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## Morse fall scale user's manual: Quality in supervision and in nursing practice

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### Abstract

Falls are common adverse hospital events. In the first phase of the research project: “Clinical Supervision for Safety and Care Quality” (C-S<sup>2</sup>AFECARE-Q), difficulties in the application of the Morse Fall Scale<sup>®</sup> and non-conformities in the implementation of the falls prevention protocol were identified. Therefore, we carried out a qualitative research to improve patient safety and quality of nursing care through the design of a tool that clarifies each item of the scale and helps nurses in the assessment of the risk of fall. With this paper we intend to publicize the process to develop the Morse Fall Scale User's Manual.

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### Introduction

According to the World Health Organization (WHO, 2012), falls are the second main cause of death by accident worldwide, representing one of the main unwanted accidents and a challenge to patient safety, care quality and therefore to clinical supervision in nursing. Clinical supervision as a dynamic, reflective and integrative process for

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nurses plays a key role in the assurance of quality in health and patient safety because it allows not only the development of nurses' knowledge and skills but also their responsibility of the performance in clinical practice.

Quality of health care is simultaneously considered to be a right of the patient but also a duty of the health professionals (Idvall, Hamrin, Soo, & Unosson, 2001). In this way, the relevance of clinical supervision for nurses is huge as it is a formal process to improve quality of care, patient safety and increase personal satisfaction.

Falls are an indicator of quality in health. Identifying people at risk of falling is essential because the most important aspect of fall prevention is its anticipation (Morse, 2009). Chang et al. (2004) analyzed several interventions for fall prevention programs and concluded that the risk evaluation is the essential intervention and nurses are target professionals in the identification of people at risk of falling and in implementing interventions to prevent falls (Williams et al., 2007).

With the results of the first phase of the research project: "Clinical Supervision for Safety and Care Quality" (C-S<sup>2</sup>AFECARE-Q), we realized that the main difficulties in the use of the Morse Fall Scale<sup>®</sup> (MFS<sup>®</sup>) were essentially due to doubts on its application, differences in comprehend the meaning of each point of the scale and lack of training, leading to a subjective interpretation/application of the scale, as documented in the study conducted by Lamas (2012).

We decided to conduct a research with the aim to provide a tool that can enhance the nurses skills for the application of the MFS<sup>®</sup> and consequently for the correct assessment of the risk of falling. Therefore, the research question was: how can we endow nurses with knowledge and skills for the correct use of the Morse Fall Scale<sup>®</sup>?

This study was placed within the paradigm of qualitative research and we used an expert panel and a Modified Nominal Group Technic to develop the tool, namely Morse Fall Scale User's Manual. Finally, with the use of a survey, we obtained a quantitative degree of consensus for each item of the manual.

It is our intention to publicize the process of the development of the manual and this paper is divided into several main sections: the first and the second part are related to the rationale, in the third one we present the methodology, in the fourth the findings of the study and finally the discussion and the conclusion of it.

## **1. Clinical supervision for safety and quality of care**

In nursing, the concept of clinical supervision, despite being relatively recent, has been targeted with different definitions for those who studied this area. However, some definitions have common aspects such as: safety, quality of care and reflection in, on and from practice.

Clinical supervision consists not only in the interaction with regular meetings between the supervisee and the supervisor to critically discuss, in a reflexive and structured way, a particular case or a situation arising from the practice, with the aim of identifying the problems and finding solutions, but is also a formal process of support and training of professionals and standardization of practice. Its maximum exponential is not only the satisfaction and the wellbeing of the professional but also the promotion of care with safety and quality, in the extent that it enhances the knowledge and skills of nurses.

In several institutions, a growing interest and importance around clinical supervision has been noticed. In addition, the growing concern over the safety and quality in healthcare has led to the appearance of accreditation organizations and external audit organizations, especially in the United States of America and in the United Kingdom (Fragata, 2006). These subjects are being increasingly discussed in health, as they are the pillars of the commitment and mission of hospitals, communities and caregivers (Abreu & Marrow, 2012). These concerns are reflected in the demand for programs that can reduce the limitations and dependency of patients, as well as in the development of infrastructures that will help to prevent errors and accidents. Currently in Portugal, many nursing schools have incorporated supervision as a course of post-graduate training (Abreu & Marrow, 2012).

The quality arises, then, as a requirement, an attribute and an inescapable dimension in the provision of health care. Associated with quality comes safety, that should be seen as a top priority in improving health care. Clinical supervision in nursing is a major promoter of personal, professional and human development through the use of processes of reflection and experimentation, with the objective to improve the quality of care (Abreu, 2007) but it is also considered a core element in the improvement of clinical standards, as well as an important tool in the development of quality in nursing care with a fundamental role in the prevention of clinical risk (Wash et al., 2003; Wood, 2004; Garrido, Simões & Pires, 2008). Effects of clinical supervision on the quality of care are a key aspect

in the improvement of quality and, therefore, were defined as a target area by the WHO (Hyrkäs & Lethi, 2003). There is an inseparable relationship between clinical supervision in nursing, safety and quality of nursing care.

## 2. Fall risk and Morse Fall Scale®

In studies conducted in the last few years, falls have been the leading cause of injury, an important cause of death and a serious public health problem because of the medical and economic consequences but also by the transformations entailing the level of health and the quality of life of the patients (Caldevilla & Costa, 2009). According to WHO (2012), falls are the second leading cause of accidental death worldwide, representing a major adverse event and one of the major challenges in the context of patient safety and in quality of care, therefore, they are considered as an object to study within the framework of clinical supervision in nursing.

Fall risk is a nursing diagnosis identified through the application of scales and the incidence of falls is an indicator of the quality of nursing care. The evaluation of the fall risk and implementation of preventive measures (in accordance with the identified risk), contribute to the control of this phenomenon and to minimize its impact, because the incidence of falls decreases when there is a measurement and evaluation of this indicator, since it allows the adequacy of nursing interventions to the specific needs of the patient (Reis et al., 2004).

Regardless the tool chosen for the fall risk assessment (as long as it is sensitive and specific for the population), its application is a fundamental resource for falls prevention (Hendrich, 2006). There are 47 instruments related to the fall risk assessment and only two have been identified as suitable, namely, the MFS® and the STRATIFY (Dempsey, 2008). Oliver et al. (2004) also identified these two instruments as well validated for assessing the fall risk. Nevertheless, the MFS® revealed to have a better internal consistency (Cronbach's alpha value - 0.72), good specificity (72.8%) and acceptability (Chapman et al., 2011). Furthermore the MFS® has been widely used and tested, and proved to have high sensitivity and specificity (O'Connell & Myers 2001; Myers & Nikolett 2003; Ganz et al., 2013).

In Portugal, most of the hospitals use scales to assess the fall risk but some of them need to be translated and validated for the Portuguese population.

Janice Morse, author of the Morse Falls Scale®, began the development of the scale with a pilot project in 1985. In 1987, she published the article "Development of a Scale to Identify the Fall-Prone Patient" (Morse, Morse, Tylko, 1989) and in 1997, the book "Preventing Patient Falls" was published. This book suffered a revision in its second edition in 2009. The scale is being applied internationally and has been widely tested. In Portugal, it is used in several hospitals and the Portuguese General Directorate of Health indicates the need to assess the fall risk as an appropriate and personalized preventive intervention (Direção Geral de Saúde [DGS], 2011).

The MFS® consists of six items with two or three possible answers for each (with different scores for each possibility). According to the performed evaluation, the total of the scores in each of the six items, results in a global score that indicates the fall risk. This score ranges from 0 to 125 points.

## 3. Methodology

Given the evidence of inadequate use of the MFS®, documented in the first phase of C-S<sup>2</sup>AFECARE-Q project and the nurses' doubts in the application of MFS®, we decided to carry out a study which research question was: "How to endow nurses with knowledge and skills for the correct use of the Morse Fall Scale®?"

A qualitative methodology was adopted and we used an expert panel and a Modified Nominal Group Technic to reach to a high consensus degree of the manual. With a survey, we achieved to a quantitative degree of agreement for each item of the manual.

Initially, a draft of the manual was prepared. It was developed based on the existing bibliography about MFS®, the help of the author of the scale regarding to the proper use and gauging of its different items and also with the consultation of several institutional protocols. This process allowed consistency and validity to the developed draft, which itself became a great work platform to the expert group.

The criteria to constitute the expert panel were: a) the position held; b) the professional experience related to safety and care quality, risk management, falls prevention and International Classification for Nursing Practice (ICNP®). Ten experts from four hospitals from the north of Portugal integrated the expert panel of this research.

Regarding to the composition of the group, we opted for a homogeneous group, and constituted by a maximum of ten elements, because the purpose was to define commonalities and maximize areas of agreement, therefore the groups should be homogeneous in their composition (Murphy et al., 1998).

Two meetings with the group of experts, with a gap of one month between them, were performed to develop the manual. The meetings were based on the assumptions of the Modified Nominal Group Technique which consists in a face-to-face interaction of the experts, after the individual approach of what we intend to discuss. The panel discussed their opinions for each item of the manual and the overall content was accepted as the most suitable for the majority.

Finally, with the use of a survey, we reached a quantitative degree of consensus for each item of the manual. The meetings allowed us to reach to the degree of consensus regarding the method and type of information that should be included in this tool. The final questionnaire enabled us to effectively measure the degree of consensus generated with the final results of the two meetings.

#### 4. Findings

The manual itself is a reflection of all the results obtained within the process and is a tool with high credibility. It reached to an agreement exceeding 75% in all items, with an overall acceptance of 92.4% that corresponds to the average of the percentages obtained.

The questionnaire ended with two questions which were intended to measure the degree of usefulness of the manual from the experts' perspective (see figure 1 – Graphic - a) and the other question which was related to the graphic aspect of the manual (see figure 1 – Graphic - b).

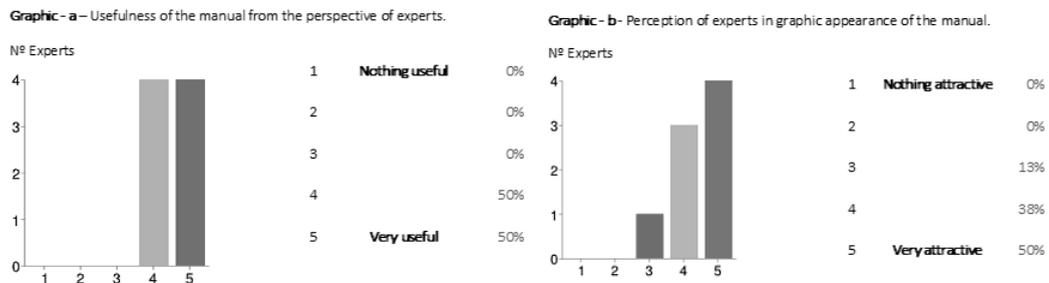


Figure.1 - Graphic – a - Usefulness of the Manual; Graphic – b - Graphic aspect of the Manual.

#### 5. Discussion and conclusion

The use of scales to assess the fall risk is essential for several reasons, such as, helps in decision making, enables the appropriateness of interventions to each patient, facilitates care planning and the transmission of information between health professionals (Ganz et al., 2013). However, these instruments must be considered a way to supplement clinical judgment and not to replace it (Ganz et al., 2013). Nevertheless, for reasons of consistency and safety, it is recommended the standardization of the use of these instruments, but this standardization should not lead health professionals to think that for falls prevention, its risk assessment should be the only task to develop (Ganz et al., 2013).

It is crucial for nurses to develop a critical and reflective attitude, in order to make appropriate decisions and effectively solve situations. Therefore, the availability of the manual is of utmost importance, given the contribution of knowledge and objectivity that provides for each item of the scale. It allows not only an accurate application of the scale but is also a facilitator guide to support decision making of the professional.

The manual can be an extremely useful instrument because it can be consulted at any time, the information is simple and appears with the same sequence in which the scale is applied and it can be very helpful for nurses' daily practice, as it reduces the subjectivity in the application of the MFS<sup>®</sup> which contributes to an accurate evaluation of

the fall risk. However, it should be highlighted that the existence of the manual does not replace the need for training in the use of MFS<sup>®</sup>, but can also be used as a tool to support it.

Finally, our findings suggest that the manual, achieved through clinical supervision in nursing, is an acceptable and reproducible tool that can contribute to the correct application of the MFS<sup>®</sup>, for the proper risk assessment and fall prevention, and consequently, for the promotion of safety and quality in nursing care.

The constant search for the best scientific evidence, knowledge update and programs that address safety and quality in nursing care, as well as sustaining nursing practice and give the proper support to professionals should be concerns of clinical supervision in nursing and this study could be an important contribution to innovate research in this area.

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