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ORIGINALES

Implementation of Evidenced- Based Nursing in Primary Care

Implementación de Enfermería Basada en la Evidencia en Atención Primaria

María García Hernández[1]
Isabel de los Ángeles Ruiz Fernández[1]
Ainara Bayle Mayor[1]
Marina Sánchez Solano[1]

[1] Family and Community Nursing, Murcia Health Service. Murcia, Spain. maria.garcia90@carm.es

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ABSTRACT:

Introduction: The implementation of Evidenced- Based Nursing (EBN) is characterized by multiple benefits, for the patients and the nurses. However, the implementation is difficult for different reasons.
Objectives: To evaluate the daily use of the EBN, the attitude towards EBN and the skills and knowledge of nurses to apply EBN in the selected health centers and also, to explore the self-perceived factors that may hinder the implementation of EBN at work and the possible measures to improve it by the nurses that work in PC.
Methods: Cross-sectional, descriptive, multicenter and mixed concurrent triangulation strategy research, compose of a validated questionnaire and two open questions.
Results: 65 nurses participated, mostly women, of whom 50,8% have received EBN's formation. The punctuation of the different parts of the questionnaire are: 27,02 ($\bar{x}$) in the EBN's daily use, 18 (m) in the attitude and 44,15 ($\bar{x}$) in the EBN's skills and knowledge. Some factors self-perceived that difficult the EBN's implementation are the lack of formation and time and the job insecurity and there are some measures suggested for palliate it such as: formation, recruitment and teamwork.
Conclusions: The participants show a favorable attitude towards EBN, but daily use and skills and knowledge are moderate, observing a relationship between training in EBN and nursing specialization with greater skills and knowledge in EBN. There is a need to carry out studies with a greater impact for a more complete evaluation and implementation of the appropriate strategies.

Key words: Evidence-Based Nursing, Primary Care Nursing, Nursing Research, nursing, Nursing Methodology Research, Clinical Nursing Research.

RESUMEN:

Introducción: La implementación de la Enfermería Basada en la Evidencia (EBE) destaca por sus múltiples beneficios, tanto para el paciente, como para las enfermeras. Sin embargo, existe dificultad en su implementación atribuida a diferentes causas.
Objetivos: Conocer el uso diario, la actitud frente a la EBE y las habilidades y conocimientos para aplicarla por las enfermeras de varios centros de salud de la Región de Murcia, además de los factores autopercibidos que dificultan la implementación y las medidas para paliarlo.

Métodos: Estudio de investigación mixta de estrategia concurrente de triangulación, transversal, descriptivo y multicéntrico compuesto de un cuestionario validado y dos preguntas abiertas.
Resultados: Participaron 65 enfermeras, predominantemente mujeres, de las cuales el 50,8% ha recibido formación en EBE. Las puntuaciones de los apartados del cuestionario son: 27,02 ($\bar{x}$) en el uso diario de EBE, 18 (m) en la actitud y 44,15 ($\bar{x}$) en las habilidades y conocimientos de EBE. Algunos factores autopercibidos que dificultan la implementación de la EBE son la falta de formación y de tiempo y la precariedad laboral y algunas medidas que sugieren para paliarlo son: formación, contratación de personal y trabajo en equipo.
Conclusiones: Los participantes muestran una actitud favorable frente a la EBE, pero el uso diario y las habilidades y conocimientos son moderados, observándose relación entre la formación en EBE y la especialización de enfermería con mayor habilidades y conocimientos en EBE. Se destaca la necesidad de realizar estudios de mayor impacto para una evaluación más completa e implementación de las estrategias oportunas.

Palabras clave: Enfermería Basada en la Evidencia, Enfermería de Atención Primaria, Investigación en Enfermería, enfermería, Investigación Metodológica en Enfermería, Investigación en Enfermería Clínica.

INTRODUCTION

Evidence-Based Nursing (EBN), according to several authors, can be considered as *"the conscious, explicit and judicious application of the best available scientific evidence related to nursing knowledge to make decisions about patient care, taking into account their preferences and values, and incorporating professional experience in this decision making* [(1)].

Globally, the use of EBN is essential to obtain better health outcomes, provide higher quality care, and promote patient's safety [(2)]. Within health services, nurses represent almost half of health professionals worldwide and, particularly in Primary Care (PC), they lead health promotion and disease prevention [(3,4)].

Since PC is the first level of care, it's essential to question daily practice and take advantage of the latest evidence to improve the quality of nursing care [(3)]. The benefits provided by the EBN should not be ignored, since in addition to benefiting the user, at the same time health spending is reduced, thanks to more efficient decision-making. The consideration of most health professionals of the importance of EBN motivates its implementation, while favoring job satisfaction and teamwork [(3-5)].

In previous research about this theme, the nurses, in general favorably perceive EBN, highlighting certain advantages such as the reduction of clinical variability and the empowerment of the profession [(6)]. However, its implementation is slow and they perceive barriers to achieve it [(7)], such as lack of time, skills or insufficient authority to change protocols, as well as the predominance of the experience criteria among coworkers [(8-11)].

In others studies, some barriers were identified, such as lack of formation in terms of researching, tiredness from have to keep up to date and even the rejection of change by the coworkers and, sometimes, by users and their families [(11,12)]. The origin of this lacks of formation could be, in part, because of the previous study plan, where until recently, research skills were absent in the formative program. With the transition from Diploma to Degree, this subject has been included, although in the background, because the low formation both at the undergraduate and postgraduate [(13)], level

stands out, being the undergraduate stage the most important to internalize critical thinking skills, before the work stage[14].

The health care provided by nurses specialized in Family and Community Nursing increases the quality standards, due to the formative program received for two years, specialized, and based on scientific evidence. This formation also increases the professional autonomy of the nurses. The future of this specialization is destined for *"give more and better answers of excellence to the community on what to do to maintain and increase their health"* [15,16].

In summary, in the similar studies consulted to the one that we propone, both nationally and internationally, it's shown that, despite the fact that the nurses recognize the benefits of EBN and their attitude is positive, knowledge and the application in daily practice are relatively low and many of them don't fell competent to apply it [3,8]. In order to overcome this handicap, the experts point out that the most important strategies are the presence of an optimal organization culture and attitude of managers, personal motivation, have enough time and the formation of nurses [14].

The reason why we have realized this study in PC lies in the importance of this level of care, being the first contact with the health system and leading, among other processes, health promotion and disease prevention. However, there're different factors that could affect its implementation [11,12]. In addition, there's a few similar studies realized in Región de Murcia o at the national level. So, we see the need to deepen the subject in order to get closer to the reality of the implementation of scientific evidence by this group.

The purpose of this study is to know the current situation of PC nurses regarding the use of EBN, in addition to have a general vision of the strengths and weaknesses that can be covered. The current level of implementation of the EBN in the health centers in which the questionnaire will be passed will be disclosed, in addition to the different barriers self-perceived by nurses, on which action could be taken to improve decision-making based on the scientific evidence. It could be also useful to facilitate and promote initiatives and thus improve daily clinical practice, in an autonomous and empowered way, thanks to EBN.

The objectives of this study are to evaluate the daily use of the EBN, the attitude towards EBN and the skills and knowledge of nurses to apply EBN in the selected health centers and also, to explore the self-perceived factors that may hinder the implementation of EBN at work and the possible measures to improve it by the nurses that work in PC.

MATERIAL AND METHOD

Study design and subjects

This study is mixed research (qualitative and quantitative) of concurrent triangulation study, through a cross-sectional, descriptive, and multicenter study, composed of a validated questionnaire and two open questions. The project was planned in January 2022, and the complete writing of the results of the study was finished in April 2023.

The participants are nurses that works in PC from various health centers of the Murcian Health Service: El Palmar, Santo Ángel, La Ñora, San Andrés, Alcantarilla-Sangonera, Sangonera la Verde, Espinardo and the peripherical centers from the Basic Health Zone of Murcia-La Ñora: Javalí Nuevo and Puebla de Soto. The selection of subjects that are part of the sample has been carried out by means of a non-probability sampling for convenience, inviting all nurses from each of the centers that were participating, considering the inclusion and exclusion criteria described in the *table 1*.

The sample universe is 85 people, covering the staff of PC nurses available in each health center selected, in addition to the substitutes and/or reinforcements, so we first passed the questionnaire to capture the largest number of participants possible, and then we did a reuptake to include those nurses that couldn't participate the first time. The application of the questionnaire was carried out during the second quarter of the year 2022, offering its completion at first to capture the largest number of participants possible and we carried out a re-capture to include those nurses who couldn't participate the first time. Finally, we have a sample size of 65 people, since there were 20 who refused to participate.

Table 1. Inclusion and exclusion criteria for the selection of participants.

Inclusion criteria	- PC nurses from the centers described (including school nurse, COVID reinforcement nurse, pediatric nurse, midwives, substitutes and/or reinforcements). - ≥ 1 year of work experience as nurse. - Voluntary participation.
Exclusion criteria	- Nurses that aren't working in these health centers. - Other health professionals. - <1 year of work experience as nurse. - Refuse to participate in the study.

Own elaboration.

Data collection

This process has been carried out by completing a printed questionnaire that we have offered to each of the centers, prior notice to the Nursing managers, during working hours (8am-3pm), during the second quarter of 2022. We provide the questionnaires to Nursing managers and/or tutors, as well as to other Family and Community Nursing residents, collaborating in this task.

The questionnaire consists of three parts. To begin with, sociodemographic and labor variables have been collected. Secondly, a questionnaire in Spanish called the Clinical Effectiveness and Evidence-Based Practice Questionnaire (CPBE-19) validated in 2009 in the context of nursing practice has been used. This is self-administered and it's composed by 19 questions distributed in three sections in relation to EBN: "daily practice", "attitude" and "knowledge and skills". These questions are scored on a Likert-type scale from 1 to 7, where 1 corresponds to the lowest degree of agreement [(9)]. The time spent is approximately 10 minutes.

Finally, the participants answered two open questions to identify, on the one hand, the self-perceived factors that may hinder the implementation of EBN in PC and, on the other hand, the measures that could improve its use.

Study variables

Sociodemographic variables were collected: sex and age (in years) and professional variables: work experience as a nurse (in years), experience in PC as a nurse (in years), time elapsed since completion of studies (in years), previous formation in EBN, tutoring of nursing students and/or residents, postgraduate training and the current employment situation.

Statistic analysis

An analysis of the different variables has been carried out using the statistical program IBM SPSS Statistics version 27.0.1.0©, in addition to the qualitative content analysis through data coding, corresponding to the two open questions. The data haven't been analyzed individually by health center in order to guarantee anonymity, especially in those health centers and clinics with fewer nurses and, therefore, fewer participants.

Ethical considerations

The participation in this study is completely voluntary and disinterested. The participants had the information about the study before answering the questionnaire, having to accept the informed consent previously. No data have been obtained that allow identification. The study has the permission of the Area 1- Murcia West Management (available in Annex II), and the permission of the Ethics Committee is not necessary given the characteristics of the study.

RESULTS

Statistical tests and sample's description

Firstly, the Kolmogorov-Smirnov normality test has been applied, obtaining as a result a parametric distribution for all the quantitative variables except for "PC experience" ($p=0.01$), the "time since completion of the studies" ($p<0.001$), age ($p<0.001$) and the "attitude" section of the applied questionnaire ($p<0.01$). Regarding descriptive statistics, we used the mean ($\bar{x}$) and standard deviation (σ) for the parametric quantitative variables and the median (m) and interquartile range (IQR) for the non-parametric variables. Regarding the qualitative variables, we used the absolute frequency (n) and the percentage (%).

Next, after the different bivariate analyses, it is shown if there is a statistically significant association ($p<0.05$) between variables or not, using a 95% confidence interval. We have used the T-student statistical test to evaluate the association between parametric quantitative variables and dichotomous qualitative variables and the U-Mann Whitney in the case of non-parametric ones. We used ANOVA of one factor in the case of polytomous qualitative variables with a parametric quantitative variable and Kruskal-Wallis in the case of non-parametric ones.

Finally, we have realized correlation analysis for evaluate the association between quantitative variables and the validated questionnaire, using the Pearson's correlation for parametric quantitative variables and the Spearman's correlation for the non-parametric ones.

The number of participants we asked to fill out the questionnaire was 85, although only 65 completed at the end, with a response rate of 76.5%. The study sample is made up predominantly of women (84.6%) from nine health centers, with a median age of 47 years and the median number of years worked in PC is 5.5.

Of the total sample, approximately half (50.8%) have received EBN formation. Regarding postgraduate training, it is present in 47.7% of those surveyed. The most frequent is the master's degree (23.1%) and some of them have more than one type of postgraduate formation (6.15%). The rest of the variables are defined in the *tables 3 y 4.*

Daily use of EBN

The mean total score of EBN daily use is 27.02±8.25 points (out of a maximum of 42 points). The question with the highest score is sharing the evidence found with coworkers ($\bar{x}$=4.92). The other way, the one with the lowest score is about the evaluation of the quality of the evidence ($\bar{x}$=3.72). The rest of the questions have a similar average score, being in an intermediate position *(table 2).*

Attitude towards EBN

The median of the total attitude score is 18 points (out of a maximum of 21 points) and the IQR is 4. The three questions in this section present high scores (between 6-7 points), in which they recognize the importance of incorporate evidence into professional practice. Likewise, they have a good predisposition to have their daily practice questioned by their coworkers and present a positive attitude towards change in the face of new evidence *(table 2).*

Skills and knowledge to apply EBN

The average score is 44.15±11.39 points (out of a maximum of 70 points), reflecting a certain lack of knowledge and skills to apply the EBN. Of the questions presented, the one that received the lowest score was the one referring to the knowledge to collect scientific evidence from different sources ($\bar{x}$= 4.03), also highlighting the issue related to research skills ($\bar{x}$=4.05). As for the question with the highest score, this is in reference to the ability to apply the information found to specific cases ($\bar{x}$=4.94) *(table 2).*

Table 2. Score obtained in the CPBE-19

Paragraph	Questions	$\bar{x} \pm \sigma$	m; IQR
Daily use	1. I formulated a clearly defined question.	4,49 ± 1,54	
	2. I inquired about the relevant evidence after I had formulated the question.	4,43 ± 1,59	
	3. I evaluated critically, using explicit criteria, any bibliographical reference found.	3,72 ± 1,75	
	4. I integrated the evidence found with my experience.	4,78 ± 1,81	
	5. I evaluated the results of my practice.	4,42 ± 1,93	
	6. I shared this information with my coworkers.	4,92 ± 1,72	
Attitude	7. I welcome questions about my practice.		6;3
	8. Evidence-based practice is fundamental to professional practice.		7;1
	9. I have changed my practice when I've found evidence in this regard.		6;2
Skills and knowledge	10. Skills for research.	4,05 ± 1,54	
	11. Skills for information technology.	4,60 ± 1,51	
	12. Monitoring and review of practical skills.	4,43 ± 1,29	
	13. Convert my information needs into research questions.	4,45 ± 1,44	
	14. Be up to date on the main types of information and their sources.	4,43 ± 1,37	
	15. Know how to retrieve evidence from different sources.	4,03 ± 1,41	
	16. Ability to critically analyze the evidence using explicit criteria.	4,17 ± 1,51	
	17. Ability to determine the validity of the found material.	4,29 ± 1,51	

	18. Ability to determine the utility of the found material.	4,71 ± 1,30	
	19. Ability to apply the found information to specific cases.	4,94 ± 1,18	

After analyzing each section of the questionnaire, bivariate analysis were carried out (*table 3),* in which statistically significant differences are observed when relating EBN formation with EBN skills and knowledge ($p<0.01$).

With respect to gender, tutoring of students and/or residents, and employment status, no significant differences were found when relating it to any section of the questionnaire ($p>0.05$). Finally, in terms of postgraduate formation, there are significant differences in the case of EIR formation in respect to EBN skills and knowledge ($p<0.05$).

Finally, after the different correlation analysis (*table 4),* we haven't obtained significant differences in any variable, so we cannot confirm any type of relationship.

Table 3. Descriptive analysis of qualitative and bivariate analysis.

		Daily use	**Attitude**	**Skills and knowledge**
	n (%)	**p**	**p**	**p**
Gender - Woman - Men	55 (84,6%) 10 (15,4%)	0,360	0,748	0,393
EBN formation - *Yes* - *No*	33 (50,8%) 32 (49,2%)	0,06	0,559	**<0,01**
Tutoring - *Students* - *Residents* - *Both* - *Neither of the two*	16 (24,6%) 7 (10,8%) 17 (26,1%) 25 (38,5%)	0,551 0,705 0,441 0,682	0,150 0,822 0,073 0,838	0,286 0,488 0,799 0,788

Postgraduate formation - *Master* - *EIR* - *Doctorate* - *Another formation* - *None*	19 (29,2%) 5 (7,7%) 1 (1,5%) 10 (15,4%) 34 (52,3%)	0,826 0,091 0,276 0,115 0,108	0,715 0,241 0,554 0,451 0,541	0,159 **0,043** 0,162 0,731 0,101
Employment situation - *Interim/Titular* - *Eventual* - *Other*	39 (60%) 19 (29.2%) 7 (10.8%)	0,258	0,493	0,229

Table 4. Correlation analysis between quantitative variables

			Daily use		**Attitude**		**Skills and knowledge**	
	$\bar{x}$ ± σ	**m; IQR**	**p**	**r**	**p**	**r**	**p**	**r**
Age (years)		46; 22	0,605	-0,65 (rs)	0,825	0,028 (rs)	0,358	-0,116 (rs)
Time since studies' completation (years)		20; 23,25	0,447	-0,98 (rs)	0,846	0,025 (rs)	0,088	-0,219 (rs)
Work experience (years)	22,3 ± 12,2		0,610	-0,064 (r)	0,875	0,020 (r)	0,335	-0,121 (r)
Work experience in PC (years)		5,50; 21,25	0,615	0,064 (rs)	0,386	0,110 (rs)	0,607	0,065 (rs)

***$\bar{x}$:** mean, σ: standard deviation, **m:** median, **IQR:** interquartile range, **r:** Pearson's correlation, **rs:** Spearman's correlation. Own elaboration.*

Self-perceived factors that may hinder the implementation of the EBN and possible measures to improve it

We have carried out a descriptive analysis after coding the data of the two open questions that the participants had to complete. In this way, we have two categories: limiting factors when implementing the EBN and measures to improve its application. In turn, we've obtained others subcategories:

Limiting factors

- *Labor conditions:* The most repeated factor was the lack of time, reported by 47 people, some of whom related it to work overload and burnout. Another 4 people reported job insecurity, 1 person indicated a lack of physical space for nurses and, finally, 1 indicated a lack of financial resources.
- *Formation:* Regarding this subcategory, 29 people indicated a lack of formation in EBN and 2 people found it difficult to apply theory to practice, 1 of them considering that it's due to "lack of consensus on protocols".
- *Individuals' factors:* There were 5 people who indicated a lack of willingness and interest on the part of their coworkers, of which 2 indicated an attitude of "negativity to change for convenience".

Measures

- *Formation offer:* Of the total number of subjects, 27 people demanded formation in EBN, of which 1 indicated that "mandatory annual formation". On the other hand, 1 person indicated formation in handing new technologies.
- *Management:* The need to hire staff and/or reduce quotas was indicated by 13 people, of which 2 specified that the hiring could be focused on family and community specialist nurses and 5 people mentioned the offer of contracts to be able to cover the days for formation. Another measure mentioned by 8 people was the creation of a time slot during the working day to be able to search for evidence. In addition, 1 person indicated improving job stability, given the eventual hiring situation. Finally, 2 people indicated updating protocols to work systematically.
- *Implication:* To promote teamwork was one of the measures referred by 7 people, carrying out bibliographic searches and the subsequent sharing in a clinical session. 1 person indicated "contact other PC professionals who are already implementing it", while another indicated carrying out a "self-audit" to assess deficiencies and share information with the entire team. Last, 2 people mentioned the need to raise awareness of the benefits of using EBN for better patient care and one of them indicates that this should be promoted "from management".

DISCUSSION

In relation to the general objective of knowing the current implementation of EBN by nurses from different health centers in the Region of Murcia that have participated, the results obtained show a quite favorable attitude towards using the EBN, although the daily use and the knowledge and skills in EBN are still pending points to work on, following the trend of other studies carried out at the national level [2,3].

Although we cannot establish relationships between a large number of variables, we did obtain significant differences with respect to having or not formation in EBN and a nursing specialism, since they favor the increase in skills and knowledge in EBN. In another similar study carried out in Spain, the same results were obtained for these two variables [3] and, despite the fact that having a nursing specialism improves EBN skills and knowledge, this is not reflected in daily use, and may be related to the organizational characteristics of the work. To do this, a study proposes that community nurse specialists adopt the role of EBN mentor nurses, leading the change towards an evidence-based organization [3].

Taking other studies as a reference, to increase the implementation of EBN by nurses, formative activities seem to be the most accessible intervention. However, there're others such as the distribution of educational material from support [17] and the commitment on the part of managers to offer an adequate organizational culture that promotes EBN and motivates nurses to carry it out, since the characteristics of the environment seem to influence the incorporation of the best available evidence in daily practice [18]. The creation of working groups can also be promoted, to facilitate the updating of knowledge according to the latest evidence [19]. However, the EBN application will only be fully implemented when the nurses consider it useful for their daily practice [20].

Despite having a small sample size, certain trends can be observed in the relationship between variables that could be confirmed with a larger sample size, such as a possible inverse relationship between age and the time since the completion of studies with regarding the daily use of EBN.

Regarding the limitations of this study, these derive from non-probabilistic sampling, in addition to having a relatively small sample size, which could make it difficult to represent and extrapolate the results to the rest of the nurses who work in Primary Care in the Region. of Murcia. It is possible that the small sample size is related to not having obtained significant differences in many of the variables. Therefore, it would be ideal to continue deepening and carry out larger-scale studies in the Region of Murcia.

It is worth mentioning the non-response bias in the qualitative part of the study, since not all the participants answered the open questions, which makes it difficult to know if there are more limiting factors or measures that haven't been mentioned in the rest of the answers.

Finally, as a proposal for improvement, an exhaustive evaluation of the perceived barriers and the detected needs could be carried out to program interventions that inspire community nurses in the use of EBN in their daily practice.

CONCLUSIONS

Participating nurses show a favorable attitude towards EBN, but daily use and skills and knowledge are moderate. There are various barriers that they perceive in relation to this topic, reiterating the lack of training, time and interest on the part of the professionals and some measures that they suggest to alleviate it are: formation, hiring of personnel and/or reduction of quotas and the development of teamwork. Regarding the rest of the variables, formation in EBN and nursing specialization are related to a higher level of skills and knowledge in EBN. Finally, we highlight the need to carry out studies with a greater impact in order to adequately assess the current state and needs and, thus, implement strategies that promote a change in PC in order to a nursing practice base on the last evidence.

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ANNEX 1- QUESTIONNAIRE FOR DATA COLLECTION

The purpose of this questionnaire is to collect data that allow us to know the current situation regarding the implementation of Evidenced-Based Nursing (EBN) in PC in various centers of Región de Murcia. These data will be collected completely anonymously, making it impossible to identify the participants. Before filling it out, *please don't forget to check the informed consent box.*

☐ **I agree to participate anonymously, voluntarily and disinterestedly in this study.**

- **Gender** (mark): Woman / Man
- **Age**: _____
- **Laboral experience as a nurse** (in years): _____
- **Laboral experience in primary care** (in years): _____
- **Do you have EBN formation?** ☐ Yes ☐ No
- **Date of completion of studies:** _____
- **Do you have postgraduate formation?** ☐ Yes ☐ No
  - *If you have postgraduate formation, indicate which:*

    ☐ Master ☐ Doctorate ☐ EIR ☐ Other (Specify): _____
- **Do you tutor students and/or residents of Nursing?**

  ☐ Students ☐ Residents
- **Current situation**:

  ☐ Titular/ Interin ☐ Substitute ☐ Reinforcement ☐ Other (Specify): _____
- **What factors do you think make it difficult for you implement EBN in your work?** *(for example, lack of time, difficulty for search bibliography or carry it out, etc.)*
- **What measures do you think would be effective to improve it?**

Clinical Effectiveness and Evidence-Based Practice Questionnaire (CPBE-19)

Next, we have the questionnaire, which is designed to collect information and opinions about the use of evidence-based practice among health professionals. There are not correct or incorrect answers, we are only interested on your opinions and the use of evidence in your practice.

1. With respect to the attention given to some patient in the last year, how often do you have asked yourself the following questions to respond to any possible gap in your knowledge? (*mark with X*):

	1	2	3	4	5	6	7
1. I formulated a clearly answerable question as the beginning of the process towards filling this gap.	☐ Never	☐	☐	☐	☐	☐	☐ Frequently

Frequently

Frequently

2. I inquired about the relevant evidence after I have formulated the question.	1 ☐ Never 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
3. I evaluated critically, using explicit criteria, any bibliographical reference found.	1 ☐ Never 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
4. I integrated the evidence found with my experience.	1 ☐ Never 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
5. I evaluated the results of my practice.	1 ☐ Never 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐
6. I shared this information with my coworkers.	1 ☐ Never 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐

2. Please, indicate where would you place yourself on the scale for each of the following pairs of statements:

7. I resent having my clinical practice questioned.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐	I welcome questions about my practice.
8. Evidence-based practice is a waste of time.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐	Evidence-based practice is fundamental to professional practice.
9. I stick to tried and trusted methods rather than changing to anything new.	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐	I have changed my practice when I have found evidence about it.

3. **In the escale from 1 to 7** (*being 7 the best score*) **how would you rate yourself?** *(please, circle the chosen number for each statement*):

	Poor						Excelent
10. Skills for research.	1	2	3	4	5	6	7
11. Skills for information technology.	1	2	3	4	5	6	7
12. Monitoring and review of practical skills.	1	2	3	4	5	6	7
13. Convert my information needs into a research question.	1	2	3	4	5	6	7
14. Be up to date on the main types of information and their sources	1	2	3	4	5	6	7
15. Know how to retrieve evidence from different sources.	1	2	3	4	5	6	7

16. Ability to critically analyze the evidence using explicit criteria.	1	2	3	4	5	6	7
17. Ability to determine the validity oof the found material.	1	2	3	4	5	6	7
18. Ability to determine the utility of the found material.	1	2	3	4	5	6	7
19. Ability to apply found information to specific cases.	1	2	3	4	5	6	7

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