

ORIGINAL ARTICLE

CLINICAL SUPERVISION: A CONTRIBUTION TO IMPROVING QUALITY INDICATORS IN NURSING CARE

HIGHLIGHTS

1. Involvement in care practice projects is differentiating.
2. Clinical supervision influences quality indicators.
3. Clinical supervision aimed at knowledge influences behaviors and attitudes.
4. Clinical supervision effectively contributes to reflective practice.

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ABSTRACT

Objective: to compare indices and indicators of the quality of nursing care in inpatient, medical and surgical services when clinical supervision is implemented. **Method:** an observational, retrospective study with a quantitative approach and simple random sampling of audit records related to the quality of nursing care (n=719). The research took place between August 2020 and August 2022, in two private hospitals in the Lisbon region, Portugal, where audits related to the quality of nursing care were carried out, and clinical supervision was implemented in one of the hospitals. Descriptive and inferential statistics were used. **Results:** analysis of the records when comparing the hospitals and services showed an increase in the desired and adequate quality scores (≤ 5 and ≤ 4) in the services of the hospital where clinical supervision was implemented. **Conclusion:** Clinical supervision allows teams to be strategically monitored in the practice of care, increasing quality indices and indicators with a direct impact on the patient.

DESCRIPTORS: Quality Indicators, Health Care; Nursing Audit; Nursing, Supervisory; Nursing Care; Outcome Assessment.

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INTRODUCTION

The development of quality management in nursing care arises from the constant search for systematic and structured processes guided by rigor and evidence in obtaining indicators resulting from practice with an impact on the patient and the expectation of quality. To create value from the best nursing practices, it is strategic to focus on changing the behavior and practices of professionals based on the development of team skills and organizational commitment.

One of the most common models for changing practices is based on the Deming cycle, defined by four stages in constant interaction: identification and prioritization; implementation of contextualized actions; monitoring; and evaluation of results evidenced by compliance with standards centered on quality and patient safety¹.

However, to change care practices, quality management must be centered on the patient and process control. Audits are one of the tools for controlling evidence of compliance and continuous improvement, as they enable improvement actions to be planned, monitored, and evaluated, in accordance with the objectives and needs diagnosed through evidence of compliance²⁻⁵. Their applicability thus becomes an explicit process of reflection on planning, metrics and indicators in the transformation, maintenance, and improvement of care quality⁶⁻⁸.

However, to meet new demands related to changing practices with an impact on patients, which go beyond meeting the quality standards of nursing care, the practice of clinical supervision has been integrated as a facilitating, dynamic and collaborative strategy among peers⁹⁻¹⁰.

From a perspective of efficiency and comprehensive support for teams, supervision provides learning and interpersonal, emotional and professional skills, guiding the understanding of nursing interventions, evaluation and recognition of practices within an institutional context⁹⁻¹¹.

According to Proctor's theory, the formative, normative and restorative intervention of supervision is beneficial for improving the quality of care and facilitates the construction of professional identity¹². Through the formative aspect, behavior is acquired for reflective practice and new learning is gained; through the normative aspect, it is oriented towards procedures and quality standards; and through the restorative aspect, interpersonal relationships, coping strategies, and critical thinking are enhanced in the awareness and self-improvement of skills.

This process of transforming thinking and acting leads to continuous and reflective training among peers, for learning, sharing knowledge and structured decision-making, which is essential for integrating, guiding and building practice according to standards, contexts and needs¹²⁻¹³. However, the efficiency of supervision in the quality of care depends on the interaction between supervisors and supervisees, the context and the skills among peers, making it possible to give meaning and value to the operationalization of actions to improve and change practices¹⁴⁻¹⁶.

In Portugal, the Directorate-General for Health considered it strategic to reduce the variability of clinical practice and increase adherence to guidelines for clinical quality and patient safety. At the same time, the Portuguese Nurses' Association defined nursing quality standards considering four dimensions: prevention of complications; comfort and well-being in self-care; functional readjustment; and organization of care, reinforcing the need for reflective professional practice through the gaining of skills.

With this in mind, and with a vision of organizational leadership geared towards clinical quality and patient safety, a private healthcare group in the Lisbon region, Portugal, made up of nine hospitals that care for patients with medical and surgical specialties, has

promoted a culture of differentiation and continuous improvement by integrating audits in all its units into its quality management model in compliance with national and international benchmark quality standards.

The audit process was based on the quality standards of the Portuguese Nurses' Association and the Haddad model¹⁷ which, by applying a grid of four dimensions and fifty-one items, classifies the quality of care into desired quality (QD)($\geq 90\%$ and $< 100\%$); adequate quality (QA)($\geq 81\%$ and $< 90\%$); safe quality (QS)($= 80\%$); minimum quality (QM)($\geq 71\%$ and $< 80\%$); and not adequate quality (QNA)($< 70\%$), making it possible to determine quality indices and indicators.

Thus, when analyzing the results of the audit records in use, there was evidence of QM or QNA indices and indicators with a direct impact on the patient, and therefore strategies for improving compliance and meeting the defined quality standards should be considered. For these reasons, as the research shows, the implementation of supervision models is a strategy that allows dynamic and collaborative interaction between peers to gain skills and have an impact on the quality of care, which led us to the aim of the study: to compare indices and indicators of the quality of nursing care in medical and surgical inpatient services when clinical supervision is implemented.

METHOD

This is a documentary, retrospective study with a quantitative approach and simple random sampling with audit grid records related to the quality of nursing care for patients with a hospitalization rate of more than twenty-four hours in the medical and surgical fields. Data collection took place between August 2020 and August 2022 in the medical and surgical services of two private hospitals in the Lisbon region, Portugal.

The hospitals were named: Hospital A (HA) with 119 beds, and Hospital B (HB) with 213 beds, in both of which monthly audits relating to the quality of care were carried out. At HA, the practice of team supervision was implemented in the surgical service (HAS) and the medical service (HAM), and at HB, audits were only carried out in the similar services (HBS) and (HBM).

As a result of the sampling, 719 records ($n=719$) were selected to calculate the sample size with a 95% confidence interval and a 5% margin of error. The HA sample had 363 records ($n=363$), of which 217 were distributed in the HAS service ($n=217$), and 146 in the HAM service ($n=146$), while in HB, the sample was 356 records ($n=356$), of which 183 records were distributed in the HBS service ($n=183$) and 173 ($n=173$) in the HBM service.

The evidence from the audit grid records made it possible to determine the overall level of quality of care in percentage values by dimension and by item categorized by quality indices and indicators, allowing scores to be created. QD ($\geq 90\%$ and $< 100\%$), QA (81% and $< 90\%$), QS ($= 80\%$), QM ($\geq 71\%$ and $< 80\%$) and QNA ($< 70\%$). As a supervision model, Proctor's theory was applied, intervening in all three aspects.

Participants included the nursing teams at the HA with 95 nurses ($n=95$), 54 of whom were distributed in the HAS ($n=54$) and 41 in the HAM ($n=41$), and at the HB with 67 ($n=67$), 31 of whom were distributed in the HBS ($n=31$) and 36 in the HBM ($n=36$). All the records in the audit grids were for patients with a length of stay of less than 24 hours, and not in the medical or surgical spheres.

Statistical treatment was carried out using SPSS® Statistics software, using descriptive and inferential statistics. Factorial ANOVA between groups was used to analyze the interaction of the significance of the implementation of supervision, meeting the interaction assumptions for $p\text{-value} \leq 0.05$ for significant differences between the scores

of the dimensions and items by hospital and by service. Pearson's chi-square test with $p\text{-value} \leq 0.05$ was used to analyze the evolution of the scores in terms of homogeneity or independence between supervision and results, and the Kruskal-Wallis test was used to analyze the homogeneity of the variances and the effect of the category on the dimensions according to the multiple comparison of the means of the orders.

The independent variable was supervision, and the dependent variables were the dimensions and items of the audit grid and the characteristics of the teams. In other words, the dimension, and respective items of prevention of complications (PC) with (13 items), comfort and well-being for self-care (SC) with (17 items), functional re-adaptation (FR) with (nine items) and organization of care (OC) with (12 items), on a three-point measurement scale (yes, no, and not applicable) (appendix 1). Team characteristics according to length of service (< five years, > five years and < to 15 years, >15 years), and professional category according to Benner's classification of skills and knowledge (novice nurse, nurse, senior nurse, and expert nurse).

For supervision to be effective, supervisors were identified as nurses with the rank of senior nurse and expert, and with more than ten years' experience at the institution, who took part in training according to Proctor's supervision model and methodology - the three vectors.

The research was approved by the ethics committee (opinion no. 01/2019) of the organization involved, and all participants were informed and clarified about the content of the research. The informed consent form was completed and signed, and the confidentiality and anonymity of the participants was guaranteed by the researchers.

RESULTS

Considering the characteristics of the nursing teams at the hospitals in the study in terms of length of service and professional category, the results showed that in the surgical service, of the 54 nurses at the HA, 24 (44.4%) had been in the service for less than five years, 24 (44.4%) had been in the service for between five and 15 years, and six (11.2%) had been in the service for more than 16 years, while at the HB, of the 31 nurses, 29 (93.5%) had been in the service for less than five years, and two (6.5%) had been in the service for more than 16 years.

In the medical service, of the 41 nurses at HA, 21 (51.2%) had been in the service for less than five years, 14 (34.1%) between five and 15 years, and six (14.6%) more than 16 years, while at HB, of the 35 nurses, 30 (85.7%) had been in the service for less than five years, three (8.6%) between five and 15 years, and two (5.7%) more than 16 years.

Regarding professional category in the surgical service, at HA, of the 54 nurses, six (11.1%) were beginners, 30 (55.5%) were nurses, seven (13%) were senior nurses and 11 (20.4%) were experts, while at HB, of the 31 nurses, three (9.7%) were beginners, 11 (35.5%) were nurses, 15 (48.4%) were senior nurses and two (6.5%) were experts.

In the HA medical service, of the 41 nurses, three (7.3%) were beginners, 26 (63.4%) were nurses, five (12.2%) were seniors and seven (17.1%) were experts, and in HB, of the 35 nurses, five (14.3%) were beginners, 15 (42.9%) were nurses, 10 (28.6%) were seniors and five (14.3%) were experts.

Global and comparative cumulative analysis for the surgical services showed indices and indicators of nursing care quality with a QD score ($\bar{x}=4.47$) at the HAS, and at the HBS, a QA score ($\bar{x}=3.70$) while the medical services showed QA scores respectively at the HAM ($\bar{x}=3.96$) and HBM ($\bar{x}=3.57$).

Regarding the analysis by item of the different dimensions in the hospitals' surgical services, there was an increase in the score in the PC and OC dimensions with QD indices and indicators ($\bar{x}=4.69$ and $\bar{x}=4.30$), and a drop for QA indicators ($\bar{x}=3.86$ and $\bar{x}=3.81$) in HB.

For the CWSC dimension, they maintained QD scores ($\bar{x}=4.62$ and $\bar{x}=4.28$) in both hospitals, while for the FR dimension, the score was QS ($\bar{x}=2.85$) in HB, and QD ($\bar{x}=4.30$) in HA.

For medical services, both hospitals saw an increase in the score for the PC dimension with QA indices and indicator ($\bar{x}=3.89$ vs $\bar{x}=3.77$), and for the CWSC dimension of QD ($\bar{x}=4.50$ vs $\bar{x}=4.19$) respectively.

For the FR dimension, the score was QA ($\bar{x}=3.16$) in HA, and in HB QS ($\bar{x}=2.61$), finally, the OC dimension in HA the score was QD ($\bar{x}=4.28$), and QA ($\bar{x}=3.73$) in HB.

Regarding the significance of the evolution of the quality of care score when comparing the items and their interactions (Table 1), significant differences were found in the surgery services when comparing the interactions in the PC dimension in items PC1, PC3, PC4, PC7, PC9, PC11, PC12 and PC13, in the CWSC dimension in items CWSC2 and CWSC16, in the FR dimension in items FR2, FR3, FR4, FR5, FR7, FR8 and FR9, and in the OC dimension in items OC6, OC7 and OC10.

When comparing the medical services, there were interactions in the PC dimension, item PC7, in the CWSC dimension in items CWSC5 and CWSC14, in the FR dimension in items FR2, FR3, FR5, FR6 and FR8, and in the OC dimension in items OC5, CWSC6 and OC7 (Table 1).

Table 1 - Evolution of quality scores by dimension and items in the surgical and medical services of hospitals A and B (n=719). Lisbon, Portugal, 2022.

| † Dimension and Items | Surgery Services | | | Medicine Services | | |
|-----------------------------|------------------|-------|---------------|-------------------|-------|---------------|
| | ‡ \bar{x} | §F | †† p-value | ‡ \bar{x} | §F | †† p-value |
| PC1 | 14.40 | 10.00 | 0.00 | | | |
| PC3 | 40.00 | 23.35 | 0.00 | | | |
| PC4 | 1.22 | 4.41 | 0.04 | | | |
| PC7 | 38.02 | 21.45 | 0.00 | 30.62 | 14.41 | 0.00 |
| PC9 | 25.60 | 13.15 | 0.00 | | | |
| PC11 | 4.23 | 5.15 | 0.03 | | | |
| PC12 | 14.40 | 10.13 | 0.00 | | | |
| PC13 | 5.62 | 4.67 | 0.04 | | | |
| CWSC2 | 5.62 | 6.73 | 0.01 | | | |
| CWSC 5 | | | | 4.90 | 6.60 | 0.01 |
| CWSC 14 | | | | 4.22 | 5.59 | 0.02 |
| CWSC 16 | 90,00 | 51,51 | 0,00 | | | |

| | | | | | | |
|------|-------|-------|------|-------|-------|------|
| FR2 | 34,22 | 16,15 | 0,00 | 11.02 | 4.09 | 0.05 |
| FR 3 | 8,10 | 7,16 | 0,01 | 28.90 | 18.00 | 0.00 |
| FR 4 | 14.40 | 4.41 | 0.04 | | | |
| FR 5 | 27.22 | 12.97 | 0.00 | 16.90 | 6.12 | 0.02 |
| FR 6 | | | | 13.22 | 7.67 | 0.01 |
| FR 7 | 62.50 | 27.42 | 0.00 | | | |
| FR 8 | 18.22 | 9.60 | 0.00 | 18.22 | 8.17 | 0.01 |
| FR 9 | 67.60 | 38.92 | 0.00 | | | |
| OC5 | | | | 1.22 | 4.41 | 0.04 |
| OC6 | 21.02 | 9.19 | 0.00 | 27.22 | 12.50 | 0.00 |
| OC7 | 48.40 | 29.10 | 0.00 | 38.02 | 20.96 | 0.00 |
| OC10 | 15.62 | 7.06 | 0.01 | | | |

Note: †Prevention of complications (PC), Comfort and well-being in self-care (CWSC), Functional readaptation (FR), Organization of care (OC). ‡ mean, §ANOVA factorial between groups. †† p-value≤0.05.

Source: The authors (2022).

According to Pearson's chi-squared test for the independence of the evolution of the scores per dimension and item of the hospitals in both services, when compared, the results showed that they were dependent on the implementation of supervision.

In surgical services, there was dependence in the PC dimension in items PC1, PC3, PC4, PC7, PC9, in the CWSC dimension in items CWSC3, CWSC10, CWSC15 and CWSC16, in the FR dimension in items FR2, FR6, FR8 and FR9, and in the OC dimension in items OC6, OC7 and OC10.

In medical services, there is dependence on items PC7, PC8 and PC12 of the PC dimension, items CWSC3, CWSC15 and CWSC16 of the CWCS dimension, items FR2, FR3, FR4, FR5, FR6 and FR9 of the RF dimension and items OC1, OC4, OC6 and OC7 of the OC dimension (Table 2).

Table 2 - Dependence of quality indices and indicators on items in the surgical and medical services of Hospitals A and B (n=719). Lisbon, Portugal, 2022

| † Dimension and Items | Surgery Services | | | | †† p-value | Medicine Services | | | | †† p-value |
|-----------------------------|------------------|-----|------|------|---------------|-------------------|-----|-----|-----|---------------|
| | ‡HA | | §HB | | | ‡HA | | §HB | | |
| | ‡‡IQ(%) | | | | | ‡‡IP(%) | | | | |
| | §§ | ††† | §§ | ††† | | §§ | ††† | §§ | ††† | |
| | QNA | QM | QNA | QM | | QNA | QM | QNA | QM | |
| PC1 | | | 7.5 | 10.0 | 0.02 | | | | | |
| PC3 | 2.5 | | 15.0 | 15.0 | 0.00 | | | | | |
| PC4 | | | | 2.5 | 0.05 | | | | | |

| | | | | | | | | | | |
|---------|-----|-----|------|------|------|------|-----|------|------|------|
| PC7 | 2.5 | 2.5 | 17.5 | 15.0 | 0.00 | | 2.5 | 22.5 | 7.5 | 0.00 |
| PC8 | | | | | | 12.5 | | | | 0.00 |
| PC9 | 2.5 | | 15.0 | 7.5 | 0.01 | | | | | |
| PC12 | | | | | | 7.5 | | 10.0 | | 0.04 |
| CWSC 3 | 5.0 | | 20.0 | | 0.02 | 2.5 | | 27.5 | | 0.00 |
| CWSC 10 | 7.5 | | 20.0 | | 0.00 | | | | | |
| CWSC 15 | 7.5 | | 35.0 | | 0.00 | 12.5 | | 40.0 | | 0.00 |
| CWSC 16 | 2.5 | | 40.0 | | 0.00 | 12.5 | | 35.0 | | 0.00 |
| FR2 | 2.5 | | 20.0 | 10.0 | 0.00 | 7.5 | | 20.0 | 7.5 | 0.05 |
| FR3 | | | | | | | | 12.5 | 12.5 | 0.00 |
| FR4 | | | | | | 10 | | 35.0 | | 0.00 |
| FR5 | | | | | | 7.5 | | 37.5 | | 0.00 |
| FR6 | 5.0 | | 10.0 | | 0.02 | 12.5 | | 17.5 | | 0.00 |
| FR8 | | | 17.5 | | 0.01 | | | | | |
| FR9 | | | 30.0 | 5.0 | 0.00 | 12.5 | | 35.0 | | 0.00 |
| OC1 | | | | | | 15.0 | | 40.0 | | 0.01 |
| OC4 | | | | | | | | 12.5 | | 0.05 |
| OC6 | | 5.0 | 20.0 | 5.0 | 0.01 | 5.0 | 2.5 | 17.5 | 10.0 | 0.00 |
| OC7 | | | 25.0 | 5.0 | 0.00 | 5.0 | | 30.0 | 7.5 | 0.00 |
| OC10 | 2.5 | | 17.5 | 2.5 | 0.04 | | | | | |

Note: †Prevention of complications (PC), Comfort and well-being for self-care (WSC), Functional re-adaptation (FR), Organization of care (OC). ‡Hospital A. §Hospital B. ††p≤0.05 Pearson's chi-squared test. ‡‡ Quality indices. §§(QNA) quality not adequate. †††(QM) minimum quality.

Source: The authors (2022).

As for the effect of supervision on the results of the indices and quality indicators of the items in the different dimensions, this was assessed using the Kruskal-Wallis test, followed by multiple comparison of the means of the orders and groups, considering p-value ≤ 0.05 as statistically significant.

When comparing the surgical services, it was found that supervision significantly affected all the dimensions, specifically items PC1, PC3, PC4, PC7, PC9, PC11 and PC12 in the PC dimension, items WSC2, WSC15 and WSC16 in the WSC dimension, FR2, FR 3, FR4, FR 5, FR 6, FR 7, RF8 and FR 9 in the FR dimension and, lastly, items OC3, OC6, OC7 and OC10 in the OC dimension (Table 3).

In medical services, items PC6 and PC7 in the PC dimension, items WSC3, WSC5, WSC14 and WSC15 in the WSC dimension, items FR3, FR5 and FR7 in the FR dimension, and items OC1, OC5, OC6 and OC7 in the OC dimension were affected (Table 3).

Table 3 - Comparison of the quality indices by item and dimension of the surgery and medicine services at Hospitals A and B (n=719). Lisbon, Portugal, 2022

| † Dimension and Items | Surgery Services | | Medicine Services | |
|--------------------------|------------------|------|-------------------|----------|
| | ‡KW | §p | ‡KW | §p-value |
| PC1 | 7.412 | 0.00 | | |

| | | | | |
|---------|--------|-------|--------|------|
| PC3 | 13.841 | 0.00 | | |
| PC4 | 5.556 | 0.05 | | |
| PC6 | | | 4.35 | 0.04 |
| PC7 | 12.787 | 0.00 | 6.38 | 0.01 |
| PC9 | 10.685 | 0.00 | | |
| PC11 | 4.515 | 0.04 | | |
| PC12 | 7.033 | 0.01 | | |
| CWSC2 | 8.184 | 0.01 | | |
| CWSC 3 | | | 4.169 | 0.03 |
| CWSC 5 | | | 8.193 | 0.01 |
| CWSC 14 | | | 5.692 | 0.03 |
| CWSC 15 | 6.251 | 0.01 | 7.151 | 0.01 |
| CWSC 16 | 22.442 | 0.00 | | |
| FR2 | 9.195 | 0.00 | | |
| FR3 | 5.242 | 0.02 | 12.106 | 0.00 |
| FR4 | 5.083 | 0.02 | | |
| FR5 | 11.604 | 0.00 | 9.943 | 0.00 |
| FR6 | 4.474 | 0.03 | | |
| FR7 | 18.097 | 0.00 | 12.836 | 0.00 |
| FR8 | 6.661 | 0.01 | | |
| FR9 | 17.351 | 0.00 | | |
| OC1 | | | 5.81 | 0.01 |
| OC3 | 4.517 | 0.04 | | |
| OC5 | | | 5.556 | 0.05 |
| OC6 | 6.422 | 0.01 | 12.163 | 0.00 |
| OC7 | 16.024 | 0.00 | 12.147 | 0.00 |
| OC10 | 3.935 | 0.056 | | |

Note: †Prevention of complications (PC), Comfort and Well-being in self-care (CWSC), Functional readaptation (FR), Organization of care (OC), ‡Kruskal-Wallis (KW), §p-value≤0.05 multiple comparison of means of orders.

Source: The authors (2022).

DISCUSSION

In the clinical quality process, it is essential to highlight the quality of practice according to patient-centered standards throughout the care cycle. Considering the audit model in use in the study units, it was possible to highlight relationships between the phases of the care process, identifying strengths and areas of potential improvement to be developed, as standardized by reference institutions.

The audit model applied allowed for the integration of processes, standards, and organizational values, as pointed out in the study in question. The existence of management models focused on practices favors the integration of processes and standards, increases autonomy and co-responsibility with the sharing of knowledge, having a direct or indirect influence on the quality-of-care practices¹⁰.

Overall, the results of the study's audits showed indices and indicators with scores between adequate and desired quality, making it possible to state that the care provided to patients complies with the reference quality standards⁴. However, in the HA where

supervision was implemented, there were higher scores for the QD and QA indices and indicators, while the unsupervised HB had a QA score, demonstrating, as described in the literature, that the implementation of peer supervision processes promotes the development of critical-reflective skills appropriate to professional practice, with direct repercussions on the quality of care provided, with a direct impact on the patient.

Also, the effectiveness of the supervision process, as indicated in the research, depends on individual and organizational factors for continuous reflection on improvement^{9,11,13}. However, they add that involving teams in monitoring methods and decision-making develops understanding and a sense of belonging in the adoption of new personal and professional behaviors¹⁸⁻¹⁹. We also considered the characteristics of the nursing teams to highlight differences between hospitals, since, as described in the research, the length of time the team has been working and its competencies compromise performance^{1,19-21}.

The results indicated that the hospital with the longest-serving team, with the highest number of senior and expert nurses, and with supervision, had higher scores, a fact related to the ability of supervisors to reflect on, guide and fully support the practices of those they supervise, as described by Benner's competency model, which determines professional competency as the ability to carry out integrated actions in a context, validated by knowledge and skills acquired over time²².

In addition, according to the studies, critical reflection on practices and experiences in different contexts transforms thinking and acting to implement strategies that show indicators of effectiveness and transparency in the process^{6,23-24}.

This evidence moves professionals towards objective data in the comparative evaluation of indicators on the underutilized care process and the improvement of skills to improve quality²⁴. This allows us to infer that the effectiveness of the quality of supervisors' practices is related to knowledge, skills and decision-making about care and the identification of effective strategies with team satisfaction and motivation^{15,20-21}.

As research has shown, professional competence is related to the involvement and knowledge of teams when faced with the complexity of diagnoses, and the ability to influence practice in the development of processes arising from the situation^{21,25}. This is where supervision may have influenced the results of the scores when comparing HA and HB, as the existence of supervisors in HA allowed collaboration between peers in the follow-up, monitoring and feedback on practice, facilitating critical reflection and the development of skills in the supervised.

Studies consider it essential for teams to be involved in monitoring methods and decision-making to gain understanding, a sense of belonging and motivation to adopt behaviors that have an impact on quality^{9-13,18-20,25}.

The results of the research revealed an evolution in the scores of the items with dependence on each other because of supervision, corroborated by research which argues that supervision based on the analysis of information produced by peers increases critical reflection on practices and interferes in the planning of actions appropriate to the real learning needs of nurses¹³⁻¹⁴.

As it is a dynamic, motivating, and integral process that supports and involves professionals in the results and solutions in favor of quality, it makes it possible for nursing teams to take ownership of identifying needs, defining interventions, and implementing and validating practices according to defined standards²⁶⁻²⁸.

When analyzing the effect of supervision on the indices and quality indicators of the dimensions, the results showed that for the PC dimension, the model of direct and permanent supervision by the supervisor instilled in those being supervised the practice of identifying and referring interventions, minimizing potential undesirable effects for the patient. In other words, the supervisor's support and stratification of potential risks was

effective in training the teams, which is corroborated by studies^{13,15-16}.

In addition, the maintenance of quality was based on training and feedback during the practice of care, providing reflection on practice and proactive decision-making between supervisor and supervised in the sharing of knowledge, also proven by research^{4,16,20,27-29}.

For the comfort and well-being dimension of self-care, the results showed an evolution of scores in specific interventions for the activities of life on which the patient is dependent, which we relate to the standardization of practices based on procedures and protocols.

Studies point to the training of those supervised as the empowerment of personal and professional skills with a direct impact on the incorporation of values and the quality-of-care practice, as it allows knowledge to be deepened and accumulated through experience^{3,19}.

As for the effect of supervision on the functional re-adaptation dimension, the study showed that through supervisory practice, the supervised nurse obtained the skills to define readjustment and teaching processes with the involvement of the patient and significant person as standardized, a fact associated with the perceived importance of this intervention. As the studies point out, the importance of training and sensitizing the team in planning for safe discharge consists of effective communication and teaching of nursing interventions^{12,15,20-21}.

Finally, in the organization of care dimension, the effect of supervision on the evidence of the practice of nursing records based on a common language of diagnoses and interventions, as recommended for the profession, was noted. The teams' perception of the importance of records in the continuity of care enhances information on interventions and guidelines, as pointed out in the study, which states that changes in behavior complete the results of non-conformities in practice after training and continuous monitoring¹⁵.

We reinforce the ability to communicate and reflect critically on practice to make the process effective, as described by studies which indicate that expectations and acceptance of guidelines for reflecting on care practice is facilitated by co-responsibility in defining actions and evaluating improvement practices^{10,22,28-29}.

It should be noted that the main limitation of the research was the scarcity of literature on the direct relationship between the theme of supervision and the theme of indices and indicators of the quality of nursing care.

CONCLUSION

In a culture of continuous improvement in quality management and patient safety, the development and involvement of professionals in the implementation and consolidation of integrated projects in the practice of care is distinctive. In this sense, the institutions where the research was carried out have adopted quality management by auditing the quality of practices, monitoring compliance and producing results, and complying with national and international benchmarks.

The research made it possible to go beyond the institutional practice of audits demonstrated by evidence of compliance, strategically integrating the practice of team supervision to influence quality indices and indicators with a direct impact on the practice of care.

It has been shown that by incorporating a supervisory culture based on team responsibility and involvement in continuous learning, guidance, training and feedback on practices, it is possible to reflect on opportunities for improvement and promote the development of professionals' skills through the transfer of knowledge.

Thus, the implementation of the practice of supervision has shown that structured intervention aimed at critical knowledge (knowing how to be, knowing how to integrate and adapt, knowing what to do and learning how to learn, and knowing how to mobilize resources) directly implies a change in the professional's behavior and attitudes, with a direct impact on the quality of care.

In addition, the supervision strategy directs practice towards reflection on the results of quality indices and indicators that have a direct impact on patients, which contributes to the development of personal, professional and organizational skills, while at the same time stimulating professional recognition of the nursing profession, generating value.

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Attachment I - Chart 1- Nursing care quality audit record. Lisbon, Portugal, 2022

| Prevention of Complications (PC) | Comfort and Well-Being for Self-Care (CB) |
|--|--|
| PC1- Evidence of hand sanitation according to the 5 moments recommended by the Portuguese Directorate General of Health () PC2- Properly positioned side protection grids () PC3- Readable ID Bracelet () PC4- Call bell within safe reach of patient () PC5- Evidence of ensuring patient privacy when providing care () PC6- Properly sanitized patient's unit () PC7- Use of scales in accordance with the patient's situation () PC8- Duly completed checklists () PC9- Evidence of the 9 rights of safe medication preparation and administration / galenicals () PC10- Infusion systems, taps, and tubes without evidence of clotted blood, and plugged and identified with date of replacement () PC11- Catheter insertion sites without inflammatory signs () PC12- Properly secured and cleaned catheters () PC13- Evidence of drainage system optimization () | CWS1- Airway permeability () CWS2- Properly prepared and sanitized secretion suction systems () CWS3- Properly applied oxygen delivery systems () CWS4- Evidence of explanation of procedures prior to execution () CWS5- Evidence that the patient is treated the way and by the name he or she likes to be called () CWS6- Evidence that the nurse introduces himself/herself to the patient before beginning the care process () CWS7- Evidence that the patient is comfortable and pain-free () CWS8- Evidence of the use of appropriate clothing according to the patient's clinical situation () CWS9- Patient safely positioned in bed or chair and in accordance with clinical situation () CWS10- Motion limiting systems properly placed, cleaned and adapted () CWS11- Evidence of clean and combed hair () CWS12- Evidence of clean and properly sanitized eyes and mouth () CWS13- Evidence of properly clean hands and nails () CWS14- Evidence that the patient eats the provided food () CWS15- Evidence of feeding tube optimization () CWS16- Evidence of correct use of dressings/bandages and wound/ostomy collection devices () CWS17- Evidence of help in going to the toilet when requested () |
| FUNCTIONAL READAPTATION (FR) | ORGANIZATION OF CARE (OC) |

| | |
|---|--|
| FR1- Evidence of safe discharge planning () FR2- Evidence of patient and significant person involvement in safe discharge () FR3- Evidence of conducting teachings () FR4- Evidence of a completed discharge/transfer note according to the care plan () FR5- Evidence of delivery of hospital discharge support leaflets () FR6- Evidence of information about critical social indicators and community resources () FR7- Evidence of information about community resources to meet anticipated hospital discharge needs related to the current situation of disease () FR8- Evidence of information to the patient/significant person about the therapeutic plan () FR9- Evidence of information related to the use of supporting medical devices | OC1- Initial assessment with physical examination () OC2- Nursing diagnoses appropriate to the patient's health situation () OC3- Planning of interventions according to the elaborated diagnoses () OC4- Planning of interventions according to the activated therapeutic attitudes () OC5- Planning and execution of intervention "monitor vital signs" at least twice a day () OC6- Pain assessment every 8/8 hours. OC7- Execution of the evidenced interventions () OC8- Evidence of objective parameters resulting from "monitor" type interventions () OC9- evidence of objective parameters resulting from "watch" type interventions () OC10- Consistent justification of the interventions marked as "not executed" () OC11- Variation of diagnosis status as a result of variations in health condition () OC12- Appropriateness of planned interventions given the variation in nursing diagnosis () |
|---|--|

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