Impact of a model of clinical supervision over the emotional intelligence capacities of nurses

Impacto de um modelo de supervisão clínica nas capacidades da inteligência emocional em enfermeiros

How to cite this article:

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ABSTRACT
Objective: to analyze the impact of the implementation of a model of clinical supervision over the emotional intelligence capacities of nurses. Methods: mixed methods study. Quantitative data were collected before and after the implementation of the Model, using the scale of Emotional Intelligence Capacities of Nurses; analyses were carried out using descriptive statistics and paired samples were analyzed using the t-test. 47 nurses from one hospital participated. Qualitative data were obtained from the analysis of the discourses of the nurses in a public presentation, using thematic/categorizing content analysis. The findings were integrated at the end to generate the results. Results: no statistically significant differences were found with the implementation of the Model. However, the nurses involved recognized the positive impact of the SafeCare Model in the development of emotional competences. Conclusion: the study contributed for clinical supervision and for the development of emotional competences.

Descriptors: Nurses; Male; Nursing Care; Nursing; Supervisory; Emotional Intelligence.

RESUMO
Objetivo: analisar o impacto da implementação de um modelo de supervisão clínica em enfermagem nas capacidades da inteligência emocional dos enfermeiros. Métodos: estudo de métodos mistos. Colheu-se os dados quantitativos antes e após a implementação do Modelo, pela escala Capacidades da Inteligência Emocional em Enfermeiros; análises foram realizadas através de estatística descritiva e pelo teste-t para amostras emparelhadas. Participaram 47 enfermeiros de um hospital. Os achados foram integrados no final para gerar os resultados. Resultados: não se verificou diferença estatisticamente significativa com a implementação do Modelo. Contudo, os enfermeiros reconheceram o impacto positivo do Modelo SafeCare no desenvolvimento das competências emocionais. Conclusão: o estudo apresentou contributos para a supervisão clínica e para o desenvolvimento das competências emocionais.

Descritores: Enfermeiros; Cuidados de Enfermagem; Supervisão de Enfermagem; Inteligência Emocional.
Introduction

Nurses, as health professionals, not only are integrated into multidisciplinary teams, but also, in their practice, provide care to people who, in most cases, are vulnerable, due to the presence of physical or mental diseases. Therefore, the emotional competence of these professionals is vital\(^1\). Nurses are expected to worry empathetically for their patients, while simultaneously regulating their own feelings and expressions as a part of their role\(^2\). The emotional competence, vulgarly known as emotional intelligence competence, must be central for the practice of nursing, since it has the potential of impacting in the quality of attention and in the results of care for patients, while also affecting decision making, critical thought, and the wellbeing of nursing professionals in general\(^3\).

Emotional intelligence can be defined as the capacity, the competence, the ability, or the self-perceived capability of identifying, evaluating, and generating one’s own emotions, as well as the emotions of others and of groups\(^4\). It is made up by five domains: self-awareness, emotion management, self-motivation, empathy, and the management of group relations. The first three domains (self-awareness, emotion management, and self-motivation) are related to the intrapersonal competences of intelligence, and represent the way in which, individually, we manage our own emotions. The empathy and the management of relations in groups represent social competences, which determine the way in which we understand and deal with others\(^4\).

Emotional intelligence can be improved through specific training programs developed for nurses\(^5\)-\(^6\), since it is a competence that gradually develops with the years\(^2\) and whose importance in the health care practice is recognized\(^3\). The most recommended strategies for education in emotional intelligence are the ones that raise awareness and promote personal growth through the use of supervision/support mechanisms executed by others\(^1\). Clinical supervision is an essential tool that gives support and aids nurses in the improvement and development of their emotional and health care competences. It can be defined as “a dynamic, systematic, interpersonal, and formal process, between the clinical supervisor and the person he supervises, aiming to structure learning, construct knowledge and develop professional, analytical, and reflective competences. This process aims to promote autonomous decisions, valuing the protection of the person, their safety, and the quality of care”\(^7\-\(^16\)\).

There is a limited corpus of empirical studies on the evaluation of the effects of clinical supervision in nursing professionals\(^8\). The clinical supervision has been implemented in countries like Australia and the United Kingdom, but it is still not a part of the daily lives of nurses in Portugal and in Brazil, where it is only targeted at nursing students. In 2010, the Order of Portuguese Nurses published the Professional Development Model, which highlighted the importance of the supervision process, which, in addition to the mechanism of offering support to the nurses and to their practices, would be a way to assure the safety and quality of the assistance\(^9\). In Brazil, although a Supervised Internship is prescribed in the nursing curriculum in universities, bringing it into effect is difficult due to the lack of clarity about the role of the supervising nurse, in addition to difficulties in the regulation of the clinical practice fields\(^10\).

Some clinical supervision models have been described which can be applied to the practice of nurses. These can be grouped according to the philosophy and the theory adopted. For example, there are models focused on human development, in which the role of the supervisor is to enhance the personal and professional growth of the person supervised; there are models focused on the functions of the supervisor (normative, formative, and restorative), and others. Although there are many models, they, generally, when implemented, do not impact the practice of clinical supervision as they do in theory, nor reflect the justifications that led to their selection\(^11\).

In an attempt to attend to the needs found for
the implementation of the clinical supervision, the SafeCare Model emerged in Portugal. It is a contextualized model of nursing clinical supervision, which results from the progress of a model developed in 2012, also in Portugal, which aimed to be effective for nurses and be adaptable to different political and social-clinical contexts. The objective of its implementation was identifying the needs of contexts and, considering those needs, promote the continuous improvement of the quality of the care offered, fomenting the creation of environments favorable to an evidence-based practice and to the development of the profession.

The SafeCare Model is based on four structuring axes: context (which refers to the set of elements and circumstances in which care is developed and provided), nursing care (focused on the interpersonal relation between the nurse and the patient, or between the nurse and a group of patients), professional development (related to the need of the nurse to continue their education during their professional activity), and supervision (based on the concept defended by the Order of Portuguese Nurses. This model involves four stages: in the first stage, the situation is diagnosed; in the second one, the needs for clinical supervision of the professionals are evaluated; the third stage is the implementation of the nursing clinical supervision; and the fourth one is the evaluation. The SafeCare Model, as a contextualized model, aims to be “an effective way to develop the professional practice and the knowledge, allowing nurses to learn from one another, to give each other support, to recognize one another, as well as to moderate the preoccupation and the anxiety related to the roles they perform” (9:291). The higher the efficacy of the implementation of a clinical supervision model, the higher the quality of the relation established between these axes.

In Portugal, after the first version of the SafeCare Model was implemented, it was found that supervised nurses were more self-motivated and spent less time discussing personal issues. However, the influence of the adoption of a supervision model in increasing the emotional intelligence capacity in nurses, in different contexts, must be further investigated.

The objective of this research was to analyze the impact of the implementation of a model of clinical supervision over the emotional intelligence capacities of nurses.

**Methods**

This research is part of an umbrella project of the type action-investigation, the SafeCare Project. It revolves around quantitative and qualitative data regarding the variable emotional intelligence capacity of nurses.

This research used a mixed method with a converging concomitant design type, since data collection and data analysis were carried out independently, and, later, the results were compared and combined. The quantitative approach used a descriptive and longitudinal design; the qualitative approach used an exploratory and descriptive methodology. Data collection (both quantitative and qualitative) was carried out by a trained researcher, who knew the hospital environment where the investigation took place.

Data were collected from May 2016 to June 2018. Quantitative and qualitative data were analyzed separately and integrated by a general interpretation, so as to identify convergences and/or divergences.

The research setting was a hospital in the north of Portugal, and the implementation of the SafeCare Model took place in three surgical wards of this hospital. A convenience sample was used to recruit the participants of the quantitative study. The inclusion criteria consisted in including in the study only the nurses who provided care to the patients in the units in which the Model was implemented. From the 59 nurses that made up the team, only 56 worked providing assistance, and, therefore, they were invited to participate in the research, which took place in the hours that are available every year to be used for educational activities.

The questionnaires of the research were delivered by the main researcher to the 56 nurses of the three units, in the first stage of the implementation of the Model, in 2016. At that moment, the researc-
cher gave them two identical questionnaires, with
the same randomly generated code. The nurses were
asked to fill in only one of the two questionnaires, sa-
ving the other one to be filled in in the fourth stage of
the implementation of the Model. At the end of the im-
plementation of the SafeCare Model, 47 (83.9%) ques-
tionnaires were entirely filled in, and could be paired
with the questionnaires found in the first stage (56
questionnaires). This was considered as the sample.
The difference found resulted from the phenomena
of maternity/paternity leaves, sick leaves, turnovers,
and non-devolution of the questionnaire, or also be-
cause it was not entirely filled in.

The data collection of the quantitative research
included two questionnaires: 1) sociodemographic:
age, sex, marital status, time of professional experien-
ce, and academic education; 2) the scale of Emotional
Intelligence Capacities of Nurses, adapted and vali-
dated for the population made up by these professio-
nals.(15)

The scale which evaluated the emotional com-
petences of the nurses is made up of a total of 84 ite-
ms, organized in five sub-scales, which correspond to
the five emotional intelligence capacities: self-awa-
reness (20 items), emotion management (18 items),
self-motivation (21 items), empathy (12 items), and
management of group relations (14 items). Each par-
ticipant was asked to evaluate up to what point they
agreed with each statement. The response options
were: 1-Never, 2-Rarely, 3-Not frequent, 4-Normal,
5-Frequent, 6-Very frequent, 7-Always. The total sco-
re of the scale of Emotional Intelligence Capacities of
Nurses, as well as the score of each of its dimensions,
was obtained through the sum of the items that con-
stituted them. The descriptive analyses of the scale as
whole and of the dimensions were carried out through
the calculation of the mean and of the respective stan-
dard deviation. Later, an analysis of the reliability of
the total scale and of its dimensions was carried out,
through the estimates of Cronbach's alpha. The coe-
eficients found in this research suggested that the in-
ternal consistence was good or very good. The highest
score was found in the scale as a whole (alpha=0.95),
while the lowest one was for the emotion manage-
ment dimension (alfa=0.78).

Quantitative data was analyzed using the Sta-
tistical Package for the Social Sciences software, ver-
sion 24.0. A descriptive analysis of the sample was
carried out, using means and standard deviations (as
quantitative variables), and absolute and relative fre-
quencies (as qualitative ones). The evaluation of the
impact of the implementation of the SafeCare Model
in the scale of Emocional Intelligence Capacities of
Nurses (for the total score and the score of each di-

mension) was carried out using the t-test for paired
samples, after the normal distribution of data was
confirmed using the Kolmogorov-Smirnov test. In all
tests and analyses carried out, a significance level of
p<0.05 was taken into account.

In the second stage of the SafeCare Model the
clinical supervision needs of the nurses were identi-
ﬁed through meetings with all the parties involved in
the project.

The third stage corresponded to the implemen-
tation of the SafeCare Model and lasted for approxi-
mately one year. In this period, the clinical supervisors
were selected, and eight supervision teams were built.
The selection of clinical supervisors was carried out in
accordance to the following criteria: having five years
or more professional experiences in the context; being
considered an expert in the context by peers; showing
competence in critical thinking and interpersonal re-
lations; being graduated in clinical supervision or ha-
ving experience in formative processes. After the cri-
teria was disclosed, the availability and the interest of
the nurses selected to be clinical supervisors were as-
essed. The teams were organized by the nurses who
were in a managerial role, since they were the ones
who managed the scheduling of supervision meetin-
gs. Monthly meetings were scheduled and carried out
from September 2016 to November 2017, each lasting
for approximately 90 minutes. In the clinical supervi-
sion sessions, the professionals had an opportunity to
discuss issues involving their clinical practices. Con-
cretely, with regard to the emotional intelligence, the
investigation team prepared eight education sessions.
in which, in addition to the strategy of exposing the theory behind the concepts, other techniques were used, such as brainstorming, individual and collective reflections, and daily life experiences. Additionally, practical exercises were carried out, promoting self-reflection and communication between peers.

The last stage (Stage 4) started in 2018 and was concluded six months later, with the evaluation of the implementation of the Model, which was carried out in two different ways. The first was the filling in of the previously coded questionnaire, which had been delivered at the start of the project. The second was related to the collection of qualitative data which took place during the public presentations of the different professionals involved in the project (supervised professionals, clinical supervisors, and nurses with management roles) in an international clinical supervision congress which took place in Portugal, in 2018. For these presentations, each nurse was asked to collect the opinions of all elements of the team about the contributions offered by the implementation of the SafeCare Model for the development of the competences of the professionals. The congress was recorded, and, after a few days, the presentations were transcribed. The data collected was subjected to content analysis techniques. Only the content that was explicitly disclosed by the subjects (manifest content) was treated, and the unsaid (latent content) was not analyzed. The type of categorization used was structural, since, at first, the inventory was performed, and later, it was classified. The analysis performed was thematic-categorizing, since it tried to reveal the social representations of the interviews of the subjects from the analysis of certain elements that constitute the discourse.

At first, a pre-analysis of the transcribed material was carried out, making it objective and operational, so its main ideas could be systematized. Later, the categories were defined, meaning that this categorization path was defined by vertical and horizontal readings of the transcriptions. From this procedure, it became necessary to elaborate category sets, in which the analytical units were classified according to thematic categories. The representation of the participants was carried out randomly by E1, E2, and E3. The letter E stands for “enfermeiro” (nurse), and the number does not follow any specific order of participation. The software used to work with the set of discursive materials was Microsoft Excel.

The Administrative Council and the Ethical Commission of the hospital where the study took place authorized its execution (No. 42/2016). All ethical issues related to the application of this type of instrument were also taken into account. The anonymity and the confidentiality of the actors and the voluntary nature of participation in the research were always guaranteed, during the entire research.

Results

The implementation of the SafeCare Model was concluded by 47 nurses, from three surgical wards of a hospital in the north of Portugal, 38 of whom were women and 9 of whom were men. The mean age of participants was 35 years old (standard deviation (sd) = 6.9 years) with a mean time of professional exercise of 12 years (sd=6.5 years). Most nurses were general practitioners (83.0%), while the others were specialists.

Table 1 shows the values of the means and standard deviations of each dimension of the scale in each moment of evaluation, that is, in stage 1 and stage 4. It was found that mean values increased from stage 1 to stage 4 of the implementation of the SafeCare Model.

To perceive the impact of the SafeCare Model in the emotional intelligence capacities of the nurses, the scale of Emotional Intelligence Capacities of Nurses was used (total score and score per dimension), with the t-test being used for paired samples. Through the comparison of the mean values of the total score and of the dimensions of the scale before (stage 1) and after (stage 4) the implementation of the SafeCare Model (Table 1) no statistically significant differences were found (p>0.05 for all dimensions) between any of the dimensions evaluated.
Table 1 – Description of the sample studied with regard to the scale of Emotional Intelligence Capacities of Nurses, and evaluation of the effect of the implementation of the SafeCare Model. Porto, Portugal, 2018

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean Stage 1</th>
<th>Standard deviation Stage 1</th>
<th>Mean Stage 4</th>
<th>Standard deviation Stage 4</th>
<th>Mean of the difference (standard error)</th>
<th>Confidence Interval 95%</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-awareness</td>
<td>106.0</td>
<td>15.8</td>
<td>107.5</td>
<td>13.0</td>
<td>-1.5 (1.9)</td>
<td>-5.3 – 2.3</td>
<td>0.436</td>
</tr>
<tr>
<td>Emotion management</td>
<td>83.3</td>
<td>11.7</td>
<td>84.3</td>
<td>9.3</td>
<td>-0.96 (1.7)</td>
<td>-4.4 – 2.5</td>
<td>0.581</td>
</tr>
<tr>
<td>Self-motivation</td>
<td>106.6</td>
<td>12.6</td>
<td>110.3</td>
<td>12.9</td>
<td>-3.7 (1.9)</td>
<td>-7.5 – 0.22</td>
<td>0.064</td>
</tr>
<tr>
<td>Empathy</td>
<td>60.7</td>
<td>9.1</td>
<td>61.2</td>
<td>8.8</td>
<td>-0.45 (1.6)</td>
<td>-3.6 – 2.7</td>
<td>0.776</td>
</tr>
<tr>
<td>Management of group relationships</td>
<td>59.8</td>
<td>9.7</td>
<td>60.6</td>
<td>10.1</td>
<td>-0.30 (1.6)</td>
<td>-3.6 – 3.0</td>
<td>0.854</td>
</tr>
<tr>
<td>Total</td>
<td>416.5</td>
<td>47.0</td>
<td>425.0</td>
<td>39.5</td>
<td>-5.8 (6.5)</td>
<td>-18.8 – 7.2</td>
<td>0.372</td>
</tr>
</tbody>
</table>

*p*Value

In the analysis of the discursive material produced by the nurses, three categories emerged, which sought to identify which competences were developed with the implementation of the SafeCare Model in the emotional intelligence capacities of the nurses. From there, three categories emerged: 1) the development of intrapersonal emotional intelligence competences; 2) the development of emotional intelligence social competences; and 3) other contributions of the SafeCare Model.

The nurses involved recognized the positive impact of the SafeCare Model in the development of intrapersonal emotional intelligence competences: becoming aware of the problems affecting the nursing professionals; we saw the development of relational and communicational competences in the professionals. The role of the supervisors was paramount so that the team could be brought into the project, through strategies that supervisors themselves adopted. These strategies included making anonymous reflective written notes, identifying our greatest difficulties, their greatest weaknesses and ours, and we ended up recognizing our emotions after discussions in group. This project brought more motivation and, also, more efficiency. The development of personal competences, which made professional valorization possible, as well as satisfaction and safety (E3).

They also stated that the model contributed for the development of social competences of emotional intelligence, namely, in the management of group relations, team cohesion, and communication: With the SafeCare project there was an improvement in teamwork (E1). We saw a greater recognition of the feelings of the patients (E2). Development of the spirit of the group. In those meetings we talked so much with each other and managed to notice each other’s shortcomings/problems, and what could one do to the other to improve (E3).

In addition to the emotional intelligence competences, nurses have found other contributions of the implementation of the SafeCare Model, such as improvement in workplace performance, and, as a result, more satisfactory health care provision to the patients and to professionals: It promoted moments of reflection in clinical practice. It allowed for an improvement in the identification and correction of the mistake, the adoption of strategies that made it possible to minimize it. Who was in the project and believed in the project was more available, even for the practice of care; we saw an improvement of nursing care (E2). The patients felt better cared for, and a lot of it resulted from what happened in Clinical Supervision; the development of personal competences, which made professional valorization possible, as well as satisfaction and safety (E3).

Discussion

This study has limitations. The small sample can be pointed out as one of them, as well as the type of sampling (non-probabilistic). There is also the fact that it was not developed in a single context, and it had no control group. Another limitation is related to the use of a self-perception questionnaire of emotional intelligence, since, although this is one of the most commonly used ways to evaluate emotional intelligence capacities, this type of instrument can lead to social desirability biases. Therefore, this study recommends future researches to use more objective forms of emotional intelligence, in different contexts, with
another type of study design. Another limitation that can lead to improvements in future studies is related to the comparative nature of clinical supervision models, that is, the evaluation of the effect of the SafeCare Model and other clinical supervision models in the emotional intelligence competences.

Although no statistically significant differences were found in any of the dimensions evaluated from Stage 1 and Stage 4 of the SafeCare Model, we cannot exclude the possibility that the implementation of the model had a positive impact in the development of the emotional intelligence competences of the nurses. It is noteworthy, in the statements of the nurses, that they developed self-motivation, emotion management, and self-awareness (intrapersonal emotional intelligence competences), as well as empathy and management of group relations (social emotional intelligence competences), despite the fact that this impact was not apparent in the quantitative data. The development of self-motivation in the professionals promotes feelings of belonging in the teams, encourages creativity, increases retention and promotes changes in assistance practices (18).

The education in the competences of emotional intelligence is possible (5-6) through support mechanisms, such as the one provided by clinical supervision. The development of these competences diminishes mental health problems of the professionals, such as, for instance, anguish and exhaustion (19). The emotional competence of the professionals is positively linked to factors that include empathy, resilience, social support, satisfaction at work, and improvements in the care provided (19). The satisfaction at work also improves, burnout is prevented and turnover diminished (20). In the statements of the professionals, it was possible to find that they developed their self-awareness and empathy, which could facilitate the solving of individual and/or group problems. The professionals recognized their difficulties and weaknesses, as well as those of their peers, during the clinical supervision meetings. They also verbalized help, support, and the satisfaction that the clinical supervision offered them, helping them overcome problems.

The interventions destined to develop the emotional competence, in addition to having a positive effect on professionals, can also bring benefits in the form of the provision of better care to patients, including physical and emotional care (20). The participants of the implementation of the Model recognized the same benefits.

This research, despite the limitations mentioned above, contributes for the implementation of the nursing clinical supervision, and for the validation of the importance of developing the emotional competence of nurses, both for them and for the patients.

Conclusion

This study presented contributions in the domains of clinical supervision in nursing and in the development of emotional intelligence competences. Although statistical differences were not found in the analysis of the impact of the implementation of the SafeCare Model in the emotional intelligence capacities of the nurses, we cannot deny the fact that benefits were identified for the development of these competences (intrapersonal and social benefits of emotional intelligence), as well as for the quality of the care offered to the patients.

Collaborations

Augusto MCB was responsible for data collection, analysis, and interpretation, and for the writing of the article. Oliveira KS contributed for the writing of the article. Carvalho ALRF, Pinto CMCB, Teixeira AIC and Teixeira LOLSM took part in the relevant critical review of the intellectual content and in the approval of the final version to be published.

References


