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ORIGINAL RESEARCH

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Experience of primary care nurses applying nurse-led management of patients with acute minor illnesses

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Abstract

Aim: The aim of this study is to determine the experience of primary health care nurses regarding the application of nurse-led management in patients with acute minor illnesses.

Background: Nursing leadership of care for acute minor illnesses is a new challenge faced by nurses in Spain.

Design: Qualitative, hermeneutical, interpretive phenomenological approach is used. The Consolidated criteria for reporting qualitative research guidelines were applied.

Methods: Twenty primary care nurses participated; three focus group discussions and nine semi-structured interviews were conducted between November 2019 and October 2020. All the focus group discussions and interviews were recorded, transcribed verbatim and analysed using content analysis.

Results: Seven main themes emerged from the focus group discussions and interviews: concept, perception of the other actors, practice, history and social context, competencies, training, and legality.

Conclusion: The study shows the diversity and complexity of nurses' experience when applying nurse-led management in acute minor illnesses. This work has helped to show the gaps perceived by nurses, including the lack of training in the treatment of conditions historically attended by physicians, the lack of definition of the legal framework and the limitations on nurse prescribing. It also highlighted the power of the nursing profession in terms of autonomy, competencies and role expansion.

KEYWORDS

acute minor illnesses, hermeneutic phenomenology, nurse-led, nursing, primary care, qualitative study, Spain

Summary statement

What is already known about this topic?

- Nurse-led management of acute minor illnesses is being applied in multiple countries.
- Nurse-led management in patients with acute minor illnesses is known to have benefits for both the patient and the system.

- Nurses' perceptions of applying nurse-led management in patients with acute minor illnesses are not known but such knowledge would allow the detection of drivers and barriers for this model of care.

What this paper adds?

- The concept of nurse-led management in patients with acute minor illnesses needs to be clarified to avoid confusion with triage.
- The topic was perceived as not properly covered in university studies and attended by a lack of ongoing training.
- Nurses express self-doubt in their prescribing because they have been able to do so autonomously for only a short time.

The implications of this paper:

- Nurses consider themselves competent to apply nurse-led management of acute minor illnesses but need more training and knowledge of the legal framework.
- University curricula need reform and adaptation to the training needs of these new roles. In addition, continuing education will be required.
- National regulation is needed to enable this practice without dependence on other professionals.

1 | INTRODUCTION

The primary health care (PHC) system in Spain is public and is distributed throughout the territory in PHC centres, which offer basic primary care, such as medical visits, preventive activities, promotion of healthy habits, health advice, and care of chronic and urgent diseases (Hämel et al., 2020). Nurse-led management for acute minor illnesses (NLMAMI) emerged in 2009, addressing the need to reorganize the healthcare system during the global economic crisis (Lopez-Valcarcel & Barber, 2017). The aim is to enable nurses to provide a complete consultation for acute minor illnesses, following protocols based on scientific evidence and agreed by experts. These protocols include the reasons for consultation, how to take a medical history, exclusion criteria, how to establish pharmacological or non-pharmacological treatment and health advice (Fabrellas et al., 2013).

This nurse-led management can be applied because the role of nurses has evolved to become more autonomous as their training and competencies have increased (Vara Ortiz & Fabrellas Padrés, 2019). As a result, nurses can take on consumer demands that until now were only seen by physicians, when they are acute minor illnesses (Iglesias et al., 2013). Studies show that nurses can successfully treat an average of 61.8% to 73.3% of adult cases and 75.6% of paediatric cases. Return consultation rates were low, between 2.4 and 4.6% (Brugués et al., 2016; Fabrellas et al., 2011, 2013, 2015).

NLMAMI has been implemented throughout Spain, but its concepts and application differ between countries and centres (Brugués Brugués et al., 2017). However, NLMAMI is not free of controversy. There was a reluctance to implement it on the part of some nurses themselves, seeing their role as overlapping with that of physicians or having resistance to the evolution towards more advanced roles (Hudspeth & Klein, 2019). The same may have occurred when their scope of responsibility was expanded, due to a lack of legal coverage, conceptual or ethical issues. Another problem has been the regulation of nurse prescribing in Spain. Regulations until 2009 prohibited nurses from prescribing any type of medication (Romero-Collado et al., 2017). In 2015, nurse prescribing was authorized even though certification of the training was pending at the time. At the end of the same year, there was a new modification of the law. This law subordinated the nurses' activity to the supervision of the physician, who was responsible for diagnosing and issuing prescriptions. Finally, in 2018, the official resolution was published, regulating the indication, use and authorization of medicines and health products for human use by nurses (Gómez León et al., 2020). It has gradually been implemented and is still in the expansion phase. Although progress has been made, Spain is still some way behind countries such as the UK or USA that endorse nurse diagnoses and independent prescription (Mitchell & Pearce, 2021; Muench et al., 2021; Saunders, 2021). The implementation of nurse prescription is an important part of NLMAMI. It allows application of the full protocol, that is, performing the whole episode of care, from taking the history and examination to the clinical diagnosis and pharmacological prescription in a totally autonomous way.

Knowing nurses' perceptions when applying NLMAMI will allow us to determine both their sources of satisfaction and the most controversial aspects to reinforce strengths and define weaknesses for the implementation of future improvements.

2 | METHODS

2.1 | Aim

The aim of the study was to determine the experience of nurse-led management for patients with acute minor illnesses by PHC nurses in Catalonia (Spain).

2.2 | Design

This was a phenomenological study according to Heidegger's hermeneutics (Heidegger, 1996) and framed within the constructivist theory of Guba and Lincoln (2002). The Consolidated criteria for reporting qualitative research *g*uidelines (COREQ) were applied in this study.

2.3 | Sample/participants

The setting for the research was PHC in the public health system in Catalonia. The area was Vallès Oriental, which serves 400 325 people in 26 PHC centres. This includes 237 nurses. The sampling was non-probabilistic of a theoretical type of typical cases. The characteristics of the sample were nurses who had worked in PHC for a minimum of 2 years. Segmentation variables were age, contractual situation and NLMAMI training. Eight typical profiles were defined, resulting from the combination of all possible variables: age (equal to or above/under 40 years), contract (permanent/fixed term or casual) and NLMAMI training (trained/not trained). Not enough volunteers were obtained from all groups, especially from the group of professionals aged under 40 years and with permanent contracts. Participant details are shown in Table 1.

Recruitment was through the institutional managers via mail. The participants contacted the principal investigator, and the project was explained, and informed consent was obtained. The sample size was decided by data saturation, and recruitment ended when no new themes emerged.

2.4 | Data collection

To obtain information, three focus group discussions (FGDs) and nine in-depth interviews were conducted between November 2019 and October 2020. The FGDs included a moderator and an observer with previous experience in conducting FGDs and

TABLE 1 Participant profiles.

Participant	Name	Age	Gender	End year of study	Years working in PHC	Title	Contact	Formed at NLMAMI	Training hours
1	Amanda	49	F	1994	1990	Diploma	Permanent	No	
2	Berta	47	F	1992	1998	Diploma	Permanent	No	
3	Carlos	58	M	1984	2009	Diploma	Permanent	No	
4	Diana	52	F	1989	1996	Diploma	Permanent	Yes	6
5	Esther	43	F	1999	2004	Diploma	Fixed term	Yes	6
6	Francisca	47	F	2000	2002	Diploma	Fixed term	Yes	6
7	Georgina	25	F	2016	2016	Degree	Casual	No	
8	Helena	48	F	1995	2007	Diploma	Fixed term	Yes	8
9	Iris	39	F	2000	2002	Diploma	Fixed term	Yes	6
10	Joana	24	F	2016	2017	Degree	Casual	No	
11	Katia	28	F	2011	2017	Diploma	Casual	No	
12	Laura	27	F	2015	2017	Degree	Casual	No	
13	Marga	42	F	1998	1998	Diploma	Fixed term	Yes	8
14	Natalia	43	F	2001	2006	Diploma	Permanent	Yes	4
15	Olga	40	F	2001	2003	Diploma	Fixed term	Yes	24
16	Paula	27	F	2013	2017	Degree	Casual	No	
17	Queralt	46	F	1996	2000	Diploma	Permanent	Yes	3
18	Rosa	58	F	1984	1985	Diploma	Permanent	Yes	6
19	Sara	26	F	2014	2016	Degree	Casual	No	
20	Tamara	34	F	2010	2018	Diploma	Casual	No	

Note: Coloured fields are segmentation variables. The profiles defined resulted from the combination of these variables.
Abbreviations: NLMAMI, nurse-led management for acute minor illnesses; PHC, primary health care.

interviews. The moderator was an RN holding a master's degree who worked as a nurse manager in another geographic area so as not to have bias in the results. She also explained to the participants that she was a researcher at the University of Barcelona. Some participants knew the moderator and her desire to conduct the research. The observer had no previous relationship with the participants.

Some of the participants invited to the FGDs did not attend the sessions, reporting work problems. The final number of participants were 8, 5 and 6, respectively. The duration of the FGDs was 88, 89 and 80 min. Sessions were held in meeting rooms of three PHC. At the end of each FGD, the moderator and observer commented on their impressions and made notes in the field diary.

Initially, eight interviews were planned, one for each typical profile defined, but one participant was added as we considered it interesting to add a participant with less tenure in primary care. Three interviews were conducted in person and six online due to Covid-19 restrictions. They ranged in length from 30 to 75 min and were conducted in Spanish or Catalan, depending on the preferred language of each participant. Both FGDs and interviews were continued to data saturation. The guidelines for the FGDs and in-depth interviews are shown in Table 2.

They were audio-recorded with prior consent and transcribed. Subsequently, they were validated by participants. For this publication, the participants' quotations have been translated into English, following their original style as much as possible.

2.5 | Ethical considerations

Ethical approval was obtained from the University Institute Foundation for Primary Health Care Research Jordi Gol I Gurina (IDIAPJGol) ethics committee with code P18/096.

Ethical criteria were considered in all phases of the research. The participant information sheet and informed consent form were provided to all participants. The confidentiality and privacy of the participants were guaranteed. The names of the participants were pseudonymized and were presented as fictitious names in the results.

2.6 | Data analysis

A content analysis was performed. To analyse the data, the information obtained was organized and synthesized. The analysis consisted of three steps: division of the data (transcriptions) into minimum units

TABLE 2 Focus group interview guide and guiding questions for in-depth interview.

Guiding questions for focus groups	
Purpose of question	**Questions**
Exploring the experience	-What does NLMAMI suggest to you, and why? -What experience do you have with the implementation of NLMAMI? Why?
Opinion	-Do you agree with its application? -Do you think you are competently prepared for its approach? -Do you consider that NLMAMI is part of nursing work? -Do you know if in other countries nurses perform this work? -What are the specific competencies that a nurse should develop for an adequate application of NLMAMI? -Do you think that in general you are prepared to carry out these competencies? -Who is to provide the training to apply NLMAMI? -Do you think that the application of the first law of prescription has affected you in the application of NLMAMI?
Benefits, limitations, improvements	-Does NLMAMI bring any benefit to the nursing profession? -What benefits and limitations do you think the application of NLMAMI has? -What improvements would you apply to be able to apply it without difficulty? -Would you like to add any aspect related to the NLMAMI that we have not considered?

Guiding questions for in-depth interview		
Phase	**Purpose**	**Questions**
Initial phase	An exploratory question was used	-What does NLMAMI suggest to you?
Intermediate phase	With questions on interpretation, opinion and feelings related to NLMAMI	-How would you explain your experience in relation to the implementation of NLMAMI? -Do you feel supported by the rest of your colleagues when applying NLMAMI? -Do you think that users agree that nurses should see patients for acute minor illness? -Do you consider that NLMAMI is part of nursing competencies? -Aspects that have favoured it, aspects that have hindered it.

Abbreviation: NLMAMI, nurse-led management for acute minor illnesses.

(coding); sorting and grouping of these units (categorization); and finally, data extraction and contextualization (Wertz et al., 2012). ATLAS.ti version 8.4.5 was used for data management.

2.7 | Study rigour

The criteria of rigour followed were reliability, authenticity and triangulation. The quality criteria used were epistemological adequacy, relevance, validity and reflexivity. The criteria applied to the study can be seen in Table 3.

3 | RESULTS

Initially, 32 defined categories were created. New categories were added as the analysis was conducted. Finally, 40 categories were identified (see Table 4). Seven themes emerged because of the co-occurrence of codes and grouping of categories. The themes were: concept, perception of other actors, practice, history and social context, competencies, and training and legality (see coding tree in Table 5).

Within the constructivist theory of Guba and Lincoln (2002), nurses' experience was explained in seven major themes:

1. The concept and conceptualisations of NLMAMI.

Nurses have very different views of what NLMAMI is. Some perceive NLMAMI as the response offered from nursing leadership to an acute consumer demand:

> the way you have to manage and solve the acute demand of patients in an acute situation, into your autonomous role (Berta).

Some understand NLMAMI as the prioritization of patient entry into the physician's office, applying a clinical risk assessment:

> the first step when a consumer comes to the center. It is like triage (Paula).

2. Perceptions of the different stakeholders

The experience of application of the model of care also involves the experience with the different actors in the NLMAMI process, such as administrative staff and physicians as well as consumers.

Nurses agreed that administrative staff would need more in-depth training to discern which consumers go to the physician and which to the nurse, depending on the health reason for which they consult.

> more training for administrative staff would represent a significant improvement (Diana).

In reference to physicians, there was more controversy. In general, nurses felt supported by the physicians:

> The physician feels that I am qualified to do this work, (Paula).

TABLE 3 Criteria of rigour and quality applied to this study.

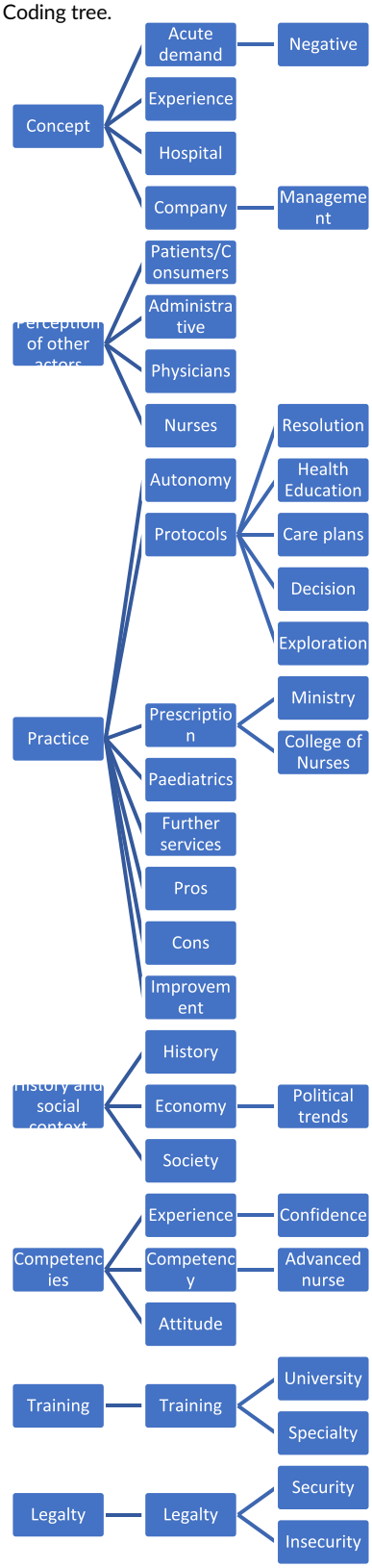
Criteria of rigour	
Reliability	
Credibility	Was ensured by validating the data by returning the transcribed texts of the FGs and interviews to each participant for review.
Transferability	The subjects and the context were described in detail, as well as how the study would be carried out
Replicability	The study context was delimited. The participants were described in detail and the data collection and analysis techniques were specified.
Confirmability	Was ensured through the collection of concrete records, textual transcriptions and direct quotations. The information was collected mechanically through a tape recorder and the transcriptions were corroborated with the participants.
Authenticity	
Authenticity	To ensure reference to the truth value, the results were recognized as real. The data obtained were related to the reality of the nurses.
Triangulation	
Triangulation of techniques	Was conducted by collecting data from FGs and interviews.
Triangulation of data	Data were collected from different participants
Quality criteria	
Epistemological adequacy	A question aimed at describing and understanding the nurses' experience applying NLMAMI was established, in accordance with a phenomenological study.
Relevance	The findings were analysed and new lines of future work have been proposed.
Validity	Was defined from the correct way to collect the data, to the proper interpretation of the results.
Reflexivity	Was assured by the contributions of the moderator and observer, included in the field diary notes.

Abbreviations: FG, focus groups; NLMAMI, nurse-led management for acute minor illnesses.

TABLE 4 Categories and frequencies identified.

Category	Frequency
Acute demand	537
Competency	330
Training	323
Company	291
Management	263
Physician	261
Nurses	239
Protocols	209
Improvement	197
Resolution	195
Legality	186
Patients—consumers	176
Insecurity	164
Cons	148
Attitude	132
Prescription	131
Further services	125
Experience	121
Security	119
University	116
Pros	102
Economy	100
Political trends	96
History	92
Novelty	92
Administrative	84
Confidence	80
Specialty	79
Society	77
Exploration	69
Negative	62
Ministry	57
Autonomy	39
Care plans	37
Decision	36
Health education	34
Hospital	34
College of nurses	30
Paediatrics	26
Advanced nurse	23

TABLE 5 Coding tree.



On some occasions, nurses felt questioned when they did not resolve the process:

> physicians sometimes consider that the patient I send them is something that I should solve and that makes me feel questioned (Amanda).

As for the consumers' opinion, they agreed that acceptance was good, because patients appreciated the reduction in waiting time for visits, the time dedicated to taking the history, examination and to health education:

> in the nursing visit you spend much more time explaining, doing health education and a very complete medical history, (Esther).

In some cases, nurses reported that when the consumer did not want to visit nurses, this was related to the historical context and their lack of knowledge of how the system works:

> they are surprised because they are not used to seeing nurses, especially young healthy patients (Berta).

3. Praxis

Nurses regretted the treatment proposed by physicians:

> protocols are not always followed by the doctors. For the same disease, the treatment is not the same if the patient has been attended by a nurse or by a physician (Iris).

This happens because, when nurses perform NLMAMI and need to write a prescription, if the treatment cannot be prescribed autonomously by nurses, it has to be validated by the physician who sometimes does not agree with the treatment proposed by the protocol. Some justified the reluctance of physicians to validate the medication proposed by nurses, because, if nurses try resolve the patient's problems with a prescription, for instance, of an antibiotic, the physician then has to validate the prescription from their consultation screen without visiting the patient:

> the doctor is validating my prescription without having explored the patient and I understand that they do not want to do so because it is their responsibility (Natalia).

4. History and social context

Many consumers were unaware of the system and did not know that nurses were part of the team that looked after their health:

> there are consumers who do not know us. But I think it is due to a lack of knowledge (Paula).

Participants were confident that cultural change would take place:

> one day the patient will be seen by nurses and will accept (Helena).

There were controversial experiences that related the poor development of the profession to certain political or economic influences:

> apart from the political level, there are other influential forces such as the college of medicine, pharmacy, etc. I remember reading a study that nursing prescribed less or cured more without so much medication. So, maybe it is not in their interest to spend less? (Iris).

Some participants even related the lack of progress in the role to gender aspects:

> it is mainly a women's profession and in general it has been devalued (Iris).

5. Competencies

Some participants were suspicious about the origin of this evolution of the role:

> the increase in competencies is related to the interest in increasing them because we have the capacity or are they simply maneuvers to get us to work more (Iris).

Others linked the evolution of nursing competencies to the level of studies:

> we have gone from being technics to being PhDs (Marga).

When asked about whether they were competent to apply NLMAMI, the responses were antagonistic. On the one hand, there were participants who believed that

> we have a degree that gives us that competence (Paula).

On the other hand, others did not believe that they had the competence for NLMAMI because they lacked training or linked the reason for consulting to competence:

> there are reasons that are nurse competencies and there are other reasons that are not (Francisca).

Others linked competence to experience or to legality:

> without legality there is no competence (Amanda).

6. Training

The continuous demand for training was common to all interviewees and focus group members. Nurses were critical of the implementation of NLMAMI without the necessary training:

We started to do NLMAMI without training (Natalia).

There was no consensus on who should provide this training: the university or the health system. The participants who related NLMAMI to a 'new competence for nursing' considered that it should be recognized by the university and training included in the undergraduate curriculum:

it should be offered by the nursing schools (Paula).

The participants stated that training differed according to the different reasons for delivery of NLMAMI. Reasons more related to nursing care, such as nursing interventions, did not require as much additional training. This had been studied at university, and nurses are required to maintain continuing education to keep up-to-date. On the other hand, they considered they did not have sufficient training in problems that were historically treated by physicians: fever, cough, red eye and so on. They all agreed that they had no or insufficient training in pulmonary auscultation, or neurological or abdominal examination

nobody taught me to palpate an abdomen or to auscultate in my degree (Natalia).

7. Legal concerns

With respect to legal concerns, most of those interviewed affirmed

the fear of incurring an illegality is the most prevalent (Amanda).

This fear was founded in their perceived lack of knowledge about legislative definitions, which influenced nurses when applying NLMAMI and completing consultations. Most interviewees did not know whether they were legally covered when applying NLMAMI:

we do not know how far we are legally covered by a specific protocol (Amanda).

In addition, they felt that the law was not keeping pace with practice changes; that their increasing competence was not matched by appropriate legislation:

our competencies have increased, but not the law (Queralt).

During the interviews, a significant lack of knowledge of the legal scope of the application of NLMAMI was observed. In some centres, this led nurses to refuse for some time to apply NLMAMI:

we met the managers and said that, if we were not legal, we refused to do it. And we refused for a long time (Carlos).

In addition, in the absence of enabling legislation, in some cases, it was not possible to successfully conclude the consultation:

I cannot complete the treatment for the patient when I have to take sick leave or write a prescription because it has to be validated by the physician (Natalia).

4 | DISCUSSION

4.1 | The concept and conceptualization of NLMAMI

Confusion was reported about what NLMAMI is. Particularly, there was confusion between NLMAMI and triage models. There are advanced triage models led by nurses usually in hospitals. This triage consists of the application of protocols by nurses, where nurses initiate a diagnostic or therapeutic action before the physician sees the patient (Soster et al., 2022). The advantage is that the waiting time is reduced and the diagnostic time is shortened (Ingram, 2020; Moxham & McMahon-Parkes, 2020). This triage could be assimilated into NLMAMI, but NLMAMI also includes fully autonomous consultation by the nurse (Vara Ortiz & Fabrellas Padrés, 2019). Therefore, the concept of NLMAMI needs to be clarified for proper application.

4.2 | Perceptions of the different stakeholders

NLMAMI has been implemented and studied in several countries. A Cochrane Review (Laurant et al., 2005) evaluated the impact of physician-nurse substitution in PHC and concluded that correctly trained nurses could provide quality care in the same way as a physician, achieving good health outcomes. Nurses interviewed agreed that consumers are more satisfied when seen by nurses, who take a longer medical history and offer more health education than physicians. These perceptions coincide with other studies (Roche et al., 2017). A systematic review concluded that patient satisfaction was greater when they had been seen by nurses, with no differences in health outcomes (Randall et al., 2017). A New Zealand study (Pirret et al., 2015) found no significant differences between diagnosis by a physician or a nurse.

Most participants believed they were qualified to carry out NLMAMI. In addition, they said that physicians had been key in terms of training. In some countries, when training advanced practice nurses, a medical mentor is appointed to assist them (Mundy & Pow, 2021).

4.3 | Praxis

Nurses reported that protocols were not followed in the same way by physicians and nurses, and that there is variability between professionals. A Swedish study showed that both nurses and physicians adhered to clinical guidelines without differences (Gröndall et al., 2015). Another study identified as a barrier that Danish nurses

did not have full prescribing authority, forcing the physician to validate a prescription without having seen the patient (Katharina et al., 2018). Until recently, prescribing was only allowed by physicians. Countries such as the United States of America or Canada have a tradition of independent prescribing. In Europe, the role of nurses has expanded over the last decade with new regulations on prescribing rights (Maier, 2019), although there are still countries such as Spain that are far from independent prescribing (Romero-Collado et al., 2017).

4.4 | History and social context

The socioeconomic context of the country, together with the lack of physicians, the lack of communication at the time of implementation and the ambiguous messaging from professional associations, have altogether given rise to many doubts among nurses, presenting barriers to acceptance of NLMAMI, as found by a systematic review (Karimi-Shahanjarini et al., 2019). Other drawbacks have been the question of why the autonomous role of nurses has not fully evolved to provide a complete resolution of the reasons for consultation, such as certifying sickness or temporary disability or, until very recently, writing a prescription. This may be a result of political interests or to nursing being historically dependent on other healthcare professionals or even to nursing being a feminized profession (Elliott, 2017).

Broadly, nurses see an opportunity in the programme, as they believe it will give visibility to the profession (Torrens et al., 2020). They commented that while patients were at the beginning reluctant to have a nurse attend them, they had seen a change in attitude. Therefore, establishing communication with patients so that they recognize this role of nurses will create a relationship of trust necessary for quality care (Leslie & Lonneman, 2016).

4.5 | Competencies

The International Council of Nurses (ICN, 2009, p.5) defines nursing competence as a level of performance that demonstrates the effective application of knowledge, skills and judgement. However, the theory of progressive practice, according to Patricia Benner, shows different levels of nursing competence when faced with the same clinical episode, according to the degrees of acquired skill, reflective analysis and clinical judgement (Ozdemir, 2019). Nurses participating in the study were unaware of the competency framework published by their nursing college and that of the health system. In another study, which also asked about nursing competence, the answer was widely debated but no clear consensus was reached (Cooper & Lidster, 2021).

During the interviews, controversy arose as to whether NLMAMI was considered a nursing competence. Those in favour considered it was, and those against it argued they were engaging in intrusiveness with other health professions. In similar studies, some participants were reluctant to resolve the case, as they considered that diagnosis was the competence of physicians (Cooper & Lidster, 2021; Karimi-Shahanjarini et al., 2019). As nursing roles expand and competencies border on those of physicians, interprofessional tensions arise and these blurred boundaries continue to be challenges to resolve, but there is increasing evidence from studies that physicians broadly support the advanced nurse role (Barlow et al., 2018; Mundy & Pow, 2021).

Developing and publicizing nursing roles in NLMAMI would result in benefits in quality of care, sustainability and satisfaction for nurses and consumers (Valizadeh et al., 2019). It would be interesting to analyse other countries that have recognized advanced practice nurses, because it has been shown that their inclusion in multidisciplinary teams benefits consumers (Bonham & Kwasky, 2021; Hill et al., 2021).

4.6 | Training

All participating nurses considered they lacked training at university level. Physical examination causes the most insecurity and they demanded more training in respiratory, abdominal and neurological examination. Similarly, a systematic review showed that nurses demanded more training and were more comfortable with nurses' habitual tasks such as prevention and promotion of heath care (Torrens et al., 2020).

However, not all NLMAMI activities need specific training, because there are some reasons for consultation that require common practices in nursing services, such as wounds, burns or infant colic. A Cochrane review found evidence of this concern related to a lack of a training base, especially when it comes to diagnosis and treatment in diseases usually resolved by doctors (Laurant et al., 2005). One proposal, in addition to encouraging classroom training, would be to promote training based on simulations in both university and clinical settings, which would increase knowledge and confidence (Cole et al., 2021).

4.7 | Legal concerns

The fear of incurring in illegality was the most generally recognized issue. Another Spanish study surveyed physicians, 91.3% of whom felt legal pressure and 88.7% stated they acted under the threat of legal action. In addition, 96.1% expressed the need to strengthen their medical-legal training (Perea-Pérez et al., 2021). This situation seems to be similar to that perceived by nurses. Current regulations for prescription in Spain have been confusing and interpretative, causing confusion among nurses, who have adopted a defensive attitude (Brugués Brugués et al., 2017; Torrens et al., 2020). Knowledge of the legal framework is a key element in providing security to nurses and thus guaranteeing application of prescribing rights without the fear of legal threats (Karimi-Shahanjarini et al., 2019).

4.8 | Study limitations

The results of this qualitative study can only be extrapolated to similar contexts.

Due to the Covid-19 pandemic, some interviews were conducted online, losing nuances of non-verbal communication.

5 | CONCLUSIONS

Study findings show that nurses have conceptual confusion of what constitutes NLMAMI. As a result, it can be applied as a triage, applying only a risk priority criterion without ever delivering fully autonomous consultation.

Nurses associate the implementation of NLMAMI with increased competencies, but point out that they lack training both during their college studies and afterwards. Finally, to have autonomous and safe practice, they needed increased legal coverage and for it to be adapted to their scope of practice.

This study contributes to understanding the experience of nurses when applying NLMAMI in Spain. Understanding its drivers and barriers can promote actions such as a reform of the university curriculum or the establishment of continuing education programmes that include physical examination practices. In addition, it is necessary to promote regulation at the national level, as has already been done in other countries, to allow this practice to be carried out without dependence on other professionals. This will ensure improvement in the profession, in the healthcare system and in society.

AUTHORSHIP STATEMENT

María Ángeles Vara-Ortiz made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data. María Ángeles Vara-Ortiz, Susana Marcos-Alonso and Núria Fabrellas-Padrés are involved in drafting the manuscript or revising it critically for important intellectual content. All authors gave their final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content. All authors agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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CONFLICT OF INTEREST STATEMENT

The authors have no conflicts of interest to report.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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REFERENCES

Barlow, N. A., Hargreaves, J., & Gillibrand, W. P. (2018). Nurses' contributions to the resolution of ethical dilemmas in practice. *Nursing Ethics*, *25*(2), 230–242. https://doi.org/10.1177/0969733017703700

Bonham, E., & Kwasky, A. (2021). Caring for the mental health of youth and families: What is the role of the psychiatric mental health advanced practice nurse? *Clinical Nurse Specialist*, *35*(5), 246–252. https://doi.org/10.1097/NUR.0000000000000620

Brugués, A., Peris, A., Pavón, F., Mateo, E., Gascón, J., & Mateo, F. (2016). Evaluation of nurse demand Management in Primary Care. *Atencion Primaria*, *48*(3), 2–8. https://doi.org/10.1016/j.aprim.2015.02.014

Brugués Brugués, A., Cubells Asensio, I., & Flores Mateo, G. (2017). Implementation of nurse demand managment in primary health care service providers in Catalonia. *Atencion Primaria*, *49*(9), 518–524. https://doi.org/10.1016/j.aprim.2016.11.012

Cole, L., Boss, L., Fowler, D., & Cheatham, L. (2021). Using leadership simulation scenarios with graduate nursing learners to support frontline nurse leader competency development. *Nurse Leader*, *19*(4), 405–410. https://doi.org/10.1016/J.MNL.2020.08.012

Cooper, J., & Lidster, J. (2021). Perceptions of competency in advanced clinical practice. *British Journal of Nursing*, *30*(14), 852–856. https://doi.org/10.12968/bjon.2021.30.14.852

Elliott, C. (2017). Emotional labour: Learning from the past, understanding the present. *British Journal of Nursing*, *26*(19), 1070–1077. https://doi.org/10.12968/bjon.2017.26.19.1070

Fabrellas, N., Juvé, E., Solà, M., Aurín, E., Berlanga, S., Galimany, J., Berenguer, L., Pujol, C., Lacuesta, S., Villo, C., & Torres, M. (2015). A program of nurse Management for Unscheduled Consultations of children with acute minor illnesses in primary care. *Journal of Nursing Scholarship*, *47*(6), 529–535. https://doi.org/10.1111/jnu.12169

Fabrellas, N., Sánchez, C., Juvé, E., Aurin, E., Monserrat, D., Casanovas, E., & Urrea, M. (2013). A program of nurse algorithm-guided care for adult patients with acute minor illnesses in primary care. *BMC Family Practice*, *14*(1), 61. https://doi.org/10.1186/1471-2296-14-61

Fabrellas, N., Vidal, A., Amat, G., Lejardi, Y., del Puig Deulofeu, M., & Buendia, C. (2011). Nurse management of «same day» consultation for patients with minor illnesses: Results of an extended programme in primary care in Catalonia. *Journal of Advanced Nursing*, *67*(8), 1811–1816. https://doi.org/10.1111/j.1365-2648.2011.05624.x

Gómez León, V. E., Rincón Elvira, E. E., & Duque Delgado, L. (2020). Development and current status of the nurse prescription in Spain. *Hygia de enfermería*, 29–38.

Gröndall, H., Hedin, K., Strandberg, E., André, M., & Brorsson, A. (2015). Near-patient tests and the clinical gaze in decision-making of Swedish GPs not follow- ing current guidelines for sore throat—A qualitative interview study. *BMC Family Practice*, *16*(81), 81. https://doi.org/10.1186/s12875-015-0285-y

Guba, G., & Lincoln, Y. (2002). *Paradigmas en competencia en la investigación cualitativa. En Por los rincones. Antología de métodos cualitativos en la investigación social* (pp. 113–145). Hermosillo: El Colegio de Sonora.

Hämel, K., Toso, B. R. G. d. O., Casanova, A., & Giovanella, L. (2020). Advanced practice nursing in primary health care in the spanish national health system. *Ciência & Saúde Coletiva*, *25*(1), 303–314. https://doi.org/10.1590/1413-81232020251.28332019

Heidegger, M. (1996). In D. Schmidt (Ed.), *Being and time*. State University of New York Press.

Hill, B., Diamond-Fox, S., & Mitchell, A. (2021). The changing context of advanced practice nursing within the UK community care setting.

British Journal of Community Nursing, *26*(12), 581–586. https://doi.org/10.12968/bjcn.2021.26.12.581

Hudspeth, R. S., & Klein, T. A. (2019). Understanding nurse practitioner scope of practice: Regulatory, practice, and employment perspectives now and for the future. *Journal of the American Association of Nurse Practitioners*, *31*(8), 468–473. https://doi.org/10.1097/JXX.0000000000000268

Iglesias, B., Ramos, F., Serrano, B., Fàbregas, M., Sánchez, C., García, M. J., Cebrian, H. M., Aragones, R., Casajuana, J., & Esgueva, N. (2013). A randomized controlled trial of nurses vs. doctors in the resolution of acute disease of low complexity in primary care. *Journal of Advanced Nursing*, *69*(11), 2446–2457. https://doi.org/10.1111/jan.12120

Ingram, S. (2020). 38 transforming post triage assessment of chest pain in a busy emergency department (ED), from ED doctor to advanced nurse practitioner (ANP) direct; the impact on patient experience times (PET). *BMJ*, *106*(Suppl 4), 2020. https://doi.org/10.1136/heartjnl-2020-ICS.38

International Council of Nurses [ICN]. (2009). ICN framework of competencies for the nurse specialist. P.5.

Karimi-Shahanjarini, A., Shakibazadeh, E., Rashidian, A., Hajimiri, K., Glenton, C., Noyes, J., Lewin, S., Laurant, M., & Colvin, C. J. (2019). Barriers and facilitators to the implementation of doctor-nurse substitution strategies in primary care: A qualitative evidence synthesis. *Cochrane Database of Systematic Reviews*, *2019*(4), CD010412. https://doi.org/10.1002/14651858.CD010412.pub2

Katharina, J., Lykkegaard, J., & Kolding, J. (2018). Danish GPs' and practice nurses' management of acute sore throat and adherence to guidelines. *Family Practice*, *36*(2), 192–198. https://doi.org/10.1093/fampra/cmy059

Laurant, M. G., Reeves, D., Hermens, R., Braspenning, J., Grol, R., & Sibbald, B. (2005). Substitution of doctors by nurses in primary care. *The Cochrane Database of Systematic Reviews*. https://doi.org/10.1002/14651858.CD001271.pub2

Leslie, J. L., & Lonneman, W. (2016). Promoting Trust in the Registered Nurse-Patient Relationship. *Home Healthc Now*, *34*(1), 38–42. https://doi.org/10.1097/NHH.0000000000000322

Lopez-Valcarcel, B. G., & Barber, P. (2017). Economic crisis, austerity policies, health and fairness: Lessons learned in Spain. *Applied Health Economics and Health Policy*, *15*(1), 13–21. https://doi.org/10.1007/s40258-016-0263-0

Maier, C. B. (2019). Nurse prescribing of medicines in 13 European countries. *Human Resources for Health*, *17*(1), 95. https://doi.org/10.1186/s12960-019-0429-6

Mitchell, A., & Pearce, R. (2021). Prescribing practice: An overview of the principles. *British Journal of Nursing*, *30*(17), 1016–1022. https://doi.org/10.1017/cbo9780511841712.004

Moxham, L., & McMahon-Parkes, K. (2020). An evaluation of the impact of advanced nurse practitioner triage and clinical intervention for medically expected patients referred to an acute National Health Service hospital. *Journal of Clinical Nursing*, *29*(19–20), 3679–3686. https://doi.org/10.1111/jocn.15392

Muench, U., Whaley, C., Coffman, J., & Spetz, J. (2021). Scope-of-practice for nurse practitioners and adherence to medications for chronic illness in primary care. *Journal of General Internal Medicine*, *36*(2), 478–486. https://doi.org/10.1007/s11606-020-05963-3

Mundy, J., & Pow, J. (2021). General practice nurses' experiences of participation in an advanced nursing practice education programme. *British Journal of Nursing*, *30*(16), 964–969. https://doi.org/10.12968/bjon.2021.30.16.964

Ozdemir, N. G. (2019). The development of Nurses' individualized care perceptions and practices: Benner's novice to expert model perspective. *International Journal of Caring Sciences*, *12*(2), 1279–1285.

Perea-Pérez, B., Garrote Díaz, J. M., Hernández Gil, Á., Martínez Hernández, S., García Martín, Á. F., & Santiago-Sáez, A. (2021). Defensive medicine in hospital emergency services. *Revista Española de Salud Pública*, *95*, 1–10.

Pirret, A. M., Neville, S. J., & La Grow, S. J. (2015). Nurse practitioners versus doctors diagnostic reasoning in a complex case presentation to an acute tertiary hospital: A comparative study. *International Journal of Nursing Studies*, *52*(3), 716–726. https://doi.org/10.1016/j.ijnurstu.2014.08.009

Randall, S., Crawford, T., Currie, J., River, J., & Betihavas, V. (2017). Impact of community based nurse-led clinics on patient outcomes, patient satisfaction, patient access and cost effectiveness: A systematic review. *International Journal of Nursing Studies*, *73*(March), 24–33. https://doi.org/10.1016/j.ijnurstu.2017.05.008

Roche, T. E., Gardner, G., & Jack, L. (2017). The effectiveness of emergency nurse practitioner service in the management of patients presenting to rural hospitals with chest pain : A multisite prospective longitudinal nested cohort study. *BMC Health Services Research*, *17*(1), 445. https://doi.org/10.1186/s12913-017-2395-9

Romero-Collado, A., Raurell-Torreda, M., Zabaleta-Del-Olmo, E., Rascon-Hernan, C., & Homs-Romero, E. (2017). Nurse prescribing in Spain: The law and the curriculum. *Nursing and Health Sciences*, *19*(3), 373–380. https://doi.org/10.1111/nhs.12355

Saunders, M. M. (2021). Informing and supporting the new clinical nurse specialist prescriber. *Advanced Critical Care*, *32*(404–414), 404–412. https://doi.org/10.4037/aacnacc2021869

Soster, C. B., Anschau, F., Rodrigues, N. H., da Silva, L. G. A., & Klafke, A. (2022). Advanced triage protocols in the emergency department: A systematic review and meta-analysis. *Revista Latino-Americana de Enfermagem*, *30*(e3511), e3511. https://doi.org/10.1590/1518-8345.5479.3511

Torrens, C., Campbell, P., Hoskins, G., Strachan, H., Wells, M., Cunningham, M., Bottone, H., Polson, R., & Maxwell, M. (2020). Barriers and facilitators to the implementation of the advanced nurse practitioner role in primary care settings: A scoping review. *International Journal of Nursing Studies*, *104*, 103443. https://doi.org/10.1016/j.ijnurstu.2019.103443

Valizadeh, L., Zamanzadeh, V., Eskandari, M., & Alizadeh, S. (2019). Professional competence in nursing: A hybrid concept analysis. *Medical – Surgical Nursing Journal*, *8*(2). https://doi.org/10.5812/msnj.90580

Vara Ortiz, M. Á., & Fabrellas Padrés, N. (2019). Concept analysis: Nurse demand management. *Atencion Primaria*, *51*(4), 230–235. https://doi.org/10.1016/j.aprim.2017.10.011

Wertz, F. J., Charmaz, K., McMullen, L., Josselson, R., Anderson, R., & McSpadden, E. (2012). Five ways of doing qualitative analysis: Phenomenological psychology, grounded theory, discourse analysis, narrative research, and intuitive inquiry. *Journal of Phenomenological Psychology*, *43*(1), 136–139. https://doi.org/10.1163/156916212x632989

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