—through trial and error and by witnessing critical events; the learning was hands-on and engaging, driven by real pressure and responsibility [23]. Other authors note that students have experienced a unique opportunity, which they valued highly due to the skills they acquired [8].

Our research shows that assuming responsibility is a catalyst for learning since it generates the need to acquire more knowledge to support clinical decision-making and instills confidence. Learning through clinical practice gives students the opportunity to experience real contexts from the main role of observer and learn by doing. Observing what nurses do allows students to determine which behaviors are acceptable. This learning process enables them to be more autonomous and make spontaneous suggestions, even when they are not entirely responsible for patient care [24]. However, this initiation in decision-making inspired by other professionals is far from the professional responsibility students assume in Healthcare Aid. In this study, students felt a significant increase in their clinical decision-making skills due to

real-time feedback from mentors and the experience of team-based learning.

This team-based learning was inspired in nurse mentoring, based on accompanied learning, rather than the traditional mentoring provided during practicums, based on clinical instructorship. Students often deem the traditional healthcare mentoring model – most commonly used in the centers where students in our study complete their practicums – unsatisfactory. Other studies also point to this same dissatisfaction, visible in the fact that students felt unprepared to cope with the demands of multiple professional responsibilities and making difficult decisions by themselves [25]. To address the underpreparedness of graduating nurses, some organizations have implemented programs such as Nurse Residency Programs to support nurses in transition. These are broad, structured programs that facilitate a smooth transition, helping students to become independent health professionals [26, 27]. For new graduates in such transition programs, the quality of preceptor support (emphasizing graduates' learning and growth, giving feedback, engaging staff to build unit support, and encouraging their evolving accountability in care decisions) has shown advantages over quantity [28]. Our findings also reinforce this idea as they show how, despite having fewer practicum hours, nurse mentoring based on accompanied learning has been perceived as more effective. Given the critical and exceptional situation of the pandemic, the mentoring model underwent a major change: students were not given instructions as they normally would be in the traditional model, but the nurses opted for a powerful accompaniment and supervision that proved more effective for the students' learning. This accompaniment is intrinsic to mentorship, understood as a trusting relationship between a novice and a professional to provide personal and professional support [29]. Working under a Healthcare Aid contract fostered a trusting relationship between students and nurses, a relationship that does not occur when students complete the standard practicum.

As our findings indicate, relying on the team and feeling like a part of it was conducive to greater and faster learning in a highly complex environment. Collaborative environments support practicum students for a better transition into the nurse practitioner role [30]. Feeling connected to coworkers and maintaining high-quality interpersonal relationships is part of the psychological need for relatedness. The need for relatedness, like autonomy and competence, are universal needs recognized by the self-determination theory, an appropriate model for addressing engagement and motivation in the workplace [31]. When the practicum environment supports these psychological needs, students feel competent to relate to the team and manage the situation [32]. The context of the pandemic fostered competence (confidence in

their ability to perform their tasks successfully) based on team-based learning. Evidence shows that perceptions of relatedness, autonomy, and competence facilitate adaptation and adjustment to stressors in the work environment [33]. The perception of a strong social network can reduce stress in high-demand work environments [34], such as the one student encountered in the pandemic. We believe that the circumstances of the COVID-19 pandemic forced nurses to see students in Healthcare Aid not just as students but as professionals, which was not generally the case in the usual practicum. A more horizontal relationship was established from nurse to quasi-nurse (with the latter assuming responsibility for care), instead of the typical hierarchical professional-student relationship.

Being almost nurses

Hiring Healthcare Aid involved the coexistence of roles reported in other studies [35] in the absence of the usual transition from student to professional. Consequently, in addition to the students' inherent insecurity, they were assuming a professional role that was not yet theirs, and where the boundaries between the two roles and the duties to be performed were unclear. When facing these difficulties, the feeling of professional responsibility delivered greater learning quality than in the clinical practicum [23]. Our findings point to this responsibility as the main cause.

Our findings also suggest that this responsibility may have promoted the advancement of students' competency level according to Benner's model (1984) [36]. Healthcare Aid facilitated progress from novice level (senior students) to advanced beginner (recently graduated nurses). In some specific cases, even towards the competent level, as suggested by a student expressing that she had been able to "get the job done," which would imply carrying out effective work and adequate organization to face and overcome various contingencies [36]. It takes 2–3 years of performance to reach a competent level. However, in extreme situations such as the one experienced with greater than usual responsibility, some students were able to do it in a shorter time. For Benner, level advances are activated by practical knowledge obtained through involvement in the situation and experience [36]. The responsibility assumed in a team-based learning context could encourage involvement in the situation, moving away from observing it from the outside—as would be done in practice—to participating in it fully. The students faced many complex and critical situations in a short time, which involved extraordinary experiential learning.

Finally, working in Healthcare Aid contributed to deeper and faster learning than in internships. Students' personal evolution involved a transition towards being

“almost nurses.” Previous studies on trainees speak of this transformation in terms of personal growth as a health worker [37] or moving from being “students” to becoming “professionals” [24]. However, Healthcare Aid has gone beyond practicum learning. This work/learning environment provided sufficient autonomy, competence, and relationship to enhance their professional development to advanced competency levels that would take years to acquire.

Limitations

This study provides data from one country with a specific university and care context during the second to the fourth wave of COVID-19. Nevertheless, it provides reliable findings that can serve as baseline knowledge for similar contexts. However, our findings provide insights into the learning and onboarding of new nurses, with no transition period and fewer hours of practicum completed, where no similar evidence is available. The use of reflective texts instead of semi-structured interviews may have induced some bias by not being able to delve deeper into the narrative. However, they were written and collected while the Healthcare Aid was still in progress. Finally, only the students’ perspective is explored. It would be necessary to have the professionals’ perspectives to better understand this transformational process.

Conclusion

Students working in Healthcare Aid during the COVID-19 pandemic have demonstrated that meaningful learning during internships is more effectively achieved through strategies such as accompanied learning. A structural change is needed in the approach of practicum, placing emphasis not so much on completing the 2,300 h of practice, but rather on the fundamental aspects that promote greater and better learning. This structural change requires close collaboration between the Academy and the Department of Health, as it involves changes to the traditional way of conducting internships for both students and professionals. We identified several priority innovations. It is fundamental to train nurses who oversee practices in team-based learning and require a basic certification of competencies in supervising students. As regards students, strategies should be implemented to integrate them into work teams with the objectives of (1) empowering them to assume responsibility and make decisions and (2) preparing them to manage emotions by being able to share concerns with a wide range of professionals.

Future research should explore (1) clinical trials that assess team-based learning interventions; (2) long-term outcomes of these adapted strategies; (3) their applicability in different healthcare settings, and (4) the nurses’ perspective on why the exceptionality of COVID-19

supported a different, more effective nurse mentoring, and how students in Healthcare Aid were included as part of the team, which does not usually happen in standard practicums.

Abbreviations

ICU	Intensive Care Unit
RN	Registered Nurse
ECTS	European Credits Transfer System
COREQ	Consolidated Criteria for Reporting Qualitative Research

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s12909-026-08930-4>.

Supplementary Material 1. Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist*.

Supplementary Material 2.

Supplementary Material 3. Participants' characteristics.

Acknowledgements

Not applicable.

Author contributions

A.A., M.F.-C., R.M.G.-S. and M.I.F.-C. made substantial contributions to the conception and design of the study. A.A., M.F.-C. and R.M.G.-S. collected the data. A.A. and M.F.-C. conducted the data analysis and interpretation. A.A., M.F.-C. and M.I.F.-C. wrote the main manuscript text and created the tables. M.F.-C. supervised the work. All authors reviewed the manuscript. All authors have read and approved the final manuscript.

Funding

No funding.

Data availability

The datasets used and analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

The study protocol was approved by the Ethics Committee of the Autonomous University of Barcelona (CEEAH 5216). All students provided written informed consent via email upon acceptance of participation.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

Received: 9 July 2024 / Accepted: 25 February 2026

Published online: 06 March 2026

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