



## Proposal of portable shower for human hygiene: An evaluation of the nursing team

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### Abstract

**Objective:** The objective of this study was to evaluate the use of portable shower used by nursing professionals.

**Method:** Qualitative, descriptive and exploratory study based on Theory of Social Representations, following the guidelines of the Discourse of the Collective Subject. The sample was composed by 13 nursing technicians in a public hospital in Jundiaí. Results: the professionals consider the device to be advantageous; they expressed central ideas categorized in: "Practicality and economy of time", "Comfort" and "Therapeutic Action".

**Discussion:** The purpose of the device is to bring a sprinkling feel even if it is unlikely for the client, reducing anxiety and fear. Conclusion: The aim of the portable shower was achieved in the ICU where the survey was carried out. It was evaluated as a method that provides greater economy of water, physical space, greater comfort for the patient, represents the best option selected by the professionals to bath in the bed, once less time is spent in its performance and better ergonomics for the nursing technician.

**Keywords:** nursing team, bed-bath, nursing assessment

### Introduction

The hospital scenario brings to the patients and families a feeling of insecurity that is accentuated when these patients have a dependency for basic nursing care such as hygiene, food and physical mobility.

It is at this moment that the nursing team has the opportunity to focus their actions on the care receiver making an integrated connection between the normative tasks by the institution and together aimed at caring <sup>[1]</sup>.

However, caring is not restricted to the performance of technical activities, it involves the patient as a whole, their history, expectations and feelings, rescuing the importance of emotional, psychological and physical aspects welcoming and valuing them in all their dimensions <sup>[2]</sup>.

The care has scientific and technological, ethical and philosophical, aesthetic and interactional dimensions of which the object is the human being, considered as a physical, social, cultural and sensitive organism. In this sense, what differentiates nursing care from other forms of care is that it represents an act with therapeutic intent, which requires technical competence, commitment and ethics of its agents who interact with each other.

Thus, the care is an action with the purpose of turning a state of discomfort or pain into one of more comfort and less pain. Therefore, it has a therapeutic perspective on a subject that has a physical and mental nature <sup>[3]</sup>.

Being considered a healing practice more than two millenniums before Christ, bathing, in the course of time and with the variation of places and cultures, was modified, establishing some standards for its performance among the peoples <sup>[4]</sup>.

There are currently three types of most common baths:

immersion (bath in bathtub), aspersion (bathing in the shower) and bathing in bed, being the person able to perform their self-care in whole or partially in the first two baths <sup>[5]</sup>.

Bathing in bed is a widely used practice in homes as well as clinics and hospitals that perform care for people who are bedridden or have illnesses that require rest or temporary stoppage, preventing them from performing their own hygiene. Such procedure demands a lot of maturity of the performer and the knowledge to explain the technique to the client or family member and, during the realization, not embarrassing them in any way <sup>[6]</sup>.

The bath in hospital environments allows therapeutic actions, promoting the increase of peripheral circulation due to the temperature of the water, physical examination by observation and touch of the whole body of the patient, which detects and minimizes the formation of wounds. The bath is not only an activity for body hygiene, but a therapeutic nursing action, based on a set of scientific knowledge <sup>[7]</sup>.

This sanitation process is an instrument of care and has a scientifically proven guide to be followed, seeking comfort and allowing the opportunity of evaluation of the patient, objectivity and agility on the professionals' part avoiding prolonged exposure and guaranteeing the safety of the same. The successful technique of this procedure represents a commitment to nursing, since it influences the premise of caring and promoting the client's well-being <sup>[8]</sup>. Even techniques developed without major difficulties in stable patients become complex in the case of a critically ill patient. These are nursing actions that require adequate planning and skilled staff in the know-how, in order to provide care free of harm and bio-functional improvement <sup>[9]</sup>.

Since the client depends on someone else to perform their

basic human needs, we must consider the discomfort that can be generated according to the chosen form to perform this manipulation. The person's feeling must be associated with care and their perceptions relieved. Nowadays, neglect is perceived with the individuality of each one, generating fear and discomfort, due to the type of practice selected <sup>[10]</sup>.

According to the Ministry of Health, bathing the bedridden client who must obey the sense cephalus podalic, leaving the intimate parts to the last stage with the aid of soft cloth and basin with water, at appropriate temperature, where the performer will moisten the cloth and perform the technique of body hygiene, but there are also other bathing materials in some stores and institutions <sup>[5]</sup>.

### Objective

To evaluate the use of the portable shower used by nursing professionals in a public hospital in Jundiaí, São Paulo, Brazil.

### Method

Qualitative, descriptive and exploratory study based on the theory of Social Representations, following the technique of Collective Subject Discourse (CSD) for data analysis. The sample (n = 13) was composed of 13 nursing technicians at the Intensive Care Unit (ICU) of the São Vicente de Paulo Charity Hospital in Jundiaí / SP, who were on the work scale on the day of the interview, and with availability in the arrival or departure of the call to answer questions.

Participants answered questions from two questionnaires, one referring to sociodemographic characteristics, with four questions, and another one related to the perceptions of the interviewee (nursing professional) about the use of portable shower with nine questions and in both questions were multiple choices and with a guiding question: How do you rate the portable shower? Justify your answer.

We included in the study nursing professionals who have made use of the portable shower inside the ICU.

An active search of the professionals who used the article was carried out, interviews were conducted outside working hours (before or after duty), in a place near the entrance of the sector and work of the participants, according to the nursing supervision of the institution. The average time each professional took to answer the questions was 10 minutes.

Data collection took place after approval by the Ethics Committee of the Campo Limpo Paulista University, registered under no. 2,314,848.

The analysis of the data followed the CSD technique, which consists of the meeting, in a single synthesis speech, of several individual discourses issued as a response to the same research question, by an institutionally equivalent social subject or part of the same organizational culture.

Three methodological figures were adopted: Key Expressions (KE), Central Ideas (IC) and CSD.

For the treatment and analysis of the data, the following order was strictly followed: In the first stage, before the beginning of the data copy, the answers were read again and again to obtain a panoramic idea and a better understanding of the texts. Subsequently, they were copied verbatim, that is, the participants' responses to the Discourse Analysis Tool 1 (DAT 1) were copied; In the second stage, the entire transcribed material was thoroughly read. In the 3rd stage all the answers

were analyzed to identify the KE that were passed to italics. Once the KE were in possession and after reading each one, the IC was identified for each study subject, taking care that it represented the description of the KE and not their interpretation.

This same procedure was performed with the other responses until the last; In the 4th stage, the Discourse Analysis Tool 2 (DAT 2) was elaborated, containing, separately, each central idea with its respective similar or complementary KE. In the 5th stage the topic of each of the interview questions was extracted, grouping them to their respective CIs, as well as the participants, establishing the absolute and relative frequencies of ideas and organizing them into a table;

As a last step, the CSDs were constructed, separately, from each CI with their respective KE.

### Results

Regarding the personal characterization of the 13 (100%) participants interviewed, eight (61.50%) were older than 32 years, four (30.80%) of the total were between 22 and 26 years old, and the other 1 (7.70%) are 27 to 31 years old. Thus, 12 (92.30%) of the participants are female and the other 1 (7.7%) are male, where 13 (100%) belong to the professional category as nursing technicians. 8 (61.50%) of the individuals surveyed performed the function 5 to 10 years ago, 3 (23.10%) from 2 to 4 years and 2 (15.40%) had been working for more than 10 years.

Table 1 presents the central ideas in order of frequency. It was verified that 13 (100%) of the persons interviewed 12 (92.30%) believed in greater practicality and time savings with the use of portable shower in relation to the bucket and basin bath, 6 (46.15%) of them say that comfort is provided with this type of bath and 3 (23.07%) consider having therapeutic action the bath performed with this device. CSD follow the same titles presented in the same table and explained in the sequence.

**Table 1:** Identification and distribution of the central ideas of nursing professionals regarding the effectiveness of the portable shower. Jundiaí. Brazil. 2017. n = 13.

Central Ideas	Participants	Fr (%)
Practicality and economy of time	2, 3, 4, 5,6,7,8,9,10,11,12 e 13	92.30%
Comfort	2,7,8,9,10 e 12	46.15%
Therapeutic Action	1, 6 e 13	23.07%

The following CIs in order of highest frequency of appearance with their respective CSDs:

#### "Practical and economy of time"

"A satisfactory experience in which I could carry out the bath in bed without loss of time. Very good, practical. In addition to that, we have room for work. For us, the bath is faster, saves water and improves patient hygiene. Advantageous and economical article. The bath is agile and takes more of the patient's smell and we can prioritize other things like talking if the patient is conscious, give more attention to them. It gives the patient a sensation that he is bathing in the shower, since he cannot go to the shower. Good, modern and hygienic it provides comfort and well-being, as each patient has their

own. In relation to the time of the bath, it does not have a rapid drop in water temperature, taking into account that bathing in bed may last long and it facilitates the number of materials, besides not getting contaminated water and improvements for the patient. It is practical, fast and keeps the water temperature. It is efficient and comfortable for us professionals”.

### “Comfort”

“Good, because it helps the patients have greater comfort and well-being. The bath is agile, maintains the temperature of the water. More practical, quick and hygienic, it provides improvements for the patient. It is practical, economical and comfortable for the professional. A satisfactory experience in which I could carry out the bath in bed without loss of time. It demands less space, less time and provides improvements for us professionals and bigger comfort for the patient. It is very good, economical and modern”.

### “Therapeutic Action”

“The portable shower is great, keeps the water at the right temperature. It gives the patient a feeling that he is bathing in the shower, since he is not able to go to the shower by themselves. It provides better hygiene results and patients report relaxation of the body when taking a shower with the portable shower. It is very good for us (professionals); the bath is faster and takes more of the patient's smell. In addition to it, the water does not get contaminated.

### Discussion

The dynamic of the bath in bed generates to the professional an intense physical mobility, producing complaints about fatigue, and occupational diseases with consequent absences in the shifts. Osteomuscular diseases related to work occur to a large extent due to the overload of the procedures performed by the nursing technicians and the unfavorable conditions in the work environment. These problems are caused by poor physical space and ergonomically inadequate materials<sup>[11]</sup>.

Bathing in bed offers risks to the nursing team and it is imperative to search for alternative methods that mitigate these damages. This search takes place through the acquisition of knowledge and studies in the development of devices that offer less adversity and more ergonomics<sup>[12]</sup>.

One of the work methods adopted and well accepted by nursing is the functional method. This method seeks to save time and agility in performing activities and procedures in a safe and efficient manner. In order to make use of this resource, the development of alternative researches and propaedeutic techniques are necessary<sup>[13]</sup>.

And the portable shower is one of them as it was previously evidenced by the speeches cited above of the respondents. In the Intensive Care Units, it was noticed that some health professionals do not prioritize some of the patient's needs during the care, being restricted to prognoses and not accomplishing, most times, the sensation of comfort, an holistic and universal care considering the desires of the patient; or not having the necessary material conditions to perform this service<sup>[14]</sup>.

Inappropriate use as well as improvisation in the substitution of certain materials is present in some institutions, putting at

risk the integrity of the patient's skin and sometimes worsening the clinical picture of the patient. Therefore, the adequacy of the institution to provide materials that promote comfort and well-being to patients is utmost important in recovering the health of the individual<sup>[15]</sup>.

Bathing in bed is not a procedure properly valued in relation to its extreme importance. It must be considered an essential necessity, since it guarantees the patient's hygiene by helping them to be free from some pathogens, as well as providing a sensation of relief, lightness and comfort, and this action must be evaluated and intensified in the sick individual<sup>[16]</sup>.

Studies show that bed-bathing generates a lot of anxiety in patients because it is a procedure that exposes their privacy. It is an activity performed by the nursing team with very great relevance. Alternative methods and strategies should be developed by health professionals to seek to reduce anxiety and promote well-being of the client, not considering the physiological aspect only, but the psychological aspect as well<sup>[17]</sup>.

During the procedure the patient has the feeling of dependency and humiliation due to being vulnerable to the care of another person. The embarrassment generated is due to the exposure of their nudity, causing a feeling of shame even if occlusion protection is used around the bed. As this situation in the Intensive Care Unit is unavoidable, it is important to promote empathy on the part of the health professional<sup>[18]</sup>.

The purpose of this action is to achieve comfort and well-being and provide the client with positive memories, since the patient finds themselves in a period of suffering. Many professionals are focused on performing their daily activities in a timely manner, not recognizing the patient's feelings<sup>18</sup>. The proposal of the portable shower is to bring a sprinkler bath feel even if it is unlikely for the client, thus reducing feelings of anxiety and fear.

Backes *et al.* (2017)<sup>[19]</sup> corroborates the previous idea that the conventional technique of bathing in the bed (bucket and basin) does not bring the remembrance of the ideal bath for the patient because it does not provide expected comfort, especially when the patient needs this procedure for several days.

### Conclusion

The portable shower proposal was successfully achieved in the studied ICU, since it was evaluated as a method that provides greater economy of water, physical space, greater comfort for the patient and represents the best option selected by professionals for bathing in the bed, due to demanding less time in its performance and better ergonomics for the nursing technician.

Regarding the perceptions of the use of the device in the light of the professionals who manipulated the central ideas were positive and thus represented: practicality and economy of time, comfort and therapeutic action.

Further studies are needed to complement these statements, to make it relevant and understand the complexities of the care of patients at rest in the bed, to promote comfort to the client as well as to evaluate the professional ergonomic issue, guaranteeing to the professional the development of articles, such as portable shower, which promote well-being,

practicality and efficiency as a working tool in their daily practice.

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