Cogitare Enfermagem

ORIGINAL ARTICLE

Dressing procedure for contaminated wounds: an analysis of videos on an online platform

HIGHLIGHTS

1. The consumption of videos for learning is a reality in universities.
2. YouTube® features videos about dressings.
3. Critical steps in the procedure were inconsistent with the literature.
4. Videos about wound dressing should be viewed with caution.

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ABSTRACT

Objective: To analyze YouTube® videos showing the dressing procedure for contaminated wounds. **Method:** Qualitative descriptive exploratory research conducted on the YouTube® video sharing platform. The search was guided by keywords, during the period between November and December 2023. For the critical analysis of the videos, an instrument was used that was developed in accordance with scientific literature related to the care of contaminated wounds. **Results:** 24 videos were identified, none of which were fully compliant. Among the results found, the following stand out: failure to check medical records and identify patients; failure to perform hand hygiene; incorrect handling of sterile dressing packages; failure to follow cleaning principles; absence of tools for wound assessment; failure to identify dressings; and absence of nursing records. **Conclusion:** YouTube® videos dealing with the dressing procedure for contaminated wounds should be viewed with caution when used for educational purposes in nursing.

KEYWORDS: Education, Nursing; Internet Use; Instructional Film and Video; Wounds and Injuries; Bandages.

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INTRODUCTION

Approximately 2% to 6% of individuals worldwide will develop some type of wound, primarily those aged 65 years or older, due to damage to the skin's structure and functional capacity, making it more fragile. The costs associated with caring for people with wounds can reach US$60 billion per year in the United States and account for 2% to 4% of healthcare spending in Europe. In addition to these events, there will also be increased resistance to antibiotics, increased workload for nursing staff, and adverse effects on the quality of life of these individuals[1]. Based on these data, we understand the importance of dressing contaminated wounds according to best practices, scientific evidence, and appropriate techniques.

The learning environment, facilitated by audiovisual resources, has changed the way students typically access information. Among these resources, *YouTube®* can be mentioned, as it offers students greater exposure to the topics they wish to learn about. This platform has educational potential and provides users with space and freedom to watch and create content[2]. When used for educational purposes in undergraduate courses, it facilitates content retention, stimulates interest, and encourages engagement in the respective subject[3].

The use of the platform also offers numerous advantages in terms of education; however, it is essential to consider its role in this process. The indiscriminate and uncritical use of posted and accessed content can lead, for example, to a lack of depth in the subject matter being studied due to the large amount of information available. The absence of verification of the material's accuracy can lead consumers, in this case university students, to believe that these are true and absolute practices, without critical analysis corroborated by relevant literature[4].

In this perspective, it is beneficial to reflect on content aimed at teaching in the health field, especially that focused on nursing, available on the *YouTube®* platform, since the production and demand for these videos is a reality among nursing students, who seek to observe and learn procedures to replicate them in clinical practice. In this regard, a critical procedure such as dressing a contaminated wound must be performed with care, given the complexity involved in caring for people with wounds.

YouTube® has a wide range of content posted in video format, all of which is free and easily accessible. However, those who create and publish this material do not always consult scientific literature, often speaking and demonstrating practices based on their own beliefs and empirical knowledge. Therefore, not all of it can be used for educational purposes. Considering that teachers and, above all, students in the health field, especially nursing, can view videos posted on this platform, the question arises: "What is the quality of the demonstration and execution of the dressing procedure on contaminated wounds in *YouTube®* videos?" In view of the above, the objective was to analyze a selection of *YouTube®* videos showing the performance of dressing procedures on contaminated wounds.

METHOD

This is a descriptive exploratory study with a qualitative approach, conducted on the YouTube video-sharing platform, accessible at the following web address: www.youtube.com. The platform was chosen due to its ease of access for users to consult information

of any kind. The data were collected after viewing videos showing the execution of dressing procedures on contaminated wounds.

The terms used for the search on the website were: contaminated dressing, contaminated wound dressing, cleaning contaminated wounds, dressing infected wounds, and dressing open wounds. The platform has been enhanced with search filters, including upload date (within the last five years), type (video), duration (4-20 minutes), and order (by date of submission). As eligibility criteria, only videos using Brazilian Portuguese were included, as well as demonstrations that allude to the medical-hospital environment. Individual searches were conducted for each term, and the first 100 videos5 were selected, all in Portuguese. Those that showed only part of the procedure, characterized as Shorts, and videos sponsored by companies or legal entities were excluded.

Data collection took place between November and December 2023. To this end, on November 11, 2023, the researchers conducted an independent search and entered the links into an Excel® spreadsheet. The critical evaluation of the videos was carried out using two instruments developed by the authors, based on similar studies[6-8], which were also conducted independently. After the information was entered into a spreadsheet and an initial round of evaluation was conducted, discrepancies were resolved, and a final summary was prepared with the support of two stoma care nurses.

Regarding the instruments, the first included items related to the characterization of the videos, such as date of posting, number of views, duration, author, performers of the procedure (teachers, students, nurses, or others), number of likes, user comments, and references used to prepare the video.

The second instrument, developed after consulting books, manuals, and guidelines for wound management and treatment[9-13], included elements considered essential for performing the procedure. The steps were grouped into domains called pre-procedure, planning, execution, and completion of the procedure.

After viewing the videos in their entirety, the items comprising each domain were assessed as not achieved (NR), partially achieved (PR), achieved (R), or not applicable (NA), and the results were arranged in percentages.

All comments available below the videos were captured and inserted into the Wordcloud program, available at www.worldcloud.online/pt, which enabled us to obtain a summary of positive and negative words used by viewers of the content. Ethical aspects were based on Resolution 510/2016.

RESULTS

The initial search on the *YouTube®* platform resulted in 352 videos. After applying the eligibility criteria, 286 were excluded for not presenting the complete procedure and/or for being sponsored by companies or legal entities. Of the 66 videos that remained, 42 were duplicates, resulting in 24 videos eligible for individual critical analysis. For identification purposes, cardinal numbers were used: V1, V2, and so on.

The 24 videos analyzed garnered a total of 929.089 views and 49.760 likes. There was a predominance of videos published in 2020 (five; 20.8%), followed by 2021 (eight; 33.3%) and 2022 (six; 25%). Of the 24 videos, 18 (75%) had a median duration (between

5 min and 15 min 59 sec), the same percentage found for the authors, who were individuals. In 11 (45.8%) videos, the participants were nurses, in 10 (41.7%), nursing students, and in three (12.5%) it was not possible to identify whether the authors were professionals or academics. Regarding bibliographic references, in 23 (95.8%) videos, there was no indication of which references were used for production.

Pre-procedure

Table 1 presents the items that comprised the critical analysis of the steps listed in the pre-procedure domain, highlighting the critical moments observed in patient identification, allergy questioning, work area disinfection, and hand hygiene. Other results are presented below.

Table 1. Analysis of the items that comprised the pre-procedure domain. Brasília, DF, Brazil, 2024

Stage	n (%)			
	NR	PR	R	NA
Check the medical record and verify the patient's identification.	20 (83.3)	3 (12.5)	1 (4.2)	-
Perform hand hygiene before entering the patient unit.	14 (58.3)	-	10 (41.7)	-
Identify the patient using two identifiers	17 (70.8)	3 (12.6)	2 (8.3)	2 (8.3)
Explain the procedure to the patient and companion (if applicable).	15 (62.5)	-	9 (37.5)	-
Check if the patient has allergies to topical agents, tapes, or any other material.	23 (95.8)	-	1 (4.2)	-
Observe and identify the location of the dressing	12 (50)	-	12 (50)	-
Disinfect the area where the dressing materials will be stored.	22 (91.7)	-	2 (8.3)	-
Ensuring patient privacy	19 (79.2)	-	5 (20.8)	-
Perform hand hygiene when leaving the patient's unit.	20 (83.3)	-	4 (16.7)	-

Caption: NR: Not performed; PR: Partially completed; R: Completed; NA: Not applicable.
Source: The authors (2024).

Planning

In the planning domain (Table 2), the results related to the materials used to perform the technique itself, the use of personal protective equipment (PPE), the use of cleaning solutions, the use of primary and secondary dressings, and, additionally, dressings demonstrated on upper and lower limbs (UL/LL) stand out. since, of the 24 videos, in 11 (45.8%) the technique was demonstrated on legs or ankles, and in four (16.7%) on UL.

Table 2. Analysis of the items that comprised the planning domain. Brasília, DF, Brazil, 2024

Stage	n (%)			
	NR	PR	R	NA
Disinfection of trays for storing sterile materials	11 (45.8)	11 (45.8)	2 (8.4)	-
70% alcohol for disinfection	22 (91.7)	-	2 (8.3)	-
Tray	12 (50)	-	12 (50)	-
Sterile forceps package	2 (16.7)	-	10 (83.3)	12 (50)
Pack of sterile gloves	-	-	6 (25)	18 (75)
Sterile gauze	6 (25)	-	18 (75)	-
Waterproof lining	1 (4.2)	-	4 (16.6)	19 (79.2)
Waste for disposal of infectious waste	9 (37.5)	-	15 (62.5)	-
EPI's*	1 (4.2)	21 (87.5)	2 (8.3)	-
Dressing on UL or LL, use of a basin or similar for fluid containment.	12 (50)	-	3 (12.5)	9 (37.5)
Cotton and alcohol for disinfecting the rubber of NS 0.9% bottle	22 (91.7)	-	2 (8.3)	-
Bottle of NS 0.9% heated	2 (8.3)	18 (75)	4 (16.7)	-
20ml syringe	21 (84)	-	1 (4)	3 (12)
Needle 40x12mm	15 (62.5)	-	9 (37.5)	-
Primary coverage	2 (8.3)	-	22 (91.7)	-
Secondary coverage	4 (16.7)	-	20 (83.3)	-
Bandage (when the wound is on a limb)	5 (20.9)	-	10 (41.6)	9 (37.5)
Adhesive tape or micropore tape	3 (12.5)	-	21 (87.5)	-

Caption: NR: Not performed; PR: Partially completed; R: Completed; NA: Not applicable.
*Full personal protective equipment was considered when the demonstration included the use of procedure gloves, surgical mask, protective goggles, and cap, and partially complete when two or more PPE items were used.
Source: The authors (2024).

Execution

In the execution domain, items related to the execution of the technique itself were included. In the analysis presented, only videos that used sterile forceps and surgical gloves were considered (16 videos), with the remaining eight videos being disregarded because they featured non-sterile gloves and forceps. Of the items analyzed, there was a predominance of steps that did not align with the scientific literature consulted, with a particular emphasis on the safe handling of dressing packages using sterile forceps. Table 3 presents the complete results for all analyzed items.

Table 3. Analysis of the items that comprised the procedure execution domain. Brasília, DF, Brazil, 2024

(continued)

Stage	n (%)			
	NR	PR	R	NA
Place the tray on the side table	13 (54.2)	1 (4.2)	10 (41.6)	-
Sanitize your hands	21 (87.5)	-	3 (12.5)	-
Put on the PPE*	1 (4.2)	21 (87.5)	2 (8.3)	-
Position the patient and expose the wound site	3 (12.5)	-	21 (87.5)	-
Check the validity and integrity of the material.	24 (100)	-	-	-
Position the disposable/infectious waste	14 (58.3)	2 (8.3)	8 (33.4)	-
Insert the 40 x 12 mm needle into the 0.9% NS bottle or connect it to a 20 ml syringe.	13 (54.2)	10 (41.7)	1 (4.2)	-
Open the sterile gauze package without contaminating it.	11 (45.8)	-	12 (50)	1 (4.2)
Dressing performed with sterile forceps n=10				
Open the sterile dressing package and place the forceps handles on the proximal edge of the field, taking care not to contaminate them.	6 (60)	-	4 (40)	-
Put on the procedure gloves	2 (20)	-	8 (80)	-
Place the gauze pads on the field without contaminating them.	-	1(10)	9 (90)	-
Form gauze "dolls" with the tweezers, being careful not to contaminate them.	-	1 (10)	9 (90)	-
Discard the first spray of NS 0.9% and moisten the "dolls," without contaminating them.	-	-	10 (100)	-
Remove the dressing with rat-tail forceps. *If the dressing is occluded with bandages, use procedure gloves to remove it. Remove it, sanitize your hands, and put on a new pair of gloves to handle the rat tooth forceps.	-	3 (30)	-	7 (70)
Remove the dressing, observing the characteristics of the exudate.	-	3 (30)	-	7 (70)
Disregard the rat tooth tweezers	1 (10)	2 (20)	-	7 (70)
Follow the principles: clean edges, irrigate the bed, and dry the edges.	1 (10)	7 (70)	2 (20)	-
Perform debridement of devitalized tissue when present	1 (10)	7 (70)	2 (20)	-
Dry the edges and the surrounding area with a soft cloth.	1 (10)	7 (70)	2 (20)	-
Cover the wound with the primary dressing.	1 (10)	-	9 (90)	-
Cover the wound with the secondary dressing (if indicated).	2 (20)	-	8 (80)	-
Position the forceps in the sterile field.	3 (30)	-	7 (70)	-
Secure the cover	2 (20)	1 (10)	7 (70)	-
Remove the procedure gloves.	7 (70)	-	2 (20)	-
Sanitize your hands	9 (90)	-	1 (10)	-
Identify the dressing	6 (60)	1 (10)	3 (30)	-
Disregard the tweezers, wrapping them in the field	7 (70)	2 (20)	1 (10)	-
Make the patient comfortable	6 (60)	-	4 (40)	-
Remove all PPE	5 (50)	-	5 (50)	-
Sanitize your hands	7 (70)	-	3 (30)	-

Table 3. Analysis of the items that comprised the procedure execution domain. Brasília, DF, Brazil, 2024

(conclusion)

Stage	n (%)			
	NR	PR	R	NA
Dressing performed with surgical gloves - n=6				
Put on procedure gloves	-	-	3 (50)	3* (50)
Remove the dressing. *If the dressing is occluded with bandages, use procedure gloves to remove it. Remove it after discarding the dressing in the trash and sanitizing your hands.	-	1 (16.6)	2 (33.4)	3 (50)
Remove the dressing, observing the characteristics of the exudate.	-	2 (33.4)	1 (16.6)	3 (50)
Open the surgical glove package without contamination.	2 (33.4)	-	4 (66.6)	-
Place the gauze inside the field	1 (16.6)	-	5 (83.4)	-
Put on surgical gloves without contaminating them.	-	-	6 (100)	-
Organize the field by making "dolls"	3 (50)	-	3 (50)	-
Take the bottle of NS 0.9% with your non-dominant hand and irrigate the "dolls" without contaminating them.	2 (33.4)	1 (16.6)	3 (50)	-
Follow the principles: clean edges, irrigate the bed, and dry the edges.	2 (33.3)	2 (33.3)	2 (33.3)	-
One-way edge cleaning	1 (16.6)	-	5 (83.4)	-
Bed irrigation with 0.9% NS using jets, in the direction "from least to most contaminated."	2 (33.4)	1 (16.6)	3 (50)	-
Perform debridement of devitalized tissue, when present*	-	-	4 (66.6)	2 (33.4)
Dry the edges and the surrounding area with a soft cloth.	4 (66.6)	-	2 (33.4)	-
Cover the wound with a primary dressing using your sterile (dominant) hand.	-	-	6 (100)	-
Cover the wound using your sterile (dominant) hand with a secondary dressing (if indicated).	-	-	6 (100)	-
Secure the cover	-	-	6 (100)	-
Remove surgical gloves	5 (83.4)	-	1 (16.6)	-
Sanitize your hands	5 (83.4)	-	1 (16.6)	-
Identify the dressing	4 (66.6)	-	2 (33.4)	-
Make the patient comfortable	3 (50)	-	3 (50)	-
Remove all PPE	5 (83.4)	-	1 (16.6)	-
Sanitize your hands	5 (83.4)	-	1 (16.6)	-

Caption: NR: Not performed; PR: Partially completed; R: Completed; NA: Not applicable.
*Of the six videos, two showed only granulation tissue, and one showed debridement. The other four videos showed granulation tissue and devitalized tissue, and one showed debridement of healthy tissue.
Source: The authors (2024).

It was found that wound assessment tools were not used (n=24; 100%). Regarding the debridement techniques used, instruments with forceps were the most common (12; 50%), followed by mechanical techniques with gauze (11; 45.8%). In one video (4.2%), debridement was not performed because the demonstration occurred in granulation tissue. In six videos (25%), although granulation tissue was present, instrumental debridement was demonstrated.

Completion

In the finalization domain, three stages were listed. In 16 (66.7%) videos, there was no return to the nursing station, in 19 (79.2%), there was no hand hygiene, and in 20 (83.3%), the prescription was not checked, and the procedure was not recorded.

A total of 1,181 comments were identified; however, this feature was disabled in two videos and was absent in four. A word cloud was created with the three positive comments and three negative comments from each video, as shown in Figure 1.

Figure 1. Word cloud with a summary of positive comments on the left and negative comments on the right from the videos analyzed. Brasília, DF, Brazil, 2024

Source: The authors (2024).

DISCUSSION

A critical analysis of the videos that comprised the final sample of this study, available on YouTube, enabled us to identify gaps in the production of materials that are consumed by laypeople but also have a place in education and academic training. Thus, they are used by teachers and students in the health field, especially nursing, since dressing procedures are an essential skill in nursing training.

The consumption of videos, podcasts, images disseminated on platforms, applications, and, above all, social media, is a reality that matches the profile of students enrolled in undergraduate courses. A study that identified the average age of nursing students at four public universities revealed that the predominant age group is between 20 and 24 years old, i.e., the age group that comprises the so-called Generation Z or millennials[14]. These young people, the millennials, born between 1982 and 2004, and Generation Z, born from 2005 to the present, are generations made up of individuals who are adapted to the internet, social media, and who use technology, especially smartphones[15]. When they need content and information, even if it is academic or scientific in nature, they prefer products with concise, short, and easily accessible messages.

In this regard, *YouTube®* videos are a tool for accessing information and knowledge, but they require specific curation when used in professional training. Another study on learning new nursing skills compared teaching with demonstration and teaching with *YouTube®* videos. The findings indicated that the participants' preferred learning style was visual (41.7%), followed by a combination of visual, tactile, and auditory (41.7%), and all respondents (100%) reported that videos enhance learning and better prepare them for practice[16]. On the other hand, a systematic review that addressed the quality of health information in *YouTube®* videos indicated that the content of the analyzed productions was of average or below-average quality. The same authors concluded that *YouTube®* is not a reliable source of medical and health-related information[17].

Regarding the domains that comprised the instrument for critical analysis of the videos, flaws were observed during the pre-procedure stage, highlighting the importance of reinforcing basic practices in healthcare. Hand hygiene remains the most effective and least expensive practice for preventing healthcare-associated infections (HAIs), being fully present in only 10 (41.7%) videos when professionals entered the unit and in only four (16.7%) when they left the unit. It is essential to remember that hand hygiene is included among patient safety goals, and the five moments for hand hygiene reinforce the need for its implementation[18]. Similarly, patient identification was not mentioned in most videos. This practice, also included in patient safety goals, prevents errors associated with procedures[18], such as medication administration, nutrition, tests, and surgeries , from being performed incorrectly. In addition, it was observed that in 23 (95.8%) videos, there was no verification of the patient's allergies, thus exposing them to allergic reactions that can range from mild to fatal. Reinforce aspects related to patient safety, hygiene, and cleanliness in healthcare settings in the videos, reminding viewers of the importance of implementing and maintaining basic best practices in nursing care.

With regard to the instruments and materials used in the planning and execution stages, NS 0.9% is the basic solution for wound hygiene, although others, such as polyhe methylene biguanide and hypochlorous acid, may replace this product. Isotonic and low toxicity[1], NS is affordable and available for different healthcare settings. For wound cleaning, warming is recommended because cell division occurs at physiological temperature, close to 37°C. Therefore, it is essential to incorporate this practice into the demonstration and execution of the procedure. Another item of attention is the use of a 40 x 12 mm needle for the production of the 0.9% NS jet, which should not exceed 15 psi for the preservation of newly formed tissue and is considered adequate for the removal of dirt and impurities from the wound bed[12]. It should be noted that for this item, in 62.5% of the videos analyzed, this device was not used.

During the procedure, whether performed with sterile forceps or surgical gloves, it is important to highlight aspects related to the opening and safe handling of sterile materials. None of the videos mentioned verification of the integrity and validity of the materials. Another aspect is contamination, observed in 60% of videos that used tweezers and 33.4% of those that used surgical gloves. Although contaminated, dressing should be performed using aseptic technique at all stages to prevent external germs from accessing the wound bed and colonizing it. Currently, one of the major problems associated with wound healing is related to biofilm, bacterial communities protected by a matrix of polysaccharides, proteins, and DNA, which stimulate chronic inflammatory responses. In this sense, it can be removed by cleaning, but primarily by debridement[1].

According to recent international consensus, hard-to-heal and chronic wounds should be treated through the coordinated implementation of four actions, which work together to remove biofilm: cleaning, debridement, edge remodeling, and dressing. Regarding the removal of necrotic tissue, debris, and biofilm, debridement should

be performed at each dressing change, and the method selected should be based on an assessment of the wound characteristics[1]. Although present in several videos analyzed in this study, debridement in granulation tissue is not recommended, as the technique is performed to remove devitalized tissue, foreign debris, and biofilm[1]. Six videos demonstrated debridement, some on granulated tissue, but did not mention the presence of agents that impair wound healing.

In addition to these factors, the lack of tools for wound assessment and dressing selection was noteworthy. The acronym MEASURE enables the assessment of wound size, exudation, and adherent tissue, among other factors[19]. TIMERS, which evaluates tissue, inflammation, moisture, edges, regeneration/repair, and social factors, provides relevant information and helps professionals select the appropriate dressing for treating patients' wounds[20].

At the end of the procedure, the absence of nursing records identified in 83.3% of the videos stood out among the nonconformities. Federal Nursing Council Resolution No. 754/2024[21] provides for the recording of nursing professionals' actions in patient records, regardless of the medium used. In 2016, the same Council published a Guide that provides guidelines for good practices when recording activities performed and, more recently, Resolution No. 736 of January 2024[22], which provides for the implementation of the Nursing Process, reiterates the importance of nursing records made by members of the nursing team in medical records, whether physical or electronic.

Finally, it is pertinent to discuss the comments made by the viewing public, considering the power of audiovisual resources on *YouTube®*, as well as the gaps and inconsistencies regarding evidence-based practices analyzed in the videos. While weaknesses were identified and recorded in the comments, such as "inappropriate," "contaminated," and "horror," responses like "excellence," "excellent explanation," and "perfect" suggest that inconsistencies were not observed. which is a cause for concern, as technical and protocol breaches could be replicated if viewers use the video as a basis for practice in a real environment.

A systematic review study on the quality of health information videos available on *YouTube®* analyzed 202 articles. One-third correlated the quality of the videos analyzed with their popularity metrics, including the number of views, likes, dislikes, shares, and comments. In 23 cases, no correlation was found between the number of views and the quality of the videos, and in 13 cases, a negative correlation was found, i.e., lower quality videos were viewed more frequently than higher quality videos[16].

YouTube® operates using metrics and a recommendation system based on the number of likes, comments, and shares[23]. However, when it comes to instructional videos, such as those analyzed in this study, the content is not always accurate and reliable, as it is the sole responsibility of the YouTubers.

In terms of limitations, the cross-sectional nature of this study and the analysis of a limited number of videos are noteworthy. The selected platform is constantly updated, so new searches may identify a new set of videos. Although YouTube is a rich and accessible source for analyzing audiovisual content in health, limitations related to the absence of contextual information, such as the etiology of the wounds in which the procedure is demonstrated, the type of materials used, the training of professionals, and the omission of important steps in the procedure, should be recognized and discussed. Additionally, there is a lack of standardization in content, as evidenced by considerable variation in technique, materials used, and presentation style. In addition to these points, there is a temporal and updating bias, as older videos may present

outdated techniques, and recent advances in products and dressing methods may not be adequately covered.

CONCLUSION

The objective of this study was to analyze *YouTube®* videos showing the dressing procedure for contaminated wounds. Based on the analysis, it was found that many videos presented nonconformities when compared to the steps described in the literature and based on scientific evidence. Although *YouTube®* has easy and free access to materials, several videos posted on the platform cannot be used for educational purposes, as they will compromise the learning of nursing students and, consequently, the care provided to patients.

Among the difficulties encountered, we can mention the presence of videos that did not correspond to the terms searched in the search engine, as well as the duplication of videos in searches made with different terms. The *YouTube®* algorithm prioritizes certain channels and displays those with the highest popularity, number of views, likes, and comments.

Due to the easy access to the platform for educational purposes, it is recommended that videos based on scientific literature be produced and posted, thus becoming reliable sources for consultation. Additionally, searches for materials related to the topic should be conducted in reliable sources, preferably on the websites of relevant entities and associations, as well as in books, articles, guidelines, and consensus documents within the field. For nursing teachers who use this tool in the classroom and students who have unrestricted access to videos for learning procedural skills, rigorous selection and evaluation of the material are necessary, as erroneous information reproduced in a healthcare setting poses serious risks to patient health and safety.

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Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - **Cauduro FLF, Justino RR.** Drafting the work or revising it critically for important intellectual content - **Cauduro FLF, Justino RR.** Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved - **Cauduro FLF, Justino RR.** All authors approved the final version of the text.

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